IT Outsourcing

in Small to Medium-Size Enterprises in the Republic of Ireland:

An Investigation

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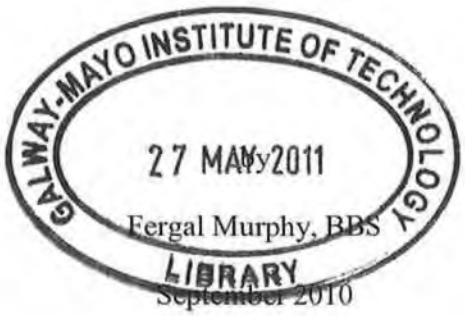

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LIST OF ABBREVIATIONS

CIO ..... *Chief Information Officer*

EDS ..... *Electronic Data Systems*

ERP ..... *Enterprise Resource Planning*

HP ..... *Hewlett-Parkard*

ICT ..... *Information & Communication Technology*

IBM ..... *International Business Machines*

IR ..... *Inland Revenue*

IS ..... *Information Systems*

IT ..... *Information Technology*

KDB ..... *Korea Development Bank*

SME ..... *Small to Medium-Sized Enterprise*

ABSTRACT

In Ireland, small to medium-sized enterprises (SMEs) play a very important role in the economy by their contribution to both employment and also to gross domestic product. Addressing issues pertinent to SMEs is of paramount importance to the sector. With the world of Information Technology (IT) rapidly growing bigger and stronger every day, so to are the challenges faced by it. It enables SMEs to automate their operations, seek new opportunities and enhance their strategic business position in local and international markets. The inability of such companies, due to their size and structure, of dealing with such challenges makes it difficult for them to benefit from IT technologies. One way out of this complex situation is to outsource the IT technology requirements. This increase in IT technologies has subsequently given rise to an increase in the number of outsourcing vendors available to take-over such activities. The value of conducting this research is outlined in Halvey & Melby (2005) where it states that IT outsourcing has become a $536 billion worldwide marketplace.[1] As IT is a company wide function, it is subject to many influencing factors that either support or discourage the decision by managers to outsource. The author of this study analysed a great deal of literature to identify such factors and ten interviews were carried out on SMEs in Ireland. This study endeavours to identify the pattern of IT outsourcing issues of SMEs within the Republic of Ireland. It reveals that the main drivers behind IT outsourcing are cost reductions, although this is directly related to quality of service offered and the need to focus on core competences. The study also identifies the main activities that are being outsourced

[1] Halvey, J., Melby, B. (2005) *Information Technology Outsourcing Transactions: Process, Strategies, and Contracts*, p.1

by SMEs, the satisfaction levels of the SMEs with their service providers and makes suggestions for further research in this crucial sector.

CHAPTER 1

Introduction

1.1 BACKGROUND

The outsourcing of non-core activities is a common option for organisations that wish to focus on their core competences in order to achieve competitive advantage and long-term organisational goals. From its introduction as a cost-reduction tool, many now feel outsourcing has evolved into a vital component of a firm's overall business strategy. It has grown from the domain of IT embodying decisions such as where and how to source IT to a much wider set of business functions: logistics, payroll, human resources, legal, and so forth.

Information technology has become very important in today's business environment. There is hardly any organisation that could continue its business processes without the help of IT. Nowadays, IT has become as indispensable as electricity or telephony. Companies are realising the strategic role that information and information systems can provide to their organisations. However, it is not simply a matter of cost reduction. As the IT function becomes more integrated with the core business activities of an organisation, it can be expected that factors other than cost alone, are the reasons behind IT outsourcing. This study looks in detail at the main reasons why SMEs outsource IT.

Within the last twenty years outsourcing has evolved from a differentiation strategy for gaining competitive advantage to more of a basic strategy of information systems (IS) management in majority of large organisations in both public (such as hospitals and local governments) and private (such as manufacturing organisations) sectors.[1] The rapid technological advancement, evolution of the internet, wide availability and

[1] Alsudairi, M., Dwivedi, Y. (2009) "A Multi-Disciplinary Profile of IS/IT Outsourcing Research", *Journal of Enterprise Information Management*, 23(2), p.215

adoption of broadband has enabled outsourcing strategy's to be implemented even by SMEs.[2] By concentrating on the 'what' is to be done and not 'how' it is to be delivered or achieved, competitive gains and cost savings have resulted for both private and public sector organisations particularly in areas of IT, which, while it may not be considered as a core business activity, is nevertheless skills intensive.

The growing importance of IT outsourcing can be attributed to two major developments. As time passes by, IT is becoming more complex, more diverse and also more critical. In addition, traditional IT organisations are less capable of contributing this complexity and diversity by themselves. Hence, many companies are turning to outsourcing as a means to solving this issue.

When technology is not considered in developing the business strategy, the results are missed opportunities that could have contributed to the achievement of the organisation's goals. In contrast to the emphasis on the strategic and competitive role of IS in organisations, companies are increasingly viewing IS as a utility that can be 'rented' from an external supplier, and it is because of such views that the IT outsourcing industry has developed and continues to develop as rapidly as it has over the past two decades.

1.2 RESEARCH PROBLEM

A significant amount has been written in literature on the topic of outsourcing. However, little attention has been given to reasons behind outsourcing decisions within SMEs in Ireland. Also, very little of the literature can be classified as

[2] *Ibid*

empirical, that is, a researcher collects and analyses data to answer a question. The literature is written for a general audience, in particular general managers, who may know nothing about IT but see outsourcing of this function as a viable business option.

This study attempts to redress this lack of empirical research on IT outsourcing and lack of attention given to the determinants of IT outsourcing specifically relating to companies in Ireland. The study examines the various factors that were or are important for the IT outsourcing decision. These factors can be broken into five different areas, namely, financial, control/strategic, technological, personnel and market reasons. It is useful to identify factors within each area as main determinants behind the IT outsourcing decisions. These factor's can be attributed to the reasons behind outsourcing - the various reasons why companies continue to outsource and will do so in the future.

The outsourcing decision is initiated by both senior managers and IT managers. By comparing the responses of both of these groups to the reasons influencing IT outsourcing decisions, valuable insights into the different perceptions of the IT function can be gained. For example, senior managers may outsource for financial reasons, in which case, IT is viewed as an overhead function, while IT managers may outsource for strategic reasons. These two different perspectives allow for a greater understanding into the successes and reasons of outsourcing initiatives.

This study attempts to analyse the factors that are most influential in deciding to outsource IT. It also attempts to provide an insight into the specific IT activities that

are currently outsourced. IT outsourcing is of particular interest in SMEs as the pace of technological innovation changes rapidly making it difficult for managers to deal with such transformations.

1.3 RESEARCH OBJECTIVE

The main objective of this study is to gain a deeper understanding of the decisions that encourage the outsourcing of the IT function within SMEs in Ireland. IT outsourcing has been a major growth area for the past two decades and continues to show impressive growth rates despite the economic downturn at present. Its popularity is unlikely to decrease in the near future. While IT outsourcing is regarded as a widespread business tool within the public sector, many private sector companies are adopting outsourcing as part of their overall business strategies.

The main research question is "what are the key reasons that small to medium sized enterprises within the Republic of Ireland initiate IT outsourcing as a viable business process?" To achieve this, the study will assess the satisfaction of IT outsourcing in the SME in general and the satisfaction of the corresponding service-provider relationship in particular. Also it will analyse what the most common aspects of IT, which are being outsourced at present by SMEs.

It is useful to carry out this study focusing on SMEs, against the background of the major structural and organisational changes that have been occurring in these companies over recent years. These changes, in many instances, have been driven by the competitive challenges arising from the global economic situation at present. All SMEs are undergoing major change initiatives aimed at stabilising their companies.

This involves cost reductions, downsizing of activities and the re-engineering of internal business processes, all aimed at improving the efficiency and overall costs of running a business. Focusing on obtaining strategic management information will provide a challenge both for the design of new information systems and how the IT function will contribute to this through outsourced practices.

Against this environmental background this research attempts to capture how companies, without the expertise or required skills, are responding to the IT challenges of today and how they see the role of IT outsourcing contributing to their overall IT strategies and policies.

The literature on IT in small businesses reveals two important features. Firstly, SMEs are characterised by resource-poverty at different levels, e.g. financial, IT experts, planning, and time. Secondly, SMEs face challenges in choosing an appropriate technology. The IT arena is currently characterised by an ever-increasing range of products and solutions. According to the Outsourcing Institute (2000), the wide range of offerings of IT products, specifically in the electronic commerce technologies sector, has made the task of appropriate choice of IT products and their suppliers a very complex process for businesses.[3] Companies want to take advantage of such technologies through outsourcing.

IT outsourcing has been very successful in companies world-wide and its potential to flourish and thrive even further remains positive. With companies ever looking for new and better ways to increase the efficiency and effectiveness of their

[3] The Outsourcing Institute (2000) *Outsourcing Index 2000: Strategic Insights into US Outsourcing*, available at http://www.outsourcing.com/Common/Index2000.jsp

product/service offering, more and more organisations look to IT outsourcing as the solution.

There are a significant number of practical problems associated with applying outsourcing as a business practice, such as, employee resistance and loss of management control. Nevertheless outsourcing does have significant potential for application across all SMEs in Ireland. Whether small or large, the application of IT outsourcing as a business tool can be either a great success or a significant failure depending on how it is applied, managed and developed.

1.4 OUTLINE OF THESIS

The research question is concerned with identifying important reasons behind SMEs in the Republic of Ireland outsourcing the IT function of their business to outside third-party vendors based on their experiences. The first chapter is simply an overview of the whole study.

In the second chapter, past literature on IT outsourcing will be examined. This chapter begins with an introduction to IT outsourcing and provides in detail definitions of the main terms used in the study. In real terms many authors appear to have a slightly different definition of outsourcing. Gradually, the focus will turn to a specific part of outsourcing, namely IT outsourcing. As IT outsourcing is a very relevant topic today, particular emphasis is placed on its history and growth from as far back as the 1960s up until the present day. The main section of the chapter concerns real life situations of the successes and failures of IT outsourcing within companies which will help identify the main advantages and disadvantages of such a

practice. To conclude, the future of IT outsourcing is evaluated. A number of issues are covered in this lengthy chapter.

The third chapter is the start of the empirical research. It examines the research methodology used in analysing the reasons for IT outsourcing decisions. The chapter describes the data collection process, the size of the sample and how it was selected, and gives a brief description of how the data was analysed and presented.

Chapter four encompasses the research findings and an analysis of these findings. The implications and meanings of these findings are discussed in detail within the chapter. The limitations to the research are also highlighted along with suggestions for future research into IT outsourcing.

Within the final chapter, the conclusions that flow from the research will be discussed. For example: To what extent has the research question been answered? What recommendations can be made towards organisations?

1.5 CONCLUSION

The focus of companies on outsourcing illustrates the interest and benefits associated with such a strategy. Outsourcing is seen now as a solution to a problem. The continued need for the IT function within companies is adding to the pressure already placed on managers. With this, the outsourcing of IT is seen as a viable option in companies where the resources are not available. Ireland is now facing a new economic era where all companies are facing increasing demands at almost every level. Companies are becoming increasingly dependent on products and services

found outside the locality of their business. This research will serve as an addition to the existing knowledge of IT outsourcing. At the same time, it will provide qualitative data and information from the market research. Therefore, the market knowledge on IT outsourcing will be increased.

