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**School of Industrial and Manufacturing Science  
Enterprise Integration**



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**Sustained Growth in Small Enterprises – A Process  
Management Approach**

Supervisor: Professor Peter J. Sackett

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This thesis is submitted in partial fulfilment of the requirements for the Degree of  
Doctorate of Philosophy

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To my father **John Hatton Rose** for his life long commitment to trade unionism

## Abstract

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This thesis illustrates that given the necessary resource and a structured Business Growth Framework, Small and Medium Enterprises can lay the foundation for sustained growth.

The author investigated the essence of Small and Medium Enterprises, conducted a literature review in SME growth, and asserted the importance of the application of structure to business processes in achieving sustainable business growth.

The author introduced the SME business process structure deficit, assessed its implications on business growth, and elaborated that the business process structure deficit can be addressed through the methodical application of six internationally accepted UK initiatives already available in the SME domain.

The thesis establishes the characteristics of Business Growth for SMEs, leading to the development of a Business Growth Framework, based upon a defined set of business processes. This framework supports business growth. The framework provides diagnostic assessment of business process performance, process specific improvements embracing better practice through the innovative application of, for example DTI publications, and internal Benchmarking linking, if desired, to the UK Benchmarking Index.

The resulting Business Growth Framework, along with the Business Growth Framework Implementation Methodology have evolved during this research and are the key tools for sustained business growth developed by the author and discussed in this thesis. The benefits of close integration of financial and manufacturing systems, like ERP, with Business Processes is discussed.

The author demonstrated that Business Growth could successfully occur amongst Small and Medium Enterprises if approached through a structured methodology. Intentionally no new and complex business models have been proposed. The research showed that there is sufficient literature available in this area already.

## Acknowledgements

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I would like to acknowledge the help given to me during the period of this research by my supervisor Professor Peter Sackett.

## Author Profile

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Thomas John Rose was born in Oxford, England, in 1948. He attended Northfield Secondary Modern School from 1960 to 1965, an LEA state school in Littlemore, Oxford.

Tom read his Bachelors degree at the University of Newcastle upon Tyne, England, where he obtained an Honours degree in Electrical and Electronic Engineering in June 1979. In June 1986, Tom was awarded a Master of Science degree in Flexible Manufacturing Systems from Cranfield Institute of Technology, (Cranfield University) England. In 1991 he was one of the first Open University students to be awarded an MBA degree.

Between secondary education and his University study, Tom spent 3 years at the Army Apprentices School, Arborfield, and then 9 years in the British Army with the Royal Electrical and Mechanical Engineers. He served both as a Paratrooper with the Parachute Squadron RAC and 7<sup>th</sup> Parachute Regiment Royal Horse Artillery, and as a Commando with 29 Commando Regiment, Royal Artillery. He saw active service in Northern Ireland and with the United Nations in Cyprus.

Tom's work experience includes time as a Soldier, Outward Bound Instructor, Physics Teacher, Project Engineer, Quality Manager, Technical Manager, and Operations Director.

Organisations include the British Army, Oxfordshire LEA, GEC Large Machines, Austin Rover, Metal Box, and a number of SMEs.

Activities include plant assembly and commissioning at the Dinorwig underground hydro-electric power station construction site, machine control system design and build, high volume production, small batch design / production, and design / make to order.

Future perspectives include developing a range of PC products to facilitate the implementation of both the Business Growth Framework and Implementation Methodology within SMEs and an entrepreneurial venture both commercial and as a further test of his thesis in the form of an 'e' company, Busyfish.com

Tom has been a Member of the Institute of Quality Assurance since 1983 and a Member of the Institution of Electrical Engineers since 1988.

## Publications and Presentations

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Rose, T. (2000)

***SME Business Growth.*** CLASP Presentation and Workshop, Cranfield University, 27<sup>th</sup> April, 2000.

Rose, T. and Sackett, P. (2000)

***Laying the foundations for SME business growth.*** Proceedings, Annual Conference of Intelligent Control and Integrated Manufacturing Systems, pp 88-95, Bordeaux, France, 18<sup>th</sup>-20<sup>th</sup> September 2000. ISBN: 960 530 050 8

Rose, T. and Sackett, P. (2001)

***The development and structure of a smart, dynamic organisation.*** Proceedings, 7<sup>th</sup> International Conference on Concurrent Enterprising, ICE 2001, Bremen, pp 477-484, Germany, 27<sup>th</sup>-29<sup>th</sup> June 2001. ISBN: 0 85358 098 7

Rose, T. and Sackett, P. (2001)

***The development and structure of a SME Business Growth Framework.*** IEE seminar, Birmingham, 21<sup>st</sup> November 2001.

Rose, T. and Sackett, P. (2002)

***Laying foundations.*** Manufacturing Engineer, Volume 81, No. 2, pp 86-91, April 2002. ISSN 0956 9944

Rose, T. and Sackett, P. (2002)

***A new look at SME business management – with growth as a strategic objective.*** Proceedings, 5<sup>th</sup> Stimulating Manufacturing Excellence in Small and Medium Enterprises, International Conference, pp 45-55, Essex, 13<sup>th</sup>-15<sup>th</sup> May 2002. ISBN: 1 900 432 39 0

Adamson, V. Rose, T. and Sackett, P. (2002)

***SME business processes for participation in virtual enterprise.*** Proceedings, Business Innovation in the Knowledge Economy Conference, Warwick, 12<sup>th</sup> June 2002. ISBN: 1 8572133 94

Rose, T. and Sackett, P. (2002)

***Small Enterprise Modelling and the New SFEDI Standards.*** Proceedings, BISME Conference, University of Brighton, 6<sup>th</sup> September, 2002. ISBN: 1 901177 82 3

Rose, T. and Sackett, P. (2002)

***Quality and SMEs – how to make it work for you.*** Proceedings, 46<sup>th</sup> European Organisation for Quality Congress, Harrogate, UK, 29<sup>th</sup> September – 2<sup>nd</sup> October 2002.

Rose, T. and Sackett, P. (2002)

***SME Survival.*** Quality World, Volume 28, Issue 10, pp 42-43, October, 2002, ISSN 13528769

Rose, T. and Sackett, P. (2002)

***Time-to-Market for an Entrepreneurial Business.*** Proceedings, 25<sup>th</sup> ISBA National Small Firms Policy and Research Conference, pp 1417-1437, Brighton, 13<sup>th</sup>-15<sup>th</sup> November 2002. ISBN: 1 901177 97

Rose, T. (2002)

***Information in an e-Enabled SME.*** Proceedings, 3<sup>rd</sup> e-Business Conference, The University of Birmingham Business School, 4<sup>th</sup> December, 2002.

Rose, T. (2003)

***Teacher's Resource Pack - Website Design Level 2.*** London Chamber of Commerce and Industry Examinations Board, 2003, ISBN: 1 86247 058 8

Sackett, P. and Rose T. (2003)

***From Quality to Business Development in SMEs.*** Accepted for publication in the Institute of Quality Assurance's new Journal of Quality, 2003

Sackett, P. Rose, T. and Adamson, V. (2003)

***The Importance of Business Process Clarification Within a Virtual Enterprise.*** Accepted for publication in a special edition on eBusiness of the Journal of Small Business and Enterprise Development, 2003

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## Notation

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<b>ACA</b>	American Counselling Association
<b>BPR</b>	Business Process Re-engineering
<b>BQF</b>	British Quality Foundation
<b>BS</b>	British Standard
<b>CASA</b>	Computers and Automated Systems Association
<b>CBI</b>	Confederation of British Industry
<b>CES</b>	Charities Evaluation Services
<b>CIM</b>	Computer Integrated Manufacturing
<b>COMP</b>	Competence
<b>CONNECT</b>	An award-winning series of programmes from the DTI about business best practice designed to help small and medium-sized companies be more successful and to help professional advisers inspire and support their clients
<b>D2D</b>	Design to Distribution
<b>DETR</b>	Department of the Environment, Transport and the Regions
<b>DTI</b>	Department of Trade and Industry
<b>EC</b>	European Community
<b>EFQM</b>	European Federation of Quality Management
<b>EPSRC</b>	Engineering and Physical Sciences Research Council
<b>ERP</b>	Enterprise Requirement Planning
<b>EU</b>	European Union
<b>EUREKA</b>	Pan-European network for market-oriented, industrial R&D
<b>FSB</b>	Federation of Small Businesses
<b>GBPS</b>	Generic Business Process Set
<b>GDP</b>	Gross Domestic Product
<b>GEM</b>	Global Enterprise Monitor
<b>GNP</b>	Gross National Product
<b>HTML</b>	Hypertext Mark-up Language
<b>ICT</b>	Information and Communication Technology
<b>IIP</b>	Investors in People
<b>IPR</b>	Intellectual Property Rights
<b>IQA</b>	Institute of Quality Assurance
<b>ISO</b>	International Standardisation Organisation
<b>IUKE</b>	Inside UK Enterprise
<b>KBS</b>	Knowledge Based System
<b>KM</b>	Knowledge Management
<b>KPMG</b>	A global network of professional service firms providing financial advisory, assurance, tax and legal services
<b>LAN</b>	Local Area Network
<b>LEC</b>	Local Enterprise Company
<b>LLL</b>	Life Long Learning

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<b>LSC</b>	Learning and Skills Council
<b>MBWA</b>	Managing by Wandering About
<b>MS</b>	Microsoft
<b>NCR</b>	Non-conformance Report
<b>NVQ</b>	National Vocational Qualification
<b>OEM</b>	Original Equipment Manufacturer
<b>PA</b>	PA Consulting - Management, systems and technology consulting firm
<b>PC</b>	Personal Computer
<b>PDAC</b>	Plan, Do, Check, Act
<b>PQASSO</b>	A quality assurance system that has been designed specifically for small and medium voluntary sector organisations
<b>QCA</b>	Qualifications and Curriculum Authority
<b>QP</b>	Quality Procedure
<b>QW</b>	Quality World
<b>R &amp; D</b>	Research and Development
<b>RONA</b>	Return on Net Assets
<b>SAP</b>	Inter-enterprise Software Company
<b>SBRC</b>	Small Business Research Centre
<b>SBS</b>	Small Business Service
<b>SFEDI</b>	Small Firms Enterprise Development Initiative
<b>SME</b>	Small and Medium Enterprise
<b>SPC</b>	Statistical Process Control
<b>TEA</b>	Training and Employment Agency
<b>TEC</b>	Training and Enterprise Council
<b>TQM</b>	Total Quality Management
<b>UK</b>	United Kingdom
<b>UKAS</b>	United Kingdom Accreditation Service
<b>UKBI</b>	United Kingdom Benchmarking Index
<b>WAN</b>	Wide Area Network
<b>APQC</b>	American Productivity and Quality Center
<b>WIP</b>	Work in Progress

## Chapter 1: Introduction

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### 1.1 Synopsis

This Chapter presents the background to the research area, introduces the research problem, establishes the research objectives and lists the deliverables from the research. It ascertains the research novelty, addresses the contribution to knowledge, and outlines the structure of the thesis.

Growth and World Class performance are linked (Gavigan, 1996). This thesis develops an Enterprise Model to support the management for growth in small and medium enterprises (SMEs) and entrepreneurial business start-ups. The Enterprise Model has been developed to facilitate business growth. The model is applicable to all stages of business development from start-up to mature organisations, it can also help limit the risk of failure associated with the critical growth phase, from the sub 50 employee company to the 100+ employee company and for smaller organisations, 10 to 10+. It builds on the EPSRC/DTI commissioned report on Managing Manufacturing Change in SMEs, (Sackett, 1994).

### 1.2 Research Background

The following quotation taken from the 1998 paperback edition of the book 'Built to Last' by Jim Collins and Jerry Porras, rings true for UK SMEs and is supported by my research findings.

“Thoughtful people crave time-tested fundamentals; they’re tired of the fad of the year boom-and-bust cycle of management thinking. Yes, the world changes, and continues to change at an accelerated pace - but that does not mean that we should abandon the quest for fundamental concepts that stand the test of time. On the contrary, we need them more than ever! Certainly, we always need to search for new ideas and solutions - invention and discovery move humankind forward - but the biggest problem facing organizations today stems not from a dearth of new management ideas (we’re inundated with them), but primarily from a lack of understanding the basic fundamentals and, most problematic, a failure to constantly apply those fundamentals” (Collins and Porras, 1998).

Small and medium enterprises, defined as enterprises that employ less than 249 employees and display an annual turnover less than 40 million euros, are of significant importance for the micro and macro economic development of all nations.

A report presented by the European Commission for the Madrid Council, concluded that SMEs constitute 99.8% of all companies, provide 66% of the total employment and

attain 65% of business turnover in the European Union (EC 1995). The report emphasises that enterprises with fewer than 100 employees were responsible for almost all the job creation within the European Union in the past year. The importance of smaller companies was also confirmed by Levy (Levy 1993). He concluded that Small and Medium Enterprises contribute one third of the United Kingdom manufacturing output, employ 45% of the UK manufacturing workforce and constitute 99% of all UK manufacturing companies (Levy 1993).

The Confederation of British Industry notes that United Kingdom based manufacturing companies provide a total of around £100 billion added value per annum and, of this, almost 60% is contributed by Small and Medium Enterprises (CBI 1995).

Small and Medium sized Enterprises in all economies have been identified as primary agents for job creation. They strengthen the capacity of a country to generate employment and wealth for the general benefit of national and regional economies. They are highly important in the promotion of national and regional economic development. However, almost 50% of these companies cease operation within five years of their creation, which raises concerns that they consistently under perform and so are ill prepared for future challenges (EC 1995).

CBI research shows that if British companies adopted only average best practice levels then annual UK GDP would increase by £300bn (SBS 2000).

### **1.3 The Research Domain**

The aim of the research is to develop tools to facilitate growth in Small and Medium-sized Enterprises. It is envisaged that knowledge based potential from within the enterprises can be used to enhance competitiveness and this will lead to sustainable growth.

The Enterprise Growth Framework is derived, in part, from 7 UK Business standards and tools, and is designed to comply with the requirements of these 7 business standards and tools. The nature of the research is practical and involves the fields of business process principles, Self-Assessment, Enterprise Assessment models, Knowledge Transfer and Small and Medium-sized Enterprises.

Small and Medium-sized Enterprises can be classified in the use of the Product Complexity and Uncertainty Matrix (Puttick and Gillis, 1985). See Figure 1-1. Complexity is the means of measuring a large number of both physical product items and product process knowledge entities that must be managed in even the smallest manufacturing business. Uncertainty arises from the unpredictable behaviour of the market place. Sustainable UK business needs to move towards high Complexity and high Uncertainty (Sackett 1996 and Bowman and Faulkner 1996). High complexity/high uncertainty enterprises are information resource intensive and require an error-free business operation.

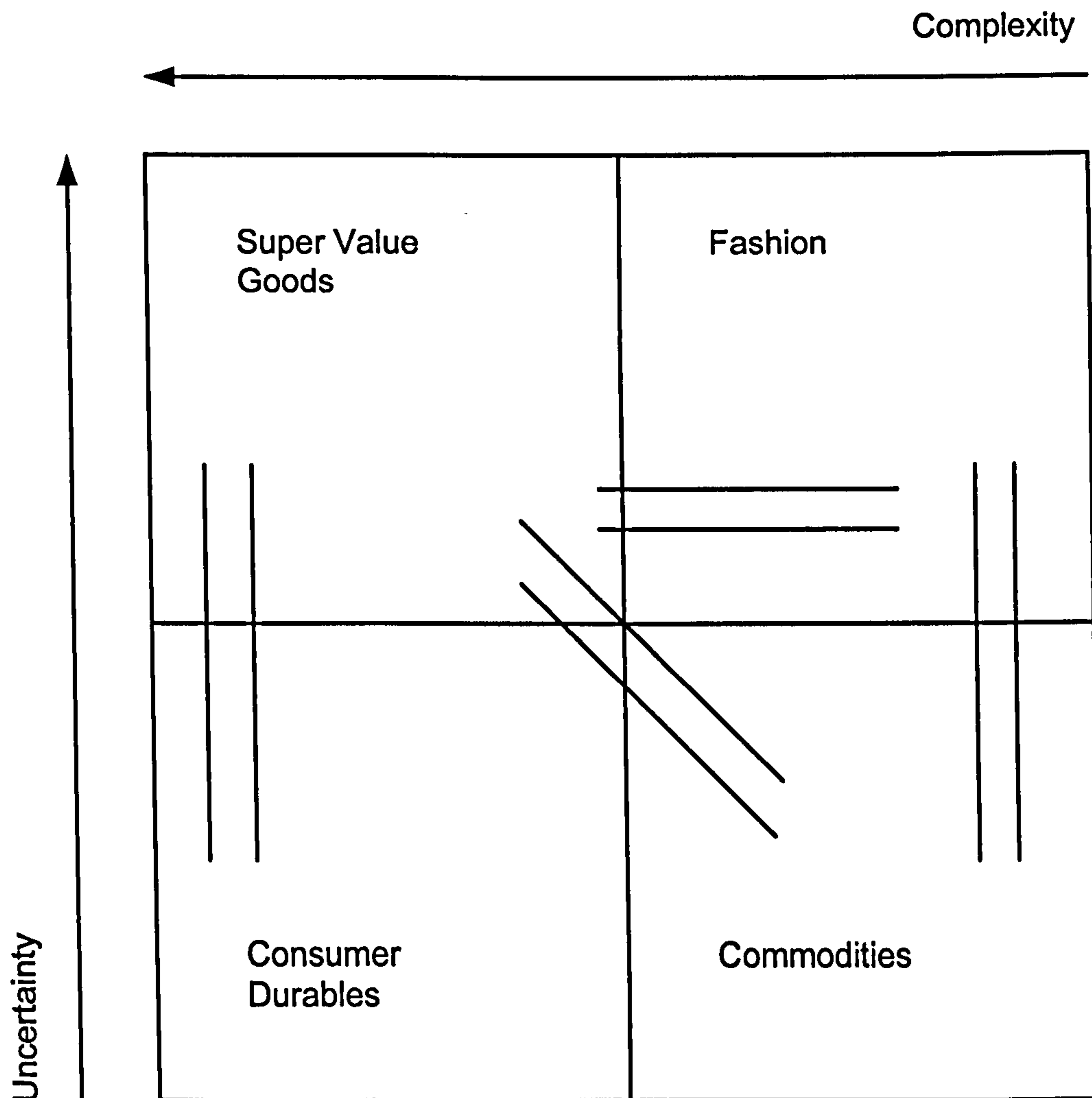


Figure 1-1, 'Market Drift' (Source: Puttick and Gillis, 1995)

Market Drift is a term used to describe the effects uncertainty and complexity have on companies, especially in relation to small companies. Market drift is the tendency for today's super value (complex) products to become tomorrow's commodities. As the pace of new product development quickens and becomes more technologically complex, large industrial customers, or original equipment manufacturers (OEMs), expect more from their suppliers. Puttick and Gillis argue that companies, especially SMEs, cannot compete as lowest cost producers alone, they must find ways to differentiate:

Companies have two alternatives in this climate of market drift. One is to follow the market down and try to become lowest cost producer. This would be extremely difficult for most manufacturers, particularly SMEs based in Europe. The second is to find new forms of differentiation for their products and services (Puttick and Gillis, 1995).

The author selected to apply the research in the fields of small enterprises that operate under the high Complexity and high Uncertainty typology, considering that enterprises operating under this typology are under higher jeopardy than enterprises under other typologies in the context of their dependence on effective information processing. These enterprises have a special opportunity to exploit business information processes.

### 1.3.1 Boundaries to the research

This research is primarily concerned with the following two types of enterprises, although it might be applicable outside this boundary.

- Small and Medium Enterprises (SMEs) which - as noted above - are defined as being enterprises that employ less than 249 employees and have an annual turnover less than 40 million euros.
- Entrepreneurial business start-ups, particularly those involving information and communications technology (ICT) and the new economy.

Businesses in both the above categories are referred to as SMEs in this work.

The SMEs investigated for this thesis are those operating in a competitive environment, in an International market place. This is opposed to those SMEs, discussed in Chapter 3, Sections 3.5 and 3.7.1, that are operating in buoyant niche markets where competition is limited or non-existent.

### 1.3.2 Defining the research problem

The problem in its simplest form can be stated thus: to isolate and identify the means to overcome barriers to business growth that affect SMEs.

However before an all-encompassing definition of the problem can be presented some further explanation is required. For example, what is meant by 'business growth'? What could be categorised as a barrier to this growth?

This topic is explored in greater depth in the Historical Overview (see Chapter 3), but a preliminary definition of business growth might be:

The change in business turnover between one trading year and the next trading year.

Although increased turnover ought to imply increased profit, this is not necessarily the case. Indeed, as shall be seen later, there is one particular phase of growth, the transition between an SME with 50 employees and the same SME with 100 or more employees that is fraught with risk, due to increased turnover coinciding with diminished profit. Therefore, the above definition of business growth must be modified to incorporate a profit factor thus:

The change in business turnover and associated net profit between one trading year and the next trading year.

It is perfectly conceivable that SMEs experiencing increased turnover could have diminished profit as a result of having to absorb the costs of expansion and/or by reducing the price per item. It is also conceivable that a company could increase the profit on each item sold, but have diminished turnover, almost to the point of extinction. The simplest way to achieve this would be by raising the price per item. A third scenario would be that of a company with both decreasing profit per item and

decreasing turnover – which would very shortly lead to its demise. None of these cases could be described as having good business growth. The form of growth that can be described as good in the context of this research is where a company increases the number of items or services sold, while at the same time managing overheads and the selling price in such a way as to increase the profit per item or service.

It is evident that increasing pre-tax profit per item sold by minimising overheads without increasing turnover and unit sales is a policy that can only be successful over the short term. There will come a point where cheaper suppliers, labour and energy cannot be found and the enterprise in question has then become static.

The same applies to an enterprise that increases turnover by increasing spending on advertising, sales and marketing and/or decreasing price. They can only pursue such a course until the net profit per item sold becomes zero, at which point the enterprise has, again, become static.

It would seem, therefore, that turnover itself is not a reliable barometer of business growth at all. A definition of true business growth should include some planned (and actual) increase in the number of items or services sold, together with an increase in the net profit per item or service, or at least the minimisation of cost of each item or service to an irreducible level.

Another factor, that of sustainability, must also be introduced into the definition. Removing barriers to a course that does not promise long-term survival is not a prudent action. Business growth should only be achieved by pursuing courses that promise continued growth over (say) the next five years. Incorporating this factor introduces, at least by implication, the element of design or planning. Growth that is achieved by accident or serendipity is not generally reproducible, and hence is not considered in this thesis.

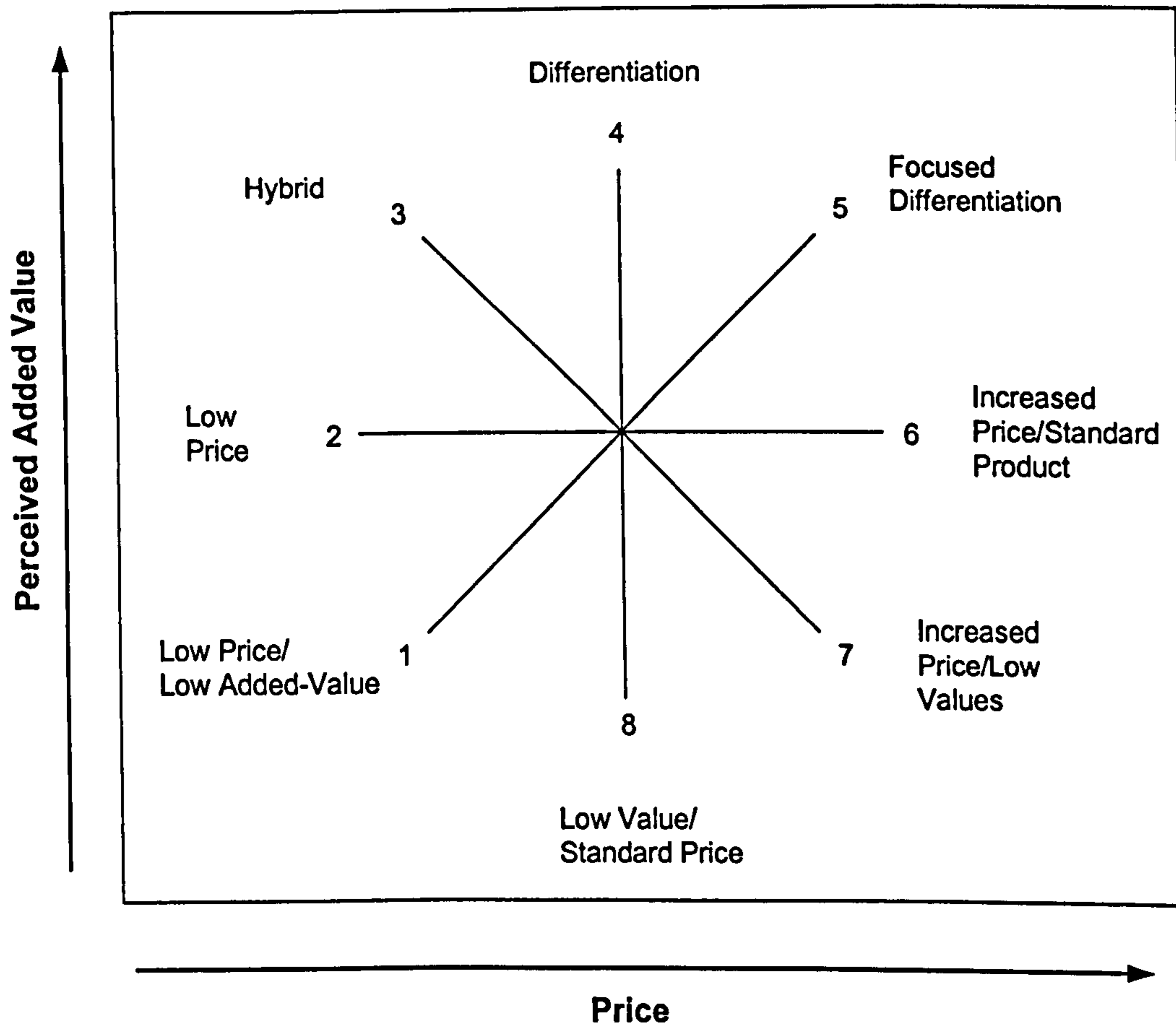
The working definition of true, good business growth which shall be used or implied throughout this thesis, is:

The planned increase that is achieved in the number of items sold in a trading year (while maintaining or increasing the net profit per item) when compared to the preceding trading year, by pursuing courses of action that seem likely to promise continued growth over the next five trading years.

The preliminary definition of a barrier to business growth might be:

Any factor or combination of factors, internal or external, that acts in such a way as to prevent an organisation from achieving its planned business growth. The preliminary definition of barriers to business growth raises the question – what sorts of growth scenarios are likely to be encountered? See Figure 1-2.





*Figure 1-2, The Strategic Clock: Bowman's Competitive Strategic Options*  
 (Source: Bowman, C. and Faulkner, D. ; Competitive and Corporate Strategy; Irwin; 1996)

The clock accounts for eight potential strategic options:

#### **Option one - Low price/low added value**

likely to be segment specific. This strategy is commonly considered to be appropriate only on a segment-by-segment basis.

#### **Option two - Low price**

risk of price war and low margins/need to be a 'cost leader'. This strategy calls for the company to position itself as the 'low cost leader'. The company risks low margins and a price war.

#### **Option three - Hybrid**

low cost base and reinvestment in low price and differentiation. Hybrid of Low Price/Differentiation. Here, the company establishes a low cost base and reinvests to keep prices low, while still seeking differentiation.

### **Option four - Differentiation**

- without a price premium - perceived added value by user, yielding market share benefits. The company adds value to the product in hopes of gaining market share despite lower margins.
- with a price premium - perceived added value sufficient to bear price premium. The company adds enough value to the product to justify its relatively high price and so, increase margins.

### **Option five - Focused differentiation**

perceived added value to a particular segment warranting a premium price. Here, the company adds enough value to the product for a specific customer segment to justify a price premium.

### **Option six - Increased price/standard product**

higher margins if competitors do not follow / risk of losing market share. Unless the product is the de facto industry standard, the company risks losing market share.

### **Option seven - Increased price/low values**

only feasible in a monopoly situation. This strategy pertains only to monopoly situations.

### **Option eight - Low value/standard price**

loss of market share. This strategy invariably means loss of market share.

Once the basis for competition or existence has been agreed, the next step is to decide how to grow the business through the generation of strategic options. Two aspects are considered here: the direction in which to grow and the method.

Direction pivots around the decision whether to grow a business through new markets, through new products or both together, which leads to diversification. There is a fourth option, which is to 'Protect and Build' by continuing to be good at what you are good at.

The second aspect is the method of growth. Many organisations choose to grow slowly using their own resources whereas others acquire businesses or establish joint ventures. The final decision rests on what capabilities the organisation has and how fast it wants to grow, which brings us on to the third area, which is strategy evaluation and selection.

To do this each option should be subject to three questions:

- 1) suitability- should we be doing this given the current circumstances?
- 2) feasibility - do we have the capability to implement the option?
- 3) acceptability - will the major stakeholders agree to the option?

The first question is a screen where wild ideas get rejected before more work is done on them. For the second question, there is no point taking forward an option that has little chance of success. For example, deciding to grow by acquisition without any money in the bank. The third question relates to what an organisation would be allowed to do. For example, an option requiring an environmentally friendly organisation to cause pollution or a public service to implement a public spirited strategy would be unlikely to be allowed to be implemented. These considerations do not relate only to the major stakeholders. In organisations where the people are the major asset it is important for them to buy-in to any changes.

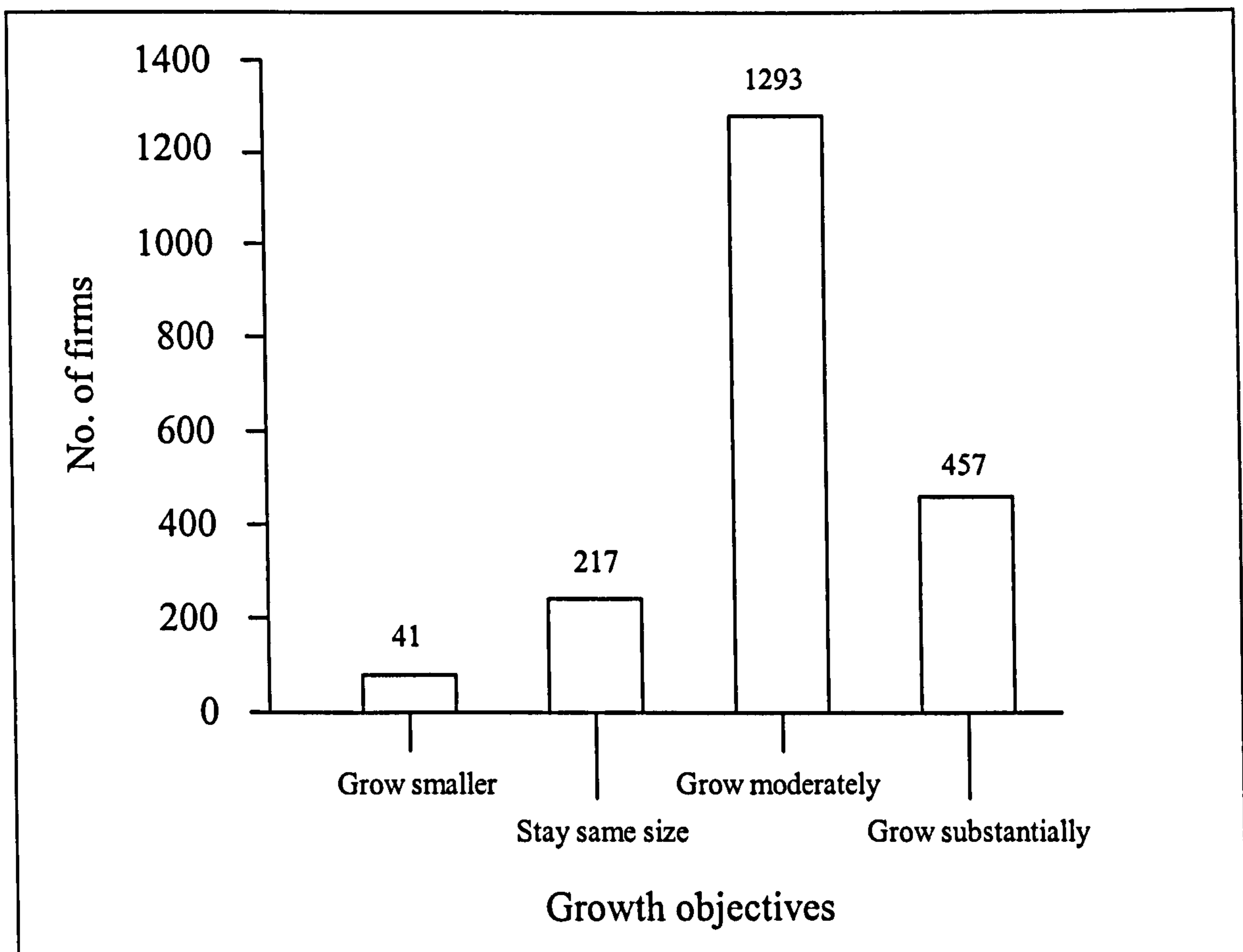
It is generally recognised that organisations operating scenarios in the lower right segment of the Bowman Clock will be likely to be struggling to achieve growth (Christopher and McDonald 1995). However, although the literature suggests that companies operating in the upper segment can readily achieve growth; data on achieved growth does not support this view (Story 1999). So, growth is not just a result of selecting a product / market strategy.

### 1.3.3 Growth Objectives

The 1992, Small Business Research Centre, University of Cambridge Report 'The State of British Enterprise' concluded that despite the recession at that time a substantial majority of surveyed firms (63.8%) reported that their objective was to grow moderately over the next three years, while a significant minority (22.5%) wanted to grow substantially. A tiny minority of firms (2%) expected to grow smaller, while a small proportion, (10.7%) stated that their business objective was to 'remain the same size' (SBRC, 1992). See Figure 1-3.

The report shows that the growth objectives of manufacturing and service firms are very similar, although a slightly higher proportion of service firms (88%) intended to grow over the next three years than did manufacturing firms (85%). The greatest differences in this area are, however, related to SME employment size. In broad terms, medium and larger companies reported 'substantial growth' as their objective appreciably more frequently (32.2% and 27.8% respectively) than small and micro businesses (22.9% and 17.0% respectively). The latter were more likely to report the objective of 'stay the same size' (10.4% and 13.2% respectively), than were larger firms (6.3%).

(Source: 'The State of British Enterprise' report, 1992)



*Figure 1-3, Growth objectives over the next three years.*

As one moves from micro to larger firms the proportion of businesses intending to grow either moderately or substantially steadily increases. This finding suggests that medium and large SMEs are more growth orientated. This could reflect a less severe recessionary impact on larger firms up to 1991, or a generally greater disposition to grow compared to smaller firms that are more concerned with maintaining tight owner-manager control.

A further characteristic that affects the growth objectives of a firm is their age. Older SMEs established more than 13 years are appreciably less likely to intend to grow substantially (only 18%) than newer firms established during the last 12 years (28%). Firms established more than 13 years are more likely to have reached their growth targets while newer firms clearly contain a higher proportion intending – and perhaps capable of – expansion.

Finally, the survey reveals clear links between growth objectives of SMEs and their past employment performance over the last three years. SMEs which recorded stable or declining employment over the last three years are less likely to want to grow substantially over the next three. A significant proportion (24%) of these stable or declining firms in fact intend to 'stay the same size' or to 'grow smaller' over the next three years. Both of these are, of course, survival strategies. Twenty-five per cent of

surveyed firms had grown rapidly over the last three years. Of these, a high proportion (33%, 138 firms) intended to grow further, either moderately or rapidly, over the next three years.

The recent report from the Federation of Small Business shows that these statistics have not changed significantly (FSB, 2000). The same report also found that despite wishing to grow most small businesses fail to achieve this objective with only 4% of firms achieving high growth. These statistics are supported by a recent report from Edengene, a leading UK venturing business, where 92% of the respondents to their survey reported that growth was a significant issue for their business. The same report stated that UK companies only achieve around 2% per annum organic growth (Edengene, 2002).

So many firms want to grow but few firms are achieving growth. What are the barriers to growth? Are the perceived barriers dissuading the micro firms from attempting to grow or is it a lack of business development knowledge that is putting them off?

### 1.3.4 Barriers to Growth

Barriers can be categorised as either external or internal. External factors, such as changes in interest rates, changes of Government employment legislation, downturns in generic economy etc. cannot be directly affected by SMEs, at least in the short term. They have to be accommodated and are thus outside the ambit of this research. Although little can be done to influence these external barriers, SMEs can and should make preparations for the broadly predictable effects of external factors.

Internal barriers are capable of being remedied by SMEs (perhaps with some external assistance or counselling). It is an assumption of this research that removing some or all of these barriers can help SMEs to achieve growth objectives and improve profitability and survival prospects. It is these internal barriers to growth that are the focus of this research. A more comprehensive survey of barriers to business growth is presented in Chapter 3.

### 1.3.5 Metrics

While the above ideas and figures are in general satisfactory as a definition of the broad area of the research, they are in the main conceptual. A prime requirement of this thesis is that there be a way to quantify such intangibles as growth, barriers to growth, improvements in performance and overall ability to perform for the individual enterprise.

The 1998 'Closing the Gap' report from the United Kingdom Benchmarking Index, UKBI, (DTI 1998), identified that Companies' self-assessment of their performance in the areas of Leadership, Process, Policy and Strategy are generally high. The report detected little or no correlation of their higher self-assessment with actual performance, based on financial or other business results.

In looking across all companies in the UKBI database whose financial performance is in the lower quartile it is possible to identify the following contributory characteristics:

- Little marketing, R & D and product development expenditure.
- Poor supplier management.
- Poor delivery performance to customers.
- Minimal staff training.

All of these factors are associated with poor long term planning and management. Despite this, Business Excellence results show that managers think that they are performing well, as illustrated by lower quartile scores that indicate:

- Leadership scores at a minimum of 63%.
- Policy and Strategy scores of 58% for all but the Metal Products sector, which scored 50%, despite low RONA (return on net assets) and growth rates.
- Customer Satisfaction related scores of over 50%, despite high levels of customer complaints and late deliveries.

These results beg the question of what managers considered good management and performance levels to be and what measures they base their performance criteria on. Overstating performance is possible because no metrics are available in most organisations. What people perceive that 'management' means is looked at in Chapter 3, Section 3.8. It is the author's view that there is much confusion in this area.

The author believes that too much business performance assessment is subjective, and this includes benchmarking, Business Excellence and IIP assessment. The above report vindicates this view.

The author recognises the importance of quantitative data and to overcome the above problem this research has developed metrics for each business process and a methodology for recording, analysing and reporting performance.

The author has formulated a set of business processes from the analysis of business case studies and seven, internationally accepted, business standards and tools, which are in everyday use in many UK businesses although not predominantly by SMEs.

A much fuller exploration of the research domain and a more formal definition of the research problem can be found in Chapter 3.

## **1.4 Research Objectives**

The aim of the research is to develop, implement and evaluate an advanced Enterprise Model and implementation framework to facilitate Business Growth in Small and Medium Enterprises and entrepreneurial business start-ups. The framework will introduce business process management and quantitative Continuous Improvement with a pre-defined set of business processes.

In the context of Small and Medium Enterprises the research objectives are defined as being:

- Review and Evaluate Business Growth principles, business growth models and current growth practices.
- Identify and understand the issues Small and Medium Enterprises face when business growth is a corporate objective.
- Establish the requirements, including metrics, for successful SME Business Growth.
- Develop an SME Business Growth Framework and quantitative Continuous Improvement Framework and methodology for implementation to help Small and Medium Enterprises achieve Business Growth.
- Evaluate the SME Business Growth Framework and quantitative Continuous Improvement Framework in selected companies to illustrate its validity.

## 1.5 Deliverables

The research reported in this thesis has resulted in the following deliverables:

- A requirements map for successful SME Business Growth.
- Validated Frameworks and methodologies for SME Business Growth and quantitative Continuous Improvement - the Business Growth Framework (See Section 9.7).
- The documentation set for efficient and effective Business Process management making use of ICT.
- Software tools to support quantitative Continuous Improvement.
- A learning methodology for implementing the new Growth Framework incorporating the new Small Firms Development Initiative, SFEDI, standards:
  - The Standard for Business Start-Up.
  - The Standards for Business Support.
  - The Standards for Exploring Enterprise.
  - The Standards for Business Development.
- A start-up model for entrepreneurial businesses, virtual companies and collaborative ventures.
- A small business diagnostic tool used to identify formal and informal business processes from the GBPS that are currently being followed by the enterprise.

## 1.6 Research Methodology

The author has utilised most of the commonly accepted types of research in the compilation of this Thesis:

- Exploratory Research.
- Descriptive Research.
- Grounded Theory.
- Focus Groups.
- Explanatory Research.

The application of these research methods is explained more fully in Chapter 2.

## 1.7 Research Novelty

This research specifies a minimum set of business processes required to facilitate business growth. This set of business processes, the business process taxonomy, has been formulated and placed within a business management framework by the author. The set of business processes, the Generic Business Process Set, GBPS, has not previously been defined. This approach differs to others in that it starts from the premise that the enterprise itself in its entirety is the most important element.

The author has developed a new Enterprise Model and framework for a continuous business process improvement, based on quantitative data, and, importantly, an implementation method that is readily understood by SMEs. Quantitative business process management drivers have been introduced and these are fully explained in Chapter 7.

The combination of the set of business processes, the management framework and the quantitative process improvement methodology, provides an innovative and powerful tool for business growth not available elsewhere.

The selective use of UK NVQ Standard Elements has been utilised to meet specific business process task requirements (QCA 2002). This methodology facilitates the development of business specific, customised, NVQs. The take-up of NVQs, particularly in the SME sector, has been poor and a new approach is required (Martlay and Addis 2002). The author's work contributes to this goal.

The applicability of this research to the emerging, entrepreneurial business community in the new economy has been addressed.

The solution to the small business growth problem derived from this research is not entirely in line with the main thrust of the UK Government's 'Fit for the Future' campaign which promotes, as its key theme, best practice and learning by example. That approach focuses attention on **particular** areas of the business. This thesis has identified the need to ensure that **all** aspects of the business are addressed. The author's view is that only after this requirement has been met is the business in a position to



focus on specifics. Growth is a cyclic process and any area of weakness in the cycle will prevent growth even if other areas are exemplary.

## **1.8 Contribution to Knowledge**

The main contribution of the research lies in the development of a new methodology for Business Growth within Small and Medium Enterprises, based on business process management (of the correct set of business processes) and continuous improvement principles. The author believes that the new Business Growth and quantitative Continuous Improvement Frameworks and methodologies will facilitate Business Growth within the SME business fraternity. A GBPS Enterprise Model is introduced based on business processes predefined by the author.

The initial research led the author to the view that there was significant intellectual challenge and novelty in positioning Business Process management as a credible and feasible technique for Business Growth in the Small and Medium Enterprise environment. Exciting opportunities that will benefit business are envisaged through widespread appropriate use of such a technique. Enhanced on-the-job learning is one example.

Application experiences in Small and Medium Enterprises have confirmed the value of the new Business Growth Framework and quantitative Continuous Improvement Framework developed in this work. These results are presented in Chapter 8.

Five hypotheses are formulated, developed and defined. These hypotheses are discussed in the following Chapters and provided in Appendix A.

## **1.9 Thesis Structure**

The thesis is structured into ten Chapters, as illustrated in Table 1-1:

<b>Chapter</b>	<b>Title</b>
Chapter 1:	Introduction
Chapter 2:	Research Methodology
Chapter 3:	Historical Overview
Chapter 4:	Small and Medium-sized Enterprises Case Studies
Chapter 5:	Selection of Tools
Chapter 6:	Current Application of Tools
Chapter 7:	The Business Development Framework
Chapter 8:	Implementation
Chapter 9:	Elaboration

Chapter 10: Conclusion

*Table 1-1, Thesis Structure*

The contents of each Chapter is outlined below:

- Chapter 1 provides background information to the research, introduces the research problem, establishes the objectives and lists the deliverables of the research. It establishes the programme boundaries and ascertains the contribution to knowledge. The structure of the thesis is presented.
- Chapter 2 describes the research methodology, data collection, and data analysis process selected for the research. The Chapter explains the reasons for their selection, their advantages and disadvantages, and how they were employed.
- Chapter 3 examines the basic principles of Business Growth as a business corporate objective. An extensive literature review of the definition, the different classifications, the advantages and limitations, and steps of a Business Growth process are detailed. Continuous Improvement is examined as an important tool in achieving Business Growth. The purpose of this Chapter is to provide background information concerning Business Growth principles. Hypothesis 1 defined.
- Chapter 4 considers the challenges faced by today's Small and Medium Enterprises that have Business Growth as a corporate objective. Investigates and tests Hypothesis 1.
- Chapter 5 looks at the range of Internationally accepted standards and tools that are currently being offered to SMEs to facilitate improved business performance. The generic business process set, GBPS, is developed.
- Chapter 6 describes the application of the standards and tools discussed in Chapter 5. Hypothesis 2 defined.
- Chapter 7 outlines the GBPS Enterprise Model formulated from this research. Hypothesis 3 is defined.
- Chapter 8 presents the results from using and evaluating the GBPS Enterprise Model. Investigates and tests Hypothesis 2 and 3. Hypothesis 4 and 5 are introduced and discussed.
- Chapter 9 discusses the research findings, experiences and observations following the implementation of the GBPS Enterprise Model. The GBPS Enterprise Model is compared against similar practices in the field to position its application against other applications of similar nature. Key learning points are extracted, and limitations of the work are discussed.

Chapter 10 provides an overview of the research, summarises the novelty of the work and outlines areas for future work following the research.

The content of Chapters 1 to 8 is illustrated at Figure 1-4, Research Development.

## 1.10 Concluding Remarks

Product and market strategy alone is not a reliable route to sustainable business growth for all but a few organisations.

The majority of Small and Medium Enterprises have poor financial, managerial and technical personnel resources, and experience a scarcity of knowledge which acts as a barrier to business growth, improvement and improved survival prospects. This knowledge deficit results in some business processes, that are critical to business growth, being overlooked. The author believes that techniques to identify and implement these processes can improve these companies and offer leverage for economic development.

This research proposes establishing an innovative Growth Framework for Small and Medium Enterprises through the application of *Continuous Improvement* to the exhaustive set of *Business Processes* defined. This Chapter established the research problem, outlined the research boundaries, stated the objectives and the deliverables of the research, and concluded with an overview of the structure of the thesis.

No Small Enterprise Model, with a focus on growth, was available at the start of this research. The author has developed such a model based upon the generic business process set (GBPS) derived from this research. The following flow chart shows the development of the research leading to the author's hypothesis and the small enterprise business model.

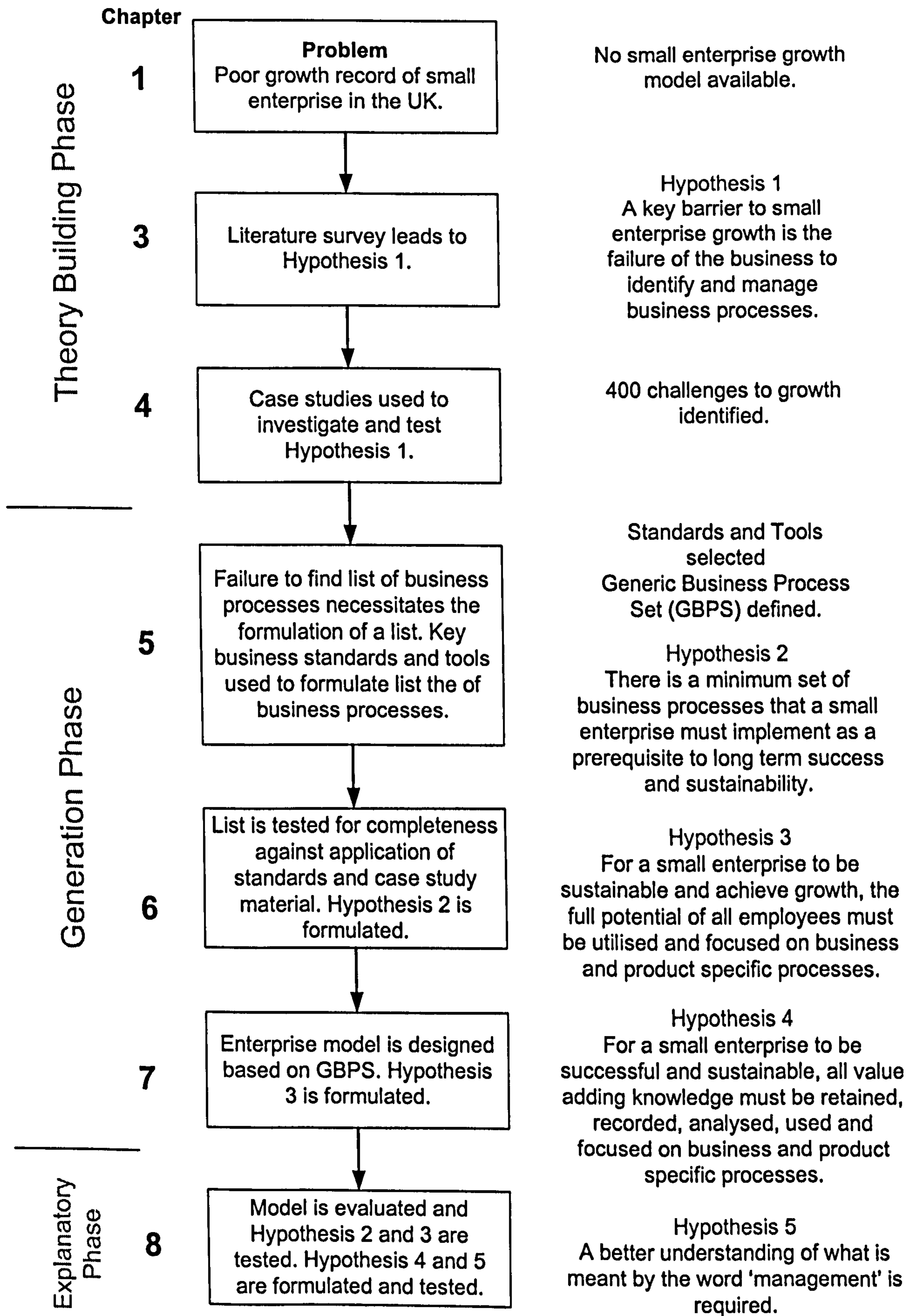


Figure 1-4, Research Development

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## Chapter 2: Research Methodology

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### 2.1 Synopsis

This Chapter describes the research approach chosen, outlines the data collection methodology followed and describes the data analysis process employed. The Chapter demonstrates the research path chosen and describes the supporting reasoning.

Emphasis is placed on how the author seeks to examine this new subject by exploratory and descriptive research, and develop new knowledge through the application of grounded theory validated through Focus Groups.

### 2.2 Research Approach

Business research can be classified as being based on either technique or function. Experiments, surveys and observation studies are common research techniques. Classifying the research objectives based on the function (purpose) provides the link between the nature of the problem and the choice of the research method. The nature of the problem determines whether the research is exploratory, descriptive or causal (explanatory) (Zikmund 1997).

#### 2.2.1 Overview

The research methodology has been split into five stages, in accordance with the nature of the research objectives outlined in Chapter 1, Section 1.4. Table 2-1 identifies the type of the research and the nature of the data collection process followed, to accomplish each of the objectives.

The initial stage of this research was exploratory, involving data gathering to provide the basis for the research theory building. Key sources for data were the literature survey and case studies. Background data concerning Business Growth principles and Continuous Improvement methodologies were acquired. Both qualitative and quantitative methods were employed in the process. The results of this activity are detailed in Chapter 3. The research problem was not defined at this stage, as exploratory research is conducted with the expectation that subsequent research will be required to produce conclusive evidence (Zikmund 1997).

The second stage of the research provides a diagnostic analysis of the application of Business Growth Models in Small and Medium Enterprises. Descriptive research aims to determine the answers to who, what, where, when and how questions, and provide accurate information. Descriptive studies are based on some previous understanding of the nature of the research problem, which is provided by the exploratory research

(Zikmund 1997). The descriptive analysis was based on both quantitative and qualitative data collection, and is described in Chapter 4.

Stage	Research Objective	Research Type	Nature of Data
<b>Theory Building Phase</b>			
1	Review and Evaluate Business Growth principles, business growth models and current growth practices	Exploratory	Qualitative
2	Identify and understand the issues Small and Medium Enterprises face when business growth is a corporate objective	Descriptive	Qualitative
		Ethnography	Quantitative
<b>Generation Phase</b>			
3	Establish the requirements, including metrics, for successful SME Business Growth	Grounded Theory	
4	Develop an SME Business Growth Framework and quantitative Continuous Improvement Framework to help Small and Medium Enterprises achieve Business Growth	Grounded Theory	
<b>Explanatory Phase</b>			
5	Evaluate the SME Business Growth Framework and quantitative Continuous Improvement Framework in selected companies to illustrate its validity	Explanatory	Qualitative
		Focus Groups	Quantitative

*Table 2-1, Research Approach Overview*

The third stage provided the baseline for the generation of a list of requirements for the successful application of a Business Growth Framework in Small Enterprises, based on Continuous Improvement practices. This was achieved through grounded theory as the developed framework was based on exploratory and descriptive survey, and is presented in Chapters 5 and 6.

The formal definition of the research problem led to the fourth stage of the research, involving the conception and development of a methodology and framework for Business Growth and Continuous Improvement in Small Enterprises. Grounded theory was applied at this stage, through the use of both qualitative and quantitative data collection methods. The development and realisation of the frameworks are presented in Chapter 7.

The main research question in the final research stage, stage five, was to verify if the proposed Business Growth and Continuous Improvement Frameworks could have a significant effect on the management and growth of Small and Medium Enterprises. The research type followed in this stage was explanatory as it provided an explanatory validation of the frameworks. The research was conducted through the development of Focus Group interviews amongst Small and Medium Enterprises and was based on both qualitative and quantitative data, described in Chapter 8.

### 2.2.2 Exploratory Research

Exploratory research is the initial examination conducted to clarify and define the nature of the research problem. The main purpose is to obtain a better understanding of the dimensions of the problem through exploration (Zikmund 1997). Subsequent research is required to clearly define the research problem. The exploratory research involved an extensive review of the literature.

The exploratory research was conducted in the fields of *SME Growth*, and consisted of a critical analysis concerning:

- an historical review of SME Growth.
- the definition of SME Growth.
- the purpose of SME Growth.
- the types of SME Growth.
- the steps in a SME Growth programme.
- the pitfalls of a SME Growth programme, and
- the link between SME Growth, business process management and continuous improvement.

A literature search was conducted on Barriers to Growth in SMEs. Information was sought on the definition, purpose, methodology and use of Growth Models. Although their implementation was outside the scope of this thesis, information was sought on the most widely employed enterprise *Performance Standards and Models*. Literature was found on:

- ISO9000:2000, the Quality Management System Guide.
- the Investors in People Standard.
- the European Foundation for Quality Management (EFQM) Excellence Model.
- the Charter Mark.
- Self Assessment.
- the UK Benchmarking Index (UKBI).

Regular searches were made of library and on-line databases throughout the period of this research. Current and back issues of key journals, magazines and publications were scanned for interesting and relevant papers and articles in the above areas. The



exploratory research was used to provide a general understanding of the research topic and formed the first part of the literature review. Chapter 3 describes the analysis of the exploratory research.

### **2.2.3 Descriptive Research**

The purpose of descriptive research is to “describe the characteristics of a population or phenomenon” (Zikmund 1997). Unlike exploratory research, descriptive studies are based on some previous understanding of the nature of the research problem area (Robson 1993). To establish the research problem, the application of Growth models in Small and Medium Enterprises was investigated. The research:

- identified obstacles to the implementation of Growth models in Small and Medium Enterprises.
- reviewed current growth initiatives aimed at SMEs.
- presented the problem of sourcing knowledge from better performing companies.

The descriptive research, in conjunction with the exploratory research mentioned in Section 2.2.2, forms the basis of the literature review, established the research problem and set the specifications for the SME Growth Framework. The outcome from the descriptive research is presented in Chapter 4.

### **2.2.4 Explanatory Research**

Explanatory research takes an established situation and explains it. It seeks an explanation usually in the form of causal relationships (Robson 1993). In this case, the situation is formed by the application of the proposed framework, and its effectiveness is researched through the establishment and employment of Focus Groups. This stage entailed gathering qualitative and quantitative data from Small and Medium Enterprises. The outcome from the explanatory research is presented in Chapter 8.

### **2.2.5 Grounded Theory**

Grounded theory is inductively derived from the study of the phenomenon it represents. It is a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon (Strauss and Corbin 1990). The purpose of the grounded theory is the “discovery of theory from data” (Bryman and Burgess 1994).

Grounded theory was presented initially by Glaser and Strauss in the book: “Discovery of Grounded Theory” (Glaser and Strauss 1967). The aim was to develop the baseline for theory developed through research, hence the definition “grounded theory”, and to establish its linkage to qualitative research. According to Strauss, the book legitimised careful qualitative research, as by the 1960s it had attained a low status because it was not believed capable of adequate verification (Strauss and Corbin 1994).

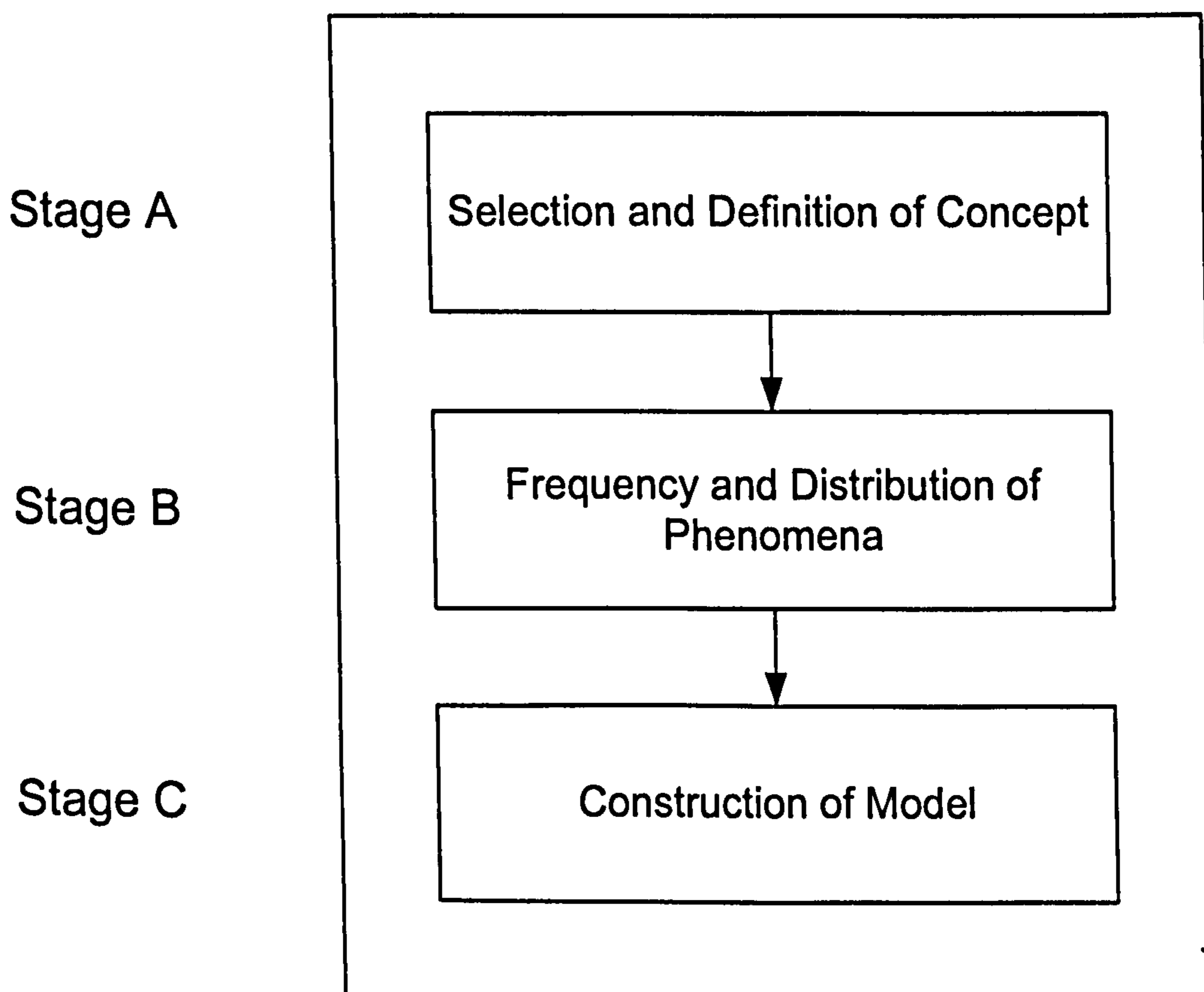
Grounded theory works by collecting data, generalising findings into statements about the possible relationships involved and verifying these statements by further data collection. One eventually reaches a point at which one can generalise about the findings of the research (Iankowicz 1995).

The basis grounded theory can be summarised in three stages (Becker and Geer 1982), see Figure 2-1.

The SME Growth and Continuous Improvement Frameworks were developed based on grounded theory. The exploratory and descriptive stages of the research led to the construction of the framework, which provides the general setting within which the research observations are described.

The selection and the definition of the concept was done at the exploratory research stage, where the basic principals of SME growth were researched. Data on the frequency and the distribution of the phenomenon was acquired at the descriptive research stage, where the application of Growth practices in Small and Medium companies was investigated. Finally, the construction of the model involved the development of the framework for SME Growth employing Continuous Improvement practices. See Chapter 7. The frameworks were tested using Focus Groups.

## Grounded Theory



*Figure 2-1, Grounded Theory*

### 2.2.6 Focus Groups

The validity and applicability of the proposed framework was supplemented through the development of Focus Groups. Focus Groups originally emerged as a research method to minimize the directive and dominating role of the researcher in interview sessions (Lettice 1995).

The Wordsmith English Dictionary (Parks 1998) defines groups as “a collection of things, ideas, or people that are assembled, connected, or related”. Groups are based on common experience (Krueger 1994).

A Focus Group interview is an unstructured, free flowing interview with a small group of people. It is not a rigidly constructed question-and-answer session, but a flexible format that encourages discussion. Participants meet at a central location at a designated time. The group consists of an interviewer or a moderator and six to ten participants who discuss a single topic. The moderator introduces a topic and encourages the group members to discuss the subject amongst themselves (Zikmund 1997).

Focus Groups enable people to discuss their true feelings, anxieties, frustrations and to express the depth of their convictions in their own words. Ideally, the discussion proceeds at the groups initiatives. They are relatively brief, easy to execute, quickly analysed and inexpensive. Their advantage is flexibility as numerous topics can be discussed.

The advantages of Focus Groups can be categorised as follows: (Zikmund 1997)

- **Synergism:** The combined effort of the group will produce a wider range of information, insights, and ideas than will the accumulation of separate secured responses of a number of individuals.
- **Serendipity:** It is more often the case that in a group, as opposed to a one to one interview, diverse ideas will find spontaneous expression. In addition the group affords the opportunity to develop an idea to its full significance.
- **Snowballing:** A bandwagon effect often operates in a group interview situation. A comment by one individual often triggers a chain of responses from the other participants.
- **Stimulation:** After a brief introductory period; the respondents – for the most part - freely express their ideas and expose their feelings as the general level of excitement about the topic increases.
- **Security:** in a well structured group, participants usually find comfort in the fact that their feelings are similar to those of others in the group, and each participant can express an idea without being obliged to defend it or to follow through and elaborate it.

- **Spontaneity:** In a group interview people speak only when they have definite feelings about a subject, not because a question requires a response – thus, answers can be spontaneous and less conventional.
- **Specialisation:** The group interview allows use of a more highly trained moderator (interviewer) to facilitate the interview and keep it focused while maintaining flexibility.
- **Scrutiny:** The group interview permits closer scrutiny to check the consistency of the interpretations. The interview can be observed by other people, recorded or even videotaped. This allows a post-interview detailed examination to offer additional insights.
- **Structure:** The group interview affords more control than the individual interview concerning the range of topics and depth covered. The interviewer or moderator has the opportunity to re-open topics that received too shallow a discussion when initially presented.
- **Speed:** The group interview permits a given number of interviews to be conducted more quickly than one to one interviews with designated respondents.

Krueger notes six limitations of Focus Groups (Krueger 1994):

- the researcher has less control over the group interview than on the individual interview. The researcher has to maintain the discussion focus.
- data is more difficult to analyse, and care must be taken to avoid lifting comments out of context.
- the technique requires trained interviewers. They must use open-ended questions, use techniques such as poses and probes, and must know when and how to move into a new topic.
- groups can vary considerably. Groups can have different attitudes to the interview: they can be lethargic or energetic and invigorating.
- groups are difficult to manage. The Focus Group requires people to take time off, to come to a designated place at a given time, to share their perceptions with others.
- the environment must be conducive to conversation. Without an effective moderator, a single, self-appointed individual may dominate the discussion. A negative impression of the dominant individual may affect the topic of the discussion and provide subjective interpretations.

In Focus Groups, the direction of the interview and the areas covered are totally in the

control of the informant (interviewee), hence called non-directive interview (Robson 1993).

### 2.2.7 Characteristics

Focus Group interviews typically have six characteristics or features:

- they are generally composed of 6 to 10 people. The size is conditioned by two factors: it must be small enough for everyone to have the opportunity to share insights and yet large enough to provide diversity of perceptions.
- they are conducted in series: One-off groups tend to be risky because they might be influenced by internal or external factors and hence yield unrepresentative or extreme results. Moreover, a group might be categorised as a “cold group” where its participants are reluctant to participate in the discussion. These factors can be identified in a series of focused group interviews and the idiosyncrasies of individual groups can be balanced over a series of group interviews.
- participants are reasonably homogeneous but unknown to each other: Groups are made up of people who are similar to each other. The nature of the homogeneity is determined by the purpose of the study and forms the basis for recruitment. Focus Groups have traditionally been composed of strangers, however, researchers are challenging this rule. Caution should still be used when considering Focus Groups with people who regularly interact as interpretations may be biased.
- they are a data collection procedure: Groups produce data of interest to researchers, as they emphasise the perceptions of participants. They are not intended to develop consensus or to establish a course of action.
- they gather qualitative data: groups produce qualitative data that provides an insight to the attitudes, perceptions and opinions of the participants. These are elicited through open-ended questions and from observations of the respondents in the group. The researcher serves several functions in the Focus Group: moderating, listening, observing and eventually analysing using an inductive process. The researcher derives understanding based on the discussion as opposed to testing or confirming a preconceived hypothesis.
- they aim to have a focused discussion: the topics are carefully predetermined and sequenced, based on an analysis of the situation. The moderator uses open-ended questions, which appear to be spontaneous, but in reality are carefully planned.

### 2.2.8 Qualitative and Quantitative Data Collection

Data can be defined as “factual information used as a basis for reasoning, discussion, or calculation” (Webster 1998(a)). Data and research are strongly interlinked.

Patterns in data can be used to perceive information, and information can be used to enhance knowledge, which is the purpose of research.

Data can be extracted from various sources using numerous methodologies, and can be categorised in terms of its format. If the data is based on numbers to provide statistical analysis, it is classified as quantitative, whereas if it is based in words, it is identified as qualitative (Blaxter, Hughes et al. 1996).

