Formulating an e-commerce strategy for success

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Abstract

The year 2000 saw many dot-com companies created and many existing companies going into E-commerce. However, with many companies failing, it is clear that companies need to follow a well thought out strategy for E-commerce. The main research aim was to assist companies towards a successful E-commerce strategy. This research was sponsored by NSB Retail which offers software solutions to high street retailers.

Published literature on E-commerce was studied to determine success and failure factors in establishing a viable E-commerce business and lessons that can be learned from this. As a result of the studies of E-commerce company experiences a strategy formulation framework was created to help companies carry out feasibility study and form a strategy for implementing E-commerce. At the heart of this framework were twenty key questions for managers considering entering E-commerce and twelve critical success factors needed for sustained E-commerce success.

This strategy formulation framework was tested by applying the initial stages in a feasibility study for an established, traditional retail company to determine whether it should move into E-commerce. The later stages of the framework were then retrospectively applied to successful and unsuccessful E-commerce companies. The case studies were also used to investigate whether traditional business and marketing theory could still be applied to an E-commerce company.

To further test the concepts behind the strategy formulation framework, a series of papers were submitted to peer reviewed conferences and journals. Feedback from the reviews of these papers and from the audiences at the conferences was very positive and showed that the experiences of experts in the E-commerce field generally agreed with the findings.
Formulating an E-commerce Strategy for Success

Abstract

Investigations from the research has also revealed there is a shortage of case study material for training E-commerce workers. Three case studies used in this research were published in an MBA course book to be used by Ball State and other universities.

It is concluded that this research has made a valuable contribution for companies contemplating an investment in E-commerce, and further work is identified to continue to assist companies to form a strategy for E-commerce implementation in the future.

Keywords: E-commerce, E-business, E-strategy, Success, Failures, Education, Managerial issues, Ethical issues, Supply Chain, Innovation, Quality, Retail industry.
Ganesha

By ancient Hindu tradition, the elephant-headed god, Ganesha, is always worshipped first in every ritual or festival. Being the lord of all things auspicious and successful, he is given pride of place at housewarmings, the beginning of a child's education, weddings, and in every temple devoted to other deities.

Ganesha, the remover of obstacles, represents wisdom, goodwill and most important, the art of living a balanced life. Many myths exist describing how he came to have an elephant's head on a rotund human body. But in concept, he demonstrates that an elephant and a mouse - always seen with him - can live happily together; that love of good food and profound spiritual knowledge can go together; He proves that the world is full of opposites, which co-exist peacefully.

Ganesha is the lord of all learning, the arts and of finer skills. He bestows achievement and success and is the guardian of all human endeavours.
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CHAPTER 1- INTRODUCTION

Chapter Preface
This chapter puts the work of this thesis into an overall context. It begins by introducing the concept of E-commerce and identifies examples gathered from various sources. It outlines requirements and issues in the form of aims and objectives to further understand how companies wanting to offer E-commerce should develop a strategy or how companies already offering E-commerce should assess their strategy. The chapter concludes with an overview of the layout of this thesis.

1.1 Introduction

"Every day it becomes clearer that the Net is taking its place alongside the other great transformational technologies that first challenged, and then fundamentally changed, the way things are done in the world".

(Loius Gerstner, Chairman and CEO of IBM, 1999)

This thesis has been synthesized from both academic knowledge and industrial experience. In the 3 years of this research most of the author's time was spent working with NSB Retail Systems' head office based in Birmingham in United Kingdom. NSB Retail Systems have sponsored this research project. The company operates across North America and Europe, supplying software solutions, focused exclusively on the retail industry.

The NSB Group operates in North America as STS, an NSB Company, with headquarters located in Montreal and satellite offices in Atlanta, Columbus (Ohio), New York, San Diego, Toronto, and Whippany (New Jersey). In Europe, The NSB Group operates under the name NSB Retail Systems, with regional offices located in the UK and in France with £48.2million turnover, and 1,300 employees in four countries. NSB Retail Systems has an expanding client base, with more than 350
Introduction

retailers, comprising marquee names such as Ann Taylor, Dollar General, Donna Karan, Liz Claiborne, Jacobson's, Neiman Marcus, Nine West, Saks Fifth Avenue, Staples, and Tommy Hilfiger. Canadian customers include Club Monaco, Roots, Sony Canada, Danier Leather, Holt Renfrew, Reitmans, and Suzy Shier. European customers include Arcadia, Debenhams, British Home Stores (BHS), Clarks, House of Fraser, Superdrug, and Woolworth's.

This thesis addresses the issues of success and failure in E-commerce by proposing a comprehensive E-commerce strategy. Uncertainty and rising levels of risk make it impossible for companies to accurately determine their future. A portfolio of initiatives approach to strategy can help ensure that companies take full advantage of their best opportunities without taking unnecessary risks. Some of the case studies within the thesis have been undertaken at NSB customers in a real life-working environment.

1.2 Background of E-commerce

The speed of business communications has increased from smoke signals to telegraph to telephone to telex to e-mail, and the World Wide Web, (Lindberg, 2002). Geographically, it has gone from local to national to international to global. Currently we are experiencing one of the most important changes in our daily lives - the move to an Internet based society. Almost everything is changed at home, in school, at work, in the government, and leisure activities. One of the most significant changes is the manner in which businesses are conducted. Electronic Commerce (E-commerce) describes the manner in which transactions take place over the Internet. It is the process of electronically buying and selling goods, services and information. However, the impact of E-commerce is not just the creation of web-based corporations. The United States Vice President, Albert Gore Jr. (2000), states "We are on the verge of a revolution that is just as profound as the change in the economy that came with the industrial revolution".
Over the years E-commerce has grown and evolved, and continues to change rapidly. There are many theories and predictions from various research companies such as Forrester research, Zdnet, KPMG and PricewaterhouseCoopers on the growth of E-commerce (for example Forrester Research, 2002). However, there are very few published examples or case studies, with real life scenarios. This real working environment aspect is the area where the author aimed to research in the three years of the PhD. E-commerce is an interdisciplinary topic of interest to managers, academics, students and organizations so the research should have wide ranging relevance.

Forrester Research (www.forrester.com) estimates a global revenue in business-to-business of $6,900 billion in 2004, and Jupiter Communications predicts a level of U.S. business-to-business E-commerce to be $6,300 in 2005. Conducting business online will grow at an explosive rate (Forrester Research, 2002).

The British Office for National Statistics (ONS), (www.statistics.gov.uk) published its first survey of E-commerce on May 15, 2001 where the financial and insurance sector had the highest values with 1.58% of total revenues over the Internet and 2.88% over all electronic networks. With the constant advancement in technology businesses are faced with a ‘do or die’ proposition. E-commerce is both an opportunity and a problem for businesses. The opportunity is clear, as it is a means of growing market share, entering new markets, and forming new alliances with business partners. However Hickson of Confederation of British Industry (CBI) stated in a BCS conference on 25th April 2001 “the two most daunting problems for most managers and startup companies is deciding where to begin and how to follow through”.
1.3 History of E-commerce

A brief background and the history of E-commerce is discussed, in order to see the changes E-commerce has gone through over the last 12 years and to put this research into context.

Electronic Commerce originated in America in the mid 1990s. It was quickly recognized as a quick and efficient method of selling products across a network. The 'Federal Acquisition Streamlining Act of 1994' first gave authority for the U.S government to use E-commerce. Ever since that day, more and more businesses are connecting with the Internet, and this was seen as the next step forward into the future (Chan et al, 2001).

The traditional approach of buying and selling products is a very involved method. It begins with one company sending out an order form requesting products, which is posted and is received by the other company the supplier. The supplier will then dispatch the goods, along with an invoice for payment that will be settled at a later date. This process usually takes a number of weeks to complete.

With the new approach carried out electronically, the customer is provided with a wider variety of products to choose from compared to the traditional approaches such as through catalogues and shops. The Internet also enables customers to complete the transaction within a matter of minutes. E-commerce provides organizations with a new chance to increase their productivity and improve the general competitiveness in the market place.

The number of people accessing the Internet on a daily basis is increasing continuously (Emarketer Research, 2002). One of the most important technologies that make up
E-commerce is the Electronic Data Interchange (EDI). This is the exchange of business information (primarily order forms and invoices) between two or more computers in a standard format. Electronic Data Interchange enables the customer and supplier to send order forms, invoices and methods of payment at the touch of a button. Electronic Data Interchange relies on private networks for players within a number of sectors such as retailing, education, shipping and airlines, to do business with each other. Despite great efforts by standards bodies in the 1980s to define technical protocols for exchanging messages, the expectations for Electronic Data Interchange never materialized. The reason, in part, was because those standards took too long to develop to a level sophisticated enough to match business needs (McNurlin, 1998).

The main benefits for businesses when using Electronic Data Interchange are that it saves time and money and reduces the chance of errors in the documentation, which in turn increases productivity. The Internet, with its roots in the military and academia in the 1960s, has mushroomed in the 1990s. Unlike the proprietary Electronic Data Interchange networks that varied from industry to industry, the Internet was built on open standards, allowing global reach and technical innovations that led to its graphical publishing capabilities. While not all of its technical standards have been ratified by international standards bodies, the fact remains that they work well and fast. The Internet has also benefited from the support of major software houses and, of course, popular media attention. So, companies in all sectors now recognize the Internet as a common and open means of exchanging business data.

The Internet provides a new paradigm for doing business. Prime Minister Tony Blair (UK), in an Andersen Consulting seminar in 2000 said “If you don’t see the Internet as an opportunity it will be a threat.” Today, trading partners, large and small, are establishing electronic links with each other and with end-users, over the Internet. The Internet especially offers smaller businesses the exposure to wider markets and sales
efficiencies required to compete effectively with large rivals. Indeed, because of their ability to capitalize on the Web's unique marketing and reach, a number of companies that didn't even exist only three years ago are now using this technology to gain market share.

The Internet may well prove to be the most efficient marketing, ordering, and distribution vehicle in business history. Looking back to all of the non-store venues for retailing, from postal mail order in the late 1800s, through door-to-door marketing of the 1960s, and finally to telephone and television mail order in the 1970s and 1980s, each has had its day, but none can match E-commerce in the ability to automate, personalize and economize every step of the selling cycle.

The E-commerce phenomenon is more than an opportunity for businesses. It is the beginning of a global transformation to a new economic system often identified as the electronic economy. As organizations use the Internet to cut costs and increase revenues, they find that customer expectations are changing. New factors demand that companies look beyond their website. These larger decisions cut to the very core of the business itself, right to the heart of culture, forcing change in a business environment with new players and new rules. The growing commercial importance of E-commerce underpins the need for more research.

1.3.1 Definitions of E-commerce

Electronic commerce is an emerging concept that describes the process of buying and selling or exchanging of products, services, and information via computer networks (Turban et al, 2000). The infrastructure for E-commerce is networked computing. The Internet has emerged as the standard computing environment in business, home and government. Networked computing connects several computers and other electronic devices by telecommunication networks, and is called the Internet.
To define E-business Lones (2000) states, "E-business is the complete digitalisation of an organization's business processes thereby allowing significant improvements in Return on investment (ROI)". E-business is really about reshaping and reinventing relationships with more speed, efficiency, and value creation for customers, channels, suppliers, and employees.

There are two views of doing business electronically:

- E-commerce - co-coordinating the information flows, which reduces transaction costs.

- E-Business - bringing everything on-line including procurement and Customer Relationship Management (CRM).

Thus E-commerce is 'buying and selling' while E-business is the transformation of key business processes through the use of Internet technologies.

Kalakota and Whinston (1997) define E-commerce from these perspectives:

"From a communications perspective, E-commerce is delivery of information, products/services, or payments over telephone lines, computer networks or any other electronic means."