With the foundations of the study identified and the main objective distinguished, the next chapter examines the literature on IT outsourcing. The main reasons behind reviewing the literature allows the author to confidentially scrutinise and analyse the trends currently in the IT outsourcing world. This forms the basis of the thesis where various published literature highlights the progress made by IT outsourcing into the growing phenomenon it has become today.

CHAPTER 2

IT Outsourcing: Evolution & Context

2.1 INTRODUCTION

Over the past several years, an increasing amount of attention has been paid to the role of outsourcing, and in particular IT outsourcing, in present-day organisations. Proliferation of the internet and advancements in information technology (IT) has brought new opportunities to companies to conduct their business more efficiently than in the past. The use of the internet and IT has not only changed the way firms do business, but has also improved their existing processes. Today, firms can conduct their business by using their own resources and expertise, or by outsourcing some of the internal functions to outside contracting firms that specialise in certain functions. Furthermore firms today prefer outsourcing their business processes to firms that are highly specialised in using IT for business purposes.

Instead of being tightly controlled in-house, information technology (IT), the lifeblood of contemporary business organisations is being outsourced at an unprecedented speed and scale.[4] In 2008 alone the top 20 worldwide IT outsourcing contracts were worth nearly US $150 billion.[5] The purpose of this chapter is to present findings from the literature research concerning IT outsourcing. This will involve examining the history of IT outsourcing to create an historical context and how it has evolved into the position it is in today. The main focus of the chapter concerns the success or shortcomings of IT outsourcing arrangements between companies. This will be aided by highlighting real life examples with particular emphasises on Irish and UK companies. The chapter concludes with some thoughts

[4] Gwebu, K., Wang, J., Wang, L. (2010) "Does IT Outsourcing Deliver Economic Value to Firms", *Journal of Strategic Information Systems*, 19(2), p.109
[5] *Ibid*

about where IT outsourcing might be headed and its likely implications. But first the chapter will begin by describing the most important terms concerning this study.

2.2 OUTSOURCING & INFORMATION TECHNOLOGY (IT)

The following paragraphs introduce and describe the terms that are the foundation of this research, namely outsourcing and information technology. Doing this allows readers to interpret the terms equally and correctly. This clarification is extremely useful since some authors use different terminology regarding outsourcing, as is the case for the word "insourcing".

So what exactly is outsourcing? There are many definitions associated with the term "outsourcing". Many contemporary authors have identified the concept of outsourcing. Yan (2000) describes outsourcing as a contractual agreement between the customer and one or more suppliers to provide services or processes that the customer is currently providing internally.[6] Conversely Zhu et al. (2001) defines the word "outsourcing" as the process of transferring the responsibility for a specific business function from an employee group to non-employee group.[7] Furthermore Embleton et al. (1998) illustrates outsourcing as the practice of handing over the planning, management and operation of certain functions to an independent third party.[8] Lankford & Parsa (1999) simply judged outsourcing as the procurement of

[6] Fan, Y. (2000) "Strategic Outsourcing: Evidence from British Companies", *Marketing Intelligence & Planning*, 18(4), p.213
[7] Zhu, Z., Hsu, K., Lillie, J. (2001) "Outsourcing - A Strategic Move: The Process and the Ingredients for Success", *Management Decision*, 39(5), p.373
[8] Embleton, P., Wright, P. (1998) "A Practical Guide to Successful Outsourcing", *Empowerment in Organisations*, 6(3), p.94

products or services from sources that are external to the organisation.[9] At its most basic it can be seen as the purchase of a good or service from an external vendor.

If something is outsourced by an organisation it is obvious that another organisation will carry out the process or tasks in return for a financial compensation. The external entity, as referred to in the explanations above, can be called a service-provider.

Information and technology are two words that can describe a revolution in the global economies of today. It is probably one of the most used terms in business nowadays. The meaning of information technology (henceforth also known as IT) is best described by Aksoy & DeNardis (2008) where information technologies are systems of hardware and/or software that capture, process, exchange, store, and/or present information, using electrical, magnetic, and/or electromagnetic energy.[10] This can include computers, ancillary equipment, firmware and similar procedures, services (including support services), and related resources. On the business front, information technology has evolved from being a back office procedure to a decisive and strategic paradigm. This rapid development of which has impacted, on a global scale, the way companies conduct their operation and for some shape their strategies.

Having explained the general outsourcing and IT fields, a deepening into IT outsourcing will be highlighted. The following are a selection of definitions from literature which best describe information technology outsourcing. Many different

[9] Lankford, W., Parsa, F. (1999) "Outsourcing: A Primer", *Management Decision*, 37(4), p.310
[10] Aksoy, P., DeNardis, L. (2008) *Information Technology in Theory*, p.8

definitions have been given to it by different authors. Generally speaking IT outsourcing:

> *"...is defined as a decision taken by an organisation to contract-out or sell the organisation's IT assets, people and/or activities to a third party supplier, who in exchange provides and manages assets and services for monetary returns over an agreed time period".*[11]

> *"...the commissioning of a third party (or a number of third parties) to manage a client organisation's IT assets, people and or activities (or part thereof) to required results".*[12]

> *"...obtaining IT services through a specific and formal organisational arrangement for the purpose of production and delivery of IT services as well as the management of the necessary resources and activities".*[13]

For the purposes of this study IT outsourcing is defined as the contracting out to outside vendors of all those IT functions that could be kept in-house. Now that the terms dealing with outsourcing and IT outsourcing have been defined, the next section will develop a summary of the history of IT outsourcing.

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[11] Kern, T., Willcocks, L. (2000) "Exploring Information Technology Outsourcing Relationships: Theory and Practice", *Journal of Strategic Information Systems*, 9(4) p.322

[12] Foogooa, R. (2008) "IS Outsourcing - A Strategic Perspective", *Business Process Management Journal,* 14(6), p.859

[13] Jayatilaka, B., Hirschheim, R. (2009) "Changes in IT Sourcing Arrangements: An Interpretive Field Study of Technical and Institutional Influences", *Strategic Outsourcing: An International Journal*, 2(2), p.85

inadequate supply of IT personnel, managers began to rely on contract programming, which became the predominant form of outsourcing during the 1970s.[19] Skills shortages and other personnel issues such as those involving scarcity of trained IT specialists and the lack of appropriate training and development programmes for IT staff, were the main reasons for outsourcing decisions in this time period. Management uncertainty over how to proceed in an evolving technological era was also a factor.

The emphasis in the 1980s was on the use of information for competitive advantage. IT was looked upon as a strategic asset and a valued function of a firm. From the mid-1980s a new type of IT outsourcing started to blossom. According to Cheon et al. (1995), five main differences stand out between this new type of IT outsourcing and more traditional outsourcing:

- a greater range and depth of services is outsourced;
- people and equipment are transferred to the supplier;
- suppliers often accept profit and loss responsibility;
- the nature of the relationship with suppliers evolves towards partnerships;
- larger companies are outsourcing (i.e. not only small and medium sized companies that do not possess their own IT infrastructure).[20]

Though this new type of IT outsourcing started developing in the mid-1980s, it really took off after the very much-heralded contract between Kodak and IBM in 1989.[21]

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[19] Lee, J., Huynk, M., Kwok, R., Pi, S. (2003) "IT Outsourcing Evolution - Past, Present, and Future", *Communications of the ACM*, 46(5), p.85

[20] Cheon, M., Grover, V., Teng, J. (1995) "Theoretical Perspectives on the Outsourcing of Information Systems", *Journal of Information Technology*, 10(4), p.106

Following this, the evolution of IT outsourcing has grown rapidly. The so-called 'Kodak effect' led to a quick increase in the adoption rate of IT outsourcing. According to Loh and Venkatraman (1992), this landmark deal legitimised the practice of IT outsourcing among US fortune 500 firms.[22] In the late 1980s and early 1990s, senior executives sought ways to leverage outsourcing to control and shape IT costs in conjunction with changing business requirements.[23] Other success stories of American Airlines and Merrill Lynch also highlighted the benefits of exploiting information systems.

Outsourcing during the period 1970 to 1990 was important but, in retrospect largely peripheral to the main IT activities that took place in midsize and large organisations.[24] In the past, IT products and/or services were outsourced on a cost/commodity basis. A firm attained differentiated advantage by placing reliance on external suppliers to provide an IT service more cheaply and of greater quality so that the host organisation could redirect its own capabilities to other high value-adding areas.[25] In the 1990s things started to change. Even the most innovative IT services, such as design, are being outsourced globally.[26]

2.3.1 IT Outsourcing in the 1990s

The period during the 1990s saw senior management look for ways to increase the efficiency of the IT department and to show greater returns on the investment in IT.

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[21] Barthelemy, J., Geyer, D. (2001) p.195
[22] Loh, L., Venkatraman, N. (1992) "Diffusion of Information Technology Outsourcing: Influence sources and the Kodak Effect", *Information Systems Research*, 3(4), p.340
[23] Currie, W. (2000) "The Supply-Side of IT Outsourcing: The Trend Towards Mergers, Acquisitions and Joint Ventures", *International Journal of Physical Distribution & Logistics Management*, 30(3/4), p.239
[24] McFarlan, W., Nolan, R. (1995) p.15
[25] Barrar, P., Gervais, R. (2006) *Global Outsourcing Strategies: An International Refernece on Effective Outsourcing Relationships*, p.51
[26] Ibid

Companies changed their diversification strategies to focus on core competencies. Many companies looked to improve telecommunications technology to enable them to compete on a global scale. However, since the mid-1990s many areas of information technology skills have been chronically difficult to staff. For example, in North America, the shortage of qualified IT professionals is so acute that federal governments intervened and allowed qualified IT professionals from any country to enter work (as non-immigrants) in North America for three to six years without requirement of a specific job offer.[27] Others saw outsourcing as the solution to the problem.

The outsourcing market was given further boost in the early 1990s by many national governments that sought to drive radical change by encouraging public sector bodies to adopt private sector efficiency techniques. For example, in the UK, the government instigated a programme called 'Market Testing' in which in-house services (including IT) were tested for value for money against what an external service-provider could deliver.[28] This resulted in the outsourcing of a substantial proportion of the government's IT services.

The increase in competition also added to the popularity in IT outsourcing in the 1990s. As IT services came under greater scrutiny, several major service-providers pushed to increase their share of the outsourcing market. These companies developed a wider and more comprehensive range of services. As organisations began to suffer from diseconomies of scale and experienced difficulties migrating from cumbersome legacy (existing) systems, these external service-providers' offerings looked

[27] Hurley, M. (2001) "IT Outsourcing - Managing The Key Assets", *Information Management & Computer Security*, 9(5), p.243
[28] Sparrow, E. (2003) *Successful IT Outsourcing*, p.4

increasingly attractive and the market grew substantially.[29] The main companies included Computer Science Corporation (CSC), EDS and International Business Machines (IBM).