The word qualitative implies an emphasis on processes and meanings that are not rigorously examined, or measured, in terms of quantity, amount, intensity and frequency. In contrast, quantitative studies emphasise the measurement and analysis of causal relationships between variables, not processes (Denzin and Lincoln 1994). Quantitative research is viewed as confirmatory and deductive in nature, while qualitative research is considered to be exploratory and inductive (Trochim 1997).

Despite their difference in nature, they are strongly interlinked. Qualitative data can be measured and coded using quantitative methods and therefore quantitative research can be generated from qualitative inquiries (Trochim 1997). The difference divides researchers into positivists, who employ qualitative data, and phenomenologists, who use quantitative data (Lettice 1995).

The author capitalised on their complementary nature through employing qualitative data to determine *what* is important in the context of the research and identify *why*, followed by quantitative data to quantify the level of importance (*how* important).

At the exploratory first stage of the research, qualitative research was applied to analyse the principles of SME Growth. Qualitative data sources included a wide range of Barriers to Growth books and journals, total quality management books and journals, a range of management journal articles and books, business journals, engineering magazines, newspaper articles, doctorate and masters theses, Internet based documents and publications, and change management articles.

Quantitative data sources include SME Growth surveys conducted in the UK, which quantify critical issues concerning challenges to growing SMEs.

The reader should note that SME Growth and Continuous Improvement are directly related to Total Quality Management. This is further elaborated on Chapters 5 and 6. For a detailed analysis of Total Quality Management, the interested reader should see for example (Juran 1979; Deming 1982; Ishikawa 1985; Creech 1994; Mahoney and Thor 1994; Weimershirch and George 1994).

Throughout the second stage of the research (descriptive stage), qualitative data was employed to analyse the application of Growth practices in Small and Medium Enterprises, while quantitative sources were used to quantify its utilisation. Qualitative data sources were the same as in the exploratory stage.

Quantitative data was acquired through the use of SME Case Study investigation, report and analysis. Case Study SMEs were selected because they were facing *challenges* to

their growth plans. The European Foundation for Quality Management (EFQM) Excellence Model criteria were used to categorise these *challenges*. The reasons why the EFQM model was chosen, and a description of the data collection process are provided in Chapter 4.

To avoid the potential of researcher bias in the formulation of the research problem, the author conducted informal discussions and meetings with academics of engineering and management disciplines, managers from Small and Medium Enterprise and experienced consultants in the fields of Small and Medium Enterprises. This unstructured informal data collection process, in conjunction with the literature review, has played an important role in establishing the essential concepts of the research work.

The fourth stage of the work involved the development of a structured SME Growth Framework and a Continuous Improvement Framework, based on TQM principles. As the frameworks evolved through the application of grounded theory, data collection was not involved. (Grounded theory involves the discovery of theory from data (Section 2.2.5)). The frameworks were applied and tested at the final stage of the research at which stage both quantitative and qualitative data were obtained from the participant companies.

Quantitative data was acquired through the analysis of Case Studies of SMEs that undertook trial implementation of the Growth Framework and Methodology. Self-Assessment was also used for this activity. The reasons why Self Assessment was the preferred method, and a description of the data collection process are provided in Chapter 8.

### **2.3 Triangulation**

The use of evidence from different sources, of different methods of collecting data and of different investigators, where feasible, are all triangulation techniques which enhance credibility (Robson 1993). It is particularly valuable in the analysis of qualitative data where the trustworthiness of the data is always a concern. It provides a means of testing one source of information against other sources. Both correspondences and discrepancies are of value to the research. Correspondences reinforce a view and discrepancies showed disagreement.

Triangulation improves the quality of data and in consequence the accuracy of the findings. Alertness for possible triangulation opportunities is a valuable quality in the enquirer (Robson 1993). Triangulation is meant to be a heuristic tool for the researcher (Janesick 1994).

For this research, literature review provided information on SME Growth principles and the application of Growth models in Small and Medium Enterprises. However, very little detailed information was provided on how SMEs could understand and implement a practical growth model. The author discussed this issue with academics and researchers in the United Kingdom. In addition, discussions with academics and practitioners in the field were conducted, following the author's presentations at various International conferences.

Triangulation was of prime importance during the data collection process. Analysis of the challenges faced by case study SMEs, that had to be overcome to achieve their desired growth, formed the basis of the hypothesis that barriers to SME growth are predominantly as a result of the way SMEs are managed. This was true for internal barriers and, in part, external barriers. Extensive analysis of the case study reports identified these challenges. It was therefore important to ensure objectivity in the process. For this reason, data was sought both horizontally and vertically in the participant organisations. Challenges identified by Owners and Directors were confirmed by the author through thorough investigation of the business. This research was not interested in the specific detail of the challenge, but in categorising the nature of the challenge. For this reason, no further attention was paid to the challenges. The categorisation of the challenges was based on the European Foundation for Quality Management Excellence Model.

## **2.4 Prominence**

This ambitious research methodology is dependent on access to a wide range of industrial practitioners and academic authorities across Europe. The author was assisted by his direct involvement in a number of European Social Fund bids based upon the frameworks and methodologies derived during this research.

The author also presented and discussed various aspects of his research at National and International conferences. Interest in the application of this work was expressed by a wide range of Academic Institutions across Europe and the United States. European Industrialists have also shown interest. In the UK Business Links, Training and Enterprise Councils, the West Midlands Region Government Office, the Department of Trade and Industry and the Confederation of British Industry have also declared themselves interested.

The author fully utilised his participation at National and International conferences and academic networks on the Internet to discuss and evaluate various aspects of his research from the early stages. This proved of significant importance for the development and application of the SME Growth and Continuous Improvement Frameworks.

## **2.5 Concluding Remarks**

The strategy for carrying out the research was directly linked to the nature of the research objectives. To provide a thorough review and evaluation of SME Growth principles, exploratory research was conducted based on both qualitative and quantitative data. During the theory building phase the nature of the research problem was established through descriptive research. Qualitative and quantitative data were employed to identify the issues that face Small and Medium Enterprises when they engage in Growth strategies. The exploratory and descriptive research phases formed the literature review for the study.

The generation phase of the research focused on the development of a framework and methodology to help discrete Small sized companies to overcome barriers to growth and



learn from their own experience through the application of a Continuous Improvement Framework. Grounded theory was applied to develop the framework and methodology, and was evaluated using Focus Groups during the explanatory stage.

Triangulation was applied to develop the research problem, to improve the quality of the data collected and the accuracy and credibility of the research findings. To discuss various aspects of the development and application of the SME Growth and Continuous Improvement Frameworks and methodology, the author fully utilised his participation at two European Conferences and workshops to gain a pan European visibility.

## Chapter 3: Business Growth

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### 3.1 Synopsis

In this Chapter, the commonest definitions of Small and Medium-sized Enterprises are presented, their importance is assessed and their typical characteristics are outlined. The principles of Business Growth are examined. The purpose of conducting a Business Growth study is outlined and an analysis of the advantages and disadvantages of a Business Growth process are examined. The types of practices inherent to Business Growth processes are discussed and their critical elements are presented.

Extant literature on business growth is also reviewed with the aim of identifying whether barriers to growth conform to particular patterns. The characteristics of business growth and barriers to business growth are discussed.

The importance of knowledge to business growth and how benchmarking can assist in this area are reviewed and discussed.

Hypothesis 1 is formulated.

*That a key barrier to small enterprise growth and sustainability is the failure of the business to identify and manage business processes.*

The pre-requisites for Business Growth and sustainability are discussed at Chapter 7.

### 3.2 Definition of Small and Medium Enterprises

Small and Medium Enterprises (SMEs) defy easy definition. In everyday usage, the term small business is usually applied to small shops in the neighbourhood, while large companies are often regarded as the multinational giants (Barrow 1993).

The initial introduction of the Small and Medium-sized business concept to the United Kingdom economic lexicon can be traced back to the report of the Macmillan Committee on Finance and Industry published in 1933, in which the lack of long-term capital for SMEs was recognised. During the Second World War, it was recognised that the post-war restructuring of industry would require the channelling of resources to the rebuilding of Small and Medium sized Enterprises. In 1959, the Radcliffe Committee recommended some improvements on the financial facilities available to small firms. Neither the Macmillan nor the Radcliffe reports attempted to define the small businesses they were referring to in their recommendations (Hertz 1982). Small companies were characterised by their difficulty or inability to raise risk capital from the public (Barrow 1993).

The first attempt to define Small and Medium Enterprises was in 1969; a committee under the chairmanship of J.E. Bolton was charged - to consider the state of small firms in the United Kingdom economy, the facilities available to them, and to make recommendations. Their report, published in 1971, defined small businesses as those with a relatively small share of the market, managed by their owners and not being a subsidiary of a larger company. The quantitative limits described these companies as employing less than 200 employees in the manufacturing sector, having an annual turnover of £50,000 pounds sterling (in 1970 prices) in retailing, and employing less than 25 employees in the construction industry (Barrow 1993).

The main difficulty encountered when creating unitary terminology is that while definitions are static in nature, the objects they describe can be dynamic and ever changing (Hertz 1982). As small businesses operate in diverse political, legal, social and economical climates any unitary global definition will undoubtedly create contradictions.

The number of employees or the annual company turnover are usually employed to define an SME. In France, companies with less than 50 employees are classified as small enterprises, while medium-sized enterprises can have up to 500 employees. Companies with more than 500 employees are considered as large enterprises. In Denmark and Ireland, a small business employs less than 50 employees, a medium sized enterprise less than 200, and a large business employs more than 200 people (Barrow 1993).

Contradictions are evident when considering a single criterion for the definition of Small and Medium Sized Enterprises. In 1992, Denmark had only 400 companies employing above 200 employees. If the large company definition would be above the 500 employee level, Denmark would have virtually no large businesses (Barrow 1993). The concept of the Small and Medium Enterprise varies somewhat from industry to industry and country to country.

The most satisfactory way of classifying a company is to combine a number of criteria. In the United Kingdom, the Companies Act of 1985 states that a small company must satisfy at least two of the following criteria (DTI 1998a):

- A turnover of not more than £2.8 million pounds sterling (approx. 4 million euros).
- A balance sheet total of not more than £1.4 million pounds sterling (approx. 2 million euros).
- Not more than 50 employees.

A medium sized company must satisfy at least two of the following criteria employees (DTI 1998a):

- A turnover of not more than £11.2 million pounds sterling (approx. 16 million euros).

- A balance sheet total of not more than £5.6 million pounds sterling (approx. 8 million euros).
- Not more than 250 employees.

Large enterprises are defined as the companies which control higher resources than those mentioned for the medium companies.

For statistical purposes, the Department of Trade and Industry in the United Kingdom, defines a "micro" firm with a workforce between 0 and 9 employees, a small firm between 0 and 49 employees (includes micro), a medium firm with 50 to 249 employees and a large firm with over 250 employees (DTI 1998a).

In March 1996, the European Commission adopted a single definition of SMEs shown in Table 3-1 (Commission 1996).

Criteria	Micro	Small	Medium
Max. number of employees	10	50	250
Max. annual turnover	-	7M euros	40M euros
Max. annual balance sheet total	-	5M euros	27M euros
Max. % owned by one, or jointly by several, enterprise(s) not satisfying the same criteria	-	25%	25%

*Table 3-1, European Commission SME Definition*

EU member states, the European Investment Bank and the European Investment Fund were invited to comply with the definition by the 31st of December 1997. The definition forwarded by the European Commission is that used in this thesis as the standard for the classification of companies. Enterprises employing more than 250 employees, with an annual turnover greater than 40 M euros, or with an annual balance sheet greater than 25 M euros, or owned by a large company by more than 25% are not within the domain of this research work.

### **3.3 Importance and Characteristics of Small and Medium Enterprises**

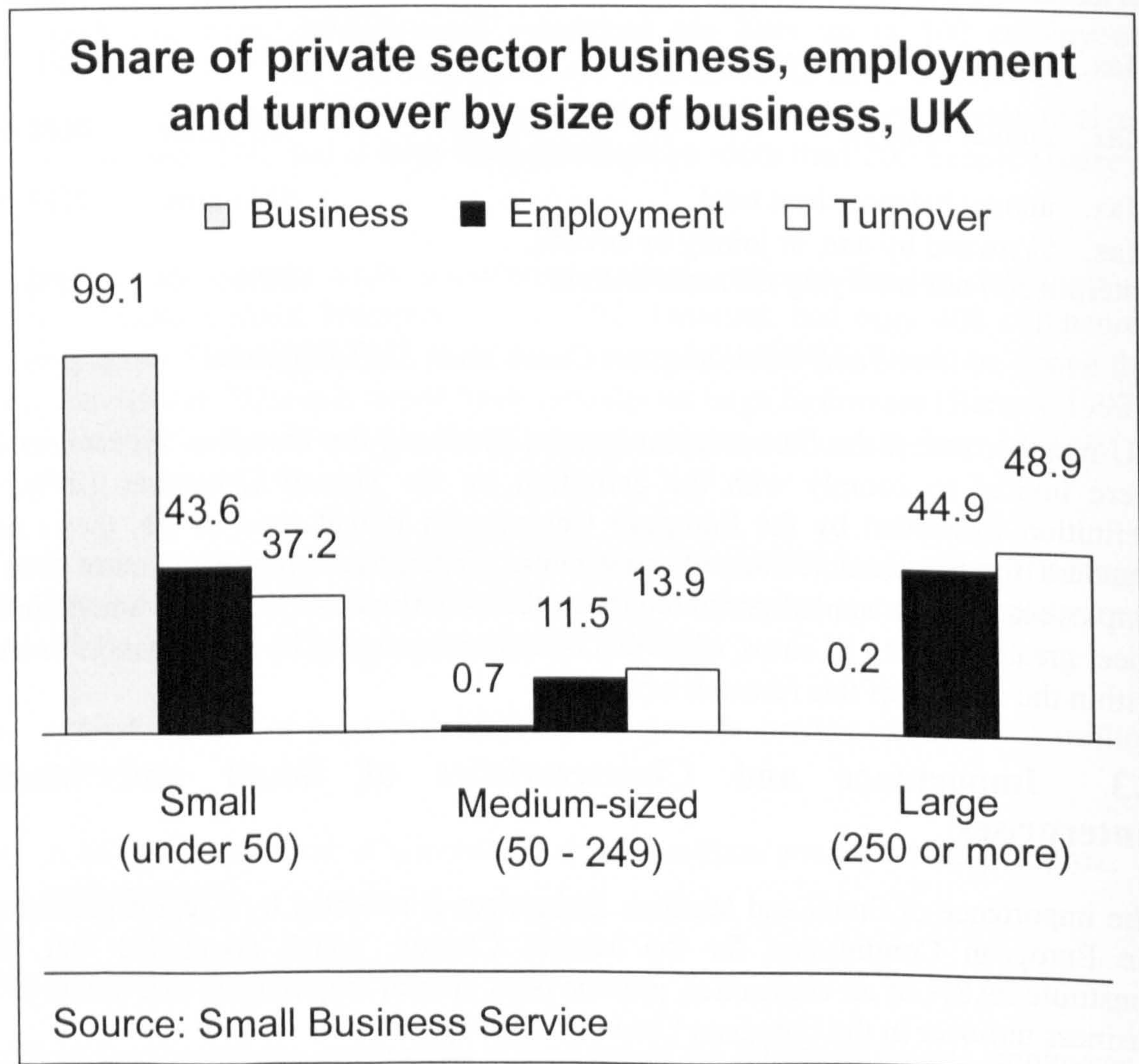
The importance of Small and Medium Enterprises is reflected by a report presented by the European Commission for the Madrid Council, which concluded that SMEs constitute 99.8% of all companies, provide 66% of total employment and attain 65% of business turnover in the European Union (EC 1995).

A statistical press release by the Department of Trade and Industry indicated that at the beginning of 1997 there were a total of 3.7 million businesses in the United Kingdom. Of that number, only twenty five thousand were medium sized (50 to 249 employees) and only seven thousand were large (above 250 employees).

Figure 3-1 indicates the proportion of businesses, employment and turnover in Small, Medium and Large Enterprises in the United Kingdom at the start of 1997 (DTI 1998a).

It is worth noting those companies with less than 50 employees constitute 99.1% of enterprises, employing 44.7% of the workforce and account for 39.5% of the UK turnover. Extending these figures to companies below 250 employees, it can be deduced that SMEs constitute 99.8% of UK businesses, employ 56.8% of the workforce and attain 53.8% of the overall business turnover.

In addition, Small and Medium Enterprises play a key role in terms of growth and generate an above average share of new jobs. The net job creation in SMEs has more than compensated for job losses during the period 1988 to 1995. Enterprises with fewer than 100 employees have been responsible for almost all the job creation at a rate of 259,000 net jobs per year, and this trend is expected to continue. During periods of economic recession, small enterprises shed jobs more slowly and absorb economic shocks better than larger companies (EC 1995).



*Figure 3-1, Proportion of Businesses, Employment and Turnover of UK Businesses*

Small and Medium Enterprises are the major contributors to supply chains. The

economy's strength is linked to the vigour/vitality of small manufacturing companies (Ratcliff 1997).

It can be summarised that Small and Medium Enterprises are of major importance to the future European economy because as Cordis (1998) outlines:

- They contribute to the creation and maintenance of employment. In many regions of Europe they are the predominant providers of jobs and livelihood.
- They account for a significant share of European Gross National Product (GNP). They are the principal sources of wealth creation in many parts of the Union.
- They occupy unique and strategic positions in the delivery chain, providing highly specialised niche products to large enterprises, as well as ensuring a diversity of supply of goods and services adapted to the needs of final customers.

Browne, Sackett and Wortmann emphasise that collectively the Small and Medium-sized Enterprises are assuming increased significance because (Browne, Sackett and Wortmann, 1994):

- Performance deficiencies in the SME sector threaten the United Kingdom overall competitive position; almost all product and service supply chain now comprise multiple SMEs.
- Globalisation could significantly shrink the United Kingdom SME base. Most SMEs in open competition with world class, low cost producers will suffer contraction, employment loss and increased potential for business failure.
- There is an opportunity for significantly increased value to be added from the United Kingdom Small and Medium-sized Enterprise resources; SMEs deploy a high proportion of the labour force and do not generate a corresponding proportion of the output.
- New job opportunities are concentrated in the SME environment; raising SME manufacturing performance offers scope for employment growth.

Small and Medium sized Enterprises, especially in the manufacturing sector, have been recognised world-wide as increasingly important to national economic well being (Sackett and Nelder 1995). However, the full potential for growth and employment within the Small and Medium Enterprise base is not being properly realised. On average 50% of SMEs in the EU fail within the first five years of their creation (EC 1995).

Table 3-2 indicates that Small and Medium-sized Enterprises form an absolute majority of companies in various industrial sectors (DTI 1998a).

<b>Industrial Sector</b>	<b>Percentage SMEs</b>
Agriculture, forestry and fishing	100%
Mining and quarrying	98.9 %
Manufacturing	99.2 %
Electricity, gas, water supply	83.7 %
Construction	100 %
Wholesale, retail and repairs	99.8 %
Hotels and restaurants	99.8 %
Transport, storage and communication	99.8 %
Financial intermediation	99.3 %
Real estate, renting and business activities	99.9 %
Education	99.9 %
Health and Social work	99.7 %
Other community, social and personal	99.9 %

*Table 3-2, Percentage of SMEs by Industrial Sector*

The high number of SMEs distributed in different industries and different markets signifies that the most striking and important characteristic is their diversity across sectors. Despite the heterogeneity in business motives, entrepreneurial styles, backgrounds and financial conditions, SMEs have a number of common characteristics (Nooteboom 1994).

Most of the smaller companies are family owned businesses, incorporating intertwined ownership and management. The manager-owner personality and their desire for success influence the overall business operation, strategy and future direction. Only the minority of these managers have received formal training on business management.

SMEs can be innovative, operate in small “niche” markets and customise their products and processes to respond to varying customer requests. They are usually product, not process orientated, and usually have a small production volume of non-complex products, using a few and simple manufacturing procedures (Barrow 1993). Complexity in the SME manufacturing environment can rise from the production of specialised products where scale effects do not appear (Nooteboom 1994).

They rarely employ formalised communication systems within the enterprise and internal information flows are based on oral communication. In contrast to larger companies, they do not have many levels in their organisational structure and have limited staff functionaries (Ratcliffe-Martin and Sackett, 2001).

The typical weaknesses of SMEs are lack of time, restricted financial and personnel resources, limited acquisition of new knowledge and use of new technology, and concentration of activities into day-to-day management. Their limited resources make them sensitive to customer demands, competitive pressures and financial risks, and they often neglect the need for internal improvement by being preoccupied with day-to-day management to attain and maintain the required cash flow (Martin, 2000).

Small and Medium Enterprise characteristics may exist in the relatively independent subsidiaries of larger firms. In fact, large companies have started to search for the flexibility typical of small firms by “decentralisation”, supplier networking and outsourcing (Nooteboom 1994).

### **3.4 Entrepreneurship**

Entrepreneurial businesses are a particular group of SMEs. There is investment interest in today's ‘knowledge economy’ and in entrepreneurship. Entrepreneurial businesses face similar growth barriers condensed into a much shorter timescale particularly in the early stages. The author has used the phrase ‘time-to-market’, which usually refers to product development, to emphasise the importance of getting a new entrepreneurial business up and running in line with new product development. These new businesses are often trading with ‘virtual’ partners and on joint projects and are created to fulfil a specific project. Entrepreneurial businesses are particularly vulnerable to poor business process definition as they are product focused.

### **3.5 Literature Review**

Wealth generation through the development of existing small, mainstream companies into larger, world class enterprises is a widespread goal. In the UK managers are deluged with examples of world class performance arising from the application of advanced manufacturing programmes and technologies. Managers seem to doubt if such approaches are applicable to their own smaller, low profile businesses. The notion of world class business operation is nonetheless evolving as exemplified by the UK Government's ‘Fit for the Future’ 2000/2001 campaign and the focus of its Small Business Service (SBS) on exemplar businesses; which offer examples of good practice as the most effective approach to business growth.

Over the last decade there has been a seismic shift in business culture. We have been through Lean Production, where world class meant being as lean as possible inside the factory. This gave way to Best Practice applied enterprise wide, World Class Manufacturing was, ‘the aggregation of best practice in a wide range of areas’. Then came Agile Manufacturing; the ability to customise through the application of advanced technology in design and manufacture processes. In the late 1990s this was seen as the way to World Class Manufacturing, although it is accepted that not all companies need to be agile! Certainly business needs to be competitive. The author questions how much influence or understanding small businesses have had on these developments.

The concept of World Class Manufacturing cannot be represented as a single objective even for a specific manufacturing enterprise. For many Small and Medium sized Enterprises wishing to improve performance the only route available is to copy exemplars. However, copying without learning or without a reference point is a high-risk strategy. A business may feel threatened with uncertainty and potential change overload and as result there may be a strong temptation to do nothing. The effect is that decision support, available to small enterprises via various DTI sponsored outlets, e.g. Business Link, for realising business excellence is not being focused on those



companies that can best exploit it. It is a blanket approach that often misses individual needs (GEM, 2001).

World Class excellence is associated with business growth, employment opportunities, added value and social well being. There is a requirement for growth in existing small manufacturing enterprises in the United Kingdom. The average value added per employee peaks in companies with 100-200 employees. In companies of 10-99 employees it is about halved and below 10 employees (94% of companies) it is halved again. The trend towards multiple, smaller companies risks a decline in value added capability and potentially threatens national well being. Existing small companies are a lineside stock of resource for future core manufacturing businesses. National well being, e.g. GDP, could be substantially improved if we realised growth in a greater number of our small enterprises (Sackett, 1996). As there are numerous small enterprises a structured approach is attractive targeting those companies with growth potential, and a blanket approach is resource intensive. Storey reports that only about 10% of UK companies with a turnover of £5-100 million per annum achieved a growth of 30% or more compound over the last 4 years (Storey, 1998).

In the emerging, global business environment a company may have the characteristics of a First Tier Supplier, with World Class product/service development capability, probably in a specialist domain. Alternatively a company will be a Second Tier supplier, with no option but to compete with the best players world-wide on price, delivery and flexibility. In open competition with world class, low cost base manufacturers, they would suffer.

SMEs employ a high proportion of the manufacturing workforce yet they do not generate a corresponding proportion of our manufacturing output. The gap in added value per employee has been growing steadily between major and smaller companies (Levy, 1993). Yet many larger companies are effectively an amalgamation of SME-sized sites while others are actively pursuing policies of decentralisation. This movement is driven by a recognition that, whilst the average performance of an SME is low, excellence in manufacturing is apparent in exemplar sites of 100-200 employees (whether independent SMEs or members of a larger group).

Warnecke (1993) discusses the need for a change in direction from current management thinking. The methods used to organize a factory and manage its employees have constantly been refined, whereby business and scientific progress have mutually profited from each other. Guidelines or paradigms remained constant and the assumption for the future was that more powerful information technology would transform data processing into information processing and finally into knowledge engineering. This would lead to improved scheduling and greater control over manufacturing processes and even the complex system of the factory would sooner or later become largely automated. This gave rise to the image of the factory of the future.

It is precisely the intense study of this approach, encapsulated in the term CIM, the integration by computer of all the processes within a factory, which has led to doubts, perhaps less with regard to the feasibility of continued technical advances as to their expediency. The deterministic view of the world on which this is based, dealing with

the familiar relationships between cause and effect or with those relationships accessible after the appropriate research work has been done, is not adequate, since it is only valid for certain limited aspects of reality. In modern science, particularly in physics, this insight has now received general acceptance; the mathematician knows the difficulty verging on impossibility of quantifying and calculating a system with numerous elements bearing multiple, often non-linear relationships to one another. It is only possible to try to create order from chaos by working with probabilities, approximations and fuzzy concepts. In practice, this means that only the most pressing problem can be dealt with in each instance, although quite a different one may be appropriate tomorrow and views as to the priorities to be set can also differ considerably (Baxter, 1999).

However, if we accept this as a reality that cannot be quantified and modelled any more effectively in the foreseeable future and possibly never, then we must amend our approaches and act accordingly. The fast global information and communications systems that we now have give us an insight into a turbulent and complex world the dynamic nature of which calls into question every position so far adopted. This means that we must also rethink our previous guidelines with regard to company organisation, staff management and manufacturing structures. We find ourselves in the midst of a revolution. Existing forms of performance optimisation have attained a high degree of sophistication; they have therefore reached a state in which an increase in effort, however great, offers only diminishing marginal utility. New attempts are expressed in key words and methods such as strategic alliances, complexity reduction, concentration of core areas, reduction in the vertical range of manufacture, overhead value analysis, segmentation, creation of production cells, group technology or lean management. The question is whether the variety of solutions on offer have any factors in common which can be integrated into an holistic approach.

There is little help from theory on models for small business growth and development. The literature on growth and SMEs in the UK largely rejects the notion of a profile of success factors which should be emulated by those companies wishing to grow and the notion of generic models or profiles for growth that might be emulated by companies wishing to expand (Gibb, 1992). There is a lack of agreed theory on enterprise model development embracing sufficient parameters with fully mapped interaction to underpin comfortable growth scenarios. Practitioner managers need guidance beyond the mere generic copying of exemplar organisations if they are to realise sustained success (O'Donnell, 2002).

The urgent requirement for business growth prompted a UK government funded national study (Sackett, 1994). This study targeted successful and innovative smaller enterprises. Findings were derived from 900 companies. Amongst the outcomes it was found that owner / directors of even good small and medium sized enterprises generally:

- prefer investment in capital equipment rather than organisational change.
- believe in the uniqueness of their company.
- lack enthusiasm for initiatives led by government.
- are unaware of university or agency research funding assistance.
- have managerial and technical personnel resource poverty.

Many of these companies are owner personality driven. Some specific findings include:

- When developing products, only 25% plan new manufacturing processes.
- Ignoring the human issues in business / technology implementation is common.
- 1 in 4 do not believe that fast growth is risky even though it is a major cause of company failure.
- Long-standing initiatives, like ISO 9000 registration, have low penetration.

Detailed analysis of the target companies developed a pre-qualifier that companies likely to successfully implement World Class technologies and programmes and sustain them over the medium to long term for realisation of consistent growth are those which:

- already employ more than 50 people.
- have a history of expansion even if only slow and erratic.
- have experienced / trained management with vision.
- own their own products.
- serve a large number of customers.

Companies scoring 4 or more on these qualifiers are likely to be able to realise World Class Manufacturing and sustained growth even if currently they are not. Individual interpretation and implementation processes for growth may be wholly different. Companies less than 5 years old may have vigorous growth patterns but are likely to be volatile and the strategies they use may not be transferable (Adizes, 1988).

The survey identified a high-risk phase of growth in the 50 - 90 employee range where special care is needed (Sackett and Nelder, 1995). Extreme product innovation, patent protection, protected markets, benign and successful customers, and good luck are all welcome but are hard to sustain in a global market.

Another report (The State of British Enterprise) listed 11 factors as possible constraints on firms' abilities to meet business objectives (SBRC, 1992). These factors are:

- Availability and cost of finance for expansion.
- Availability and cost of overdraft finance.
- Overall growth market demand.
- Increasing competition.
- Marketing and sales skills.
- Management skills.
- Skilled labour.
- Acquisition of new technology.
- Difficulties in implementing new technology.
- Availability of appropriate premises or site.
- Access to overseas markets.

'Barriers to Growth' a 1996 report by the Enterprise Group of the Institute of Chartered Accountants, listed 21 barriers to growth. These barriers are:

- Funding.

- Customs and Excise.
- Inland Revenue.
- Advice on finance.
- Management skills.
- Financial management skills.
- Legislation.
- Local regulation.
- Owner attitude.
- Staff skills.
- Marketing skills.
- Information systems.
- Accounting standards.
- Health and safety regulations.
- Economic environment.
- Competition.
- European Union legislation.
- Quality and other standards.
- Property issues.
- Export.
- Plant and machinery issues.

J Barber, JS Metcalfe and M Porteous in their 1989 book 'Barriers to Growth in Small Firms' discuss 4 areas as barriers. These areas are:

- Lack of finance.
- Market structure.
- Labour market.
- Large purchasers.

There are several recurring factors but if all available research were to be cited then every conceivable business activity could be listed as a possible barrier to growth, no doubt with justification.

David Storey's three reports entitled 'The Ten Percenters' look at business growth from the other direction. The first report (Storey, 1996) found that only 9.8% of the SMEs investigated generated growth in turnover of at least 30% per annum over each of the previous four years hence the title of the reports.

The second report (Storey, 1997) found that, amongst Ten Percenters, those which grew particularly rapidly were characterised as:

- Being in buoyant niche markets.
- Focusing particularly heavily upon customer service.
- Focusing upon quality rather than price.

The researchers were less able to link performance to indications of good managerial practice such as:

- Training.
- Customer satisfaction monitoring.

- Profit sharing schemes.
- Innovation.

Peter Morgan (Partner, Deloitte & Touche) in his foreword to the third report (Storey, 1998) observed:

“Using a boating analogy, there are two strategies (for making the boat go faster) — one is to have a capable crew and the other is to have the boat backed by a strong current. Our observation is that the Ten Percenters place more emphasis upon locating the boat correctly in the current than on the quality of the crew”.

David Storey’s third report seeks to investigate this somewhat controversial analogy in which the ‘current’ reflects the market and the ‘crew’ reflects the organisational tightness and managerial formality of the business.

The third report focuses much more tightly on:

- Sectors and markets.
- Strategy.
- Management of people.
- Company culture.

as factors influencing the Ten Percenters rapid growth.

These results support the approach taken by Ichak Adizes in his 1988 book ‘Corporate Lifecycles: How and Why Corporations Grow and Die and What to do About It’. His thesis is that organisations need to reach a happy medium between the flexibility of a young organisation and the controllability of an old organisation. With a structured approach this will enable them to address the many problems, some of which have been listed above, which face an organisation as it tries to grow. See Figure 3-2

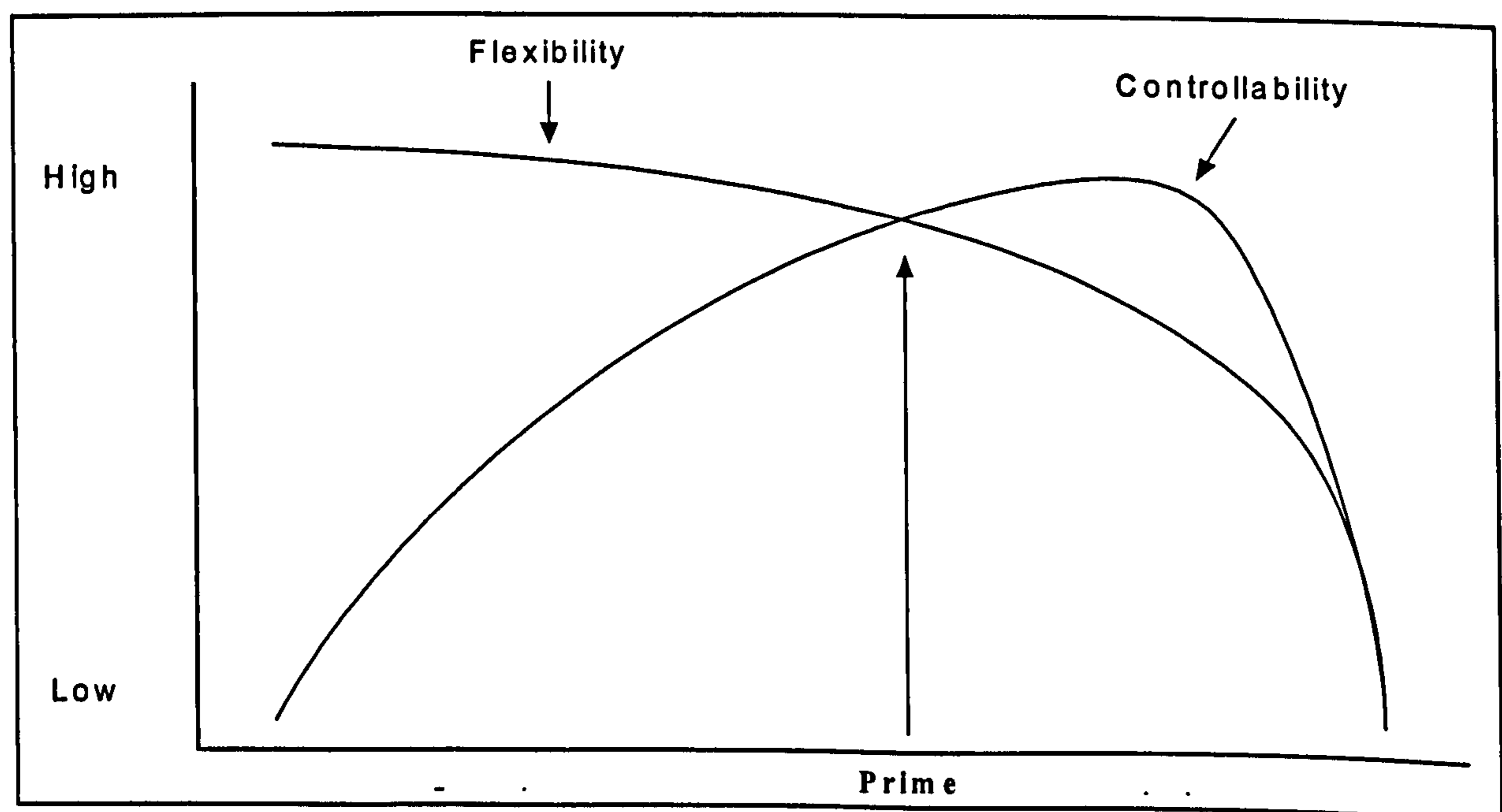
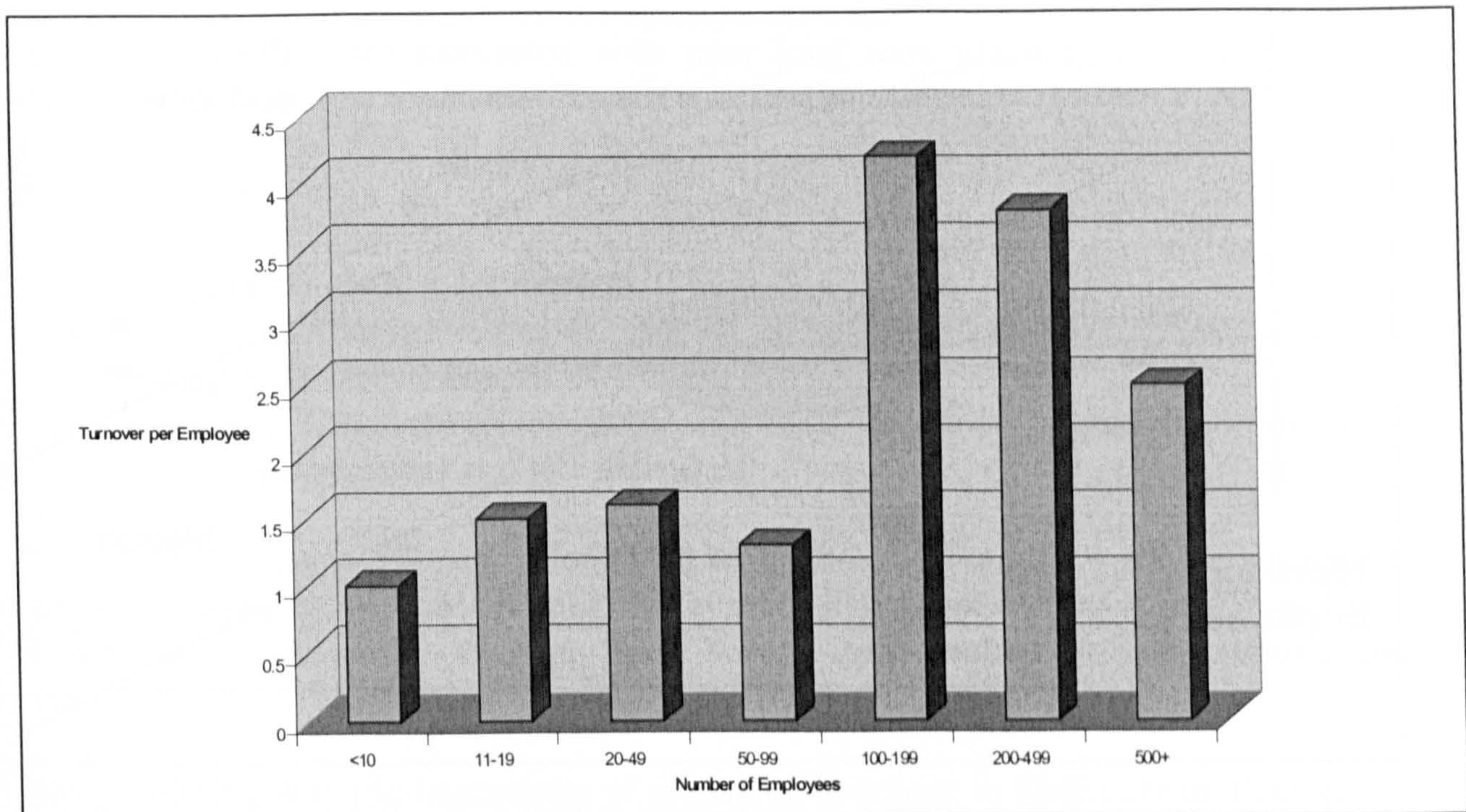


Figure 3-2, The Adizes Approach

Companies in the 50-99 employee range have lower revenue per employee than smaller companies, larger companies show a rapid increase before declining, see Figure 3-3.

(Source: Sackett and Nelder (1995))



*Figure 3-3, Turnover per Employee*

Sackett and Nelder (1995) postulate that SMEs may follow a growth path in which growth to above 50 employees creates an area of special transition risk, where labour costs rise faster than sales revenue, see Figure 3-4. Those companies which succeed in achieving further growth to above 100 employees more than recover from this transitional risk period or critical area situation. Companies in, or approaching, the transition size need assistance. In particular, it would be valuable to identify mechanisms to help companies take Route 1 which avoids the area of high risk, rather than Route 2.

For some time the study of small business growth tended to focus on external issues such as the capacity to raise finance and the nature of market opportunities (Scase, 1995). Other research has included finance and banking, business advice and legislation as the three external factors most important to business survival and growth (FSB, 2000). Government strategies relating to financing growth companies, competition for the best people and tax and legal environment are deemed to be most important by Europe's fast growing entrepreneurs (Arthur Andersen, 2000). Not surprisingly research has also highlighted the importance of internal factors.

Storey (1998) focuses on two factors which appear to be key to rapid growth: the ability to select and develop the marketplace and how the business is organised and managed internally.

(Source: Sackett and Nelder (1995))

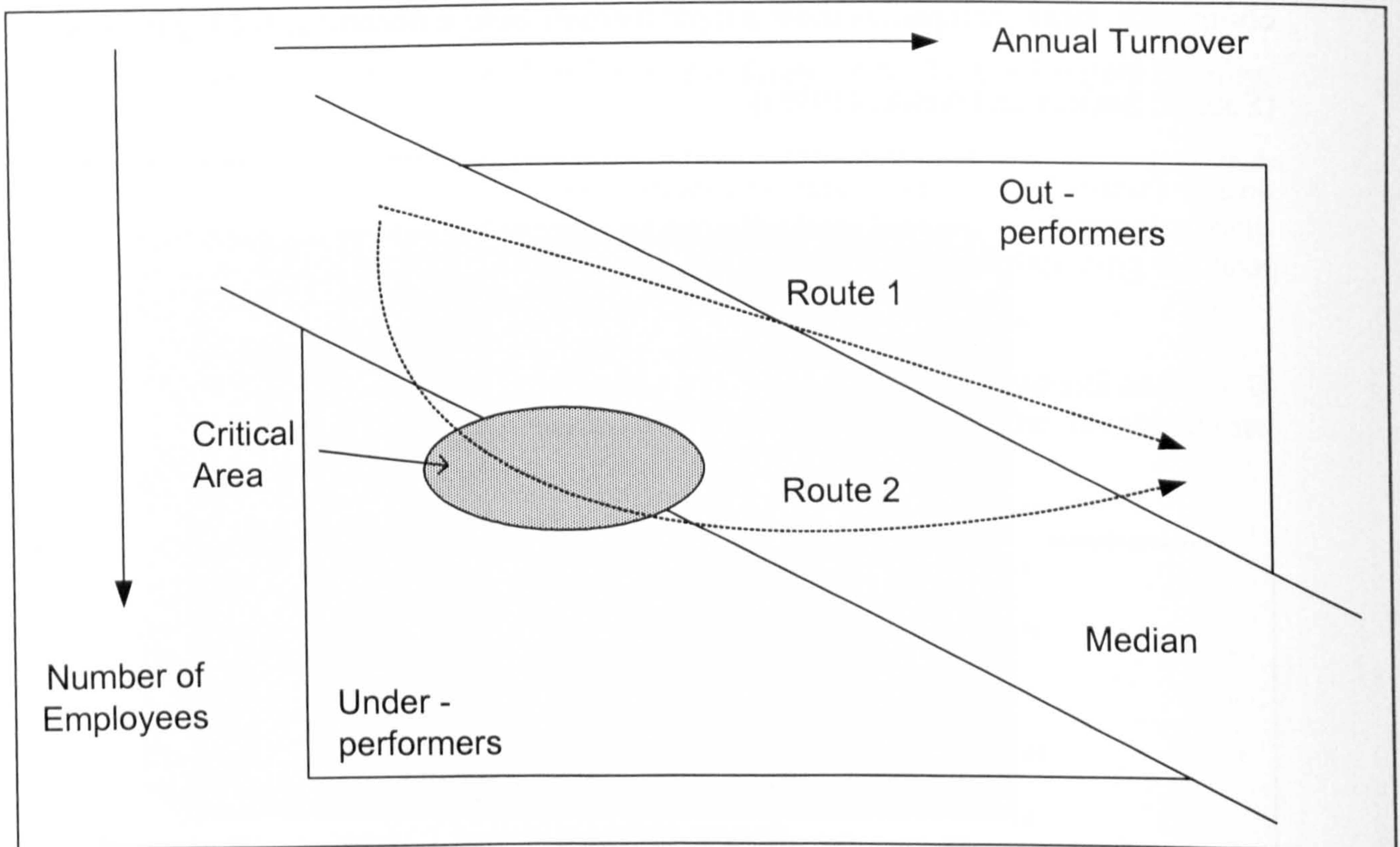


Figure 3-4, Growth Paths

More recently Ram (1999) highlights the critical role of 'people management' to shaping the trajectory of small firm growth. Martin (2001) looks into the resistance of owner managers to embrace lifelong learning as a route to economic competitive advantage despite the current governmental policies directed at both firms and individuals promoting this path.

Skandalakis (1999) illustrates that didactic and gnostic practices, identified through a structured Knowledge Transfer Framework, can effect business improvement in Small and Medium-sized Enterprises.

### The DTI's 'Closing the Gap' reports

Two reports have been produced by the DTI from analysis of the United Kingdom Benchmarking Index (UKBI), now the Small Business Service's Benchmarking Index, database. The Index was started in October 1996 and since then over 2000 assessments have been undertaken.

The first report was published in March 1998 and the second in August 2000. The following extracts are taken from the concluding statements of the reports:

**DTI (1998) report:** In looking across all companies whose financial performance is in the lower quartile it is possible to identify the following contributory characteristics:

- Little marketing, R & D and product development expenditure.
- Poor supplier management.
- Poor delivery performance to customers.
- Minimal staff training.

All of these factors are associated with poor long term planning and management. Despite this, however, Business Excellence results appear to reflect a feeling that managers think that they are performing well. This is illustrated by lower quartile scores which indicate

- Leadership scores at a minimum of 63%.
- Policy and Strategy scores of 58% for all but the Metal Products sector, which scored 50%, despite low RONA and growth rates.
- Customer Satisfaction related scores of over 50%, despite high levels of customer complaints and late deliveries.

These results question the perceptions held by managers of what are good management and performance levels. This highlights a need to persuade SME managers from lower performing companies to examine areas where improvement is both possible and necessary.

**SBS (2000) report:** The importance of managing overhead in SMEs shines through the Benchmark Index data set. Dealing with multiple suppliers and failing to appoint the right people, for example, both add cost without creating value, and their impact is clearly reflected in the value added per employee figures. To improve the financial performance of SMEs, then, there appear to be three levers that are particularly critical at this stage:

- 1) Overhead management — ensuring that SMEs do not allow overhead costs to grow unnecessarily.
- 2) Supplier management — searching for ways in which the supply base of SMEs can be rationalised.
- 3) People management — identifying means that will help managers in SMEs enhance their employee recruitment and retention processes.

One of the most surprising issues is that customers do not feature in this list, but there are several reasons why this might be the case. According to the Benchmark Index data the companies that are achieving the highest levels of value added per employee are those that have put their own house in order; and are controlling overheads. They are looking after their employees. They are managing their supply network. Of course they will be focusing on delivering value to customers, but then so are the firms that are achieving low value added per employee. In both cases, customers appear to be receiving a similar level of service. Those companies that are achieving high levels of value added per employee, however, have found ways of delivering this level of service that are far cheaper than those companies that are achieving low levels of value added per employee.



Although the report did not put a clear emphasis on the importance of business processes, all three case studies included within the report identified that their route to improvement was through new or improved business processes.

Finance is often cited as a constraint on SME growth and performance. Smaller businesses rely on high cost, short-term finance, with some 57% of respondents to a Confederation of British Industry study using overdrafts, mostly from banks. In the UK, a peak of 6% of venture capital industry funds were raised from corporate ventures in the 80's, compared to about 20% in the United States (McNally, 1994). There is an unwillingness to use sources of capital in growth projects where loss of control is implied and the risk is difficult to assess.

Finally, JC Collins and JI Porras in the 1998 edition of their book 'Built to Last' identify (amongst other things), the importance of the business 'vision'. They present a conceptual framework that defines vision, adds clarity and rigor to the vague and fuzzy set of concepts swirling around that term, and give practical guidance for articulating a coherent vision within an organisation. The author of this thesis recognizes that the formulation of a business vision is a prerequisite for business growth.

### **3.6 Discussion of Literature Review**

Academic literature on the subject of business growth was found to be limited. Commercial literature on the other hand was prolific. The literature review was used to derive two cause and effect diagrams through mind mapping, group brainstorming and use of the fishbone technique:

- Characteristics of barriers to Business Growth in SMEs, Figure 3-5.
- Characteristics of Business Growth in SMEs from Literature, Figure 3-6.

These two diagrams are interesting in that one is not the inverse of the other. Again this may be due to the traditional data collection methods employed where a questionnaire is sent out with a relatively fixed list of questions and yes, no, or don't know answers are the only options available. The same old questions appear every time. We have been presented with these sets of questions regarding business growth and business failure for so long that they are ingrained.

A third cause and effect diagram, Characteristics of Business Growth in SMEs from Research, was derived from, in part, the first and second diagrams and also with input from all the other areas of the author's research particularly discussions with other researchers at conferences and via Internet networking groups. This third diagram, discussed in Chapter 4, is used to design the SME Growth Framework discussed at Chapter 7. Each element included in the third diagram is important to Business Growth and details of the elements can be described, but what is important to SMEs is how to implement the particular requirement, and, more importantly, how to promulgate it throughout the organisation. This must be done through a business process. Business processes are discussed further in Chapter 4.

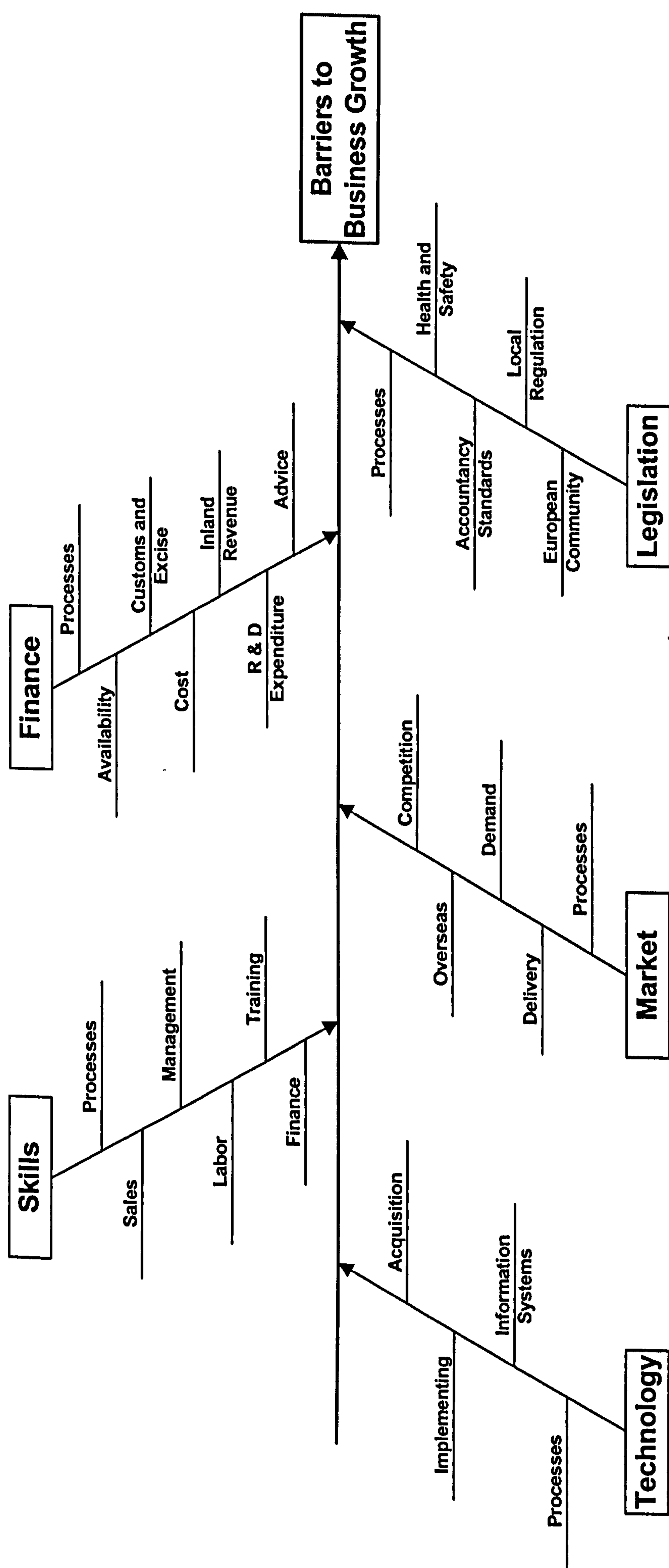


Figure 3-5, Characteristics of barriers to Business Growth in SMEs

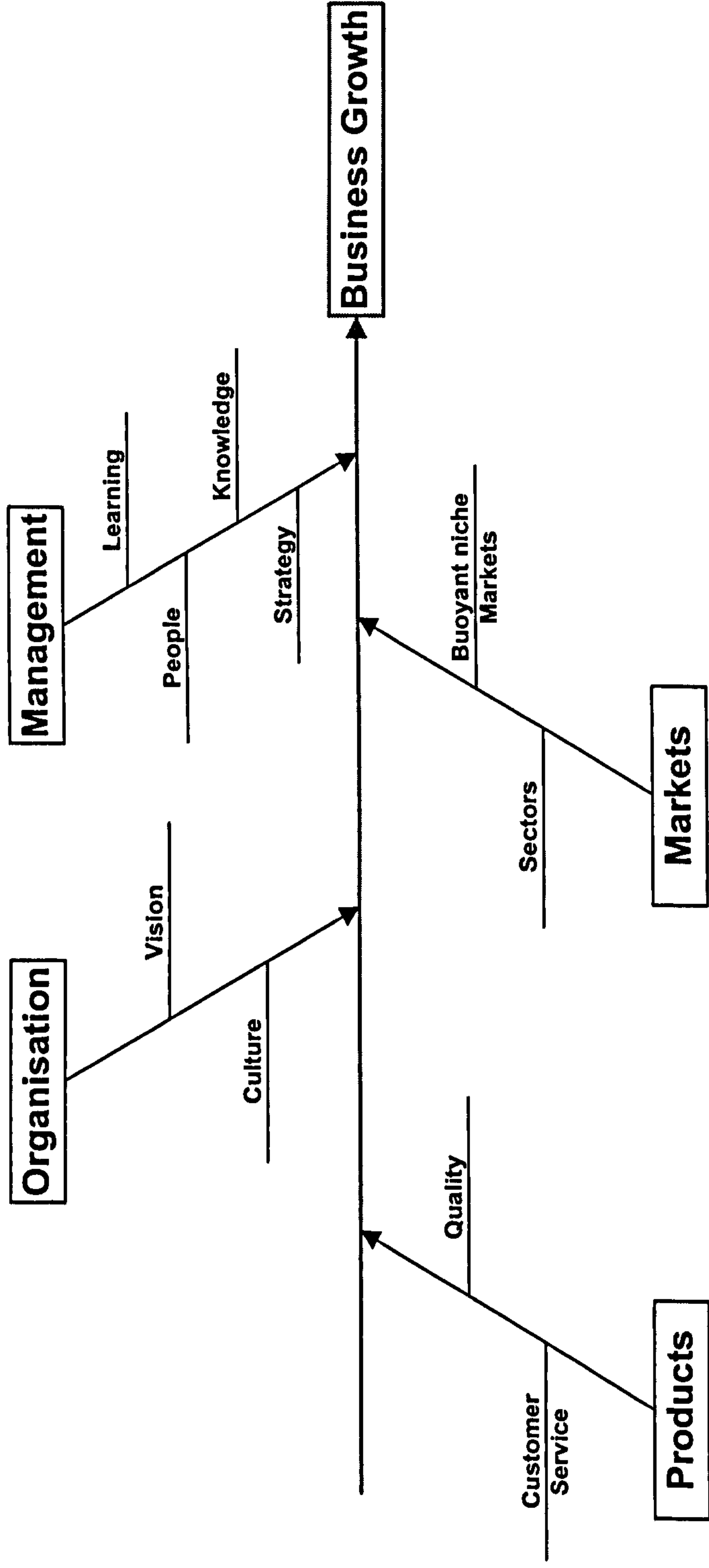


Figure 3-6, Characteristics of Business Growth in SMEs from Literature

After the importance of Business Processes became apparent to the author a return to the literature confirmed that this is an area that has little or no coverage in any detail. This lack of detail is discussed further at Section 3.9. The relationship between business processes and sustainability is discussed at Chapter 7.

### **3.7 Business Growth Practice**

Current routes available for small businesses for business growth strategies fall into 7 main categories:

- 1) Exploitation of buoyant niche markets.
- 2) External Courses.
- 3) Consultants.
- 4) Government Agencies.
- 5) Business Standards and Tools.
- 6) Workforce Development and Initiatives.
- 7) Copy Exemplar.

See Figure 3-7. A key characteristic common to all of these approaches to business growth, excluding the first, is that they are all fiercely competitive. Each has a slightly different angle on the same theme, business development. Because of commercial issues none are able to develop their portfolio of products into a complete business development package without falling foul of one of the other's products. The end result of this is poorer business development tools, products and services for SMEs.

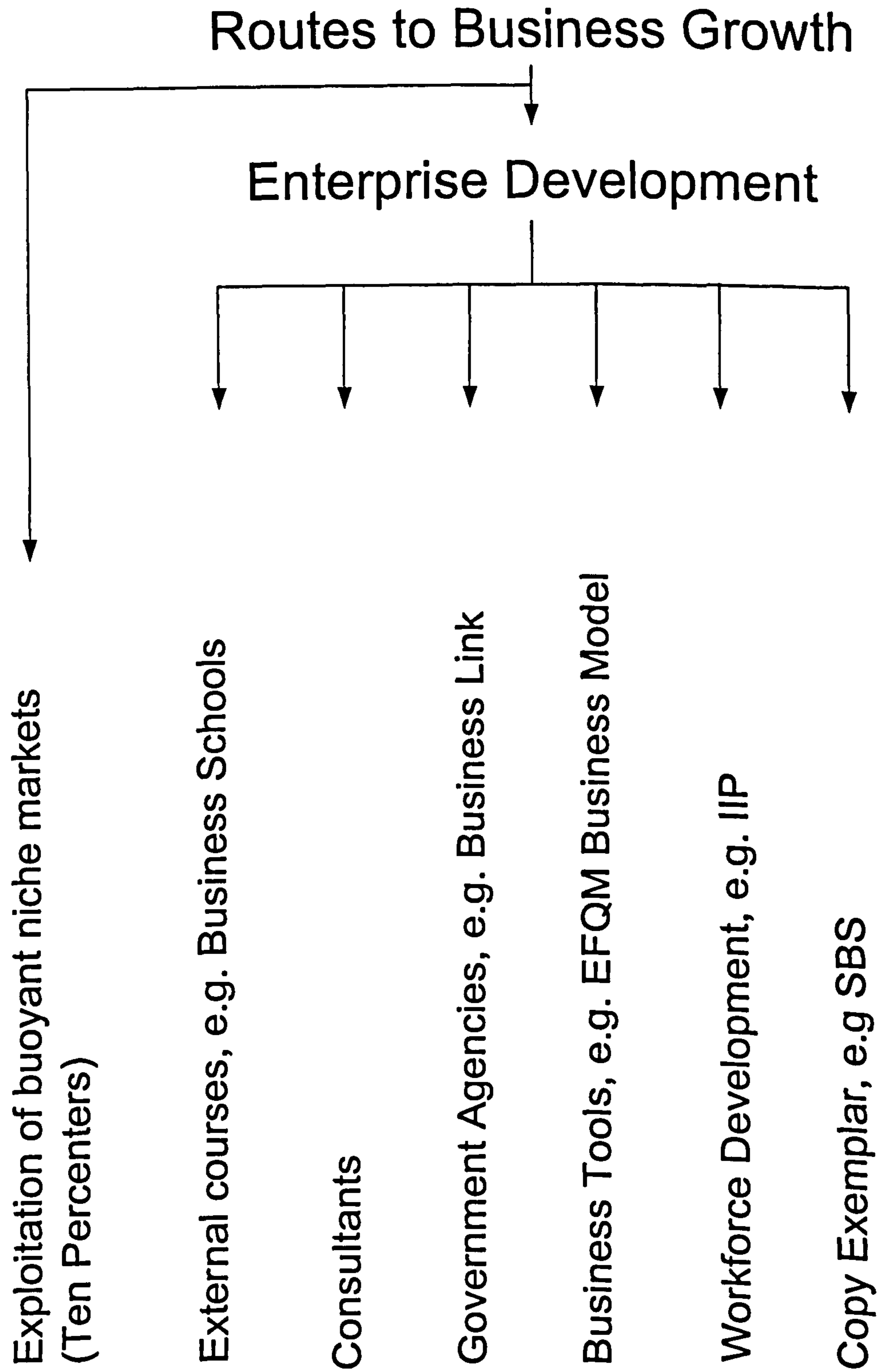
#### **3.7.1 Exploitation of buoyant niche markets**

This approach has been covered by the 'Ten Percenters' reports discussed at Section 3.5. It is only applicable to a small number of SMEs who have access to a buoyant niche market (Story 1998). Although it is a route to growth it is not regarded by the author, as a solution on its own. Marketing, a process that should identify products and markets, certainly is an integral part of the solution to business growth.

#### **3.7.2 External Courses**

This strategic approach entails senior managers attending a programme consisting mainly of high profile business speakers telling their own success story and recommending a similar strategy for success (Fuller-Love 2002).

There are a plethora of organisations offering business development programmes on a commercial basis, including many UK Universities. All these programmes are variations on the same theme. The duration of the programmes vary widely from one-day seminars to one week programmes of seminars and workshops and longer periods with occasional days of seminars and workshops and mentoring days in the delegates place of work.



*Figure 3-7, Routes to Business Growth*

The key theme of these strategic programmes is; how we did it and if you adopt our strategy you can do it also. Some very good examples of this type of programme are those provided by:

- The Business Growth Programme, Warwick Business School. [www.ebs.ac.uk](http://www.ebs.ac.uk)
- Oliver Wight, Business Excellence Limited. [www.oliverwrighteurope.com](http://www.oliverwrighteurope.com)

A comprehensive list of Business Schools can be found at:

<http://www.the-abs.org> (The Association of Business Schools) At the time of writing this list included 120 UK business schools.

As a stand-alone solution, which in most cases they are, the value of this approach to business growth is questionable.

### 3.7.3 Consultants

In addition to the national and international organisations (See Table 3-3) each geographical area has its own selection of business consultants. Often their programme (intervention) is based upon one or other of the business standards and tools discussed at Section 3.7.5. A one or two day visit by a consultant results in a report listing the traditional areas of weakness and a solution initiated by a new business plan.

Organisation	Web Site
Deloitte and Touche	<a href="http://www.us.deloitte.com">www.us.deloitte.com</a>
Arthur Andersen (now Boston Consulting)	<a href="http://www.growthplus.org">www.growthplus.org</a>
KPMG	<a href="http://www.kpmg.co.uk">www.kpmg.co.uk</a>
PA Consulting	<a href="http://www.paconsulting.com">www.paconsulting.com</a>

*Table 3-3, Consultancy Organisations*

### 3.7.4 Government Agencies

The best known is Business Link, once known as the Training and Enterprise Councils or TEC. Now under the authority of the Small Business Service which is an agency of the DTI, supported by Government Regional Offices.

The Governments approach to the problem of small enterprise growth, as illustrated for example by the 'Fit for the Future' campaign, is embodied in the Small Business Service's (SBS) three National Best Practice programmes – CONNECT, Benchmarking Index and Inside UK Enterprise (IUKE). These services do not address the specific business process problems affecting small businesses identified by this research (GEM 2001, Bennett and Robson 2002 and O'Donnell 2002).

### 3.7.5 Business Standards and Tools

ISO9001:2000, Excellence Model, Six Sigma, etc. These business standards and tools are discussed fully in the next two Chapters. Findings from this research indicate that take up in the SME community is low, that no single standard or tool covers the full

range of business processes, and that their development is restricted by commercial issues (Armitage 2002 and Sear 2002).

### 3.7.6 Workforce Development and Initiatives

The workforce initiatives come in many different guises from Investors in People to Total Quality. Workforce initiatives are seen as important part of business development but often too much concentrated effort is put into achieving pre-defined goals at the expense of other aspects of the business. The author draws the analogy with building a house on sand. Unless the initiatives are implemented on a sound and complete business structure they can do more damage to the business than good (Collins and Smith 2002 and Fraser 2002).

### 3.7.7 Copy Exemplar

This is the mainstay of the DTI's Fit for the Future campaign and is delivered via the CONNECT label. As with workforce development initiatives there is a danger of too much effort being placed in one area at the expense of other areas. Additionally all business processes are interrelated in many intricate ways. One organisations solution works because of these relationships. The same solution will not necessarily work in another organisation where relationships have evolved differently. There are not many small enterprises making use of the programme (DTI 2001 and DTI 2002).

## 3.8 Business Definitions

A notion that the author wanted to clarify during the exploratory research period was what is a business? There are many types of organisations ranging from volunteer through not for profit to public limited companies. It was not possible to find a single definition that described them all. So thoughts turned to what businesses or organisations do and how do they do it, this led to the development of the following definitions.

### Products

*Product:* something produced by effort, or some mechanical or industrial process.

ISO9000:2000 identifies four generic product categories. These are:

- Hardware.
- Software.
- Service.
- Processed materials.

Most products are combinations of some of the four generic product categories. Whether the combined product is then called hardware, processed material, software or service depends on the dominant element.

## **Organisation**

*Organisation:* a business or administrative concern united and constructed for a particular end.

An organisation is concerned with realising and delivering a product to its customer.

An organisation can be recognised as a collection of processes.

## **Policy**

A policy is a plan of action adopted or pursued by the organisation. Policy should be implemented via all processes within the organisation.

## **Process**

*Process:* a series of actions that produce a change or development.

The basic concept for a process consists of three elements: inputs, activities and outputs.

A process can be represented by a series of activities or tasks. In addition it is necessary to define inputs and outputs and to specify resources.

Processes are often described as being formal or informal.

*Formal:* of or following established forms, conventions, etc.

For a process to be formal it must have a complete set of documentation that specifies inputs, outputs, activities and resources. The documentation must also specify what information is to be recorded, and, where that information is to be recorded. Recorded information must be maintained. If this is not the case then the process is informal.

For a formal process individuals and teams can still have a degree of flexibility in how they achieve outputs from the process dependent on the degree of specification of the activities.

*Informal:* not of a formal, official, or stiffly conventional nature.

If a process is informal then individuals or teams undertaking that process have total flexibility in how they achieve the desired outputs from the process.

## **Process Categories**

ISO9000:2000 introduces two categories of processes. These are Product Realisation Processes and Support Processes. Realisation processes result in the products of the organisation that add value to the organisation. Support processes, including management processes, are necessary to the organisation, but do not directly add value.



The author has identified two alternative categories for the same set of processes. These are Business Processes and Product Specific Processes. The Business processes are those processes that are generic to all organisations. The Product Specific processes are those processes that are specific to a particular organisation due to the nature of the products that it produces.

Business processes do not, in most cases, add value to the products but they certainly add value to the business. Not all Product Specific Processes add value to the product.

### **Procedure**

A detailed description of how to undertake a task, usually written. This should not be confused with a Process.

### **Management**

*Manage:* 1. to be in charge (of); 2. to succeed in being able (to do something); contrive. 3. to have room, time, etc., for; can you manage dinner tomorrow? 4. to exercise control or domination over. 5. to contrive to carry on despite difficulties, especially financial ones. 6. to wield or handle (a weapon).

*Management:* 1. the members of the executive or administration of an organisation or business. 2. managers or employers collectively. 3. the technique, practice, or science of managing or controlling. 4. the skilful or resourceful use of materials, time etc. 5. the specific treatment of a disease. etc.

*Manager:* 1. a person who directs or manages an organisation, industry, shop, etc. 2. a person who controls the business affairs of an actor, entertainer, etc. 3. a person who has a talent for managing efficiently.

*Managing:* having administrative control or authority.