"From a business process perspective, E-commerce is the application of technology towards the automation of business transactions and workflow."

"From a service perspective, E-commerce is a tool that addresses the desire of firms, consumers, and management to cut service costs while improving the quality of goods and increasing the speed of service delivery."

"From an online perspective, E-commerce provides the capability of buying and selling products and information on the Internet and other online services."
A working definition of E-commerce for this thesis is "buying things on the Internet" (Chan and Swatmann, 1999). Whether trading between business-to-consumer or business-to-business, a transaction normally involves a transfer of value between two or more parties in exchange for physical goods or services.

1.4 The Need for Guidelines for Formulating an E-commerce Strategy

While there are hundreds of thousands of online businesses, the reality is that there are only a handful of business strategies that lead to success (Pastore, 2001). The main aim of this thesis is to propose a set of guidelines to form a strategy for businesses to start up in E-commerce.

The IBM website (2000) states that "Electronic commerce has evolved from a high-tech marvel to a corporate initiative." Electronic commerce can no longer be ignored or thought of only as an IT project. Electronic commerce projects must now be intertwined with the firm's strategic plans.

"The psychology a year ago was very exuberant toward dot-com's and now is rife with cynicism. The truth is somewhere in between," asserts Hancock (2001), senior vice president at Mainspring, a strategy consultancy in Cambridge, Massachusetts. "There was a tremendous amount of innovation and a tremendous amount of learning that took place in 2000" (Overby, 2001).

From the year 1999 many dot-com companies were built up and many companies were starting E-commerce initiatives realizing the benefits of offering products and services globally and to increase their return on investment. However, by the year 2002 it became a different story, with more and more companies failing, and investors becoming cautious when investing money in Internet ventures. There is more cash needed then was expected. Many have found their competitors going into E-commerce
and they didn't want to be left behind. Experiences of companies that have failed will help other companies to realize what they need to follow to have a successful business if they plan well and have a good strategy.

From an E-business expo exhibition held in Earls Court November 2001, the key message summarized from speakers of a Computer Weekly panel stated that currently organisations are in the transition period, moving on from the experimental phase of the dot-com start-ups in 1999. Organisations are no longer being pushed to market quickly, but are being told to consider their strategy carefully. Given the current economic climate, there has never been a greater need to explore E-commerce. The pipe dreams of opening new channels to market and forging wholly new revenue streams have been dispelled. Instead, businesses are beginning to re-evaluate their internal processes. When budgets are tight and all expenditure is closely scrutinised, it is imperative to make improvements in internal knowledge sharing and decision making, to streamline procurement and to deliver staff training at lower cost (Bicknell, 2001).

However, businesses are boosting investment in E-commerce technology despite the threat of a global economic recession, according to a study by consulting firm, Accenture (2001), that found that 75% of 840 board level executives plan to increase E-commerce spending by an average of 15% in the next year. At the time when this research first started there was much excitement and enthusiasm for investment in starting up dot-com companies, but as it was a new area, there were bound to be errors and pitfalls as the many dot-com failures since then have shown. It is therefore necessary to think of issues and factors that need to be addressed at the start of the new venture and at the same time learn from others' successes and failures. This thesis, therefore, is being written at the time when it should be helpful for organizations to be given guidelines on building a strategy and suggestions of the various issues and factors for offering services online to be considered.
E-commerce is a constantly developing field mixed with economic uncertainty that requires extensive business knowledge (Cunnigham, 2000). Websites are constantly changing to keep up with customer demand and needs. Companies are required to be constantly innovating and evolving. Currently there aren't any set, formal guidelines for companies to use. For companies in UK, the British Chamber of Commerce wants the government to get the physical and political infrastructure right for E-commerce (E-commerce@its.best.uk). This implies the UK government should produce the right regulatory framework and remove any barriers for companies offering E-commerce. Formulating guidelines for an E-commerce strategy was the main aim of the research, at a time of significant change in IT and E-commerce, supporting strategy formulation would be helpful for organizations in charting an appropriate path to the future. A strategy formulation approach derived in this research is proposed and discussed in Chapter 7. An E-commerce strategy pack was compiled and distributed to organizations and companies to guide them in making decisions and to challenge thinking and to provoke actions. The pack can be found in Appendix 3.

E-commerce has evolved over the years from a few; small companies selling basic items to a vast number of companies trying to sell everything from stamps to cars. According to Couldwell (2001) of the Sunday Business, “Being successful at E-commerce has become synonymous with responding faster to customer needs, reacting more effectively to market changes, reducing operating costs and increasing co-operation with key customers and trading partners. However, as many companies realize, they have to create a viable E-commerce solution component in their operations to compete.”

The rapid developments in technology and E-commerce means that research needs to be constantly updated and it should not be assumed that the proposed strategy in this thesis is the only answer and only guideline to be followed.
1.4.1 The need for case study research

The content of this thesis should prove to be a valuable contribution to the real world and academia as it analyses successes and failures of companies and provides guidelines for companies wanting to offer E-commerce. In the year 2002, with an economic downturn forcing companies to revaluate their current strategies, the use of case studies will prove useful, as many academics and organizations need published real life experiences to learn and avoid mistakes. However, there is a lack of case studies in E-commerce publications. As Khosrow-Pour (2002) states in the call of papers for the Annals of Cases on Information Technology Journal, "In every discipline, one of the most powerful tools in the hands of educators, researchers and managers is documented case studies based on experiences of others. This is particularly true for information systems educators and professionals. Case studies are tremendous sources of solutions, knowledge, ideas, innovations and lessons related to the utilization and management of information technology in modern organizations throughout the world." The author's case studies on dot-com companies discussed in chapters 10 and 11 have been published as a chapter in a book published by Prentice Hall for MBA students to analyze cases using the Harvard business case style.

There is much information from software companies selling products that perform all the operations of trading online, enabling the setting up of a website for a company in 24 hours. However it is not enough, there are the basic business rules that apply. There are issues of inter-organizational relationships, training and education, awareness, having the right infrastructure, having the right product to sell, having customer commitment, having stakeholders involvement, and following customer relationship management, to name but a few issues that have been identified in this study that need to be considered.

The case studies in this research show that some managers, employees and stakeholders in the UK were unaware of the consequences of conducting business electronically. This enables software companies selling E-commerce packages to take
advantage of the unawareness and hype and make a lot of money from organizations which had been lead to believe that simply having a website would bring in revenues. The case studies also revealed that there were other issues that affected the dot-com survival, as consumers were not ready to purchase online with concerns of credit card security being a major issue.

Case studies have helped perceptions to change, and now in the year 2002, from training sessions and seminars on E-commerce, there is more awareness and a more careful approach. More enlightened companies are seeing E-commerce as an additional channel to offer their products and services and giving an option for consumers to shop by carrying out multi channel shopping, and the ability to sell globally (Bowen, 2001).

The well-publicized failures of dot-com companies have helped bring about this change in attitude, but the detail of these experiences may be hard to find and many more, well documented case studies are needed to help organizations learn from others’ mistakes. An important objective of this research, therefore, is to provide case study material to enable future E-commerce professionals to learn from the experiences of the companies studied.

Case studies were used to apply theory into practice, taking the theory into account when making decisions. With E-commerce changing so much, academics, investors, companies and entrepreneurs all want more examples to show what others have done and to learn from their successes and failures.

Consultancy companies such as IBM, PricewaterhouseCoopers, KPMG, and Ernst and Young all use case studies to emphasize their services and products. With the nature of E-commerce and the development of the strategy pack it was considered necessary to apply the theory into business practice, therefore real life case study experiences were chosen for this research. The case studies chosen were convenience samples, as the author had the right contacts at the right time, In2netlogic an E-commerce software
developer company had a customer, Prezzybox.com, who were a pure play dot-com company, the author helped In2netlogic in designing their company pack. The director of Clotheslocker was the author's colleague at university who had his own business, and John Lewis was contacted from the NSB retail customer list. 30 other retail companies were contacted, such as Marks and Spencers, Sainsburys, HSS, Mothercare, Next, and Debenhams, however these companies responded that it was company policy not to answer questionnaires. The case study used for the feasibility study was an NSB customer. Though the cases used were convenient samples, they were useful as there was full access to the companies. As Prezzybox.com and Clotheslocker.com were small companies, it was easier to contact the managers directly which could be difficult in large organizations as to interview the managers would require going through junior employees. With John Lewis and the footwear company the author had contacts with the managing directors through NSB Retail. It was easier to approach the companies chosen, they were sent out a letter with the aims of the project and with their interest and participation it was useful to achieve the information. There were other companies contacted using NSB customer contacts, however those companies were not interested in participating in the research. While it was necessary to restrict the case studies to those which were convenient for access, these were nevertheless considered to be a very appropriate sample with a broad mixture of old, established companies and new startup companies. The companies represented a mix of small companies with just a handful of employees and large companies with thousands of employees, and of companies with a physical high street presence and companies, which only trade through E-commerce.

This research could also be considered to be applied research as companies could benefit from the authors research. The changing nature of E-commerce means that it is always necessary to update the research. Furthermore, in order to establish that traditional marketing theory applies to E-commerce, it was necessary to apply the theory to a dot-com company that had started from scratch. To apply the E-commerce strategy pack it was necessary to use real life case scenarios to show that the step-by-
step, phased approach with a clear, well thought strategy, can enable companies to be successful. Due to the time limitations of the PhD project, the author was only able to use 4 cases. More case studies could be used in the future to compare the findings. However, in order to add to the body of this research and put the work into the context of other research, this thesis also draws on published cases such as Amazon, Dell Staples, Argos and Boo.com.

1.5 The Research Focus

Research into E-commerce at the outset of this PhD project in September 1999 presented a major challenge as there was little academic literature on the subject. It was an area that was constantly changing, mistakes were being made and solutions were under test. The technological and business advances in E-commerce are very fast moving so inevitably, there are problems of the early research being relevant by 2002, as the E-commerce environment had undergone significant change.

However, now in 2004 there are number of books, news articles, and journals on E-commerce written by experts from the industry and academia. Conferences are being held globally discussing E-commerce research, and there is a continual increase in calls for papers from researchers, academics and industrialists and for presenters around the world to share their experiences. Exhibitions and seminars are being held annually, discussing the changes brought by doing business with the advancement in technology. E-commerce is a very young field in the context of general management Rahman, Raisinghani (2000). Academic theory on E-commerce is best understood by a synthesis of the strategic management literature.

The author needed to keep up with up-to-date news, findings, research, and economic changes. It was apparent that if the researched work were not published throughout the research period it could be outdated by the end of the research project. For this reason
one of the main aims was, to publish the findings at the first available opportunity. List of publications can be found in Appendix 1.

One of the limitations of the research was that E-commerce is a broad area and covers many aspects such as security, legal issues, technical issues. Therefore, due to time restrictions of a full time PhD, three years, it was not possible to cover all these issues, where no doubt research is needed and is of importance.

As E-commerce is a broad area, it was necessary to focus on a few key areas rather then concentrating on the whole spectrum. The author focused mainly on the managerial and business issues, such as strategy formulation, identifying opportunities, comparing the traditional marketing theory, conducting competitor analysis in retail industry. E-commerce strategy pack developed in this research was aimed at companies trading in the UK market.

Research for the thesis was particularly aimed to help companies anywhere in the world who wanted to offer services/products online and guide companies who already were offering online transactions. The research was aimed to focus on human aspects and management side of the change and use of E-commerce. Deciding whether or not to take the E-commerce plunge and picking the right partner for the journey are two of the most difficult issues that can face executives of both large and small companies.