During the dotcom boom, a large number of new, smaller service-providers emerged, with outsourcing services operating at remote data centres.[30] Such companies offered rapid implementation and simplified pricing, and were aimed primarily at SMEs. Now in the 21st century there is a rich and mature IT outsourcing market, offering a wide variety of services to meet different needs.

2.3.2 Developing Trends

Large facilities management contracts in the 1980s signalled a timely convergence of supply and demand factors. On the one hand, major vendors offered facilities management and other outsourcing services. On the other hand, managers, who were tired of IS budget growth year after year and sometimes elusive benefits, saw an opportunity to cut IT costs, downsize the IS function, and do to IT what they were doing in other parts of the business – subcontract.[31] Plus the announcement of two seemingly revolutionary outsourcing contracts at Eastman Kodak and at General Dynamics may have given business the confidence to take on IT outsourcing on an ever-widening scale, and the issue was established on corporate agendas.[32] The successful arrangements highlighted proved to some companies that IT outsourcing in certain situations can be beneficial if implemented right.

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[29] *Ibid*
[30] *Ibid*
[31] Earl, M.J. (1996) "The Risks of Outsourcing IT", *Sloan Management Review*, 37(3), p.28
[32] Loh, L., Ventkatraman, N. (1992) "Determinants of Information Technology Outsourcing: A Cross-Sectional Analysis", *Journal of Management Information Systems*, 9(1), p.10

The outsourcing of IT has experienced phenomenal growth over the past decade in North America, the UK and Australia. Western Europe, South America and parts of South East Asia, including Japan, are now positively responding, having recently resisted the trend.[33] The IT market analysts, the Gartner Group (1999) projected a 16.3% growth rate world-wide between 1997 and 2002, estimating a $120 billion IT outsourcing market by the end 2002.[34] Figures such as the ones highlighted showed how valuable IT outsourcing had become to companies.

The outsourcing phenomenon can be explained by at least two trends. First, many executives believe that IT is quickly evolving into a utility service. As such, utility services are more efficiently acquired through specialised vendors that achieve economies of scale.[35] Second, a significant bandwagon effect has been noted.[36] Outsourcing successes primarily at Kodak, but also at Southeast and Continental Airlines (both US) prompted many executives to outsource without due consideration of the potential consequences.

Much of the literature tends to deal with numerical estimates when highlighting IT outsourcing trends in the 2000s. According to Khalfan (2004) the IT outsourcing market was predicted to reach $150 billion by 2004.[37] Further the Gartner Group expects the outsourcing market to grow $180.5 billion in 2003 to $253.1 billion in

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[33] Kakabadse, A., Kakabadse, N. (2002) "Trends in Outsourcing: Contrasting USA and Europe", *European Management Journal*, 20(2), p.191
[34] *Ibid*
[35] Lacity, M.C., Hirschheim, R. (1993) "The Information Systems Outsourcing Bandwagon", *Sloan Management Review,* 35(1), p.75
[36] Loh, L., Ventkatraman, N. (1992), p.12
[37] Khalfan, A. (2004) "Information Security Considerations in IS/IT Outsourcing Projects: A Descriptive Case Study of Two Sectors", *International Journal of Management Information*, 24(1), p.30

2008.[38] Forrester estimates that the value of the world's outsourcing market is $120 billion per year and predicts that European firms will increase the expenses derived from outsourcing in 2008.[39] A survey conducted by KPMG illustrated that 87 percent of the companies interviewed plan to maintain - or increase - their current outsourcing level since 42 percent of them thought that their outsourcing contracts had definitely improved their financial performance, and another 27 percent stated that outsourcing had enhanced their competitiveness.[40] Although these statistics may vary across different sources, it has ensured that IT outsourcing attains extensive world-wide business attention.

2.4 IT OUTSOURCING: SUCCESS OR FAILURE?

The aim of this section is to provide real life examples of IT outsourcing deals. There is an abundance of literature on mega outsourcing arrangements. The two main examples highlighted will be the UK Inland Revenue's arrangement with EDS (Electronic Data Systems) in 1993 and Bank of Ireland's IT outsourcing contract with HP in 2003. Procter & Gamble's deal with HP, also in 2003, will be briefly discussed. A brief discussion will also be given about two successful arrangements engaged by SMEs.

As highlighted under the section of IT outsourcing in the 1990s, governments wanted to introduce radical change in the public sector by adopting private sector efficiency techniques. This was done by examining in-house activities against external

[38] Gonzalez, R., Gasco, J., Llopis, J. (2010) "Information Systems Outsourcing Reasons & Risks: A New Assessment", *Industrial Management & Data Systems*, 110(2), p.284
[39] *Ibid*
[40] KPMG IT Advisory (2007) *Strategic Evolution: A Global Survey on Sourcing Today*, p.12, available at http://www.kpmg.com.au/Portals/0/rasita_strategic-evolution200701.pdf

providers of the same functions. Inland Revenue in the UK sought to test the cost-efficiency of 25 percent of all its activities against external suppliers.[41] In line with government policy, the Inland Revenue (IR) which is responsible for administration of all UK taxes undertook in 1992 to outsource most of its IT.

By January 1993 three vendor consortia and three single bidders - EDS, Hoskyns and Sema Group - were pursing the contract, planned to commence in 1994.[42] EDS was selected as the preferred strategic partner for the outsourcing of Inland's information technology. The contract was worth a staggering £1 billion over a ten year period. At the time this was the largest outsourcing contract ever awarded in Europe. The estimated cost savings from handing over IT assets, staff and management activities were £225 million over the life of the contract.

According to the IT Director, Geoff Bush, the rational for total outsourcing was: to gain rapid access to new technologies; enhance the capability of IT to meet business needs, and especially to reduce development time; optimise IT staff career opportunities and achieve step improvements in efficiency, including cost efficiency.[43] In 2001, EDS had delivered the promised cost savings according to a 'constant volume' model maintained by the IR. Such cost assessments become increasingly inaccurate, because the volume, composition and services change during the life of the contract. Perhaps more importantly than the cost savings, the IR and

[41] Willcocks, L.P., Kern, T. (1998) "IT Outsourcing as Strategic Partnering: The Case of the UK Inland Revenue", *European Journal of Information Systems*, 7(1), p29
[42] *Ibid*
[43] *Ibid*

EDS have used the IT to enable a number of tax reforms, notably the Self Assessment Initiative introduced in April 1997.[44]

Early on there were some industrial relations difficulties over possibilities of job losses, and terms and conditions of transfer. Like all mega contracts, the IR-EDS relationship is an evolving and dynamic one. In 2003 one major problem occurred which led to the termination of the arrangement between EDS and IR. The reasoning behind this was the introduction of a new tax credit system for which the EDS was responsible. The software went live after four weeks of tests, although a 20-week test period was originally specified. Hundreds of thousands of low-paid workers and their families suffered short-term hardship when their payments failed to arrive as expected - and needed.[45] EDS was paid £168m to complete this extra project. According to a report by the Committee of Public Accounts, the problems were due in large part to deficiencies in IT systems.[46]

The cost of the contract had risen from £1 billion to an expected £2 billon over the 10 year contract, largely due to the extra work given to the supplier. The planned upgrades to the IR system were delayed in 2000 by the Y2K bug.[47] Dave Evans, head of security at the IR highlighted that viable lessons were learned from the EDS contract and applied when the Revenue retendered its IT operations, with Cap Gemini Ernst & Young.[48] The knowledge gained will also inform the rest of government IT procurement. The new 10-year deal with Cap Gemini Ernst & Young

[44] Lacity, M.,Willcocks, L. (2001) *Global Information Technology Outsourcing: In Search Of Business Advantage,* p.95
[45] Cullen, D. (2003) *Inland Revenue Poised to Ditch EDS*, available at http://www.theregister.co.uk/2003/12/08/inland_revenue_poised_to_ditch/
[46] House of Commons Public Accounts Committee (2004) *Inland Revenue: Tax Credits,* p.3, available at http://www.publications.parliament.uk/pa/cm200304/cmselect/cmpubacc/89/89.pdf
[47] Ranger, S. (2000) "Bug Causes Revenue Tax Return Delays", *Computing*, May 17th
[48] Goodwill, B. (2004) "Inland Revenue Learns Security Lessons", *Computer Weekly*, Sept. 28th

commenced in January 2004.[49] Again this deal was surrounded by controversy as it involved the transferring of key staff that worked for EDS. However these issues were resolved and the contract was signed to become Cap Gemini Ernst & Young's largest ever IT services contract.

One of the most significant IT outsourcing contracts signed in Ireland in recent times was in relation to Bank of Ireland. The bank signed a £348m, seven-year IT outsourcing contract with Hewlett-Packard (HP) after several months of negotiations with staff and union leaders in 2003.[50] The deal saw the transferring to HP of the IBM mainframes and Windows NT4 and Windows 2000 servers, together with desktops, networks and the ATM network.[51] It also involved the transfer of 350 staff in Ireland and 145 in the UK to HP. Many companies saw the deal as one of the largest outsourcing deals in Ireland and the UK.

Plans for the deal were first announced in April of that year, when HP was named as the preferred supplier. However this deal did encounter some problems at the beginning as employees feared job losses. An arbitration deal that offered significant job security and pension guarantees was accepted by staff, who already took part in a one-day strike.[52] Bank of Ireland staff has already faced considerable disruption in recent years. In 1998 the bank outsourced its IT to a joint venture with Perrot Systems, which ended in 2002 with the staff and systems being brought back in-

[49] Collins, T. (2003) "Uncharted Outsourcing Territory for the Revenue", *Computer Weekly*, Dec. 16th
[50] Huber, N. (2003) "Bank of Ireland Signs HP Outsourcing Deal", *Computer Weekly*, Sept. 12th
[51] Simons, M. (2003) "Bank of Ireland IT Workers End Dispute Over HP Outsourcing Deal", *Computer Weekly*, Sept. 16th
[52] *Ibid*

house.[53] There has been an evident lack of communication with staff on the outsourcing deals on both occasions.

The major reason why Bank of Ireland embarked on this deal was to minimise operating costs and reduce volume consumption.[54] According to Chief Information Officer (CIO) another reason behind the move was to use innovative technology in the future.[55] Basically the HP deal was as much about business transformation as it was about the day-to-day ICT support and maintenance. An example of this business transformation was the introduction of its banking online system which allowed customers to view their account(s) online.

Some analysts said that the deal had an impact on outsourcing contracts in the UK and Ireland. A banking trade union official negotiating for IT staff facing outsourcing at Royal & Sun Alliance said of the HP deal at the time, "it appears to set standards in the industry which other unions and companies will hopefully try and follow".[56] There is also the worry that once outsourcers have sufficient IT hardware and staff assets in a market, they would inevitably look to consolidation and staff reductions to boost their bottom line. The message from this case is that clear communication with staff is needed. Honest communication and timelines are vital. Although initially the deal did encounter problems, they were resolved when the deal was effectively communicated to employees. The arrangement did run the course of its life until 2010. According to the Irish Independent (2010) the contract has been put out to

[53] Simons, M. (2003) "Bank of Ireland Deal - A Worrying Benchmark?", *Computer Weekly*, Sept. 23rd
[54] Faughnan, L. (2005) *Outsourcing Enters Adulthood*, available at http://www.techcentral.ie/article.aspx?id=6670
[55] *Ibid*
[56] Simons, M. (2003)

tender again with a potential worth of over €600 million.[57] The two main companies vying for this lucrative contract are HCL Technologies and IBM.