(The new Collins Concise English Dictionary, 1982, was used to construct the above definitions)

For this research the author has used the following interpretation of management.

The words manager and management etc. have traditionally been misused in the UK probably as a result of Unions and the demarcation between white collar and blue-collar workers and management and workforce.

Management is an activity just like knitting is an activity. We are all required to do a degree of managing in our lives and at work it is no different. All people at work must come to recognise that they have some management responsibilities. What it is they have to manage, of course, must be clearly defined. Here it is not proposed to list all the areas that require managing in an enterprise. Three areas are of significant interest to this work. These are:

- 1) Business management.

- 2) Process management.
- 3) People management.

The 'managers' traditionally have spent too much time on 2 and 3 and not enough time on 1. The case study results, discussed in Chapter 4, indicate that this is still current practice.

This thesis puts products, organisation, policy, process, procedure and management together to derive a new business enterprise model.

### **Management Drivers**

In the context of continuous improvement, Management Drivers are the particular parameters of your business processes upon which process management can impact.

Understanding and communicating these management drivers and the relationship between them is critical to the success of the continuous improvement process because:

- It enables the setting of improvement objectives and prioritising investment.
- An understanding of the value of an objective and its contribution to the overall picture is a powerful motivator for achieving the objective.

The understanding of the relationship between them is gained through management driver analysis, or cause and effect analysis and is a key feature of the Balanced Scorecard method for translating strategy into action (Kaplan and Norton 1992).

### **The Generic Business Process Set (GBPS)**

The Generic Business Process Set, derived from this research, is that minimum set of business processes that all small businesses should be implementing if they are to be sustainable over the long term and if they would like to grow. The GBPS consists of 52 business processes. These processes are listed in Appendix D and the method adopted by the Author to illustrate the processes is shown in Appendix F. The author has described the GBPS along with the Framework and Implementation Methodology discussed in Chapters 7 and 8, as the business process taxonomy for small businesses. See Figure 7-6, The Business Process Taxonomy. *Implementing* implies the efficient and effective management of the business processes and their continual improvement within a small business.

## **3.9 Business Models**

The most well-known business model is that of the European Forum for Quality Management (EFQM) Business Model. This model adopts a strategic approach in its application. This model is discussed further in Chapter 5. Two more examples: ISO9000:2000 has introduced a model that it calls the Model of the process approach and the CASA Manufacturing Enterprise Model was developed in 1993 and is currently

undergoing re development to adapt it to the contemporary virtual enterprise (CASA, 2002).

None of the many business models identified during the exploratory research provided detail regarding actual business processes. This was seen as a limitation to their application particularly in small organisations where, as already discussed, there is a lack of knowledge generally and particularly regarding the full range of business processes required.

Only two examples of attempts to model processes were found. These are both Internet based models and can be found at the following sites:

- 1) Process Classification Framework developed by American Productivity and Quality Centre's International Benchmarking Clearing house in partnership with Arthur Andersen & Co. A high-level, generic enterprise model that claims to encourage businesses and other organisations to see their activities from a cross-industry process viewpoint instead of a narrow functional viewpoint. <http://www.apqc.org> This model identifies in excess of 210 processes or sub processes.
- 2) A Handbook of Organisational Processes developed by the Center for Coordination Science, Massachusetts Institute of Technology. The handbook is intended to help people: (1) redesign existing organisational processes, (2) invent new organisational processes (especially ones that take advantage of information technology), and (3) share ideas about organisational practices. <http://dime.mit.edu/handbook.html>

They are evolving as a result of input from users of the sites and neither offers a definitive set of business processes. Processes identified are short on detail for practical application in a SME.

Examples of on line business models can be found at: (note: at the time of writing)

- Deloitte and Touche, <http://www.us.deloitte.com/growth/growthtools/growthprac.htm>
- Arthur Andersen, [www.growthplus.org](http://www.growthplus.org)
- KPMG, [www.kpmg.co.uk](http://www.kpmg.co.uk)

No process information is provided in these models. These are commercial organisations and are subject to the usual commercial pressures and since the start of my research changes have been made to these web sites and the original models are either changed or no longer available.

Discussion of business processes was seen in papers by Peter Fraser (Fraser, 2001a and Fraser, 2001b). Also available at [www.mandos.co.uk](http://www.mandos.co.uk) Here the importance and mis-

understanding of business processes are clearly put in perspective with what is currently on offer to SMEs as business development strategies.

The Enterprise Model derived from this research is presented in Chapter 7.

### **3.10 Change Management**

Small and Medium sized Enterprises in the Manufacturing sector have been recognised as increasingly important. There is decline in the scale and the total population of large enterprises. The average life of the best-known companies is less than half that of current human life expectancy. There is a requirement to address the transition management of change for growth and World Class performance in United Kingdom SMEs.

The management of change may be seen as an end in itself, as a reluctantly pursued long-term goal, or as a response to crisis, or as a mechanism for facilitating business growth. Organisations are inclined to be change averse and most change is associated with stress. If management of change is essential for mere survival, the incentive for change is unambiguous. The substantial resources, particularly senior management time, required for the management of change for growth needs to be justified and so there must be a clear business benefit and controlled risk.

The SME domain is particularly challenging and resistant to external input of any kind. However, excellence in manufacturing, well beyond that achieved in large organisations, is exhibited by parts of the SME base. The small and medium sized manufacturing enterprise is assuming increased significance (Browne and Sackett, 1994). The SME population is large and diverse. This poses a special problem in targeting resources and assistance for growth through change.

The special problems that SMEs face have been the subject of much academic research and studies commissioned by numerous authoritative bodies worldwide.

Some core findings are identified below. The importance of SMEs to the United Kingdom manufacturing base is highlighted.

In the UK there is relative strength in large multinational companies but a shortfall in the number of manufacturing companies in the 100-500 employee range when compared with most European countries.

Foresight, (1995) asserts that manufacturers must review the drivers for change and develop the vision, plans, resources and determination to benefit from these changes. There must be an 'innovation culture'. SMEs will become internationally mobile. The pan European EUREKA study (EUREKA, 1995) on manufacturing futures identifies focused 'Total Manufacturing Systems', agility and the need for appropriate techniques and technologies. The basis of competition is moving the company capability up the product complexity / demand uncertainty matrix. This requires substantial change for the majority of SMEs.

The Confederation of British Industry / Department of Trade and Industry study (1994) on competitiveness (CBI/DTI, 1994) found - not surprisingly - that leading companies have visionary leaders, know their customers, unlock the potential of their people, deliver products and services that exceed their customers' expectations, and, most importantly, continuously introduce differentiated products and services. This last point generates the need for increased management of change in the SME base.

There is an urgent need for management of change for SME growth. SMEs seeking to grow face a high risk transition phase which is not well recognised or understood. There is a discontinuity in SME growth that occurs in the 50-99 employee range. Companies of this size are in a crucial 'management of change' phase. Companies of over 100 people have probably digested this change and become more outward-looking. They carry out more market research, are more prepared to use consultants, and likely to implement generic solutions to solve growth problems. They are increasingly able to self manage participation in research and to properly utilise research findings to drive innovation.

### **3.11 SME Knowledge Deficit**

A study carried out by the CIM Institute, Cranfield University, commissioned by the Department of Trade and Industry and the Engineering and Physical Science Research Council found that Small and Medium Enterprises have little interest in preparing for the future through education and training (Sackett and Nelder, 1995). The study found that SMEs have poor managerial and technical personnel resources. Small companies suffer from a drain of experienced personnel. They are more likely to lose staff to larger companies than they are to gain from them. The shortage of highly skilled people moving into the sector isolates SMEs from an important source of management knowledge and technology transfer. Furthermore, the movement of people out of SMEs reduces the incentive to train.

The study found that SMEs prefer to invest in capital equipment rather than training and organisational change. This reduces the impetus for improvement. Business leaders with training and experience are much more open to new ideas, are confident that they can use new ideas and will seek ideas both within and outside the enterprise. Seen against this background, the finding that 20% of Managing Directors questioned, in a sample of 900, had received no formal management education and had no previous management experience before taking up their post is not surprising. The majority claimed on-the-job experience and some education, but no recent education.

Businesses managed by trained leaders have better than average rates of survival and growth, and are better equipped for the future. Making the transition from untrained to trained leadership requires a holistic business development approach. Senior personnel are often resistant to academic approaches to education and training, where the individual is exposed, but are more receptive to learning opportunities presented as business development, where they can draw on the experiential knowledge of their peer groups.

SMEs experience a scarcity of new knowledge, and require a process to assist enterprise evolution, knowledge acquisition and management learning for the future. Smaller companies often fail to maintain coherence between continuous improvement and day-to-day management, due to knowledge deficit, which can imperil their sustainability and long-term survival in the business arena.

The SME knowledge deficit can be characterized as: the difficulty that SME managers experience in identifying and prioritising which area of their business to improve, the unawareness of what performance standard they must attain, their bewilderment of where and how to acquire superior practices, supplemented by the difficulty in using and applying superior practices internally (Skandalakis, 1999). This is despite a proliferation of excellent, high quality, publications from the DTI and other organisations on this subject.

Lack of knowledge reduces the impetus and capacity for business development and improvement. Assisting SMEs to overcome the knowledge barrier could have a significant effect on business improvement and growth and might lead to long-term sustainability and economic development (IM, 2000 and Martin, 2001).

### **3.12 Concluding Remarks**

This Chapter has explored the literature that documents the fundamentals of Business Growth. Much of the literature is promotional and unreflective. Little academic literature exists in contrast to the abundance of commercial material on the subject. The commercial story is discussed in Chapter 5. Many International business consultancy organisations and University Business Schools offer commercially driven solutions to business growth problems. It seems that commercial interests have taken precedence over academic research, as there are many rich pickings in this market. There is little statistical evidence of the effectiveness of this approach to business growth. There is evidence of a deep-rooted push strategy approach to small business help as opposed to a pull strategy that takes account of actual needs.

For most SMEs the consultancy path is financially prohibitive and solutions offered do not include much that can be readily implemented by an SME. Although no statistics are available, the take-up of other business development tools is low in the SME sector (GEM 2001). The standards and tools documentation, discussed at Chapter 6, are not expensive to obtain. They provide valuable information relevant to business development that can be used without the additional cost of full implementation and registration. This is the author's preferred route to business development.

The basis of a business or organisation was defined as being a collection of processes undertaken with the aim of realising and delivering a product to its customer. The author therefore sees processes as being important to enterprise development. This exploratory research has not found research literature discussing a set of business processes and concludes that knowledge in this area within SMEs is limited.

This has resulted in the author hypothesising:

***That a key barrier to small enterprise growth and sustainability is the failure of the business to identify and manage business processes.***

The reason for this failure is due to a lack of knowledge on the part of the business and a lack of understanding on the part of the providers of business assistance.

This chapter has provided a review and evaluation of Business Growth principles, enterprise models and Business Development practices available to Small and Medium-sized Enterprises, in accordance to the research objectives set in Chapter 1.

The next Chapter, Chapter 4, investigates the above hypothesis using case studies of business that are facing challenges to their desired growth plans.

Some attention has been given to the pre requisites for business growth in this Chapter. This topic will be discussed further in Chapter 7.

## Chapter 4: SME Business Case Studies

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### 4.1 Synopsis

In this Chapter, the case studies of 152 businesses that have met challenges to their growth strategy are discussed. The 471 individual challenges identified are classified and the results presented. A key area of research is to look at business processes and what business processes are necessary for business growth. In addition to the 152 individual case studies an in-depth case study was made, over a period of 12 months, of an organisation that had confirmed product excellence, a Queens Award for Export in 1994, but has been unable to achieve sustained growth since that time.

### 4.2 Introduction

The 152 business case studies were undertaken by the Sunday Times Enterprise Network between April 1998 and February 2003. These case studies were published in the Sunday Times each week. The case studies identified and discussed challenges to growth identified by the case study company. A panel of 5 experts discuss the challenges in the case study report.

John Jay of the Sunday Times said, "Achieving Growth is the challenge facing owners and managers of middle-market companies. The middle market is the powerhouse of the economy, generating wealth and jobs, yet many companies struggle to overcome problems that block expansion. Some firms find the answers but many do not. While big companies have access to the best the consultants can offer, mid-market companies lack access to the specialist advice that can turn potential into profit.

In response, The Sunday Times has launched The Enterprise Network as part of a long-term commitment to helping mid-market companies grow. By delivering advice through the pages of The Sunday Times and the Internet, we aim to help create a genuine middle-market business community that will draw strength from pooled experience.

Over the past 14 weeks we have examined the success secrets of wealth-creating companies, drawing on the conclusions of Winning, a Department of Trade and Industry (DTI 1997) report. This week the Enterprise Network moves into its second phase, which will examine problems encountered by growing companies and provide solutions.

Each week we will focus on the challenges facing a company, covering issues ranging from manufacturing, distribution and personnel to marketing, information technology and finance. Suggested responses will appear the following week from our panel of commercial and non-commercial partners. The aim will be to meet companies' hunger for advice" (Jay 1998).



The in-depth case study was undertaken by the author from February 2000 to February 2001. During this period the author spent 3 days each week with the company implementing an ERP system, Vantage by Epicor. See [www.vantage.epicor.com](http://www.vantage.epicor.com)

The case study company had 200 employees to design and manufacture plastic injection mould tooling and the injection moulding of precision plastic components for the electronics and information technology industries. The company was founded in 1973 and in 2000 its turnover was £8M. Its situation was summed up as follows: "Our growth is in danger of being constricted by our human processes not keeping up with the advanced information, manufacturing and communication technologies we are using" (Sackett 1996).

The company was also used as an example of best practice in the research for the report International Best Practice in the Adoption and Management of New Technology (Harrison and Samson 1997).

The situation in February 2000 regarding the 'human processes' was that no formal business processes existed and the passage quoted above was found to be the case. In contrast the manufacturing technologies being used were the most up-to-date available. Consequently the company provided a valuable resource for this research. The process of implementing an ERP required a thorough review of business processes.

### 4.3 Hypothesis

In Chapter 3 the author hypothesised that "a key barrier to small enterprise growth is the failure of the business to identify and manage business processes". In this Chapter this hypothesis is investigated through business case studies. This is achieved in two ways as illustrated in Figure 4-3.

### 4.4 Business Case Studies

To test the hypothesis:

**That a key barrier to small enterprise growth is the failure of the business to identify and manage business processes.**

A statistical method was adopted to draw some objective, quantitative conclusions. The aim was to explore the contradiction apparent in the DTI's "Closing the Gap" reports, in which managers suggest that business processes are documented and controlled yet this is not supported by the more quantifiable 'financial' data from the same organisations. Poor financial results are indicative of poor business process control.

#### 4.4.1 Description of Case Study Businesses

The case study reports are from SMEs who have 'accelerated growth' as one of their corporate aims. The subject SMEs were from a cross section of business sectors. The challenges facing these SMEs in their progress towards growth have been identified by the case study organisation and analysed by the author. The number of case study

companies was 152 and the number of individual challenges faced by these SMEs was 471. Each company identified an average of three challenges or barriers standing between them and their desired growth. Detailed discussion of the challenges is included in each case study report.

This study did not follow the usual business survey method where businesses are asked to tick a number of options on a questionnaire. Such a method of collecting data provides a restricted answer to the question dependent on how many options are offered on the questionnaire in response to the question. In this survey only actual and specific barriers to growth were considered, as described by the interviewee, and no attempt to categorise these barriers was made during the case study interviews. The specific barriers to growth identified, an average of 3 for each case study business, were clarified through detailed discussion. Banner statements describing the general barriers facing the case study businesses are included at Appendix B. These banner statements illustrate the extensive range of challenges that extend over the whole area of business activity.

#### **4.4.2 Outline of Challenges to Growth**

The challenges identified are wide ranging and confirm the finding that SMEs face an unprecedented number of possible barriers to their planned growth. It is in the nature of SMEs that they are each unique in their functionality and approach to business organisation and management. The varying capabilities and expertise of the managers of SMEs means that what may be a challenge to one SME is not necessarily a challenge to another; this presents a difficulty when attempting to define internal barriers to growth.

The types of challenges range from 'improve margins' to 'capture a good market share', from 'juggle between focusing on strategy and dealing with day-to-day issues' to 'developing the management team'. The full list of Challenges is provided at Appendix C.

#### **4.4.3 Categorisation of Challenges to Growth**

Many researchers have categorised barriers using a list of the most frequently identified barriers, both internal and external. This was not considered appropriate for this research. The approach used was to categorise the challenge in accordance with the area of business activity in which the barrier was manifested. As this was a subjective exercise, a methodology that used business tools that are relatively well known, accepted and understood in business was used. In this way the subjectivity has been minimised. Using this method it was anticipated that the barriers to growth could be identified closer to the actual activities of the enterprise rather than as a list of bland areas.

The EFQM Excellence Model is a non-prescriptive framework based on nine criteria. Five of these are 'Enablers' and four are 'Results'. The 'Enabler' criteria cover what an organisation does. The 'Results' criteria cover what an organisation achieves. 'Results' are caused by 'Enablers'.

The Model, which recognizes there are many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise that:

Excellent results with respect to Performance, Customers, People and Society are achieved through Partnerships and Resources, and Processes.

Further detail of the Excellence Model can be found at Chapter 6.

The 5 'enabling' Criteria are:

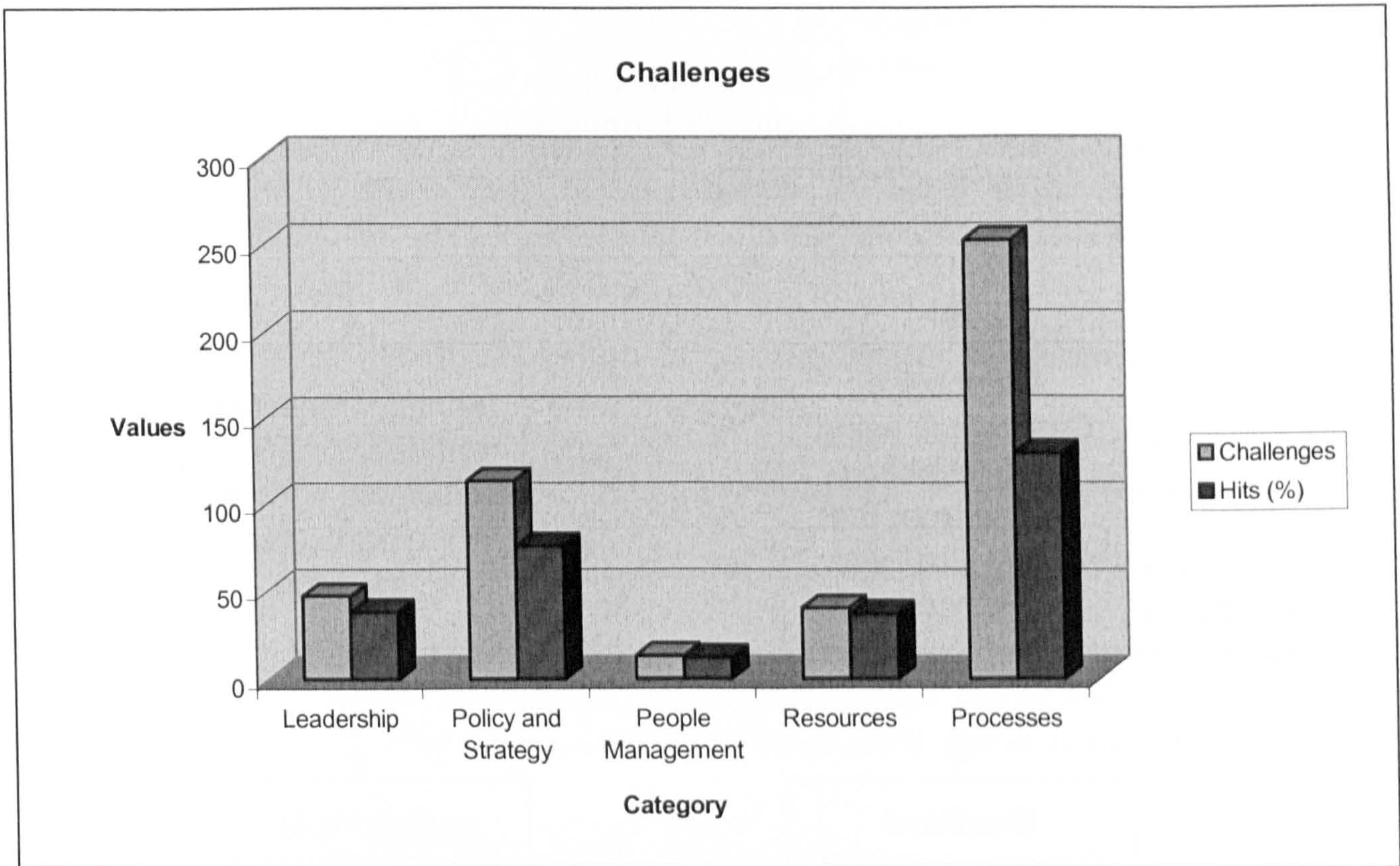
- 1) **Leadership**, asks how the behaviour and actions of the executive team and all other leaders inspire, support and promote a culture of Total Quality Management.
- 2) **Policy and Strategy**, analyses how the organisation formulates, deploys, reviews and turns policy and strategy into plans and actions.
- 3) **People Management**, is concerned with the extent to which the organisation releases the full potential of its people.
- 4) **Resources**, asks how the company manages resources effectively and efficiently.
- 5) **Processes**, which analyses how the enterprise identifies, manages, reviews and improves its processes.

The challenges have been categorised using the 5 'enabler' criteria from the Excellence Model. The information contained within each company's detailed case study report was used to facilitate this task. The criteria selected for each challenge is that area of the business that is the most representative of the area in which the challenge exists. This method for categorising the challenges was selected because this business model is recognised as a valued representation of a business therefore all challenges should fit into one or other of the 5 enablers thereby providing a good tool for data analysis.

#### 4.4.4 Results of Categorisation

The results from categorising the challenges identified by the case study businesses are shown in Figure 4-1 below. The value of 'challenges' represents the total number of challenges in that category. The value of 'hits' represents the percentage of SMEs facing one or more challenges in that category. The largest group of challenges facing these SMEs fall into the 'Processes' category. That is if the enterprise had had in place the relevant business process that would have addressed the specific challenge then that challenge would have been overcome. It could be argued that this is the case for all challenges. For example the challenge 'there is a high turnover among the part time staff' has been allocated to the 'people management' category but when investigated it was clear that it is the lack of certain people related business processes that is causing dissatisfaction amongst the part time staff.

The results from this analysis corroborate the findings of the second UK Benchmarking Index report; 'Closing the Gap' regarding the management of business processes. See Chapter 3, Section 3.5.



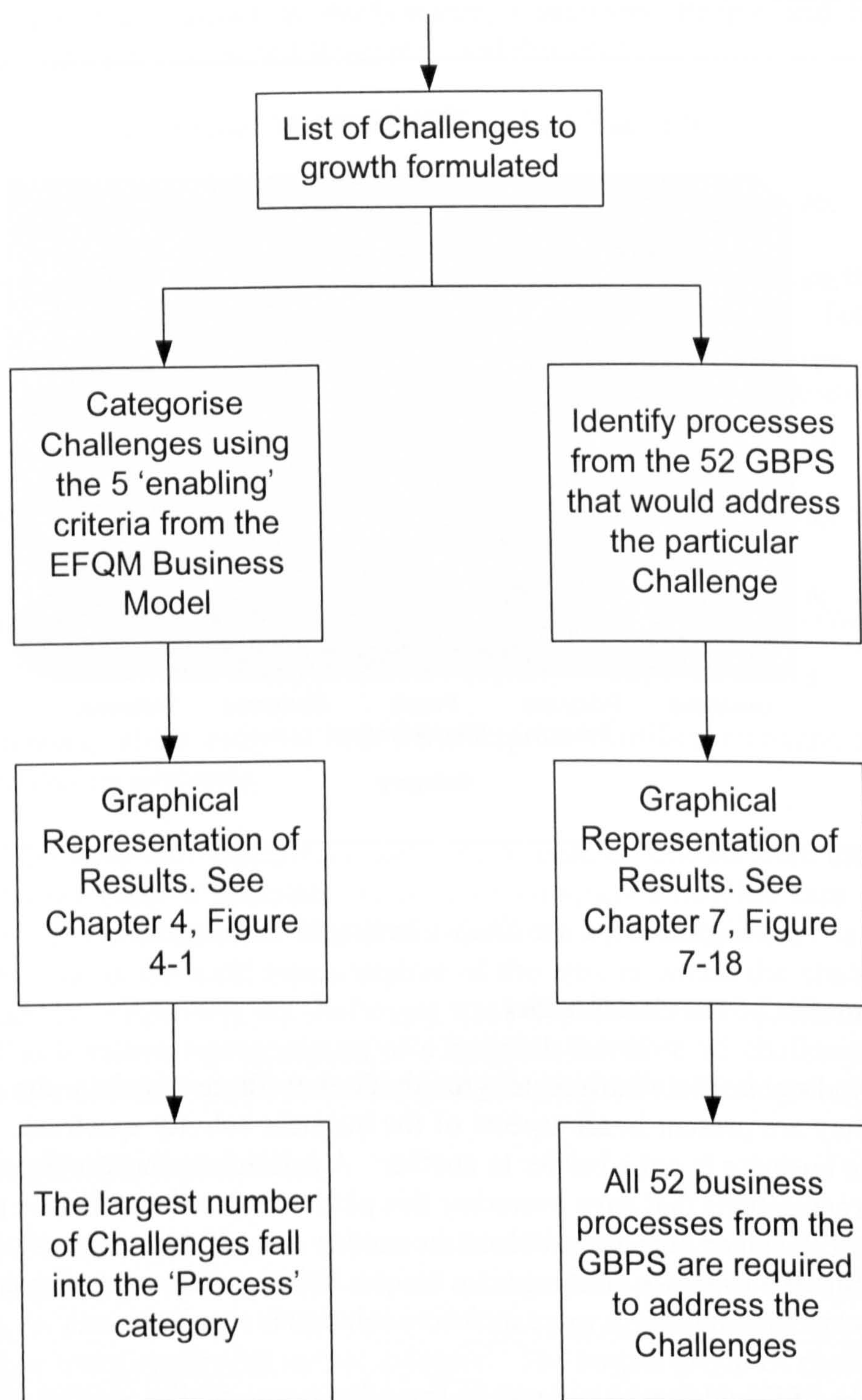
*Figure 4-1, Case Study Challenges vs Category*

#### 4.4.5 Discussion of the Case Studies

The main finding is that barriers to growth do not fit neatly into the traditional categories, they are present in all aspects of the business activity spectrum. What is a barrier to one business is not a barrier to another. A solution to this problem may be to copy from organisations that have overcome this particular problem. This is not seen as a solution by the author because problems in another area of the business will then be uncovered. Small businesses do things in a unique fashion; what works for one will not necessarily work for another. A more inclusive solution is required.

From the work of David Storey and results from these case studies we can estimate that at least 90% of small businesses are facing one or more barriers to their growth plans (Storey, 1996). Figure 4-2, Case Study Analysis Overview, shows how the case study data has been analysed.

## Case Study Analysis



*Figure 4-2, Case Study Analysis Overview*

This was done in two parts. The first part is discussed in this section. The second part, the reconciliation of the case study challenges with a business process from the GBPS is discussed in Chapter 7. This has produced corroboratory results.

## 4.5 In-depth Case Study

The purpose of this case study was to have a detailed look at how the business processes in the organisation are identified and managed. The documentation of business processes that is provided to employees was investigated and the employees understanding and implementation of the processes was questioned.

The organisation was selected because it had proven ability to supply products of the highest quality; it was a recipient of a Queen's Award for Export Achievement in 1994, but it was failing to meet its strategic growth objectives (Sackett and Mason 1997). Typical questions to be answered by the case study were:

- What are the characteristics of the way the organisation is managing its business processes in relation to its growth objectives?
- How are the business processes understood and undertaken from the perspective of the employees that are involved with them in their day to day activities?

The case study was undertaken over a period of 12 months and the author spent two days a week at the organisation for the whole of this period. Ethnography, a qualitative research approach, was used to study the organisation naturalistically to elicit hidden work and its meaning (Fetterman 1998). All employees were interviewed several times during the period of the research and a number of focus group meetings were run.

## 4.6 Overview of findings

The enterprise was unable to achieve its growth objectives for three reasons:

- Failure to deliver product on time, orders were regularly many weeks late.
- Lost orders due to the enterprise's inability to follow up enquiries in a timely manner or guarantee a delivery date.
- Failure to chase additional work from existing customers.

It is the underlying reasons for the above that are of interest to this research. The author was able to identify the problems stated above in a relatively short time. The author paid due diligence to confirm that his initial thoughts were correct. Throughout the period of the case study it was clear that these were the overriding problems with the organisation in its quest for growth. To investigate the underlying reasons for these key problems the enterprise has been split into a number of areas under two headings, Positive and Negative.

### **Positive**

Product – the product is excellent. It is designed and built to the highest quality and customers are entirely satisfied with its performance.

Production facilities – production facilities are excellent and there is sufficient capacity to meet growth profile. The production facilities include the latest equipment and are maintained to a high specification.

Production workforce – the production workforce are extremely well skilled and motivated and there is sufficient capacity to meet growth profile. Most started with an apprenticeship and have been with the enterprise since. The complex characteristics of the product are understood by the production workforce.

Support staff – there is a dedicated and capable support team with an up-to-date ICT network and applications.

Vision – the Managing Director was visionary. He had, for a number of years, ambitious plans for expansion and was implementing them. Despite this growth was not being achieved.

### Negative

Product data management – there is no product data management. This is a major drawback when manufacturing a complex product that is reliant on product data. It was clear that the concept of product data management was not understood within the organisation. At any one time there were up to 3000 piece parts in the manufacturing process. Because there was no register of these parts it was impossible to even make a start at formal product data management. Parts did not have unique part numbers and that compounded the problem. The author concluded that it was this tradition, of not giving parts unique identification, and the fact that the production workforce was predominantly trained in house that had prevented a product data management system from evolving early in the life of the enterprise. A number of ad hoc, informal, solutions to product data communication were in operation within the production facility with the consequential unreliability problems abounding.

Production planning – production planning is undertaken manually and hand written. The piece parts typically have a complex routing scheme with a large number of small operations. Due to the problems with product data management parts are often available for next operation but no product data is available, or vice versa. Because the production programme is hand written there are problems with promulgating production programme information throughout the organisation. This is done mainly through word of mouth and the compilation of ad hoc, informal, lists by individuals. Progress tracking is impossible for all but one or two high priority parts at any one time.

Purchasing – no unallocated stock is held. A relatively large number of individuals within the enterprise purchase materials. Usually suppliers are not given purchase order numbers. There is no reconciliation of purchase order and delivery note nor delivery note and invoice. Because unique reference numbers are not used there is no history available on repeat orders. The purchase orders are recorded on an in-house designed PC application using MS Access. This application has no reporting facility. Orders are entered by the support staff often using information gleaned from the supplier's delivery note. There is no store or goods inwards area. Suppliers leave deliveries in the corridor. Items remain in the corridor until the person that ordered them goes to look for them.

Supervision – each area is supervised by a responsible and authoritative supervisor. Nevertheless because of the problems outlined above workflow supervision is

inefficient and ineffective. Each supervisor creates his own weekly work-to list. These lists are not formally co-ordinated between sections or to the master production schedule. The supervisors were very territorial of their area, machines and staff.

#### **4.7 Discussion of the In-depth Case Study**

Each of the 8 production departments within the organisation operated like individual organisations. They all undertook the same business processes but they achieved the tasks by different routes all of which were informal and under the control of the supervisor. Business process tasks, that had been completed by one department satisfactorily, were again repeated by the next department that handled the piece part. Information was not formally recorded and not passed on or held centrally. When the volume of throughput of piece parts is considered this repetitive work amounts to a large amount of unnecessary work. Additionally the nature of the information being predominantly numerical, i.e. dimensions, resulted in mistakes being made and jobs having to be re-worked. This compounded the problem.

This situation was as a result of the total lack of formal business processes. This is in contrast to the very comprehensive production processes available. Most production operatives had completed or were in the process of completing apprenticeship training at the local technical college that accounts for the advanced formal production process documentation.

The problems associated with the lack of formal customer order processes and production planning processes tended to overshadow other problems due to the lack of formal processes in other areas. Activities were being done; the problem was that individuals executed the same processes in different ways. This results in two key problems:

- The most effective and efficient methods not applied.
- There is no starting point for improvement.

Once this situation is established it is difficult to break out of it. Because individuals had always worked this way it was not identified as being a problem. The application of formal business processes would have quickly resolved this situation. For example, a formal purchasing process established during the case study was rapidly accepted and adopted.

#### **4.8 The Business Growth Characteristics**

Figure 4-3, Characteristics of Business Growth in SMEs from Research, was derived from Figure 3-5, Characteristics of barriers to Business Growth in SMEs and Figure 3-6, Characteristics of Business Growth in SMEs from Literature. Additionally characteristics derived from the business case studies discussed in this chapter have



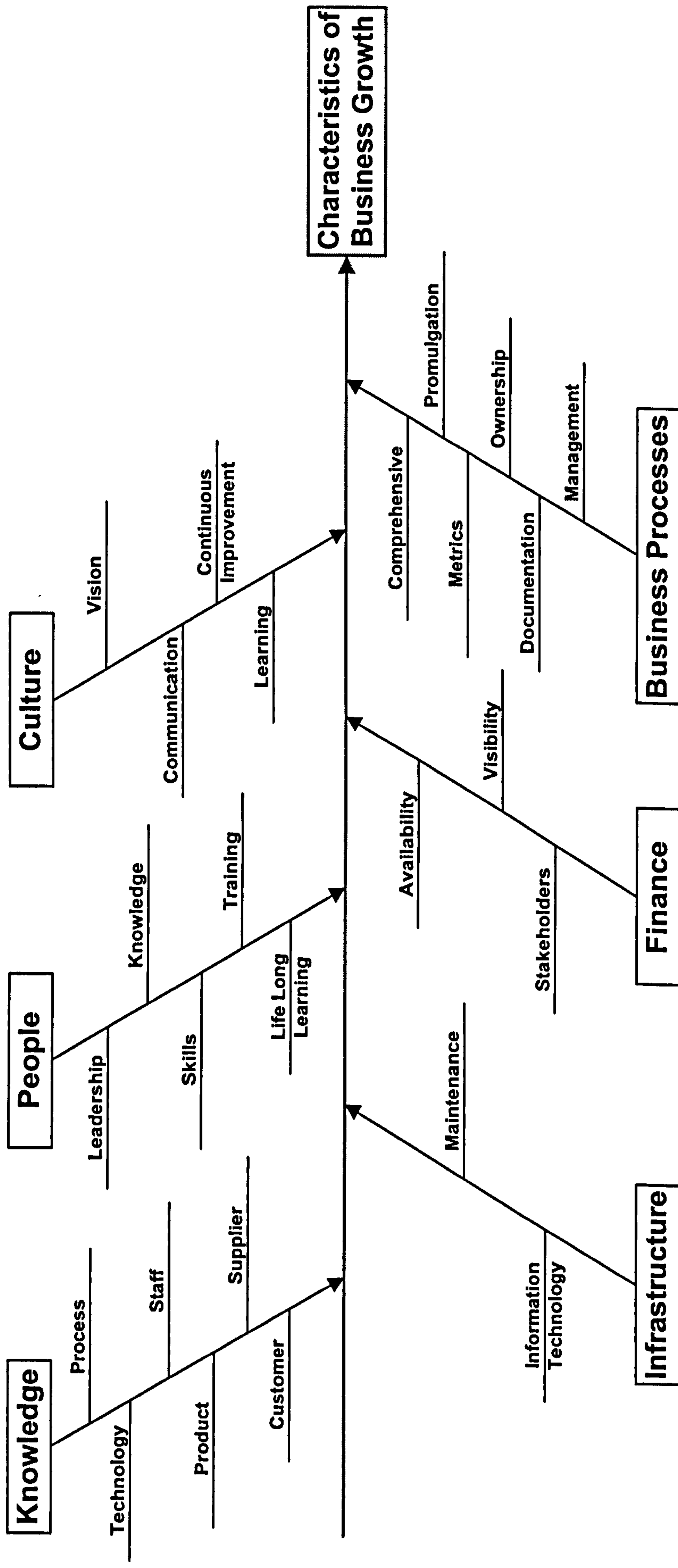


Figure 4-3, Characteristics of Business Growth in SMEs from Research

Note: Product specific processes are not considered directly in this diagram. An assumption is made that they are already relatively effective and efficient

been included. Product specific processes have not been included in this diagram. Although product development is an issue and is certainly part of the business process set, product specific processes were not generally found to be an issue regarding business growth. Figure 4-3 was used to develop the enterprise growth model discussed at Chapter 7.

## 4.9 Concluding Remarks

The business case studies and the in-depth case study all pointed to a poor comprehension of business processes by the businesses reviewed. This research indicates that failure on the part of SMEs to recognise, understand and implement with an appropriate degree of formality their business processes stands out as a key barrier to business growth. This supports Hypothesis 1:

**That a key barrier to small enterprise growth and sustainability is the failure of the business to identify and manage business processes.**

Small and Medium Enterprises form a heterogeneous and significant economic force in industry. They have a great potential to create new jobs, generate economic growth and form the foundation elements of supply chains, as discussed in Section 4.3. They play an important role in innovation, but may have difficulties in accessing new technology. Because they have limited financial, personnel and time resources, day-to-day management takes priority, and they are sensitive to external pressures, which pose challenges to development. The importance of SMEs to the well being of the national economy and the recognition that they seem to under perform emphasises the need to assist smaller companies to improve their performance. These case studies indicate that currently available assistance is either not being sought or is lacking in the basic business principles i.e. business process development.

The following Chapter outlines a set of business standards and tools that are available to businesses that have been designed to help in areas of process development, improvement, and management. The reasons why the uptake of these standards and tools within the SME sector is poor are discussed.

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## Chapter 5: The Selection of Tools

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### 5.1 Synopsis

The aim of this Chapter is to show that much of the current business development methodology, particularly an interest in processes, grew out of earlier efforts to improve product quality. This is important because of the influence this evolution has had on the current quality standards and tools available today.

In Chapter 3 the author concluded that the attitude and approach of an enterprise to 'quality' was important to its success. Chapter 4 looked at strategies used by the case study enterprises in the area of total quality. Many of these strategies originated from the 'total quality' toolkit discussed in this Chapter. This is a clear indication that 'quality' can make a significant contribution to the development of an enterprise growth strategy. This Chapter describes the evolution of an interest in product quality into a diverse range of business development strategies and portfolio of commercial products. These commercial products are discussed in the next Chapter, Chapter 6. Key contributors to this 'quality' development are discussed as are the different tools introduced along the way.

The important evolution from the emphasis being placed on product inspection through to current practice of process improvement is traced. This discussion leads onto the selection of a number of current business standards and tools (described as commercial products above) from which, in part, the global business process set, GBPS, is derived. The business development strategies identified in this chapter form the basis for part of the case study analysis in Chapter 4. The development of the GBPS into an Enterprise Model is discussed in Chapter 7.

Chapters 3 and 4 identified the importance of business processes in business growth. Despite extensive searching, internationally, a comprehensive list of business processes was not found to be available. The author concluded that due to the importance of business processes, this list was a necessary element of business growth. A list of business processes, the GBPS, is derived in this Chapter. This list is tested for completeness in the next Chapter, Chapter 6. In this Chapter the author defines business processes.

## 5.2 The evolution of quality

### 5.2.1 Historical overview

Before the concepts and ideas of Total Quality Management (TQM) were formalised, much work had taken place over the centuries to reach this stage. The following pages chart this journey, from inspection through to the present day concepts of total quality. During the early days of manufacturing, an operative's work was inspected and a decision made whether to accept or reject it. As businesses became larger, so too did this role, and full time inspection jobs were created.

Accompanying the creation of inspection functions, other problems arose:

- More technical problems occurred, requiring specialised skills, often not possessed by production workers.
- The inspectors lacked training.
- Inspectors were ordered to accept defective goods, to increase output.
- Skilled workers were promoted into other roles, leaving less skilled workers to perform the operational jobs, such as manufacturing.

These changes led to the birth of the separate inspection department with a "chief inspector", reporting to either the person in charge of manufacturing or the works manager. With the creation of this new department, there came new services and issues, e.g., standards, training, recording of data and the accuracy of measuring equipment. It became clear that the responsibilities of the "chief inspector" were more than just product acceptance, and a need to address defect prevention emerged. Hence the quality control department evolved, in charge of which was a "quality control manager", with responsibility for the inspection services and quality control engineering.

In 1924 Shewhart made the first sketch of a modern control chart. His work was later developed by Deming and the early work of Shewhart, Deming, Dodge and Romig constitutes much of what today comprises the theory of statistical process control (SPC). However, there was little use of these techniques in manufacturing companies until the late 1940's.

At that time, Japan's industrial system was virtually destroyed, and it had a reputation for cheap imitation products and an illiterate workforce. The Japanese recognised these problems and set about solving them with the help of some notable quality gurus – Juran, Deming and Feigenbaum.

In the early 1950's, quality management practices developed rapidly in Japanese plants, and became a major theme in Japanese management philosophy, such that, by 1960, quality control and management had become a national preoccupation. By the late 1960's and early 1970's Japan's imports into the USA and Europe increased significantly, due to its cheaper, higher quality products, compared to the Western counterparts.

In 1969 the first international conference on quality control, sponsored by Japan, America and Europe, was held in Tokyo. In a paper given by Feigenbaum, the term “total quality” was used for the first time, and referred to wider issues such as planning, organisation and management responsibility. Ishikawa gave a paper explaining how “total quality control” in Japan was different, it meaning “company wide quality control”, and describing how all employees, from top management to the workers, must study and participate in quality control. Company wide quality management was common in Japanese companies by the late 1970’s.

The quality revolution in the West did not begin until the early 1980’s, when companies introduced their own quality programmes and initiatives to counter the Japanese success. Total quality management became the centre of these drives in most cases.

In a DTI publication in 1982 it was stated that Britain’s world trade share was declining and this was having a dramatic effect on the standard of living in the country (DTI, 1982). There was intense global competition and any country’s economic performance and reputation for quality was made up of the reputations and performances of its individual companies and products/services.

The British Standard (BS) 5750 for quality systems was published in 1979, and in 1983 the National Quality Campaign was launched, using BS5750 as its main theme (DTI, 1983). The aim was to bring to the attention of industry the importance of quality for competitiveness and survival in the world market place.

Since then the International Standardisation Organisation (ISO) 9000 has become the internationally recognised standard for quality management systems. It comprises a number of standards that specify the requirements for the documentation, implementation and maintenance of a quality system.

TQM is now part of a much wider concept that addresses overall organisational performance and recognises the importance of processes. There is also extensive research evidence that demonstrates the benefits from the approach.

### **5.2.2 The original quality gurus**

A guru, by definition, is a good person, a wise person and a teacher. A quality guru should be all of these, plus have a concept and approach to quality within business that has made a major and lasting impact. The gurus mentioned in this chapter have done, and continue to do, that, in some cases, even after their death.

There have been three groups of gurus since the 1940’s:

- 1) Early 1950’s Americans who took the messages of quality to Japan.
- 2) Late 1950’s Japanese who developed new concepts in response to the Americans.
- 3) 1970’s-1980’s Western gurus who followed the Japanese industrial success.

It is beyond the scope of this thesis to go into great detail on each of the gurus, their philosophies, teachings and tools; however, a brief overview of their contribution to the quality journey is given.

### **The Americans who went to Japan**

W Edwards Deming placed great importance and responsibility on management, at both the individual and company level, believing management to be responsible for 94% of quality problems. His fourteen-point plan is a complete philosophy of management that can be applied to small or large organisations in the public, private or service sectors. He believed that adoption of, and action on, the fourteen points was a signal that management intended to stay in business. Deming also encouraged a systematic approach to problem solving and promoted the widely known Plan, Do, Check, Act (PDCA) cycle. The PDCA cycle is also known as the Deming cycle, although it was developed by a colleague of Deming, Dr Shewhart (Deming, 1982a, 1982b, 1993).

It is a universal improvement methodology, the idea being to constantly improve, and thereby reduce the difference between the requirements of the customers and the performance of the process. The cycle is about learning and ongoing improvement, learning what works and what does not in a systematic way; and the cycle repeats; after one cycle is complete, another is started.

Dr Joseph M Juran developed the quality trilogy – quality planning, quality control and quality improvement. Good quality management requires quality actions to be planned out, improved and controlled. The process achieves control at one level of quality performance, then plans are made to improve the performance on a project by project basis, using tools and techniques such as Pareto analysis. This activity eventually achieves breakthrough to an improved level, which is again controlled, to prevent any deterioration.

Juran believed quality is associated with product satisfaction and dissatisfaction, and emphasised the necessity for ongoing quality improvement through a succession of small improvement projects carried out throughout the organisation.

He concentrated not just on the end customer, but on other external and internal customers. Each person along the chain, from product designer to final user, is a supplier and a customer. In addition, the person will be a process, carrying out some transformation or activity (Juran, 1980, 1988, 1989, 1992).

Armand V Feigenbaum was the originator of “total quality control”, often referred to as total quality (Feigenbaum, 1991). He defined it as:

“An effective system for integrating quality development, quality maintenance and quality improvement efforts of the various groups within an organisation, so as to enable production and service at the most economical levels that allow full customer satisfaction”.

He saw it as a business method and proposed three steps to quality:

- 1) Quality leadership.
- 2) Modern quality technology.
- 3) Organisational commitment.

### **The Japanese**

Dr Kaoru Ishikawa made many contributions to quality, the most noteworthy being his total quality viewpoint, company wide quality control, his emphasis on the human side of quality, the Ishikawa diagram and the assembly and use of the “seven basic tools of quality”:

- 1) Pareto analysis – which are the big problems?
- 2) Cause and effect diagrams – what causes the problems?
- 3) Stratification – how is the data made up?
- 4) Check sheets – how often it occurs or is done?
- 5) Histograms – what do overall variations look like?
- 6) Scatter charts – what are the relationships between factors?
- 7) Process control charts – which variations to control and how?

He believed these seven tools should be widely known and used to analyse problems and develop improvements (Ishikawa, 1976, 1985).

Dr Genichi Taguchi believed it is preferable to design a product that is robust or insensitive to variation in the manufacturing process, rather than attempt to control all the many variations during actual manufacture (Taguchi, 1985). His message was concerned with the routine optimisation of product and process prior to manufacture rather than quality through inspection.

“Taguchi methodology” is fundamentally a prototyping method that enables the designer to identify the optimal settings to produce a robust product that can survive manufacturing time after time, piece after piece, and provide what the customer wants. Today, companies see a close link between Taguchi methods, which can be viewed along a continuum, and quality function deployment.

Shigeo Shingo is strongly associated with the Poka-Yoke (mistake proofing) system (Shingo, 1986). In Poka Yoke, defects are examined, the production system stopped and immediate feedback given so that the root causes of the problem may be identified and prevented from occurring again.

He distinguished between “errors”, which are inevitable, and “defects”, which result when an error reaches a customer, and the aim of Poka-Yoke is to stop errors becoming defects. Defects arise because errors are made and there is a cause and effect relationship between the two. Zero quality control is the ideal production system and this requires both Poka-Yoke and source inspections. In the latter, errors are looked at before they become defects, and the system is either stopped for correction or the error condition automatically adjusted to prevent it from becoming a defect.



## Western Gurus

Philip B Crosby is known for the concepts of “Quality is Free” and “Zero Defects”, and his quality improvement process is based on his four absolutes of quality (Crosby, 1979, 1984, 1988, 1989, 1995):

- 1) Quality is conformance to requirements.
- 2) The system of quality is prevention.
- 3) The performance standard is zero defects.
- 4) The measurement of quality is the price of non-conformance.

Tom Peters identified leadership as being central to the quality improvement process, discarding the word “Management” for “Leadership” (Peters, 1982, 1985, 1988). The new role is of a facilitator, and the basis is “Managing by wandering about” (MBWA), enabling the leader to keep in touch with customers, innovation and people, the three main areas in the pursuit of excellence.

Having researched successful American organisations, he concluded that any intelligent approach to organising had to encompass, and treat as interdependent, seven variables, in what became known as the McKinsey 7-S Framework, designed to force explicit thought about both the hardware and software of an organisation:

- 1) Structure.
- 2) Strategy.
- 3) Skills.
- 4) Staff.
- 5) Style.
- 6) Systems.
- 7) Shared values.

There are many other management “gurus” whose philosophies and ideas fill whole books on their own, and several of these are important to quality management. The ones included in this chapter are those whose reputation is primarily for their work in quality and excellence. However, there are contradictions between the gurus’ approaches, as well as many common features.

During the evolution of quality emphasis has moved from managing product quality to managing all aspects of the organisation. This inclusive approach has adopted the title of Total Quality Management.

## 5.3 Total Quality Management (TQM)

### 5.3.1 Introduction

TQM is far wider in its application than just assuring product or service quality – it is a way of managing people and business processes to ensure complete customer satisfaction at every stage, internally and externally.

The core of TQM is the customer-supplier interfaces, both externally and internally. Processes provide these interfaces. This core must be surrounded by commitment to quality, meeting the customer requirements, communication of the quality message, and recognition of the need to change the culture of the organisation to create total quality. These are the foundations of TQM, and they are supported by the management necessities of people, processes and systems in the organisation. TQM affects more business characteristics than product quality alone (Watt 2002a and Watt 2002b).

### 5.3.2 The total quality organisation

The literature provides many differing views on what total quality means to an organisation. The following interpretation is one such view (IProE, 1989). A total quality organisation is an organisation that is totally committed to quality and that:

Focuses on: Continual Process Improvement

- Everything as a process.
- The use of scientific methods – decisions supported by facts / data.
- Perfection as the goal.

Through: Universal participation

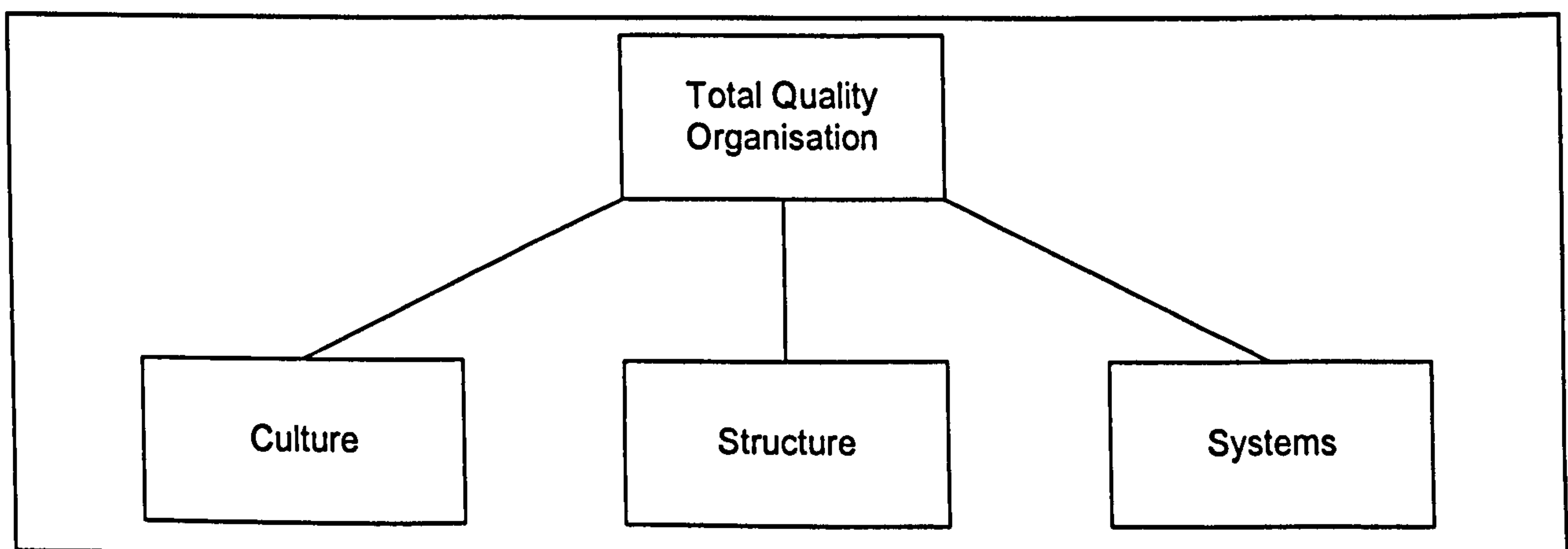
- Everyone.
- Everywhere.
- Individuals and teams.

Resulting in: Customer satisfaction

- Exceeding expectations.

For: Internal and External Customers.

There are three factors that dictate how an organisation functions and how that organisation is perceived. See Figure 5-1.



*Figure 5-1, Factors that dictate how an organisation functions*

Success comes from the right balance between these three factors which should be supportive of the concepts outlined above.

**Culture** – The combination of company values and management style and the employees' attitudes and reactions to these values supported by training.

**Structure** – Formal reporting relationships usually shown by an organisational chart – trades off specialisation and natural group integration of people, jobs and departments.

**Systems** – Procedures formal or informal which match organisational 'ownership', some of which may be supported by information technology.

This Chapter could go on a lot longer but the picture has been painted of where we are now in terms of our view of what quality means to enterprise.

## **5.4 Discussion**

The value to business of the outputs from this evolution should not be underestimated. Clearly TQM has become a key business tool for developing an enterprise although a definitive definition for TQM is not available. This is in part due to the implementation of TQM being biased to the areas of expertise of the implementer or tool being used. A number of TQM strategies can be identified and these are grouped as follows:

- Leadership.
- Processes.
- Culture.
- Structure.
- System.

Consideration was given to the visibility of strategies in these five areas when analysing case study material.

Processes are mentioned throughout the 'quality' literature but exactly what these 'processes' are is certainly not discussed. The new ISO9000:2000 standard for quality management is based upon what it calls the process approach and although processes are divided into 'added value' and 'support' processes again actual processes are not listed.

As a result of the evolution of quality 4 key quality standards have evolved over the years and are now accepted as valuable, and three key business development tools are in wide usage by UK enterprises, although less so in smaller enterprises. There are a large number of additional standards and tools available, undoubtedly of equal value to those selected, but too numerous to mention in this thesis.

The 4 key quality standards are:

- 1) ISO9000:2000.
- 2) Investors in People (IIP).

- 3) The Charter Mark.
- 4) PQASSO 2<sup>nd</sup> Edition.

The 3 business development tools are:

- 1) The Excellence Model.
- 2) UK Benchmarking Index (UKBI).
- 3) Self Assessment.

Each of these standards and tools have developed with an emphasis on a particular aspect of the organisation or a particular approach to implementing improvement. It is the author's view that commercial constraints, e.g. IPR and Copyright, have influenced this development rather than the interests of the users.

These standards and tools have been selected by the author for analysis because collectively they provide:

- Standards for quality management that will address customer satisfaction and,
- for developing people.
- A framework around which the organization can be structured.
- A standard for public service specific but not exclusive to the public sector.
- A standard for voluntary organisations specific but not exclusive to the voluntary sector.
- A method for the systematic and regular review of the organisation's activities and results, and
- an assessment of competitive performance against the market place competitors.

Again 'processes' are discussed throughout these standards and tools but no attempt is made at listing what these processes are in the documentation. The selected standards and tools are discussed in detail in Chapter 6.

## **5.5 Defining Business Processes**

From the close analysis of the requirements of these 7 business standards and tools the author has derived a set of 52 business processes that if implemented within an organisation would ensure that that organisation met the requirements of the 4 business standards and would be able to make best use of the 3 business development tools. The 52 business processes are listed and described at Appendix D.

The analysis of the 7 business tools and standards was undertaken:

Each clause or element of the 7 standards and tools were listed. Against each of these clauses or elements the business process or processes required to meet (or provide) the requirements of the clause or element were listed. The resulting list of business processes was then rationalised. To assist in the rationalisation process the business

processes were put into one of three groups. Operational, Commercial or Business Development. The author's personal experience of the application of the standards and tools during his career helped a great deal in this task. By organising the business processes into these three groups the author was able to identify any areas of business activity not covered by the initial analysis. Additional business processes were added to cover these omissions.

As a further test of the validity of the derived business process set an analysis was made of the business processes and the challenges face by the case study companies. The results of this analysis is discussed at Chapter 7, Section 7.8.

## **5.6 Concluding Remarks**

The overriding characteristic of the evolution of quality is the prominence and importance placed on 'process' in current business standards and tools. This is a relatively new approach. Although this emphasis is placed on 'process' no guidance is available regarding what these processes are. In fact a degree of confusion is introduced by conflicting terminology and definitions not only between different tools and standards but within the same tools and standards (Fraser, 2002). The author has attempted to evaluate the impact of this lack of process taxonomy on the ability of the case study enterprises to overcome the challenges to growth that they currently face.

The evolved importance placed on 'process' was in line with the finding of the literature survey described in Chapter 3 and the case study analysis described in Chapter 4.

The vested commercial interests of the organisations that have developed and that market the standards and tools listed above and the competitive nature of their products has been detrimental to the small enterprise user. The need for 'product differentiation' by the stakeholders for each of the products and tools has suppressed the development of any one of the products into an all round business development tool or standard.

The DTI's 'flavour of the month' approach and its funding regimes via what were the TECs and their successors, has also had a key impact on their take-up by SMEs.

A number of business standards and tools have been selected for further analysis and for the identification of the business 'processes' required for their implementation or use. These are discussed in Chapter 6. Other business development tools were discussed, e.g. Six Sigma (Bendell, 2002) and The Balanced Scorecard (McCunn, 1998), but these were not included because the resources required for implementation make them unpractical for SMEs.

The author has derived a business process taxonomy, the Generic Business Process Set (GBPS) and this is discussed further in Chapter 7.

## Chapter 6: Current application of the selected tools

### 6.1 Synopsis

The aim of this Chapter is to identify the limitations of the 7 business development standards and tools, selected in the last Chapter, in respect of business growth.

In the previous Chapter, 4 business development standards and 3 business development tools were identified. In this Chapter the current application of these business standards and business tools is discussed. Each of these standards and tool are highly commended and recommended as effective development tools by the author. But they all suffer from the same limitation. That is that they do not, on their own or collectively, address the full spectrum of business activity necessary to achieve growth.—This is a serious problem for small businesses as implementation and assessment takes up all available capacity, misguidedly through thinking that the tool is all-inclusive, thereby leaving other areas of the business under resourced. It is the totality of business process coverage and the gap in business process coverage of these business standards and tools, both individually and collectively, that the author is interested in investigating in this Chapter.

There is limited take up of these standards and tools by small enterprises. Those that do find them useful are most likely to implement one and exceptionally two of the standards or tools. Alternatives to the standards and tools route for business growth were discussed in Chapter 3, Section 3.7, where it was concluded that, despite its limitations, this was the preferred option for small enterprise for sustainable growth.

Hypothesis 2 was formulated:

*That there is a minimum set of business processes that a small and medium size enterprise must implement as a prerequisite to long-term success and sustainability.*

### 6.2 Introduction

Individual requirement statements have been derived for 5 of the 7 selected business standards and tools. These requirement statements have been designed so that collectively they meet the requirements of the business standards or facilitate the use of the business tools. PQASSO and Self Assessment are not sufficiently specific for a set of individual requirements to be derived that would add value to this exercise.

The following table, Table 6-1, illustrates the number of individual requirements associated with each standard or tool. No attempt has been made to rationalise these individual requirements at this stage. The author estimates, after initial investigation,

that when this rationalisation exercise is completed the total number of individual requirements across all standards and tools will reduce from 142 to about 60.

The applicability of each individual requirement has been assessed against the 52 business processes in the GBPS. The results of this analysis is discussed in the following sections.

Ref.	Standard or Tool	Requirements
1	BS EN ISO9000:	47
2	Investors in People	24
3	UK Benchmarking Index	30
4	Excellence Model	31
5	Charter Mark	10
		Total 142

*Table 6-1, Individual Requirements*

A list of the derived requirements for each of the 5 standards and tools is included at Appendix E.

## 6.3 ISO9000 : 2000

### 6.3.1 Overview

Research has shown that most small enterprises that apply BS EN ISO 9000 do so because they believe their customers require it or will require it in the future (Spendlove, 1997).

ISO 9000 originated in the UK as BS 5750, the British Standard for quality management systems. It is now the established worldwide standard for quality management systems to support supplier customer relationships having been adopted by 60,000 organisations in the UK and over 270,000 in 143 countries worldwide.

It is a tool to help organisations ensure that their processes and documentation enable them to meet their customers' needs and expectations. An illustrated overview of the standard is provided at Figure 6-1.

To comply with the standard an organisation needs to review and document its procedures in accordance with the requirements of this international standard, then prepare a quality manual. In other words, organisations must:

- Say clearly what they do.
- Capture this in a quality manual.
- Ensure they do what they say.

- Make sure their actions are effective.
- Make improvements to what they do.

Once a quality system is in place and established, organisations usually seek an independent assessment by a certification body to check conformity with the requirements of the standard and to ensure that declared procedures are working in

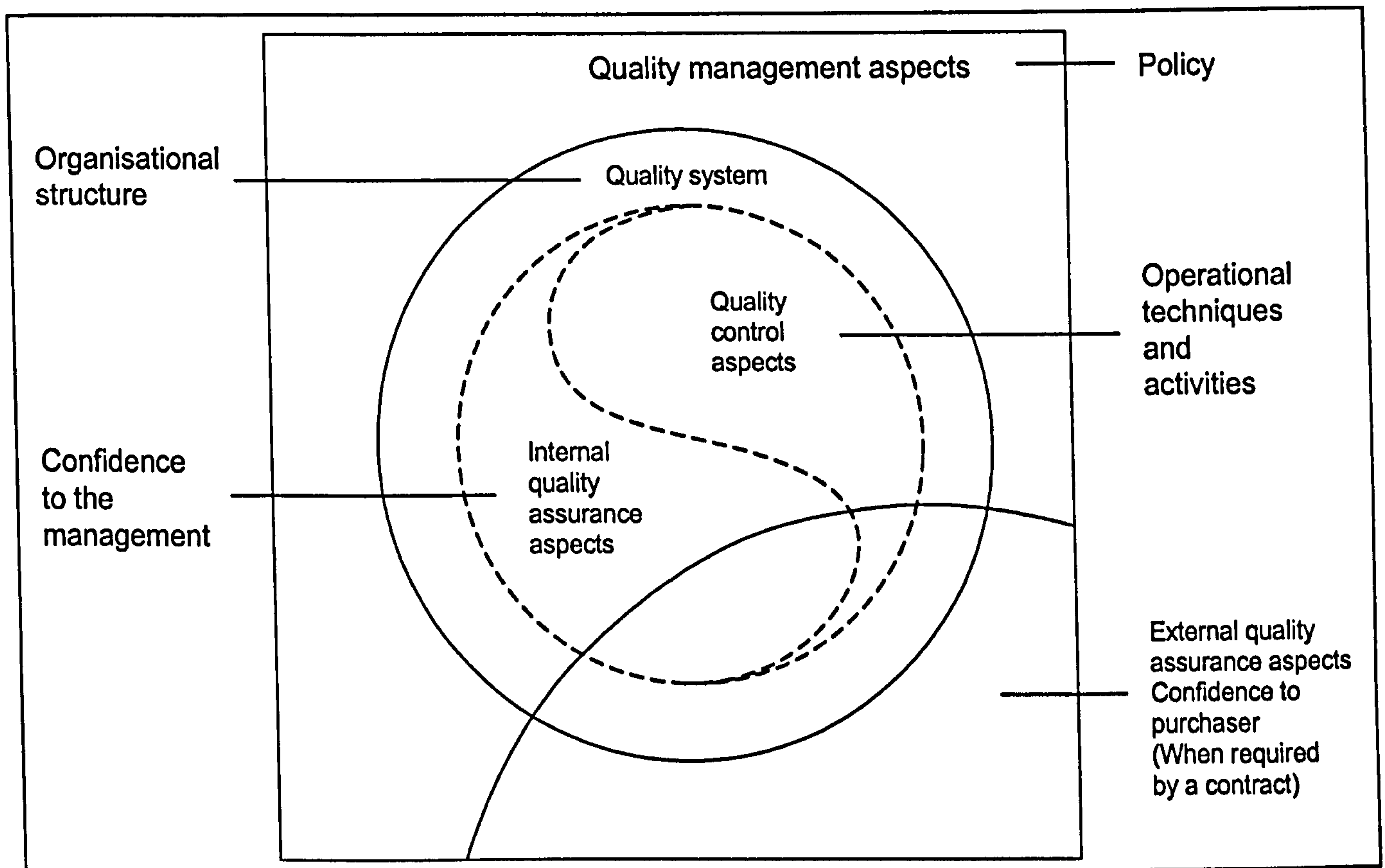


Figure 6-1, The relationship of concepts in Quality Management (Source BS5750)

practice. The certification body may itself be subject to independent assessment. In the UK such assessment, known as accreditation, is conducted by the United Kingdom Accreditation Service (UKAS). In the context of ISO 9000, UKAS is the only UK accreditation body recognised by the UK Government and it operates under a Memorandum of Understanding with the Department of Trade and Industry. The Government encourages organisations seeking certification to ISO 9000 to use the services of UKAS accredited certification bodies where there is an option. Only organisations certified by an UKAS-accredited body may use the National Accreditation Mark. The Mark is a clear and public demonstration that an organisation's quality system has been assessed by a competent and independent body and is recognised internationally. Once an organisation is successfully certified, it will continue to be visited at regular intervals each year to ensure the standard is maintained. Similarly, a certification body will, once accredited, be assessed regularly by its accreditation body.

ISO 9000 is sufficiently flexible in its application and can be implemented successfully



in any organisation. Its application range can be from designers and manufacturers to a simple customer service role.

Cost depends on the size and complexity of the organisation, but a typical organisation of between 60 and 70 people could expect to pay £1500-£2600 for the initial assessment and £1400 each year for the audits.

The length of time leading up to assessment depends entirely upon the current state of the organisation's management system and the need to develop consistent working practice to comply with the standard's requirements. Frequently the process of implementation through to assessment can be complete in six to nine months. In particular, all organisations will need to write:

- A Quality Policy,
- A Quality Manual, and
- Procedures and Work Instructions.

The initial pressure from customers is inevitably overtaken by the internal energy created from working in a better-managed organisation (Whyman, 1999). Real benefits include:

- Improved efficiency.
- Better use of time and resources.
- Improved consistency of service performance and therefore higher levels of customer satisfaction.
- Improved public perception of organisation's image.
- Improved communication, morale and job satisfaction: staff understand what is expected of them.
- Transparent communication and processes.

### 6.3.2 Discussion

Thoughts on the value of ISO9000 as a business development tool are mixed (Tricker 2001, Daniel 2001, Hutchins 2001, Bendel et al. 2000, Green 2000, and Boulter et al. 2001). During the period of this research ISO9000 has been re-issued. The current version, ISO9000:2000, promulgates a 'process approach' to quality management illustrated at Figure 6-2.

This is certainly a step in the right direction. The standard is still marketed as a standard for quality management systems although it has moved away from a focus on quality.