1.6 Aims and Objectives

Getting started in Electronic Commerce can be, for many organizations, bewildering and confusing at first. What Electronic commerce actually is, how it works, what it can do and the advantages it offers, can open up a whole new world. While E-commerce projects and dot-com companies continue to fail due to rushed decisions and
ineffective business plan, it is possible that the greater problem may in fact lie with the approach and how the business plan analysis is carried out to create a strategy.

Organizations can be more effective by having a set of proposed guidelines to adopt E-commerce and be successful. The specific knowledge of these issues and concerns, therefore, becomes critical for companies to identify potential success and failure strategies for E-commerce. It is this very gap that this research hoped to fill, by highlighting the specific risks and issues of adopting E-commerce.

The underlying aim of the thesis was: -
To assist those in industries committed to moving into E-commerce to form an E-commerce strategy by:

1) Producing guidelines for formulating E-commerce feasibility study and strategy based on the combined experiences of other companies.
2) Determining whether traditional marketing and business theory can be applied to E-commerce companies.
3) Producing and publishing further E-commerce case studies that can be used for learning and training.

In order to achieve the above stated aims the main objectives were:

1) To study published literature and case studies to determine
   i) The reasons behind successes and failures of companies and the lessons that can be learned from this.
   ii) Whether traditional marketing and business theory still applies to E-commerce companies.

2) To draw up a set of guidelines for managers to form an E-commerce strategy, based on the review of published material, on the opinions of managers involved in E-commerce, and on new case studies carried out as part of this research.
3) To test these guidelines by retrospectively applying them to known successful and unsuccessful E-commerce companies in business to consumer trading.

4) To test the findings and proposals by publishing in peer reviewed conference proceedings and journals at the earliest opportunity.

5) To publish case study details for use as training and learning material for individuals and companies entering E-commerce.

To achieve the objectives of the PhD has involved examining companies, which have adopted Electronic commerce and their experiences of the changeover, the affects of the claimed gains it brings, and the risks, if any, it brings. Research was also carried out for a company who are thinking of adopting E-commerce by carrying out a feasibility study in terms of cost and time and changes it will bring.

From the research carried out the intended outputs were:

1) A set of guidelines for formulating a strategy for entering E-commerce for companies considering such a step and for companies who have already started an E-commerce venture to review their strategy.

2) An evaluation of the guidelines based on their application to a known successful and unsuccessful E-commerce retail companies.

3) Publication of the research in peer reviewed conferences and journals.

1.7 Thesis Layout

Each chapter is summarized below, with the details of the original paper on which each is based:

1.7.1 Chapter 2, Literature Review

This chapter contains analysis of the extent and depth of the problem. This chapter aims to build a theoretical foundation upon which the research is based by reviewing the relevant literature to identify research issues, highlighting those that have not been
Introduction

answered by previous researchers. The literature review also provides a verification and refinement of the aims and objectives for this research.

1.7.2 Chapter 3, Methodology

This chapter describes the methodology used to collect the data for the research objective outlined in Chapter 1. This chapter looks at the methodologies used in this research and the reasons for doing so. Justification is given for the mixed approach of using published company experiences, case studies, surveys and the author's own experience of information science and management obtained in her bachelor and master's degrees.

1.7.3 Chapter 4, Critical Success Factors for E-commerce

This chapter lays the foundation of the thesis by identifying the critical success and failure factors for offering E-commerce by looking at examples of companies gathered from published sources and the author's own experiences to identify success and failures. It identifies issues that managers and companies wanting to offer E-commerce or already offering E-commerce should consider and these are discussed further in the next chapter.

1.7.4 Chapter 5, Key Questions for Management

This chapter is based on the "Management issues regarding E-commerce and the Internet" paper, which was presented at the International Conference on Management of Innovation and Technology in November 2000 in Singapore (Shah and Dawson 2000b). Chapter 5 identifies the managerial issues regarding E-commerce and the Internet. As the size and popularity of the Internet have grown enormously during the
past few years and continue to grow at phenomenal rates, the risks of entering E-commerce are many and it is important that the issues are understood.

1.7.5 Chapter 6, Applying Quality Considerations and Traditional Marketing Practice to E-commerce

This chapter is partly based on the paper titled “Is Quality the Key to Successful E-commerce Marketing” published in a conference of Software Quality Management at Limerick March 2002 (Shah and Dawson, 2002b) It examines the role of quality and traditional marketing issues when setting up a Dot-Com company. This chapter also explores one of the aims of this research, to determine whether traditional marketing and business theory can be applied to an E-commerce company, using Prezzybox.com as an example.

1.7.6 Chapter 7, Formulating an E-commerce Strategy

This chapter is based upon the paper of “Formulating an Ecommerce strategy” presented at the International Centre of E-commerce at Vienna in November 2001 (Shah and Dawson, 2001b). This chapter provides some guidelines for companies who are entering into E-commerce to create an E-commerce strategy or who already have an E-commerce presence to revise their existing strategy.

1.7.7 Chapter 8, Feasibility Study for Offering E-commerce

This chapter is based on a paper, “Research for a Footwear company in UK to offer E-commerce - a case study”, presented at the International Academy of E-business conference in Las Vegas, April 2002, (Shah and Dawson, 2002c). The chapter looks at the second part of the research aim to carry out a feasibility study for companies wanting to offer E-commerce using some stages of the strategy formulation.
1.7.8 Chapter 9, Testing the Validity of the E-commerce Strategy Framework

This chapter looks at how the strategy could be applied to real life working examples by using two Dot-com case studies Prezzybox.com selling presents online, and Clotheslocker.com selling clothes, and bricks and mortar company John Lewis a departmental high store in UK offering products online under John Lewis direct. This chapter shows the validity of the strategy as applied to companies.

1.7.9 Chapter 10, Summary, Conclusions and Recommendations for Further Work

This chapter summarizes the whole thesis, relating the work to the aims and objectives set out in chapter 1 and refined in chapter 2, and provides recommendations for future work. The overall conclusion is that the research has been successful in satisfying its aims and objectives and that the guidelines produced should be useful for any company about to enter or which has recently entered E-commerce.

1.7.10 Appendices

Appendix 1: - List of publications
This appendix contains details to date of author's journals and conference publications

Appendix 2: Copy of Published paper
This appendix contains details of authors published paper

Appendix 3: - In2Netlogic decision pack
This appendix contains a copy of the decision pack used by In2netlogic.

Appendix 4: - NSB Retail reports
This appendix contains the NSB systems report on the feasibility of offering E-commerce and the NSB report on their customer order management survey and product mapping
Appendix 5:- Copy of questionnaires
This appendix contains a copy of the questionnaire to evaluate customers' attitudes for a footwear retail company. It also has a copy of questionnaire to Prezzybox.com, Clotheslocker.com and John Lewis.
CHAPTER 2: LITERATURE REVIEW

Chapter Preface
This chapter contains a literature review for the proposed research. This chapter starts with a general overview of E-commerce and then looks closely at the main research area of formulating an E-commerce strategy. By identifying the gaps in existing published material on the need to have an Internet strategy and, secondly, on the formulation of an E-commerce strategy, this chapter forms a justification for the aims and objectives of this research given in chapter 1. The objectives are then refined in the light of the literature reviewed.

2.1 Methodology
This section will explain how the research was carried out to find articles and literature, published on E-commerce strategy. The purpose of this review is to identify whether there was any previous research carried out on formulating an E-commerce strategy. Material was gathered from various books, journals, the Internet, newspapers and company websites. Search strings were used to find as many websites as is possible using different search engines such as Google, Dogpile and Excite. To get the most out of a search the author used search strings such as "Formulation of E-commerce strategy", "E-business strategy", "Internet Strategy", "E-commerce strategy".

As E-commerce was a new field at the start of this research and there were few publications in this area, and very little on frameworks and guidelines towards steps to offer E-commerce. The author looked at general management and business strategies published in journals and books. The aim was to find the evidence on the need for an E-commerce strategy and to show the gap in publications relating to formulation of an E-strategy. The main objective was to show the link between a company's general business strategy and the formulation of an E-commerce strategy.
The literature reviewed in this chapter is the literature that existed at the start of this research project, which is the literature published before the year 2001, and the literature that was published as the project progressed, which is the literature published in 2001 and 2002.

2.2 What is E-commerce?

This section provides a background and history on what is E-commerce. The link between technology and business innovation goes back to the very beginning. The development of keeled hull ships by the Phoenicians in 2000 BC made it possible to sail against the winds and go beyond the shores to the high seas of the Mediterranean. By doing something never before possible, the Phoenicians broke the bonds of geography and developed a flourishing trade with other people. Today, the Internet has broken the bonds of both time and distance and set the stage for profound, global change. It is a technology breakthrough that enabled electronic trade and gave birth to E-commerce (Kiffer, 2000).

A working definition of E-commerce as outlined in chapter one for this thesis is "buying things on the Internet" (Chan and Swatmann, 1999). Whether trading between business-to-consumer or business-to-business, a transaction normally involves a transfer of value between two or more parties in exchange for physical goods or services. This definition of E-commerce is used throughout the thesis.

2.3 Why is E-commerce important?

This section gives an overall view of the importance of E-commerce in business, which helps define the significance of the author's research.

Though some companies were carrying out E-commerce in the early 1990s, E-commerce was not truly recognized until the late 1990s. In 1996 companies were creating a presence by producing websites as brochures but not actually selling online.
Then, according to Turban et al (2000), E-commerce in 1998 became much more mature. There was a lot of hype surrounding E-commerce in the late 90s mainly because the stock prices of some of the early dot-com companies were high. In the late 90s, dot-com companies like Amazon.com and eBay, rapidly gained size, and market capitalization posed a threat to traditional “bricks and mortar” businesses. In many ways, these dot-com companies seemed to be rewriting the rules of business. They had the customers without the expense of maintaining physical stores; they had little inventory, unlimited access to capital and little concern about actual earnings. The idea was to grow rapidly and worry about profits later. By late 1999, Amazon had a market capitalization of close to $25 billion, eclipsing some of the largest and most established companies in America (Turban et al, 2000). This shows the motivation for companies to enter into E-commerce as organizations were convinced that investment in E-commerce would increase as firms look to Internet technologies to help them improve earnings by reducing costs and boosting productivity.

Retail giants such as Kmart and Wall-Mart in America were hoping to cash in on the dot-com market by merging with companies who had the right infrastructure to run their E-commerce operations (Turban et al, 2000). However, many never made it to the initial public offering after the NASDAQ started to tumble in the spring of 2000. Almost as quickly as the dot-com phenomenon took over, the hype over B2C E-commerce dissipated along with the crumbling NASDAQ.

This raises the question, is E-commerce still important now that the “bubble has burst”? According to Enow.com, a consultancy company, predictions of future E-commerce growth are heavily influenced by two key events in 2001: the September 11 terrorist attack and the dot-com failure. However, even with these two negative events, the predictions are still primarily positive as society continues to make the transition from the industrial age to the Internet age, creating plenty of opportunity for continued growth and e-volution (Mitchell, 2001).
According to Continental Research in August 2001, 15 million people in the UK use the internet on a regular basis either at home or at work. The company found that internet users in the UK have a host of interests for PC and internet usage, and 48% of non-users are interested in going online for at least one specific activity. There is plenty of potential for E-commerce in the UK. Figure 2.1 shows the growth of E-commerce worldwide and its predicted trend in 2002. (Continental Research, 2001)

![Figure 2.1: The growth of E-commerce worldwide and its predicted trend in 2002](image)

2001 saw many dot-com failures. As of June 2001, 330 dot-com companies had closed their doors since the start of the year. However, the news was not all bad for, at the same time, the 'bricks and mortar' retailers were attracting more online visitors and profiting from multi channel strategies by promoting their websites in stores and advertise in-store promotions on their websites (Gibbels, 2001).