Procter & Gamble's £2bn deal with HP was another massive IT outsourcing agreement. Under the terms of the contract, HP began managing Procter & Gamble's IT infrastructure, data centre operations, desktop environment, networks and some applications development and maintenance in 160 countries.[58] The contract adopted a multi supplier approach, which suited HP. Experts believed Procter & Gamble's new outsourcing deal will be more flexible, give it more control and prove more responsive to the changing needs of the business.[59] There is also scope for the manufacturer to play the suppliers off against one another to secure better deals and conditions. Although one danger of this is that the third parties might not get on with each other. Due to the highly lucrative contract on offer and HP beating off competition from rival firms such as IBM Global Services, the view is that Procter & Gamble got a highly competitive deal. Currently the contract is still active and working.

Despite companies' concerns about the risks of getting locked into a deal with a single supplier and the lack of flexibility in long-term contracts, the trend for multibillion-pound deals shows no signs of abating. The lure of a model that lets a company outsource its IT function, enabling it to focus on its core competences and – so the suppliers claim – achieve massive cost savings is understandable. Other notable IT outsourcing contracts that were signed during the past decade include:

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[57] Brennan, J. (2010) "HP Workers Will Strike to Protect Jobs if Bank Contract Goes Abroad", *Irish Independent*, April 30th

[58] Cushing, K. (2003) "Procter & Gamble's £2bn HP Deal Shows Mega IT Outsourcing is Still Tempting Some", *Computer Weekly*, April 22nd

[59] *Ibid*

- UK retailer Boots signing a 10-year, £710m outsourcing contract with IBM Global Services to manage its IT infrastructure;
- Finance house JP Morgan announcing an outsourcing deal with IBM for an estimated £3.6bn;
- Global travel and real estate giant Cendant signing a 10-year, £910m IT services deal with IBM;
- Fiat and NTL announcing they were outsourcing IT operations with a combined value of £5.8bn to IBM. [60]

Although the examples above highlight the huge interest in big-money IT outsourcing contracts, there is evidence of successful arrangements between SMEs and IT service-providers. Taplin (2008) identifies two cases where successful IT outsourcing has occurred. The first concerns Pulmuone, established in 1984 as a small food company which has grown to a medium-sized company having more than 1,500 employees with annual revenues amounting $360m in 2005.[61] By making a joint investment with CSG (Consulting Software Group), which had performed the various IT-related services for Pulmuone for many years, it established a company called Linkware (now MetanetBTS).[62] By 1996, Pulmuone initiated a five-year IT outsourcing contract with Linkware. Pulmuone's initiative occurred when there was no precedent for IT outsourcing among SMEs. The outsourcing charge was computed on a monthly basis. The company preferred an imperfect contract, which meant that most future problems or unexpected situations were to be resolved mainly by cooperation and discussion between the parties. This is somewhat different to

[60] Cushing, K. (2003)
[61] Taplin, R. (2008) *Outsourcing & Human Resource Management: An International Survey*, p.195
[62] *Ibid*

practices of today, where strict policy is placed on the elements of a contract. The second case highlights the Korea Development Bank (KDB) where for the first time in banking industry, promoted a total outsourcing of their IT functions in 1999.[63] The KDB was determined to enter into a joint liability operation period after going through the outsourcing operation and cooperation period, and then it could accept the most up-to-date IT, concentrate internal manpower on core capabilities and secure the flexibility of manpower. These two cases had been considered as a reference model for the successful practice of IT outsourcing among SMEs at that time.

2.5 THE FUTURE OF IT OUTSOURCING

Outsourcing continues as a prime topic of much discussion among association executives and IT professionals. On the one hand, it has been praised in the IT community for creating real efficiencies and cost savings, and criticised on the other as hard to manage, more expensive than hiring additional staff, and lacking real return on investment. So how does the prospect of IT outsourcing look with this in mind?

IT outsourcing has witnessed continued popularity in the past two decades. The IT outsourcing market accounts for 67% of all global outsourcing deals with current IT outsourcing services market at $746 billion.[64] Lacity et al. (2008) predict that both IT outsourcing market and business process outsourcing market continues to grow in all global market: for example, China's market will grow at an annual rate of 38%

[63] *Ibid* p.197
[64] Narasimhaiah, G., Lau, M.B. (2009) "Will Negative Experiences Impact Future IT Outsourcing?", *Journal of Computer Information Systems*, 50(3), p.91

through 2010.[65] However satisfaction rates with IT outsourcing make for worrying analysis. According to Wang & Yang (2007) satisfaction with IT outsourcing has been reported at a rate of only 33% for outsourced IT services in comparison to a rate of 70-80% for non-IT services.[66] A survey in 2006 highlighted that out of 160 IS projects outsourced, only 70 projects continued and the remaining 90 discontinued their current contracts either by switching vendors or by backsourcing.[67] Looking ahead, IT services-providers would need to improve on their product offering.

Outsourcing all or parts of a firms general IT functions still ranks number one for IT outsourcing, along with the move to data centers and the adoption of new backup and disaster recovery systems. According to Kane (2008) in the past year we have seen a growing trend in firms outsourcing all of their IT functions, many still view outsourcing as an adjunct to their in-house IT staff.[68]

In early 2008, expanding economic pressures caused the growth of overall IT spending to slow. The IT outsourcing industry also witnessed a rather dull year in 2009 majorly due again to the slowdown of the global economy. This has led to organisations freezing their IT budgets. Forrester (2009) predicts that business and governments' purchases of computer and communication equipment, software, IT consulting and integration services, and in particular IT outsourcing will actually

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[65] Lacity, M.C., Willcocks, L.P., Rottman, J.W. (2008) "Global Outsourcing of Back Office Services: Lessons, Trends and Enduring Challenges", *Strategic Outsourcing: An International Journal*, 1(1), p.14

[66] Wang, J.J., Yang, D.L., (2007) "Using A Hybrid Multi-Criteria Decision Aid Method For Information Systems Outsourcing", *Computers and Operations Research*, 34(12), p.3692

[67] Whitten, D., Leidner, D. (2006) "Bringing IT Back: An Analysis of the Decision to Backsource or Switch Vendors", *Decision Sciences*, 37(4), p.607

[68] Kane, C. (2008) "Trends in IT Outsourcing - Managed Services", *Associations Now Supplement*, 4(10), p.12

decline by 3% on a global basis when measured in US dollars.[69] Forrester is then anticipating overall IT spend to rise by 9% in 2010.[70] Today's global economic pressures are already forcing firms to cut costs even closer to the bone, and many firms are turning to application and infrastructure outsourcing to reduce overall IT spend. Managers face intense pressures for near-term cost savings with the requirement to position for future competitive advantage. The growing internal demand of business innovation and new market offerings make selecting the right infrastructure services partners even more vital. For example Chief Executive Officer Sam Palmisano expects IBM (the world's biggest computer-services company) to almost double operating earnings to $20 per share by 2015, as they continue to focus on more lucrative software and services businesses.[71] Also in the same article Chief Financial Officer Mark Loughridge of IBM expects outsourcing signings to have double-digit percentage growth in the second quarter of 2010. Clients are increasingly reliant on service-providers that can be successful as they take over broader portfolios.

The next few years are been viewed as the 'golden age of outsourcing'. That prediction is based on figures that suggest approximately £80 billion of public sector services are currently outsourced. However, by 2015, this is likely to exceed £140 billion.[72] According to Neil Stephenson, CEO of Onyx Group, the specialist business and IT solutions provider, believes that organisations of all structures and sizes are increasingly recognising the benefits of IT outsourcing and turning to this model to

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[69] Roehrig, P. (2009) *The Forrester Wave: Global IT Infrastructure Outsourcing Q1 2009*, p.2, available at https://www-935.ibm.com/services/us/igs/pdf/forrester-wave-global-it-2009.pdf

[70] *Ibid*

[71] Hoffmann, K. (2010) "IBM falls as Sales Miss Undercuts Optimistic Outlook", *Irish Independent*, July 20th, p.1

[72] Soujeolo, C. (2010) *IT Outsourcing - Emerging Trend following the Economic Crisis*, p.1, available at http://www.levi9.com/en-US/Pages/News.aspx?itemID=174

provide their IT needs.[73] This is due to the fact that in-house IT management is complicated, time consuming and requires the finance, resource and capacity that businesses, simply do not have.

IT outsourcing in Ireland is showing positive signs of improvement considering the current economic situation. The Harvey Nash CIO Survey 2010 highlights some interesting facts on Ireland's appetite for outsourcing. The survey consisted of 180 Irish IT leaders. It found that just over a quarter of Irish CIOs plan to increase outsourcing spend over the next 12 months despite more than three-quarters having had their budgets reduced or frozen in 2009.[74] It also found software application development is the most popular task for outsourcing (62pc), followed by IT infrastructure (46pc).[75] The economic crisis and its impact on business has forced companies to examine their cost base and outsourcing speaks to that need.

A new report by Irish owned managed services company, Hibernia Evros Technology Group (2010), highlights that company size is irrelevant when it comes to unlocking the benefits of IT outsourcing. Most IT outsourcing deals tend to be about projects involving hundreds of staff and millions of Euro. However, what about the SME? This report emphasises that technology is moving so quickly that it is difficult for an internal IT department or individual in an SME to remain on top of trends including security, new products, managing mobility, the move to social media and other issues.[76] The report suggests if there is an internal IT department,

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[73] *Ibid*
[74] Harvey, N. (2010) *CIO Survey 2010: New Decade, New Opportunities*, p.63, available at http://media.harveynash.com/uk/mediacentre/CIO_survey10.pdf
[75] *Ibid*
[76] HiberniaEvros Technology Group (2010) *IT Outsourcing - Size Doesn't Matter*, p.4, available at http://www.hetg.ie/_fileupload/Document/IT%20Outsourcing%20whitepaper%20final.pdf

just outsourcing some elements of the service provision will free up time to focus on more strategic elements of the business.[77] The findings in this report hold well for SMEs, not just in Ireland but globally as well, where IT outsourcing contracts can boost efficiency and cut IT costs.

The flip side of this can also be beneficial for small IT suppliers. With outsourcing an ever more popular solution to IT management, the scope for the industry is far reaching. This presents a huge opportunity to SME IT suppliers as both private and public sector IT contracts become readily available.

2.6 CONCLUSION

It would appear from the literature that the earliest existence of IT outsourcing was in the 1960s. From there it has grown into an industry worth billions. Lucrative big money deals between firms and IT vendors highlighted the potential gains on both sides from such arrangements. During the 1990s national governments wanting to decrease costs in the public sector sought this through outsourcing deals which helped the industry gain even further publicity. In Ireland the arrangement between Bank of Ireland and HP was a deal that got much exposure. This deal helped promote to other firms the success an IT outsourcing arrangement can bring. Globally the future of IT outsourcing lies with SME. Both the SME and SME IT supplier can equally gain from the economic situation at present. Big money deals will always gain much publicity but the SME IT outsourcing market has much potential. Also more research on the Irish IT outsourcing market needs to be explored due to the lack of material available. Having examined all relevant literature concerning IT

[77] *Ibid*

outsourcing the next chapter will look at the research methodology. This involves justifying and analysing the means by which the data is to be collected to answer the main research question.