Frank Steer, Director General of the UK's Institute of Quality Assurance says of the new standard:

".... business will only take up a model that really adds value to the organisation, enhancing its competitive edge, or, in the public sector, improving efficiency and effectiveness." (Steer, 2002)

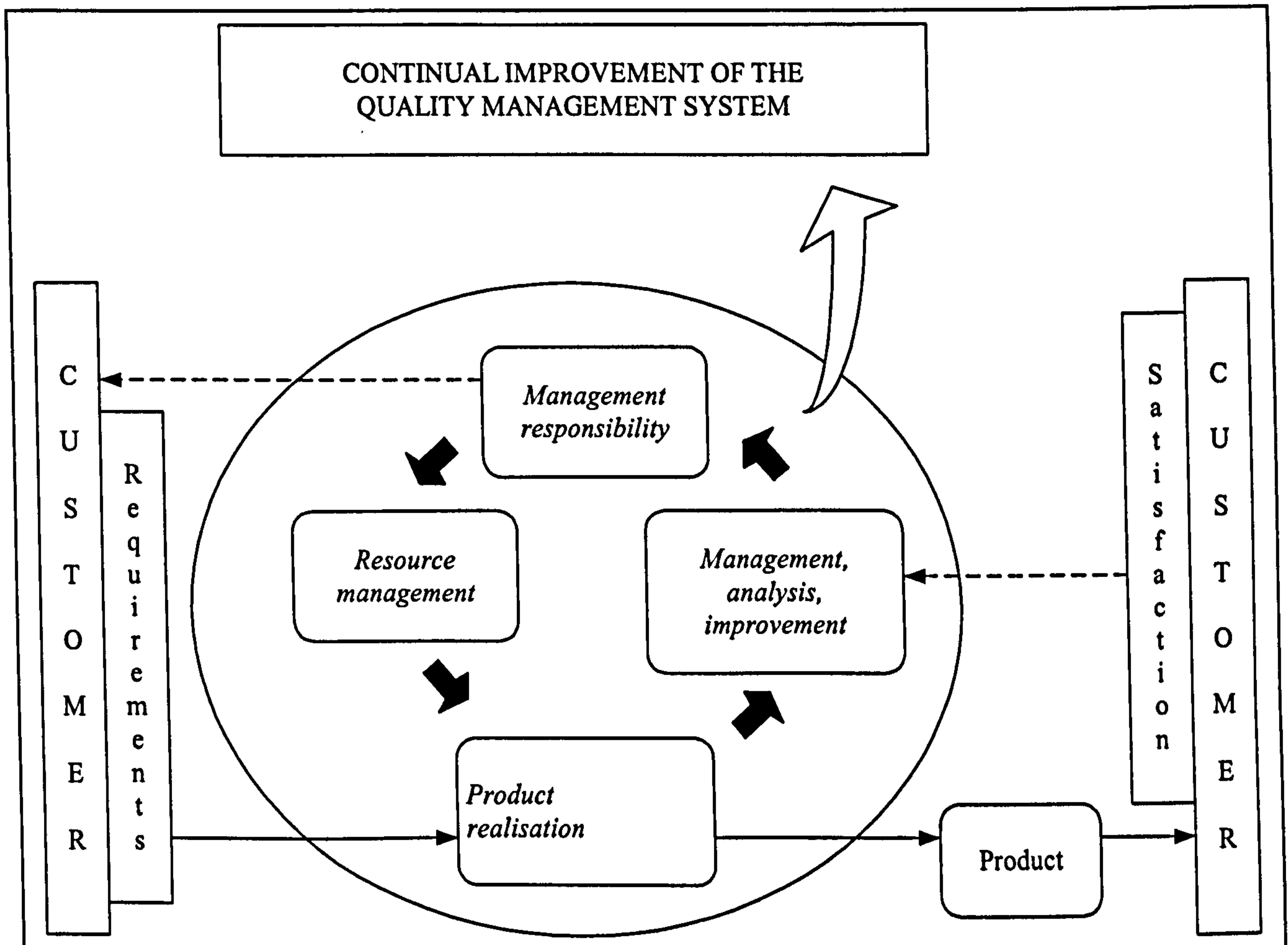


Figure 6-2, Model of the process approach (Source BS EN ISO 9001:2000)

Although this may be true it must be read with caution. The new standard still fails to address **all** processes necessary for sustainable business growth, and specific processes are not clearly identified in the standard. It is possible to meet the requirements of the standard with flying colours even though some very important processes within the organisation are being seriously neglected and the company is in severe cash flow difficulties. This gives those organisations that do gain certification false confidence in the performance of their business.

ISO9000:1994 was used to derive the specific requirement for this standard. This exercise resulted in 47 individual requirements. The following table illustrates the coverage of this standard across the 52 business processes of the GBPS.

Hits	% Hits	Processes	% Processes
99	4%	31	59.6

**Key:** 'Hits' is the number of times the individual requirements are applicable to the GBPS, i.e. in this case the 47 individual requirements and 52 business processes produced 2444 opportunities for a match between the requirement and the process. 99 hits therefore gave a percentage hits value of 4%. 'Processes' is the number of processes that are influenced by 1 or more of the individual requirements, i.e. 1 or more hits per process.

This standard does not address 21 of 52 business processes of the GBPS. Organisations that are relying on this standard for business improvement are in danger of overlooking some very important business processes.

## 6.4 The Investors in People Standard

### 6.4.1 Overview

#### National Standard for Effective Investment in People

An Investor in People organisation makes a public commitment from the top to develop all employees to achieve its business objectives.

- Every business should have a written but flexible plan which sets out business goals and targets, considers how employees will contribute to achieving the plan and specifies how development needs in particular will be assessed and met.
- Management should develop and communicate to all employees a vision of where the organisation is going and the contribution employees will make to its success, involving employee representatives as appropriate.

An Investor in People organisation regularly reviews the training and development needs of all employees.

- The resources for training and developing employees should be clearly identified in the business plan.
- Managers should be responsible for regularly agreeing training and development needs with each employee in the context of business objectives, setting targets and standards linked, where appropriate, to the achievement of National Vocational Qualifications (or relevant units) and, in Scotland, Scottish Vocational Qualifications.

An Investor in People organisation takes action to train and develop individuals on recruitment and throughout their employment.

- Action should focus on the training needs of all new recruits and continually

developing and improving the skills of existing employees.

- All employees should be encouraged to contribute in identifying and meeting their own job-related development needs.

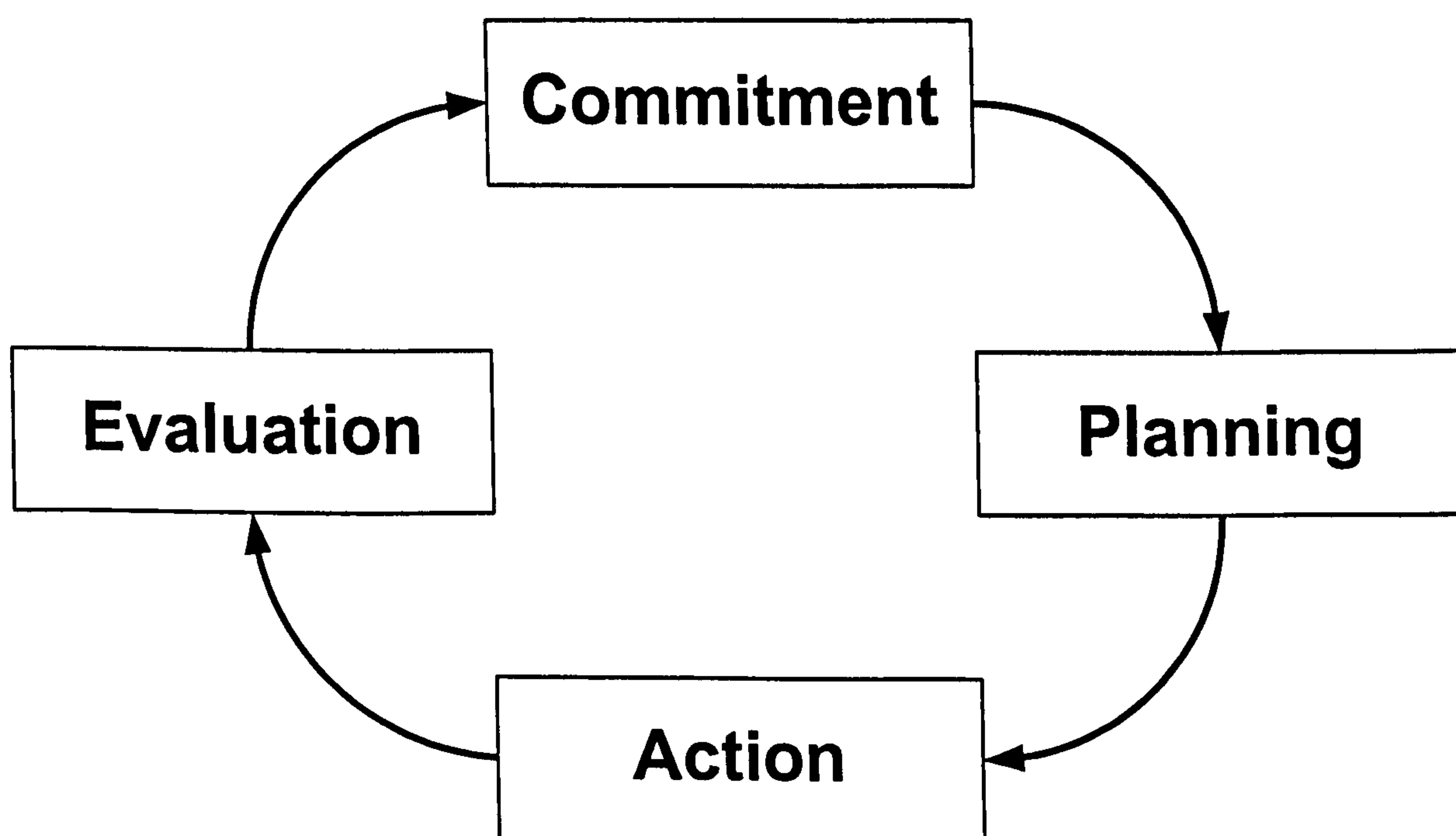
An Investor in People organisation evaluates the investment in training and development to assess achievement and improve future effectiveness.

- The investment, the competence and commitment of employees, and the use made of skills learned, should be reviewed at all levels against business aims and targets.
- The effectiveness of training and development should be reviewed at the top level and lead to renewed commitment and target setting.

The Investors in People standard exists to support organisations in achieving their goals through effective management of their people. The Standard promotes people development and a planned approach to setting and communicating business objectives.

In simple terms, the Standard ensures that what people can do and want to do, matches what the organisation needs them to do. Investors in People is based on a four stage cycle of: Commitment, Planning, Action, and Evaluation. See Figure 6-3.

This cycle drives continuous improvement. The Standard is focused on the people, their commitment, skills development and motivation to achieve. It requires senior management commitment, plus the planning, review and improvement of the approach taken by the organisation to ensure that it is successful.



*Figure 6-3, The Investors in People four principles*

Investors in People is a national Standard for effective investment in the training and development of people in order to achieve organisational goals. It is a standard based on four key principles:

- A commitment, from the top, to develop all employees.
- A regular review of the training and development needs of employees and a plan to meet those needs.
- Action to train and develop individuals throughout their employment.
- The measurement of the organisation's success in using its investment in training and development effectively.

Investors in People is open to any organisation of any size from any sector. Individual units of, for example, a large Government Department or local authority may pilot the Standard as part of an overall strategy for achievement, or may go for the Standard in their own right if they have the authority to do so from their parent department.

Becoming an Investor in People involves a number of stages:

- Information Gathering — including finding out more about the Standard and talking to your local Training and Enterprise Council (TEC) in England and Wales, Local Enterprise Company (LEC) in Scotland or Training and Employment Agency (TEA) in Northern Ireland. (This structure has changed since writing).
- Initial assessment — to see how your organisation measures up against the national Standard and identify action to close any gaps.
- Develop people and processes as necessary.
- Further assessment — once your organisation meets the Standard it will be formally recognised as an Investor in People and can publicise this through use of the logo.
- Re-assessment — organisations will need to decide how often they wish to be reviewed against the Standard. There is no minimum or recommended time period between post-recognition reviews, although the maximum is three years. The timing should ensure that continuous improvement becomes an integral part of retaining the Standard.

There will be costs associated with the process of initial diagnosis or assessment against the Standard and any subsequent development of both people and processes to close any gaps. However, these should be viewed against the benefits that are likely from continuous improvements accruing to the organisation from working with the Standard.

The only direct cost is that of assessment. Assessors charge £550 per day but the total cost of assessment will depend on the size of the organisation, the number of employees and the number of sites involved. By way of a guide, an organisation with 50 — 100 employees should need between 1.5 — 4.0 assessor days, depending on the number, locations etc.

The length of time between making a commitment to achieve the Standard and being recognised will vary from typically six months to two years, depending on the extent of development needed in the organisation.

The benefits of Investors in People can be seen both for the organisation and the individuals within it (DETR, 2000).

For the organisation:

- a more systematic approach to training.
- a clearer focus on training based on business needs.
- improved employee communications.
- a better understanding of the business among employees.
- a higher level of motivation among the workforce.
- a more skilled workforce.
- better value from their training spend.
- increased profitability.

For the individual:

- increased job satisfaction.
- the training and development to enable them to do a good job.
- recognition and structured development.
- a greater sense of pride in the organisation.
- improved motivation and commitment.

#### **6.4.2 Discussion**

The IIP standard is suitable for a diverse range of sectors (IIP, 2000). Organisations are encouraged to commit to the Investors in People standard by DTI agencies, i.e. Business

Link. The commitment involves the organisation in a lot of effort in a narrow spectrum of business activity. This may be at the expense of the remaining areas of activity, some of which may, at the time, be crucial for business survival. For the areas of activity that are covered this standard is very worthwhile and is recommended by the author but it should not be seen as an answer to business sustainability even though this is often how it is sold.

The IIP standard includes the set of specific requirement. There are 24 individual requirements. The following table illustrates the coverage of this standard across the 52 business processes of the GBPS.

Hits	% Hits	Processes	% Processes
24	2.9%	13	25

Key: 'Hits' is the number of times the individual requirements are applicable to the GBPS. 'Processes' is the number of processes that are influenced by any 1 or more of the individual requirements.

This standard does not address 28 of 52 business processes of the GBPS. Organisations that are relying on this standard for business improvement are in danger of overlooking some very important business processes.

## 6.5 The Charter Mark

### 6.5.1 Overview

Charter Mark is the government's award scheme for encouraging and rewarding improvement in public services. Applicants that are assessed as providing an excellent standard of service get the public recognition of the Charter Mark Award. Charter Mark provides expert independent assessment and detailed feedback on how to improve.

Charter Mark is the Government's award scheme for recognising and encouraging excellence in public service and it is also a powerful quality improvement tool focusing on customer service and service delivery. It is unique among quality schemes in the way it concentrates on results — the service the customer actually receives. To reach the Charter Mark standard, it shows that the organisation puts its users first, and that it is delivering a first class service.

Charter Mark encourages public sector organisations to strive to be the best, to focus on their customers, to constantly improve and give value for money. All are key to the modernising government programme, which aims to improve the quality of public services and make them more responsive to the needs of their users.

Charter Mark focuses on the outcome for the customer. It is the only major public service award that concentrates on the quality of service that users receive. It is flexible, easy to understand and applicable to all sizes of public sector organisations. Charter Mark is a standard of excellence, not a competition.

Some 6000 organisations have applied for Charter Mark and over 1650 currently hold the award. The number of organisations applying has steadily increased.

Organisations are assessed against ten criteria that deal with aspects such as service standards, co-operation with other services, consultation with customers and frontline staff, access and choice, fair treatment, the effective use of resources and an accessible complaints and redress system.

Applicants receive a feedback report from assessors identifying areas of weakness and making suggestions for improvement. Those not successful in winning an Award can also attend a feedback meeting where they can discuss their application in more detail.

Organisations submit a twelve-page application that must be supported by evidence (no more than a box file). This is to show a high standard of service provision against each of the ten criteria. Help is available to intending applicants in the form of an assessor helpline and a programme of seminars where experienced assessors describe the evidence required and Charter Mark holders describe their experiences and give advice. After submitting an application and being assessed, organisations receive a visit from an assessor who tests the evidence, follows up issues raised in the application and talks to users, staff and others involved with the service. An independent judging panel takes the final decision.

### **6.5.2 Benefits**

- Free audit — experienced assessors give detailed feedback on the organisation's performance. A recent study showed that 97% of winners and 79% of unsuccessful applicants had implemented assessors' feedback recommendations to some extent;
- Benchmarking — measured against the best public services;
- Recognition and positive publicity — national and local;
- Motivation and team building — rewards front-line staff and gives a big boost to morale.

There are three key stages:

- First, you measure your service against the ten Charter Mark criteria and make an application for assessment.
- Second, your application is subject to expert scrutiny, and you get a visit by an assessor.
- Third, based on the evidence provided, detailed feedback is provided on how to improve your service further. An assessment is made as to whether you have won the award.



The Charter Mark process can be used to:

**To improve your service.** The experience of nearly 1,700 Charter Mark holders shows that the process of putting together an application provides an excellent framework for self-assessment and a tool-kit for improvement.

**To get expert feedback.** Well over 90% of previous applicants surveyed — successful and unsuccessful alike — found the expert feedback from the team of assessors useful and implemented it.

**To get recognition.** Local and national recognition from peers and users of services provided.

**To improve staff morale.** Seven out of ten Charter Mark holders say that staff motivation and morale improved.

**To help achieve best value.** Charter Mark holders listen more to their users, perform better than average, and have more satisfied users.

The Charter Mark has been designed for:

- All public sector organisations that deal direct with the public.
- Voluntary organisations providing a service to the public and receiving at least 10% of their income from public sector funds.
- Sub contractors as long as they provide a service to the public which is provided elsewhere by another public sector organisation.

The services offered to the public do not have to be provided on a face-to-face basis, either by you visiting users or them coming to you. They may be handled by telephone, letter, fax, email or via the Internet.

The Charter Mark scheme is for organisations which provide direct services to the public. Organisations which only provide internal services cannot apply at present.

The Judges are looking for you to show that you do the following:

- Set yourself clear, tough and meaningful performance standards, and tell users what they are, and how well you are performing against them.
- Tell users in a clear, straightforward way about your services and how to get the most out of them.
- Consult widely on what services people need and how services can be improved, and make good use of their ideas.

- Make services available to everyone who needs them. Give people choices wherever possible.
- Treat all people fairly. Have polite and helpful staff, and a user—friendly approach to aspects like opening hours, answering the phone and any special needs of the people who use the service.
- Make it easy for people to say when they are not happy with the service and act swiftly to put mistakes right. Learn from complaints.
- Use resources effectively by budgeting carefully and achieving best value for you and your users.
- Continually make improvements in the quality of service you provide and have new ideas for improvements for the future.
- Work with other providers to provide a better service.
- And you need to show that your users agree that you provide a really good service.

### 6.5.3 Discussion

The Charter Mark has achieved some impressive results (Forbes 2000 and Stephenson 2002). This standard is very specific to the public sector and specifically addresses public service. Although this is only part of the activities undertaken by these organisations the standard is clear about its scope. It has been included here because in the author's view it does a good job and is the only widely used standard covering this spectrum of business activity in detail, i.e. customer service. Although the standard is specific to the public sector its principles can be applied to all sectors of business.

The Charter Mark standard includes the set of specific requirement. There are 10 individual requirements. The following table illustrates the coverage of this standard across the 52 business processes of the GBPS.

Hits	% Hits	Processes	% Processes
21	4%	12	23.1

Key: 'Hits' is the number of times the individual requirements are applicable to the GBPS. 'Processes' is the number of processes that are influenced by any 1 or more of the individual requirements.

This standard does not address 40 of 52 business processes of the GBPS. Organisations that are relying on this standard for business improvement are in danger of overlooking some very important business processes.

## 6.6 PQASSO 2nd Edition

### 6.6.1 Overview

PQASSO is a quality assurance system that has been designed specifically for small and medium voluntary sector organisations. Designed as a workpack, it is simple and straightforward to use, offering a flexible staged approach to implementing quality.

PQASSO covers twelve quality areas and promotes continuous improvement through self assessment. It helps staff and management committees identify what the organisation is doing well and what needs to be done in order to improve. The areas are:

- Planning for quality.
- Governance.
- Management.
- User-centred service.
- Staff and volunteers.
- Training and development.
- Managing money.
- Managing resources.
- Managing activities.
- Networking and partnership.
- Monitoring and evaluation.
- Results.

PQASSO is a good entry point to quality for small organisations.

Because PQASSO is a self-assessment tool, it allows organisations to approach quality at their own pace, without costly consultancy fees.

Launched by the Charities Evaluation Services (CES) in 1997, and revised in 2000, PQASSO is rapidly becoming recognised as the foremost quality system for small voluntary organisation and is useful for small and medium organisations as well as smaller projects or members of larger voluntary bodies.

Priced at only £65 plus postage and packaging, PQASSO is affordable. Thousands of work packs have been purchased by voluntary organisations and PQASSO is now in its second edition. PQASSO can assist with organisational development and improved services in many ways, including:

- demonstrating accountability, through the use of a well recognised quality assurance system.
- bringing people together to work for improvement.
- facilitating discussion within an organisation to ensure all stakeholders are aware of organisational policies, procedures and plans.

- focusing effort on what really matters.
- motivating people by making progress more visible.
- providing a clear, shared language for negotiating with funders.

The successful implementation of PQASSO is dependent on how well you plan and manage the overall process. The workpack provides useful techniques and tools needed for this purpose.

### **6.6.2 Discussion**

PQASSO has a relatively large uptake (Matthews, 2001). Targeted primarily at voluntary organisations this standard has coverage of a broader range of business activity than those previously discussed. Business processes are alluded to in the standard but insufficient detail is provided to enable organisations to define existing or new processes. The 'self assessment' tool is too qualitative to provide consistent results for reliable benchmarking purposes.

## **6.7 The Business Excellence Model**

### **6.7.1 Overview**

The Excellence Model is a comprehensive framework for assessing the strengths and areas for improvement of an organisation across the whole spectrum of its activities. It has been developed for over ten years and is based on the practical experience of hundreds of organisations across Europe — both in the private and public sectors. It is widely used by private and public sector organisations of all sizes. Organisations using the Excellence Model can apply for a prestigious quality award in the UK, sponsored by the British Quality Foundation (BQF), a not-for-profit membership organisation that promotes the use of the Excellence Model in the UK.

The Excellence Model is promoted in Europe by the European Foundation for Quality Management (EFQM). Essentially it tells us that excellent results with respect to Customers Results, People Results and Society Results are achieved through Leadership driving Policy and Strategy, Management of People, Partnership and Resources and Processes leading ultimately to excellence in Key Performance Results.

The European Foundation for Quality Management Business Excellence Model is rapidly being adopted by organisations across Europe as a framework which helps define and drive towards excellence within organisations.

The EFQM Business Excellence Model has an important role to play in enhancing the competitive position of European companies in the world market by reinforcing the importance of quality in achieving competitive advantage and in stimulating and assisting the development of quality improvement activities. It is based on the premise that customer satisfaction, people satisfaction and impact on society are achieved through leadership driving policy and strategy, people (employee) empowerment, resources and processes, and that this leads ultimately to business results.

The 9 areas of the model, illustrated at Figure 6-3, are as follows:

- 1) **Leadership**, which investigates how the behaviour and actions of the executive team and all other leaders inspire, support and promote a culture of Total Quality Management.
- 2) **Policy and Strategy**, which analyses how the organisation formulates, deploys, reviews and turns policy and strategy into plans and actions.
- 3) **People Management**, is concerned with the extent to which the organisation releases the full potential of its people.
- 4) **Resources**, which investigates how the company manages resources effectively and efficiently.
- 5) **Processes**, which analyses how the enterprise identifies, manages, reviews and improves its processes.
- 6) **Customer Satisfaction**, which examines the extent to which the organisation is satisfying its external customers.
- 7) **People Satisfaction**, which is related to how well the organisation is satisfying its employees.
- 8) **Impact on Society**, which focuses on what the organisation is achieving in satisfying the needs and expectations of the local, national and international community at large, as appropriate.
- 9) **Business Results**, which emphasise the organisation's achievement in relation to its planned business objectives and in satisfying the needs and expectations of everyone with a financial interest or other stake in the organisation.

Although initially designed for the private sector, the Excellence Model was revised and re-launched in 1999, with changes that make it wholly applicable to the public sector.

The Excellence Model consists of nine criteria, divided into Enablers (the hows) and Results (the whats).

The Enabler criteria are concerned with how the organisation conducts itself, how it manages its staff and resources, how it plans its strategy and how it reviews and monitors key processes.

The organisation's Results are what it achieves. These encompass the level of satisfaction among the organisation's employees and customers, its impact on the wider community and key performance indicators.

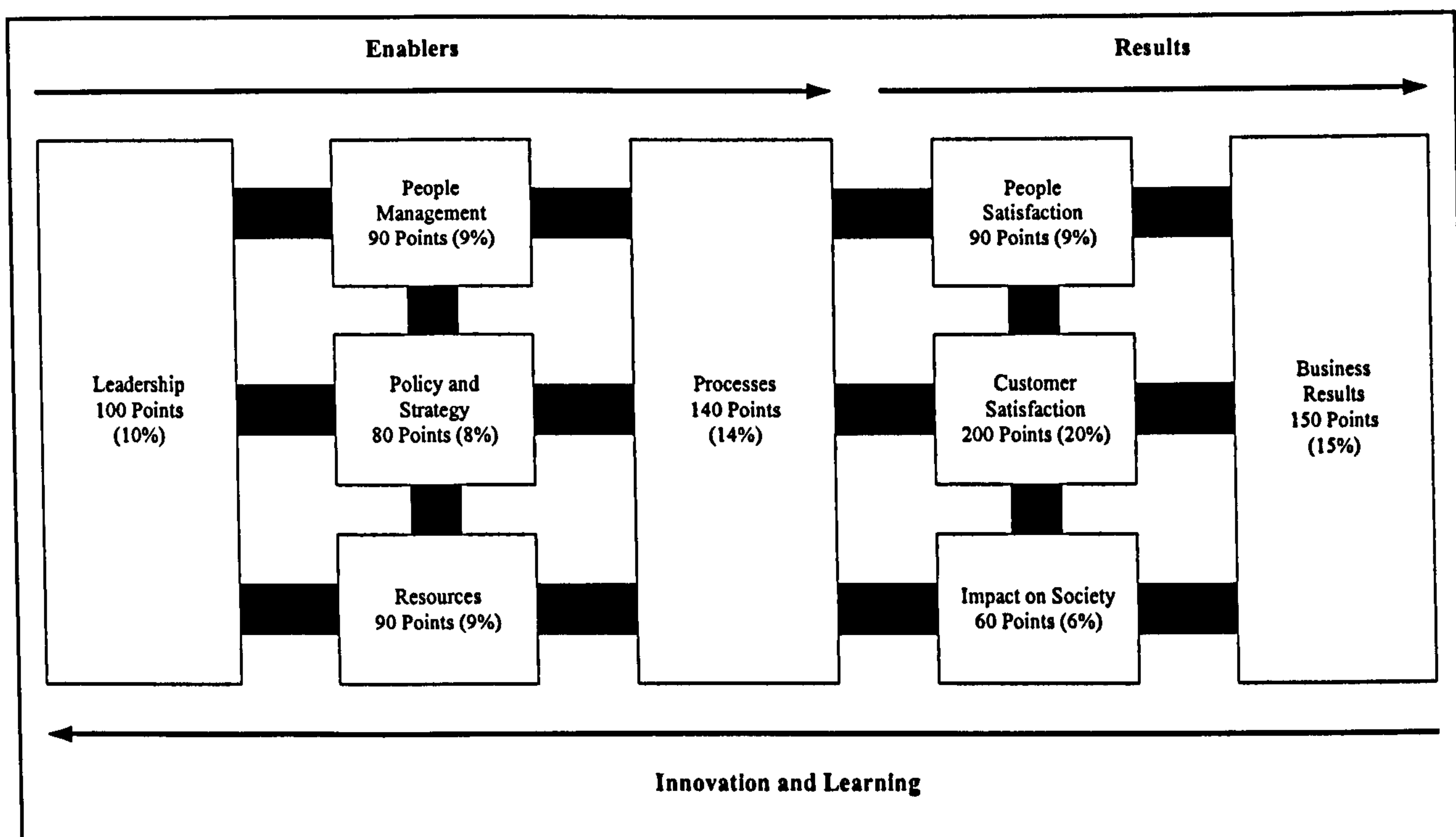


Figure 6-4, The EFQM Business Excellence Model

The starting point for most organisations is to gather evidence relevant to the nine criteria of the Excellence Model. The result can range from a quick, rough guide to a fully evidenced and externally validated report. Self-assessment leads to a profile of the organisation's strengths and weaknesses, including "Areas for Improvement" that are valuable in developing a prioritised improvement action plan. It is possible to "score" performance against the Excellence Model criteria, the main value of this being a summary appreciation of the organisation's overall quality, or for award purposes. Most organisations that use the Excellence Model over time do not routinely score their performance but concentrate on areas for improvement. In the UK, publications, software and training are available for organisations that need them from the British Quality Foundation (BQF), Quality Scotland and other sources licensed by them.

#### Self-assessment against the Excellence Model:

- identifies strengths and areas for improvement;
- provides year-on-year assessment of performance against a widely recognised model;
- provides an excellent understanding of the whole business at a reasonable cost;
- provides a framework which makes sense of all quality and improvement activities;
- generates fresh motivation for improvement;

- gives an insight into world class practice;
- facilitates comparison with a wide range of other organisations.

The resources required for self-assessment vary enormously according to the methodology chosen, the degree of rigour and the level of knowledge about the Excellence Model, which the organisation already has. First-time participants typically devote about £4000 and a total of 35 staff days, spread among ten people and over six weeks. This includes materials, training and consultancy support. There is a large number of providers who offer a wide range of approaches, starting from the very basic at around £100 (involving no external support) and going up to the rigorous and intensive with commensurate prices. However, there are simple ways of using the Excellence Model in particular circumstances where the cost of its application is very much less — in some cases almost nothing.

The EFQM Excellence Model is a key framework for helping European organisations in their drive towards being more competitive.

The Model is key in four ways:

- As a framework which organisations can use to help them develop their Vision and goals for the future in a tangible, measurable way.
- As a framework which organisations can use to help them identify and understand the systemic nature of their business, the key linkages and cause and effect relationships.
- As the basis for the European Quality Award, a process which allows Europe to recognize its most successful organisations and promote them as role models of Excellence for others to learn from.
- As a diagnostic tool for assessing the current health of the organisation. Through this process an organisation is better able to balance its priorities, allocate resources and generate realistic business plans.

This fourth, diagnostic use, is known as Self-Assessment. EFQM believes that the process of Self-assessment is a catalyst for driving business improvement and promotes it as such in all its literature. The EFQM definition of Self-Assessment is as follows:

- Self-Assessment is a comprehensive, systematic and regular review of an organisation's activities and results referenced against the EFQM Excellence Model.
- The Self-Assessment process allows the organisation to discern clearly its strengths and areas in which improvements can be made and culminates in planned improvement actions which are then monitored for progress.
- We have a number of products and services related to Self-Assessment available, all designed to help organisations adopt the process and through this drive their organisation towards Business Excellence.

## **The need for a model**

Regardless of sector, size, structure or maturity, to be successful, organisations need to establish an appropriate management system. The EFQM Excellence Model is a practical tool to help organisations do this by measuring where they are on the path to Excellence; helping them understand the gaps; and then stimulating solutions. The EFQM is committed to researching and updating the Model with the inputs of tested good practices from thousands of organisations both within and outside of Europe. In this way the model remains dynamic and in line with current management thinking.

## **The Fundamental Concepts of Excellence**

The EFQM Model is a non-prescriptive framework that recognizes there are many approaches to achieving sustainable excellence. Within this non-prescriptive approach there are some Fundamental Concepts. The list is not meant to be exhaustive and they will change as excellent organisations develop and improve.

### **Results Orientation**

Excellence is dependent upon balancing and satisfying the needs of all relevant stakeholders (this includes the people employed, customers, suppliers and society in general as well as those with financial interests in the organisation).

### **Customer Focus**

The customer is the final arbiter of product and service quality and customer loyalty, retention and market share gain are best optimized through a clear focus on the needs of current and potential customers.

### **Leadership and Constancy of Purpose**

The behaviour of an organisation's leaders creates a clarity and unity of purpose within the organisation and an environment in which the organisation and its people can excel.

### **Management by Processes and Facts**

Organisations perform more effectively when all inter-related activities are understood and systematically managed and decisions concerning current operations and planned improvements are made using reliable information that includes stakeholder perceptions.

### **People Development and Involvement**

The full potential of an organisation's people is best released through shared values and a culture of trust and empowerment, which encourages the involvement of everyone.



### **Continuous Learning, Innovation and Improvement**

Organisational performance is maximized when it is based on the management and sharing of knowledge within a culture of continuous learning, innovation and improvement.

### **Partnership Development**

An organisation works more effectively when it has mutually beneficial relationships, built on trust, sharing of knowledge and integration, with its Partners.

### **Public Responsibility**

The long-term interest of the organisation and its people are best served by adopting an ethical approach and exceeding the expectations and regulations of the community at large.

### **6.7.2 Discussion**

Although the Excellence Model is predominantly a large organisation's development tool (Jeanes 2000, Rummelink and O'Hanlon 2001, and Reed 2002) it can be used successfully by smaller organisation (Thompson and Simmons 1997). Much commercial activity is associated with the Excellence Model. Assessor training, for example, costs £1,000. As stated in other areas of this thesis this is a common feature of all business development tools. In addition there is an element of each of the big players, as discussed in this chapter, not stepping on each other's territory.

The Excellence Model is not structured or presented in a way that can be easily associated with the activities of a small business.

The Business Excellence Model includes the set of specific requirement. There are 31 individual requirements. The following table illustrates the coverage of this standard across the 52 business processes of the GBPS.

<b>Hits</b>	<b>% Hits</b>	<b>Processes</b>	<b>% Processes</b>
68	4.2%	28	53.8

Key: 'Hits' is the number of times the individual requirements are applicable to the GBPS. 'Processes' is the number of processes that are influenced by any 1 or more of the individual requirements.

This standard does not address 24 of 52 business processes of the GBPS. Organisations that are relying on this standard for business improvement are in danger of overlooking some very important business processes.

## 6.8 Self Assessment

### 6.8.1 Overview

EFQM believes that the process of Self-assessment is a catalyst for driving business improvement and promotes it as such in all its literature. The EFQM definition of Self-Assessment is as follows:

- Self-Assessment is a comprehensive, systematic and regular review of an organisation's activities and results referenced against the EFQM Excellence Model.
- The Self-Assessment process allows the organisation to discern clearly its strengths and areas in which improvements can be made and culminates in planned improvement actions which are then monitored for progress.
- We have a number of products and services related to Self-Assessment available, all designed to help organisations adopt the process and through this drive their organisation towards Business Excellence.

### 6.8.2 Self-Assessment

The relative ease of starting a new activity internally, the lower resource implications and the higher assurance of gaining co-operation, nominate internal Benchmarking as the most preferable type which organisations choose to start their Benchmarking activities (Dence 1995). For the same reasons, self-assessment has been established as a preferable methodology for companies to assess their performance.

### 6.8.3 Definition

The European Foundation for Quality Management has defined self-assessment as (EFQM 1998):

“An internal, comprehensive, systematic and regular review of an organisation's activities and results referenced against a model of business excellence.”

Self assessment is a vital diagnostic tool, as it helps a company to learn about Total Quality Management practices, realise how far down the Quality road they have travelled, how much further they need to travel and how they compare to others. The primary purpose of undertaking self-assessment should be to drive business improvement (EFQM 1998).

### 6.8.4 Objectives

Van der Wiele et al, conducted a survey of 519 companies across Europe and outlined the five most important objectives (from a list of 16 prescribed issues) for organisations starting self-assessment (Wiele, Dale et al. 1995):

- Find opportunities for improvement.
- Create focus on a model of Total Quality Management.
- Direct the improvement process.
- Provide new motivation for the quality improvement process.
- Manage the business.

This is also supported by Dale and Coulambidou in a survey concerning the use of Quality Management and Self-Assessment in the United Kingdom. They identified the five most important reasons for starting a Self-Assessment process (Dale and Coulambidou 1995):

- Find opportunities for improvement.
- Direct the improvement process.
- Establish Internal champion within units.
- Manage the business.
- Create focus of a Model of Total Quality Management.

The key issues emerging from the above are that self-assessment is often employed as a management tool to find, direct and motivate improvement based on TQM. This is also supported by Caravatta who notes that the goal of Self-Assessment is to identify what an organisation is doing well, what it is not doing well, what it is not doing at all, and most important, where and how it can make measurable improvements (Caravatta 1997). This is also supported by Davis et al. who note that companies use Self-Assessment to evaluate their current business processes and employ the results to drive Continuous Improvement and stay competitive (Davis et al. 1996).

Self-Assessment allows organisations to discern clearly their strengths and areas in which improvements can be made and culminates in planned improvement actions, which are then monitored for progress. Zaremba and Crew from their experience in conducting self-assessment at Royal Mail in the United Kingdom, note that it provides a credible framework of excellence to measure business unit performance, identify gaps, and subsequently, plan and prioritise improvement activities (Zaremba and Crew 1995). It is an organisation-wide exercise and calls upon the contribution of all key functions and the involvement of a multi-functional group. It relies on objectivity, transparency and honesty, and is an evidence-based approach. No judgement can be accepted unless it is supported by facts and accurate information (Aly 1997).

Self-Assessment has gained importance in recent years, as organisations have had to increase their efforts to stay competitive (Davis et al. 1996).

### 6.8.5 Types

The European Foundation for Quality Management outlines six types of self-assessment (EFQM, 1998):

- The Award Simulation Approach, which involves developing a full submission document (75 page report) for the European Quality Award. It involves a team of trained assessors, and provides a high degree of accuracy in the scoring profile. This approach may be ambitious and perplexing for organisations which do not have previous experience at self-assessment.
- The Pro-Forma Approach, involving the creation of a set of pro-forma, which employees complete. The pro-forma must provide a description of assessed criterion, the strengths and weaknesses of the enterprise in the considered criterion, and provide supporting evidence. The pro-forma approach provides a list of the strengths and weaknesses, allows the documentation of evidence, but does not provide a detailed assessment as it's often employed to assess high level criteria.
- The Workshop Approach, involving the use of workshops to assess the enterprise performance. The management team is responsible for gathering the data and presenting the evidence at a workshop. There are five components to the process:

Training of the assessors, data gathering, scoring workshop, agreement of improvement actions and reviewing against action plans. The Workshop Approach is less robust and rigorous than the Award Simulation Approach, requires excellent preparation and facilitation to ensure the management team are comfortable and fully prepared for the process.

- The Matrix Chart Approach, involves the creation of a company specific achievement matrix, which typically consists of a series of statements of achievement against a scale of scores between 0 and 10, or similar. The approach can be used to assess any level of an organisation by either the management team, or a representative of the Business Unit undergoing the Self-Assessment process. The approach is simple to apply, involves the management team, and it is particularly suited for small enterprises, enabling all the employees to participate in the assessment. However, the approach does not provide detailed identification of the enterprise strengths and weaknesses, and is not as robust as the Award Simulation Approach.
- The Questionnaire Approach, which uses a questionnaire to collect widespread data. The approach is simple to use, easy to compute and comprehend the scores, provides a good introduction to Self-Assessment and can be used in parallel to the Workshop Approach. However, not everyone may understand the questions, accuracy depends on the quality of questions asked, and it does not generate areas of strengths and improvements. Moreover, the use of questionnaires provides information on what people think, but does not provide any reasoning.

- The Peer Involvement Approach, which is similar to the Award Simulation Approach but does not involve preparing an Award Assessment document. It is less prescriptive than the Award Simulation Approach, and provides a comprehensive list of strengths and areas for improvement. However, it is a resource intensive approach, relying on the commitment of the business units as there is no direct incentive (for example: preparing for a submission for the European Quality Award as in the case of the Award Simulation Approach).

The selection of the appropriate self-assessment approach depends on the enterprise. The implications of the various approaches in terms of time, cost and quality of outcomes must be considered in the context of the organisations' culture before selecting a desirable approach.

### **6.8.6 Methodology and Implementation**

The self-assessment process, regardless of the selected approach, can be divided into eight general steps, according to the European Foundation for Quality Management, shown in Figure 6-5 (EFQM 1998).

The first stage of the self-assessment process is to gain management commitment, which as with Benchmarking, is crucial for the success of the process. The second phase forms the planning of the process and involves the identification of the data collection methodology, a possible pilot study and the definition of the assessment process boundaries through the selection of participant business units.

The third stage encompasses the establishment of the teams which will perform the assessment and educate the employees who will be directly involved. Selection of key and relevant people is crucial for the process. The team must be familiarised with the process and the responsibilities to which its members must be assigned. The next stage involves the communication of the purpose of self-assessment, underpinning customer and business prosperity, which is followed by the data collection and scoring process. Data collection may take different forms such as individual and group interviews, workshops, questionnaires or meetings. The analysis of the results will provide information concerning which areas of the business under perform. Any differences between the different team scores must be sorted out at this level, and a consensus reached to arrive at a common position on the scores (Davis, Khodabocus et al. 1996).

The sixth stage involves establishing an action plan to improve those business critical areas that are observed to under perform. Improvements are set, followed by the setting of milestones to safeguard improvement. The action plan must be communicated so that all employees are aligned with the improvement process, and at the seventh stage improvement teams are set-up to implement the action plan.

The process does not in itself improve the organisation as it provides a snapshot of the company performance, a "moment in time" picture of the status of the organisation. It is vital to ensure that reviewing progress against the action plan is part of the normal business review process of the organisation and not a separate activity (EFQM 1998).

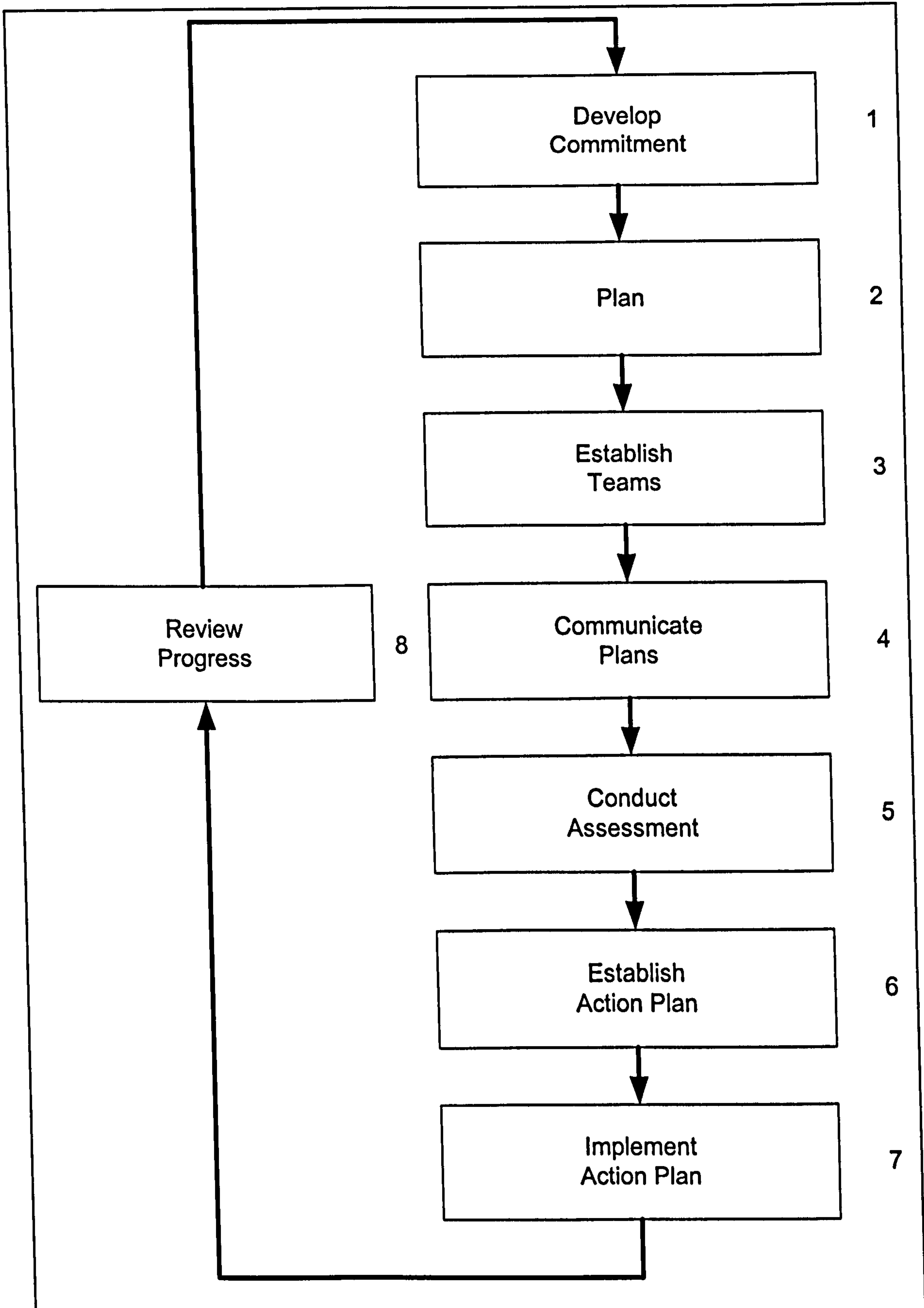


Figure 6-5, Self-Assessment Process

Finn and Porter conducted an analysis of the employee involvement levels in self-assessment, using data obtained from 33 United Kingdom based organisations (Finn and Porter 1994). The majority (67%) of the respondents employed less than 10% of their workforce in the activity and only 9% involved 50% or more of their workforce.

The large majority of the companies with less than 10% involvement were in the first year of self-assessment. Companies with longer experience were more likely to involve more employees.

Dale and Coulamidou present the outcomes of a survey of 19 companies known to be using or interested in self-assessment and of 120 companies who are not known to conduct self-assessment, based in the United Kingdom (Dale and Coulamidou 1995). Seventy two (60%) of the 120 companies had not started self assessment, and almost half of those (37 companies) did not have any plans to engage in self-assessment. The main reason is that companies are unaware of the benefits of the process. Typical comments obtained from the companies included: "Why should we?", "The small size of the business makes a formal approach too intensive", "It hasn't been proposed by anyone that we should do so" and "Probably too blue sky...".

### **6.8.7 Strengths and Weaknesses**

Companies use Self-Assessment to evaluate their current business processes and employ the results to drive Continuous Improvement and stay competitive (Davis et. al 1996). Self-Assessment is about assessing an enterprise to find opportunities for improvement, create focus on Total Quality, direct improvement activities to enhance business performance, manage the business and provide new motivation for improvement. It is about knowing the strengths and weaknesses of an enterprise and provides a "moment in time" picture of the status of the organisation (EFQM 1998).

The weaknesses of self-assessment are presented by Dale and Coulamidou, as obstacles and difficulties that companies experienced in implementing and operating the self-assessment process (Dale and Coulamidou 1995). The greatest problem was gaining top management commitment and persuading them to formalise the use of self assessment. Another problem was in relation to the data collection process and its subsequent interpretation, such as variability in scoring, how to collect data and how to deal with zero scoring. Blame culture can hinder self-assessment, as the management might blame employees for low performance, rather than concentrating on the improvements, which can lead to a high emphasis being placed on the scores.

Conti mentions that another danger-weakness in self-assessment is retaining emphasis on the scoring, and the second risk is the transformation of the self-assessment process from a diagnostic approach to an audit-like assessment (Conti 1997), where importance is not placed on how to improve the weaknesses but on how to emphasise the strengths.

### **6.8.8 Critical Success Factors**

Finn and Porter elaborate that self-assessment involves people in the regular and systematic review of their processes and results, and allows an organisation to identify

strengths and weaknesses as well as enabling the process of Total Quality Management (Finn and Porter 1994).

Numerous factors tend to be stressed as facilitators for successful implementation of Total Quality Management. Three main categories include leadership and commitment, employee involvement and education and training (Zairi and Youssef 1995). This is also supported by Dale and Coulambidou, who note that the most important critical success factors for Self-Assessment are (Dale and Coulambidou 1995)

- Training of the people who will conduct the assessment.
- Defining in advance the way in which self assessment will be used.
- Involving senior management.

Many companies realise that it is not self-assessment that establishes bottom line gains, but the improvement system initiated by the process (Davis, Khodabocus et al. 1996). This is emphasised by Ton van der Wiele and Dale, as self-assessment has to be linked to feedback and communication of the results on a company-wide basis.

To summarise, the most important factors for the success of a self-assessment process include: top management commitment in the process, training of people to conduct the self-assessment, employee involvement in the process, communication of results and the link between Self-Assessment and improvements.

### **6.8.9 Benchmarking**

Finn and Porter report that the great majority (88%) of the companies believe that self-assessment can potentially facilitate Benchmarking. The key themes arising from their work are (Finn and Porter 1994):

- Self-assessment helps focus on award winning companies, which as best in class are ideal Benchmarking partners.
- Self-assessment helps focus on key areas, and therefore helps identify processes to benchmark.
- Self assessment helps to identify an organisation's strengths and weaknesses, therefore indicating Benchmarking priorities.
- Self-Assessment is a form of Benchmarking.

Self-assessment facilitates Benchmarking in such a way that the two techniques are so interlinked as to be inseparable (Finn and Porter 1994). The introduction of quality awards and more specifically of the Malcolm Baldrige National Quality Award in 1987, had led to the widespread use of self-assessment (Conti 1997).

Finn and Porter concluded that self-assessment facilitates benchmarking (Finn and



Porter 1994). Design to Distribution (D2D), a subsidiary of the computer systems group ICL and a winner of the 1994 European Quality Award, employs self-assessment and Benchmarking practices to measure their processes against their competitors, to improve efficiency, to reduce defects and provide better value for customers (Davis et al 1996). Tandberg Data in Norway, uses self-assessment and Benchmarking to evaluate the relevance of chosen strategies, the effectiveness of translation of strategies into actions and the results obtained (Jeneson 1995). The Post-Office in the United Kingdom employs self-assessment and benchmarking as a means of business development (Jackson 1998). Other enterprises that employ self-assessment and benchmarking practices to improve their competitive edge include TNT UK Ltd (Powers 1997), Rolls Royce (Pearson 1998) and British Aerospace Ltd (McCoy 1998).

Self-Assessment is essential to the success of Benchmarking. Unless you know where you are and how you are performing today, how will you know where you are going or recognise if you have got anywhere? (Codling 1998)

### **6.8.10 Summary**

Self Assessment is strongly linked with Total Quality Management. Ton Van der Wiele, Dale et al. note that Self-Assessment helps management understand what Total Quality Management is about and how important it is for an organisation (Wiele, Dale et al 1995). Companies employ self-assessment practices to evaluate their systems and processes.

It provides a sense of direction as to what needs to be improved, an assessment based on objective data, a structured approach to business improvement and the means to Benchmarking both internally and externally against other organisations who employ the same performance assessment model.

### **6.8.11 Discussion**

Self assessment is a valuable tool. Because its application is not business process specific it is not possible to derive a set of requirements from the self assessment tools available other than that processes should be managed and monitored in a way that will provide the data necessary for self assessment. That is a valuable input for process design.

## **6.9 The UK Benchmarking Index**

### **6.9.1 Overview**

Since its launch in October 1996, the United Kingdom Benchmarking Index (UKBI) has established itself as one of the most comprehensive sources of SME performance data anywhere in the world.

Benchmarking is an invaluable management tool that enables all types of organisations to examine their performance critically, so that they may adopt the better practices of those that are considered market leaders. By appraising their performance and assessing

their strengths and weaknesses through benchmarking, organisations gain the opportunity to develop the appropriate policies and implement the changes necessary to achieve competitive advantage.

The DTI backed UKBI has enabled small and medium-sized companies to enjoy the advantages of high quality benchmarking that larger organisations with their greater resources have benefited from for some time.

An extensive database of information about SME performance has been built up since October 1996, which has provided a wealth of information for analysis.

Comparative data on more than 60 key performance measures under the general headings of Finance, Management and Business Excellence form the basis of the benchmarking reports, allowing each company to quickly establish its relative position. The gap between their own performance and the best in any chosen sample provides an indication of what it is possible to achieve, and implementation of tailored action plans devised to close the gap can lead to improvements in both individual company performance, and in the UK's competitive performance as a whole.

The United Kingdom Benchmarking Index is the first truly national Benchmarking service specially designed for small firms, which has been developed for the Department of Trade and Industry. It is a simple, computer-based system that, through a series of questions, will allow a large range of different types of small firms to compare their performance in key areas such as finance and operations, business excellence and manufacturing with other companies in their sector or region. Its objective is to bring high quality Benchmarking information and advice within easy reach of SMEs.

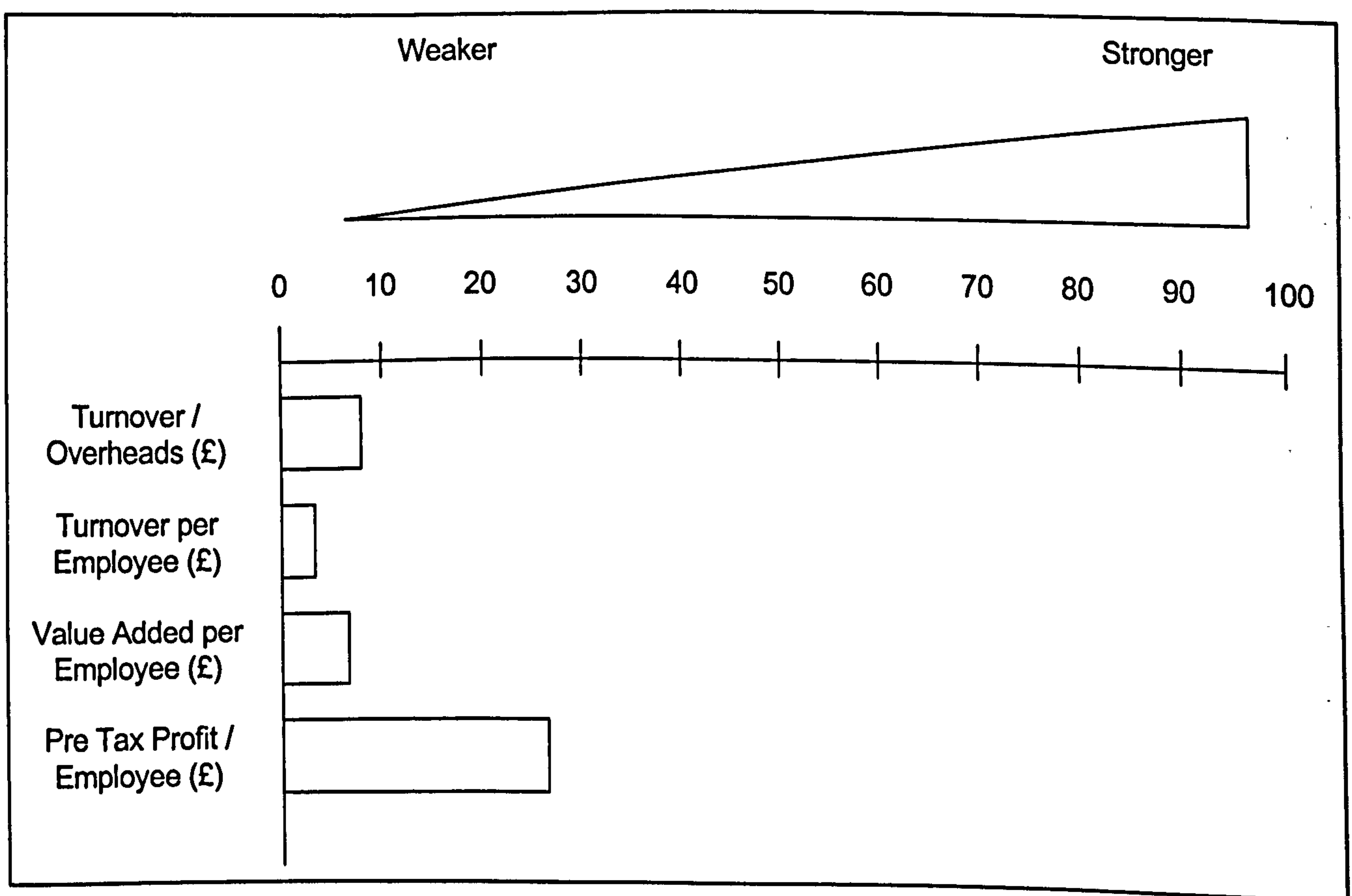
Interested Small and Medium-sized Enterprises complete an assessment covering Financial, Management and Business Excellence measures. This information is then compared against the UK Benchmarking Index central database. Company performance can be compared locally, nationally, or for a particular sector. A report is then generated which analyses company performance in detail, focusing attention on areas of the company where there is room for improvement.

The Benchmarking process involves seven stages. At the first stage, the business advisor provides the interested company with the assessment questionnaire, which comprises 80 questions. It has been designed to help an organisation assess its competitive position. It focuses on performance measures, which range from financial and operational areas through to the accepted factors of measuring business excellence using the EFQM Business Excellence Model. The second stage involves the data collection process. The company will work through the assessment by itself without any involvement from the business advisor, who at the third stage will help clarify any queries, and validate the score through his experience. The fourth stage involves transmitting the completed questionnaire to the central database electronically to conduct the analysis and the Benchmarking process. Companies can select which Benchmarking criteria they would like to employ to assess and position their

performance. Comparisons can be made on a regional or industrial sector basis, in turnover or number of employees

The fifth stage of the Benchmarking analysis comprises the automatic generation of a report showing comparisons of around 65 key business performance measures covering customer service, profitability, investment, financial management, productivity, growth, innovation, suppliers, people satisfaction, people management, and business excellence. The report is subsequently presented to the company, and reviewed by the business advisor, forming the sixth stage of the process.

An example of the type of Benchmarking comparisons done under the UK Benchmarking Index is shown in Figure 6-6. Companies which achieved a score of 100% in a given criteria are the top performers in the database.



*Figure 6-6, United Kingdom Benchmarking Index Sample Performance Graph*

The last part involves developing an action plan for improvement with the assistance of the business advisor who will guide the company towards what services they can obtain from their local Business Link office.

The advantages of the Benchmarking Index are that it helps senior management teams assess and improve overall business performance. It provides comprehensive, quantifiable and objective performance information, and enables companies to compare themselves, easily. The Index highlights business strengths and weaknesses, identifying

areas needing improvement. Working with Business Advisers provides opportunities to develop action plans to implement these improvements.

The disadvantage of the United Kingdom Benchmarking Index is that there is no Knowledge Transfer between the better performing companies and the benchmarked enterprise in terms of how superior performance was attained. This disadvantage is partly addressed by the annual publication of the SBS's annual 'Closing the Gap' report. Unfortunately the data upon which the report is based is at least 12 months old. As the UK Benchmarking Index is based on a database, there is the danger that companies may be comparing their current performance against outdated best practices.

Benchmarking as a tool for improvement can be employed to enhance the competitiveness of smaller businesses, however, it has limited penetration or adoption in Small and Medium-sized Enterprises. The principal reasons for the hesitance to adopt Benchmarking as an improvement process are: lack of awareness, time, knowledge, financial and personnel resources, emphasised by the consideration that it is applicable only to large enterprises.

The impact of Benchmarking in SMEs is further minimised, because it is widely employed as a performance positioning tool rather than a performance improvement methodology. A review of the major SME Benchmarking initiatives in the United Kingdom demonstrated that there is no knowledge or information sourced from superior performing companies on how better practices were attained. This is despite the DTI's efforts in this area. The review also indicated that Benchmarking analyses are based on data collected in the past, emphasising the danger of generating lapsed comparative conclusions through out-dated data.

### 6.9.2 Discussion

The values of benchmarking to business development are well known (SBS, 2001). The UK Benchmarking Index questionnaire includes the set of specific requirement. There are 30 individual requirements. The following table illustrates the coverage of this standard across the 52 business processes of the GBPS.

Hits	% Hits	Processes	% Processes
76	4.9%	26	50

Key: 'Hits' is the number of times the individual requirements are applicable to the GBPS. 'Processes' is the number of processes that are influenced by any 1 or more of the individual requirements.

This standard does not address 26 of 52 business processes of the GBPS. Organisations that are relying on this standard for business improvement are in danger of overlooking some very important business processes.

## 6.10 How the Schemes Fit Together

Although the individual schemes discussed in this Chapter concentrate on specific aspects of quality, they need not operate in isolation. The Excellence Model provides an overall framework for an organisation's activities, while Investors in People, Charter Mark and ISO 9000 look in much more detail at ways of improving performance. The Excellence Model helps users ask questions. The other three schemes help with the answers. How they are used, and in what order is for each organisation to decide. The Excellence Model gives you an overview. The other schemes concentrate on particular areas.

Figure 6-7, shows, in simplified form, the critical overlaps between the schemes. It pictures the critical links between the enablers and results of the Excellence Model and the three other main schemes.

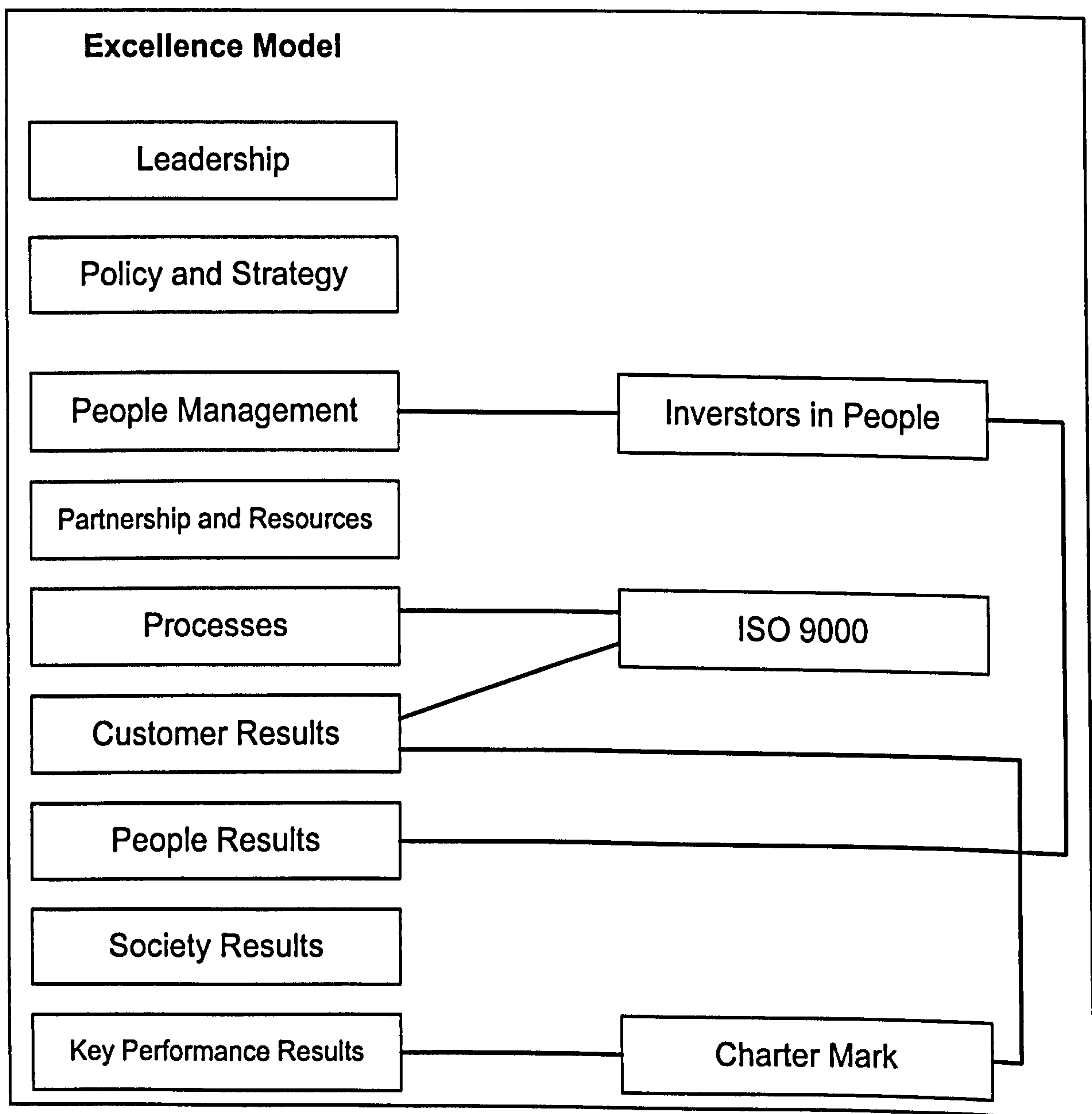


Figure 6-7, Critical overlaps between the schemes (Source: DETR Best Value Guide)

## Detailed Links Between Quality Schemes

There are many other links between Charter Mark, the Excellence Model, Investors in People and ISO 9000, but they are too complex to show on the single diagram shown at Figure 6-7.

### 6.11 Conclusions

The 6 standards and tools were selected because they were considered to be a representation of standards and tools currently available and are the most commonly used by enterprises in the UK and further afield. The purpose of this chapter was to look at the application of these standards and tools and draw conclusions regarding their coverage of the 52 business processes derived in the last Chapter.

Elements or clauses in these standards and tools address either specific activities within a process or the cumulative outcomes of a number of processes. They rarely address a complete process and certainly do not identify the range and breadth of processes required for an enterprise to operate effectively and efficiently.

Many enterprises rely on the implementation and registration to one or, in a minority of cases, two of these standards or tools as the key method of developing their business. This is a dangerous path to follow if the limitations of the standards or tools implemented are not fully understood.

From the research discussed in this chapter the author has formulated Hypothesis 2:

**That there is a minimum set of business processes that a small enterprise must implement as a prerequisite to longer-term success and sustainability.**

This minimum set of business processes was derived in Chapter 5 and has been given the name the Global Business Process Set, GBPS, and it is made up of 52 business processes. Of the 52 business processes in the GBPS, only 6 business processes had no hits at all. That is only 11.5% of processes.

At almost 60% of the business processes being addressed, BS EN ISO9000 provides the best value in terms of process coverage. See Table 6-2.

Ref.	Standard or Tool	Hits	%Hits	Processes	% Processes
1	BS EN ISO9000:	99	4	31	59.6
2	Investors in People	63	2.9	13	25
3	UK Benchmarking Index	76	4.9	26	50
4	Excellence Model	68	4.2	28	53.8
5	Charter Mark	21	4	12	23.1
6	Total	327	4.3	110	42.3

*Table 6-2, Coverage of the selected Business Standards and Tools*

But with 40% of business processes not addressed there is much scope for enterprises neglecting some important areas of business activity if they have tied up resources in achieving registration to this standard or any of the others.

When the GBPS is analysed against the selected standards and tools, by each of the three groups of processes the following average hits per process group were achieved.

Ref.	Process Group	Average Hits
1	Business Development	12
2	Commercial	2.6
3	Operational	3.3

*Table 6-3, GBPS Hits by Process Grouping*

This research has shown that it is the business processes that fall into the 'business development' group that are most often neglected in SMEs yet it is this very group that current standards and tools are most applicable to.

The author has reviewed these results and extrapolated from them that the ideal set of requirements for business development and sustainable growth would have the following characteristics:

Hits	% Hits	Processes	% Processes
520	16.6%	52	100

In fact it is suggested by the author, that the current standards and tools selected for this research, if rationalised and made more applicable to the complete set of business processes, is sufficient. The problem is the number of different interpretations and misinterpretations made of these standards and tools by consultants and business advisers. An illustration of this interpretation and misinterpretation can be found in an article in Quality World (QW, 2003) where five of the UK's leading certification bodies, a consultant and a representative from industry are asked to define business processes. Their answers all vary wildly. The GBPS will provide the business process framework to address this problem.

Although the implementation and external assessment of these standards, particularly if consultants are used, are prohibitively expensive for the majority of SMEs value can be made from purchasing and understanding the actual standards and tool documentation. The cost is not high but this practice is not generally followed.

The following chapter looks at how the GBPS can be used to facilitate business growth within a SME.