Optimism for the future of E-commerce was expressed by Klein and Keefe in 2001 (Klein and Keefe, 2001), who opine that the development and diffusion of electronic commerce has entered a new century and a new period of maturity. The notion of electronic or digital commerce was gaining widespread popularity. For the most part, industry and government are leading these developments, with academic research
following these trends in the form of empirical and economic research (Lee, 1997). The area is undergoing explosive growth and calls for rethinking of many aspects of commerce and of societal relationships, as well as for the adaptation and application of several essential information technologies.

The economic fortunes of the world at the beginning of the twentieth century were strongly influenced by the advent of the electricity and the internal combustion engine (Chaston, 2001). Currently in the new millennium, some forecasters are predicting that the World Wide Web and E-commerce will have an even larger impact on the world economic order. Academics preparing students for future employment in E-commerce, claim that E-commerce will totally change the way organizations are managed (Chaston, 2001). This gives some explanation of the high number of E-commerce failures. The E-commerce environment was too different and too new for much experience and expertise to exist. How can anybody be in a position to offer guidance on exploiting this new technology if the required management models are yet to evolve?

Cunningham (2000) confirms this, stating “E-commerce is not just technology, it’s a way of doing business differently”. A common reason for the high failure rate of E-commerce projects is related to poor integration of business goals, work process change and technology in determining plans. No one looking at the world in 1900 could have foreseen the way in which the lives of millions of people has been transformed by the use of technology in the 20th century (Jahankhani and Hamid, 2001). Using technology and the improvements in the communication media, with an increase use of the Internet, E-commerce growth has been explosive. People have become more dependant on machinery and technology in their daily lives. Pepperell (1995) suggests that human beings are no longer seen as independent from the technology around them but are intertwined as one.
This section has shown that, despite the setbacks of E-commerce failures, most authors are optimistic that E-commerce will grow. However, there is much uncertainty on how to pursue E-commerce ventures due to its newness and the way it fundamentally affects the way people do things. Andy Grove (1996), Chairman of Intel, one of the early adopters of E-commerce has made a meteorological analogy with the Internet. “Is the Internet a typhoon force, a ten times force, or is it a bit of wind? Or is it a force that fundamentally alters our business?”

This section shows the importance of E-commerce and its predicted trends of future growth. However, the newness of E-commerce and the fact it is fundamentally different from traditional marketing has lead to many failures. This underlines the importance of this research to produce guidelines to help companies identify what should be done for success in E-commerce.

2.3.1 Perceived benefits of E-commerce

As reported by many authors, E-commerce has several benefits over the normal manual trade (eg. Turban 2000). This section summarises the benefits described.

- As the reach of Internet is vast, it can sell products to a larger number of people all over the world. It expands the size of the market from regional to national, or national to international.
- It can decrease costs of administration and distribution, for example by allowing music to be downloaded, it eliminates the waiting for a CD through the post, it reduces or eliminates call handling costs, order processing costs and mailing costs, it allows efficient inventory management and enables customer information to be gathered for repeating customer relationship management.
- A website can provide price quotes, where the prices listed can be easily and instantly changed - whereas a printed catalogue involves the expense of printing, and the delay in circulation of a new version if prices are changed.
The Internet allows a customer to buy something from a merchant who would otherwise not have been accessible to him. Customers get a wider choice, usually at a more competitive price and can receive more information about the product. This enables the customer to make a more informed decision. The greater information leads to more confidence to make a purchase decision, more information can also lead to enhanced customer satisfaction because the customer has a better idea of how to use the product.

The demands of customers can be met 24hrs a day, 7 days a week as there is no person needed to conduct the trade, the seller can have a web application selling his goods.

These perceived benefits show why there was a rush to enter E-commerce in the years up to the year 2000. However, given the significant evidence of E-commerce failures, highlighted earlier, there is a critical need for organizations to develop a coherent E-commerce strategy to ensure that the benefits of such initiatives can be realized, and the pitfalls avoided.

2.4 Strategic Management in the context of E-commerce

This section examines the terms “strategy” and “E-commerce strategy” defined by various authors. In order to understand how E-commerce strategy is practiced, it is important to first identify the essentials of generic business strategy. Though there is relatively little material published on E-commerce strategy, a significant strategic management literature does exist, which provides a good point of departure for any discussion of E-commerce strategy. Strategy theory aims to explain or predict a competitive advantage based on specific factors, such as marketing and IT. Thus sustaining competitive advantage using IT or E-business is a specialization of general strategy theories. E-business strategies are viewed as equivalent to IT based strategy as they both involve using IT for business functions such as sales, human resources and operations (Hidding, 2001).
As E-commerce strategy is an aspect of business strategy it is useful to first examine what is meant by business strategy. There are hundreds of definitions of business strategy, the following are examples:

- Johnson and Scholes (1999) define corporate strategy as the direction and scope of an organization over the long term, which achieves advantage for the organisation through its configuration of resources within a changing environment to meet the needs of markets and to fulfill stakeholder expectations.

- Lynch (2000) describes strategy as an organizations sense of purpose. However he notes that purpose alone is not strategy, plans or actions are also needed.

- According to Miller & Dess (1997), and Certo & Peter (1988), strategy is defined as the continuous, iterative planning process, which focuses on keeping an organization competitive in its environment.

- Robert and Bernard (2001) define strategy to be the transformation of an executive's vision into a profile of what the company should look like sometime in the future.

- Plant (2000) indicates that strategy is the formulation of a set of directives that, when effectively executed, fulfill the competitive vision set by executive management.

As these definitions indicate, strategy consists of both directional strategy and operational strategy. A sense of direction is not a lot of use without the means to get where you want to go, and there is little point to planning how to progress if you don’t know where you want to progress to. For the purposes of this thesis, therefore, it is
Literature review

Chapter 2

considered necessary for a strategy to have both the directional and operational elements.

A number of authors have attempted to apply these strategy principles to the formulation of E-commerce strategy:

- According to Turban et al (2000), strategy formulation is the development of long range and strategic plans for the effective management of environmental opportunities and threats in light of corporate strengths and weaknesses. It includes examining or redefining the corporate mission by specifying achievable objectives, developing strategies and setting implementation guidelines for E-commerce.

- Chaston (2001) presents a marketing oriented approach of selecting E-strategies and constructing an e-plan. This approach can be applied to E-commerce as it relates to E-commerce resources, market position and financial performance. His ten step E-marketing plan is a situation review, a SWOT analysis, a summary of key issues, a statement of future objectives, a strategy to achieve future objectives, a marketing mix for delivering strategy, an action plan, financial forecasts, control systems and contingency plans.

- Deise et al (2000) present a novel approach to developing E-business strategy. Their approach is based on work conducted for clients of management consultants PricewaterhouseCoopers. They suggest that the initial focus will be on the selling changes, then on the value chain integration.

These authors put the strategy formulation process in the E-commerce domain but the approaches do not acknowledge any aspect of the strategy that is unique to E-commerce. Their approach seems equally valid for generic business strategy as it is for E-strategy.
Venkatraman (2000) suggests a more 'E' centred approach with a five-stage strategy process for what he describes as a dot-com strategy for existing businesses looking to make use of new digital media. The five stages are presented as five questions for a management team:

1. What is your strategic vision?
2. How do you govern dot-com operations?
3. Do you have the resources?
4. What is your operating infrastructure for the dot-com operations?
   Venkatraman emphasises the importance of the infrastructure in adding value to the customer through functionality, personalization and ensuring privacy.
5. Is your management team aligned for the dot-com agenda?

Venkatraman (2000) also highlights the need to continuously scan the environment and so revise the strategy. "We need to abandon models of strategy perfected under the predictable conditions of the Industrial age. We should embrace the philosophy of experimentation since the shape of the future business models is not obvious."

There was little published material on E-commerce strategy formulation when the author started her research, though some did appear as the research progressed. An example is Rayport and Jaworski's book (2001), titled *E-commerce*, which discusses strategy decision making in the new economy. They discuss six interrelated sequential decisions to make and implement an E-commerce strategy,

1. Market opportunity analysis, looking at the stakeholder's involvement in the strategy such as the customers, competitors and partners.
2. Business modeling, looking at the product offering, the company's resources, and the financial model.
3. Customer interfaces, considering how to offer customer value.
4. Market communications and branding to build customer awareness and traffic.
5. Implementation of strategy and innovations to facilitate workflow.

6. Metrics that reflect early warning indicators of the progress of an E-commerce strategy as well as outcome measures such as customer satisfaction and financial performance.

In this research electronic commerce strategy is considered to be a business strategy, but the focus is on how a business needs to adapt, both directionally and operationally, to meet the challenges presented by the emergence of the Internet as a business tool. This concept aligns with Venkateramann's (2000) suggested strategy and that of Rayport and Jaworski(2001). For the purposes of this research, the definition of E-commerce strategy used is:

*Electronic commerce strategy is the formulation and execution of a vision of how an existing or new company intends to do business electronically.*

Bringing together the ideas of these pioneering authors on E-commerce, it does appear that existing business strategy elements such as environment analysis, objective setting and strategy definition are naturally still required. However, this needs to be set in the context of the Internet which can give people across the world access to company information and products, but equally it can give the same access to a company's competitors.

A term that is used extensively in the electronic commerce literature is the term 'business model'. It has become a buzzword amongst electronic commerce academics and business professionals. Like many buzzwords, however, it's meaning has become blurred with individuals attaching different meanings to it to suit their needs. The term 'business model' is used in many contexts and it is difficult to understand exactly what a business model is (Timmers, 1999; Mahadevan, 2000). Some authors do not try to define the term but do refer to business models and/or taxonomies of business models (Bambury, 1998; Chen, 2001). Others, such as Kalakota and Robinson (1999) and
Whiteley (2000), do not use the term ‘business model’ at all but use terms such as business designs and strategies. Many authors use the terms ‘business model’, ‘E-business model’ and ‘Internet business model’ interchangeably. In this thesis the author refers to E-commerce strategy and E-commerce strategy formulation. Although this research could also be interpreted as the putting in place of an E-business model or Internet business model, these terms are not used.

2.5 The Need for an E-commerce Strategy

This section examines what the literature says on the need for an E-commerce strategy to establish the significance of the author’s research. In 1999, when the author’s PhD commenced, getting started in electronic commerce for many organizations was bewildering and confusing. An objective of this research project was to review some companies, which have adopted or are thinking of adopting electronic commerce and their experiences of the changeover, the affects of the claimed gains it brings and any risks it may bring. After identifying risks and issues the author’s next objective was to develop a set of strategy guidelines for the use of companies of any size, large or small, in any industry sector wanting to offer E-commerce.

The urgency of the author’s research is indicated by Miers (1996), who states “There is a revolution about to happen. Adapting to the challenges which will arise requires new strategies - the strategies of revolution - turning markets on their head and paradigms inside out, Develop A Strategy - Now!”. The need of having a strategy was also emphasized by Evans (2001), who also stresses that it affects all types of organisations, stating that “Both new E-business startups and current businesses that are investigating the possibility of migrating to an E-business system need to have an E-strategy”. Evans in his research focuses on harmonizing internal business functions, and integrating them towards E-business strategy. However, he fails to consider the steps to take towards formulating strategy and focuses on how business should follow customer
relationship management instead. To fill this gap in Evans's published research would require E-businesses to visualize the future from a strategic viewpoint.

Kalakota and Robinson (1999) point out that companies that simply establish a Web presence rather than reconfiguring their business practices are not going to succeed in the electronic marketplace. Unless there is a longer term, wider ranging strategy the investment in E-commerce will eventually lead to business failure. Lee and Whang, (2001) also mention the importance of companies having a wide ranging E-commerce strategy, stating that “Numerous factors affecting the adoption of an eBusiness strategy need to be addressed. A commitment from the executive level is necessary for rethinking business processes. Without the involvement of an executive decision-maker, many projects will not reach fruition. The strategic planning process should not begin without this commitment”.