CHAPTER 3

Data Collection & Analysis

3.1 INTRODUCTION

The purpose of this chapter is to discuss the methodology used to investigate the reasons behind IT outsourcing within companies in the Republic of Ireland. An analysis of the literature highlighted a number of factors which formed the basis of the research. The researcher has chosen to elaborate on the motive for choosing the various methodologies and to comment on the effectiveness and validate each as a research tool. The chapter reinforces the reasoning behind the method of data collection relating to the data required as opposed to any other means of data collection. It should be noted that the choice of research methodology is constrained by both the nature of the research and by the practical considerations of time and resources. How the data is to be accessed and interpreted will also be reviewed. Both primary and secondary research were undertaken in order to successfully complete the research process. The following sections will describe the details of these research methods.

3.2 RESEARCH DESIGN

To ensure a scientific approach to a research project a guided framework must be utilised to control data collection, sampling procedures, and time and cost constraints. This framework is known as the research design. There are many definitions of 'research design', but no one definition imparts the full range of important aspects. Generally speaking the keywords 'research design' address the question of how to plan a study. The function of research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible.[78] Flick (2009) gives a comprehensive definition of research design:

[78] De Vaus, D. (2005) *Research Design in Social Design*, p.9

"Research design is a plan for collecting and analysing evidence that will make it possible for the investigator to answer whatever questions he or she has posed. The design of the investigation touches almost all aspects of the research, from the minute details of data collection to the selection of the techniques of data analysis".[79]

The research for this study involved interviews as the primary source and printed material as the secondary sources of information. These sources are discussed in more detail below.

3.2.1 Secondary Research

Secondary data are data that already exist in some form.[80] They are relevant and useful guides from which to base primary research. Also known as desk research - you can do it without leaving your desk. The first tenet of data gathering among researchers is to exhaust all sources of secondary data before engaging in a search for primary data.[81] Therefore it is imperative that the secondary data relating to the subject matter be analysed before primary research is conducted. Stevens et al. (2002) outline three research purposes for which secondary data are used:

1. It can provide the background necessary to understand the problem situation and provide an overview of the market dynamics.
2. It often can provide exploratory information that can aid in the planning and design of the instruments used to gather primary data.

[79] Flick, U. (2009) *An Introduction to Qualitative Research*, p.128
[80] McGivern, Y. (2006) *The Practice of Market and Social Research: An Introduction*, p.149
[81] Stevens, R., Wrenn, B., Sherwood, P., Ruddick, M. (2006) *The Marketing Research Guide*, p.90

3. It can suggest research hypotheses or ideas that can be studied in the primary data phase of the research process.[82]

The use of secondary data is advantageous from both a cost and a time perspective if available and applicable.[83] They pose a useful starting point for researchers and frequently cite guideline areas for further research. The relative cheapness of this data collection method can help overcome budget constraints experienced in many studies. Alternatively, the collection of primary data can be so costly and time consuming as to be impractical.

The methodology employed in the secondary research primarily involved the analysis and synthesis of past and current literature on the subject of IT outsourcing in the form of books, journal articles, research papers, reports, magazines and newspaper articles as well as electronic sources such as the internet. Secondary data proved to be an essential part of the study for the author as it helped to establish what aspects of the research topic needed to be examined. In addition, it also provided the necessary background information needed to obtain and interpret the research results.

Despite the many advantages linked with secondary data, the researcher is aware of the drawbacks which it can present. Boone et al. (2010) have identified two main disadvantages of secondary data, that of, published information becoming quickly obsolete and published data collected for an unrelated purpose may not be completely relevant to the marketer's specific needs.[84] Similarly Schmidt & Hollensen (2006) outlined some of the drawbacks associated with secondary

[82] Stevens, R., Loudon, D., Wrenn, B. (2002) *Marketing Research: Text & Cases*, p.63
[83] Schwab, D. (2005) *Research Methods for Organisational Studies*, p.40
[84] Boone, L., Kurtz, D., Snow, K., Mackenzie, H. (2010) *Contemporary Marketing*, p.235

research. Firstly, researchers have no knowledge of how data was collected, nor do they have any control over it so therefore, levels of accuracy or bounds of error are made on assumptions.[85] Secondly, problems of fit are likely to occur between the data required for current research and the available data.[86] Thirdly, time lag between data collection to data publication is often lengthy; hence, the data is outdated even when first available.[87] An example is a government census, which takes years to be published. Also there can be an inherent bias in the research of which the researcher is unaware.

Despite the many limitations related to secondary data it has proved critical to the researcher in gaining an insight into IT outsourcing and in providing a specific direction for the research. With the data accumulated at this stage, the researcher then advanced the study to the primary stage, using the secondary information already gained as a backdrop and guideline.

3.2.2 Primary Research

Primary research is best described as research consisting of information collected for the specific purpose at hand.[88] The nature of the data sought determines the choice of fieldwork methods. In its most basic form data can be classified as either (1) quantitative, or (2) qualitative. It is fair to say that both quantitative and qualitative research approaches are useful and needed in researching business organisations. Both kinds of research are important, and both kinds of research can be rigorous. The most significant decision facing the researcher in devising a research design is the

[85] Schmidt, J., Hollensen, S. (2006) *Marketing Research: An International Approach*, p.17
[86] *Ibid*
[87] *Ibid*
[88] Kotler, P., Armstrong, G. (2010) *Principles of Marketing*, p.131

choice between these two forms of data. Therefore, it is essential that a review of these research methods be conducted so that the most appropriate design is pursued. Theoretically, this decision is guided by the nature of the research objectives of the study in question and the type of data to be obtained. Both methods inherently have their respective advantages and disadvantages. Distinguishing between both can provide a clearer analysis and can provide means to justify the research method chosen (See table 1).

Table 1: Differences between Quantitative & Qualitative Research

Difference with respect to:	**Quantitative Research**	**Qualitative Research**
Main purpose of investigation	To quantify extent of variation in a phenomenon, situation, issue etc.	To describe variation in a phenomenon, situation, issue etc.
Approach to inquiry	Structured/rigid/predetermined methodology	Unstructured/flexible/open methodology
Sample size	Emphasis on greater sample size	Fewer cases
Measurement of variables	Emphasis on some form of either measurement or classification of variables	Emphasis on description of variables
Dominant research topic	Explains prevalence, incidence, extent, nature of issues, opinions and attitude; discovers regularities and formulates theories	Explores experiences, meanings, perceptions and feelings
Outcome	Recommend a final course of action	Develop an initial understanding

Source of Data: *Kumar (2005)* p.17-18

It is important to this research to distinguish between these two forms of analyses and use this distinction as justification for the decision to use qualitative research in this study.

Gravetter & Forzano (2009) describe quantitative research as being based on measuring variables for individual participants to obtain scores, usually numerical values that are submitted to statistical analysis for summary and interpretation.[89] According to Myers (2009) quantitative is best if you want to have a large sample size and you want to generalise to a large population.[90] The objective is to study a particular topic across many people or many organisations. Researchers want to find out trends or patterns that apply in many situations. Various statistical techniques can be used to analyse your data. Quantitative techniques endeavour to identify the 80% of information common across a sample.

In contrast, qualitative methods are based on making observations that are summarised and interpreted in a narrative report.[91] It deals with the understanding rather than measuring. It is concerned with the 'how' and 'why' rather than the 'how many'. Qualitative techniques tend to be flexible and provide a necessary and complementary perspective on human behaviour.[92] As Malhotra (2007) points out:

[89] Gravetter, F., Forzano, L. (2009) *Research Methods for Behavioral Science*, p.147
[90] Myers, M. (2009) *Qualitative Research in Business & Management*, p.9
[91] *Ibid*
[92] Mariampolski, H. (2001) *Qualitative Market Research: A Comprehensive Guide*, p.8

> *"The findings of qualitative research are misused when they are regarded as conclusive and are used to make generalisations to the population of interest".*[93]

Traditionally, quantitative techniques have been more highly favoured particularly because of their ability to quantify data and provide more general results. However, many distinguished writers have supported the qualitative route. Hogan et al. (2009) describe qualitative research in the following terms:

> *"Qualitative research is pragmatic, interpretive, and grounded in the lived experiences of people. It is a broad approach to the study of social phenomena. It attempts to understand behaviour and institutions by getting to know the persons involved and their values, rituals, symbols, beliefs and emotions".*[94]

Proctor (2005) also expresses similar sentiments. He claims that despite the apparent preferences of executives, qualitative research has grown in popularity, for three reasons. First, it is usually much cheaper than quantitative research.[95] Second, it produces a good mechanism for coming to an understanding of customer attitudes and motivations and thirdly, it can improve the efficiency of quantitative research.[96] Others have been critical of the qualitative route. Some criticise it because it does not

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[93] Malhortra, N.K. (2007) *Marketing Research: An Applied Orientation*, p.237
[94] Hogan, J., Dolan, P., Donnelly, P. (2009) *Approaches to Qualitative Research: Theory & Its Practical Application*, p.2
[95] Proctor, T. (2005) *Essentials of Marketing Research*, p.222
[96] *Ibid*

provide samples that are representative of the target population of the research.[97] The usefulness of qualitative research depends very much on the skills of the researcher. However, the qualitative approach continues to grow in popularity and has been firmly asserted as a viable research strategy.

With regard to methods available to collect the primary data, there were several options. At the most basic the quantitative methods included postal, telephone or face-to-face survey while the qualitative methods included in-depth interviews, focus groups and case studies. As the information being sought for this study is principally qualitative in nature, the most suitable method of achieving this was through the use of structured in-depth interviews.

3.3 ACCESSING THE DATA

The research instruments are the methods by which the information required by the researcher is gathered. A reactive method of research involves intruding into the environment in order to collect the information. For this study the main investigative technique used was that of an interview. A definition provided by Gillham (2000) is that:

> *"An interview is a conversation, usually between two people but it is a conversation where one person - the interviewer - is seeking responses for a particular purpose from the other person - the interviewee".* [98]

[97] *Ibid*
[98] Gillham, B. (2000) *The Research Interview*, p.1

While there are a number of interview techniques available, care must be exercised as each option has its own risk of bias and error. For the purpose of this study structured interviews were chosen. The semi-structured type of qualitative interview is the one that is most commonly used in business and management. The major advantage of semi-structured interviews is that it gives some structure, while allowing for some improvisation. Blackburn & Stokes (2000) recommend face-to-face data collection methods to overcome some of the weaknesses of postal surveys, telephone surveys, face-to-face surveys, administered questionnaires or direct observation in qualitative research.[99] MacMahon & Murphy (1999) suggest that quantitative survey methodologies are of very limited value in researching management decision-making.[100] They explain that more in-depth smaller scale studies elicit far more useful data where observation of practices and attitudes is important.