## Chapter 7: The Business Development Framework

### 7.1 Synopsis

From a thorough review and interpretation of the selected tools and standards discussed in Chapters 5 and 6, the taxonomy of SME business processes was formulated. This taxonomy represents all those business processes deemed, by the author, to be necessary for an SME to meet the requirements of the set of tools and standards selected in Chapter 5. This taxonomy is comprised of 52 individual business processes.

To test the value of the 52 business processes and Hypothesis 2, they were reviewed within a working SME. To achieve this a framework was required and an implementation methodology for the GBPS.

This chapter discusses the development and illustration of the individual business processes and the development of an enterprise model that are key elements of the business development framework, and an implementation methodology suitable for use within a working SME. An analysis of the GBPS against the case study SMEs, discussed in Chapter 4, is included.

Hypothesis 3 is formulated:

*That for a small enterprise to be sustainable and achieve growth, the full potential of all employees must be realised, developed, utilised and focused on business and product specific processes.*

### 7.2 Introduction

The importance of business processes to business success has now been recognised (Fisher, 2000). The link between business processes and quality is recognised by the EFQM excellence model. Process management is identified as one of the key 'enablers' of business excellence (DTI, 1998). The revised standard ISO9000:2000 has also adopted a business process approach. Nevertheless a true 'process' business model is still not available.

Product quality is no longer seen as being just a function of the production process. Today there is a greater understanding of how all activities in a business have an impact on product or service quality.

Organisations have some experience in documenting formal manufacturing processes and quality procedures but the practice of documenting business processes is not so common, particularly within the SME sector. Many of the evolving ERP solutions,



SAP for example, have designed business processes to suit their particular applications (Waters, 2001). The use of ERP systems is common in larger organisations. Because of this, when seeking to migrate business processes from large organisations to small organisations it is often not possible to identify their applicability within the structure of the small organisation.

PC application software for business process flowcharting is now prolific in the market place. The advanced entity relationship features available in these applications often lead users on to document ever more complex and convoluted processes. Simply attempting to map what is thought to currently exist as a process results in what is actually a whole series of bits of other processes documented as a single process. Once this new process documentation has been approved it is difficult to replace.

Even when a business process has been specifically designed for a small organisation there are many reasons why it is difficult for the small organisation to adopt it (Stach et al. 2001). This reluctance stems from a belief that formal processes will increase workload and accountability. It is important that a culture is developed within the organisation, at an early stage, that will overcome this reluctance

Figure 7-1 shows the difference between large and small organisations with respect to the business process knowledge per person. While large organisations often have dedicated employees dealing with one business process, in SMEs one person is responsible for the application of several business processes (often the manager). Consequently, the business processes applicable for SMEs must require less learning and implementation effort and business processes which are 'lean' or 'light' have better chances of acceptance.

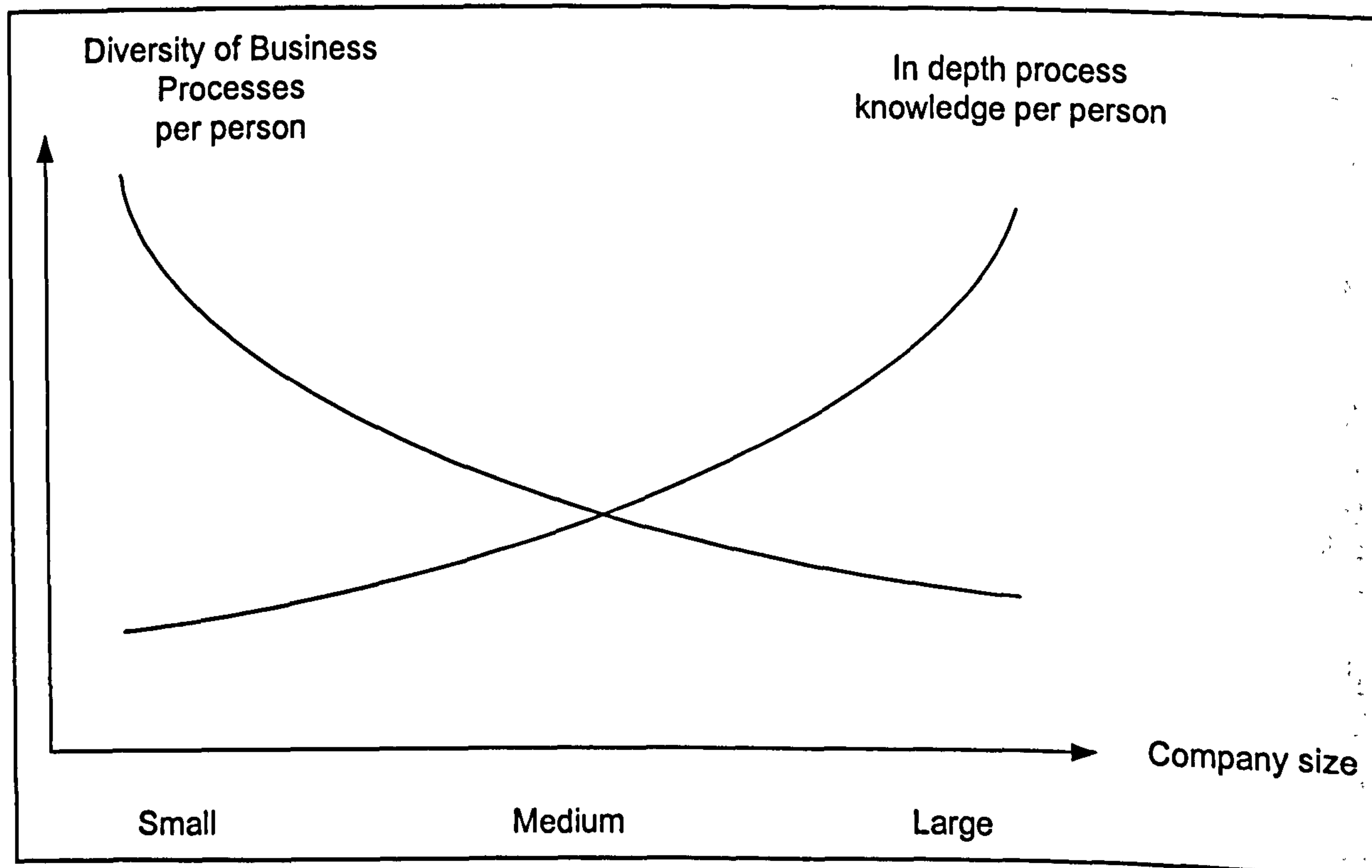


Figure 7-1, Per person ratio in different companies: knowledge versus diversity

Literature discussing business processes generally is increasingly available but that relating to specific business processes is scarce.

The author has found only two sources of this nature. The American Productivity and Quality Center produce a Process Classification Framework (APQC, 1996) that they describe as the taxonomy of business processes, however the actual processes are not illustrated. This framework was originally developed in 1992. The second source for specific business process information is available at the Phios Corporation web site (Phios, 2002). Here processes are given a short description and linked to other relevant processes but no taxonomy or index is available. Neither of these two sources of specific business process detail is immediately helpful to SMEs because both have a large organisation perspective on their business process taxonomy and provide little detail.

The GBPS, derived at Chapter 5, serves as a high level generic SME enterprise model that allows organisations to see and communicate all their key activities from a process viewpoint instead of from a narrow functional viewpoint, as has been the tradition. It is important that the GBPS is seen to contain activities that are currently being undertaken by the organisation and not additional activities to be undertaken on top of the current workload.

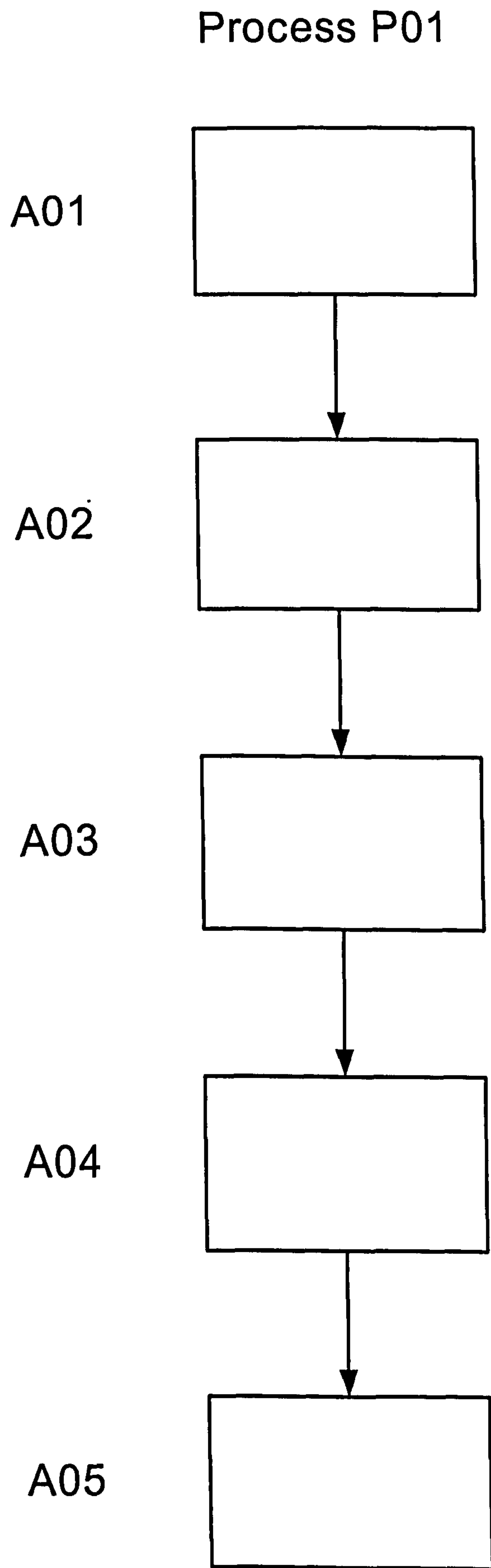
### **7.3 Business Process Illustration**

In order to explain to employees what each business process is, it was necessary to produce a documented description or illustration of each process. From a detailed study of the list of requirements derived from the selected business standards and tools and the many years of experience from working in SMEs and larger organisations, the author was able to identify key activities for each of the 52 business processes. Relevant NVQ competences were used to confirm the selection and description of these activities (QCA, 2002).

Each business process has been illustrated diagrammatically using flowcharting techniques. To ensure that the flowcharts were not over descriptive, the number of activities within each process was kept to a minimum with each process having an average of 6 key activities. Further examples are included at Appendix F.

A feature of the flowcharting technique developed was the referencing of the process and activities as illustrated at Figure 7-2. This will be discussed later. A brief description of the activity is displayed in the relevant box. Experience gained during this research, discussed at Chapter 8, indicated that sufficient process detail was included on the business process flowcharts to allow understanding for SMEs adopting this methodology.

Each activity can be uniquely identified from the addition of the box reference to the process reference. For example the first activity in the example, illustrated at Figure 7-2, has the reference number P01A01. Using this reference information relating to the activity was stored in a database.



*Figure 7-2, Business Process Illustration*

There are many proprietary software tools available for flowcharting. Examples are provided in Table 7-1.

Product	Description	Web Site
OnQ2 <sup>®</sup>	Interactive flowcharts	www.OnQ2.com
IMSOL <sup>®</sup>	Advanced process mapping	www.imsol.net
QMAP	Business process mapping	www.qmap.co.uk
Proquis	Process mapping and simulation	www.proquis.com
Process Navigator	Bottom-up process mapping	www.triaster.co.uk
Promanade <sup>®</sup>	Process map and manage	www.mandos.co.uk

Table 7-1, Business process flowcharting tools

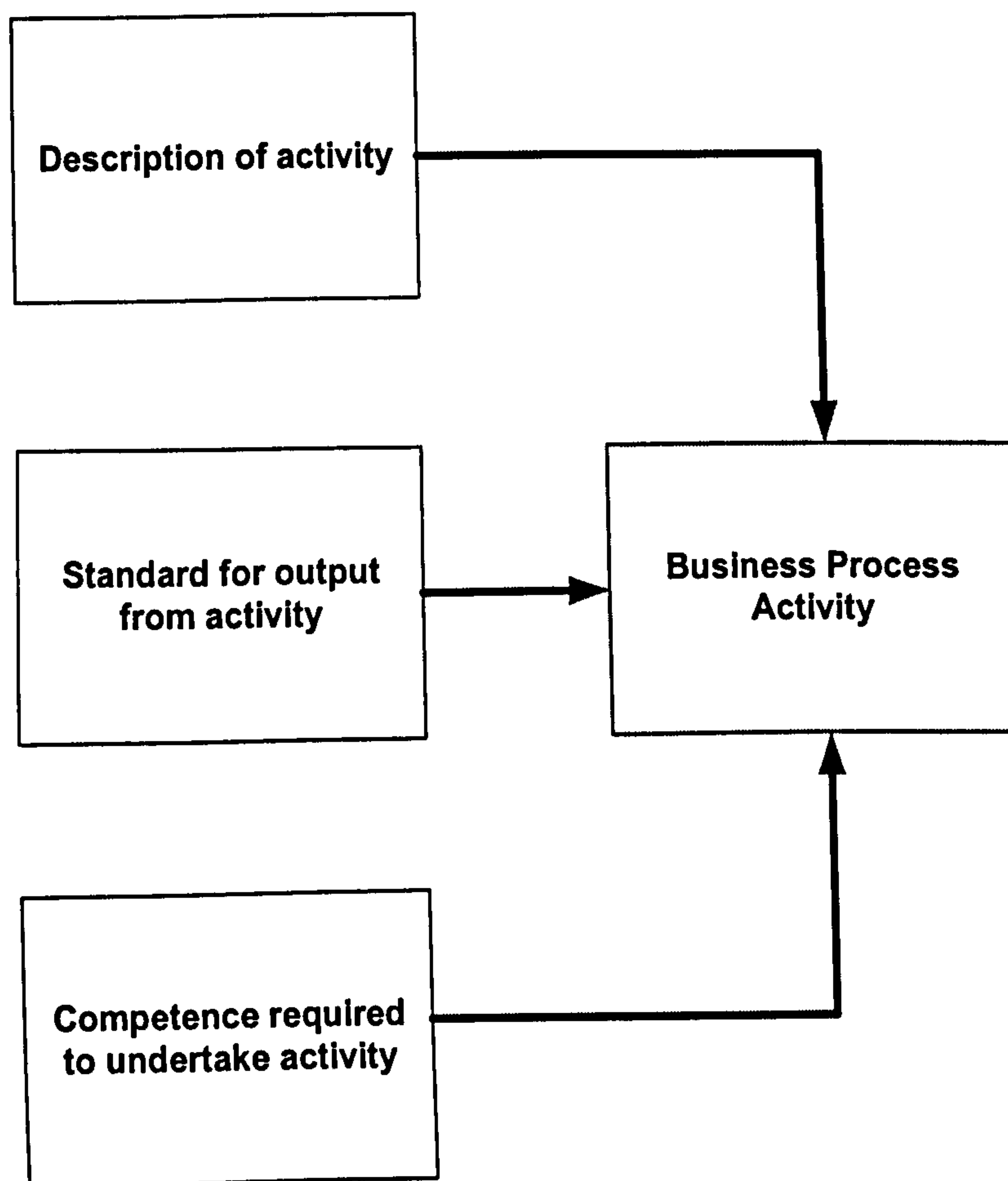
Additionally the GRAI Methodology (www.graisoft.com), developed at Bordeaux University, was investigated (Ducq, Gentil and Doumeingts 2000). The author did not find a set of characteristics in any of the proprietary process mapping tools that matched the requirement of this research. The actual flowcharting is a simple task and the author found Microsoft Visio to be adequate for the task.

Because the business processes have been derived from a selected set of standards and tools it was possible to find, from the set of standards and tools, a standard or requirement for undertaking or the output of the activity in question. This particular standard or requirement can be referenced to the one or more documents from the set from which it was derived. So in order to identify the standard of undertaking or output for all the activities of a particular business process it may be necessary the address the requirements of one or more of the selected standards and tools. Figure 7-3 illustrates the application of requirements and competences for each business process activity.

Each activity in each process has 3 attributes. These are:

- Description of the activity.
- Standard of output for the activity.
- Competence required to undertake the activity.

The author has called the information in the three left-hand boxes in Figure 7-3 potential *management drivers*. It will be shown how these attributes can be used in this way. Each business process has an average of 6 activities and each activity has 3 management drivers. With 52 business processes we have a total of  $6 \times 3 \times 52 = 936$  management drivers associated with activities in the GBPS. Some activities are more complex than others. The most complex are also likely to have written procedures. Some activities are simple and require little or no information other than the description.



*Figure 7-3, The application of requirements and competences for each business process activity*

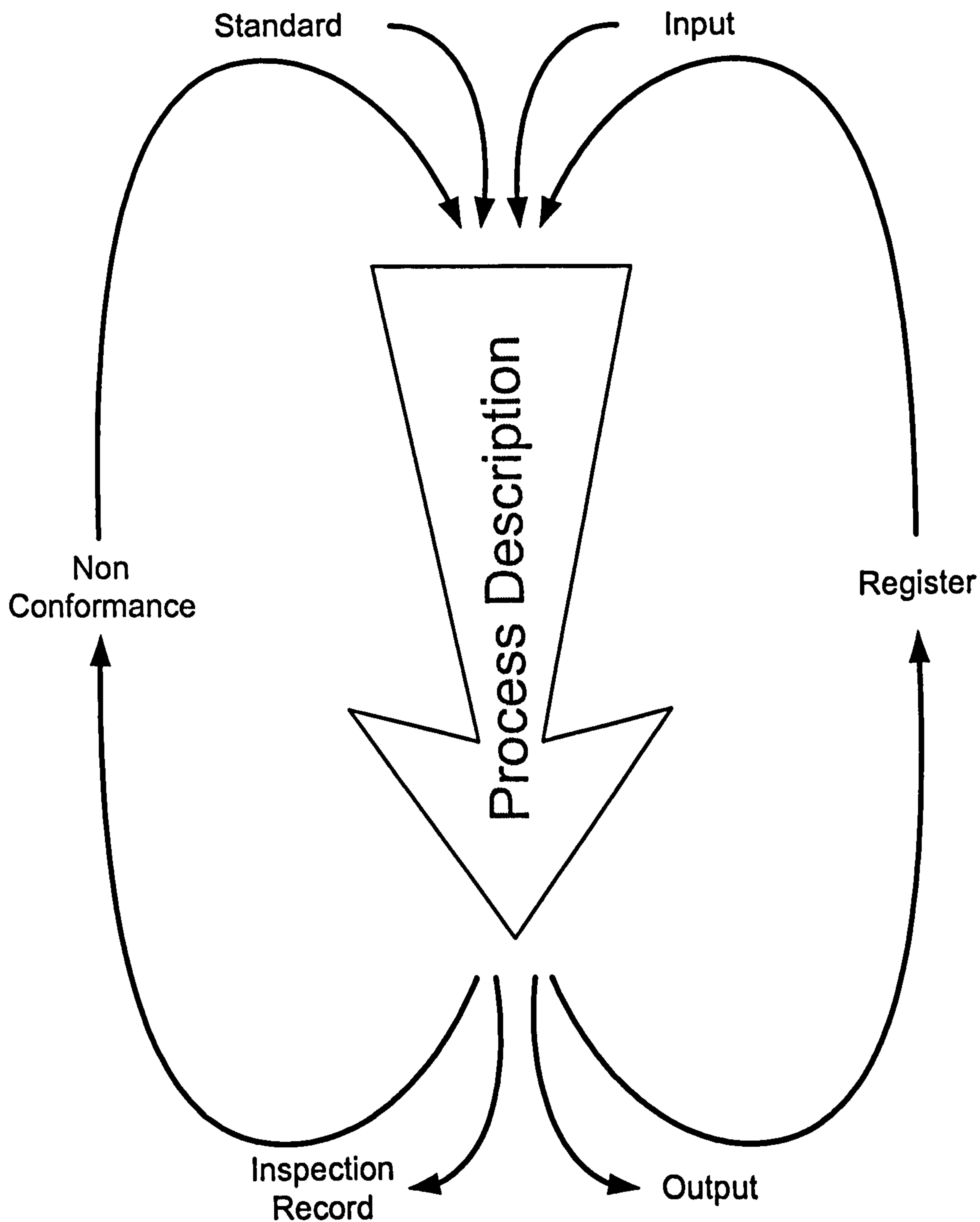
Each of the business processes have been allocated 7 attributes or *management drivers*. These are:

- Process Description.
- Standard.
- Input.
- Output.
- Register.
- Inspection Record.
- Non Conformance Record.

Illustrated at Figure 7-4. Details of each will be provided later.

There are 7 management drivers for each of the 52 business processes. That is  $7 \times 52 = 364$  in total for the GBPS.

That gives a grand total of  $364 + 936 = 1300$  management drivers for the GBPS. This large volume of information could be easily accessible to SMEs. This at first appears to be a large undertaking but this is not found to be the case if the task is approached systematically and full use is made of ICT.



*Figure 7-4, Process Management Drivers*

Process management driver descriptions follow:

Process management driver descriptions and example of their use follow:

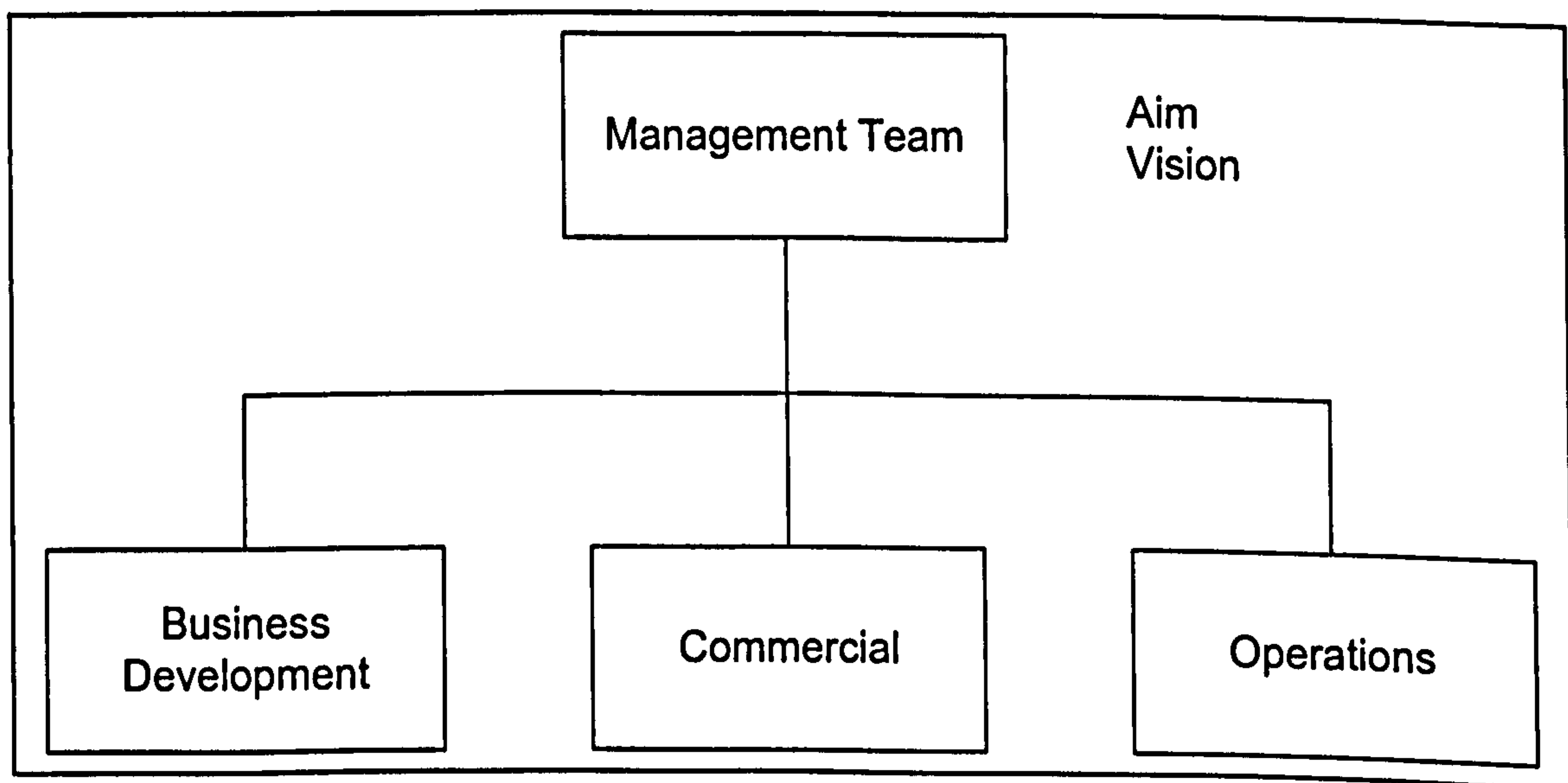
- **Process Description:** A description of the business process. Used to re-define the process.
- **Standard:** An illustration of the standards of output required from the process. Usually illustrated by actual examples. Used to improve or reduce quality.
- **Input:** A description of the inputs to the process. Used as a target for cost reduction.

- Output: A description of the outputs from the process. Used as a target for waste reduction.
- Register: A 'Register' has been identified for the particular process to record throughput. The requirement for metrics defined, i.e. standard cost, standard time, throughput, etc has been defined. These registers will preferably be ICT based but will be dependent on the sophistication of the particular enterprise's ICT network. Used as a target for time reduction.
- Inspection Record: An 'Inspection Record' has been defined to record the quality process activity or throughput and a filing system established, again preferably ICT based. Used as a target for error reduction.
- Non Conformance Record: A record of defects or non-conformance identified during process activity. This can be in relation to throughput, process functionality, etc. A filing system, preferably ICT based, will be identified. Used as a basis for process improvement.

These process management drivers are further discussed at Chapter 8.

To facilitate understanding the 52 Business Processes have been allocated to the following business areas:

- Operations.
- Finance.
- Business Development. See Figure 7-5.



*Figure 7-5 The Three Functional Areas of a Small Business*

The Business Process Taxonomy for a Small Enterprise was developed. See Figure 7-6

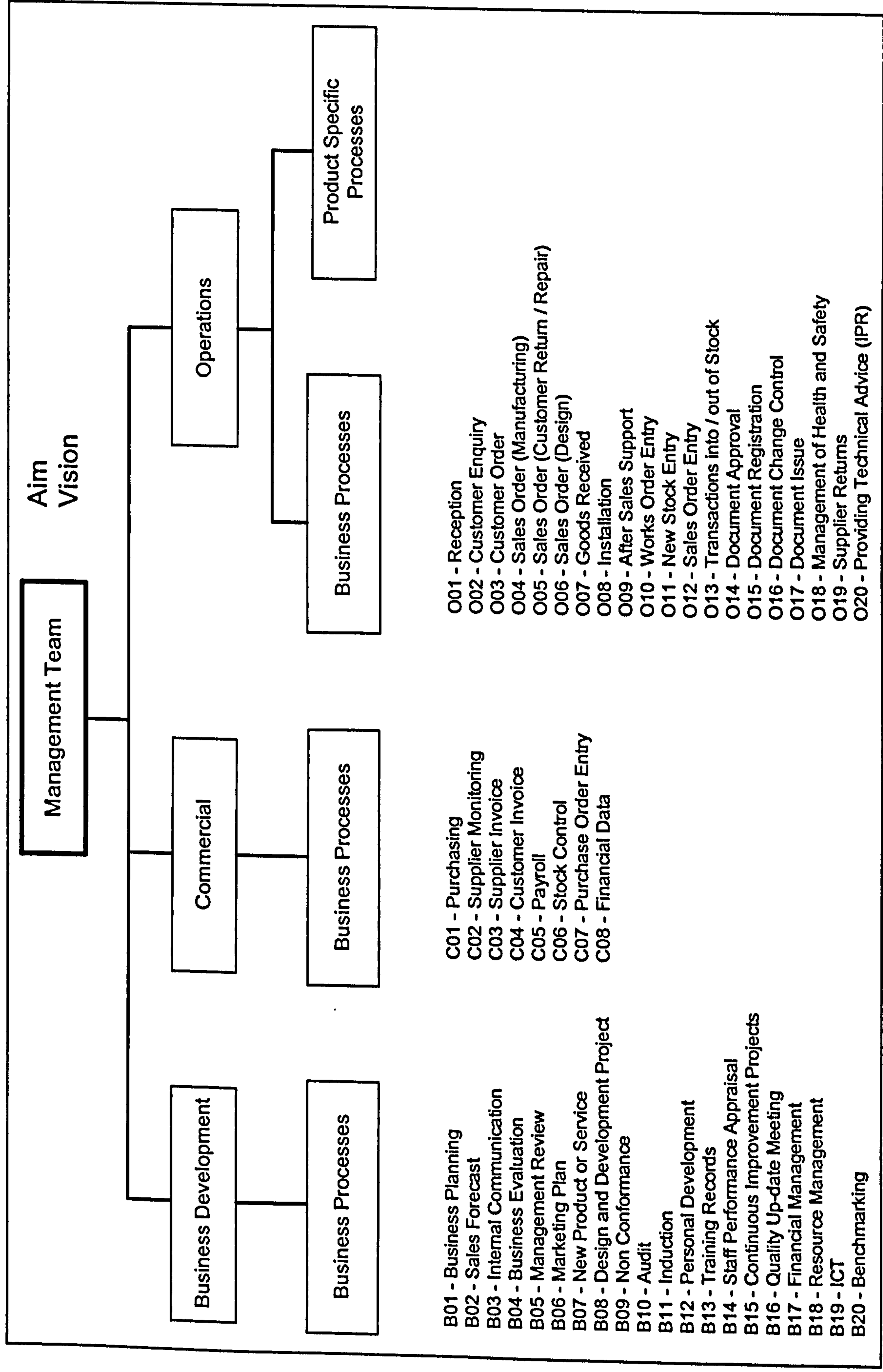


Figure 7-6, The Business Process Taxonomy for a Small Enterprise



The following example, Figure 7-7, shows how a typical business process has been illustrated. The QP references link to information held in a database. This will be illustrated later.

In the example provided below, the Purchase Order process, 6 activity standards (QPs) are invoked, as illustrated on the left hand side of Figure 7-7. If we take, for example the second one, QP 7-1, this activity standard is derived from the following requirements from the set of standards and tools:

- ISO9001 : 2000 - Clause 7.4.1, Purchasing Control.
- The Charter Mark - Criterion 7, Use Resources Effectively.
- UK Benchmarking Index - Management Data, Suppliers (14).
- The Excellence Model - Criterion 4, Partnerships and Resources.

Cross references are included in the QP to the relevant sections of the above published standards and tools. It will be shown later that the hypothesis that this is also the set of business processes that is required to be implemented for a SME to facilitate growth, Hypothesis 2, is correct.

The business process taxonomy, illustrated at Figure 7-6, can be extended by the addition of the key activities for each of the 52 business processes and the competences required to undertake those activities (See Figure 7-3). Additionally for each of the activities other features can be defined. For example standards of output, records, files, ICT applications, etc. See Figure 7-8, The Extended Business Process Taxonomy for a Small Enterprise.

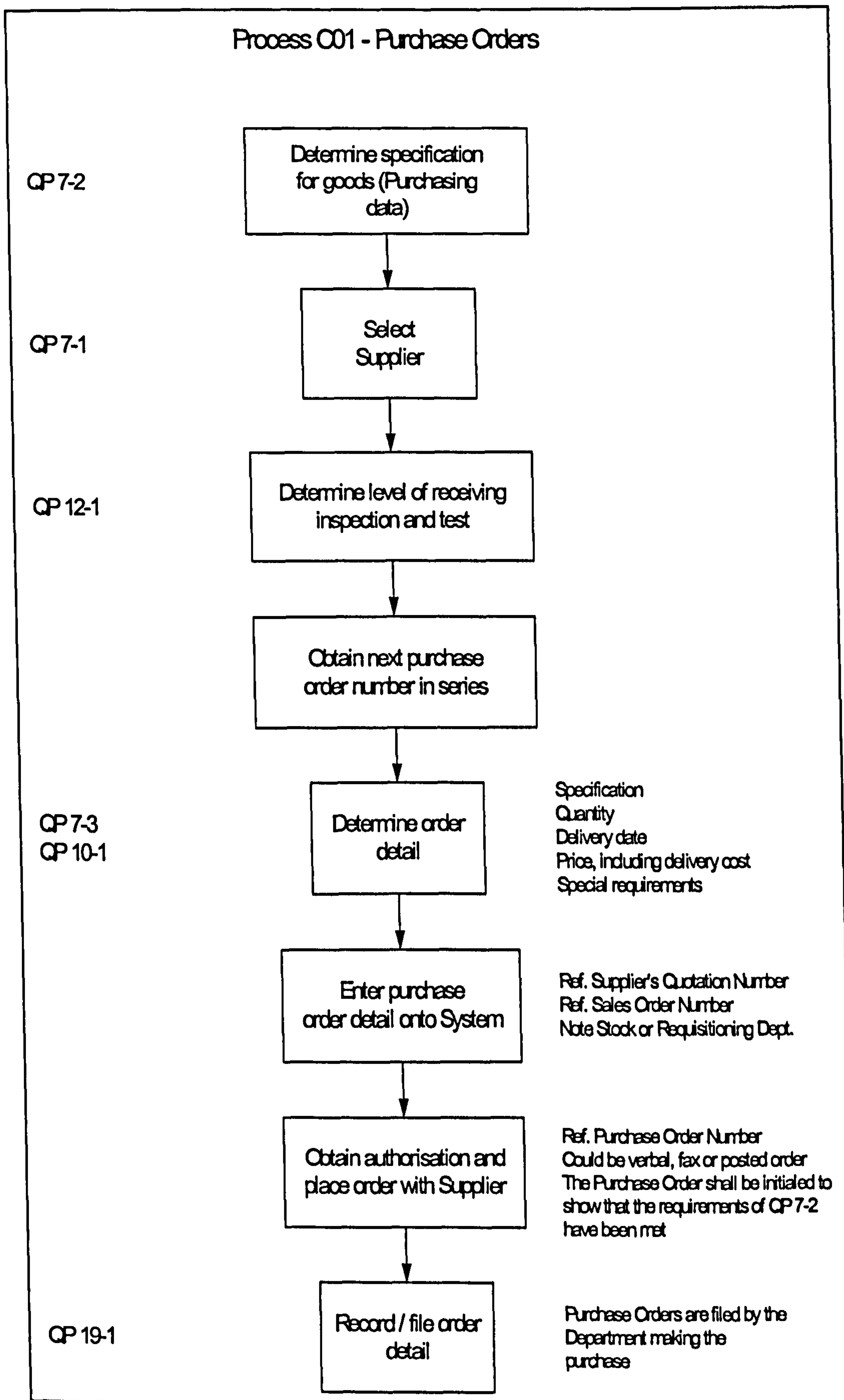


Figure 7-7, Illustrated Business Process

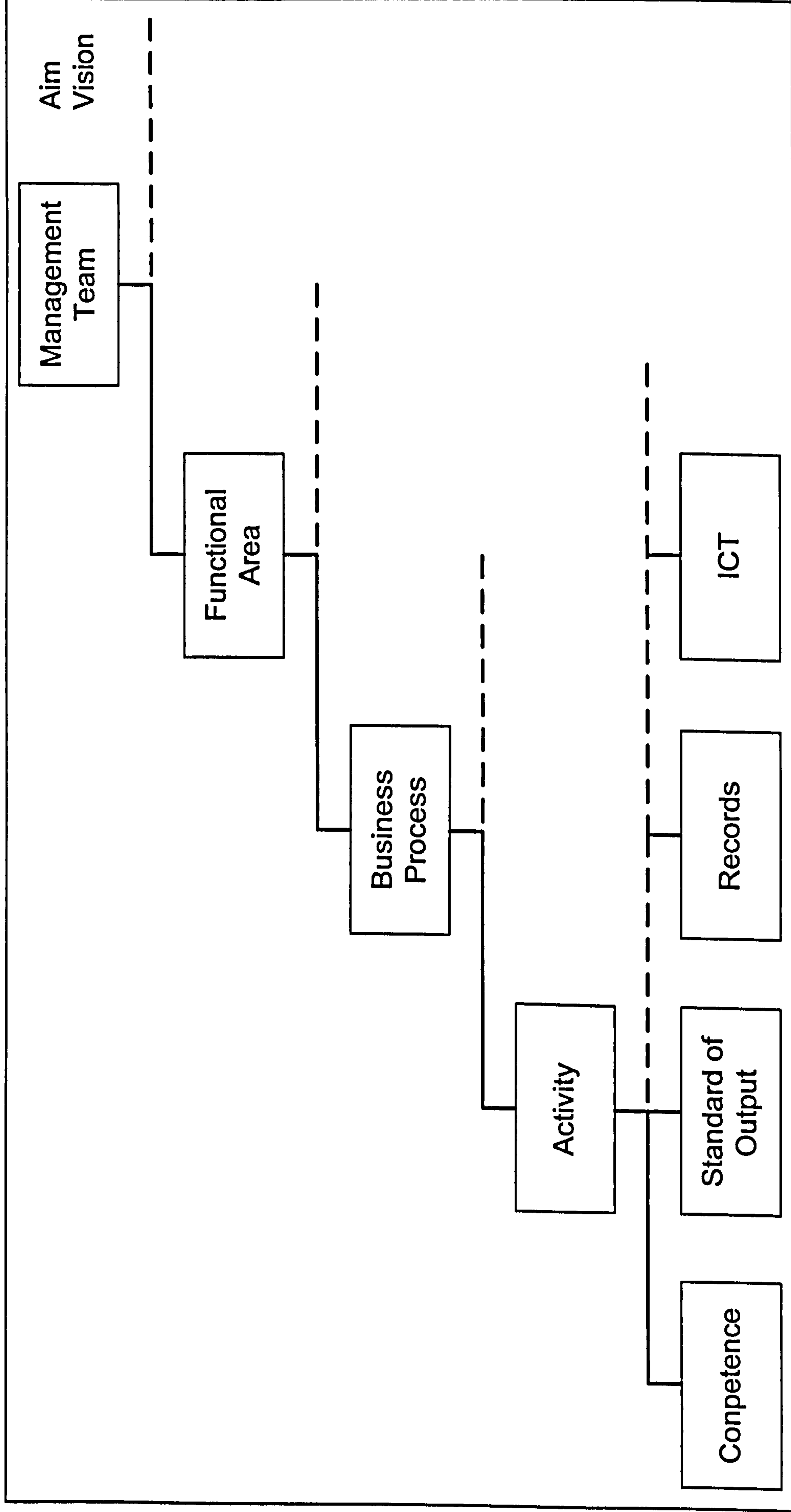


Figure 7-8, The Extended Business Process Taxonomy for a Small Enterprise

## 7.4 Documentation

To make the business process taxonomy (See Figure 7.6) transparent to all members of a business it was necessary to design a simple documentation set for the GBPS. The key elements of this documentation set is as follows:

- GBPS Manual - The 52 business process illustrations.
- Activity Standards Manual - Rationalised requirements from the selected set of standards and tools.
- Inspection Record – Standard Form.
- Non conformance Report – Standard Form.
- Registers – Standard Forms.

From the trial applications discussed at Chapter 8 it became apparent that it is important to identify and provide clear filing systems for all documentation.

The documentation can also make clear links between company policy and processes thereby ensuring that policy is implemented and adhered to.

## 7.5 Analysis of Information Available

If we understand and have a degree of documentation of all the key activities within the organisation, and we have a standard for the output of these activities then we can formulate the skills requirement for the organisation. This is illustrated in the following paragraphs. The ‘standard of output’ is that expected by the organisation and its customers of the work output of its employees.

In the Business Process / Standards Matrix, Figure 7-9, the columns represent a particular standard of output, e.g. QP01, and the rows represent particular business process, e.g. P01. In Figure 7-9, a column with few blank spaces indicates a particular standard of output that is required to be met in a large number of the business process activities. A row with few blank spaces indicates a business process whose activities are required to meet many standards. Analysis will identify the most important standards and susceptible business processes.

The Business Process / Standards requirement can also be represented by specific competences, performance criteria and assessment standards from the set of UK National Vocational Qualifications (NVQs), i.e. Skill / Standard ‘QP01’ can be cross referenced to Competence / Performance Criteria ‘COMP01’. Just as not all process activities required a standard of output to be set, not all activities were covered by competences from the NVQ framework.

In the Employee / Competence, Performance Criteria Matrix shown at Figure 7-10, the columns represent a particular competence / performance criteria, selected from the appropriate NVQ, required to undertake the corresponding activity to the required standard, and the rows represent particular employees. In Figure 7-10, a column with few blank spaces indicates a competence / performance criteria that has been met by a large number of employees. A row with few blank spaces indicates an employee that





can meet a large number of the required competences / performance criteria, and is therefore trained to undertake a large number of the business activities of the enterprise.

Individuals that undertake specific tasks can be trained and assessed to the specific NVQ standards using clearly documented NVQ techniques from the UK NVQ framework.

Clearly for the business to run effectively and efficiently one requirement is that a darkened column in the Business Process / Standards Matrix should be replicated in the Employee / Competence, Performance Criteria Matrix.

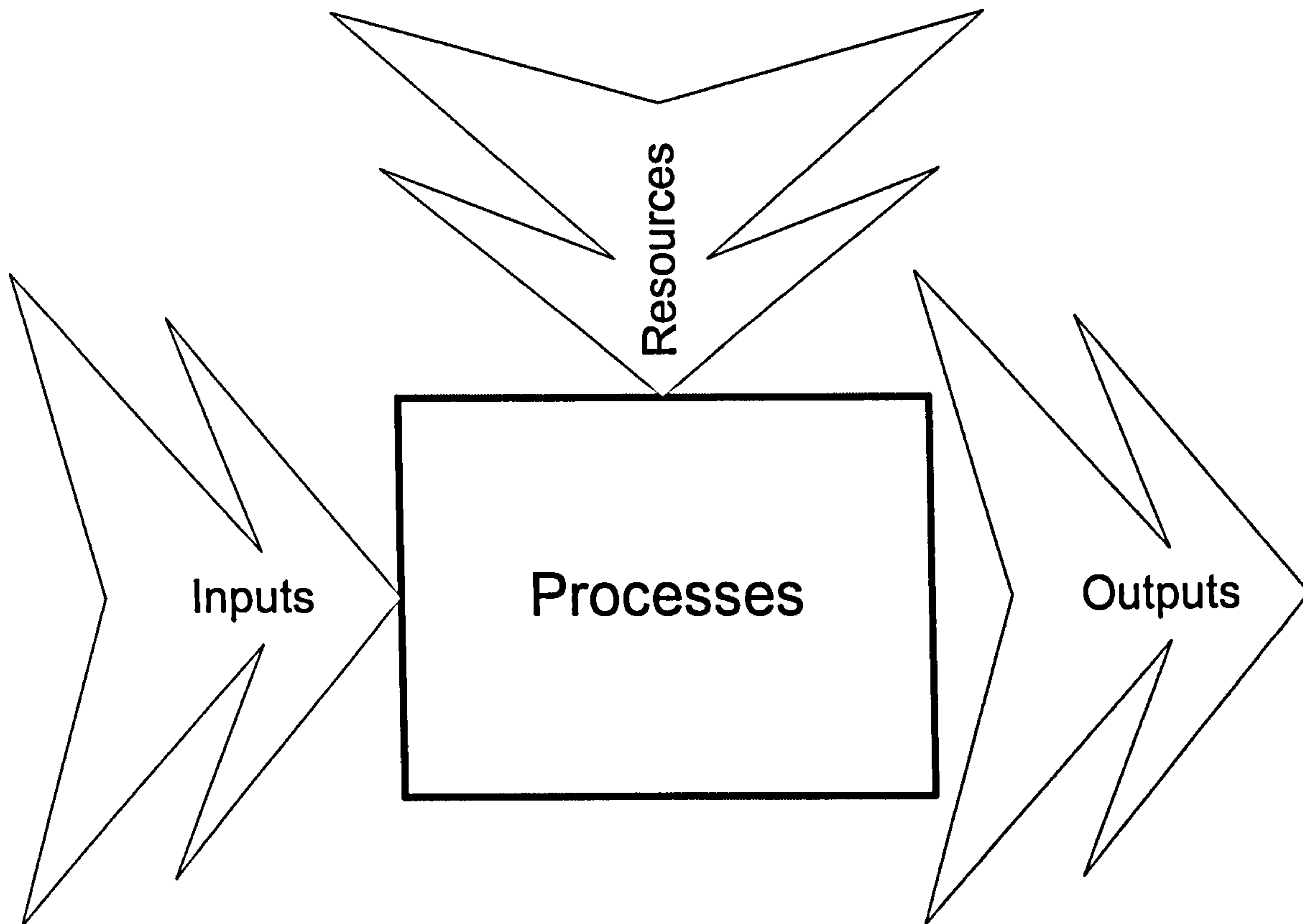
From data held within the framework (system) it is a simple task, using the tabulated matrix format illustrated at Figures 7-9 and 7-10, to identify a skills gap both generally within the organisation and with individuals that undertake specific activities.

This methodology makes lifelong learning (LLL) look so much more attractive to employers and employees because all training can be designed and targeted around the specific activities of the enterprise.

## **7.6 New Enterprise Model**

A new enterprise model was necessary to place the 52 business processes into context with the overall structure of an organisation. The new model has been developed from the definitions introduced in Chapter 3 Section 3.8. The new enterprise model was completed after the results of its implementation were fed back from Chapter 8.

An enterprise can be represented by a collection of processes, and a process can be represented by a series of activities. In addition to the activities it is necessary to define inputs, outputs and resources. See Figure 7-11, The Basic Enterprise Model.



*Figure 7-11, The Basic Enterprise Model*

If we look at the processes in more detail it is possible to divide them into two sets. These are:

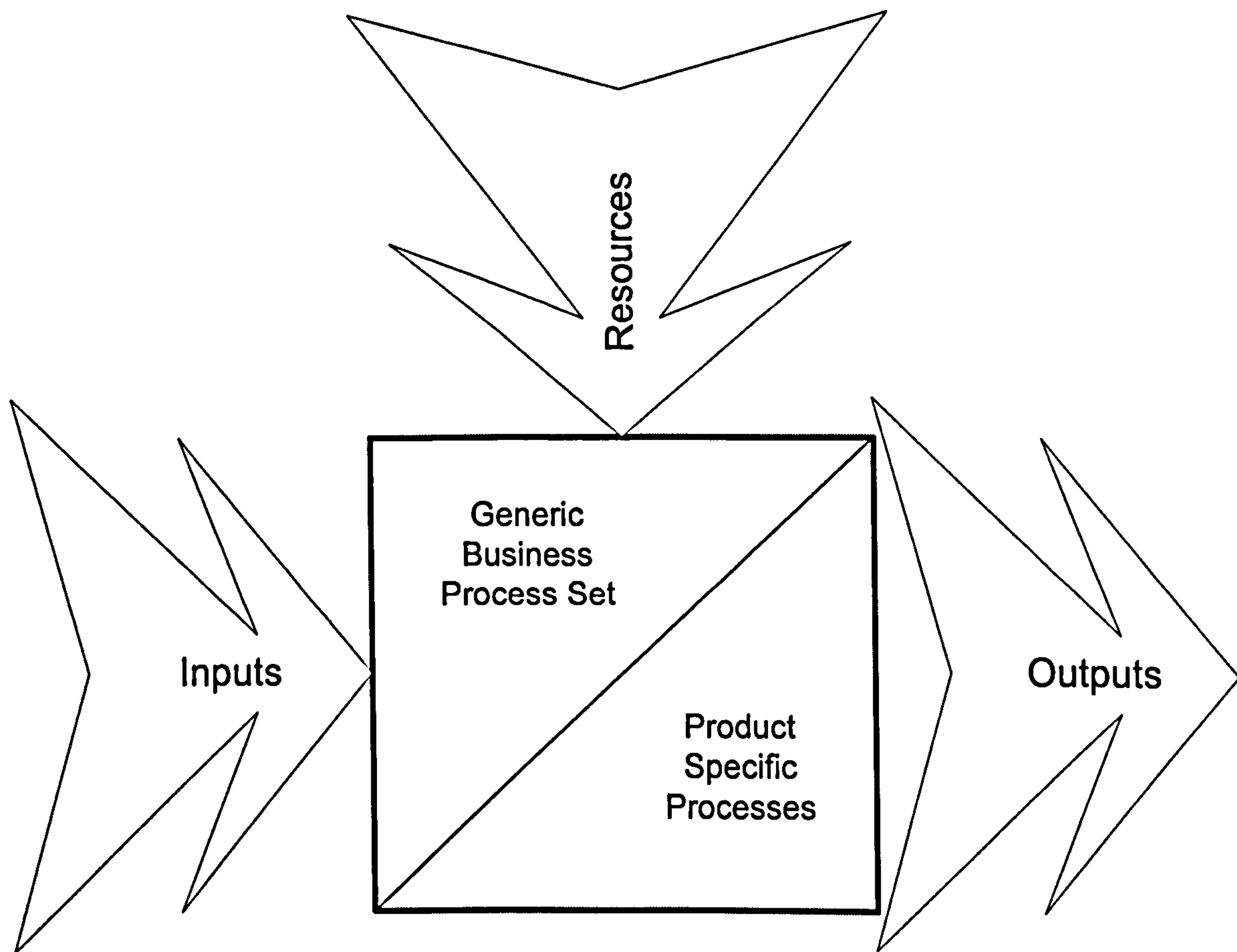
- 1) Generic Business Processes.
- 2) Product Specific Processes.

The new ISO9000:2000 standard for Quality Management makes a similar division.

In this case the Business processes are those processes that are generic to all organisations. The Product Specific processes are processes that are specific to a particular organisation due to the nature of the products that it produces.

At Chapter 5, Section 5.5, the author has specified this set of Generic Business Processes and called it the Generic Business Processes Set or GBPS. The GBPS consists of 52 business processes and in addition to inputs, outputs and resources a number of attributes have been defined for each process. The Basic Enterprise Model can be improved to incorporate the GBPS, see Figure 7-12, The GBPS Enterprise Model.





*Figure 7-12, The GBPS Enterprise Model*

During the trial implementation of the GBPS Enterprise Model, discussed at Chapter 8, it became clear that the work environment was important to the success of process management within the organisation. The next section discusses changes made to the GBPS Enterprise Model, to include elements of the work environment, as a result of focus group work undertaken during implementation trials.

## **7.7 The Process Enterprise Model**

### **7.7.1 Introduction**

Figure 7-13 illustrates the final Business Growth Enterprise Model. This final model was designed as a result of feedback obtained during focus group meeting with organisations undertaking trial implementations of the Business Growth Enterprise Model as part of this research.

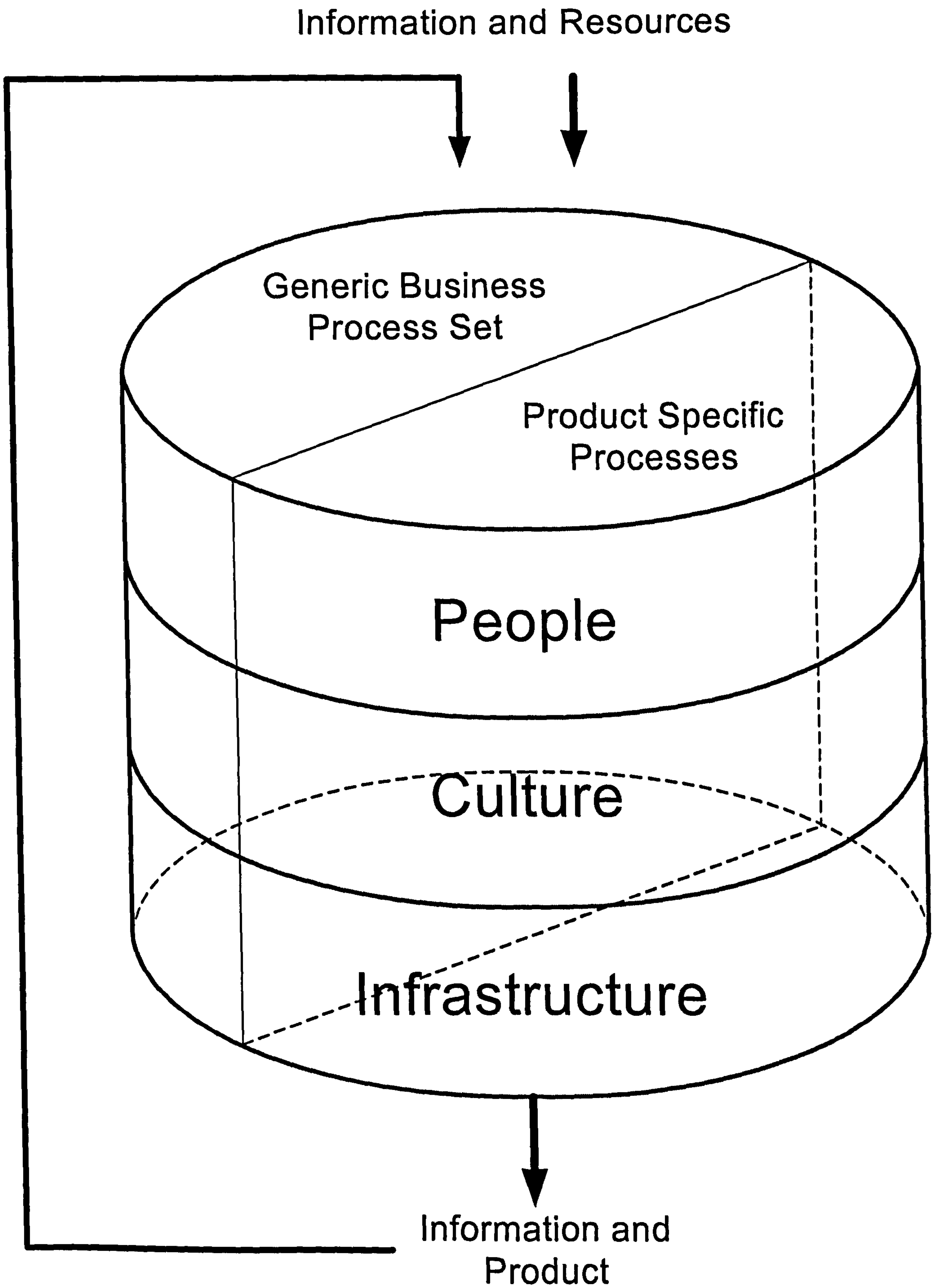
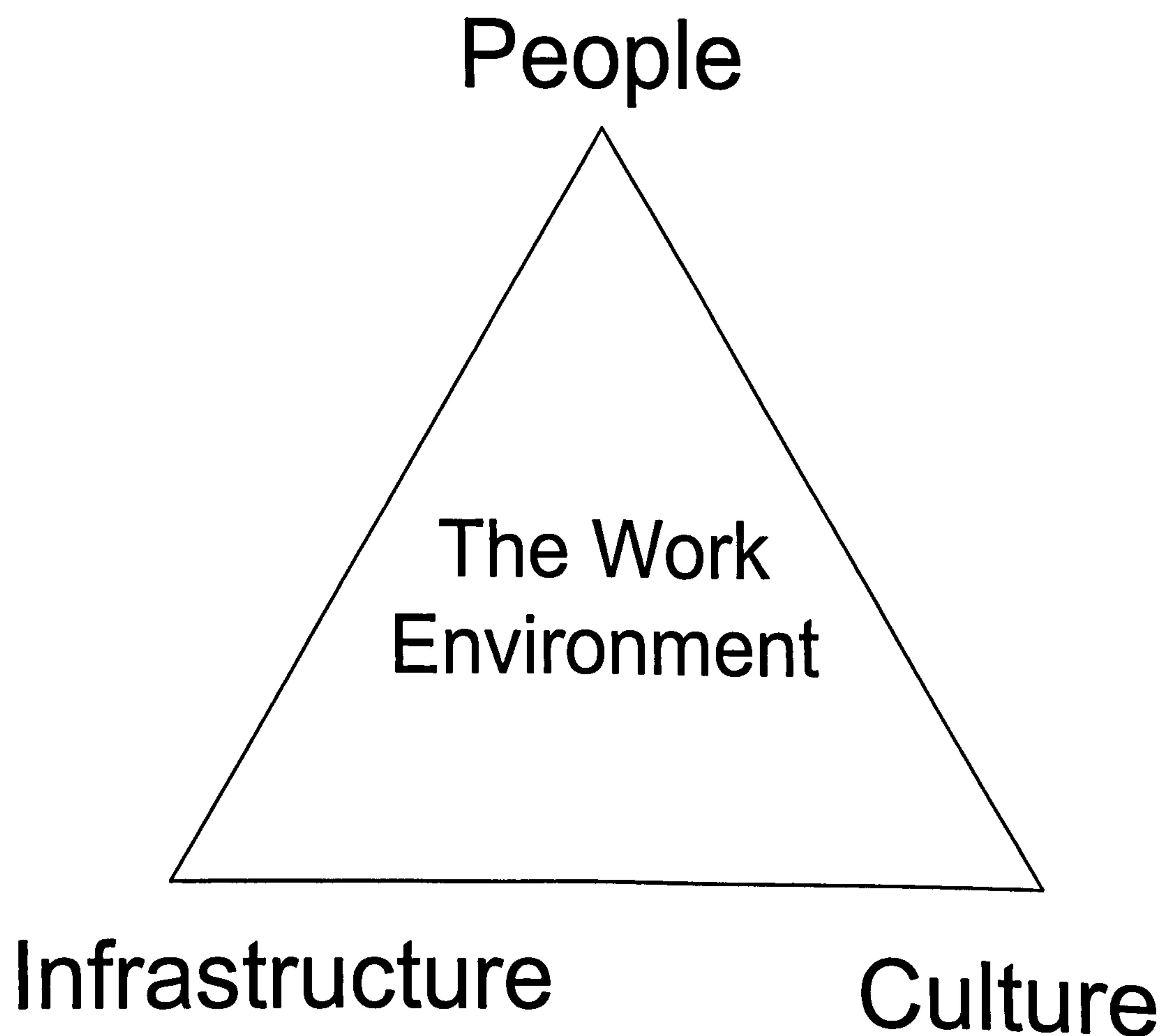


Figure 7-13, The Business Growth Enterprise Model

The central element of the model is the represented by a vertical tube. This vertical representation was designed to illustrate that inputs to the enterprise should ideally pass through the enterprise as quickly as is possible. In this illustration that passage is idealistically shown to be assisted by gravity. The equivalent to gravity in an enterprise is momentum born out of a 'pulling together' culture within the enterprise. This unrestricted passage through the enterprise is important. To achieve this the enterprise's processes must be both effective and efficient and understood by the people implementing them and the necessary infrastructure must be in place to support those processes and people. The relationships between infrastructure, people and culture has been called 'the work environment' by the author. The enterprise's processes are also illustrated as running vertically through the tube in the model.

The paragraph above mentioned that people, culture and infrastructure are important elements of the enterprise. Because they are important to the enterprise they have been included as characteristics of the model. See Figure 7-14, The Work Environment. Each element is discussed below.



*Figure 7-14, The Work Environment*

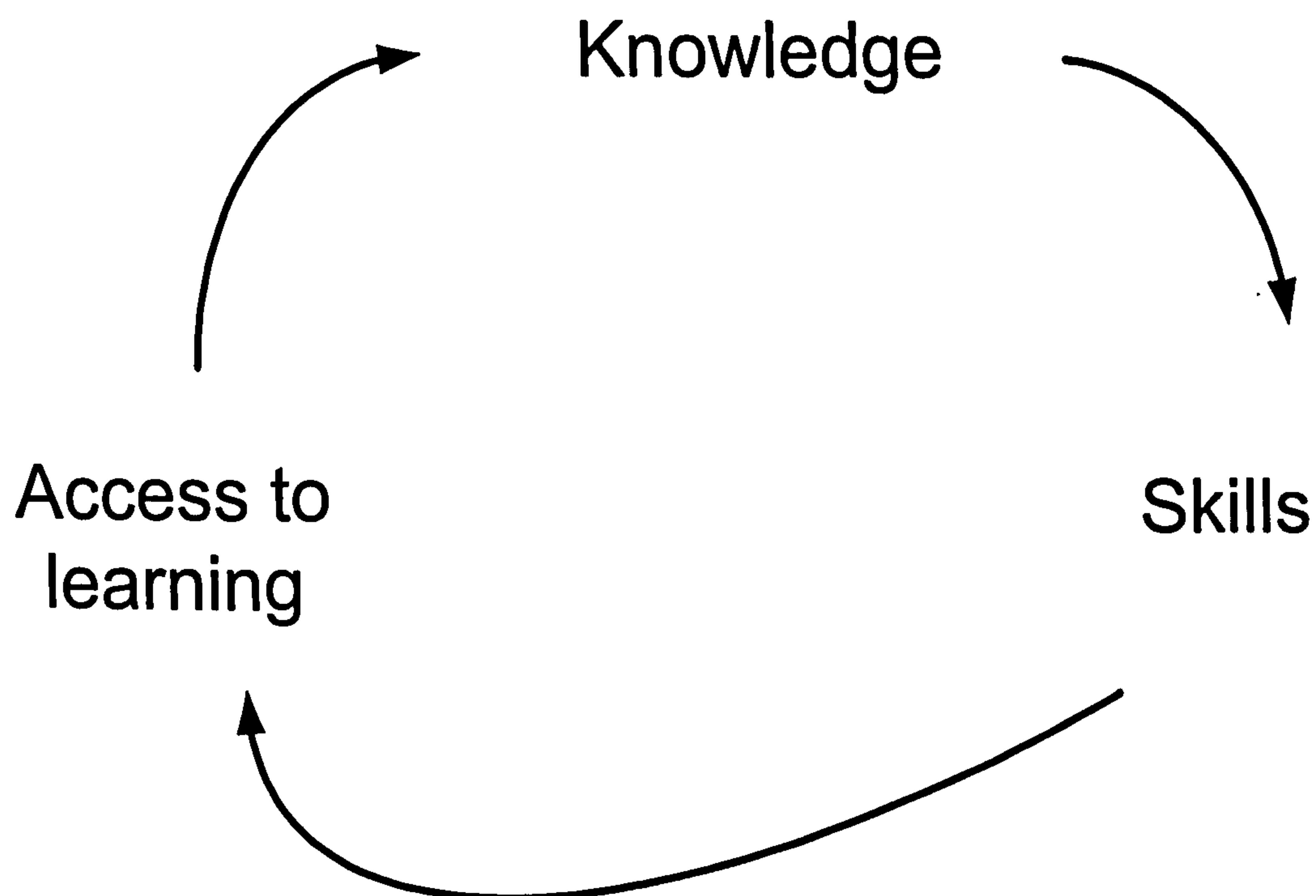
## 7.7.2 People

The focus group work, discussed at Chapter 8, resulted in a list of issues associated with the people working in the organisations. The list is as follows:

- Management – Resources, Processes and People.
- Responsibilities.
- Knowledge.
- Skills.
- Access.
- Life Long Learning.
- Communication.
- Participation.
- Attitude.
- Continuous Improvement.
- Appraisal.

To discuss all these issues is outside the scope of this research nevertheless they were highlighted as issues that need to be addressed within an organisation. They certainly are relevant to achieving business growth. Two issues stood out from the focus groups as being crucial to the implementation of the Process Enterprise Model. These were knowledge and management.

### 7.7.2.1 Knowledge



*Figure 7-15, Individual knowledge development cycle*

It was found that as people became more familiar with how the organisation's business processes worked they were able to develop their individual skills associated with the processes. The desire to develop their skills lead them on to learning. Provided that assess to learning was possible their individual knowledge was increased. In turn this lead to improved skills. This cyclic increase in knowledge is illustrated at Figure 7-15.

### **7.7.2.2 Management**

The term process management is significantly different than that conjured up in the mind by the word management. Process management is used to describe the management of the process and not the people by the managers. Process management means the management of all aspects of the process. Section 7.3 has already shown that there are a large number of attributes or management drivers associated with each process that require to be managed. It is only when all these attributes are brought under the control of the process operators that we can say that the process is on the way to becoming effective and efficient. The term 'on the way' is used to take account of the continuing improvement process or necessary change due to improvements in associated processes. Responsibility must reside with process operators. They 'manage' the process.

### **7.7.3 Culture**

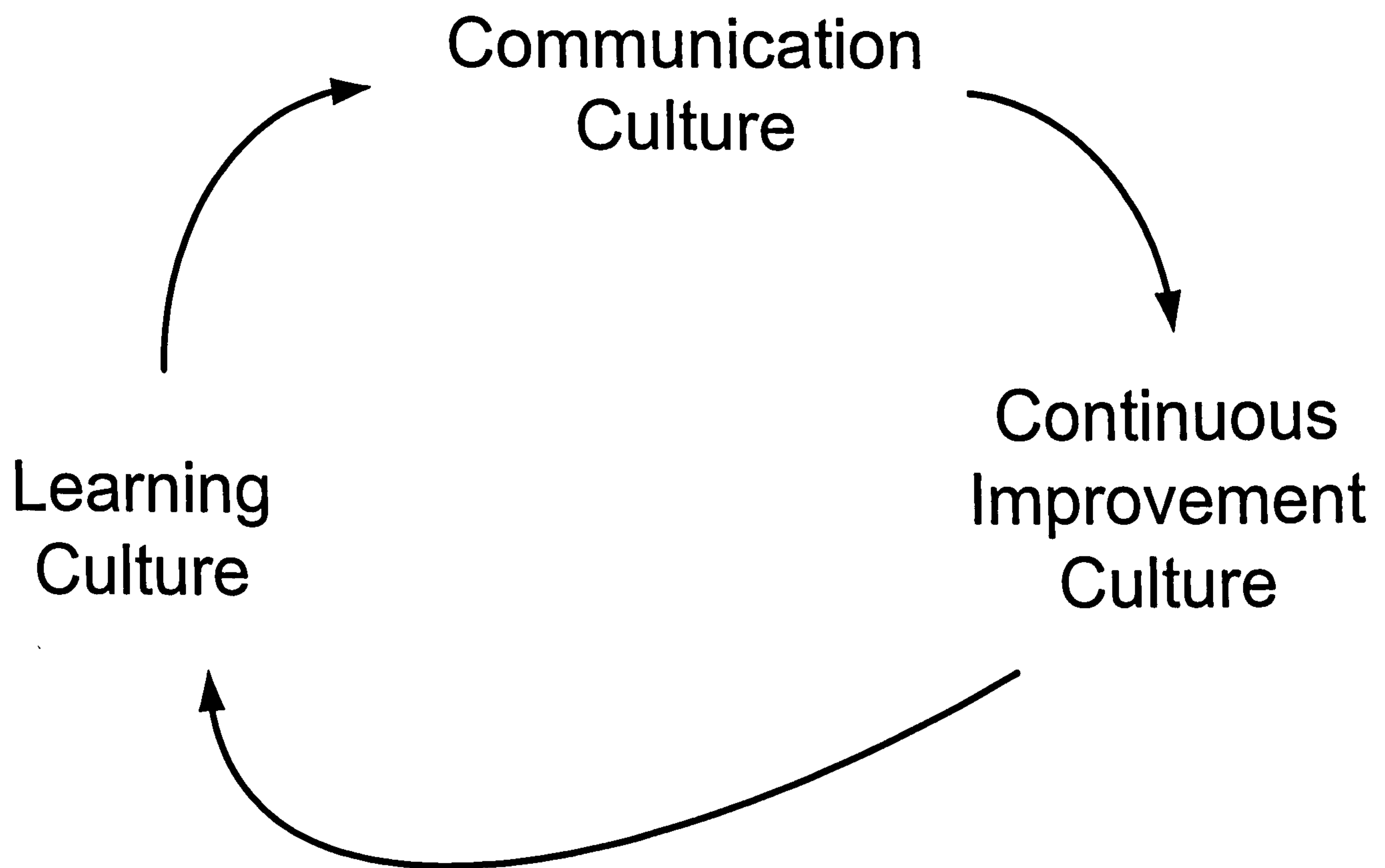
Many people have difficulty in identifying their needs and while they understand their own work they are sometimes unaware of wider aspects of organisation and work activity (Hughes et al, 1993). There is also evidence to suggest that in practice some people cannot articulate their actions but act correctly, while others articulate clearly what should be done but do not actually do it, (Broadbent, 1990). Recent and comprehensive accounts of human cognition suggest that, rather than operating as rule based finite state machines, humans form mental models of problem situations (Gentner and Stevens, 1983), aided by training and experience, which enables them to navigate around problem spaces in a flexible manner as conditions change. External representations, such as functional diagrams, are known to support cognitive activities, (Payne, 1992).