This idea that entering E-commerce has a wide ranging impact on a business and therefore cannot be taken lightly is confirmed by Reedy et al (2000), who claim that E-commerce challenges traditional organizational practices, and opens up a vast array of issues that the organizations must address. By focusing on the varying levels of an organization, the effects of E-commerce become apparent. An understanding of the implication E-commerce has on such organizational divisions can help businesses gain understanding hence plan for their continuing evolution. In terms of marketing, the modern organization must be critically aware of the development of E-commerce, and the implications that it entails. "Marketers develop their own recipe of promotional tactics to fit the product lines or industries in which they compete. Now electronic communications tools are and will continue to be an important ingredient in the promotional mix" (Reedy et al, 2000).

Further confirmation comes from Coltman and Devinney (2001), who state “The Internet is not just about E-commerce, it is the profound impact this medium will have
Their research revealed that the Internet is driving a global market-place transformation and paradigm shift in how companies get things done, how they compete and how they serve their customers and how they develop a strategy.

Kully also discussed the twin themes of the need for commitment and the wide ranging nature of an E-commerce strategy in an IBM presentation (2001) at an E-commerce seminar. He stated that steps to success required a sound business strategy supported by executive management with a focus on long-term customer relationships and value. This requires concentration on all aspects of the sell cycle, awareness, interest, desire, action and support, and a robust, scalable and integrated business process and infrastructure able to handle millions of hits.

Like Kully (2001), Tribunella (2001) also identified the importance of having a strategy that adds value. According to his research, for E-commerce activities to add value, they must facilitate organizational strategy. An organization should not finance a Web presence before it has a clear understanding of how the site will facilitate its business strategy.

According to Czuchry (2001), in spite of the rapid growth of Internet use, the piecemeal me-too E-commerce approach doesn’t work. A systematic approach with emphasis on strategy must be used. Market realities demand an effective E-commerce business strategy as a response to customer expectations and competitive pressures. Firms that rush to enter the Internet’s highly competitive environment without a well thought-out strategy and business model face a high probability of failure (Macaluso, 2000). For example, dotcomfailures.com, a Web business that kept track of E-business failures, itself failed due to a poorly thought-out strategy (Deitel & Steinbuhler, 2001).

The importance of having a strategy to give some form of systematic approach is also mentioned by Leucke (1999) who states “Instead of spending time pinpointing the
perfect E-commerce strategy - (There isn't one.) - More companies need to at least choose a strategy and communicate it”.

Strauss and Frost (1999), suggest E-commerce is an opportunity as it provides organisations with a unique medium to analyse their business, but this requires information relating specifically to its environment. Venkatraman (2000) goes a lot further, commenting that a business strategy that fails to recognize the Internet is destined to fail. A KPMG survey in 2000 shows that managers are aware of the need to execute a Web strategy to complement existing business models (Venkatraman, 2000). They point out that it is critical for traditional retailers to begin to clearly define their Web strategy.

Venkatraman (2000) also discusses the need for an E-commerce strategy to be integrated into the financial planning of a business “Currently many organizations offering services online are not yet at the stage of realizing profits from E-commerce. Many are struggling with the initial stages of E-commerce policy: trying to decide if investment is the key strategy or if a combination of business practices is preferable”. It is the lack of an integrated strategy that restricts many organizations from realizing the full potential of the technology to improve business processes. Bicknell (2001) agrees that when making strategic choices, organizations must consider both their operational assessment (of production, sourcing, logistics, marketing and human resources, for example) and financial conclusions regarding investment logic, sources of funding and performance criteria.

Michael Porter, who many regard as the “father” of business strategy, re-enforces the need for an integrated E-commerce strategy in his views on the Internet economy in the Harvard Business Review (2001). Porter also comments on the need to show added value, stating that the right way to create value through the Internet is to develop a strong strategy and then leverage the Internet throughout the business strategic elements and processes. Porter was also one of the contributors in a European Business
Forum titled "Does Strategy Really Matter Anymore?" published on http://www.manyworlds.com where almost all the writers in the forum agreed on the continued (and often increased) importance of strategy, although they each stress different aspects.

The general message from all of these authors is that a strategy that provides a focus on the systematic exploitation of E-commerce and the Internet, is a necessary integral part of a company's overall business strategy to obtain a competitive advantage. However, the strategy needs to be wide ranging, covering all aspects of the business and it therefore requires a clear commitment from management. This is illustrated by a study by Spiegel (2000) of 400 brick-and-mortar retailers with Web sites, which found that those retailers that have taken a proactive approach to E-commerce are well ahead of their competitors. "These E-tail leaders have developed a strategy that integrates their Web efforts with other channels," the study states.

Lynch and Beck (2001), reflect the importance of E-commerce strategy by taking the wider view, looking at profiles of internet buyers in 20 countries, identified the importance of each country having a strategy. Their research mainly focuses on the prospect of standardization of Internet strategies on a worldwide basis. It showed there were implications for a regional approach to global E-commerce strategies, with differences in beliefs, attitudes, perceptions, and Internet buying behavior depending on user experience, and home country or region. However, this interesting suggestion is beyond the scope of this research which concentrates on E-commerce strategy formulation at the organisational level.

This section shows that rushing into E-commerce without a lot of thought ahead of time is a serious mistake and shows the importance of having an E-commerce strategy to provide a planned systematic approach to E-commerce that will avoid failures. This strategy needs to show added value, be wide ranging, be integrated into business planning, and be supported by management commitment at the highest levels.
However, a survey by the Department of Trade and Industry (DTI, 2000; Timms, 2000) showed that few UK companies had a well thought out E-commerce strategy in place and research from Siegel and Gale (1999) showed a lack of strategy was the highest reason for failure. Despite the widely acknowledged importance of the E-commerce strategy, there has, to date, been little comprehensive, coherent and well-focused guidance, available to companies, on how to formulate, apply and monitor an effective E-commerce strategy. This issue is addressed in the following section.

This section shows that industry has a particular need for the research in this thesis, as although there is a recognised need for an E-commerce strategy, few companies had succeeded in putting an effective strategy in place. By analysis and identification of the strengths and weaknesses of current implementations, the aim of this research was to provide guidelines so that Internet technology investment matches organizations' requirements and objectives.

There are some, but not many, publications by independent authors on case studies of E-commerce strategy implementation (eg. Chen et al 2003, Doolin and Watton, 2003; Cheek and Kunz, 2002). However, these case studies were not available at the start of this research project and were too late to influence this research. Case studies of E-commerce strategies show that there are lessons to be learned from published experiences, yet each individual publication has severe limitations when it comes to guiding a company considering E-commerce. A reported case study company may have so many differences to the company trying to decide whether and how to enter E-commerce it would prove little use in making the necessary decisions. What is needed is some form of framework to bring the collected experiences together. This would need to be flexible enough to cover a wide range of applications of E-commerce so managers can select the parts of the framework that are applicable to their own circumstances. The area that is arguably the most critical, yet is particularly poorly covered in the literature is the point of the very first decisions - should the company
enter E-commerce or not, and if so, how? The next section reviews the available frameworks and methods for forming a strategy in the literature.

2.6 The Formulation of E-commerce Strategy

This section discusses what has been published and researched by various researchers, practitioners, scholars, lecturers, and managers on producing frameworks and methodologies for companies to formulate an E-commerce strategy. The literature review in this section justifies the research done on the basis of the papers published up to 2001. Several references were taken from the websites due to the lack of published conference/journal literature.

As shown in the previous sections, to be effective, an E-commerce strategy has to be integrated with the strategic vision of the company as a whole. As an executive from American Express put it, "The Net has to integrate into your core business" Plant (2000). However, the approach to the creation of an effective E-commerce strategy is not always clear. For example Amazon.com, AOL.com and eBay.com are new organizations, pure play Internet companies with no bricks and mortar presence. Furthermore, what if a company is an industrial manufacturer of cyclical products, how does it proceed? What if a company is a supplier of information-based services that wishes to develop an Internet strategy - again, how does it proceed? The aim of this section is to review the pre-2001 literature on the formulation of E-commerce strategies to determine what lessons can be learned from this body of work, and what gaps remain to be filled.

The ultimate success of the strategy created and adopted by an organization depends heavily upon early identification of the specific issues and options available when applied to the individual circumstances of the organization. Plant (2000) discusses seven dimensions of an E-commerce strategy out of which: four are positional characteristics which he also calls "the four key pillars of success": brand, technology,
service, and market and three bonding factors:- leadership, infrastructure, and organizational learning. As implied by the name, these bonding factors are the glue of E-commerce strategy, without them the four positional factors stand in isolation. Determination of the interrelationships among these factors is key to the creation of a strong, yet adaptable, E-commerce strategy. Plant discusses the dimensions in depth, covering the general factors that need to be looked at for E-commerce to function, but does not explain some of the issues that need to be considered for a strategy, such as setting goals, aims, having a business plan, planning and design issues, implementation and assessment. This underpins the need for guidance on E-commerce strategy formulation that is far more comprehensive.

Plant's (2000) discussion on the power of branding on the Internet is a factor to consider during the initial stages of E-commerce strategy formulation. However it is also worth noting that Amazon was a pure-play Internet company that has built a strong brand name within 3 years. The strength of the new online organization has created significant brand equity very quickly. Traditional organizations moving to the Internet, face a challenge to leverage existing brands effectively and move forward in their new chosen market spaces. Plant (2000) discusses the four major positions that can be adopted: brand reinforcement, brand creation, brand reposition, and brand follower. This illustrates that success in the online market space requires flexibility and adaptability on the part of the organization, which indicates that any proposed strategy framework or set of guidelines must itself be flexible and adaptable to each individual organization's needs.

Griffith and Krampf (1998) indicate areas where managers can build an E-business strategy: on-line sales which are consistent with the definition of retailing, communication which involves advertising, promotion and building corporate brand image, and customer service where the Internet provides a rare opportunity for retailers to provide exceptional customer service by being both accessible and responsive.
Venkatraman (2000) points out that every company will need to develop a strategy for the dot-com world and ultimately, business strategy will be dot-com strategy. Vision, governance, resources and alignment are the stepping-stones to a successful Web strategy (Griffith & Palmer, 1999; Venkatraman, 2000; Hackbarth & Kettinger, 2000). This indicates that any strategy formulation framework needs to facilitate a wide range of viewpoints to ensure all aspects of E-commerce are properly considered.

There have been articles published on what kind of strategy to follow such as disintermediation, or direct selling to customers in research by Fruhling (2000). However the author of this thesis wanted to devise a framework for companies to use to make that first initial decision on what strategy to apply to their business to determine whether it should be direct to customer, disintermediation, or whatever. The need to carefully think things through before jumping into practice is illustrated by a failure of a company who followed a direct-to-customer strategy. The seed-and-bulb company started selling directly to customers via its own web site one year after its traditional retail partners started selling the company's products through their own web sites. After a month, the company began receiving daily e-mail complaints from customers who could not understand why it cost more to buy the company's products directly from the company than it did from the traditional retailers. Customers did not know or understand that the retail partner had signed an exclusive contract that allowed it to sell the company's bulbs and seed for 40 percent below retail (Maston, 2000).

This again emphasises the particular need for guidelines to cover the very first decisions about entering E-commerce. The thought process of making these early decisions is not adequately covered in published literature, which is why the author saw the need to devise a framework to help companies decide what they can and can not offer. Strategy should precede E-commerce investments. While the framework proposed in this research cannot be totally comprehensive, it is designed to help
companies understand how to proceed with their overall business planning and E-commerce planning while adhering to the strategic methodology.