The main reasons why interviews were selected were:

- Response Rate - the interview tends to have a better response rate than mailed questionnaires. For this study conducting interviews guaranteed responses.
- Flexibility - interviewers can probe for more specific answers and can repeat a question where the response indicates that the respondent is misunderstood. This allowed for a greater understanding into the main reasons why SMEs outsourced the IT function of their business based on their experiences.
- Completeness - the interviewer can ensure that all of the questions are answered unlike a mail survey where questions may be skipped or not answered.

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[99] Blackburn, R., Stokes, D. (2000) "Breaking Down the Barriers: Using Small Focus Groups to Research Small & Medium-Sized Enterprises", *International Small Business Journal*, 19(1), p.44

[100] MacMahon, J., Murphy, E. (1999) "Managerial Effectiveness In Small Enterprises: Implications For HRD", *Journal of European Industrial Training*, 23(1), p.29

Although interviews generally can be an inconvenience for the interviewee and can be a costly and timely data collection method, a number of key issues were addressed in order to overcome this. They were as follows:

- **Interview Structure:** Before entering the field-research phase, a representative and thorough literature research was performed. From that point, a questionnaire was created with open and closed questions. Parts one and two of the interview questions consist of mixture of open and closed questions. These two sections served as an introduction to the company and their outsourcing activities. In this way, the interviewee was able to come into the subject. Part three consisted of more open and closed questions again but more flexibility was allowed to let manager's speak about their experiences and motives on the reasoning behind their IT outsourcing decision. The interview structure follows the same pattern for each participant. Each question follows a logical sequence.
- **Question Wording:** The questions must be worded in a clear, concise manner so that no bias or ambiguities occur. In this type of study, that of IT research, the terminology is very important so both the participant and researcher fully understands each other.
- **Sponsorship:** It was important to let respondents know in the initial letter sent that the research was an official part of the Masters Degree in the School of Business. Any documentation used was also with official School of Business paper.

Once the interview structure and relevant companies were identified to partake in the study, personalised cover letters with the official Graduate School heading were sent

out to the selected managers (see Appendix I). The letter briefly explained what the study entailed and was there a possibility of the receiver partaking in an interview. Confidentiality of the responses to the interview was guaranteed, helping to ensure maximum participation of the respondents. It was important to stress this point as respondents are wary to give out too much information in case these undertakings are breached. The researcher also offered to send a copy of the results and findings of the research to any interested respondents.

Approximately one week after the letter was sent out to the selected companies, each respondent was contacted by telephone. Reasoning behind this was to ensure the letter reached the correct person, to confirm that the contact name still works for the same organisation and performs the same duty and most importantly, to gain the managers' commitment to participate in an interview. Providing the respondent was willing to participate in the study a time and date was arranged for the interview to take place. The time period of a week was chosen as it gave sufficient time for the letter to be received. It allowed for follow up in case the letter was discarded or forgotten about. The main advantages to following up by telephone were firstly, it personalised the study. Secondly, it allowed the researcher to establish a rapport with the participant. Thirdly, it showed the researcher was interested in following-up responses rather than just waiting to see what happened. It indicated that the researcher had a seriousness and dedication towards the research study. Finally, it attracted the interests of the participants and consequently, they were more likely to take part in the study. Due to work commitments and respondents being extremely busy, the collection of data was a very lengthy process and in some cases it took more than one follow-up phone call to ensure an interview was arranged.

Prior to conducting the interviews, a pilot interview was undertaken to ensure that the questions were clear and comprehensive. This involved administering the questions to a number of colleagues who helped in identifying a small number of discrepancies, which were corrected. Finally the interview questions and structure were approved by the researcher's supervisor and the interviews were conducted. Also contact was made at the beginning of the data collection process with a large IT outsourcing vendor. They were very helpful at that stage in generating ideas.

3.4 DATA SAMPLING

A further step in planning the research design is to identify the target population and select the sample. The population consists of all the people about whom a study is meant to generalise, whereas the sample represents the subset of people from the population who actually participated in the study.[101] The sample targets companies that outsource all or parts of the IT function of their business. These companies account for a huge range of economic activity such as air and land transport, postal and telecommunications, and banking and broadcasting. According to Hogan et al. (2009) sampling in qualitative research is generally purposive, that is, the subjects, or cases, selected for examination are chosen specifically, due to some characteristic of interest to the researcher and her/his research topic.[102] Again this study specifically targets companies that outsourced all or parts of their IT function. Numerous companies were contacted and a target of ten interviews was set as a response rate. While this would rule out a purely statistical approach to analysing the data, it would be a sufficient amount to reflect the spectrum of opinion regarding the variables across all the categories of the sample.

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[101] Jackson, S. (2009) *Research Methods & Statistics: A Critical Thinking Approach*, p.94
[102] Hogan, J., Dolan, P., Donnelly, P. (2009) p.5

This sample is an illustration of a non-probability sample. Non-probability techniques provide researchers with the opportunity to select a sample purposely and to reach difficult-to-identify members of a population. This form of sample is often used when working with very small samples as is the case with this study. While it would be easy to select companies in the hope that they outsource IT, this study distinctively targets companies that outsource the IT function of their business. Although probability sampling is more efficient, given the short time period to complete the study a non-probability sample was used. A correctly executed non-probability sample can provide acceptable results for this study and it was felt that the additional costs and time involved in planning and carrying out a probability sample was unnecessary.

Organisations were selected through various personal contacts. Although many of the sample companies were specifically targeted, this was not an attempt to bias the results, but to achieve a representative sample at short notice. A cross section of companies of different sizes and in different industries were targeted to provide comparisons over the main factors that were considered to be the main drivers of IT outsourcing by companies.

The respondents targeted were IT managers (where applicable) and non-IT managers who initiated the outsourcing. However, both these managers may give different reasons for outsourcing based on their respective perceptions of the IT function. IT managers were only targeted where possible to avoid mixing responses from both manager categories. They are more likely to have a greater understanding of IT in their business and in general.

3.5 METHOD OF ANALYSIS

After the data was collected it was organised and analysed. This was conducted by comparing the responses of the respondents. The analysis of interviews is rather difficult, because strategies and techniques have not been well defined. Every interview should strive to have a general analytic strategy, defining priorities for what should be analysed and why. Before starting the research, a strategy should be developed to prevent oneself from arriving at the analysis phase with irrelevant data. The researcher chose to make a more objective analysis by coding the individual interviews in a numerical form. This is only possible when embedded units of analysis within the interviews must be conducted, which applies in this research. Such quantitative coding can still not be analysed in a statistical way, but it does provide us with a certain framework to have more grip while analysing.

During the interviews each company was asked to deliver supportive material (documents, reports) to improve validity, although not every company was able or willing to do so. The questions were presented to the interviewees and after completion, an in-depth discussion was conducted to highlight certain issues and enlighten others (the interview questionnaire itself can be found in the Appendix II). The questions in part three of the interview questionnaire were designed to rate the importance of each of the five factors on a scale of 1 to 5 - 1 meaning no importance and 5 meaning vitally important. This was done to highlight the main reasons why the company outsourced IT. Notes were made during the interviews. After each interview an interview-report was complied using the notes and the supplied material. The gathered data per individual organisation was analysed first, to compare these afterwards with the rest of the researched organisations. For the

overall analysing technique, cross-case synthesis was used. This technique, especially created for multiple cases, will enable patterns to be found between the individually analysed cases. Due to the small sample size of ten, it is inappropriate to analyse the data using SPSS (Statistical Package for the Social Sciences) or other statistical packages.

3.6 CONCLUSION

This chapter focused on the research design and methodology used to accomplish the study objectives. Firstly, the structure of the research methods employed in this study were discussed, and the considerations that were taken into account in adopting the research methodology were presented. Secondly, detailed descriptions of the population of the study, data collection instrument, and the main interview procedures were given. Finally the chapter ended by presenting the statistical analysis techniques used in this study.

The researcher used qualitative in-depth interviews as the main method of data collection. The method adopted for this study involved interviewing ten companies that specifically outsourced the IT function of their business. An analysis and interpretation of the empirical data collected through this method will be presented in the next chapter.

CHAPTER 4

Research Findings

4.1 INTRODUCTION

As stated, the primary objective of this study is to understand the main reasons why SMEs in Ireland outsource the IT function of their business. This is achieved through two secondary objectives of highlighting the main IT outsourced functions within these companies and assessing the satisfaction levels of the companies with their service-provider. The purpose of this chapter is to describe the results of the study based on the methodological steps taken in the previous chapter and answer the research objectives. The analysis of interviews is the most difficult part of the research, because there are no standard analyses to be executed like during a statistical analysis. During the field research, ten interviews were conducted that provided a lot of information. This chapter will analyse the data and reflect them on the stated objectives. Firstly, the limitations to the research will be highlighted. Afterwards the objectives suggested in chapter one will be discussed from the acquired data. Besides, other remarkable outcomes from the research will also be examined. Finally the potential for future research into IT outsourcing based on this research will be suggested.

4.2 RESEARCH LIMITATIONS

As previously stated this study is at most an exploratory investigation into the motives behind IT outsourcing in SMEs in the Republic of Ireland. Specific limitations exist in the empirical investigation chapter (chapter 3).

Number of Respondents

The number of respondents to this research could be deemed as small. However, as proposed by Cooper & Emory (1995):

> *"one false belief is that a sample must be large or it is not representative... how large a sample should be is a function of the variation in the population parameters under study and the estimating precision needed by the researcher".*[103]

Similar to the vast majority of research, the examination of the findings must be treated with care, considering the disproportionate amount of participants to the wider population. However, the author believes that the number of managers within SMEs is sufficient enough to provide pertinent insights into the nature of the research issue and topic.

Non-Response

The author anticipated an element of non-response. Therefore, fifteen individuals were requested to participate in the study, of which ten, the required target, agreed to do so. Some managers felt they were inappropriate respondents for the study and decided against participation. However, this only occurred with a few respondents and overall the author managed to receive responses from most managers.

Time & Cost Constraints

Both financial and time constraints proved to be a significant limiting factor whilst undertaking this research, limiting the amount of responses obtained by the researcher.

[103] Cooper, D., Emory, W. (1995) *Business Research Methods*, p.265

Confidential Issues

Some of the data requested may have been interpreted to be confidential in nature. The researcher was conscious of this possibility and therefore reassured respondents of the utmost confidentiality in relation to any sensitive information imparted. However, understandably, some of the respondents would not divulge certain financial information requested in the interview which slightly hindered the sample size, but generally did not prove to be a barrier to the research.

4.3 PROFILE OF RESPONDENTS

Initially, fifteen companies had been selected to participate in the research. These companies were known to find themselves in an IT outsourcing trajectory. This group represents a consistent part of the total population of SMEs that outsource their IT. After contacting these companies by letter and thereafter by telephone, ten companies agreed to participate in the research. The reasons for rejection by the other companies were lack of time and unwillingness to share the information (competitive reasons).

Due to the time constraints placed on the author, SMEs were chosen to reduce the sample size. The author had neither the finances nor the time to analyse an industry-wide sample area. Therefore, it was chosen to study these specific companies in Ireland.