The social and environmental nature of knowledge is of particular importance in considering possibilities for the ways in which knowledge based technology might interact with co-operative decision making.

Situated action (i.e. action that generally occurs in a specific place and in a specific context) offers a perspective in which cognition, action and situation are bound together in particular social and physical circumstances (Suchman, 1987). In this view cognition is a social action and context, such as organisational goals and norms, an essential resource.

In the implementation trials, the Process Enterprise Model has proven to be an excellent tool for developing a desirable culture in an organisation. The model provides a route to initiate discussion. Discussion creates a communication culture. Communication leads

to problem identification and problem solving and a continuous improvement culture develops. This desire to improve leads to training and a learning culture develops. This cyclic culture development continues as employees develop through learning. A self-perpetuating knowledge based system (KBS) evolves with the addition of some simple ICT applications. At this point new and innovative approaches to the way that people are managed can evolve based upon individual knowledge led responsibility. See Figure 7-16, Cyclic business culture development. This is the organisational equivalent of the individual knowledge cycle shown at Figure 7-15.



*Figure 7-16, Cyclic business culture development*

This culture is promulgated to Suppliers, Customers, Stakeholders, External Agencies, the General Public, etc through daily interaction with employees.

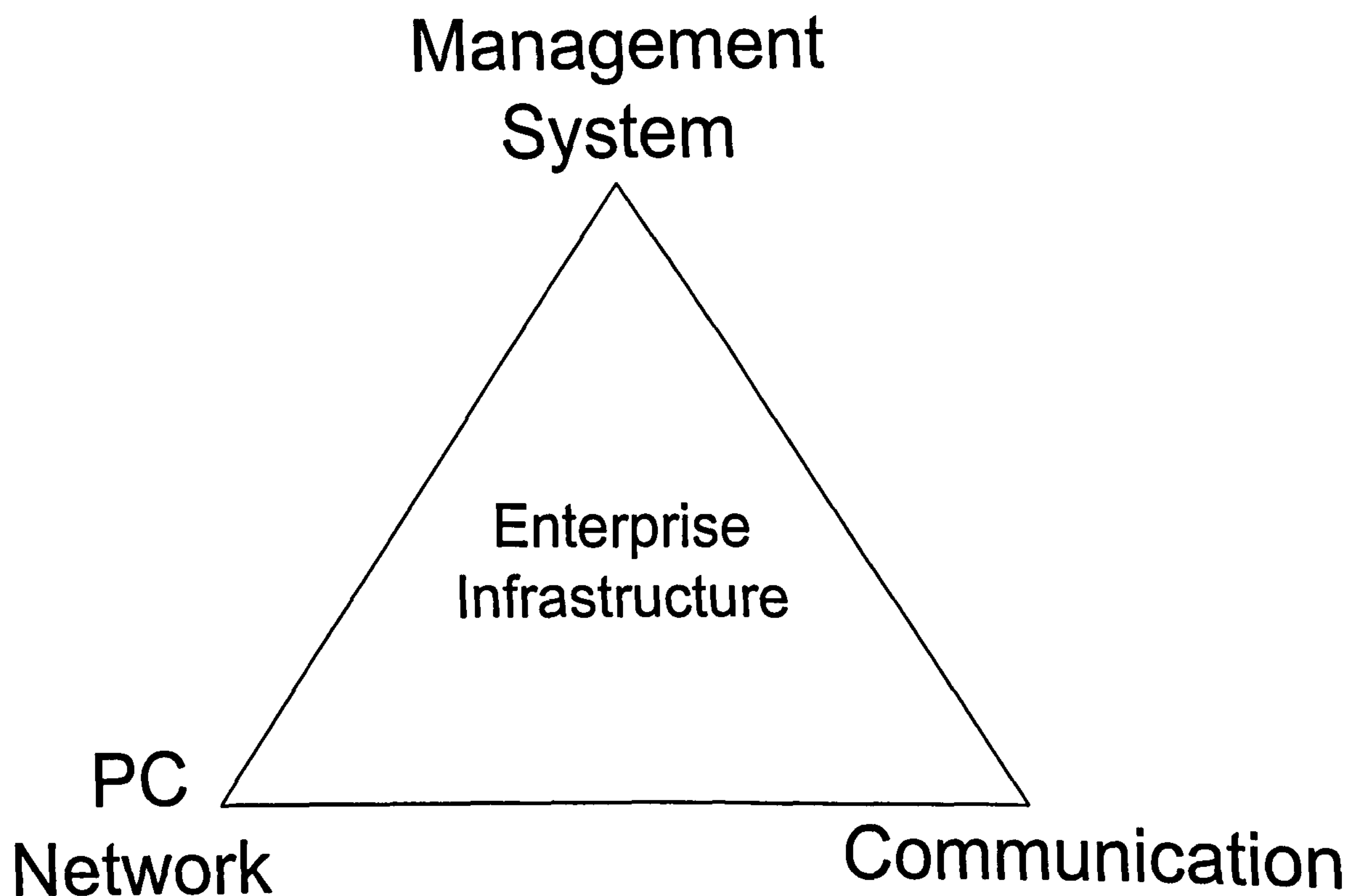
#### **7.7.4 Infrastructure**

The focus group work, discussed at Chapter 8, resulted in a list of issues associated with the infrastructure of the organisations. The list is as follows:

- Information – Data, KBS, KM.
- ICT – Internet, intranet, PC Network, PC Applications, LAN, WAN.
- Learning system.
- Enterprise Management System – documentation, formal – Working Processes.

- Premises.
- Fixtures and Fittings.
- Utilities.
- Legislation – e.g. Health and Safety, Environmental.
- Production Facilities – Plant and/or Equipment.
- Metrics.
- Stock, WIP.

To discuss all these issues is outside the scope of this research nevertheless they were highlighted as issues that need to be addressed within an organisation. They certainly are relevant to achieving business growth. The key elements of an enterprise infrastructure were identified as the management system, the PC network, and the communication network, illustrated at Figure 7-17, Enterprise Infrastructure.



*Figure 7-17, Enterprise Infrastructure*

## 7.8 Analysis against GBPS

As a further check to confirm that the GBPS was complete each of the 400 challenges from the case studies discussed at Chapter 4, were analysed against the 52 processes from the Generic Business Process Set, GBPS, defined in Chapter 5. The business process that would address the particular challenge has been identified. The results are interesting in two ways. Analysis showed that all of the 400 challenges were addressed

by one or more of the 52 business processes and that none of the 52 business processes were unallocated to a challenge. This confirmed the completeness of the GBPS and further illustrates that the range of challenges faced by small enterprises that are meeting barriers to their growth strategy encompasses the whole range of business processes and that in general no process is more predominant than another. See Figure 7-18, GBPS Usage, below. This result is confirmed in Chapter 8 where enterprises that evaluated the Business Growth Enterprise Model produced similar results from their initial surveys. See Figure 8-2 in Chapter 8. The completeness of the GBPS was confirmed by the fact that although not all processes were considered necessary by all organisations, each process was considered necessary by at least one organisation. The traditionally held view that the barriers to business growth could be represented by a short list of internal and external barriers is questioned. This research shows that any single process within the full spectrum of business activities has the potential to present a barrier to growth.

An overview of the case study analysis relating to business processes is provided at Figure 4-3, Case Study Analysis Overview, Chapter 4. This chart shows the 471 challenges matched with one or more of the 52 business processes of the GBPS. No single group of processes stood out as being more significant than any other group in terms of their contribution to overcoming the challenges presented in this research.

## 7.9 Conclusions

In this chapter a business development or growth framework has been derived based upon the GBPS. The framework is the enterprise model and the documentation required for its use. The Process Enterprise Model was designed as a result of feedback from implementation trials discussed in the following chapter.

The Business Growth Framework is constructed from the following elements:

The Business Growth Enterprise Model – Figure 7-13.

The Generic Business Process Set – Figure 7-6.

The Continuous Improvement Framework – Section 7.7.3 & 10.4

The Learning Framework – Section 7.7.2.1 & 10.4

The Business Infrastructure – Section 7.7.4.

The Business Growth Framework Implementation Methodology is constructed from the following elements:

The Business Growth Framework Implementation Methodology – Figure 8-1.

The Business Growth Diagnostic Tool – Section 8.3.

The Business Growth Framework - Section 7-9, also listed above.



The GBPS Usage

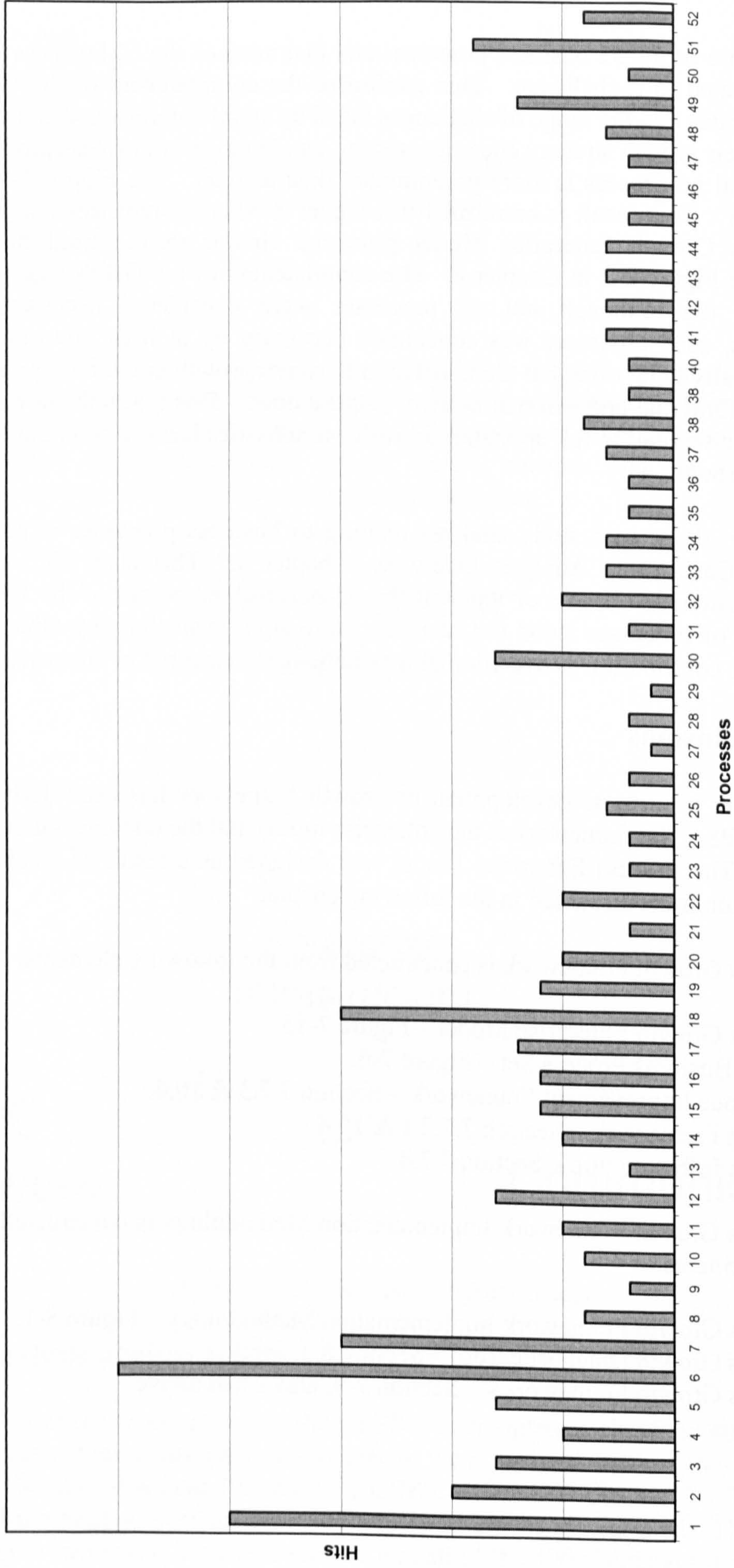


Figure 7-18, Analysis of GBPS Processes against Challenges

This new enterprise model is significantly different from any current model in that it identifies specific business processes and places them in context with the work environment. The work environment was discussed and defined.

The validity of the GPBS was further tested at Section 7.8 where it was confirmed that the GPBS would have addressed each of the 400 challenges identified. It is recognised that resolution of the challenge may require more than just a process. This area is discussed in the next chapter. This went partway to test Hypothesis 2.

Tools and methodologies to assist in the implementation of the model and facilitate business growth are discussed at Chapter 8.

Discussion in this chapter has led the author to hypothesise:

***That for a small enterprise to be sustainable and achieve growth, the full potential of all employees must be realised, developed, utilised and focused on business and product specific processes.***

The word *all* is important because *all* employees must be included.

The cyclic feature of the improvement frameworks discussed in this Chapter is important for sustainability.

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## Chapter 8: Implementation

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### 8.1 Synopsis

The purpose of this Chapter is to describe and discuss the trial implementation of the Business Growth Framework and Implementation Methodology in a small business environment. The framework was applied in a number of Small and Medium Enterprises from diverse business sectors. The Framework was promulgated within the organisations via their intranet. The author relied heavily on his own experience and personal skills during this period of the research. The implementation methodology and resulting data collection and analysis was seen, by the author, as an important part of this research.

Focus Groups, formed from participating SMEs, provided feedback that was used to further develop the Business Growth Framework and Implementation Methodology. The Focus Group research methodology was discussed at Section 2.2.6.

Where relevant, implementation activities have been linked to specific business processes from the GBPS. See Appendix D for a full list of the GBPS business processes.

Hypotheses 4 and 5 are formulated:

*That for a small enterprise to be successful and sustainable all value adding knowledge must be retained, recorded, analysed, used and focused on business and product specific processes.*

*That a better understanding of what is meant by the word 'management' is required.*

### 8.2 Introduction

Four businesses were selected to trial the framework. The key selection criteria was that each business was operating in the lower half of the Bowman Clock, See Section 1.3.2, but also were attempting to grow. A further criterion was that they had between 5 and 15 employees. Less than 5 employees would reduce the value of focus group activity and more than 15 employees would make the implementation too complex for the time available. Sector was not considered significant provided there was variety. The selected organisations were from the following sectors: Manufacturing, IT, Voluntary and Social Care.

Figure 8-1 illustrates the approach adopted by the author for trial implementation of the Business Growth Framework. A 6-stage implementation methodology was developed.

Each of these stages is discussed in the following Sections. The 6 stages of the implementation methodology are titled as follows:

- Initial Assessment.
- Planning.
- Implementation.
- Metrics.
- Internal Assessment.
- External Assessment.

Although Figure 8-1 shows these stages following on from each other, the next stage can be started prior to the completion of the previous stage. For some stages though, information is required from the previous stages prior to the start of the next. Each stage is iterative and is subject to regular review.

The trial implementations are currently at different stages and, at the time of writing, none have progressed past stage 5.

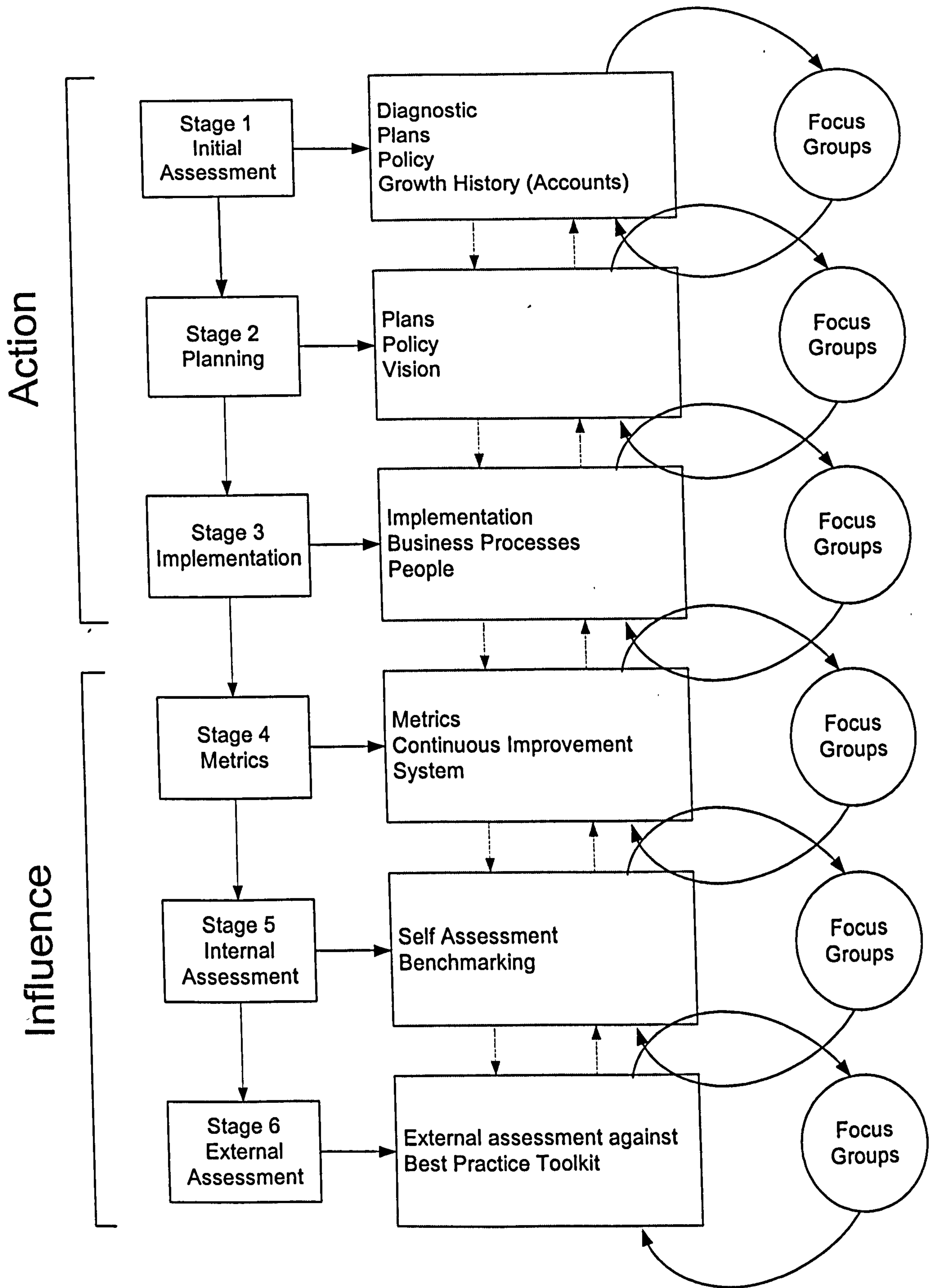


Figure 8-1, Business Growth Framework Implementation Methodology

### 8.3 Stage 1 – Initial Assessment

This stage was designed to review the current situation of the organisation regarding its process understanding and process management. The stage consists of 4 steps as follows:

- Diagnostic.
- Plans.
- Policy.
- Growth History (Accounts).

For the Diagnostic a list of the 52 business processes, the GBPS, was reviewed against current activity within the organisation. Against each process three 'current practice' options were offered:

- Formal.
- Informal.
- Not Applicable.

The results of the diagnostic are included at Figure 8-2. At the point that this information was provided the participating organisations had only been privy to the name of the process and a brief description. Only a brief definition was provided for formal and informal processes. It can be seen from Figure 8-2 that all processes were addressed, either formally or informally, by one or more of the participating organisations. Five processes, 32, 34, 41, 43, and 45, were addressed, either formally or informally, by only one of the participating organisations. Two processes, 22 and 30, were classed as formal by all organisations and a further 25 were classed as either formal or informal by all organisations. No additional processes were identified by any of the organisations. It became clear from further work with the organisations that their view of what constitutes a 'formal' process was not in line with the definitions provided at Chapter 3. This situation was resolved through two-way discussion between the author and the organisation seniors and employees.

Information relating to plans, policy and growth history (Accounts) were reviewed. Each organisation had different approach and extent of records on these subjects. Records that were available were collated for each organisation for further reference and development. The current status of these records was discussed with each organisation. Business Process B04 – Business Review, was also discussed at this stage.

The documentation used and developed for this stage and the value of the activity for the organisation led to the development of the Small Business Diagnostic Tool. The Small Business Diagnostic Tool is discussed at Chapter 10. The stage 1 questionnaire is included in Appendix G.

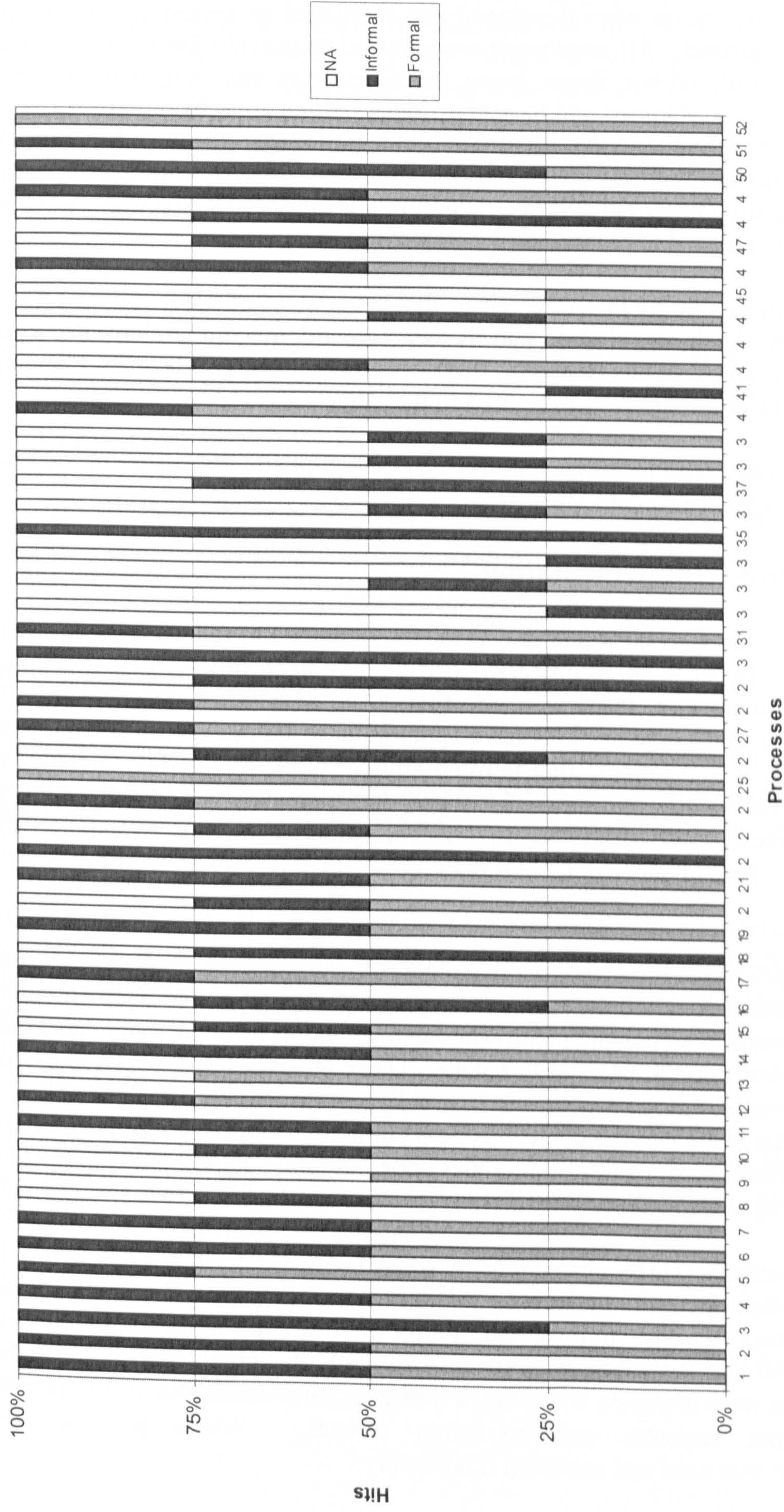


Figure 8-2, Initial diagnostics from trial implementation organisations



## 8.4 Stage 2 – Planning

Plans, policy and vision were developed and published as review documents on the organisation's intranet. All employees were invited to provide feedback on any of the documents. Brief, ad-hoc focus group meetings were encouraged to increase the amount of feedback obtained and to acknowledge participation by employees. It is the view of the author that it is important that plans, policy and vision of the organisation are reflected through their business processes. This provides an important influence on the developing organisational culture. Adopting this approach enabled the next stage to be entered with reduced apprehension by employees.

It is beyond the scope of this research to discuss content of plans, policy and vision documentation. Each organisation had its own view but this did not have any effect on the outcomes relevant to this research. Business processes B01 – Business Planning and B03 – Internal Communication were used in this stage.

The ad-hoc focus group meetings led to the introduction and discussion of the business process B16 – Quality Update Meeting.

## 8.5 Stage 3 – Implementation

Business processes were first introduced via the intranet and followed by discussion in focus groups. Because some processes had already been followed i.e. Planning and Internal Communication, these were the first. The next was Goods Inwards (O07). Most people in small organisations have some input to the goods inwards process and because of this it is a process that is often abused, particularly when it comes to the filing of Delivery Notes and other associated documentation. In order for the goods inwards process to work goods need to have been ordered correctly so Purchase Orders (C01) was the logical process to introduce next. In this way all the processes were introduced.

At this stage processes flow chart documentation was introduced as process illustrations for guidance and discussion only. There was no compulsion placed upon employees to follow the processes as documented. The documentation of the activity standards and competences was not published at this stage. Those processes that were addressed on a daily basis created the most comment. It was this discussion, combined with focus group work that instigated the cyclic business culture development discussed at Section 7.7.4. The development of this culture was apparent to the author and employees in all the participating organisations.

Individual processes were only addressed when instigated by the employees. Initial discussions often focused on records and filing. This provided an opportunity to establish systems, clarify activities, and modify the flowchart illustrations. In this way 'ownership' of the processes was established with the employees. A number of standard forms were designed at this stage where it was necessary to record information e.g. throughput registers and inspection records. Where possible existing documentation was used and modified if necessary.

The process flowchart provided the catalyst to instigate discussion on the purpose, effectiveness and efficiency of processes. From focus group discussion it became apparent that there were a number of discrepancies in the way that individuals undertook activities in the same processes. Major differences were discussed and resolved in the focus group. Smaller problems were difficult to resolve in this way for two reasons. There were many of them so discussion was very time consuming and a solution to one problem often made another problem worse. To overcome these difficulties, once the basic process flowchart was agreed, smaller problems were recorded on a non-conformance report form. This activity is discussed in the following Sections.

Experience gained during this phase has shown that it is not effective to improve one area of a business's operations, processes or practice in isolation as all operations – especially in an SME - are interconnected.

## **8.6 Stage 4 - Metrics**

Initially as the documentation for a new process was introduced the only metrics included were the basic metrics discussed at Sections 7.3 and 7.4. These were:

- Register.
- Inspection Record.
- Non-conformance Report.

Data collection, storage and analysis issues were identified. Although this research did not go into this area it was clear to the author and organisations involved that valuable information could be extracted from data collected. See business process B20 – Benchmarking. This area is further discussed at Chapter 10.

The application of ICT, if not already in use, was reviewed. Because all business process activity is covered by the GBPS it is possible to get a complete picture of possible ICT solutions. See business process B19 – ICT. This activity is discussed at Chapter 10.

## **8.7 Stage 5 - Internal Assessment**

Business Processes B04 – Business Evaluation, B05 – Management Review, B10 – Audit and B12 – Personal Development were introduced at this stage. Because of time limitation results of implementation are not yet available.

## **8.8 Stage 6 - External Assessment**

Business Process B20 – Benchmarking was introduced at this stage. Because of time limitation results of implementation are not yet available.

## 8.9 Focus Groups

Focus groups proved invaluable for three reasons. The first for obtaining research data, and the second as the key tool in the implementation methodology. Data was obtained that was used to develop the elements of the deliverables. The third and probably the most important was that they gave a strong sense of ownership to the employees and played a key part in the development of the required culture within the organisation. This culture development is discussed at Section 7.7. Focus group meeting evolved into Quality Update Meetings (B16).

The whole focus group activity was well received by employees in all participating organisations. The value of their contribution was a contributing factor in the success of the trial. Every employee had a contribution to make and was encouraged by the use made of their contribution.

## 8.10 Continuous Improvement

Information relating to non-conformance was collected via Non-conformance Report (NCR) forms. An example form is included at Figure 8-3. This form was designed to meet the requirements of ISO9000. In addition to a description of the problem the following additional information was also collected:

- Process reference.
- Person discovering problem.
- Person responsible for problem.
- Category of problem.

### Non-Conformance Report Form

Problem identified by:		Date:	
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Process/Product:	
<b>Problem:</b>	

<b>Immediate corrective action taken to resolve the problem:</b>	

Dept. responsibility:		To be investigated by:	
<b>Cause:</b>			
		Person responsible:	

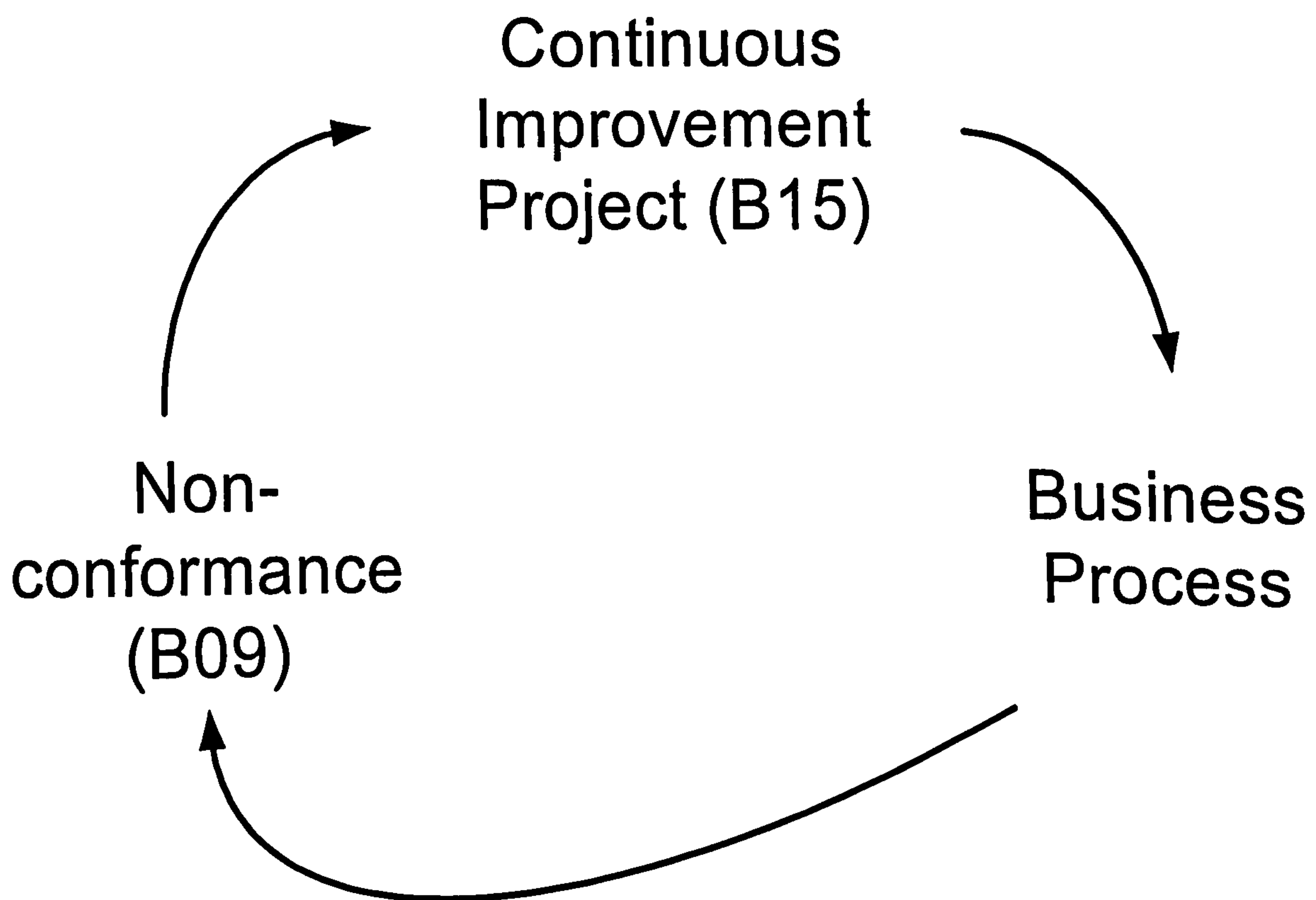
<b>Immediate preventative action:</b>	

Our product code:		NCR No.:	
Quarantine Ref. No.		Estimated cost:	
Fault code:		Closed by:	
Process code:		Date closed:	

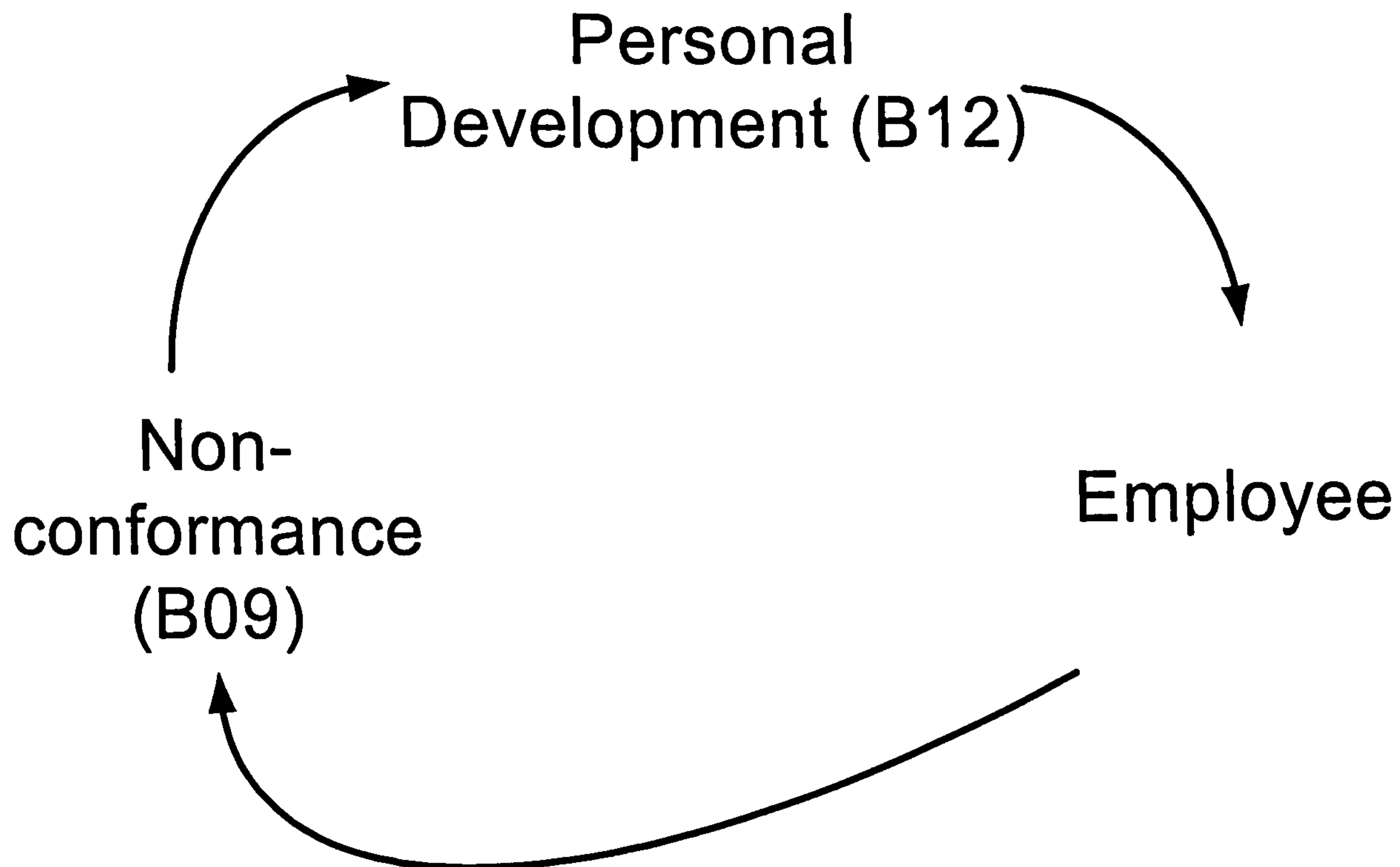
*Figure 8-3, Non-conformance Report Form*

Individual problems were resolved and the action taken recorded on the Non-conformance Report. Key information was recorded in a database. Even after a relatively short time it was possible to identify areas for improvement activity, quantitatively, from the analysis of data held in the database. This database and analysis methodology led to the development of the Continuous Improvement Framework. Continuous improvement is addressed by the following GBPS business processes: B09 – Non-conformance, B14 – Performance Appraisal, and B15 – Continuous Improvement Projects. The Continuous Improvement Framework is discussed at Chapter 10.

Figure 8-4 illustrates the improvement of processes cycle and Figure 8-5 illustrates the improvement of people cycle. The reference in brackets refers to the business processes from the GBPS that are involved.



*Figure 8-4, Continuous Improvement - Processes*



*Figure 8-5, Continuous Improvement – People*

### 8.11 Access to Learning

Because the processes were illustrated using an intranet it was possible to introduce hyperlinks to learning material direct for the process illustrations. This learning material was either a document accessible via the PC network or a hard copy document available within the organisation. This methodology for access to learning material led to the development of the Learning Framework. The Learning Framework is discussed at Chapter 10.

### 8.12 Concluding Remarks

The implementation activity was an important aspect of this research. It led to the design of the Business Growth Implementation Methodology and the development of the Business Growth Framework. As a result of Focus Groups the requirement to develop a Continuous Improvement Framework and a Learning Framework were identified. The cyclic nature of these frameworks is an important feature for sustainability. The value of using an intranet and HTML technology to promulgate information within an organisation was endorsed. The author realised early on in the research that it would be necessary to use intranet technology to promulgate this work within SMEs. The volume of paper resulting from using traditional methods would be unacceptable to them. It was necessary to have a high quality of presentation of documentation on the intranet. This was given due consideration by the author.

As a result of the continuous improvement and learning activities undertaken during this phase of the research the author has designed two software applications:

- The Continuous Improvement Framework.
- The Learning Framework.

Analysis of the initial diagnostic, illustrated at Figure 8-2, indicates that all business processes included in the GBPS are valid. Because no additional business processes were identified during this phase of the research it is indicative that the GBPS is also complete. This is further confirmed when considering the results, discussed at Section 7.8, where case study challenges are matched with all the business processes in the GBPS.

During this phase of the research consideration was given to the appropriate time in the life cycle of an organisation for the application of the Business Growth Framework. The following boundaries were considered suitable. Consideration can be given to the application of the Business Growth Framework and Implementation Methodology as early in the life of a business as possible, even prior to the formation of the business. The upper boundary, although there need be no boundary, ideally is prior to the organisation implementing an Enterprise Resources Planning (ERP) software system or equivalent. These, all encompassing, software systems can have a major impact on business processes (Ford, 2000) and if implemented in an organisation that has a poor understanding of its business processes the ERP system will not be effective and will take many hours to put right.

It became clear from focus group discussions during the implementation activities that there were two areas that were worth deeper investigation. These were the employees' perception of 'information' and 'management'. Similar responses were seen in each of the implementation organisations in these two areas. First, people did not understand what information was or where it could be recorded analysed and used. Second, management was seen solely as the concern and responsibility of the 'boss'. This meant that whenever these words were used the group 'switched off'. This made any response or discussion in these areas impossible until explanations had been provided. Once this explanation had been provided the response was as required. The attitudes of the employees in these areas changed overnight and they became regular and valuable sources of discussion during future groups.

This led that author to formulate Hypotheses 4 and 5:

***That for a small enterprise to be successful and sustainable all value adding knowledge (information) must be retained, recorded, analysed, used and focused on business and product specific processes.***

***That a better understanding of what is meant by the word 'management' is required.***

It has not been possible to take these hypotheses further during the period of this research.

The results discussed at Section 8.3, i.e. that by the end of the implementation period all 4 organisations agreed that all 52 business processes were relevant to their organisation and that no additional business processes were identified, supported Hypothesis 2.

Employees response to training provided during the implementation period supports Hypothesis 3. What is considered as 'training' is important here. It is the author's view that 'training' is something that should happen all the time. This is possible if access to learning is provided. Again what is considered as 'access to learning' is important. This is supported by a recent report by the new Learning Skills Council (LSC). The report concludes that training needs to be targeted more at enhancing the work skills of those who receive it if a real difference is to be achieved with regard to economic performance. The report also highlights the need for education and training providers to become more innovative and flexible in meeting the demands of business. (LSC 2003).



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## Chapter 9: Elaboration

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### 9.1 Synopsis

This Chapter outlines the research objectives and methodology followed and the research outcomes achieved. It discusses the research findings, experiences and observations following implementation of the Business Growth Framework and Implementation Methodology. The Business Growth Framework and Implementation Methodology are compared against similar practices in the field, to position its application against other applications of a similar nature. Key learning points are extracted, and limitations of the work are discussed. This research follows on from previous research undertaken at Cranfield University particularly in the area of SME knowledge deficit and knowledge transfer between small manufacturing enterprises (Skandalakis 1999), and information flow within SMEs (Martin, 2000) and much consideration was given to their research findings.

### 9.2 Overview of Research

This section provides an overview of the research. It outlines the research area, describes the research objectives and the methodology followed and elaborates on the research deliverables.

#### 9.2.1 Research Area

Small and medium enterprises play a significant role in economic development at the micro and macro level. In Section 3.3 it was noted that small and medium enterprises constitute 99.8% of all companies, provide more than half of business turnover in the European Union, have a key role in job creation, and are the major contributors to supply chains. Ratcliff pronounces that the economy's strength is linked to the small manufacturing company strength (Ratcliff, 1997). However, small and medium enterprises generally, i.e. not just manufacturers, seem to constantly under perform (Business Link, 2002), and half of SMEs in the UK close within the first three years of their creation (Barclays, 2001).

In Section 3.12 it was concluded that the inability of organisations to understand and manage their business processes was a key inhibitor to achieving sustainable growth for the business. In order to find a solution to this problem it was necessary to first define the set of business processes that are necessary to facilitate growth in an organisation. This set of business processes was derived at Section 5.4.

In Section 3.11 it was noted that knowledge forms a principal source of competitive advantage for any enterprise regardless of size. Knowledge is the business as much as

the customer is the business. The collective ability to accumulate knowledge, and apply it to produce new knowledge, has underpinned development (Drucker, 1993; Moralez-Gomez, 1993). Strong businesses and economies draw on deep reservoirs of know-how and expertise. The UK's competitive future lies in the Knowledge driven economy (DTI, 1998).

However, small and medium enterprises experience a scarcity of new knowledge, particularly in the area of business processes. These processes tend to have been 'handed down' or just evolve and SMEs find it difficult to analyse and make changes in this area. Smaller companies often fail to maintain coherence between continuous improvement and day-to-day management, due to a knowledge deficit and lack of time, which can imperil their sustainability and long term endurance in the business arena. Lack of knowledge can inhibit progress. Assisting small and medium enterprises to enrich their business process knowledge base through the application of a business model based upon processes, the Business Growth Enterprise Model, described in Section 7.7, could help them improve their performance. Effective and efficient business processes will make more time available for business development activities.

The purpose of this research was to develop a business growth framework and implementation methodology that could be employed to facilitate the understanding and development of businesses and process management within SMEs. The framework should also act as a catalyst to transfer knowledge amongst small and medium enterprises and external agencies in an effort to reduce the SME knowledge deficit particularly in the area of business processes and time wasted by business consultant 're-inventing the wheel' every time they visit an SME. See Figure 10-1.

The aim of the research was to develop, implement and evaluate an advanced business growth framework and implementation methodology to facilitate growth in small and medium enterprises. The framework developed uses a Generic Business Process Set, (GBPS), described at Chapter 5, to enhance individual employees understanding of business processes and to act as a template for communication, both within the organisation and with other SMEs and consultants etc., illustrated at Figure 10-1.

The Business Growth Framework is based on basic business management principles and learning, and is designed to comply with the unique nature of small sized enterprises. The application of the research is practical and involves the fields of Management of Change, Business Process Re-engineering, (BPR), Benchmarking principles, Self-Assessment, Enterprise Assessment models, knowledge acquisition and transfer and small and medium enterprises. The author targets the framework in the sector of small and medium enterprises that operate under the high Complexity and high Uncertainty typology, as described by Puttick and Gillis (1985), considering that enterprises operating under this typology are under higher jeopardy than enterprises under other typologies. An ideal time for implementation is anytime from conception to prior to the introduction of ERP systems. It is particularly applicable to relatively recently proliferation of micro businesses.

### 9.2.2 Research Conduct

The objectives of the research were identified as (see Section 1.4):

- Review and Evaluate Business Growth principles, business growth models and current growth practices.
- Identify and understand the issues small and medium enterprises face when business growth is a corporate objective.
- Establish the requirements, including metrics, for successful Business Growth.
- Develop a Business Growth Framework and quantitative Continuous Improvement Framework to help small and medium enterprises achieve Business Growth.
- Evaluate the SME Business Growth Framework and quantitative Continuous Improvement Framework in selected companies to illustrate its validity.

The objectives divided the research into three key elements:

- Literature Research.
- Business Growth Process.
- Business Growth Framework.

The first element was the literature research and review concerning business growth principles, the essence and the problems that small and medium enterprises face when they engage in growth activities. The author reviewed growth or business development initiatives available to SMEs in the United Kingdom to discover that they offered little or no practical hands on help in achieving growth for the SME sector. The Research Conduct has utilised exploratory research to provide a thorough review and evaluation of business growth principals and growth frameworks available to SMEs, while descriptive research was applied to identify and understand the issues that SMEs face when engaging in Growth related activities, as described in Section 2.2.

The second element of the research involved the development of the requirements for the process of successful small business growth, using descriptive research shown in Section 2.2.3. The development of the requirements or characteristics of the business growth process were based on the application of grounded theory, which is described in Section 2.2.5.

The third element of the research involved the realisation and implementation of a business growth framework. The framework was based on the prerequisites for business growth, which were identified in the previous element of the research, and thus involved the use of grounded theory. The implementation of the business growth framework involved the application of Focus Groups, as described in Sections 2.2.6. The principles of exploratory, explanatory, descriptive and grounded theory are

provided in Chapter 2, along with background information concerning the implementation of Focus Groups.

Qualitative and quantitative data was acquired throughout the research methodology, concerning the development, realisation, implementation and validation of the framework, as described in Section 2.2.7.

### 9.2.3 Research Output

The author has defined the characteristics of a successful Business Growth Process for SMEs, as described in Section 4.7, and developed a framework for Business Growth for smaller enterprises based on these characteristics, as described in Section 7.7. The aim of the framework was to facilitate business growth, and it was developed from 7 business standards and tools that are in common use in UK businesses.

The research objectives set out in Chapter 1 have been met. A review and evaluation of business growth principals has been conducted and is described in Chapter 3. The author identified what issues are faced by small and medium enterprises when they engage in growth activities, demonstrated in Chapters 4 and 5. The identification of the issues led to the development of the characteristics for the successful application of a business growth strategy based on effective and efficient business processes. This is described in Chapter 6. The Business Growth Framework was developed based on the predefined characteristics to provide the baseline for Business Growth in small and medium enterprises and is described in Chapter 7. The framework implementation methodology and part validation is described in Chapter 8, and discussions concerning the research are outlined in this Chapter.

The deliverables from the research are listed in Section 1.5 and consist of:

- A requirements map for successful SME Business Growth.
- Validated Frameworks and methodologies for SME Business Growth and quantitative Continuous Improvement (See Section 9.7).
- The documentation set for efficient and effective Business Process management making full use of ICT.
- Software tools to support quantitative Continuous Improvement.
- A learning methodology for implementing the new Growth Framework incorporating the new Small Firms Development Initiative, SFEDI, standards:
  - The Standard for Business Start-up.
  - The Standards for Business Support.
  - The Standards for Exploring Enterprise.
  - The Standards for Business Development.

- A small business diagnostic tool used to identify formal and informal business processes from the GBPS currently being followed by an enterprise.

The development requirements map for successful Business Growth in SMEs is illustrated at Figure 4-3 and discussed at Section 4.8, as the prerequisites for the establishment of sustainable growth activity in small and medium enterprises. The prerequisites were employed to develop the Business Growth Framework, which was validated in small and medium enterprises (See Section 9.7). The framework forms the second deliverable of this research and is described in detail in Chapter 7. It consists of 5 main elements:

- \* The Business Growth Framework.
  - The Continuous Improvement Framework. ✓
  - The Learning Framework. ✓
- \* The Business Growth Implementation Methodology.
  - The Small Business Diagnostic Tool. ✓

The documentation for the Business Growth Framework, included above, is the third deliverable and is discussed at Section 7.4. The documentation system consists of:

- GBPS Manual - The 52 business process illustrations.
- Activity Standards Manual - Rationalised requirements from the selected set of standards and tools.
- Inspection Record – Standard Form.
- Non conformance Report – Standard Form.
- Registers – Standard Forms.

ICT is used to promulgate the framework via the organisation's intranet and by links, using Hypertext Mark-up Language (HTML), to information held in databases. Implementation and validation of the Business Growth Framework is discussed at Chapter 8.

The Continuous Improvement Framework, a software tool and system for quantitative continuous improvement is discussed at Chapter 8 and Chapter 10. This is the fourth deliverable.

For the Learning Framework, the fifth deliverable a software tool and system were developed to investigate and record staff training needs. The training is based on the competences specified in the 4 SFEDI standards and is linked to the process flowcharts using HTML links.

The documentation used for Stage 1 of the Business Growth Implementation Methodology has been developed and meets the requirements of the sixth deliverable resulting in an effective diagnostic tool having been designed and developed for use with small businesses.

## 9.2.4 Research Observations

The Business Growth Implementation Methodology, described in Chapter 8, consists of 6 Stages:

- Initial Assessment.
- Planning.
- Implementation.
- Metrics.
- Internal Assessment.
- External Assessment.

The observations concerning each stage of the implementation of the Business Growth Framework are described in the following sections.

### 9.2.4.1 Stage 1, Initial Assessment

Prior to this stage the activity, its aims, etc. are explained to all members of the enterprise.

The first stage of the process incorporates the enterprise assessment stage, which is described in Section 8.3. The purpose of this stage is to collect data from the company and provide an assessment of its current business process management against the GBPS. Data is recorded on a questionnaire and any number of employees can contribute, preferably 100%. It transpired, as expected, that if more people are involved in the initial stages then future stages are less problematic.

Upon initial questioning the participant enterprises provided assurances that they operated a number of formal business processes, this fact did not live up to scrutiny. Applying the definition of 'formal' as derived in Section 3.8, a different story evolved. As expected a number of problems came to light:

- 1) The identification of business processes was difficult as a number of processes were often mixed together.
- 2) Formal process documentation was often distributed across a number of documents.
- 3) Individuals had differing views as to what activities were parts of what business process.
- 4) Quality procedures were confused with business processes.

This is a very important stage because it is the point at which the organisation first realised the gap between its current activity and that required by the GBPS. It is important that the validity of the GBPS is accepted because if it isn't then the organisation is likely to say that it will require more effort to close the gap than it is prepared to give. The task was to persuade the organisation that the benefits outweigh

the additional effort required and that the end result will mean more effective and efficient processes.

Additionally during this stage an organisation structure diagram for the enterprise was obtained or created and the same for the vision or mission statement. These two items are necessary for the next stage.

Against each of the 52 business processes in the GBPS the following information was collected:

- Are formal process instructions available? If not then:
- Is the process undertaken? If not then:
- Is the process applicable to the organisation?

In order to obtain a 'yes' against these questions a consistent answer had to be obtained from a cross section of users of the particular process within the organisation, i.e. it was not acceptable for the MD to provide answers without his views being corroborated by other members of the organisation. In this way a true position was established.

#### **9.2.4.2 Stage 2, Planning**

The documentation available and content for business plans, policy and vision varied across the 4 organisations. It was clear that understanding was limited. Although this was the case at the start, the situation was rectified as the project progressed. This was achieved without the help of the author. It was apparent that for most employees it was the first time they had had the opportunity to provide input to these documents. Their enthusiasm was encouraging for the project.

#### **9.2.4.3 Stage 3, Implementation**

By introducing process illustrations on the intranet employees were able to look at information, and comment, prior to any formal introduction. Having had time to chat informally and ask questions via the intranet chat room, apprehension was not a problem. It took longer than anticipated to introduce all 52 business processes but as the project progresses and techniques were developed then this time was reduced. It was not difficult to get employees to talk about processes. The focus groups became a rich source of feedback. It was clear that once a basic understanding of the process was achieved then employees were able to put the activities into context with their daily routine and recognise skills already obtained. "Ah! I understand that now" was a phrase that was repeated over and over again.

#### **9.2.4.4 Stage 4, Metrics**

It soon became clear that metrics were a difficult area. Because of the knowledge deficit, apparent in all the trial organisations, metrics were not introduced as a defined stage in the implementation programme. Instead, as data was clearly already being used



from processes previously formalised, it was left up to the employees to raise the issue. This was successful and it was not difficult to move onto more formal systems for data collection, storage, retrieval and analysis. Limited ICT skills within organisations meant that only simple solutions could be employed at this stage. The value of information was recognised by employees.

#### **9.2.4.5 Stage 5, Internal Assessment**

Because of the limited time period to date, little data was available for a realistic internal assessment. Nevertheless enthusiasm for the process was clearly seen in all the test organisations.

#### **9.2.4.6 Stage 6, External Assessment**

External standards were obtained by the organisations and consideration was being given to external assessment. It was the authors view that any external assessment should not be considered until at least 12 months of data has been collected and valid analysis tools established.

### **9.3 Critical Factor Compliance**

Zairi notes the criteria for the establishment of successful Best Practice sharing, and subsequently Knowledge Transfer (Zairi, 1998), sourced from ACA News, September 1995. The Critical Factors of Success have been listed for Best Practice Sharing within enterprises.

The Business Growth Framework has been developed in accordance with these factors, as shown in Table 9-1. The left column of the table lists the Knowledge Transfer Critical Success Factors and the right hand side column provides evidence of compliance against each factor.

Wathne et al (1996) suggest some key factors influencing the effectiveness of the knowledge exchange. In particular, they propose three main features, which are openness, trust and prior experience (Wathne et al 1996). For the Business Growth Framework to succeed, it is a requirement that employees must be willing to disseminate their knowledge and skills and must be receptive to new knowledge.

The element of trust, which is noted by Zairi is also considered essential in the Business Growth Framework Implementation Methodology. The author considers trust to be very important in establishing employee collaboration, as it can influence the openness of participants.

Trust	The organisation's intranet is used to promulgate all documentation giving all individuals access to the same information.
The ability to communicate clearly and with enough bandwidth to transfer meaning	The business processes are developed from standard illustrations that everyone has access too and are not difficult to understand and put into context.
A common context or language	The GBPS has been developed from standards and tools commonplace in UK enterprises. This has been reflected in their design. The same GBPS was available to all.
A reason or goal for sharing	The initial activity was to agree on plans, policy and vision. All employees will have had an input to their development.
The space to think and reflect	The Focus Group discussions and intranet chat room discussions provide individuals with the space to think, reflect and discuss with other individuals. There are no barriers in the questions that can be asked, and employees have ownership of the event.
The ability to interact with others in a non-purposeful way	Individuals that participate in the Focus Group meeting and intranet chat room discussions interact with other individuals to learn. Interactions are open and do not involve any hidden agenda or purpose.
The autonomy to share	Individuals are presented with the opportunity to share their knowledge and views but this is not a prerequisite for participation.
Local knowledge that can be transferred easily	The GBPS provides the framework that enables individuals to put their discussion into context with the activities of the organisation and confirm the understanding of others.
A control and command structure that supports knowledge sharing	A Continuous Improvement Framework has been included.
The infrastructure to support learning	A Learning Framework has been included.

*Table 9-1, Knowledge Transfer Critical Evidence of Compliance Success Factors (Zairi 1998)*

Finally, the element of prior experience is related to the ability of acquiring, using and transferring new knowledge. Cohen and Levinthal note that prior knowledge increases both the ability to store new knowledge and the ability to recall and use it (Cohen and

Levinthal 1990). Wathne et al. claims that the higher the degree of prior experience, the greater the effectiveness of knowledge transfer (Wathne et al. 1996).

The Business Growth Framework is closely linked to Total Quality Management, as its purpose is to improve enterprise performance, and it makes use of Self-Assessment and Benchmarking practices which form integral part of Total Quality management as described in Chapter 5. This is supported by Thiagarajan and Zairi who note that Benchmarking and Self-Assessment form an integral part of Total Quality process (Thiagarajan and Zairi 1997b).

Thiagarajan and Zairi have conducted a thorough review of the literature for critical factors for Total Quality Management. The identified factors are considered imperative for the success of TQM related implementations and were based on case study experiences, and supported by quality gurus and writers (Thiagarajan and Zairi 1997a, Thiagarajan and Zairi 1997b, Thiagarajan and Zairi 1997c). They stress the importance of ensuring top management commitment and actively involving the management team in a TQM initiative (Thiagarajan and Zairi 1997a). This is recognised by the Business Growth Framework characteristics. A number of the derived business processes included in the GBPS re-enforce this issue.

Moreover, they note that Total Quality Management practices succeed only if employees are actively involved in the process and if middle management does not perceive the TQM implementation as a threat to their authority and life-style (Thiagarajan and Zairi 1997a). The Business Growth Framework and Implementation Methodology involves employee participation. The issue of middle management is considered less important in small enterprises in comparison to large enterprises, as companies with below 50 employees may not have many levels in their organisational structure and have limited functionaries as described.

Thiagarajan and Zairi also stress the importance of training and education and reward and recognition for the success of TQM initiatives (Thiagarajan and Zairi 1997a). The author recognised the importance of training in the success of the Business Growth Framework, and Implementation Methodology and a skilled facilitator is required. Informal training for the enterprise employees is necessary for success. However, training was not provided to all the company employees in the participant enterprises, in the view that they would contact the process champion should any problem arises. Reward and recognition for employees are considered very important by the author, as they can form a powerful drive for participation and success. However, they are related to the implementation of the improvement activities inside the participant enterprises, and are beyond the principal focus of this research work.

Finally, they emphasise the importance of communication, by noting that effective communication could make the difference between success and failure (Thiagarajan and Zairi, 1997b). Under the Business Growth Framework, the facilitator is responsible for the communication inside the enterprises. Moreover, the participation of employees in the Business Growth Framework was well received by enterprise employees as described in Section 8.10.

## **9.4 Comparative Analysis**

In this section the Business Growth Framework will be compared against other models of Enterprise Development. Differences and similarities are outlined where relevant

### **9.4.1 Exploitation of buoyant niche markets**

There is a limit to the number of SMEs that are able to develop products that can exploit a buoyant niche market let alone sustain business growth using this approach. It certainly does work for a small number of businesses (Storey, 1998) but when the market dries up the business will be in a very vulnerable position.

### **9.4.2 External courses, e.g. University Business Schools**

The author can speak from experience and say that these courses are strong in business strategy development and scenario solutions at a strategic level but weak on implementation and day-to-day business operations. They only offer a part solution to business development that will address less than 10% of the business processes of the GBPS.

### **9.4.3 Consultants, e.g. Business Link**

Not seen as effective as a route to business development (GEM, 2001). The author has identified that a key cause of their ineffectiveness is that they all offer a different flavour to the same problem and have no tool by which they can learn from each other and offer a developed and proven solution. An example of the wide range of business diagnostic tools used by West Midlands Business Links is provided at Appendix G. This range of tools reflects the range of business development models also being used. This potentially valuable source of SME business development assistance would certainly benefit from a more consistent approach. See Figure 9-1.

### **9.4.4 Business Tools, e.g. EFQM Business Model**

Business tools are more applicable to an organisation that already has a formal structure to its business processes. That is not the case for most SMEs. Implementation will help to improve what is already there but if that is fundamentally flawed that fundamental flaw is likely to go on undetected after successful implementation of the business tool. The competitive environment in which these tools are marketed inhibits their development.

### **9.4.5 Workforce Development, e.g. IIP**

Workforce development suffers from the same basic problem as business tools. Existing business processes remain and often more are created to overcome ineffectiveness in the current set. The full range of processes is not addressed.

#### 9.4.6 Copy Exemplar, e.g. SBS

This approach can result in considerable effort being used to improve an area of the business that was already working while real problem areas are neglected. Copy exemplar can be useful if the organisation knows that all areas of business activity are already at an acceptable standard. The DTI support this approach to business development.

### 9.5 Learning Points

The principal outcome from the research is that any one of the business processes in the GBPS can be the cause of a barrier to growth therefore all business processes must be addressed. Once a basic understanding of all business processes has been achieved by all employees in an enterprise then improvement activities can start. It is only when all employees understand the full enterprise undertaking that they begin the cyclic communication and learning cultures that will drive business growth.

Providing documentation and illustrations that all employees have access to is important. This would have been difficult without HTML technology, particularly with the number of document changes in the early stages of implementation. With usage and feedback from the field the starting set of documentation will be improved so this situation will be minimised. Nevertheless it is the author's view that the task would be difficult without employing HTML technology.

The value of information, that was previously being disregarded, became apparent to the enterprises at an early stage in the implementation process. Low cost software solutions are not available to handle this information and although Microsoft Access was available the development skills necessary to create simple databases were not. This means that valuable information could be lost.

Employees must be given access to learning material. Basic business principals, identified by the SFEDI standards, are the subject areas most required. Once started the collection of learning materials can grow rapidly with little cost. Business Link and the DTI proved to be invaluable sources in this area.

### 9.6 Limitations

The author notes some limitations and risks that must be considered prior to the implementation of the Business Growth Framework:

A major limitation would be the non availability of an intranet. Although a very simple network will suffice it is crucial to implementation.

A major risk is that the organisation has no confidence in the completeness of the GBPS. That initial confidence is necessary to make the effort to start.

## 9.7 Validation

The full implementation of the business growth framework developed during this research can take several years to achieve in an SME. In large organizations a team of dedicated professional would be established for this type of project. In an SME staff have to cope with their every-day tasks as well as additional tasks of this sort. Consequently time did not permit the full validation of the framework and implementation methodology. Results achieved to date, although not quantitative, give a good indication of the value of this research.

## 9.8 Concluding Remarks

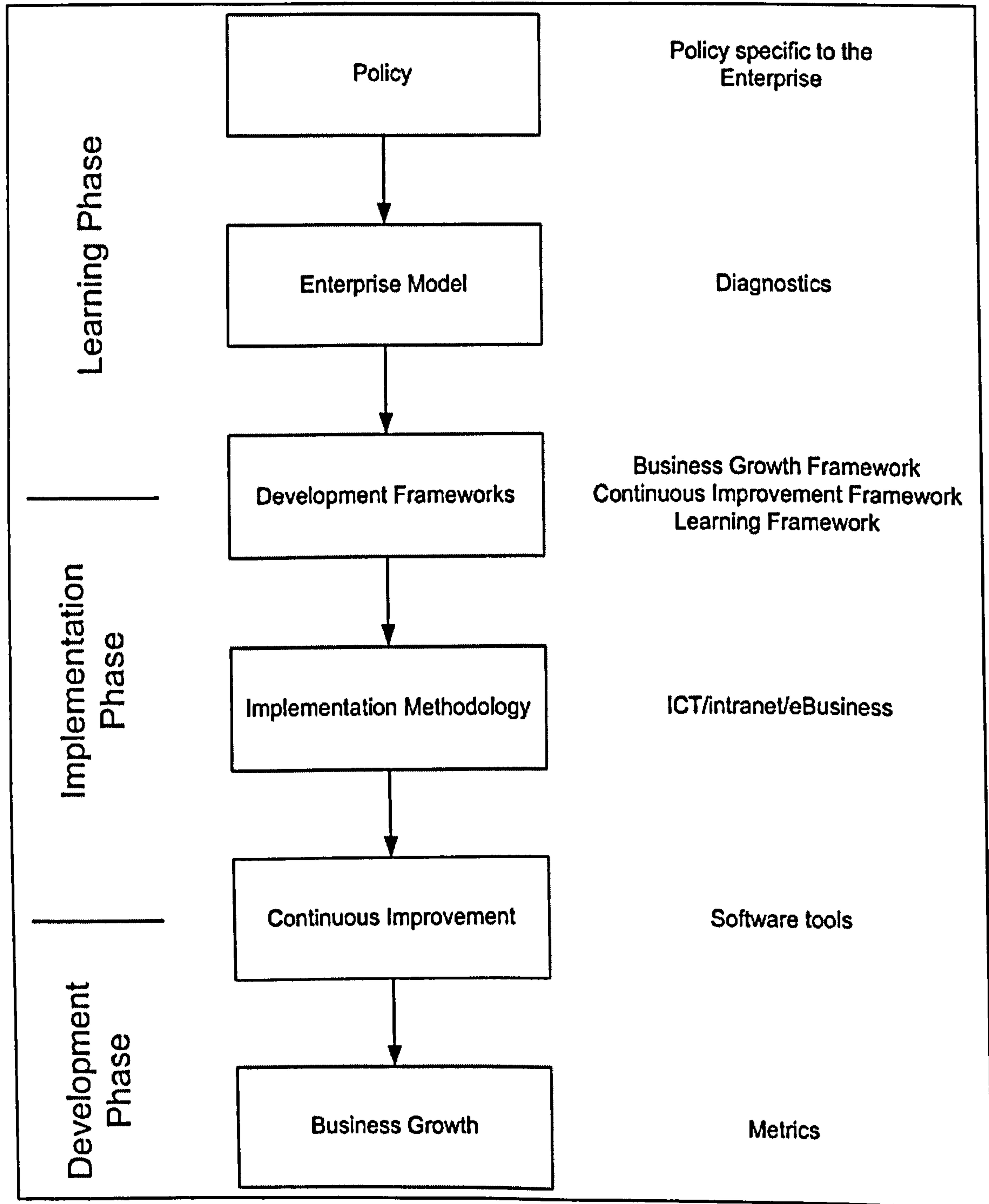
The author has conceived, developed and implemented a Business Growth Framework based on an advanced application a Generic Business Process Set to stimulate improvements in small and medium enterprises. The implementation methodology focuses on overcoming the lack of understanding of business processes which is an obstacle for small and medium enterprises, as described in Section 3.12. The framework provides a structured approach to implement good process management practices over the correct set of business processes, and was successfully applied and part validated in 4 small enterprises in Worcestershire, United Kingdom. Full validation can only be shown when the participating organisations have had time to grow.