Amit and Zott (2001) in their research explained the architecture of business models, and went onto describe the main elements of their eValue framework, which they use to examine the value-creating potential of various business models. The four key value drivers, in their view, are efficiency, complementarities, lock-in and novelty. As the Internet continues to transform the business world, Amit and Zott point out that more research will be needed to analyze how business models contribute to wealth creation. The eValue framework, however, does offer executives tools to analyze how their own E-commerce efforts measure up against these criteria. There is a lack of published research on any form of evaluation and review methodology for E-commerce strategy. The framework proposed in this research, therefore, incorporates a review step in the strategy formulation.

The importance and need of frameworks has been covered in textbooks (eg. Plant 2000), though there is a lack of recent published research in academic journals. However, a discussion of how specific E-commerce issues can be mapped into the strategic planning process is absent from the literature. This shows the need to research and explore a method to link E-commerce issues with strategic planning.

Tjan (2001) highlights the need to avoid flaws and devise a strategy. He looked at adapting classical portfolio strategy to the digital age, by looking at the common flaws in Internet strategies to avoid. These he identified as:

1. spreading of investments by funding projects indiscriminately
2. devoting money and time to a high-stakes initiative
3. trend-surfing.

A better way is to invest in a limited number of initiatives representing different levels of risk and opportunity. He stated that by avoiding these flaws, one can avoid the risk
of failing. This re-enforces the conclusion of the last section, that there are advantages to be gained in learning from the experiences of others, though it does not indicate how to do so. Once again there is little in the way of guidelines to help companies look at and make decisions about entering E-commerce taking into account all the potential pitfalls experienced by others.

Sawtrey and Perith (2001) argue that the business world has become much more complicated, such that the ability to adapt and respond is now as important as the ability to anticipate and act. Strategy formulation for E-commerce has much in common with strategy formulation for other business contexts or functions. There is a danger that in the race to capitalize on fast growing E-commerce markets, businesses may forget the fundamentals, and overlook fundamental business principles and neglect adequate strategy formulation. All business strategy in E-commerce or otherwise is concerned to focus on questions such as “Which markets should we be in?” or “What benefits will our customers expect in five years?”. On the other hand there are a number of factors that are unique to E-strategy formulation such as the interactive nature of the channel, which means that the business has a direct connection with each and every customer. This emphasizes that any strategy formulation must take into account both the general business principles and the unique characteristics of E-commerce.

Coltman (2001) stated in 1998, firms had tested no less than eleven distinct E-business models in the marketplace. Most of these subsequently failed, leading some to suggest that managers became so focused on IT innovation that they failed to apply the underlying principles of business. The problems encountered include poor understanding of the costs and benefits of E-business technology and therefore uncertainty about eventual returns to investment. They also include significant difficulties in building usable customer interfaces, integrating E-business with legacy IT systems, or aligning organizational structures with new business models.
Some authors, such as Useem (1999), have stated that effective management of Internet business alongside established business poses challenges for many businesses. Many other organisations are also experimenting with ways to defend their market position while developing a Web business, e.g. Toysrus, Walmart, Tesco and Sears. One of the challenges to complete translation to Web-based models has been the inability to identify a new business model with assured profitability. This highlights the need for any strategy formulation to take into account the need to cater for a company's existing business as well as its E-commerce venture.

Riggins et al (1998) in their research towards a unified view of E-commerce discuss a framework to identify E-commerce applications in the context of intranets and extranet connection. Similarly Gebhart in (1996) in her research article on the Internet strategy handbook, focusses on how companies can achieve competitive advantage on the Internet. Her research covered everything from the corporate planning and decision making to the rethinking of content, packaging, and delivery of products and she covered the issue of integration within the workplace. However, her research did not provide a framework to cover all aspects of E-commerce issues that were needed to build a strategy.

The literature reviewed in this section has demonstrated that a considerable body of literature, relating to the formulation of E-commerce strategy, has evolved in recent years. However, this literature is fairly fragmented and very little of it has been subjected to critical academic scrutiny, through either peer review or PhD examination. There is, therefore, still a pressing need for more coherent and comprehensive strategy formulation methods and guidelines to be developed, and subjected to critical academic scrutiny. Moreover, the literature reviewed in this section in this has established that any such E-commerce strategy formulation method must:

- Be very flexible to cover the many different types of company from pure-play E-commerce companies to companies with a mixture of traditional and Web based trading.
Literature review

- Be widely applicable, to cover all types of businesses, such as retail, banking, or tourism.
- Assist managers to make decisions, particularly in the early stages of deciding whether or when to enter E-commerce.
- Take into account any existing business and ensure the E-commerce strategy is an integral part of an overall cohesive business strategy.
- Cover the essential traditional business principles as well as taking into the unique characteristics of the Internet.
- Incorporate a means of review to ensure that the strategy keeps pace with the quickly changing Internet environment.
- Take advantage of the various published experiences of other companies.

A key objective of this PhD study was to develop and validate a strategy formulation method that met the above criteria, and could be used to guide future E-commerce initiatives.

A formal and systematic strategy formulation method may not necessarily the only way to ensure that web-based projects are appropriately focused, and a number of alternative approaches have been proposed. For example, Coltman (2001) proposes the idea of posing a set of key questions for managers to answer to ensure that an E-commerce initiative is likely to be well-focused and viable. While some questions, such as “How will E-commerce affect existing customers?” may be trivial for a new company startup, others are bound to be more thought provoking and force the managers to think of issues they may not have otherwise considered. Questions could be posed to ensure all aspects of E-commerce are fully considered. Furthermore, if the questions are derived from other companies’ experiences then it allows others to take advantage of that experience. Venkatraman (2000) also usefully employed the idea of posing questions to ensure managers consider all necessary issues, as mentioned in section 2.4. Whilst the idea of developing a set of questions may well have some merit, previous efforts have not been subjected to rigorous academic scrutiny. Moreover, it is
unlikely that such an approach could present a complete alternative to strategy formulation methods, as they offer little guidance to support the design, implementation, nor monitoring of an E-commerce strategy. Consequently, a key objective of the PhD study was to develop and validate a set of questions for managers to answer, which would complement and be explicitly integrated into the strategy formulation method.

Chaffey (2002) notes that E-business or E-marketing strategy process models tend to share the following characteristics:

- Continuous internal and external environment scanning is required.
- A clear statement of vision and objectives is required.
- Strategy development can be broken down into formulation and selection.
- After strategy development, there should be strategy implementation.
- Control is required to detect problems and adjust the strategy accordingly.
- A strategy must be responsive to changes in the marketplace.

These are also fundamental aspects of traditional business models. This raises the question of how well do traditional business methods; particularly marketing methods apply to an E-commerce business. The next section considers this issue.

2.7 The Application of Traditional Marketing Theory in E-commerce

This section looks at research published on whether the traditional marketing concepts and theory can be applied to E-commerce.

The importance of developing an effective E-marketing strategy was indicated by Michael Porter (2001) who said: 'The key question is not whether to deploy Internet technology – companies have no choice if they want to stay competitive – but how to deploy it.' Porter stated the need of having an E-marketing strategy was to provide consistent direction for an organisation's e-marketing activities that integrates with its other marketing activities and supports the overall objectives of the business. This
shows the importance of integrating a company's E-commerce marketing strategy with its overall business marketing strategy - but are the two compatible? There is a need to establish whether the traditional marketing theories still apply in the E-commerce environment.

In assessing the implications of E-commerce in terms of marketing, it is important to understand its impact in respect to marketing strategy formulation. As the Internet, and in turn E-commerce has developed, and continues to evolve and grow, it is vital that any organisation, in any particular industry, must base its strategic planning around such a rapidly growing medium. The growth of the Internet is an environmental influence that must be embraced and understood so to successfully plan for future marketing implementation.

The next crucial element is to gain an understanding of E-commerce itself, as well as the current and possible future developments. In understanding E-commerce's impact on strategic foundations, an organisation's strategies can be more clearly focused. Once the organisation and E-commerce's respective environments are clear it is then possible to understand E-commerce's implications in regards to fundamental marketing strategies. As Brown (1997) states “By focusing on tools such as the competitive strategy framework, we can gain a better understanding of strategy formulation.” It is easy to link E-commerce directly into the strategic planning sequence, and hence understand its impact to the marketer (Brown, 1997). By reviewing these traditional marketing theories and practices, it's possible to see where, if at all E-commerce fit into current frameworks. This will provide relevant conclusions that can be made based on the strategic implications of E-commerce, and its attributes in the marketing process. In doing so, this adds a vital dimension to the marketer in an ever-growing technology based society, of which must be clearly understood.

Brown (1997) in his research made a link with marketing principles and E-commerce strategy. He states “In implementing a strategic plan it is appropriate to identify the
four key elements in an organization’s environment. They are: the internal strengths and weaknesses; and the external opportunities and threats (Or SWOT analysis)”. By matching the organizations resources and any apparent opportunities, Brown concludes it may be possible to produce an effective match, and hence, a favourable outcome. These four major environmental factors are important for the organisation, and are vital in assessing its strategy in an E-commerce situation. For example a farming supplier who currently possesses an e-mail ordering system may be thinking about developing a web-site. To apply this theory, as they currently already operate basic E-commerce facilities, they may identify this as a strength in their business. Hence, in doing so, their strategic formulation has been based around the fundamental practice of SWOT analysis.

This section has illustrated that the traditional marketing theory should be applicable to an E-commerce business, though this is yet to be proven. This emphasizes the need to review whether the traditional marketing theory actually applies in practice to E-commerce ventures. While authors such as Brown (1994) and Turban (2000) advocate the application of sound market theory there is little evidence in published research that shows that this has been tested in E-commerce businesses.

2.8 The Use of Critical Success Factors (CSFs)

This section looks at research on critical success factors for E-commerce to establish the usefulness of this approach for this research project.

A manager should be continually aware of the current level of performance in each of the critical areas of a business as a basis for decision-making (Holsapple and Whinston, 1996). Ward and Griffiths (1997) report that the current status of performance in each area should be constantly measured and that information should be made widely available. A suitable technique for that is the Critical Success Factor (CSF) theory (Rockart, 1979). It has been widely applied in many aspects of Information Systems and Technology Management (Teo and Ang, 1999). CSFs in software development
were investigated by Reel (1999) and Tackett and Van Doren (1999). In another publication, Liu and Arnett (1999) empirically study the factors associated with website success in electronic commerce. The question to be asked is how can we devise a strategy to avoid failures in E-commerce? Put, the other way round, this becomes a need to find the factors critical for success in order to incorporate them into an E-commerce strategy. A study of critical success factors in E-commerce, therefore suggests itself.

The critical success factor approach has grown as a method of identifying the information requirements of executives within organizations. This approach has been expanded by Bullen and Rockart (1981) into a Strategic Information Systems Planning (SISP) methodology. Bullen and Rockart (1981) define critical success factors as, "Critical success factors are the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department, or organization. Critical success factors are the few key areas where "things must go right" for the business to flourish and for the manager's goals to be attained." If these goals can be attained, the success of the firm or organization is ensured Rockart (1979). The definition of critical success factors is described further in chapter 4.