The ten companies that participated in the research included the following:

- a leading hotel in Galway City;
- an Enterprise Centre;

- an Online Tourist Accommodation Company;
- a 3D Simulation Solutions Company;
- a Music Software Company;
- a Town Planning and Design Company;
- a Computer Based Solutions Company and
- three Medical Device Companies.

The size of the companies can be analysed through their number of employees. 90% of the companies interviewed had less than ten employees while 10% of the companies had more than fifty employees. The amount spent on IT by each company varied from €4,000 to €6,000 in any given year.

4.3.1 Reasons for IT Outsourcing

Organisations turn to IT outsourcing for a number of reasons, the most prominent of which is cost cutting and the desire to focus on those activities that are considered its strengths, often referred to as core competencies.[104] However, other studies have pointed to reasons other than cost being the primary motivation for outsourcing. Beasley et al. (2009) found other reasons like the excess to expertise and the organisational flexibility overrides cost considerations.[105] According to Lacity & Willcocks (2000), the most achieved benefits from outsourcing were: cost reduction (although modest savings), refocusing of in-house IT staff on more value-added IT work and business applications, improved flexibility of IT since the outsourcer's

[104] Tafti, M. (2005) "Risks Factors Associated With Offshore IT Outsourcing", *Industrial Management and Data Systems*, 105(5), p.549
[105] Beasley, M., Bradford, M., Dehning, B. (2009) "The Value Impact of Strategic Intent on Firms Engaged in Information Systems Outsourcing", *International Journal of Accounting Information*, 10(2) p.80

costs are more flexible than in-sourcing costs which are fixed.[106] Other benefits identified but with minimal influence, include better quality service, improved use of IT resources, access to scare IT/IS skills, improved business flexibility, focus on core competences, better management control, access to new IT, balanced processing loads, and help in cash problems.[107] As against the reason identified in the past studies, the main reasons as revealed in this study are shown in the table below.

Table 2: Determining Reasons for IT Outsourcing

Organisation	*Reason for Outsourcing*
1	Improve quality of service, cost reduction, outsourced before and lack of skills
2	Cost effective, outsourced before and access to IT skills
3	Cost reduction, focus on core competences and access to new technology
4	Improve quality of service and access to new technology
5	Cost reduction and lack of skills
6	Cost reduction, quality improvement and focus on core competences
7	Cost reduction, improve quality of service and access to new technology
8	Improve quality of service, access to IT skills and focus on core competences
9	Cost reduction, access to new technology and lack of in-house capabilities
10	Cost-efficiency, focus on core competences, back-sourcing not an option

Table 2 reveals very interesting reasons for outsourcing. The reasons for outsourcing are rather diverse, though cost reduction seems to be a common motive amongst all

[106] Lacity, M., Willcocks, L. (2000) "Survey of IT Outsourcing Experiences in US & UK Organisations", *Journal of Global Information Management*, 8(2), p.11
[107] *Ibid*

companies. This would be in line with the cost cutting measures taken by many companies across all industries with the economic situation at present. Nevertheless the focus on core competences and improved quality of service offered also are valid reasons with the surveyed companies. The findings are in tune with earlier studies by Tafti (2005) and Lacity & Willcocks (2000), which pointed to the reasons such as cost reduction and a focus on core competences as important drivers for outsourcing. The priority evident in reasons for outsourcing points out that SMEs in Ireland have a positive attitude towards technology and embrace external expertise in order to enhance their internal systems and their services to their customers. Although cost remains important one company highlighted that during the beginning of their business cost was a major factor but as the company grew, quality overrode this issue.

Other drivers that have impacted on outsourcing decisions are previous outsourcing in the company, lack of in-house capability, access to IT skills and access to new technology. This could be interpreted that SMEs' IT systems are so preliminary and rudimentary that they do not require separate IT staff/department. This assertion could be endorsed by the reason, 'significant access to expertise' mentioned earlier as SMEs seem to rely more on outside expertise.

Although the dominate reason amongst the companies is cost reduction it is worth noting that this has a tangible relation to quality. When each company was probed further on cost reduction, the question was asked 'if they could get the service provided to them cheaper, would they accept it?' Each company distinctively answered only if the quality of the service remained the same. Each manager

specifically highlighted that they were willing to pay more for the extra quality in the service provided.

It is of value pointing out that if this study was specifically carried out on IT managers they may view strategic factors (i.e. focus on core competences) more highly than other factors due to false or biased perceptions of the IT function. It is natural for IT managers to rate the importance of their own function very highly and to be seen to be making strategic decisions.

As regards the market reasons behind outsourcing there was no substantial trend towards them being behind companies outsourcing. Some managers did note that there is an increase in the availability of outside services but the efforts by these outsourcing vendors (e.g. promotions, advertisements) was really not important in their outsourcing decision.

4.3.2 What Is Being Outsourced & Satisfaction Rates?

It is interesting to know what IT activities are being outsourced by the Irish SME market. The three areas that are increasingly being outsourced are data centres, client/servers, and help desk application.[108] Currently, most mainframe management, computers maintenance, help desk support, local/wide area network development and management, and application maintenance is subcontracted. Furthermore, e-commerce is increasingly redefining the trading world and company thinking.[109] Setting up a website for online sales can be expensive and requires in-house expertise in server management, security, and myriad related technical functions, which are

[108] Kakabadse, A., Kakabadse, N. (2000) "Outsourcing: A Paradigm Shift", *Journal of Management Development*, 19(8), p.678
[109] Ibid

usually in short supply. It is extremely difficult to manage a mix of highly skilled people and very expensive to keep updating their skills. In a survey undertaken by Lacity & Willcocks (2000) it was found the majority of the outsourced activities were in IT infrastructure activities such as disaster recovery rather than IT development or IT strategy.[110]

The study tried to identify the areas of outsourcing undertaken by SMEs in Ireland. The responses are shown below in Table 3. This table also illustrates the satisfaction levels amongst the respondents with their IT service-providers.

Table 3: Profile of Outsourced Activities & Satisfaction Levels

Organisation	*Activities Outsourced*	*Level of Satisfaction*
1	All IT activities	Average
2	Hosting, ERP and web design	Good
3	Hosting, website design and ERP	Good
4	Website design & maintenance, hosting	Good
5	Application development, hosting and website design	Average
6	Hosting, website design & maintenance and social media	Good
7	Hosting, ERP and website maintenance	Good
8	Hosting, website deign and ERP	Average
9	Hosting, ERP and website development	Good
10	Desktops, hosting, website design, customising packages	Good

[110] Lacity, M., Willcocks, L. (2000) p.15

Taking a closer look at this table it highlights several things. Firstly, it reveals that the main activity of software outsourcing is in website development/design, which has to be tailor made for each business. A substantial effort is required to manage these activities and consequently outsourcing is seen as a viable option. The other important activities are web hosting, ERP, website maintenance, desktops, and customising ready made packages. Since small businesses are desirous of going online, it is not surprising to find that the most important activity of software that is outsourced is website development. This is consistent with the findings from Table 1, where access to expertise is identified as a motive for IT outsourcing. It is consistent as SMEs emphasise more on outsourcing as recruitment of experts would not anyway give them complete access to expertise, not withstanding the financial constraints that SMEs would face in recruiting experts on a full time basis. In fact, outsourcing gives the SMEs the flexibility for easy access to IT expertise. Understandably, very low percentages of SMEs opt for outsourcing of application development, as the majority preferred readymade packages.

Secondly, the satisfaction level amongst the researched group looks promising. All bar three companies rate the relationship between them and the service-provider as good. This is in line with each company saying they want to renew the outsourcing arrangement once the current contract is over. This could be in direct relation to the length of the contract. The common view on the length of a contract is that it should not be too long, since at the end of the contract, the service-provider will feel the urge to perform better, hoping to continue the relationship. This is something that was evident in this study. All the respondents have contracts with their service-provider for less than three years. In the past, 5-10 year contracts were the norm.

Now firms will only commit themselves in the short-to-medium term. The length of the contract does play a role, but is not ultimately decisive for the success.

4.3.3 Other Observations of the Research

The trends worldwide clearly point out that the phenomenon of IT outsourcing has come to stay and is growing. However, there are many related problems that businesses will have to deal with while undertaking IT outsourcing. One problem encountered by a surveyed company who had numerous IT contracts with multiple service-providers, was the conflict between the service-providers wanting the one single contract. The respondent highlighted that the contracts with each service-provider were nearly cancelled due to the conflicts that arose. Similar to Procter & Gamble's case highlighted in chapter two, the predicament with having numerous multi-vendors can be problematic. This difficulty was also emphasised in the study carried out by Al-Qirim & Bathula (2002) where 5% of respondents claimed conflict with suppliers as a problem in their outsourcing arrangements.[111] Negotiating contracts with service-providers, and in particular with multi-service providers, is vitally important. Another respondent highlighted poor communication and ineffective responses to a problem as a setback to outsourcing although the financial aspects of the contract outweighed this negative side. The key for SMEs is to have service-providers that are able to cater for the changes of the organisational needs and accommodate the falling prices in the market while upholding the high quality standards. It would be important for the client company to have an exit mechanism built into the contract which would enable the client company to withdraw from the

[111] Al-Qirim, N., Bathula, H. (2002) *IT & eCommerce Outsourcing in Small to Medium-Size Enterprises in New Zealand: An Exploratory Research*, p.547 available at http://www.bledconference.org/proceedings.nsf/0/b7347a665a22a0cec1256e9f0032bab9/$FILE/alqirim.pdf

contract under specified circumstances. Also there should be sufficient flexibility to add and delete services during the contract period, and to exit from the agreement if appropriate.

Whether a company should deal with a single vendor or multiple vendors remains inconclusive. This would be a useful distinction to make in any future research. The danger of dealing with a single vendor over such a long period of time is that the client company can become over dependent on the vendor. If the contract is not renewed at the end of the previous one, the client company is left in a very uncertain position. Using multiple vendors is a much more viable option in that it is cheaper to change supplier. This is evident in the position faced by the interviewed company above where if the manager were to cancel a contract due to the arisen conflicts, the other vendors would be more than willing to accept more responsibilities.

During one of the interviews a manager made a very interesting remark to the interviewee. The manager highlighted the reason why his outsourcing arrangement has been so successful. The manager had performed outsourcing before, within different companies. During these outsourcings, mistakes were made, but he learned from them. According to the manager, these experiences have served him well in negotiating with service-providers and are a reason for success during his current outsourcing.

Another notable observation from the research was the willingness of the respondents to increase the amount of IT activities they outsource. Obviously one company who outsourced all its IT activities would not be in the position to make

such an increase. But there was a consistent view with the respondents that due to the gains of cost efficiency and the access to a greater quality of service provided due to outsourcing, each manager was willing to consider outsourcing more IT functions. Selective outsourcing (i.e. partial outsourcing) not only meets with customer needs, but also minimises the risks associated with total outsourcing. This is in line with the majority of researched companies highlighting they will be renewing their outsourcing contract.

4.4 SCOPE FOR FUTURE RESEARCH

Directly related to this research and with the lack of empirical evidence on this topic, especially in the Irish market, there are a number of potential avenues for future research. This study indicates that there is significant potential growth in IT outsourcing in Ireland and consequently the subject deserves further study.