The Business Growth Framework offers an exciting opportunity for the transformation of SMEs from 25% current good performers to a larger proportion showing good performance and sustainable growth. It provides a novel approach for Business Growth in small and medium enterprises, as enterprises learn specific skills and activities that can be implemented to improve their process and overall performance. The process involves establishing communication and learning cultures within organisations that enable enterprises to take advantage of information that is already within their organisations. It includes processes that address people, culture and infrastructure, as illustrated at Figure 7-13. Each of these three elements have been identified by this research as crucial to the business growth process.

The Enterprise Growth process is divided into 6 stages, the Initial Assessment stage, the Planning Stage, the Implementation Stage, the Metrics Stage, the Internal Assessment Stage and the External Assessment Stage, illustrated at Figure 8-1. The first stage involves the assessment of the enterprise current business process activity, and forms an introduction to business process awareness within the enterprise. The process is conducted through the use of a questionnaire listing the GBPS business processes and provides an indication of the enterprises understanding of these processes and their level of formality in undertaking the processes. The outputs of this stage are the identification of the enterprise's level of formal implementation of the GBPS business processes. The second and third stages involves the members of the enterprise gaining a deeper understanding of the GBPS and formally implementing any business processes that were not identified as being used in the first stage. The fourth stage is the continuous improvement stage where the NCR system is introduced and implemented. The fifth stage includes self-assessment. In the sixth stage external assessment is

undertaken. This can include benchmarking using, for example, the UK Benchmarking Index.

A roadmap for small business growth, derived from this research, is included at Figure 9-1.



*Figure 9-1, Roadmap for Small Business Growth*

The roadmap has three phases:

- Learning Phase

- Implementation Phase
- Development Phase

This roadmap was designed from experience gained during the implementation of the Business Growth Framework discussed at Chapter 8.



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## Chapter 10: Conclusions

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### 10.1 Synopsis

This Chapter provides an overview of the research, summarises the novelty of the work and outlines areas for future work following the research.

### 10.2 Overview

The research objectives have been met. The GBPS framework and implementation methodology have been validated (See Section 9.7).

The outcome of this thesis could be summarised as:

*A practical framework and implementation methodology to facilitate SME growth*

The author has conceived, designed, developed and implemented a Small Enterprise Business Growth Framework and Implementation Methodology based on an advanced interpretation and application of a selection of established but often badly implemented business standards and tools. The framework has been designed to stimulate improvements in Small and Medium Enterprises process management. Poor business process management was found, by this research, to be the root cause of poor growth performance in the UK SME sector. A generic business process set has been derived and defined. The Business Growth Framework and Implementation Methodology focus on overcoming the cultural and learning obstacles for small and medium enterprises. The framework provides a structured approach to business process management in small businesses thereby allowing them to make better use of examples of extract superior performance practices from companies which can be classified as better performers. This is in line with the DTI's current approach to small business development. The identification, collection, storage, retrieval and analysis of information, that has always been available in SMEs but has not been recognised as being of value, has been addressed in all business processes.

The implementation methodology makes extensive use of the change in the culture of the organisation, discussed in Section 7.7.3, to manage the change required for implementation.

The final deliverables from this research are listed at Table 10.1. The Section where they are discussed is listed in the last column of the table. Details of each deliverable can also be found at that Section.

The five key elements of this research are listed at Table 10-1. An overview of each of

these elements follows.

Ref.	Deliverables	Section
1	<b>The Business Growth Framework</b>	7
1.1	Business Growth Enterprise Model	7.7
1.2	Generic Business Process Set (GBPS)	5.5
1.3	Documentation Set	7.4
2	<b>The Continuous Improvement Framework</b>	7.7.3
2.1	Software Application	10.4
2.2	Documentation Set	10.4
3	<b>The Learning Framework</b>	7.7.2.1
3.1	Software Application	10.4
3.2	Documentation Set	10.4
4	<b>The Business Growth Framework Implementation Methodology</b>	8
4.1	Documentation Set	10.4
5	<b>The Small Business Diagnostic Tool</b>	10.5
5.1	Documentation Set	10.4
5.2	Software Application	10.4

*Table 10.1, Main Deliverables*

The design of the Generic Business Process Set (GBPS) was the first step in the development of the Business Growth Framework. In order to place the GBPS into context within an enterprise the Business Growth Enterprise Model was designed. Together with the necessary documentation these make up the Business Growth Framework. The Business Growth Framework documentation has been designed using Hypertext Mark-up Language (HTML) and the extensive use of Hyperlink Technology has been applied throughout. This technology has transformed access to information for SMEs.

The Business Growth Framework provides an organisation with the documentation for a set of generic business processes. In order for individual organisations to make maximum use of this business model the individual processes have to be tailored to suit the needs of organisation. To retain efficiency and effectiveness this tailoring should be minimal. To achieve this the author designed a Continuous Improvement Framework. Using this tool, organisations can improve the basic business processes to improve their own efficiency and effectiveness. Because analysis and improvements can be directed towards particular business processes this is an effective business development tool.

To design the Small Enterprise Growth Model and Implementation Framework, the author has identified a set of prerequisites business processes to facilitate growth in Small and Medium Enterprises, which are presented in Section 5.5, and have been based on the 7 most commonly used business standards and tool currently available. The implementation methodology is prescriptive in the early stages to focus attention on the GBPS, and becomes less prescriptive as the implementation progresses, allowing participant enterprises to learn specific adaptations to fit their particular situation. The framework was not implemented in the in-depth case study Company described in

Section 7 because access was limited to the data collection phase of this research. Upon reflection it is clear that the Framework could provide a solution to the trading environment in which the Company was operating. The Company was in segment 5 of the Bowman Clock which should point to growth but it was also in the critical area illustrated at Figure 3-4 in Section 3.5. Because of the confusion within the organisation over the Company's business processes output was low and more staff were required than could be supported by turnover. Several trial business processes were introduced and response was favourable.

This suggests that the classic vulnerability phase in the lifecycle of company growth could be addressed by the application of the Framework. In past cases this has been recognised at the 50 – 75 employee level. The author considers that signs of this impact are apparent well before this level of growth is realised, even in the case study companies at below 15 employees.

### 10.3 Novelty

The conclusions regarding the research novelty are based on the establishment of the Generic Business Process Set, the Business Growth Framework and the Implementation Methodology (Chapter 7), on the application of the Implementation Methodology (Chapter 8) and on the elaboration Chapter concerning the application of the Business Growth Framework, the Implementation Methodology and the methods employed to document, illustrate and promulgate them (Chapter 9).

In terms of the realisation of business growth, the research programme provides the following areas of novelty:

- A generic business processes set (GBPS) has been defined. This research has shown that the set of business processes defined is correct.
- The importance of culture is already well known. This research has shown how to develop the correct culture for business development and that it is a cyclic process. Culture development starts with communication.
- Learning and culture are dependant upon each other and learning will only happen if access and learning material is provided.
- Communication catalyst for culture development but for communication to be established understanding firsts has to be normalised. See Figure 10-1.
- Knowledge of ICT within the organisation is imperative if simple, low cost, development tools are to be used.

In terms of the outcomes of the research, novelty can be ascribed to the following elements of the research:

- The research demonstrated that given guidance on the correct set of Business

Processes SMEs can rapidly and enthusiastically align their activities to those business processes. The enthusiasm comes from clarity of purpose.

- The research demonstrated that using the Business Growth Framework employees could readily see their individual value. This recognition of value is the first step to self-improvement.
- The research proved that the GBPS enabled information and detail to be focused in areas of applicability and to be placed in context with other activities. In this research the examples of this are planning and policy but it is equally relevant to, for example, external input and consultancy.

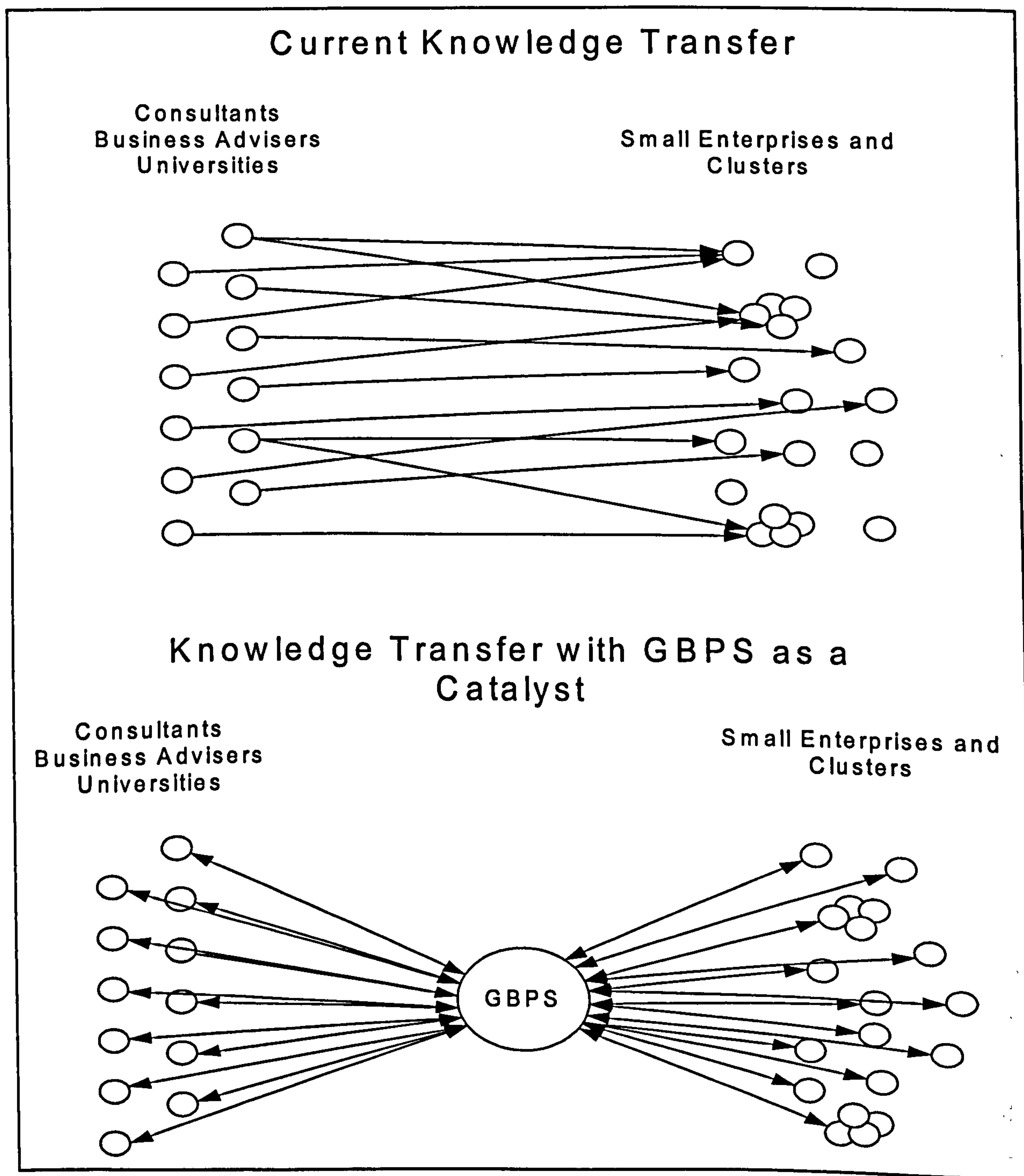


Figure 10-1, The GBPS as a Catalyst for Knowledge Transfer

## **10.4 Documentation Sets and Software Applications**

Although the documentation sets and software applications were produced for the implementation phase of this research details have not been included in the interest of brevity and because they add nothing to the theoretical and academic aspects of this research.

## **10.5 Future Work**

The further research topics suggested in the section build upon the approach suggested in this thesis.

- Entrepreneurial Start Up companies frequently emphasis the product time to market. This research shows that the business process time to market is of similar significance in terms of sustaining and growing the company. The Framework could be packaged for use in training and support for company start up programmes.
- The Framework developed is best portrayed in an intranet environment. The use of HTML and an intranet is common in larger organisations. Its use in smaller organisations to document and promulgate information is not so common. Simplified methodologies for the operation of intranets could be established to make this more feasible.
- Because a proven generic business process set is now available, a Web Site could be established to promulgate best practice that will readily be applicable to GBPS users.
- The Continuous Improvement Framework software could be further researched and developed to make Continuous Improvement an integral part of everyday business activities for SMEs.
- The Learning Framework software could be further researched and developed to enable it to be part of standard business practice. Contact has been made with SFEDI and a proposal to integrate the SFEDI standards with the GBPS model is currently being produced.
- A new National Standard for business process requirements could be established from the work done in this area during this research.
- Sector specific product process documentation and development could be undertaken using the methodology developed by this research.
- Teaching Entrepreneurship in Schools could use the GBPS. Contact has been made with Young Enterprise. A proposition to integrate the GBPS model as part of their company programme is currently being produced.

- The Small Business Diagnostic Tool could be developed to rapidly position and focus small companies in terms of product, market and process. Advantage West Midlands has proposed a development project to produce a packaged, standard diagnostic tool based on the work developed in this thesis.

An example of the confusion in the area of small business diagnostics is provided by Advantage West Midlands, the Regional Development Agency for the West Midlands, where 16 different diagnostic tools have been identified as being currently in use in the area by Business Links, See Appendix H. This is not only confusing for businesses in the area but is also confusing for Business Link consultants and hampers discussion and improvement. See Figure 10-1 above.

- Data collection, storage, retrieval and analysis via the intranet using hyperlinks into simple databases could be developed to make Continuous Improvement and Life Long learning a much simpler process to undertake.
- An ICT strategy for SMEs can developed based on the GBPS. This has not previously been possible because the full set of business processes, within the context of an organisations policies, aims and vision, could not be quantitatively visualised before.

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## References

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Adizes, I. (1988)

***Corporate Life Cycles: The Theory of How and Why Corporations Grow and Die and What to Do About it.*** Prentice Hall, December, 1988, ISBN 0131744003

Aly, M. (1997)

***Is Self Assessment (as a Powerful Tool for Total Quality Management Implementation) Suitable in the Middle East Context? The Experience of a Petrochemical Global Company.*** Total Quality Management, Vol. 8, 1997, pp 54-59

APQC, (1996)

***Process Classification Framework.*** American Productivity and Quality Center, Houston, Texas, USA, [www.apqc.org](http://www.apqc.org) 1996

Armitage, A.M.D. (2002)

***Eating the Elephant: Using Quality Awards in SMEs.*** Proceedings, 5<sup>th</sup> SMESME International Conference, Stimulating Manufacturing Excellence in Small & Medium Enterprises, pp 126-131, Danbury, May 2002, ISBN 1 900 432 39 0

Arthur Andersen, (2000)

***Not Just Peanuts.*** Arthur Andersen Report, UK, 2000

Barclays, (2001)

***Barclays Small Business Survey - Start-ups and Closures Quarter Two 2001.*** Barclays SME Market Research, Barclays Bank, UK, 2001

Barrow, C. (1993)

***The Essence of Small Business.*** Prentice Hall, London, UK, 1993

Baxter, R. (1999)

***What can you make?*** Manufacturing Engineer, UK, Vol. 78, No. 6, 1999, pp 241-244, ISSN 0956-9944

Becker, H.S. and Geer, B. (1982)

***Participant Observation: The Analysis of Qualitative Field Data.*** Field Research: A Sourcebook and Field Manual, R.G. Burgess, London, UK, George Allen and Unwin, 1982



- Bennett, R.J. and Robson, P.J.A. (2002)  
*Changing Use of External Business Advice and Government Support by SMEs in the 1990s*. Proceedings, 25<sup>th</sup> National Small Firms Conference: Competing Perspectives of Small Business and Entrepreneurship, Volume 2, pp 759-782, Brighton, November 2002, ISBN 1 901177 08 4
- Bendell, T., Boulter, L. and Hannon, P. (2000)  
*ISO9001:2000 Heading for Impact with SMEs*. Quality World, UK, Vol. 26, Issue 4, pp 12-14, April 2000, ISSN 13528769
- Bendell, T. (2002)  
*Six Sigma Analysed*. Quality World, UK, Vol. 28, Issue 4, pp 16-18, April, 2002, ISSN 13528769
- Blaxter, L., Hughes, C. et al. (1996)  
*How to Research*. Buckingham, UK, Open University Press, 1996
- Boulter, L., Bendell, T. and Stone, M. (2001)  
*SMEs Surveyed*. Quality World, UK, Vol. 27, Issue 6, pp 32-34, June, 2001, ISSN 13528769
- Bowman, C. and Faulkner, D. (1996)  
*Competitive and Corporate Strategy*. Irwin, 1996
- Broadbent, D.E. (1990)  
*Effective decisions and their verbal justification*. Philos Trans R Soc Lond Biol. 327: 493-502, 1990
- Browne, J., Sackett, P.J. and Wortmann, H. (1994)  
*Industry Requirements and Associated Research Issues in the Extended Enterprise*. Proceedings of the European Workshop on Integrated Manufacturing Systems Engineering (IMSE), Grenoble, France, Chapman and Hall, 1994
- Bryman, A. and Burgess, R. (1994)  
*Developments in Qualitative Data Analysis: An Introduction*. Analysing Qualitative Data, A. Bryman and R. Burgess, New York, USA, Routledge, 1994
- Business Link, (2002)  
*Closing the Gap 3*. Business Link Benchmarking Index Report, URN 02/345, UK, December, 2002
- Caravatta, M. (1997)  
*Conducting an Organisational Self-assessment Using the 1997 Baldrige Award Criteria*. Quality Progress, UK, Vol. 30, pp 87-91, 1997

- CASA, (2002)  
*Reinventing the Wheel: Adapting the CASA Manufacturing Enterprise Model to the Contemporary Virtual Enterprise*. International Conference on Flexible Automation and Intelligent Manufacturing, Dresden, Germany, 2002
- CBI, (1995)  
*Manufacturing Facts*. Confederation of British Industry, National Manufacturing Council, London, UK, 1995
- CBI/DTI, (1994)  
*Competitiveness - How the Best UK Companies are Winning*. CBI/DTI, UK, 1994
- Christopher, M. and McDonald, M. (1995)  
*Marketing – An Introductory Text*. Macmillan Press Limited, 1995, ISBN: 0 333 62586 2
- Codling, S. (1998)  
*Benchmarking*. Gower, Aldershot, Hampshire, UK, 1998
- Cohen, W.M. and Levinthal, D.A. (1990)  
*Absorptive Capacity: A New Perspective on Learning and Innovation*. Administrative Science Quarterly, Vol. 35, pp 128-152, 1990
- Collins, J.C. and Porras, J.I. (1998)  
*Built to Last - Successful Habits of Visionary Companies*. Century Business Books, 1998, ISBN 0 7126 7961 8
- Collins, L.A. and Smith, A.J. (2002)  
*Guiding Small Firms Towards Investors in People – A Business Link Advisory Process*. Proceedings, 25<sup>th</sup> National Small Firms Conference: Competing Perspectives of Small Business and Entrepreneurship, Volume 3, pp 1761-1777, Brighton, November 2002, ISBN 1 901177 13 0
- Commission, (1996)  
*Commission Recommendations of 3rd April 1996 Concerning the Definition of Small and Medium Sized Enterprises*. Report No. C(96) 261 Final, Brussels, Belgium, Commission of the European Communities, 1996
- Conti, T. (1997)  
*Optimising Self-Assessment*. Total Quality Management, UK, Vol. 8, 1997, pp 5-15, 1997
- CORDIS, (1998)  
*SMEs in the 5th Framework Programme*. A Joint EACRO-FEICRO Position Paper, European Community Research and Development Information Service (CORDIS), 1998

- Creech, B. (1994)  
*The Five Pillars of TQM*. New York, USA, Truman Tally Books, 1994
- Crosby, P.B. (1979)  
*Quality is Free*. McGraw-Hill, New York, 1979
- Crosby, P.B. (1984)  
*Quality Without Tears*. McGraw-Hill, New York, 1984
- Crosby, P.B. (1988)  
*The Eternally Successful Organisation*. McGraw-Hill, New York, 1988
- Crosby, P.B. (1989)  
*Lets Talk Quality*. McGraw-Hill, New York, 1989
- Crosby, P.B. (1995)  
*Quality is Still Free*. McGraw-Hill, New York, 1995
- Dale, B. and Coulambidou, L. (1995)  
*The Use of Quality Management Self-assessment in the United Kingdom: A State-of-the-Art Study*. Quality World Technical Supplement, UK, Vol.2, pp 110-118, 1995
- Daniel, F.J. (2001)  
*ISO9001:2000 - Direct Hit?* Quality World, UK, Vol. 27, Issue 9, pp 28-30, September, 2001, ISSN 13528769
- Davis, J., Khodabocus, F. et al. (1996)  
*Self Assessment: A Path to Business Excellence*. Quality World Technical Supplement, UK, Vol. 1, pp 4-11, 1996
- Deming, W.E. (1982)  
*Quality, Productivity and Competitive Position*. Cambridge, Massachusetts, USA, MIT Center for Advanced Study, 1982
- Deming, W.E. (1982a)  
*Out of the Crisis*. MIT, Cambridge, Massachusetts, USA, 1982
- Deming, W.E. (1982b)  
*Quality, Productivity and Competitive Position*. MIT, Cambridge, Massachusetts, USA, 1982
- Deming, W.E. (1993)  
*The New Economics*. MIT, Cambridge, Massachusetts, USA, 1993
- Dence, R. (1995)  
*Best Practices Benchmarking, Performance Measurement and Evaluation*. J. Holloway, J. Lewis and G. Mallory, London, UK, Sage Publications, 1995

- Denzin, N.K. and Lincoln, Y.S. (1994)  
*Entering the Field of Qualitative Research*. N.K. Denzin and Y.S. Lincoln, Thousand Oaks, California, USA, SAGE Publications, 1994
- DETR, (2000)  
*Guide to Quality Schemes and Best Value*. Department of the Environment, Transport and the Regions: London, UK, February, 2000
- Drucker, P.F. (1993)  
*Post-Industrial Society*. Oxford, UK, Butterworth-Heinemann Limited, 1993
- DTI, (1982)  
*Standards and International Competitiveness*. DTI White Paper, UK, Cmnd. 8621, July, 1982
- DTI, (1983)  
*National Quality Brochure*. DTI, UK, 1983
- DTI, (1997)  
*Competitiveness – How the best UK companies are Winning*. URN 97/961, Department of Trade and Industry, 1994, Revised November 1997
- DTI, (1998)  
*Closing the gap - The performance of UK SMEs within the United Kingdom Benchmarking Index*. DTI, UK, URN 98/969, March 1998
- DTI, (1998a)  
*Small and Medium Enterprise (SME) Definitions*. Department of Trade and Industry, UK, 1998
- DTI, (2001)  
*Process Innovation in UK Manufacturing: Best practice makes perfect. Management*. Today Best Factory Awards publication, URN 01/900, June 2001
- DTI, (2002)  
*Wining Partnerships – Building Business Competitiveness*. Fit For The Future publication, URN 02/1156, Winter 2002
- Ducq, Y., Gentil, M.H. and Doumeingts, G. (2000)  
*Use of GRAI Methodology for Quality System Design and Implementation in Accordance with the New Standard ISO9000:2000*. Proceedings, Annual Conference of Intelligent Control and Integrated Manufacturing Systems, pp 230-245, Bordeaux, France, 18<sup>th</sup>-20<sup>th</sup> September 2000. ISBN: 960 530 050 8
- EC, (1995)  
*Small and Medium-sized Enterprise: A Dynamic Source of Employment, Growth and Competitiveness in the European Union*. A Report Presented by

- the European Commission for the Madrid Council, Madrid, Spain, The European Commission, Report No. CSE(95)2087, 1995
- Edengene, (2002)  
*Corporate Venturing and Corporate Growth Survey*. Edengene Limited, UK, May, 2002
- EFQM, (1998)  
*Self-assessment Guidelines for Companies*. Brussels, Belgium, European Foundation for Quality Management, 1998
- EUREKA, (1995)  
*Factory for the Future*. EUREKA, European Commission, Brussels, Belgium, 1995
- Feigenbaum, A.V. (1991)  
*Total Quality Control*. 3rd Edition, Revised, McGraw-Hill, New York, 1991
- Fetterman, D.M. (1998)  
*Ethnography Step by Step*. Second Edition, Sage Publications Inc., 1998, ISBN 0 7619 1358 8
- Finn, M. and Porter, L.J. (1994)  
*TQM Self Assessment in the UK*. The TQM Magazine, UK, Vol. 6, 1994, pp 56-61, 1994
- Fisher, B. (2000)  
*Sharpening Process Management*. Quality World, UK, Vol. 26, Issue 7, pp 32-36, July, 2000, ISSN 13528769
- Forbes, D. (2000)  
*A Tale of Two Applications*. Quality World, UK, Vol.26, Issue 10, pp 20-21, October, 2000, ISSN 13528769
- Ford, D. (2000)  
*Beyond ERP*. Manufacturing Engineer, UK, Vol. 79, No. IEE, UK, 5, October, 2000, ISSN 0956-9944
- Foresight, (1995)  
*Technology Foresight Programme*. Office of Science and Technology, London, UK, 1995
- Fraser, P. (2001a)  
*Transfer to the Process*. Quality World, UK, Vol. 27, Issue 12, pp 38-41, December, 2001, ISSN 13528769

- Fraser, P. (2001b)  
*Contemplating the Process*. Quality World, UK, Vol. 27, Issue 7, pp 42-45,  
July, 2001, ISSN 13528769
- Fraser, P. (2002)  
*The Process of Managing - Defining a Process-based Business Management System and the Implications for ISO9001:2000*. Management and Operational Systems Limited, UK, 2002
- Fraser, S. (2002)  
*The Impact of Investors in People on Small Business Growth: Pain or Panacea?* Proceedings, 25<sup>th</sup> National Small Firms Conference: Competing Perspectives of Small Business and Entrepreneurship, Volume 2, pp 945-967, Brighton, November 2002, ISBN 1 901177 08 4
- FSB, (2000)  
*Barriers to Survival and Growth in UK Small Firms*. Report to the Federation of Small Business, UK, October, 1992
- Fuller-Love, N. (2002)  
*Management Development in Small Firms*. Proceedings, 25th National Small Firms Conference: Competing Perspectives of Small Business and Entrepreneurship, Volume 3, pp 1855, Brighton, November 2002, ISBN 1 901177 13 0
- Gavigan, J. (1996)  
*Manufacturing employment in Europe - High tech growth verses low-tech decline*. The IPTS Report, No. 02, European Commission, Joint Research Centre, Seville, March, 1996
- GEM, (2001)  
*Global Enterprise Monitor, 2001 UK Executive Report*. London Business School, UK, 2001
- Gentner, D. and Stevens, A.L. (1983)  
*Mental Models*. Lawrence Erlbaum Association, Hillsdale, New Jersey, 1983
- Gibb, A.A. (1992)  
*Key Factors in SME Growth - An Overview*. Durham University Business School, Durham, UK, Working Paper No. 9202, 1992
- Glaser, B. and Strauss, A. (1967)  
*The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, USA, Aldine, 1967
- Green, D. (2000)  
*ISO9000:2000 an Analysis*. Quality World, UK, Vol. 26, Issue 12, pp 30-33, December, 2000, ISSN 13528769

- Harrison, N.J. and Samson, D.A. (1997)  
*International Best Practice in the Adoption and Management of New Technology*. Report for the Department of Industry, Science and Tourism, Australia, July 1997, ISBN 0 642 27443
- Hertz, L. (1982)  
*In Search of a Small Business Definition: An Exploration of the Small Business Definitions in the United States, the United Kingdom, Israel and the People's Republic of China*. Washington D.C., USA, University Press of America, 1982
- Hughes, J.A., Sommerville, I., Bently, R. and Randall, D. (1993)  
*Designing with ethnography: making work visible*. *Interacting with Computers*, 5(2): 229-241, 1993
- Hutchins, D. (2001)  
*Certification - On The Road To Ruin*. *Quality World*, UK, Vol. 27, Issue 12, pp 18-20, December, 2001, ISSN 13528769
- IIP, (2000)  
*Introducing Our Six of the Best for the Millennium*. *Investors in People*, UK, Issue 16, pp 37-44, January, 2000
- IM, (2000)  
*Achieving Management Excellence - A survey of UK management development at the millennium*. The Institute of Management, UK, June 2000
- IProdE, (1989)  
*The Lucas Manufacturing Systems Engineering Handbook - Mini Guides*. The Institution of Production Engineers, UK, May, 1989, ISBN 0 85510 035 4
- Ishikawa, K. (1976)  
*Guide to Quality Control*. Asian Productivity Association, 1976
- Ishikawa, K. (1985)  
*What is Total Quality? - The Japanese Way*. (Translated by D.J. Lu), Prentice-Hall, Englewood Cliffs, New Jersey, USA, 1985
- Jackson, S. (1998)  
*Benchmarking for a First Class Supply Chain: The Post Office*. In *Global Cases in Benchmarking: Best Practice from Organisations Around the World*, Ed. R. Camp, Milwaukee, Wisconsin, USA, ASQ Quality Press, 1998
- Janesick, V.J. (1994)  
*The Dance of Qualitative Research Design: Metaphor, Methodology and Meaning*. *Handbook of Qualitative Research*, N.K. Denzin and Y.S. Lincoln, Thousand Oaks, California, UK, SAGE Publications, 1994

- Jankowicz, A.D. (1995)  
*Business Research Projects*. Second Edition, Chapman and Hall, London, UK, 1995
- Jay, J. (1998)  
**The Enterprise Network**. The Sunday Times Business Section, Page 9, 19<sup>th</sup> April 1998
- Jeanes, C. (2000)  
*Death by a 1,000 Initiatives*. Quality World, UK, Vol. 26, Issue 5, pp 24-25, May, 2000, ISSN 13528769
- Jeneson, C. (1995)  
*Benchmarking of Tandberg Data Against EFQM's Assessment Model*.  
Benchmarking - Theory and Practice, A. Rolstadas, London, UK, Chapman and Hall, 1995, pp 126-138
- Juran, J.M. (1979)  
*Quality Control Handbook*. New York, USA, McGraw Hill, 1979"
- Juran, J.M. (1980)  
*Quality Planning and Analysis: Product Development Through Use*. McGraw-Hill, New York, 1980
- Juran, J.M. (1988)  
*Juran on Planning for Quality*. The Free Press, (Macmillan), New York, 1988
- Juran, J.M. (1989)  
*Juran on Leadership for Quality: An Executive Handbook*. The Free Press (Macmillan), New York, 1989
- Juran, J.M. (1992)  
*Juran on Quality by Design*. Free Press, (Macmillan), New York, 1992
- Kaplan, R. and Norton, D. (1992)  
*The Balanced Scorecard – Measures that Drive Performance*. Havard Business Review, February 1992
- Krueger, R. (1994)  
*Focus Groups: A Practical Guide for Applied Research*. Thousand Oaks, California, USA, SAGE Publications, 1994
- Lettice, F.E. (1995)  
*Concurrent Engineering: A Team-Based Approach to Rapid Implementation*.  
PhD Thesis, The CIM Institute, School of Industrial and Manufacturing Science, Cranfield University, Bedfordshire, UK, 1995



- Levy, J.C. (1993)  
*Small and Medium Sized Manufacturing Enterprise - A Recipe for Success.*  
IEE, London, UK, 1993
- LSC, (2003)  
*Skills in England 2002.* Learning Skills Council, UK, 10 February, 2003
- Mahoney, F.X. and Thor, C.G. (1994)  
*The TQM Trilogy: Using ISO9000, the Deming Prize, and the Baldrige Award to Establish a System for Total Quality Management.* American Management Association, New York, 1994
- Martin, V.A. (2000)  
*Information Behaviour in the Customer-Focused Small Manufacturing Company.* PhD Thesis, The CIM Institute, School of Industrial and Manufacturing Science, Cranfield University, Bedfordshire, UK, 2000
- Martin, L. (2001)  
*No yoga for Eric, lifelong learning from a small firms perspective.*  
International Journal of Lifelong Education, Vol. 20, No. 6, 2001
- Martlay, H. and Addis, M. (2002)  
*Competence-based training, vocational and learning targets: some lessons for the Learning Skills Council.* Education and Training, UK, Vol. 44, Number 6, pp 250-260, 2002, ISSN 0040-0912
- Matthews, S. (2001)  
*PQASSO: A Masterstroke.* Quality World, UK, Vol.27, Issue 2, pp 26-27, February, 2001, ISSN 13528769
- McCunn, P. (1998)  
*The Balanced Scorecard..... the Eleventh Commandment.* Management Accounting (CIMA), UK, Vol. 76, No. 11, pp. 68-69, December, 1998
- McNally, K. (1994)  
*Sources of Finance for UK Venture Capital Funds: The Role of Corporate Investors.* Entrepreneurship and Regional Development, Vol. 6, No 3, 1994
- Moralez-Gomez, D. (1993)  
*Knowledge, Change and the Preservation of Progress - The Discourse on Development Should Shift Ground to Embrace Traditional Cultural Knowledge.* IDRC Reports, Vol. 21, 1993
- Nooteboom, B. (1994)  
*Innovation and Diffusion in Small Firms: Theory and Evidence.* Small Business Economics, Vol. 6, 1994, pp 327-347, 1994

- O'Donnell, J. (2002)  
*Business Link has failed to connect*. The Sunday Times Small Business Section, pp 12, UK, 20<sup>th</sup> January 2002
- Parks, R. (1998)  
*Definition of Group*. Wordsmyth English Dictionary-Thesaurus, 1998
- Payne, S.J. (1992)  
*On the mental models and cognitive artefacts*. In Rogers Y, Rutherford A and Bidy PA (Eds), *Models in the mind: Theory, perspective and applications*. Academic Press, London, UK, pp 103-118, 1992
- Pearson, D.S. (1998)  
*Developing Holistic Management*. European Workforce Development Conference, May 12th, Nottingham University, Nottingham, UK, 1998
- Peters, T.J. and Waterman, R.H. Jr. (1982)  
*In Search of Excellence*. Harper and Row, 1982
- Peters, T.J. et al. (1985)  
*A Passion for Excellence*. Random House Inc., New York, 1985
- Peters, T.J. (1988)  
*Thriving on Chaos*. Macmillan, London, UK, 1988
- Phios, (2002)  
*Process Handbook Project*. Phios Corporation and The Massachusetts Institute of Technology, Massachusetts, USA, 2002
- Powers, V.J. (1997)  
*A European Approach to Benchmarking*. Benchmarking in Practice, Vol. 6, The American Productivity and Quality Centre, 1997
- Puttick, J. and Gillis, J. (1995)  
*Factory for the Future*. Synopsis of Final Report for the Department of Trade and Industry, UK, January, 1995
- QCA, (2002)  
*Qualifications and Curriculum Authority*. The National Database of Vocational Qualifications, QCA, UK, [www.qca.org.uk](http://www.qca.org.uk) 2002
- QW, (2003)  
*Question Time - In trying to identify your management processes, what is the best way to try to understand the difference between a management process and a department process?* Quality World, UK, Vol. 29, Issue 1, January, 2003, ISSN 13528769

- Ram, M. (1999)  
*Professionals at work - Transitions in a small service firm*. Journal of Small Business and Enterprise Development, Vol. 7, Number 1, 1999
- Ratcliff, P. (1997)  
*Change Catalyst in Small Manufacturing Companies*. Engineering Management Journal, Vol. 7, 1997, pp 137-140, 1997
- Ratcliffe-Martin, V. and Sackett, P.J. (2001)  
*Information and Small Companies: Chaos with Intent*. AI & Society, Special Edition on Work Organisation, Springer-Verlag, London, UK, Vol.15, pp.22-39, 2001, ISSN 0951 5666
- Reed, D. (2002)  
*A Dose of Excellence*. Quality World, UK, Vol. 27, Issue 5, pp 30-32, August, 2002, ISSN 13528769
- Remmelink, R. and O'Hanlon, T. (2001)  
*The Excellence Adventure*. Quality World, UK, Vol. 27, Issue 5, pp 16-19, May, 2001, ISSN 13528769
- Robson, C. (1993)  
*Real World Research: A Resource for Social Scientists and Practitioner Researches*. Oxford, UK, Blackwell Publishers Limited, 1993
- Sackett, P.J. and Mason, A. (1997)  
*Beyond structured models for growth in Small and Medium sized manufacturing enterprises*. Proceedings, 4th International Conference Decision Sciences Institute, Innovation - New Products, Processes and Techniques, pp 581-583, Sydney, Australia, 20-23 July, 1997, ISBN 0-646-324691
- Sackett, P.J. and Nelder, G. (1995)  
*Managing Manufacturing Change in SMEs: A United Kingdom Position Study*. Proceedings, Vol. II, pp 129-144, Autofact, Chicago, Illinois, USA, November, 1995
- Sackett, P.J. (1994)  
*Managing Manufacturing Change in Small and Medium Sized Enterprises*. Report No. EC/4948/94, The Engineering and Physical Research Council, Swindon, UK, 1994
- Sackett, P.J. (1996)  
*Manufacturing Strategy Decision Support Tools: Linking Corporate Vision to Measures of Manufacturing Performance*. Proceedings, ASST, Concurrent Products and Process Design and Development, pp 47-67, Damascus, Syria, October 1996

- SBRC, (1992)  
*The State of British Enterprise*. Small Business Research Centre, University of Cambridge, UK, 1992
- SBS, (2000)  
*Small Business Service - Closing the Gap*. Small Business Service, DTI, UK, 2002
- SBS, (2001)  
*Top Ten Benchmarking Benefits*. The Benchmarking Index Journal, Issue 3, URN01/248, Small Business Service, DTI, UK, August, 2001
- Scase, R. (1995)  
*Employment Relations in Small Firms*. In Edwards, P.K. (Ed): Industrial Relations in Britain, Blackwell, Oxford, UK, 1995
- Sear, L. (2002)  
*Adviser Knowledge and Business Needs and Requirements: Complementary or Worlds Apart?* Proceedings, 25<sup>th</sup> National Small Firms Conference: Competing Perspectives of Small Business and Entrepreneurship, Volume 1, pp 617-640, Brighton, November 2002, ISBN 1 901177 03 3
- Shingo, S. (1986)  
*Zero Quality Control: Source, Inspection and the Poka-Yoke System*. Productivity Press, Stamford, Connecticut, USA, 1986
- Skandalakis, A. (1999)  
*Knowledge Transfer Between Small Manufacturing Enterprises*. PhD Research Thesis, Cranfield University, UK, 1999
- Spendlove, H. (1997)  
*Quality standards and survival*. Manufacturing Engineer, Vol. 76, No. 5, IEE, UK, October, 1997, ISSN 0956-9944
- Stach, et al, (2001)  
*Applying CE-Methods in Small and Medium Sized Enterprises*. Proceedings, 7th International Conference on Concurrent Enterprising: 'Engineering the Knowledge Economy through Co-operation', pp 385-393, Bremen, Germany, June, 2001, ISBN 0 85358 098 7
- Steer, F. (2002)  
*ISO 9000: A Valuable Tool not the Whole Toolbox*. ISO Management Systems, Vol. 2, No. 4, July-August, 2002 ISSN 1680-8096
- Stephenson, R. (2002)  
*Charter Mark II*. Quality World, UK, Vol. 28, Issue 11, pp 44-45, November, 2002, ISSN 13528769

- Storey, D. J. (1996)  
*The Ten Percenters: Fastest Growing SMEs in Great Britain*. Report No. 1, Deloitte and Touche, UK, pp. 18, UK, September, 1996
- Storey, D.J. (1997)  
*The Ten Percenters - Second Report on Fast Growing SMEs in Great Britain*. Deloitte and Touche, Tohmatsu International, UK, pp. 32, October, 1997
- Storey, D. J. (1998)  
*The Ten Percenters: Fastest Growing SMEs in Great Britain*. Report No.3, Deloitte and Touche, UK, pp. 24 1998
- Strauss, A. and Corbin, J. (1990)  
*Basic of Qualitative Research*. Newbury Park, California, USA, SAGE Publications, 1990
- Strauss, A. and Corbin, J. (1994)  
*Grounded Theory Methodology: An Overview*. Handbook of Qualitative Research, N. Denzin and Y.S. Lincoln, Thousand Oaks, California, USA, SAGE Publications, 1994
- Suchman, L. (1987)  
*Plans and situated actions: The problem of human-machine communication*. Cambridge University Press, New York, USA, 1987
- Taguchi, G. (1985)  
*Systems of Experimental Design*. Unipub Kraus International Publications, 1985
- Thiagarajan, T. and Zairi, M. (1997a)  
*A Review of Total Quality Management in Practice: Understanding the Fundamentals Through Examples of Best Practice Applications – Part I*. The TQM Magazine 9(4), pp 270-286, 1997
- Thiagarajan, T. and Zairi, M. (1997b)  
*A Review of Total Quality Management in Practice: Understanding the Fundamentals Through Examples of Best Practice Applications – Part I I*. The TQM Magazine 9(5), pp 344-356, 1997
- Thiagarajan, T. and Zairi, M. (1997c)  
*A Review of Total Quality Management in Practice: Understanding the Fundamentals Through Examples of Best Practice Applications – Part III*. The TQM Magazine 9(6), pp 414-417, 1997
- Thompson, J. and Simmons, P. (1997)  
*Carving up the Business Excellence Model in a Small Firm*. Quality World, UK, Vol. 23, Issue 4, pp 274-277, April, 1997, ISSN 13528769

- Tricker, R. (2001)  
*One Size Fits All*. Quality World, UK, Vol. 27, Issue 11, pp 36-38, November, 2001, ISSN 13528769
- Trochim, W.M.K. (1997)  
*Comparing Qualitative and Quantitative Methods*. Bill Trochim Centre for Social Research Methods, UK, 1997
- Warnecke, H-J. (1993)  
*The Fractal Company: A Revolution in Corporate Culture*. Springer - Verlag, Berlin, Germany, 1993, ISBN 3-540-56537-X
- Waters, J. (2001)  
*Engineering Business Processes and Performance Measurement System Towards the Development of a Business Process Management System*. MSc Thesis, Cranfield University, UK, 2001
- Wathne, K., et. al. (1996)  
*Towards a Theory of Knowledge Transfer in a Cooperative Context*. In *Managing Knowledge – Perspectives on Co-operation and Competition*, eds. G. von Krogh and J. Roos, London, UK, Sage Publications, 1996
- Watt, B. (2002a)  
*Is TQM a religion?* Quality World, UK, Vol.28, Issue 4, pp 34-38, April, 2002, ISSN 13528769
- Watt, B. (2002b)  
*Is TQM a religion? Part Two*. Quality World, UK, Vol.28, Issue 5, pp 38-41, May, 2002, ISSN 13528769
- WWWebster, (1998a)  
*Definition of Data*.  
<http://www.mw.com/cgi-bin/dictionary?book=Dictionary&va=information>  
Merriam-Webster OnLine"
- Weimershirch, A. and George, S. (1994)  
*Total Quality Management: Strategies and Techniques Proven at Today's Most Successful Companies*. John Wiley and Sons, New York, USA, 1994
- Whyman, M. (1999)  
*EUREKA! ISO9000 need not be the enemy of innovation*. Quality World, UK, Vol. 24, Issue 1, pp 46-48, January, 1999, ISSN 13528769
- Wiele, T.V., Dale, B., et al. (1995)  
*State-of-the-art Study on Self Assessment*. The TQM Magazine, UK, Vol. 4, pp 13-17, 1995

Zairi, M. and Youssef, M.A. (1995)

*Benchmarking Critical Factors for TQM*. Benchmarking for Quality Management and Technology, Vol. 2, pp 5-20, 1995

Zairi, M. (1998)

*Examining Whether You Have the Culture for Benchmarking*. The European Best Practice Benchmarking Award, The International Arena, 14-15 October, Cardiff, UK, 1998

Zaremba, D. and Crew, T. (1995)

*Increasing Involvement in Self-Assessment: The Royal Mail Approach*. The TQM Magazine, UK, Vol. 7, pp 29-32, 1995

Zikmund, W.G. (1997)

*Business Research Methods*. The Dryden Press, Harcourt Brace College Publications, Forth Worth, Texas, USA, 1997

**Appendix A**

**Hypotheses Developed During This Research**

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## Hypotheses:

1. That a key barrier to small and medium enterprise growth is the failure of the business to identify and manage business processes.
2. That there is a minimum set of business processes, the Generic Business Process Set (GBPS), a small and medium size enterprise must implement as a prerequisite to long-term success and sustainability.
3. That for a small enterprise to be sustainable and achieve growth, the full potential of **all** employees must be realised, developed, utilised and focused on business and product specific processes.
4. That for a small and medium size enterprise to be successful and sustainable, all value adding knowledge must be retained, recorded, analysed, used and focused on business and product specific processes.
5. That a better understanding of what is meant by the word 'management' is required.

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## **Appendix B**

### **Case Study Challenges to Growth - Banners**

## Banner Headlines

Netica drives for expansion in selling cars over the Net.

Cutting the old-school ties.

Customers demand the best.

Managing in a goldfish bowl.

How to stay forever young.

Salesmen seek fresh fields.

Fighting off growing pains.

The ABC of pampering.

New hands take the wheel.

Boffin's brave new world.

Terrapin fights to right itself.

Growing in a crowded world.

Tall order for pizza company.

Into the euro twilight zone.

Selling without a sales force.

Aerial battle over high-flying pound.

Knowing when to let go.

Skills gap threatens nice little earner.

Instrument maker hits a high note with overseas expansion.

Keeping the customers satisfied.

Researchers don't miss the point.

Facing up to a clash of cultures.

Hotel feels the muscles from Brussels.

Turning hot air into millions.

Unravelling the trouble with textiles.

Bookseller marks its place in publishing's next chapter.

Upstart online car retailer aims for the fast lane.

Designer spoilt for choice.

Wrestling with politicians.

Putting sales into motion.  
Survival of the fittest.  
Challenge of going global.  
Challenge of a virtual company.  
Toymaker wants to play global game.  
Keeping up with the pack.  
Meeting the challenge of thinking big.  
Challenge of the Net age.  
Boating partners face stern test.  
Help suppliers catch the growth wave.  
Fighting in the trenches to cut costs.  
Pitta king rises above cheaper rivals.  
Ad men struggle to sell themselves.  
Finding the right prescription for a float.  
Where soul searching never stops.  
Ambitious restaurateur won't sell stake.  
High flyers can't manage on their own.  
Net pioneers search for a market.  
Sauce maker climbs on gravy train.  
Taxman presses printer's profits.  
Coping with the tide of red tape.  
Move up market or return to sender.  
Growing pains hit media buyer's profits.  
Caterer seeks recipe for tasty growth.  
Coping with the overheated pound.  
The pains of growing up in a hurry.  
Web of competition traps bookseller.  
Mobile-phone broker calls for help.  
Budgeting for a brand new image.  
Internet service seeks jump-start.  
Recipes for a healthier brand image.

Online bookie bets on staying ahead.  
Keyboard fails to tap true potential.  
Engineers must bridge skills gap.  
Property firm builds world brand.  
Surviving on industry's cutting edge.  
From invention to bottom-line.  
Teaching old dogs new tricks helps plug IT skills gap.  
Transport headache forces manufacturer into slow lane.  
Sound advice helped car data firm rise to Internet challenge.  
Lava lamp maker aims to put Asian copycats in the shade.  
Teletubbies maker seeks funds for expansion.  
Environmental demands turn up heat on foundry.  
Digital advertising media spell bad news for printers.  
High-speed growth forces hard decisions on software firm.  
Marketing firm changes image on the advice of our experts.  
Financial adviser struggles to escape dotcom downturn.  
Galleries brush up on fine art of selling paintings online.  
Expansion dilemma dogs boss who just will not give up control.  
Maker of military decorations seeks new markets to conquer.  
Aerospace supplier seeks to take off by forging alliances.  
Haulage network changes culture to roll into Europe.  
Agricultural supplier remains unbowed by crisis in farming.  
Cut-price sandwich chain needs to beef up service.  
Driving to be in the lead: a tale of two innovators.  
Read all about it: magazine boss who just can't let go.  
Travelling too light in a tough holiday market.  
Directors cannot live up to owner's great expectations.  
Luxury car seat maker must sew up additional markets.  
Currency firm drives to expand beyond motor and boat trade.  
E-Mail entrepreneur needs to get his message to the market.  
Founder cannot let reins go as firm's success stacks up.

Manufacturing's decline puts commercial laundry in a spin.  
Water sportswear firm aims to reach crest of the wave.  
Multilingual jobs agency has its work cut out.  
Soft drink profit will dry up unless firm keeps expanding.  
Gardeners need cash to blossom.  
Export: a risk worth taking.  
Kitchen firm needs a recipe for rolling out a national brand.  
Computer games firm tries to score with expansion.  
Electrical goods retailer uses Internet to expand nationwide.  
Private sector can help NHS care better for mentally ill.  
Software sales challenge.  
Organic grower digs deep for help.  
TV ad maker needs a break.  
Data firm aims for expansion after success with junk mail.  
Sweet dreams as party bed is exported back to America.  
Flying through the storm.  
Minnow making the tills ring.  
Shirt maker measures up for selling over the Internet.  
Cereal maker faces crunch as supermarkets go global.  
Satellite technology drives car parts firm off course.  
Race to bring e-commerce buyers and sellers together.  
Education firm learns how to become a global player.  
Photographic company aiming to develop with dot com orders.  
Pioneer business broadcaster must expand to fulfil potential.  
Galleries brush up on fine art of selling paintings online.  
After the binge, Cobra Beer struggles to see the future.  
Reliant looks for signposts as Robin comes to end of road.  
Helping local communities does firms a power of good.  
Web manager hits barrier on road to worldwide expansion.  
Can a firm raise its profile without marketing experts?  
Lack of fresh finance leaves franchises open to copycats.

Video link distributor must look at the bigger picture.  
Get back to basics and start again when chips are down.  
Pioneers hack path through continental red tape jungle.  
Uphill struggle for ski travel company that must diversify.  
Dotcom collapse forces ISPs to look to e-mail for survival.  
Home nursing service seeks remedy for its low profile.  
Computer network suppliers seek expansion programme.  
Fresh breath of management needed for mouthwash firm.  
Helping local communities does firms a power of good.  
Chic maternity wear suffers as pregnancy goes out of fashion.  
Travel operator must gear up for leap into the big league.  
Golf club maker struggles to improve currency handicap.  
Internet contact lens retailer pokes opticians in the eye.  
Events manager plots move upmarket to revive profits.  
Electronics group cries out for regulations to be enforced.  
Manager struggles to control rapidly accelerating dotcom.  
Tour pioneer seeks strategies to survive the summer slump.  
Textile makers must cut their cloth to suit the 21st century.  
Covent Garden dismisses law on recycling as a load of rubbish.  
Growing pains cause concern at medical equipment maker.  
Trendy restaurateur seeks recipe for worldwide brand.  
To split or not to split - that is the question for event manager.  
Firms need to be less retiring about stakeholder pensions.  
Box finds a great invention is no guarantee of success.



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## **Appendix C**

### **Case Study Challenges to Growth**

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## Challenges to Growth

1. To capture a good market share.
2. Short of expansion capital and the right staff.
3. Faces competitive threats from bigger and well-branded businesses.
4. Its managers constantly have to juggle between focusing on strategy and dealing with the day-to-day issues.
5. Falling pupil numbers threaten the future of this school. Fee income is not covering costs, and state support for assisted places is fading fast.
6. Management is in the hands of a voluntary board of governors and a headmistress of the old school.
7. The school must decide whether going coeducational will increase or decrease student numbers.
8. Admitting pupils of all ability levels weakens its standing in the school league tables. It needs to market itself more effectively in a highly competitive market.
9. It must find ways to strengthen its niche position against giants such as Thomson without compromising its quality or diluting its brand.
10. It has to assess whether diversification into long-haul holidays can be successfully managed or will undermine the business.
11. It has to manage the diversification process against a background of volatile exchange rates that are a key determinant of profitability.
12. It must decide whether it can maximise value by staying independent, or by selling to a larger rival.
13. To make the project work, The Words Group has first to ensure that its staff have 'bought in' to the policy of transparency. Because of the extent of the change required, this may be difficult.
14. The programme must increase client satisfaction. Unless staff commitment is total, clients may be alienated rather than attracted.
15. The downside is enormous. Having attempted to switch to transparency, it will be very difficult to turn the clock back if it fails.
16. Unless Words establishes the system well, it may find a rival learns from mistakes and steals a march on it.

17. Text 100 has grown fast by attracting ambitious young staff. But its global business structure's needs are increasingly at odds with its liberal culture. The company must reconcile its soft, people-centred culture with a need for firmer management discipline.
18. Encouragement for staff to change and move must be balanced with clients' needs for stability.
19. Staff, while acting as independent entrepreneurs running start-up businesses, must remain tied in to the group.
20. The company must ensure that generous personal development programmes cause no disruption and problems with clients.
21. The IT market is changing rapidly: EMS needs to establish credibility with supermarkets, which will soon account for a large proportion of IT sales.
22. The company plans to diversify into sales of mobile phones and expand its service by offering "relationship marketing" through telephone services. It must diversify successfully without undermining the quality of its core business or squandering its resources.
23. EMS must solve growing problems with its rural location, which limits the availability of skilled staff.
24. The company is expanding fast but must retain a small business culture to maintain its competitive edge.
25. The more GSM grows, the greater the pressure on its determination culturally to "stay small." It must find innovative ways to reconcile an apparent contradiction in terms.
26. Subdivision of factories and product lines can only go so far or the developed structure will become unwieldy and fragmented, defeating the object for which it was conceived.
27. GSM must get ever closer to big clients without taking on their large company ethos.
28. The company has to cut costs in a business losing approximately £2m pa and restore the reputation of a debased brand name.
29. Maintain the commitment of ground staff and customers through a difficult period of company redirection.

30. Roll out the Champneys health club model to a network of European financial capitals.
31. Explore ways of exploiting the brand name to generate new business, whether through franchising management contracts or merchandising.
32. The family owned company has been selling the same core product for almost 40 years.
33. But market conditions are changing rapidly and the firm's founder is nearing retirement.
34. A smooth management transition from father to son must be made.
35. The company needs to stimulate demand for its more expensive, new generation sports car.
36. The production process must be protected from disruptions to supply from numerous small suppliers.
37. Establish a dominant position in America.
38. Set up a one-stop shop for pharmaceutical companies or research institutions seeking drugs development services. If OM does not fill a technology gap, someone else will.
39. Ally with a global player with a worldwide distribution network.
40. Make sure IT systems are embedded in corporate structures of main customers, the pharmaceutical companies, and that they are so comprehensive and effective that there is no incentive for them to migrate to another system.
41. Restore consistent profitability after years of losses, and refresh and revitalise an ageing workforce.
42. Develop a customer focused marketing strategy possibly involving a change of brand.
43. Improve industry awareness of big changes in construction technologies. Foster strategic alliances with businesses in complementary areas.
44. Face up to the issues arising from majority control in the hands of one extended family.
45. To compete as a small niche player in a market dominated by globalisation of its competitors and mergers of its clients.

46. To diversify core activity so that it includes not just advertising but also the growth area of brand consultancy.
47. To refinance for growth.
48. Daily sales volumes vary enormously and are often unpredictable.
49. Customer service suffers when sales are particularly high or low.
50. There is a huge turnover among the part time staff.
51. Network expansion plans are hindered by difficulties recruiting full time managers.
52. Protecting itself against adverse euro sterling movements.
53. Responding to new competition at home once Britain joins euro.
54. Developing a pan European supply base.
55. Finding the best currency in which to report and measure business performance.
56. It wants to expand without the costs of new business development.
57. Managers are not comfortable with the uncertainties of sales activity.
58. Strength in customer focus and production are matched by weakness in marketing.
59. Maintain and develop export markets in the face of the strong pound.
60. Compete with cheap imports to the domestic market.
61. Prepare for the arrival of the euro.
62. Conduct market research to identify new opportunities, then boost R&D to make its products the market leaders.
63. Restructuring the company's management to reduce central control.
64. Achieving a better balance between creative ideas and implementation.
65. Developing a structure that allows the founder to combine strategic control with hands off management.
66. Recruit sufficient skilled information technology staff to develop new products.
67. Avoid being distracted from core product by constant flow of new opportunities.
68. Cope with key customers' short term needs dictating business strategy.
69. To diversify away from its home market and become truly global.
70. To have a manufacturing base of its own in China.
71. To overturn the unjust tax treatment of smaller companies planning to set up overseas factories.

72. Improve order handling and delivery to halt customer dissatisfaction.
73. Diversify to offset seasonal demand patterns and spread the risk.
74. Devise ways of making products more price-competitive and avoid being undercut on price by superficially similar rival offerings.
75. Control spending when a lot of money has to be spent on research and development before seeing significant revenues.
76. Develop organisational structures to manage rapid growth.
77. Establish Powderject as a brand that will survive beyond the expiry of its patents.
78. Building a strong position in a fragmented but fast changing global market.
79. Managing new company acquisitions in other countries.
80. Persuading staff in newly acquired companies to adopt CFS's corporate culture.
81. Offsetting the extra personnel costs resulting from the European Union's working time directive by improving the hotel's overall efficiency.
82. Improving staff retention in the face of increasing local competition.
83. Planning ahead despite ambiguity of legislation.
84. Change the company from a service provider to a manufacturer.
85. Develop a range of standard products to take the place of work on one-off special.
86. Make investment in the latest technology pay by establishing the most efficient working practices.
87. Avoiding knee-jerk response to current crisis in the retail and textile sectors.
88. Achieving a balance between domestic and overseas production.
89. Increasing margins by modernising machinery and work practices.
90. Managing pessimistic investor expectations of the UK textile industry.
91. To improve margins.
92. To strengthen its brand outside Scotland.
93. To position the company for eventual rationalisation of the book market.
94. Convincing motorists to buy cars online.
95. Overcoming opposition from manufacturers and franchised dealers.
96. Competing against more familiar brand names.

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97. It has to recruit a manager for the key job of running the new business.  
Candidates are hard to find.
  98. It must manage the diversification without diluting its commitment to its core activity.
  99. It must overcome problems in hiring suitable designers for the fast-growing core.
  100. Peter Matthews has to make the transition from hands on entrepreneur to strategic manager, without losing his spirit of enterprise.
  101. The economic case for rail is unclear until tax rates are announced.
  102. There are not enough people or wagons for rail to work efficiently for several years.
  103. Previous diversification has exposed weakness.
  104. Hesitation in committing to rail could expose it to initiatives from rivals.
  105. It must be prepared for the lift off of the consumer market in video communications.
  106. It must position itself to compete effectively with the cheaper systems that will emerge from the Far East.
  107. It must maintain its competitive edge against bigger rivals through continual innovation in cutting edge technology.
  108. Increasing numbers of manufacturers are selling direct, squeezing Forza's margins.
  109. The market is consolidating, giving greater power to fewer purchasers.
  110. Forza is vulnerable to changes in the ownership of suppliers and their distribution.
  111. Its big customers want to move from national to global sourcing. It is more than 90% concentrated in the UK, so has to build an international network that can supply them or it will ultimately lose their business.
  112. Speed is of the essence: it has to establish a global supply infrastructure by the year 2000. So it has rapidly to identify suitable acquisitions and execute those deals.
  113. At the same time, customers want it to expand its remit to become a service provider, managing relationships with smaller suppliers on their behalf.



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114. It has to do all this while maintaining profits growth in the face of increasing pressure on prices and margins.
  115. Managing an international sales network over which it has no direct control.
  116. Maintaining brand identity when client relationships are handled by third parties.
  117. Deciding on the best sources of extra investment to sustain sales growth.
  118. Manage volatility in an industry where the average life of a product is nine months.
  119. Expand without compromising core entrepreneurial values.
  120. Compete in 'techno toys' without becoming an engineering led company.
  121. The firm aims to expand into the contract recruitment area, but this requires large amounts of cash upfront.
  122. It needs to build the management to support growth and enable the founders to look at the bigger picture.
  123. It has to retain key sales staff.
  124. To move from being a small entrepreneurial company to a bigger professionally run organisation.
  125. To achieve global reach from a small company base.
  126. To create a network of field sales engineers who will generate growth at low cost.
  127. Immediate availability of information via the World Wide Web devalues its core product.
  128. Now that data are a relatively cheap commodity, Jato must quickly add further value to its services. It is not enough simply to transfer its online information service onto the Internet.
  129. Business use of Intranets means ever-growing numbers of people expect to use the information supplied by Jato. Everyone wants to use the data in a different way, so the services must become more sophisticated and versatile.
  130. The pressure to make these changes coincide with a desire to exploit other opportunities for using Jato's data, but management resources are thinly spread across the world.

131. The success of the holiday consortium is hampered by members' conflicting motives.
132. Fiercely independent members are unwilling to relinquish power to the group.
133. The group's holiday prices appear to offer poor value because they are all-inclusive.
134. Money is not available for long-term investment in building market awareness.
135. Develop a supplier base that can keep pace with the increasing volume of demand as well as its variability.
136. Ensure that suppliers grow with the company through quality order-processing and distribution systems.
137. Manage the financial exposure to a supplier base that stretches across 10 countries.
138. Cut the costs between the factory gate and the sites where its products are used.
139. Reconcile a one-week order cycle with a three-month production cycle without tying up capital stock.
140. Turn customer's long-term rationalisation strategies into an opportunity rather than a threat.
141. Keep growing in a flatbread market that appears to be approaching a plateau.
142. Resist pressure on prices by providing services, not just products, to customers.
143. Encourage competitors to survive through innovation, not price-cutting.
144. Persuade potential clients to adopt the fundamental business changes the agency advocates.
145. Gain the trust of big companies reluctant to consider a small agency.
146. Reduce the risk of losing business because of its small customer base.
147. To float at the end of 2000 CP has to decide whether to cut investment to drive up profits or to reinvest.

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148. To convince the City that the high growth potential from reinvestment is better than steadily growing profits.
  149. To find how best to finance acquisitions or development.
  150. Complete the firm's transformation to an upmarket provider of services.
  151. Find new growth areas as the markets for shoe repairs and key cutting become saturated.
  152. Ensure that craftsmen staff are also able to offer the highest quality of customer service.
  153. Raise capital to invest in a new chain of London wine bars.
  154. Increase turnover at a twenty year old traditional English restaurant.
  155. Reconcile a desire for growth with a need to retain control.
  156. Change from a virtual company with minimal overheads into a more structured business.
  157. Relinquish control over management of the existing business.
  158. Maintain business growth through diversification.
  159. Educate potential customers to their need for its new Internet-based application services.
  160. Grow big fast enough to take advantage of an extremely dynamic market.
  161. Reduce the risk that its products will be copied by bigger rivals.
  162. Establish partnerships with retailers in a sector where contracts are rare.
  163. Change business focus while maintaining the commitment of existing companies in the group.
  164. Tax allowances on new machines are too small to take account of plant that is obsolete in 18 months.
  165. Accounts conceal underlying profitability.
  166. Prices for digital printing are falling.
  167. Keep pace with the speed and complexity of new legislation.
  168. Develop communication and training programmes to ensure that staff and clients assimilate regulatory changes.
  169. Maintain focus on the core business while ensuring compliance with new legislation.

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170. Changing the focus of business operations when the need to change is not yet urgent.
  171. Overcoming perceptions that door-to door delivery services are crude and low value.
  172. Developing new services to compete with more sophisticated marketing media.
  173. Fierce price competition in a highly fragmented market.
  174. Spiralling wages and higher expectations increase costs.
  175. Clients expect more services for less money.
  176. Resisting pressure towards standardisation in the food services industry.
  177. Attracting and retaining talented entrepreneurial chefs in a tight labour market.
  178. Ensuring that the company's standards are maintained across a highly decentralised organisation.
  179. Increase productivity by between 30% and 50% to combat the pressure on prices.
  180. Develop a strategy for buying materials and components at "world best prices".
  181. Create strategic alliances to achieve greater buying power and penetrate new markets in
  182. Europe and America.
  183. Change company's top-heavy decision making process.
  184. Resolve conflict between technological advance and working relationships.
  185. Retain the small business "can do" work ethos.
  186. E-commerce threatens its revenue stream.
  187. It lacks the resources to compete in a price war with rival booksellers.
  188. Investment in a new web site must be recouped quickly.
  189. It has to compete against aggressive discounting by the mobile phone networks.
  190. It must get Oftel, the regulatory body, to prevent unfair competition.
  191. It must keep its reputation as an impartial broker.

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192. Creating the image of a top brand on a tiny budget.
  193. Establishing a market niche that is less vulnerable to price competition.
  194. Becoming less dependent on the loyalty of existing customers.
  195. Abandon its strategy of building value and achieve profitability immediately.
  196. Establish a network of virtual salesmen working only on commission to keep overheads down.
  197. Become one of the net's dominant motoring channels.
  198. Modernise its image without the resources enjoyed by larger rivals and without damaging its commitment to ethical organic food production.
  199. Establish proper management systems.
  200. Cut back its product range and number of suppliers.
  201. Making its brand known to gamblers around the world.
  202. Attracting high-calibre management and directors.
  203. Capitalising on its British credentials.
  204. Turning innovative design into commercial success.
  205. Marketing to a tightly defined global market.
  206. Reconciling high moral principles with commercial needs.
  207. Attract high-calibre graduate engineers although these are in short supply.
  208. Rebuild its overseas work, which it has run down to focus on Britain.
  209. Decide whether to commit funds to sponsoring students because of the slump in engineering courses.
  210. Build an upmarket international brand for residential property.
  211. Roll out the concept through joint ventures that are profitable but do not compromise the brand.
  212. Build systems to ensure quality and consistency across national boundaries.
  213. Persuade customers that the company is capable of taking on some of the higher-value work that is traditionally done in-house.
  214. Replace declining low-value metal-bashing work with new higher-value contracts.

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215. Concentrate on improving profitability.
  216. Bypassing retailers and interesting consumers directly in its products.
  217. Targeting countries with a more eco-friendly bias.
  218. Finding the right big brother to create geographical growth.
  219. Meritec and Dataskill need to overcome the reluctance of big clients to deal with small IT suppliers, grow without hurting their flexibility or reputation and hire sufficiently skilled IT staff.
  220. Wombwell Foundry should use technology to boost profits and improve the age mix and skills of its workforce.
  221. Cut transport costs, which have grown to 3.8% of domestic sales and 7.3% of export sales.
  222. Cut the cost of packaging.
  223. Reduce delays in delivery.
  224. Reduce the increase of goods going astray during delivery.
  225. Make sure that all distribution costs are passed on to customers.
  226. Establish a spin-off business that quickly builds a global presence.
  227. Managing an international network of partner organisations.
  228. Responding effectively to local market needs.
  229. Combat the threat from cheap Far Eastern copycat products with a stronger defence of intellectual property.
  230. Respond to price undercutting by shifting some manufacturing offshore.
  231. Build a broader base to avoid being seen as a 'one-product wonder'.
  232. Securing outside investment without losing creative control.
  233. Becoming big enough to gain negotiating power.
  234. Planning an exit strategy for the company founder.
  235. To implement the new environmental measures while boosting profitability.
  236. To ensure that any new environmental management systems are in the company's best interests.
  237. To convince leading customers that it can implement the new environmental standards and also sustain them.
  238. Decline in demand for its core products.

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239. Growing threat from digital printing technology.
  240. Too much time spent on internal issues rather than reacting to market changes.
  241. Grow fast enough to seize a global market opportunity without losing control of company culture.
  242. Develop marketing strategies for selling to a diverse set of customers.
  243. Recruit lots of IT staff in competitive labour market.
  244. Pick right time to float.
  245. Build a presence in a higher value market sector.
  246. Compete effectively against large and well-established rivals.
  247. Defend its business against 'sexy' new technologies.
  248. Restore investor confidence.
  249. Build brand integrity globally.
  250. Boost revenues from financial trading.
  251. To achieve sales of £2m by the end of 2001.
  252. To build the brand.
  253. To build a reputation for strong customer service.
  254. Finding the right strategy for rapid expansion.
  255. Retaining control for the majority owner.
  256. Keeping other managers out of strategic planning.
  257. To double sales to £10m to achieve better profit margins through economies of scale.
  258. To invest in new plant so that productivity catches up with that of American and continental competitors.
  259. To diversify away from dependence on military contracts to new work in the retail sector.
  260. To force a dialogue with the big manufacturers.
  261. To form a virtual company with annual sales of £50m.
  262. To secure long-term relationships on which to base capital spending.
  263. Decide whether expansion on the Continent will be through joint venture or franchises.