Fidler and Rogerson (1996) state that the critical success factor approach has enjoyed widespread popularity within the field of IS strategy development mainly because of its conceptual simplicity and its relatively small use of resources. In essence, critical success factors are those few things that must go well to ensure success for a manager or an organization, and therefore they represent those managerial or enterprise areas that must be given special and continual attention to bring about high performance (Boyton and Zmud, 1984). The key to success for most managers is to focus their most limited resource (their time) on those aspects that really make the difference between success and failure (Bullen and Rockart, 1981).
The idea behind CSF theory is simple: in any organization certain factors will be critical to the success of that organization, in the sense that, if objectives associated with the factors are not achieved, the organization will fail. According to Pollalis and Frieze (1993), the concept of critical success factors is easy to apply, flexible and does not require a rigorous format in their use. This offers an advantage as critical success factors can be tailored to different applications (as seen in the growing number of uses proposed for critical success factors in IS and other organizational domains). A disadvantage is that the flexibility of critical success factors may lead to an overly casual approach to their application. If this occurs, the critical success factors will communicate invalid signals to both analysts and users.

Critical success factor analysis is a powerful and "deservedly popular technique" in IS strategy planning and business planning (Ward and Griffiths, 1997). Thierauf (1982) notes that in addition to its use by top management and the corporate planning staff, critical success factor analysis is useful at each level of general management. The literature reviewed in this section has demonstrated the importance of critical success factors, to the effective management of business enterprises. However, there has, to date, been little academic investigation of the applicability of CSFs, in the context of E-commerce, and how such CSF's might complement E-commerce strategies. The derivation of the critical success factors in this research is described in chapter 4.

2.9 Conclusions

The Activemedia research group (2001) state that "While there are hundreds of thousands of online businesses, the reality is that there is no effective strategy that provides useful guidelines." The difference between success and failure of a strategy comes down to elements of execution, executive choices and priorities. There is a need to learn what successful online businesses do to follow the right strategy to grow and thrive in today's online world.
From an industrial perspective, gathering knowledge is a critical activity for any company and its employees. There are independent research companies such as Gartner group and Butler group, and consultancy companies such as IBM and Price Waterhouse Coopers providing forecasts and predictions of the growth of E-commerce. They have published literature on E-commerce concepts, guidelines on how to build a website and how to follow customer relationship management, what functions to outsource and what Internet Service providers and application service providers to go for (http://www.gartnergroup.co.uk, http://www.butlergroup.co.uk, http://www.pricewaterhouse.com). However, there are no set frameworks or guidelines for companies to develop a strategy right from the initiation and decision stage.

The ESRC Virtual Society issued a memorandum in 1999 to the Trade and Industry Committee Inquiry into Electronic Commerce which concluded by suggesting that: "evaluation of the impact of E-commerce requires an in-depth understanding of the context of application and the broader social and economic context for development" (Woolgar, 1999). This supports the conclusion that what is needed is a framework that raises awareness of all the issues of entering E-commerce for each individual organisation as well as giving guidelines on how to build an E-commerce strategy.

This chapter has shown the importance of E-commerce and the growing need for companies to develop an E-commerce strategy that is compatible with and an integral part of the companies' overall business strategy. There was a wealth of literature on E-commerce up to 2001, much of it identifying the importance of having a well thought out strategy for E-commerce, but very little on just how a company should produce such a strategy for their own particular circumstances. This leads to the conclusion that a framework is required that will allow managers to tailor a strategy to suit their own needs. As described in Section 2.5 this framework must be flexible, widely applicable, take into account any existing business, and conform to traditional business principles as well as taking the unique characteristics of the Internet into account. It needs to help in decision making, particularly in the early stages, but also
incorporate a continual review capability. There are a number of published case studies on E-commerce, though few studies by independent authors existed at the start of this research. However, the wide variation of published cases limits the usefulness of each one for guiding other companies. What is needed, therefore, is for any proposed framework to be built on the reported experiences of a collection of case studies to bring these experiences together in a form that is useable by others.

To help form a strategy framework, three ways forward have been identified in this chapter:

1) Determining critical success factors is a good way of analyzing successes and failures and these are then easily usable as a means of learning from the past experiences of others.

2) A series of questions to ensure all the necessary considerations are examined is a very flexible way of producing guidelines for a wide range of different types of organization and business, and it has the added bonus that it helps managers determine whether and when to enter E-commerce as well as review their previous activities.

3) There is some published material that implies that traditional marketing methods apply to E-commerce but what is really needed is some case studies to see if it is really true in practice.

This last point also emphasizes the value of case studies. Case studies are a means of learning from others’ experiences. To build on this experience, this research needs to consider as many case studies as possible, whether these are existing, published case studies or new case studies carried out by the author. It must also be recognized that to contribute to the available case study experience, the author must seek to publish any new case studies carried out in the course of this research.
2.10 A review of the aims and objectives

The aims and objectives of this research can now be examined to ensure that they fulfill the need to "plug the gap" in available research. This section refines the aims and objectives in the light of the literature review.

The initial aims given in chapter 1 were:

1. To assist those in industries committed to moving into E-commerce to form an E-commerce strategy by:
   i) Producing guidelines for formulating E-commerce feasibility study and strategy based on the combined experiences of other companies.
   ii) Determining whether traditional marketing and business theory can be applied to E-commerce companies.
   iii) Producing and publishing further E-commerce case studies that can be used for learning and training.

These aims conform closely to the need for research identified in this chapter. However, to particularly meet the need for help in decision making at the initial stages when a company is considering whether and when to enter E-commerce a second aim is introduced:

2. To assist those in industry considering whether or when to enter E-commerce to carry out a feasibility study as the first steps of formulating an E-commerce strategy

In order to achieve the above stated aims the main objectives can also now be refined. In particular the first two objectives are refined and expanded to three points to incorporate the need to identify the critical success factors, the need to find if traditional market theory really applies in practice, and the use of questions for managers to raise their awareness of issues. The objectives therefore become:
1) To study published literature and case studies to determine the critical success factors (CSFs) for E-commerce companies to assist companies to learn the lessons from others' experiences.

2) To study the application of traditional marketing and business theory to an E-commerce company case study to see if the theory is still applicable in practice.

3) To draw up a set of guidelines for managers to form an E-commerce strategy, based on the review of published material, on the opinions of managers involved in E-commerce, and on new case studies carried out as part of this research. The guidelines will include a set of questions to be answered to ensure all necessary considerations are taken into account.

4) To test these guidelines by retrospectively applying them to known successful and unsuccessful E-commerce companies in business to consumer trading.

5) To test the findings and proposals by publishing in peer reviewed conference proceedings and journals at the earliest opportunity.

6) To publish case study details for use as training and learning material for individuals and companies entering E-commerce.

The research reported in this thesis attempts to fill the gap in the existing research (or, at least, that existing when the research was carried out in 1999-2001) by determining how to formulate an E-commerce strategy.

There are many examples of successes and failures in E-commerce. However, why companies failed and what should have been done is still under review in the 21st century. This is where this research fits in trying to fill the gap by providing guidelines for companies wanting to trade electronically. Also, by identifying factors that lead to failure and taking into account mistakes made by pioneers, it should be possible to learn from others' failures to move forward to success.
However, as more case examples about success and failure in an E-commerce world become available, a common theme begins to emerge, suggesting many of the basic principles of management applied to bricks and mortar business remain entirely valid in E-commerce and cannot be ignored (The Economist, 1999). Part of this research seeks to determine whether this really is the case in practice.

There have been bits and pieces of research on strategy but no one has put it together to get an overall picture of the issues to be considered when going into E-commerce, including the factors that need to be incorporated within the plan and the market research necessary. The aim was to research and identify the necessary issues that need to be considered within the strategy and the critical success factors that can be included in the strategy formulation. This literature review has shown there is a need for a general set of guidelines that can be used regardless of the size of the company, small or large, and for trading in all types of industry. The guidelines need to be in simple English, with no technical jargon, to enable CEOs, senior executives, and managers to understand the competitive ramifications of E-commerce within their arenas of corporate competition.

2.11 Summary

This chapter discusses the literature concerning E-commerce strategy and its issues. It also compares research that has been carried out to date on E-commerce strategy, identifying a gap that the author could research. The literature covered in this chapter is of great importance to the thesis as a whole in that it allows the aims and objectives to be verified and refined and it sets the scene for the research methodology that follows in the next chapters. Research on formulating an E-commerce strategy is necessary and a framework incorporating CSFs, questions for managers, traditional marketing methods and strategy development have been shown to be the ways forward.
CHAPTER 3 - METHODOLOGY

Chapter Preface
This chapter describes the methodology used to collect the data for the research objective outlined in Chapter 1. In many research projects, several methods may be used for research. Increasingly authors and researchers who work in organizations and with managers often argue that one should attempt to mix methods to some extent, because it provides more perspectives on the phenomena being studied (Easterby, 1991) and the same theory is recommended in PhD theses (Gable, 1994). This chapter considers the selection of an appropriate approach to achieve the research objective.

3.1 Methodology
This chapter was written to identify which was the best method to use to carry out the research subject. Material on different types of methodologies was gathered from books, the Internet, and previous PhD thesis referred at Loughborough University library. This chapter discusses the general overview of methods used. However, the detailed methodology of how research was carried out is described in each chapter at the beginning on how the material was gathered.

3.2 Introduction
Research is a process of enquiry or examination designed to discover information or relationships, influenced by its environment and its historic nature (as it is impossible to collect and analyze data simultaneously).

Due to the nature of the subject, E-commerce presents a significant obstacle to the academic seeking to undertake and present high quality research. The reasons are its recent emergence, the rapid change, and media hype.
The author has used the following terms for the research approach for the thesis

- Research methodology refers to the study of research methods.
- Research technique mean the approach or tool used, whereby data is gathered and analyzed, and results drawn
- Research method refers to the way a particular research project is undertaken.

For the author, what was important in deciding what research method to use depended on each individual circumstance and decision on what techniques and methodology were appropriate and would achieve the objective set. Most importantly, research in E-commerce needed to reflect the state of knowledge when the research project commenced so as to advance knowledge and present an original piece of work. Research had to be practical; likely to be publishable and research had to be ambitious.

3.3 Factors influencing the research

Some of the difficulties in conducting research on E-commerce were because established theories were in short supply when the author commenced the PhD in 1999. Models of consumer behavior were lacking in the context of Internet where few theories existed. Most E-commerce technologies and applications are new and so too are organizations and individuals who apply them. The period during which the results of a well-performed cross-sectional study are valid may be so short that publication is not possible as results become outdated too quickly. Due to the changing nature of the subject and uncertainty, the researcher can be defined as a participant of the research context. For example, when the author conducted interviews with retail managers and used questionnaires there was an exchange of ideas and opinions, which shed light on subjects giving the researcher an opportunity to learn.

Certain external factors were considered when selecting the research technique to use. A national study on applying strategy was deemed inappropriate for in depth analysis and therefore a case study format was used. Some telephone interviews and questionnaires were used to avoid the cost of traveling to companies.
3.4 Research methods available

“Quantitative” and “Qualitative” are terms used to describe the nature of the data that is gathered in empirical research (Van Maanen, 1979) and both are used in the author’s research.

Empirical research is research based on observations of the real world comprising of objects and processes. This real world cannot be directly understood by humans, nor ‘captured’ into human artifacts. However, through observation humans can form theories as to how it came to be the way it is, and how and why the processes take place. In gathering data to test a hypothesis, active observation is guided by theory and only relevant data is gathered to test the research objective.

Where no appropriate theory can be found as a basis of research, exploratory research can be carried out. This involves open-ended study, not supported by theory and provides new body of empirical knowledge from which theories might arise.

The author used an Interpretvisit research technique (Galliers, 1992) where the focus is on openness to alternative perspectives and to identify any ambiguity in the data and setting. Interpretive research is where the researcher gathers data and analysis using their own intuition. The author used focus group research, which involved gathering a group of people together to discuss a topic. The purpose was to raise concerns, issues, impacts and implications of the subject under discussion (Clarke, 1999).