After this explorative research, a study amongst a larger group would allow some statistical analysis to be done. This will give more validity and show more insight to what the main drivers behind IT outsourcing are and what exact degree their corresponding components have on success.

This study took a broad emphasis on SMEs. A more in-depth study of the motives behind IT outsourcing by firm size would be enlightening in that it might place different emphasis on the various decisions behind outsourcing. This study could include a breakdown on companies, for instance, very small (less than ten employees), small (between ten and fifty employees) and medium (greater than fifty employees).

A study with specific focus on the contract agreement between vendor and the customer would be useful, particularly with regard to contract duration, service levels, and risk areas. It could help potential SMEs who are open to the idea of outsourcing as these businesses are small and lack the skills for contract management (negotiation, finalisation, implementation and monitoring).

Finally, a case study focusing on outsourcing from the vendor's perspective would be a beneficial contribution to understanding the many key success factors involved in a vendor/client outsourcing relationship.

4.5 CONCLUSION

The main element of this chapter highlighted that cost remains a significant reason why companies decide to outsource IT. Although there is the need of the companies to focus on core competences and improve the quality of service provided, the underlying requirement of cost reduction is paramount. The satisfaction levels amongst the interviewed group were interesting as all companies were on short-term contracts which could be directly related. By this a short-term contract could improve satisfaction rates among SMEs. The predominant area that seems to be outsourced by SMEs is web based development. One of the most vital goals of an SME is to get the company on the web for greater exposure. Many SMEs lack the skills and individuals to perform such tasks and look to outsourcing as the solution. Areas for future research into this topic remain open due to the fact that no statistical analysis was carried out in this research and a study into a larger group would enable this. The final chapter will continue with the conclusions of the analysis and the research as a total will be discussed.

CHAPTER 5

Conclusion

CONCLUSION

The past two decades has seen a significant increase world-wide in the outsourcing of various IT functions on the advice of managers, consultants, and other practitioners. Many corporate decisions regarding the outsourcing of IT have been primarily led by prospects of financial savings or cost-cuttings. This study attempted to come to terms with the reasons why SMEs outsource IT activities. These particular companies faced enormous challenges due to their small size and lack of expertise in specific areas. Plus with the economic circumstances at present, are SMEs outsourcing, as literature would state, because of financial reasons? For this reason, the author investigated IT outsourcing by SMEs.

The study specifically deals with answering the research question as set out in chapter one:

> *"What are the key reasons that small to medium-sized enterprises within the Republic of Ireland initiate IT outsourcing as a viable business process?"*

The study analysed the literature concerned with IT outsourcing in order to gain a deeper understanding of its history, growth, and success rates. The literature also identified the factors that lead to IT outsourcing and why companies have decided to outsource previously.

The empirical investigation concerned a sample of ten trading SMEs who currently outsourced the IT functions within their business. The chosen method of data collection was to conduct structured interviews. The investigation involved

identifying what motives were behind the managers of these companies to outsource based on their business.

The findings from this research clearly demonstrate that the market for IT outsourcing for SMEs is already significant and growing, with more businesses planning for it in the near future. It throws open a huge opportunity to the IT industry to position themselves to tap into this market. It is important to appreciate that the single most important drivers for the SMEs to outsource their IT requirements is cost reduction, need to improve the quality of service and access to new technology. The challenges faced by SMEs now show that cost cutting measures are in place and can, in some instances, hinder quality. Not surprisingly in a market where there is an array of IT products, access to expertise emerges as an important consideration in IT requirements also.

This study is somewhat in line with the majority of literature that cites financial factors being the most influential in the outsourcing decision. The perception gained from the surveyed group was that a reduction in cost was a reason for outsourcing but the quality of service needed to be good. Cost reduction was always seen to be vital at the start-up stage of a company and this remains to be the case. The key issue to stress here is that the various factors for outsourcing are all very important and are considered together when making the decision.

The study also reveals that IT outsourcing by SMEs is mostly in hosting and web design. The obsession with new start-up companies wanting the publicity received through having a website seems to be high on SMEs agendas. Web design requires

expert skills that most managers would not have. Other areas from the research identified ERP and customised packages as outsource activities. The range of areas identified for outsourcing by SMEs indicates not only their willingness to accept new technologies for better service delivery but also to seek presence in the market (i.e. social media websites).

The satisfaction levels among the surveyed group highlighted how all companies were content with the service they were being provided with. One manager did draw attention to the difficulty he had with multiple vendors all wanting the one contract with the company. All SMEs had short-term contracts with their vendors. This puts pressure on third-party vendors to produce a high quality service in order to get the contract renewed, which is good for the customer. Selecting the right vendor can also be difficult. This points to the lack of expertise in the SMEs in this area and therefore the need for guidance in outsourcing decision-making.

As companies enter into outsourcing arrangements, they often find that the vendors bring added unexpected value in the form of improved quality of service, more flexible and responsive implementations of IT systems, and access to skilled staff, etc. Overall outsourcing, in some cases, has resulted in the ability to provide users with a competitive edge.

A significant side benefit for those organisations that utilise outsourcing services is that these vendors have the responsibility of upgrading systems to accommodate the ever growing future technological developments. Therefore, outsourcing is not only here to stay, but it will be an ever expanding part of the IT setting in the future.

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Appendices

APPENDIX A - COVER LETTER

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Email: fergal37@gmail.com

31 May 2010

To Whom It May Concern,

I am currently a student in the Galway-Mayo Institute of Technology undertaking a Masters of Business. As part of the programme, I am required to carry out a thesis over the summer period, under the guidance of a member of staff from the School of Business department. My chosen topic for research involves examining "The Outsourcing of Information Technology (IT) by companies in the Republic of Ireland: An investigation".

What I require from yourselves is an interview with a representative from your organisation. For my research to be valid and worthwhile, an interview conducted with your organisation would greatly enhance the results of my research. I plan to submit my research in early August. Therefore, I would appreciate if you could respond before or around the middle of July. Please respond at your earliest convenience.

Participation in this research is completely voluntary. All information gathered from the interview will remain confidential. However, if you wish to view the research results, I will be happy to supply you with any information requested. Should you require any further information in relation to the thesis or even the Masters itself please do not hesitate to contact either me or my supervisor Dr. Larry Elwood, Head of School of Business, directly.

I look forward to hearing from you in the near future.

Thanking you in advance for participating in this research.

Yours sincerely,

_____

Fergal Murphy, BBS

APPENDIX B - INTERVIEW QUESTIONNAIRE

Thank you for taking part in this interview. The information collected will be extremely useful for me to complete my research. This information will be treated with the strictest confidence. It will not be possible to identify the individual firms from the results obtained.

For the purposes of this study, IT outsourcing refers to the contracting of various IT functions to outside vendors. These functions may include:

- Data entry
- Software & systems development
- Applications development
- Transaction processing
- Data centre operations/management
- Telecommunications
- Systems integration
- Disaster back-up and recovery
- Education and training
- PC & technical support
- Consultancy services
- User support/help-desk
- Hardware maintenance/service

Please proceed, and once again thank you for your co-operation

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GALWAY
CASTLEBAR
LETTERFRACK
MOUNTBELLEW

Part One - Company Background Information

Q1. What activity best describes the primary business of your organisation?

Manufacturing	□	Government	□
Bank/Accounting	□	Retail/Wholesale	□
Insurance	□	Legal	□
Consulting	□	Communications	□
Education	□	Real Estate	□
Training	□	Construction	□
Transportation	□	Agricultural	□

Other _____

Q2. How many employees are employed by your organisation?

< 100 employees	□
100 – 500 employees	□
> 500 employees	□

Q3. How many of these are employed by the IT department or have IT responsibilities?

_____ *(Approx.)*

Q4. Do you consider the contribution of your IT activities to your business operations as?

Critical	□
Useful	□

Q4. Do you consider the contribution of your IT activities to your business operations as?

Critical ☐

Useful ☐

Q5. Do you consider the contribution of your IT activities to your business positioning as?

Commodity ☐

Differentiator ☐

Q6. Approximately, how much is spent on IT by your organisation in any given year?

_____

Part Two - IT Outsourcing Information

Q7. Upon deciding to outsource IT, your decision was to?

Outsource all IT functions ☐

Outsource part/parts of the IT functions ☐

Q8. Over the years has your company ever thought to increase/decrease its IT outsourcing arrangements?

Increase ☐ Decrease ☐ Neither ☐

Reason: _____

Q9. What percentage of the current IT budget is spent on outsourcing?

_____ *(Approx.)*

Q10. Which of the following best describes the length of your outsourcing contract arrangements?

< 3 years	□	3-6 years	□
6-10 years	□	> 10 years	□

Q11. How would you rate the relationship between the company and the current service-provider?

Good	□	Bad	□	Average	□

Reason: _____

Q12. How satisfied was the business about the solution offered and the supplier at the time of the conclusion of the last contract?

_____

Q13. What are the main IT components in the company that are outsourced to the service-provider?

_____

Q14. What determines the quality of service?

_____

Q15. Will your company be renewing its outsourcing contract with the same service-provider once it has been completed?

Yes ☐ No ☐ Do Not Know ☐

Reason: _____

Part Three - Reasons for IT Outsourcing Decision

Q16. What is your main argument for outsourcing?

_____

Q17. How important were the following factors for your outsourcing decision? *(Circle one code per line)*

Scale:
1 = Not important
2 = Little importance
3 = Important
4 = Very important
5 = Vitally important

Financial Reasons	Not Important				Vitally Important
Cost Reductions	1	2	3	4	5
Better IT cost control	1	2	3	4	5
Others *(please specify):*					
_____	1	2	3	4	5
_____	1	2	3	4	5

Control/Strategic Reasons	Not Important				Vitally Important
Avoid management of complex IT dept.	1	2	3	4	5
Focus more on core business functions	1	2	3	4	5
Provide better service	1	2	3	4	5
More flexible response to client needs	1	2	3	4	5
Lower risk (on time and cost overruns)	1	2	3	4	5
Others *(please specify):*					
_____	1	2	3	4	5
_____	1	2	3	4	5

Technological Reasons	Not Important				Vitally Important
Avoid obsolescent technology	1	2	3	4	5
Access to more sophisticated technological skills	1	2	3	4	5
Keep up-to-date with tech. improvements	1	2	3	4	5
Access to state-of-the-art technology	1	2	3	4	5
Others *(please specify):*					
_____	1	2	3	4	5
_____	1	2	3	4	5

Personnel Reasons	Not Important				Vitally Important
Increase knowledge and expertise	1	2	3	4	5
Temporary access to IT staff (on as-needed basis)	1	2	3	4	5
Reduces personnel salaries & expenses	1	2	3	4	5
Reduce recruitment and training problems	1	2	3	4	5
Others *(please specify):*					
_____	1	2	3	4	5
_____	1	2	3	4	5

Market Reasons	Not Important				Vitally Important
Increased availability of outside services	1	2	3	4	5
Efforts by outsourcing vendors (e.g. promotions, advertisements)	1	2	3	4	5
Success of other outsourcing efforts	1	2	3	4	5
Outsourcing articles and studies (e.g. publications)	1	2	3	4	5
Others *(please specify):*					
_____	1	2	3	4	5
_____	1	2	3	4	5