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264. Ensure that the network of independent operators on the Continent is as disciplined as that in Britain.
  265. Adapt the Palletways brand for international expansion.
  266. To work with the industry to reassure the public on food safety.
  267. To improve profit margins, which have tumbled 85%.
  268. To fight off further costly regulation.
  269. To make the business more efficient.
  270. To create better brand awareness.
  271. To improve customer service in the shops.
  272. To regain the world championship.
  273. To retain its sponsors.
  274. To keep using design and technology to beat its rivals on the track.
  275. To demonstrate that its technology can work.
  276. To raise funding.
  277. To find a partner that will turn the idea into commercial reality.
  278. To keep growing to reduce dependence on one client.
  279. To make the directors delegate more responsibility.
  280. To acquire staff with formal management skills.
  281. Survive as an independent agent.
  282. Invest in IT to recoup profit margins via repeat selling.
  283. Ensure that the business supports its overheads.
  284. Overcoming internal complacency.
  285. Increasing company awareness in target market.
  286. Meeting owner's high expectations of growth.
  287. To develop the management team.
  288. To convince clients that it can handle bigger contracts and projects.
  289. To diversify away from the car industry.
  290. To diversify into new market sectors.
  291. To choose the best source of investment funds.
  292. To change strategic focus.
  293. To change a product-driven culture into one including services.
  294. To build a strong customer base in Britain and America.



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295. To forge partnerships with advertising agencies.
  296. Persuading the owner to relinquish control as firm expands.
  297. Improving the company's image as the quality of its products rises.
  298. Overcoming opposition to change within the company.
  299. To raise awareness of the quality of service and value for money that the company provides.
  300. To adapt as the number of manufacturing customers declines.
  301. To decide where to take the company next as pressures mount in the market place.
  302. To raise the profile of the Alder brand in Britain.
  303. To overcome seasonal fluctuations in sales.
  304. To find a viable way of doing business overseas.
  305. Changes in the law threaten a valuable source of income.
  306. The economic slowdown has cut demand by 20%.
  307. Big clients want to pay less.
  308. Competing in a market dominated by huge producers.
  309. Extending sales in overseas markets.
  310. Funding the expansion of production sources.
  311. To increase the value of the brand in a new market.
  312. To finance further expansion.
  313. To form a partnership with another company.
  314. Rationalising its distributor base.
  315. Developing a new export model for American market.
  316. Positioning itself as a pan-European supplier for large retailers.
  317. To build a national brand in upmarket Kitchens and bathrooms from a series of regional acquisitions.
  318. To ensure that distribution systems keep pace with the explosion in Internet sales.
  319. To exploit opportunities fully while protecting against a downturn in the housing market.
  320. To develop computer games for the consoles that are going to be market winners in two years.

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321. To grow fast enough to spread risk by holding a larger portfolio of games in a highly volatile industry.
  322. To make sure that growth is in line with the infrastructure needed to support it.
  323. To undercut high-street rivals by 20% on electrical goods.
  324. To build a strong brand image.
  325. To provide good online service for customers.
  326. Overcome NHS resistance to outsourcing psychiatric care.
  327. Combat shortage of psychiatric nurses with good pay and conditions and opportunities to progress.
  328. Develop managers from clinical backgrounds who are capable of driving forward a larger business.
  329. Becoming profitable using an unproven business model.
  330. Developing its sales channels.
  331. Finding the right strategy for global expansion.
  332. To find the most effective way to manage franchising.
  333. To decide how best to develop and market the brand.
  334. To balance customer choice and seasonality with price and environmental issues.
  335. Diversifying into other markets and expanding overseas.
  336. Increasing its percentage of new business.
  337. Growing the business in a market downturn.
  338. To expand the business.
  339. To develop new forms of data collection.
  340. To decide whether to build on its existing product range or diversify.
  341. To transform the company from a traditional toy maker into a more broadly based product designer.
  342. To break into the American market with a new children's bed.
  343. To manage volatility of demand.
  344. Uncertain future demand for core services.
  345. Rising cost of insurance and red tape.
  346. Static sales levels and poor profitability.

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347. To gain a significant share of the Epos market while its software still has a leading edge.
  348. To convince top retailers that it can supply software systems reliably despite its small size.
  349. To secure a high-profile customer.
  350. To drive the mail-order business onto the Internet without damaging the company's reputation.
  351. To lift sales to £100m within six years.
  352. To develop its brand globally while spending less on marketing.
  353. To double its share of the British Market.
  354. To expand on the Continent.
  355. To differentiate its brand through further innovation.
  356. An urgent need to diversify as the core business declines.
  357. Initial investment in satellite technology may have been focused on wrong application.
  358. Need to identify more profitable applications in unfamiliar markets.
  359. Lack of strategy for business development coupled with a shortage of financial resources.
  360. Reduce dependency on a single software supplier.
  361. Acquire a new media company to establish expertise in customer analysis.
  362. Build market credibility as leading implementer of big e-commerce systems.
  363. To strengthen the management team.
  364. To own more of the content it sells.
  365. To gain critical mass in its market.
  366. Diversification into an unfamiliar market.
  367. Competing with existing suppliers.
  368. Lack of management expertise in target market.
  369. To manage growth.
  370. To recruit the right people.
  371. To realise the value of the relationships being created.

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372. To grow the business.
  373. To sell more works to public galleries and museums.
  374. To boost overseas sales.
  375. Identifying the best areas for diversification.
  376. Expanding from a niche market into the mainstream.
  377. Capitalising on brand value.
  378. Living without direct control over products sold.
  379. Adjusting to a more complex business structure.
  380. Resolving a conflict over medium-term business objectives.
  381. To establish itself as a market leader in online computer training.
  382. To use its community involvement to raise the company's profile.
  383. To return to profit from the first point of contact.
  384. Achieve ambitious sales targets to satisfy investors.
  385. Expand into leading continental markets.
  386. Quickly establish overseas subsidiary companies.
  387. Maintain sales growth without high-level marketing expertise.
  388. Marketing highly sophisticated technology cost effectively.
  389. Competing against high-profile American rivals.
  390. To make its trade customer base less fragmented.
  391. To cope with big new entrants who will sell direct and bypass resellers.
  392. Transform the company from a low-margin computer-chip producer to a developer of consumer electronics with Internet connection.
  393. Establish a presence in the dominant American market.
  394. Develop alliances with global partners in some markets and compete against them in others.
  395. Build the infrastructure to ensure it complies with each country's laws, taxes, regulations and accounting conventions.
  396. Boost sales to justify the investment that is needed to build such an infrastructure.
  397. Use the infrastructure as a tool to attract clients and staff.
  398. Exploit the growth opportunities in emerging markets while ensuring compliance in alien regulatory environments.

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399. Buy in top-quality legal and accounting advice.
  400. Developing management responsibility.
  401. Diversifying to protect against market volatility.
  402. Expanding into online ski-holiday sales.
  403. To build a global brand in a highly volatile market.
  404. To ensure the business model is robust enough to risk entry into foreign markets.
  405. To act swiftly to press home its marketing advantage.
  406. To make sure that it delivers on its new strategy as soon as possible.
  407. To lessen its reliance on the consumer ISP market.
  408. To become profitable early next year.
  409. To develop a marketing strategy to underpin a large rather than a start-up company.
  410. To raise public awareness of the company's services without alienating the medical community.
  411. To avoid encouraging unrealistic patient expectations.
  412. Profit margins in the core business are falling.
  413. The company needs a clear strategy.
  414. The directors have limited experience of management.
  415. To continue researching and developing new products.
  416. To acquire new expertise.
  417. To decide when the owners should exit the business.
  418. To establish a nationwide operation.
  419. To reinforce an ethical image elsewhere in Britain.
  420. To derive more benefit from community spending.
  421. Quadruple sales in five years in a static market.
  422. Acquire other brands to open up new markets.
  423. Raise finance without compromising creative autonomy.
  424. Triple sales within three years to compete with larger players.
  425. Decide on the right target(s) for acquisition.
  426. Invest in e-commerce systems to increase market share and drive up profit margins.

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427. Finance these initiatives by listing on Ofex or raising venture capital.
  428. To boost its sales in Britain.
  429. To manage the currency risk.
  430. To develop new complementary business.
  431. To avoid antagonising regulators.
  432. To reassure consumers that healthcare is paramount.
  433. To establish itself as one of the top service providers in its market.
  434. Drive up profits by focusing on higher margin service work.
  435. Introduce better financial controls to maintain margins.
  436. Set up a stable team of senior managers after some defected in the wake of big acquisitions.
  437. Band together with the rest of the industry to press for government action.
  438. Improve margins.
  439. Become less reliant on EMC business.
  440. Expanding quickly to handle rapid sales growth.
  441. Diversifying into new market sectors.
  442. Defending against online competition from banks.
  443. Grow sales without harming service.
  444. Use its reputation for excellence to develop higher yielding niche markets.
  445. Settle uncertainties surrounding future ownership of the company.
  446. Return to profit.
  447. Grow turnover.
  448. Work with the industry to re-establish luxury British wool fabrics in the world market.
  449. Protect its intellectual property.
  450. Use e-commerce to market and licence its technology worldwide.
  451. Turn its innovations into world class products.
  452. To work with its trade association and the Environment Agency to simplify procedures.
  453. To persuade government to change the law to make it more workable.

- 454. To use technology to minimise the cost of complying with environmental regulations.
- 455. Maintaining rapid growth in sales.
- 456. Planning for a stock market floatation.
- 457. Allaying the fears of staff that they will be passed over for promotion as new people are recruited.
- 458. To build a global brand in a highly volatile market.
- 459. To ensure the business model is robust enough to risk entry into foreign markets.
- 460. To act swiftly to press home it's marketing advantage.
- 461. To boost sales and make them less seasonal.
- 462. To find a way of restructuring the business.
- 463. To maintain the company's strong culture.
- 464. To make sure that all employees are fully aware of stakeholder pensions.
- 465. To fight threat of compulsory employer contributions.
- 466. To motivate and retain staff.
- 467. To reduce debt burden.
- 468. To help staff achieve long-term financial security.
- 469. Lack of proven commercial applications for telemetry.
- 470. Partner organisations do not share similar levels of commitment.
- 471. Market needs have had little influence on research and development.

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## **Appendix D**

### **The 52 Business Processes of the GBPS**

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## The 52 Business Processes of the GBPS

B01	Business Planning	Starts with a review of the current year's Business Plan and concludes with the next years Business Plan. Consideration is given to the outputs, often draft outputs at this stage, of the following Business Processes: BO2 - Sales Forecast, BO6 - Marketing Plan, and CO8 - Financial Data. The development of the new Business Plan is an iterative process and several drafts may be required.
B02	Sales Forecast	Starts with a review of the current year's Sales Forecast and concludes with the next years Sales Forecast. Consideration is given to the outputs, often draft outputs at this stage, of the following Business Processes: BO1 - Business Plan, BO6 - Marketing Plan, and CO8 - Financial Data. The development of the new Sales Forecast is an iterative process and several drafts may be required.
B03	Internal Communication	A brief summary of performance over the previous month delivered by the most senior person to the whole staff. The output from BO4 - Business Evaluation can be discussed. The written record is important.
B04	Business Evaluation	Data can be collected for any other Business Processes. A monthly evaluation should be undertaken. It is not necessary to go into detail for all areas of the business if no area of concern comes to light. Close integration with Business Process B20 - Benchmarking will be useful. The aim is to make each Business Process self evaluating.
B05	Management Review	This is a review of the way that we manage our business against our policy statements and the external standards that we aspire to meet. It is important that action results from process. B09 - Non conformance can be used to register findings. An agenda is set prior to the review and each item is discussed in a final report with conclusions and recommendations.
B06	Marketing Plan	A review of our current products and services against the market. Product development and market development needs are analysed. External information required. An iterative process is used to produce the final plan. Many tools, i.e. Ansoff Matrix, can be used in developing the final plan.
B07	New Product or Service	The specification, design and development of new products and services as a result of market needs as reviewed in the Marketing Plan - BO6. Also requires Business Process BO8 - Design / Development Project. Long term perspective required.
B08	Design and Development Project	Design and Development project management process. Follows BO7 - New Product or Service or a Sales Order (Design) - O06. The output from this process is a new product or service.
B09	Non Conformance	Uses a standard form to record non-conformance in all areas of the business. Data analysis and reporting. Provides areas for B15 - Continuous Improvement Projects. Software tool essential.
B10	Audit	Review specific areas of the business. Best practice and non-conformance identified. An audit program is produced periodically and each audit results in a report with NCRs raised against non-conformances.
B11	Induction	To introduce new employees and students to the business. Uses a pre-prepared induction pack.
B12	Personal Development	To ensure that every employee is engaged in life long learning. To identify training options available to meet training requirements. Software tool essential. Note data protection requirements.

B13	Training Records	A record of training done (and qualifications) and training required. Report on outstanding training needs. Individuals are responsible for their own records. Uses the same software tool as B12. Reviewed during B14.
B14	Staff Performance Appraisal	Standard staff performance appraisal documentation is used. Training needs are identified. Standard documentation is used. Report and next periods targets are produced.
B15	Continuous Improvement Projects	To instigate improvement in specific areas of the business. Area for improvement project is identified from B09. After implementation of recommendations improvements are monitored.
B16	Quality Up-date Meeting	To provide business development feedback to employees and provide the opportunity for employees to express own views. Results are published on notice board. Inputs for agenda can come from any employee.
B17	Financial Management	To ensure that the business plan is being met in terms of income and expenditure. Areas selected for review. Report produced with historic data illustrated.
B18	Resource Management	To ensure that the business plan is being met in terms of resources. Register of resources that are managed is maintained. Software tool essential. Report produced.
B19	ICT	To ensure that the business plan is being met in terms of ICT. Strategy and implementation plan produced. Diagram of network, current and proposed is important.
B20	Benchmarking	To monitor progress towards best practice. Areas for benchmarking pre-selected. Follows UKBI model for benchmarking leading to external assessment.
C01	Purchasing	To ensure that purchasing is managed. Purchase order is produced. Purchase order register maintained.
C02	Supplier Monitoring	To ensure that we are getting the best from our suppliers and that they understand our needs. Reports on key suppliers maintained.
C03	Supplier Invoice	To ensure that the correct goods or services have been received prior to an invoice being paid. Output is an invoice matched with a delivery note and purchase order.
C04	Customer Invoice	To ensure that an invoice is sent out in a timely manner and that the documentation is created to enable payment tracking. Invoice register maintained.
C05	Payroll	To ensure correct employee payments are made on time.
C06	Stock Control	To ensure that stock is managed. Non-conformance reports (B09) produced if necessary.
C07	Purchase Order Entry	To ensure that the correct set of documentation is produced when purchasing. Software tool assumed.
C08	Financial Data	To ensure that the required financial data is recorded at the right time. Historic data illustrated. E.g. Actual sales and forecast sales for period.
O01	Reception	To ensure that all information coming into reception is recorded and passed on. To ensure that all enquiries are answered.
O02	Customer Enquiry	To ensure that all customer enquires receive a satisfactory response. Records of enquires are maintained. Records of quotations are maintained.
O03	Customer Order	To ensure that the required documentation is raised and that the correct data is recorded. A sales order is produced.
O04	Sales Order (Manufacturing)	To ensure that the requirements of a Sales Order are met and that quality is maintained. Customer requirement is dispatched.
O05	Sales Order (Customer Return / Repair)	To ensure that the requirements of a Sales Order are met and that quality is maintained. Customer requirement is dispatched.

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O06	Sales Order (Design)	To ensure that the requirements of a Sales Order are met and that quality is maintained. Customer requirement is dispatched.
O07	Goods Received	To maintain quality. To ensure that goods received get to the right person in a timely manner and that the documentation is sent to the right place. The supplier's delivery note is filed.
O08	Installation	To maintain quality and health and safety when on customers premises. To ensure that customer requirements are met.
O09	After Sales Support	To ensure that customers are given the right support and in a timely manner. To ensure that IPR are secure.
O10	Works Order Entry	Input derived from Sales Order (O04-6). To ensure that the correct documentation is produced for a works order.
O11	New Stock Entry	To ensure that the correct details are recorded for new stock items. Output is a stock item record.
O12	Sales Order Entry	To ensure that the correct details are recorded for sales orders. Sales order detail is derived from a customer order (O03)
O13	Transactions into / out of Stock	To ensure that stock records (quantities) are maintained.
O14	Document Approval	To ensure that changes to documents are approved. A list of document types that require approval is maintained.
O15	Document Registration	To ensure that documents that require approval are registered in the documents database. Revision status is maintained.
O16	Document Change Control	To ensure that changes to approved documents are controlled and approved. Document revision status is recorded in the document register. See O15
O17	Document Issue	To ensure that the correct revision of a document is issued and that changes can be notified to document holders. Document revision status can be obtained from the document register. See O15.
O18	Management of Health and Safety	To ensure that Health and Safety is managed. Risk assessments are documented and made available to all employees.
O19	Supplier Returns	To ensure that faulty goods are returned to suppliers and the a credit note or replacement goods are received.
O20	Providing Technical Advice (IPR)	To ensure that the provision of technical advice, possibly our IPR, is controlled.
O21	Monitoring Customer Satisfaction	To ensure that our customers are monitored and we take action on our findings. Reports on all customers are maintained.
O22	Dealing With Complaints	To ensure that complaints are dealt with in a timely manner. The NCR system (B09) is used to record and action complaints. All correspondence is retained. See O21.
O23	Management of Regulatory Issues	To ensure that regulatory issues are understood and managed. Reference material is maintained and requirements documented throughout the relevant process documentation.
O24	Management of Environmental Issues	To ensure that environmental issues are understood and managed. Reference material is maintained and requirements documented throughout the relevant process documentation.

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## **Appendix E**

### **List of Requirements from the Selected Standards and Tools**

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**ISO9000:1994 Quality Management Systems – Clause in brackets**

**QP1-1 Quality policy (4.1.1)**

To define and document the organisations policy and objectives for, and commitment to, quality.

**QP1-2 Responsibility and authority (4.1.2.1)**

To define and document the responsibility, authority and the interrelationship of all personnel who manage, perform and verify work affecting quality; particularly for personnel who need the organisational freedom and authority to:

- a initiate action to prevent the occurrence of product non-conformity;
- b identify and record any product quality problems;
- c initiate, recommend or provide solutions, through designated channels;
- d verify the implementation of solutions;
- e control further processing, delivery or installation of non-conforming product until the deficiency or unsatisfactory condition has been corrected.

**QP1-3 Resources (4.1.2.2)**

To identify in-house verification requirements, provide adequate resources and assign trained personnel for management, performance of work and verification activities including internal quality audit. See also QP20-1.

**QP1-4 Management representative (4.1.2.3)**

To appoint and identify a management representative who, irrespective of other responsibilities, shall have defined authority and responsibility for ensuring that the requirements of the Quality Management System (QMS) are maintained.

**QP1-5 Management review (4.1.3)**

To review, at appropriate intervals, the QMS to ensure its continuing suitability and effectiveness in satisfying the requirements of ISO9001:1994 and our stated policy and objectives.

**QP2-1 Quality system procedures (4.2.2)**

To establish and maintain a documented quality management system as a means of ensuring that product conforms to specified requirements.

**QP2-2 Quality planning (4.2.3)**

To ensure that the requirements for quality are planned and that timely consideration is given, to meeting specified requirements for products, projects and contracts.

**QP3-1 Auditing the quality system (internal) (4.17)**

To carry out a comprehensive system of planned and documented internal quality audits to verify whether quality activities comply with planned arrangements and to determine the effectiveness of the quality system.

**QP4-1 Operation quality costs (n/a)**

**QP4-2 External assurance quality costs (n/a)**

**QP4-3 Management visibility (n/a)**

**QP5-1 Contract review (4.3)**

Each contract shall be reviewed to ensure that:

- a the requirements are adequately defined and documented;
- b any requirements differing from those in the tender are resolved;
- c the supplier has the capability to meet contractual requirements.

**QP6-1 Design control, general (4.4.1)**

To establish and maintain procedures to control and verify the design of the product in order to ensure that the specified requirements are met.

**QP6-2 Design and development planning (4.4.2)**

To draw up plans that identify the responsibilities for each design and development activity. The plans shall describe or reference these activities and shall be updated as the design evolves.

**QP6-3 Organisational and technical interfaces (4.4.3)**

To ensure that organisations and technical interfaces between different groups shall be identified and the necessary information is documented, transmitted and regularly reviewed.

**QP6-4 Design input (4.4.4)**

To ensure that design input requirements relating to the product are identified and documented and their selection is reviewed by the supplier for adequacy. Incomplete, ambiguous or conflicting requirements shall be resolved with those responsible for drawing up the requirements.

**QP6-5 Design review (4.4.5)**

To ensure that the design process is reviewed at appropriate stages to ensure that:



- 
- a All reasonable design paths have been explored.
  - b All contributing factors have been considered (statutory requirements, etc).
  - c The design meets the specified requirements.
  - d The design can be built, inspected, tested, installed, operated and maintained in a way which is satisfactory to ourselves and the customers.
  - e There is adequate supporting documentation to define the design and how the output from the design is to be used and maintained.

#### QP6-6 Design output (4.4.6)

To ensure that design output is documented and expressed in terms of requirements, calculations and analysis.

#### QP6-7 Design verification (4.4.7)

To plan, establish, document and assign to competent personnel, functions for verifying the design. Design verification shall establish that design output meets the design input requirements by means of design control measures such as:

- a holding and recording design reviews;
- b undertaking qualification tests and demonstrations;
- c carrying out alternative calculations;
- d comparing the new design with similar proven design, if available.

#### QP6-8 Design validation (4.4.8)

To ensure that product and services conform to defined user needs and/or requirements.

#### QP6-9 Design changes (4.4.9)

To identify, document and appropriate review and approval of all design changes and modifications.

#### QP7-1 Evaluation of sub-contractors (4.6.2)

To ensure that sub-contractors are selected on the basis of their ability to meet sub-contract requirements, including quality requirements. Records of acceptable sub-contractors shall be established and maintained. The selection of sub-contractors, and the type and extent of control shall be dependent upon the type of product and, where appropriate, on records of sub-contractors' previously demonstrated capability and performance.

#### QP7-2 Purchasing data (4.6.3)

To ensure that purchasing documents contain data clearly describing the product ordered, including, where applicable:

- a the type, class, style, grade or other precise identification;

- b the title or other positive identification and applicable issue of specifications, drawings, process requirements, inspection instructions and other relevant technical data, including requirements for approval or qualification of product, procedures, process equipment and personnel;
- c the title, number and issue of the quality system International Standard to be applied to the product.

The purchasing documentation will be reviewed and approved for adequacy of specified requirements prior to release.

#### QP7-3 Verification of purchased product (4.6.4)

To ensure that, where specified in the contract, the purchaser or his representative shall be afforded the right to verify at source or upon receipt, that purchased product conforms to specified requirements.

#### QP9-1 Production planning (4.9)

To identify and plan the production and, where applicable, installation process which directly affect quality and to ensure that these processes are carried out under controlled conditions.

#### QP9-2 Control of production (4.9)

To provide documented work instructions defining the manner of production and installation, where the absence of such instructions would adversely affect quality; use of suitable production and installation equipment; suitable working environment; compliance with referenced standards/codes and quality plans.

#### QP9-3 Special processes (4.9)

To ensure that for special processes continuous monitoring and/or compliance with documented procedures is undertaken to ensure that specified requirements are met. Records shall be maintained for qualified processes, equipment and personnel, as appropriate.

#### QP10-1 Product identification and traceability (4.8)

To, where appropriate, provide identification of the product by applicable drawings, specifications or other documents, during all stages of production, delivery and installation. Where, and to the extent that, traceability is a specified requirement, individual product or batches shall have a unique identification.

#### QP11-1 Inspection and test status (4.12)

To ensure that the inspection and test status of product can be identified and that the conformance or non-conformance of product with regard to inspection and test

performed is clearly indicated. To ensure that only product that has passed the required inspection and test is despatched, used or installed. Records shall identify the inspection authority responsible for the release of conforming product.

**QP12-1 Receiving inspection and testing (4.10.2)**

To ensure that incoming product is not used or processed (except in the circumstances described below) until it has been inspected or otherwise verified as conformed to specified requirements. Verification shall be in accordance with the quality plan or documented procedures.

Where incoming product is released for urgent production purposes, it shall be positively identified and recorded in order to permit immediate recall and replacement in the event of non-conformance to specified requirements.

Note: In determining the amount and nature of receiving inspection, consideration should be given to the control exercised at source and documented evidence of quality conformance provided.

**QP12-2 In-process inspection and testing (4.10.3)**

To:

- a inspect, test and identify products as required by the quality plan or documented procedures;
- b establish product conformance to specified requirements by use of process monitoring and control methods;
- c hold product until the required inspection and test have been completed or necessary reports have been received and verified except when product is released under positive recall procedures (see QP12-1).

**QP12-3 Final inspection and testing (4.10.4)**

To:

- a all specified inspection and tests, including those specified either on receipt of product or in process, have been carried out and that data meets specified requirements;
- b all final inspection and testing is carried out in accordance with the quality plan or documented procedures to complete the evidence of conformance of the finished product to the specified requirements;
- c no product is despatched until all the activities specified in the quality plan or documented procedures have been completed satisfactorily and the associated data and documentation is available and authorised

**QP12-4 Inspection and test records (4.10.5)**

To provide records which give evidence that the product has passed inspection and/or

test with defined acceptance criteria.

**QP13-1 Control of inspection, measuring and test equipment (4.11)**

To control, calibrate and maintain inspection, measuring and test equipment, whether owned by the supplier, on loan, or provided by the purchaser, to demonstrate the conformance of product to the specified requirements. Equipment shall be used in a manner which ensures that measurement uncertainty is known and is consistent with the required measurement capability.

**QP14-1 Control of nonconforming product (4.13)**

To ensure that product that does not conform to specified requirements is prevented from inadvertent use or installation. Control shall provide for identification, documentation, evaluation segregation (when practical), disposition of non-conforming product and for notification of the functions concerned.

**QP14-2 Nonconforming product review and disposition (4.13.2)**

To ensure that non-conforming product is reviewed and disposition authorised.

It may be:

- a reworked to meet requirements, or
- b accepted with or without repair by concession, or
- c re-graded for alternative applications, or
- d rejected or scrapped.

**QP15-1 Corrective action (4.14.2)**

To:

- a investigate the cause of non-conforming product and the corrective action needed to prevent recurrence;
- b analysing all processes, work operations, concessions, quality records, service reports and customer complaints to detect and eliminate potential causes of non-conforming product;
- c initiating preventative actions to deal with problems to a level corresponding to the risk encountered;
- d applying controls to ensure that corrective actions are taken and that they are effective;
- e implementing and recording change in procedures resulting from corrective action.

**QP15-2 Preventative action (4.14.3)**

To ensure that effective action is taken to prevent the reoccurrence of non-conformance.

**QP16-1 Handling (4.15.2)**

To provide methods and means of handling that prevent damage or deterioration.

**QP16-2 Storage (4.15.3)**

To provide secure storage areas or stock rooms to prevent damage or deterioration of product, pending use or delivery. Appropriate methods for authorising receipt and despatch to and from such areas shall be stipulated. In order to detect deterioration, the condition of product in stock shall be assessed at appropriate intervals.

**QP16-3 Packaging and preservation (4.15.4)**

To control packing, preservation and marking processes (including materials used) to the extent necessary to ensure conformance to specified requirements and to identify, preserve and segregate all product from the time of receipt until the supplier's responsibility ceases.

**QP16-4 Delivery (4.15.6)**

To arrange for the protection of the quality of product after final inspection and test. Where contractually specified, this protection shall be extended to include delivery to destination.

**QP17-1 Servicing (4.19)**

Where servicing is specified in the contract to ensure that servicing meets the specified requirements.

**QP18-1 Document approval and issue (4.5.2)**

To control all documentation that relates to quality. These documents shall be reviewed and approved for adequacy by authorised personnel prior to issue. This control shall ensure that:

- a The pertinent issue of appropriate documents are available at all locations where operations essential to the effective functioning of the quality system are performed.
- b Obsolete documents are promptly removed from all points of issue or use.

**QP18-2 Document changes (4.5.3)**

To ensure that changes to documents are reviewed and approved by the same functions that performed the original review and approval unless specifically designated otherwise. The designated organisations shall have access to pertinent background information upon which to base their review and approval.

Where practicable, the nature of the change shall be identified in the document by the insertion of an amendment bar down the left or right hand margin, or the appropriate

attachments.

A master list or equivalent document control procedure shall be established to identify the current revision of documents in order to preclude the use of non-applicable documents.

QP19-1 Control of quality records (4.16)

To establish and maintain procedures for identification, collection, indexing, filing, storage, maintenance and disposition of quality records.

QP20-1 Personnel (Training) (4.18)

To establish and maintain procedures for identifying the training needs and provide for the training of all personnel performing activities affecting quality. Personnel performing specific assigned tasks shall be qualified on the basis of appropriate education, training and/or experience, as required. Appropriate records of training shall be maintained.

QP21-1 Product safety and liability (n/a)

To ensure that our products and services comply with the relevant UK Regulations.

QP22-1 Statistical techniques (4.20)

To establish, where appropriate, procedures for identifying adequate statistical techniques required for verifying the acceptability of process capability and product characteristics.

QP23-1 Control of customer supplied product (4.7)

To establish and maintain procedures for verification, storage and maintenance of purchaser supplied product provided for incorporation into the supplies. Any such product that is lost, damaged or is otherwise unsuitable for use shall be recorded and reported to the purchaser.

Note: Verification by the supplier does not absolve the purchaser of the responsibility to provide acceptable product.

## **The United Kingdom Benchmarking Index**

### **Leadership**

- 1.1 Our Senior Managers work together as a team: *always*.
- 1.2 Senior Managers demonstrate their commitment to quality improvement by the way in which they themselves behave: *always*.
- 1.3 Our Managers meet with customers/suppliers to discuss performance: *very often*.

- 
- 1.4 The average amount of management time spent on improvement activities is: *more than 5 days per month.*

### Policy and Strategy

- 2.1 Policy/strategy statements: *have been formally documented and have been communicated to all employees.*
- 2.2 The policy/strategy statements take into account: *shareholders, customers and employees plus competitive and "best in class" benchmark information.*
- 2.3 The resources needed to deliver the objectives defined in our Strategy are: *identified in some depth by those responsible for their delivery and are included in our Business Plan.*

### People Management

- 3.1 An up-to-date skills assessment: *covers employees' skills and current company needs; and is used to plan people moves and also covers future needs.*
- 3.2 A company training programme: *covers managers and employees; is based on business/statutory needs and includes routine assessment of training effectiveness.*
- 3.3 Personal development needs are identified: *for all employees; regularly updated/included in training programme and is used to develop career paths.*
- 3.4 Performance targets are set: *from business objectives for individuals or teams, with their involvement plus performance is self-monitoring, managers review progress.*
- 3.5 Communications within the company are: *upwards and downwards, open and effective and across the organisation.*

### Resource Management

- 4.1 Fixed assets are assigned to: *individuals who are responsible for their security and effective utilisation plus utilisation effectiveness is reviewed at least annually.*
- 4.2 Key performance information on business processes is made available for: *all employees who can use it as and when needed plus regularly reviewed for effectiveness of usage.*
- 4.3 Information available around the company: *uses a full range of techniques appropriate to different employee groups.*

### Business Processes

- 5.1 Processes critical to the success of the business have: *outputs and process standards set to meet business needs but with continuous improvement through regular performance reviews.*
- 5.2 Whenever processes are changed, employees who are directly affected: *are fully trained in good time and are encouraged to check that the changes are working correctly.*

- 5.3 After significant changes have been made to processes, we: *routinely check that improvement has been made and check that it is sustained over a period of time.*
- 5.4 Our company manages Quality: *with a system that meets ISO9000 registration or customer accreditation standards but it also encompasses a Total Quality System.*

#### Customer Satisfaction

- 6.1 We work with customers: *as partners – we work closely to meet mutual business needs.*
- 6.2 Our measurement of customer satisfaction is based on: *regular formal customer feedback that covers all aspects of performance.*
- 6.3 We use our customer satisfaction measures: *to identify key areas for improvement to meet customer requirements, to meet comparable results against competition and to improve our performance against “best in class”.*
- 6.4 Over the last 3 years, our market share has: *increased by more than 100%.*

#### People Satisfaction

- 7.1 In respect of health and safety, we: *meet all statutory requirements, run a safety education programme, hazard analysis is completed for all activities; controls are implemented.*
- 7.2 We measure how ‘satisfied’ all our employees are: *by using a confidential written questionnaire on a regular basis, at least every other year.*
- 7.3 Employee motivation when compared to companies of a similar size and industry is: *very high.*
- 7.4 Staff turnover when compared to companies of a similar size and industry is: *very low.*

#### Impact on Society

- 8.1 A policy for the increasing use of recyclable materials: *is in use and is highly effective and has brought identifiable benefits.*
- 8.2 Our company operates an Environmental Management System that: *is registered to ISO14000 or a customer defined standard or is integrated into the business plan.*
- 8.3 Employees are encouraged to contribute to the local community: *as the need arises and time off is given if needed.*

#### Investor in People Standard

- IIP1.1 There is a public commitment from the most senior level within the organisation to develop people.

The cornerstone of the Standard. ‘Public commitment’ means openly to all employees. It may also be made known to people outside the organisation. ‘The most senior level’ means the Board or senior management team, and in particular the Owner, Chairman, Chief Executive or Managing Director.



**IIP1.2 Employees at all levels are aware of the broad aims or vision of the organisation.**

Establishes that the organisation has not only defined its aims but has communicated them effectively to all employees.

**IIP1.3 There is a written but flexible plan which sets out business goals and targets.**

The written plan may be in the form of several documents, produced at different levels and times. The point is whether the organisation is clear about where it is going and so has the basis to make an effective investment in people. 'Goals' refer to longer-term objectives, 'targets' to shorter-term milestones.

**IIP1.4 The plan identifies broad development needs and specifies how they will be assessed and met.**

The key is to establish that the written plan links broad development needs to business objectives and that a process exists to assess and meet these needs. Closely linked to 2.2. The training and development needs of the organisation will be driven both by business needs and by relevant individual needs. This indicator concentrates on business needs. 'Assessed' means translating business-driven development needs into a set of action points for individuals and groups.

**IIP1.5 The employer has considered what employees at all levels will contribute to the success of the organisation and has communicated this effectively to them.**

Examines whether the employer seeks to harness the full energies and potential of employees and enables them to contribute in different ways, not all narrowly job-related.

**IIP1.6 Where representative structures exist, management communicates with employee representatives a vision of where the organisation is going and the contribution employees (and their representatives) will make to its success.**

'Representative structures' usually involve trade unions but may also relate to other workplace representatives.

**IIP2.1 The written plan identifies the resources that will be used to meet training and development needs.**

Established that the planning commitment to training and development in the business plan is backed by resources. 'Resources' include money, facilities, expertise, people and time.

**IIP2.2 Training and development needs are regularly reviewed against business objectives.**

Establishes the link between the changes in direction of the business and training and development plans. Closely related to 1.3.

**IIP2.3** A process exists for regularly reviewing the training and development needs of all employees.

Focuses on individual needs – in the context of business objectives. The indicator does not require all employees to receive training in any given period. ‘Regularly’ may mean through a periodic structured review but can also include informal counselling discussions. ‘All employees’ should include part-time employees and those with special needs.

**IIP2.4** Responsibility for developing people is clearly identified throughout the organisation, starting at the top.

Establishes that responsibility is defined at all levels.

**IIP2.5** Managers are competent to carry out their responsibilities for developing people.

‘Managers’ includes owner-managers. ‘Competent’ means that they are able to apply appropriate knowledge and skills.

**IIP2.6** Targets and standards are set for development actions.

Establishes that targets and standards for development actions should be set before the actions take place and should describe the desired outcomes.

**IIP2.7** Where appropriate, training targets are linked to achieving external standards, and particularly to National Vocational Qualifications (or Scottish Vocational Qualifications in Scotland) and units.

Ensures that targets are set in terms of relevant standards. These may relate to individual achievement or to organisational standards (e.g. ISO9000).

**IIP3.1** All new employees are introduced effectively to the organisation and are given the training and development they need to do their jobs.

Concerned both with induction and with initial training. ‘New employees’ includes people taking up new jobs in the same organisation.

**IIP3.2** The skills of existing employees are developed in line with business objectives.

Reflects an approach based on continuous development in line with business needs.

**IIP3.3** All employees are made aware of the development opportunities open to them.

Puts the onus on the employer to communicate development opportunities.

**IIP3.4 All employees are encouraged to help identify and meet their job-related development needs.**

**Reflects the role of individuals in shaping their own development.**

**IIP3.5 Effective action takes place to achieve the training and development objectives of individuals and the organisation.**

**The key indicator in confirming that words and commitment are translated into action.**

**IIP3.6 Managers are actively involved in supporting employees to meet their training and development needs.**

**‘Actively involved’ means before, during and after the training and development actions that are taken. ‘Managers’ means anyone directly responsible for staff.**

**IIP4.1 The organisation evaluates how its development of people is contributing to business goals and targets.**

**This indicator concerns the overall relevance of training and development to organisational success.**

**IIP4.2 The organisation evaluates whether its development actions have achieved their objectives.**

**This indicator is concerned with individual training and development actions rather than the overall link between training and business goals.**

**IIP4.3 The outcomes of training and development are evaluated at individual, team and organisational levels.**

**Evaluation should focus on the outcomes of developmental activities, at all levels.**

**IIP4.4 Top management understand the broad costs and benefits of developing people.**

**Costs and benefits will not always be quantified. What matters is that investment in people is not just an act of faith, and that the business benefits can be described.**

**IIP4.5 The continuing commitment of top management to developing people is communicated to all employees.**

**The proof of business improvement should be shared, and should ensure continuous development**

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## The EFQM Excellence Model

### Leadership

- 1a How leaders continuously display their commitment to excellence and continuous improvement.
- 1b How leaders support improvement and involvement by providing appropriate resources and assistance.
- 1c How leaders are involved with customers, suppliers and other organisations.
- 1d How leaders recognise and reward peoples' efforts.

### Policy and Strategy

- 2a How policy and strategy are based on information which is relevant and comprehensive.
- 2b How policy and strategy are developed.
- 2c How policy and strategy are communicated and implemented.
- 2d How policy and strategy are regularly updated and improved.

### People Management

- 3a How Human Resource is planned and improved.
- 3b How people capabilities are sustained and developed.
- 3c How people agree targets and continuously review performance
- 3d How people are empowered and recognised.
- 3e How people and the organisation have an effective dialogue.
- 3f How people are cared for.

### Resources

- 4a How information resources are managed.
- 4b How supplier relationships and materials are managed.
- 4c How buildings and other assets are managed.
- 4d How technology is managed.

### Processes

- 5a How key processes are identified.
- 5b How processes are systematically managed.
- 5c How processes are reviewed and targets set for improvement.
- 5d How processes are improved using innovation and creativity.
- 5e How processes are changed and the benefits evaluated.

### Customer Satisfaction

- 6a The customers perception of the organisation's products and/or services.
- 6b Additional measures relating to the satisfaction of the organisation's customers.

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## People Satisfaction

- 7a The people's perception of the organisation.
- 7b Additional measures relating to people satisfaction.

## Impact on Society

- 8a Society's perception of the organisation.
- 8b Additional indicators of the impact on society.

## Business Results

- 9a Financial measures of the organisation's performance.
- 9b Additional measures of the organisation's performance.

## The Charter Mark

- CM-1 Set clear standards of service that users can expect, and monitor and review performance and publish the results, following independent validation, wherever possible.
- CM-2 Be open, and communicate clearly and effectively in plain language to help people using public services; and provide full information about services, their cost and how well they perform.
- CM-3 Consult and involve present and potential users of public service as well as those who work in them; and use their views to improve the service provided.
- CM-4 Make services easily available to everyone who needs them including using new technology to the full, offering choice wherever possible.
- CM-5 Treat people fairly, respect their privacy and dignity, be helpful and courteous and pay particular attention to those with special needs.
- CM-6 Put things right quickly and effectively; learn from complaints; and have a clear, well publicised and easy to use complaints procedure, with independent review wherever possible.
- CM-7 Use resources effectively to provide best value for taxpayers and users.
- CM-8 Always look for ways to improve the services and facilities offered, particularly the use of new technology.
- CM-9 Work with other providers to ensure that services are simple to use, effective and co-ordinated, and deliver a better service to the user.
- CM-10 Show that your users are satisfied with the quality of services they are receiving.

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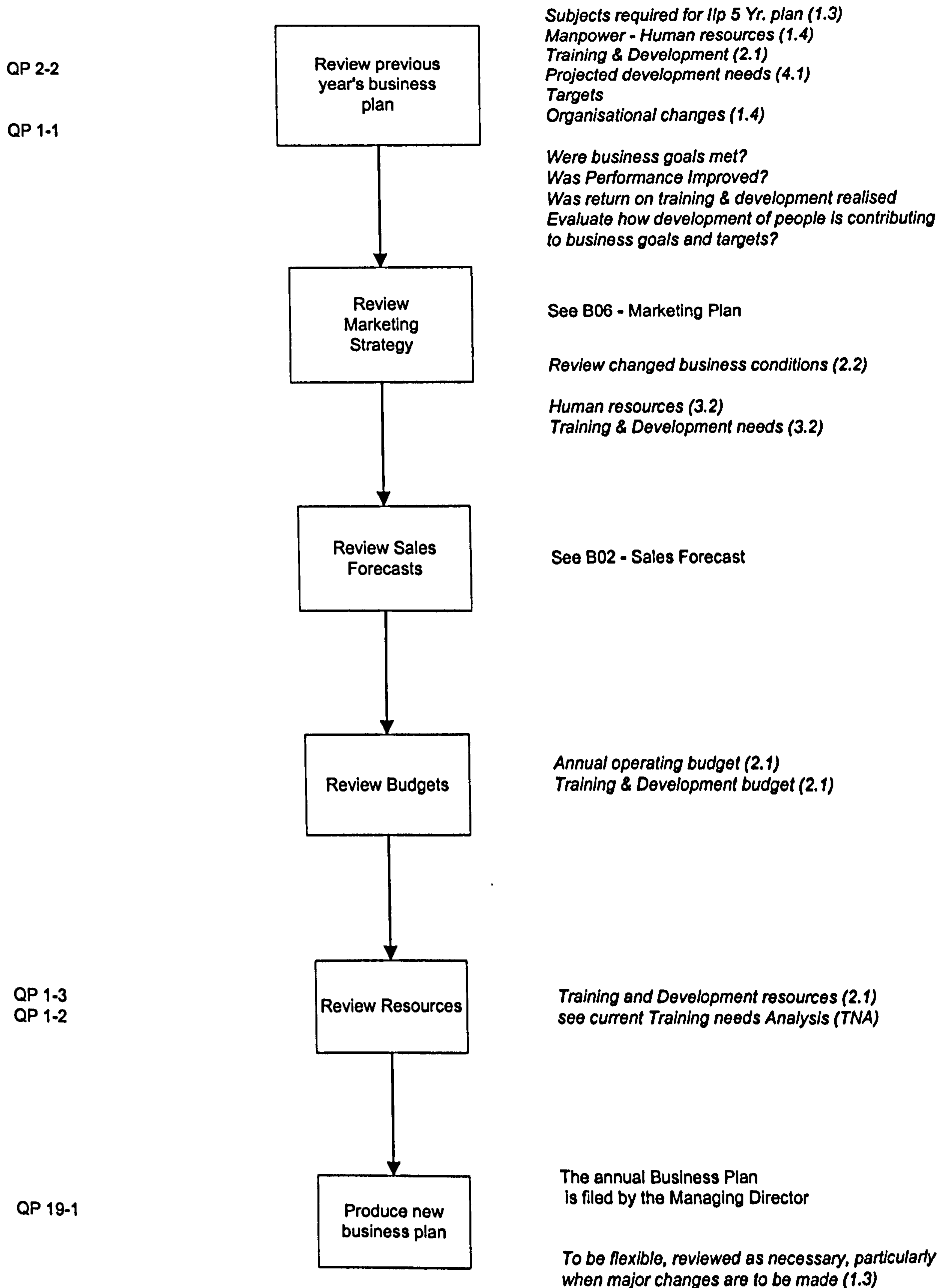
## **Appendix F**

### **Example Business Process Flow Charts**

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## B01 - Business Planning

### Management Responsibility - TJR



Note: See Investors in People Portfolio



### B02 - Sales Forecast

#### Management Responsibility - TJR

See B01 - Business Planning

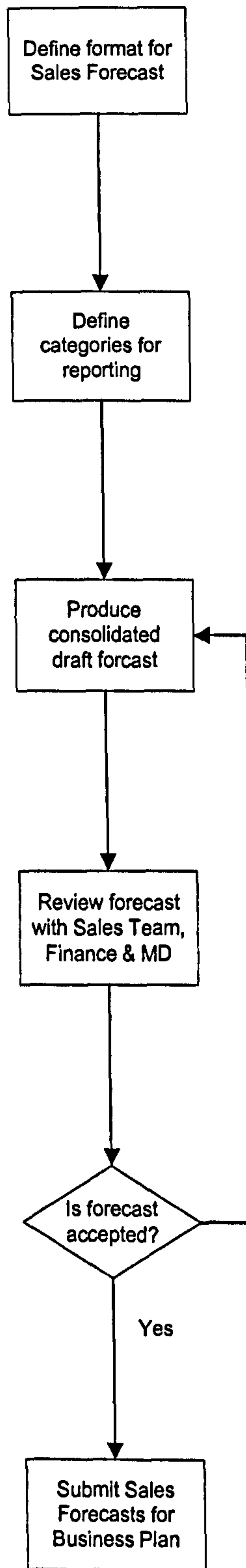
Draft forecasts to be produced by the end of June in standard layout and using Microsoft Excel

To be coordinated by TJR

Review changed business conditions (2.2)

Product Group  
Territory  
Period  
Market Segments  
Responsibility

QP 1-3  
QP 9-1



No

Yes

QP 19-1

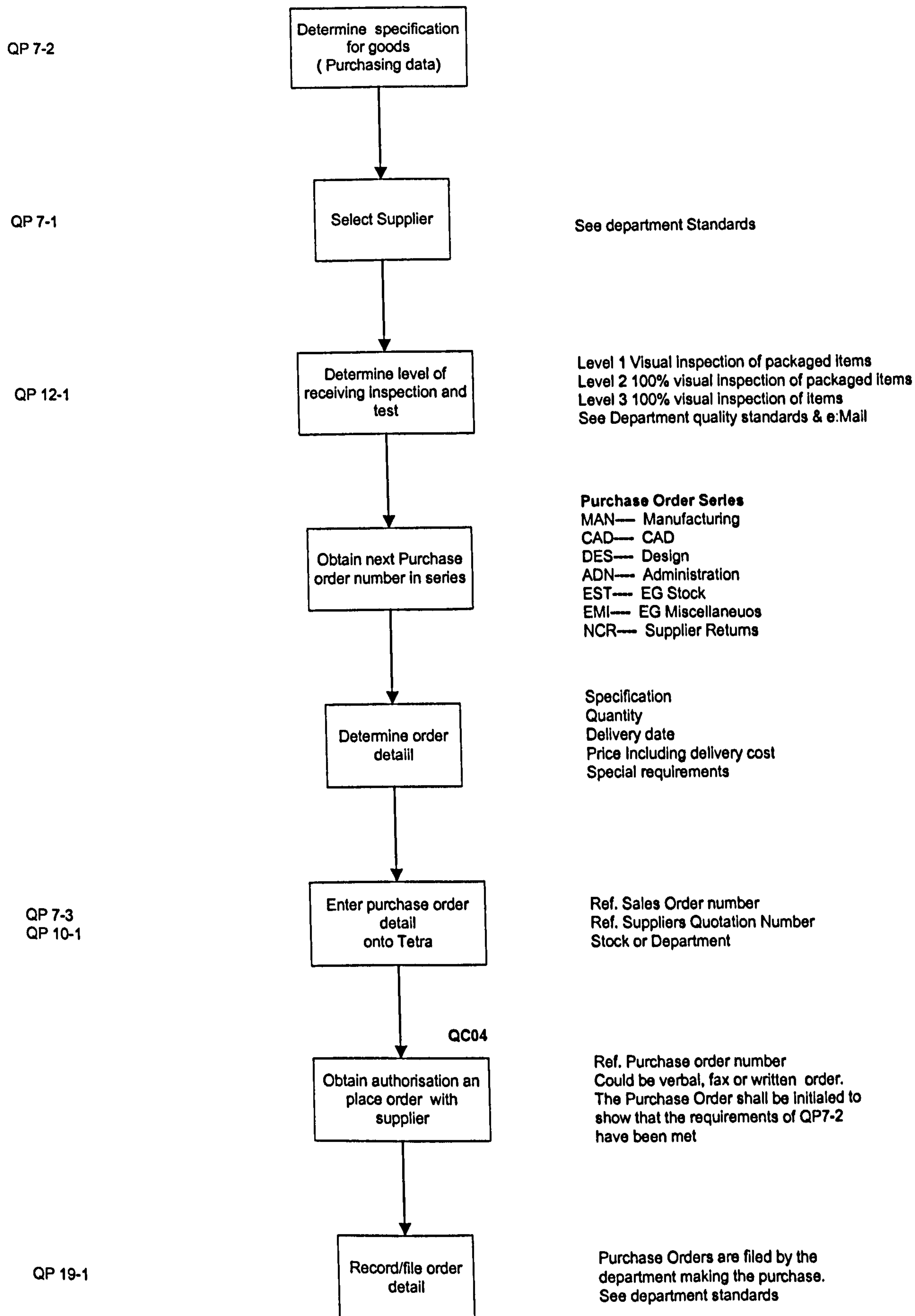
The annual Sales Forecast is filed by the Sales Director

Note: See Investors in People Portfolio

C01 - Purchasing

Management Responsibility - TJR

See document 94032625 - Purchasing Guidelines  
See C07 - Purchase Order Entry



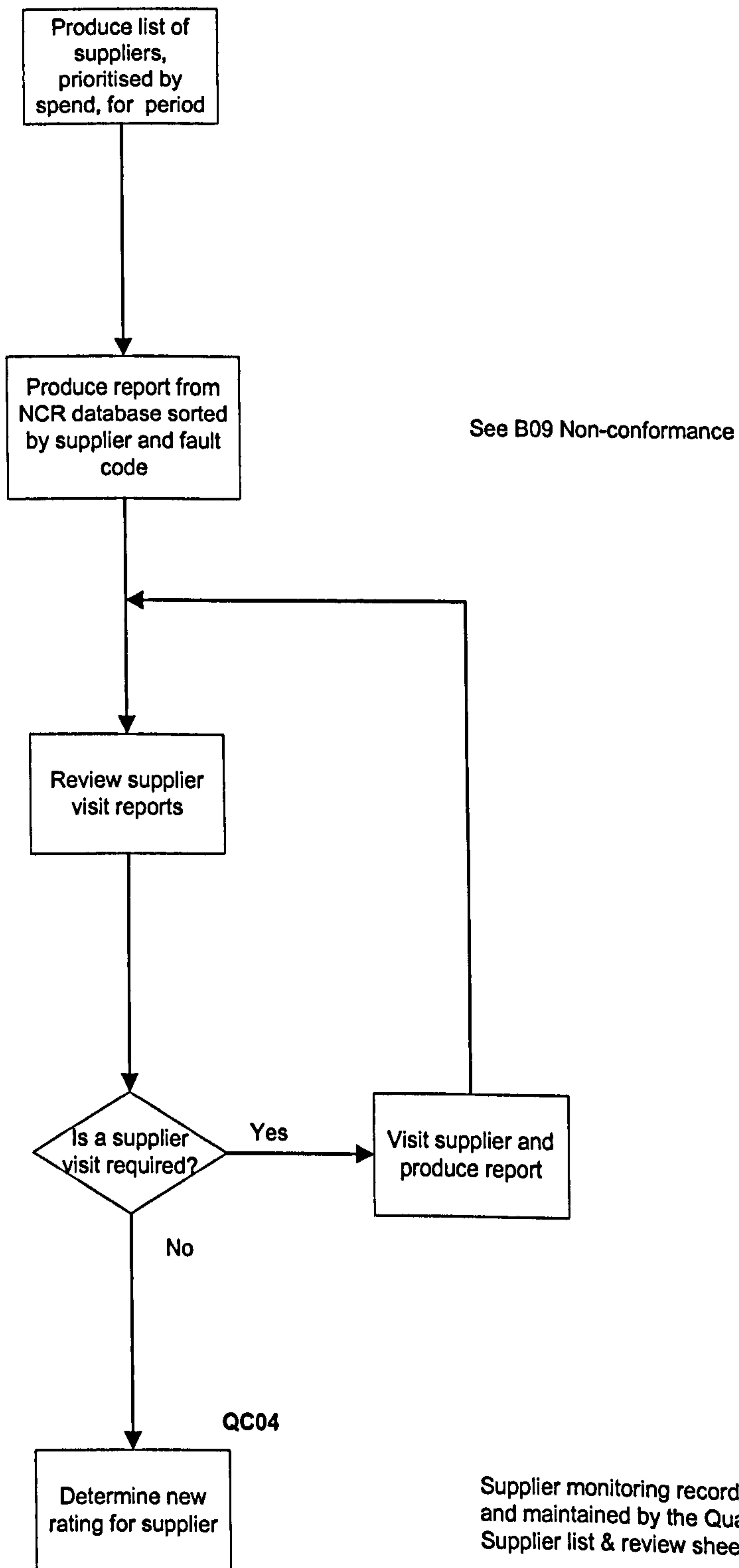
## C02 - Supplier Monitoring

### Management Responsibility - TJR

QP 7-1  
QP 19-1

QP 19-1

QP 19-1



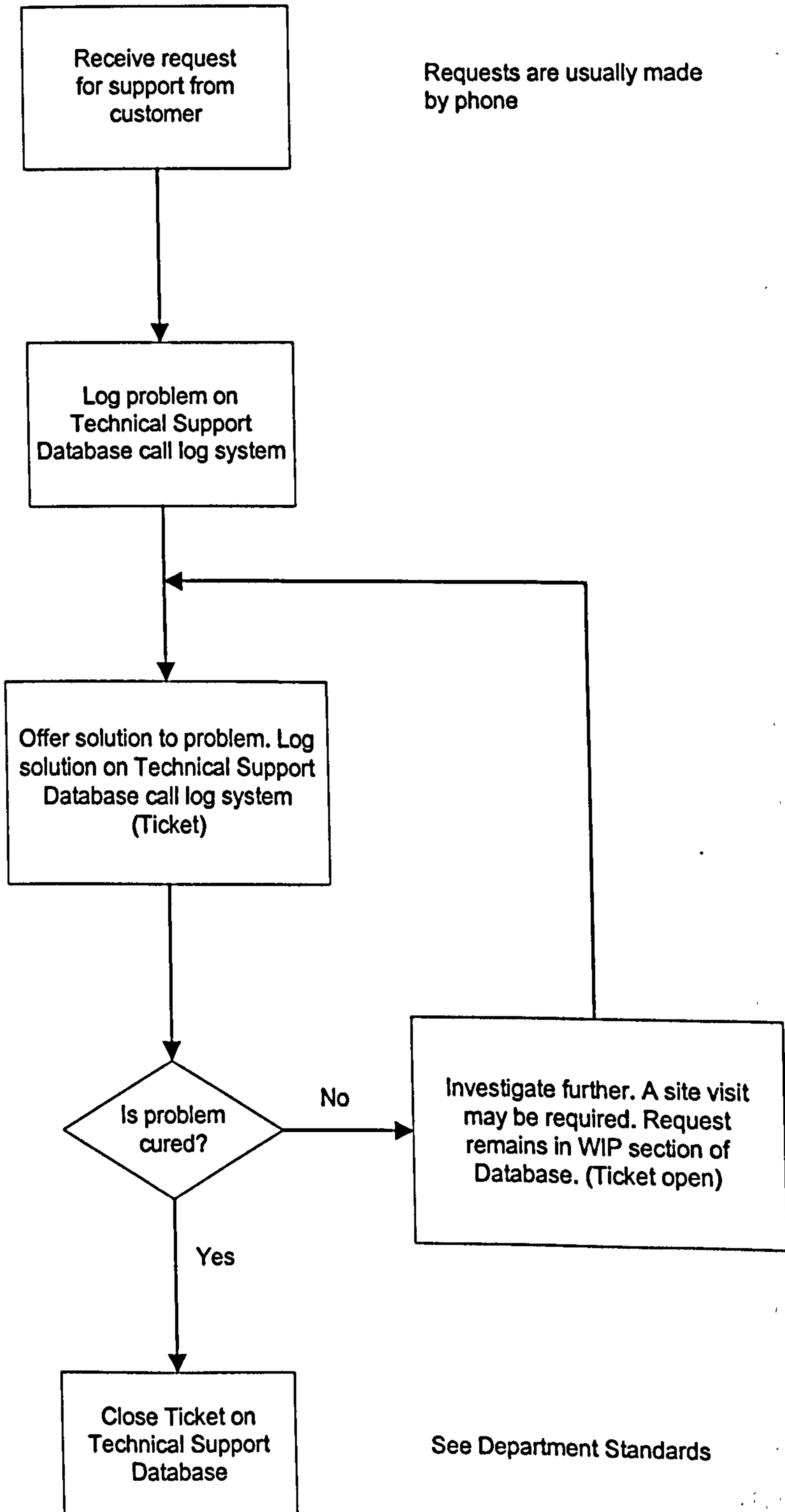
Supplier's goods inwards inspection level is recorded in the Supplier's Tetra record. It is the responsibility of the Purchaser to ensure that this record is maintained. See Purchasing Guidelines, document 94032625



O09 - After Sales Support

Management Responsibility - TJR

QP17-1



QP19-1

See relevant Maintenance Contract for type of support due to each Customer  
 Details on Customer Equipment Database

## **Appendix G**

### **Stage 1 Questionnaire – Diagnostic Tool**

# Business Processes Diagnostic

# Appendix G

Reference	Title	Formal	Informal	Dosen't Apply	Comments
B01	Business Planning				
B02	Sales Forecast				
B03	Internal Communication				
B04	Business Evaluation				
B05	Management Review				
B06	Marketing Plan				
B07	New Product or Service				
B08	Design and Development Project				
B09	Non Conformance				
B10	Audit				
B11	Induction				
B12	Personal Development				
B13	Training Records				
B14	Staff Performance Appraisal				
B15	Continuous Improvement Projects				
B16	Quality Up-date Meeting				
B17	Financial Management				
B18	Resource Management				
B19	ICT				
B20	Benchmarking				
C01	Purchasing				
C02	Supplier Monitoring				
C03	Supplier Invoice				
C04	Customer Invoice				
C05	Payroll				
C06	Stock Control				
C07	Purchase Order Entry				
C08	Financial Data				
IT01	Customer Enquiry				
IT02	Quotation				

# Business Processes Diagnostic

# Appendix G

IT03	Project Planning				
IT04	Software Life Cycle				
IT05	Hardware Life Cycle				
IT06	Replication, Delivery and Installation				
IT07	Maintenance				
O01	Reception				
O02	Customer Enquiry				
O03	Customer Order				
O04	Sales Order (Manufacturing)				
O05	Sales Order (Customer Return / Repair)				
O06	Sales Order (Design)				
O07	Goods Received				
O08	Installation				
O09	After Sales Support				
O10	Works Order Entry				
O11	New Stock Entry				
O12	Sales Order Entry				
O13	Transactions into / out of Stock				
O14	Document Approval				
O15	Document Registration				
O16	Document Change Control				
O17	Document Issue				
O18	Management of Health and Safety				
O19	Supplier Returns				
O20	Providing Technical Advice (IPR)				
O21	Monitoring Customer Satisfaction				
O22	Dealing With Complaints				
O23	Management of Regulatory Issues				
O24	Management of Environmental Issues				



## **Appendix H**

### **List of Advantage West Midlands Diagnostic Tools**

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27 November 2002

Thomas J Rose  
Enterprise Integration  
Cranfield University  
Cranfield  
Bedford  
MK43 0AL

Dear Mr Rose,

**Diagnostic Tools**

Enclosed is a copy of the list of diagnostic tools used by Business Links primarily.

Sorry about the delay, it took a little while to track down. Please contact me if you have any questions on 0121 380 3607.

Yours sincerely,

PR  


David Lampitt  
Learning & Skills Adviser

**REGIONAL MANAGEMENT SKILLS GROUP 1  
DRAFT DIAGNOSTIC TOOLS MATRIX DECEMBER 2000**

**Introduction**

One of the ten key themes of the Management Development Framework (MDF) is that 'Effective management development should stem from business analysis and be a part of business planning'. The MDF contains a number of objectives concerning business analysis and the use of diagnostic tools.

We define diagnostic tools as follows –

'A tool that is used for reviewing any part of the business or individuals in the business in order to assess the current position and leads to the development of an action plan for improvement'.

The most effective diagnostic tools will –

- Gather information / facts.
- Contain challenging questions i.e. thought provoking.
- Provide data that clearly shows the need for improvement / change.
- Excite and inspire the organisation to take action.

The development of a diagnostic tools matrix is an important step towards the achievement of MDF objectives.

There is a plethora of diagnostic tools available; some are more effective than others. It is important to recognise that no one tool will be appropriate for all business purposes.

The matrix that follows is a working document, compiled from data supplied from the RMSG 1 and represents the range of tools currently used by TEC/CCTE's in the region. It is the first stage in the development of a matrix, which will ultimately be used to help promote the use and value of diagnostic tools for businesses.

**REGIONAL MANAGEMENT SKILLS GROUP 1**  
**DRAFT MATRIX OF DIAGNOSTIC / TNA TOOLS USED BY TECS/CCTES - DECEMBER 2000**

1. Diagnostic Tool	2. Used by TEC/CCTE	3. Purpose and added value What is it used for?	4. Target Audience	5. Cost	6. Contact organisation/name
Business Excellence Model	Dudley B/S H&W Sandwell Walsall Wolves	A holistic model to help examine business performance. It gives a baseline of where businesses are. Used for Total Quality Management and continued improvement activities in businesses. Flexible – use varies -whole model or parts of it can be used examine certain aspects of the business.	Any sized companies		Management Development Advisors (MDA) in each TEC
Build a Better Business	Dudley B/S H/W Wolves	A Business development tool – develops people as part of business plan. (IIP recognition – best practice HR management) Used outside of Investors. Workshops Can be rigorous and utilised for management development Can be sector specific. Used as a feeder into other programmes.	SME's	Varies from TEC/ CCTE and within TECs e.g. a pack is 65	Ditto

1. Diagnostic Tool	2. Used by	3. Purpose and added value	4. Target Audience and Notes	5. Cost	6. Contact organisation/name
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1. Diagnostic Tool	2. Used by TEC/CCTE	3. Purpose and added value What is it used for?	4. Target Audience	5. Cost	6. Contact organisation/name
Training Needs Analysis: National Management Standards and BEM	Wolves Dudley	Management Skills Project tool. Aim to identify management team strengths and areas of development which will form a recommended training and development plan. Management Standards are used as a framework for discussion to identify managers' strengths and areas of development. BEM indicators are used as a framework to benchmark when analysing the organisations needs.	All organisations	At Wolves CCTE - Free to SME's Consultant costs for larger organisations	Management Skills Adviser 01902 445500
Management Standards And Owner Management standards	SCCTE and Business Link	To use as a guide as to what is expected of managers	All companies - Owner Managers, SMEs		Yvonne Peers Dudley TEC Carolyn Griffiths SSCTE/BLink
Business Health Check	Walsall	Initial diagnosis - all aspects of business - outcome - report. Second stage - How to action findings. Initial diagnosis is free service.	SME's	Varies	Consultants - contact via MDA at TEC
Management Development Corporate Diagnostic	Dudley	To examine business performance and develop improvement plans encompassing: Company profile, management team profile, company market place, SWOT analysis & action plan	SME's Adviser facilitated	No charge	Yvonne Peers at TEC

	TEC/CCTE	What is it used for?	All organisations	Varies from TEC/CCTE and within TECs	IIP team and MDA in individual TEC/CCTE
Investors in People Standard	Dudley B/S H/W Sandwell Walsall Wolves	Management Development diagnostic tool –develops people as part of business plan. Identifies management practice/ opportunities for improvement. Can be rigorous	All organisations	Varies from TEC/CCTE and within TECs	IIP team and MDA in individual TEC/CCTE
The Benchmark Self Assessment Questionnaire	Bim/ Solihull TEC	Assessing the business in terms of: <ul style="list-style-type: none"> <li>- Capacity –markets &amp; products/ Services</li> <li>- Resources-financial &amp; other</li> <li>- know how, including management</li> </ul> to benchmark, identify support needs & implementation plans and measure impact of support over time. Identifies gazelle companies (potential growth)	All SME's (requesting support) Enables greater subsidy for subsequent consultancy.		
Blueprint for Optimum Performance	H&W	Business diagnostic tool for medium sized companies (20-150) Delivered via workshop approach. Purpose and use varies – IIP, EFQM	Medium sized companies with desire to succeed.	Licence fee and training	SCA Ltd 0115 9440466 John Cox

1. Diagnostic Tool	2. Used by TEC/CCTE	3. Purpose and added value What is it used for?	4. Target Audience	5. Cost	6. Contact/organisation/name
Two stage Business Review	Sandwell	To help examine business performance and focus on areas of potential improvement. To identify further detailed diagnostic review and links to specialist input i.e. Export, Management Development, IT.	SME's primarily Support packages (subsidised) are then linked via the Business Advisers	Varies	MDA at TEC
IBX (Implementing Business Excellence)	B&S	Group scheme (10 participants) for: -raising awareness of EFQM model -introducing self assessment skills -benchmarking through making a submission to Midlands Quality awards -feedback report for each organisation Leading to: continuous approach to business improvement and improved management capability	All businesses but SME's preferred (for funding purposes)	1750 subsidised	
TNA's	B&S	Individual and team assessment of competence against appropriate management standard(s) Questionnaire and interview		Highly subsidised - 40 Per person	

1. Diagnostic tool	2. Used by	3. Purpose and added value	4. Target Audience	5. Cost	6. Contact organisation/name
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HR Review	TEC/CCTE Wolves	What is it used for? Business Response Unit tool. Aim is to gather additional facts and information on the organisation focusing on all aspects of HR, management development forms part of this process. This will provide leads in to the organisation. Th process is carried out with the support of an adviser, who will complete the questionnaire document through discussion.	All organisations	Free to all organisations	Business Response Unit 01902 445500
Management Matters	SSCTE/Blink	The programme is unique in that it develops individual managers and management teams in the context of the organisation. The process starts with a review of the company, which allows the Management Matters team to assess and understand the needs of the organisation. This allows them to tailor the development activities and help managers participating to implement their learning into the business. Available through the programme are senior management team days – individual reviews, which ensures that clear links are made between the organisations objectives and the development of managers.	All companies- however the emphasis is with SME's	?this is a pick and mix programme Example of costs: Reviews ? 300 Team Day: ? 1000 Indiv. Assessment: ? 325	Carolyn Griffiths SSCTE and Business Link

1. Diagnostic Tool	2. Used by	3. Purpose and added value	4. Target Audience	5. Cost	6. Contact organisation/name
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	TEC/CCTE	What is it used for?			
Manufacturing Challenge	All	Questionnaire crude.	Manufacturing companies		
Enabler 2000					