Field studies were undertaken by the author at various client sites, the object of these studies is to gather data by direct observation (Klein and Myers, 1999), though in the author’s research most of the fieldwork consisted of conducting interviews and using questionnaires. Questionnaires were also used during interviews where the questions gave structure to the interviews. A secondary research method was also used where, rather than producing new data, the contents of existing literature and documents were analyzed.
Case studies involve an attempt to describe relationships that exist in reality, very often in a single organization. Case studies may be positivist or interpretivist in nature, depending on the approach of the researcher, the data collected and the analytical techniques employed. Reality can be captured in greater detail by an observer-researcher, with the analysis of more variables than is typically possible in experimental and survey research.

However, case studies can be considered weak as they are typically restricted to a single organization, and it is difficult to generalize findings since it is hard to find similar cases with similar data that can be analyzed in a statistically meaningful way. Different researchers can have different interpretations of the same data, thus adding research bias into the equation. Researchers have used the case study research method for many years across a variety of disciplines. Social scientists, in particular, have made wide use of this qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods. Yin (1984) defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.

Critics of the case study method believe that the study of a small number of cases can offer no grounds for establishing reliability or generality of findings. Others feel that the intense exposure to study of the case biases the findings. Some dismiss case study research as useful only as an exploratory tool. Yet researchers continue to use the case study research method with success in carefully planned and crafted studies of real-life situations, issues, and problems.

Simulation involves copying the behavior of a system. Simulation is used in situations where it would be difficult normally to solve problems analytically, and it typically
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involves the introduction of random variables. As with experimental forms of research, it is difficult to make a simulation sufficiently realistic so that it resembles real world events. The newness and uncertainties of E-commerce meant that it was not only difficult to produce a realistic simulation for E-commerce, but it was also difficult to even know how realistic or unrealistic any simulation would be. For this reason, simulation is not used in this research.

The author as part of her research used the case study approach, which has been defined below along with the justification for using the approach for her research.

3.5 Case study approach

The underlying principle of the case study approach is to study solutions to current problems and, thus, it was an ideal approach to use as the author's subject, E-commerce, is continually changing and has to be examined at a particular point in time. The term “case study” implies a fairly intensive examination of what has happened in a single bounded context and time (Dockerell and Hamilition, 1980). It helps to explore, unravel and understand problems, issues and relationships in a particular situation.

There are a number of important articles describing the case study approach to research. Key among these is Benbasat et al.'s (1987) paper with its comprehensive definitions and suggestions for the conduct of case research. The case study is considered by Benbasat et al. (1987) to be viable for three reasons.

- As a study can be conducted in a natural setting
- The researcher can ask "how" and "why" questions, so as to understand the nature and complexity of the processes taking place.
• Research can be conducted in an area where few, if any, previous studies have been undertaken.

Case studies can be defined in various ways, and a standard does not exist. However, a definition compiled from a number of sources Jackson (2001), Stone (1978), Benbasat (1984), Yin (1984), Bonoma (1985) and Kaplan (1985) in Benbasat et al. (1987), is as follows:

• A case study examines a phenomenon in its natural setting, employing multiple methods of data collection to gather information from one or a few entities (people, groups or organizations). The boundaries of the phenomenon are not clearly evident at the outset of the research and no experimental control or manipulation is used.

The case study approach is surrounded with skepticism, much of which rests on the view that generalizing from the results of a small number of studies is not possible. Gummerson (1991) notes that however well they are planned, case studies lack the scientific weight and general applicability of conventional research methods. However in certain areas they represent the only possible research strategy, as was the case for the author to achieve the proposed research objective.

The principle criticism of case studies in research is that they are unrepresentative. Theoretical conclusions derived from case studies cannot be considered valid unless the cases can be demonstrated to be typical of the phenomena under investigation (Smith, 1991). Mitchel (1983) takes a slightly different view reporting that the extent to which generalizations may be made from case studies depends upon the adequacy of the underlying theory and the corpus of related knowledge of which the case is analyzed rather than on the particular instance itself. Bryman (1978) dismisses the argument about generalization writing that case studies should instead be 'evaluated in terms of the adequacy of the theoretical influences that are generated'. The aim is not
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...to infer the findings from a sample to a population, but to engender patterns and linkages of theoretical importance.

It must be accepted that any case study will be unique and therefore not representative of other instances, but this absence of rigorous control is both a strength and a weakness of the approach.

Case studies were a dominant feature of this research; the approach was taken since it was considered to be the most appropriate to develop understanding about the company's feasibility of offering E-commerce and to develop rich case descriptions needed to build theoretical understanding. However, it was acknowledged that case studies were not universally accepted as a rigorous research method. According to Yin (1994), case studies have been viewed as a weak relation of other research methods. He suggested, however, that this stereotype is wrong, and that case studies are most appropriate for certain conditions.

"In general, case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is contemporary phenomenon within some real life context" (Yin, 1994).

This view was used to judge the suitability of case studies for this research. The research aimed to explore the feasibility of E-commerce and develop a methodology for creating an E-commerce strategy. The exploratory nature of the research does correspond to the 'how' and 'why' approach which would indicate the value of case studies in this research.

The single case study, although a common feature of social research, has been shown to be particularly appropriate when testing formulated theory, or when multiple examples do not exist. Single case studies can be used for the pilot stage of any case
study based research. If there is a need to focus on events in a natural setting, clearly there are advantages to using a case study.

The same is also true if it is a theory building research project and there is no strong theoretical base for the research (Jackson, 2001). Benbasat et al (1987) confirm this, stating "A rich and natural setting can be fertile ground for generating theories". However, a case study would not be appropriate if there were a need for control or manipulation of variables. These considerations again show that a case study approach is suitable for this research. The aim is to produce practical guidelines for managers considering E-commerce, so the "natural" setting of real businesses attempting to pursue real E-commerce ventures is not only appropriate, but essential. Furthermore, the lack of existing theories and models means this research requires a theory building component, which again suggests a case study approach.

An important issue was how many case studies to select. Yin (1994) described the options available, either a single case study or multiple case studies. Generally speaking it is more valid and generalisable, to include multiple cases, though there are instances where a single case is instructive (Lee, 1989). Exploratory studies are generally better served by single cases, where there is no previous theory. A single case can also be used to test an existing, well-formed theory. Multiple cases are preferable when the purpose of the research is to describe phenomena, and to develop and test theories. In this research, both single and multiple case studies have been used. For example, a single company's (In2netlogic) experiences were used to derive the initial draft of the twenty key questions for managers described in Chapter 5. However, these questions were tested, first in a focus group consisting of managers from a number of companies, and later in an in-depth feasibility study in Chapter 9.

As has already been indicated, case studies require multiple data collection methods, the results of which hopefully converge, in order to establish construct validity. Yin (1984) identifies these methods as including:
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- direct observation of activities and phenomena and their environment;
- indirect observation or measurement of process-related phenomena;
- interviews — (structured or unstructured);
- documentation, such as written, printed or electronic information about the company and its operations (also newspaper cuttings);
- records and charts about previous use of technology relevant to the case.

(Yin, 1984)

The case study approach was the most suitable for the author's research into the feasibility of offering E-commerce and on helping to identify success and failures affecting companies by using NSB contacts. The case study approach helped build the author's theories in a relatively new area of research. Using multiple data collection methods, as advocated by Yin, the author also carried out face-to-face interviews, telephone interviews, questionnaires, observations during NSB meetings, and studies of company websites. Multiple collection of data was obtained by contacting the case study companies to carry out interviews, attending case study sites, carrying out customer analysis questionnaires, emailing questionnaires to competitors, researching websites and collecting newspaper articles and journal articles for information. The author also attended seminars, conferences and exhibitions on E-commerce, where there were presentations and workshops given by experts in E-commerce. Data was gathered through company exhibitors from their literature and by talking to them about various concepts.

3.6 Questionnaires and Focus Groups

Questionnaires were used for the feasibility study to ask customers whether they would prefer to shop online, a mix of open and closed questions were asked. In all cases they were kept as short as possible while achieving the quality of response required. Each questionnaire was piloted before use and changes made as required. One of the weaknesses of questionnaires is the low response rate. A strategy used to improve the
response rate was that each questionnaire sent to companies was sent with a stamped return envelope. Follow up calls were then made to remind the recipients to reply. However, even with stamped return envelopes and follow up calls the response rate was often as low as 20%.

Focus groups were originally called “focussed interviews” or “group depth interviews”. The technique was developed after World War II to evaluate audience response to radio programs (Stewart and Shamdasani, 1990). A focus group can also be defined as a group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific or focused issue. Additionally Greenbaum (1998) suggests that a focus group is an ideal mechanism for gaining a richer and deeper set of insights into a particular research issue by listening to and learning from a group of knowledgeable individuals.

3.7 Conclusions

This chapter explains what were the challenges in researching the subject and why a mixture of surveys and case study research approach was used which is a more of an interpretivist approach. Research in any new domain is highly risk-prone. Research in E-commerce was especially challenging. Finally, the research method has been determined by using previous literature describing case studies, which has been valuable in identifying the most important points of the case study methodology, as well as illustrating the weaknesses associated with earlier research. Adopting multiple methods is important not only to enhance the richness of the findings but also to ensure validity through the process of triangulation (Stake, 1995).
Chapter Preface

This chapter sets the foundation of the thesis by identifying successes and failures of E-commerce companies, with examples, and discusses what strategies to adopt to ensure successful E-commerce business. By identifying the critical factors that lead to success or failure this chapter provides the necessary background needed to satisfy the aim of producing guidelines to formulate an E-commerce strategy so as to survive in the current economic climate.

This chapter examines literature published in refereed journals and conferences proceedings and also on company web sites on the successes and failures of E-commerce companies. From these case studies and examples, the chapter extracts twelve critical success factors for E-commerce. The chapter then describes how these factors were tested through a focus group discussion at NSB Retail. This chapter concludes with some more detailed case studies that further verify the validity of the 12 critical success factors.

4.1 Methodology

The research objective was to identify the set a critical success factors that were common to the majority of E-commerce projects, and could therefore, form an integral component of the E-commerce strategy formulation framework. The core of the material for this chapter is based on published literature – including academic journals, the Internet, news articles and E-commerce books. More specifically, the author sought to use the documented experiences of a range of early E-commerce adopters, to derive a set of critical success factors, that were common to many organizations.
The twelve success factors were then tested by checking and comparing them with the views and concerns of a focus group (Greenbaum, 1998) of 30 retail managers called by NSB Retail. NSB Retail organized a customer focus meeting in January 2001. Part of the meeting was conducted by NSB where discussion on E-commerce was introduced, after which the author did a presentation to 30 high store retail managers. The aim was to get an awareness of E-commerce, raise issues and concerns that the managers had, discussed and give advice. The derivation of what was considered as critical factors was a further objective of the meeting. The author also attended a number of conferences, E-commerce exhibitions, seminars where quotes and comments from various keynote speakers and audiences were noted down and used to further validate the 12 factors.

A number of case studies are then examined to verify that the identified critical success factors have made a significant contribution to company E-commerce ventures. The case studies reported here are obtained from company web sites rather than published journal and refereed conference papers. Nevertheless, as these sites are reporting the companies’ own experiences they are still an appropriate source of evidence for the purpose of identifying and verifying the critical factors in E-commerce success. This approach is similar to the one adopted by Hart et al [2000].

4.2 Introduction

The route to E-commerce Success is not straightforward. It is set with difficulties of selecting the correct strategic direction and surviving in an increasingly harsh competitive environment. Demand from customers and adoption by competitors make it essential to succeed. Rewards are evident from early adopters who identified the opportunity early and steered their companies in the right direction (Hobart, 2002). Bock in an interview with Leader Talk (2001) defined success as “identifying repeat customers to the site, and understanding their interactions is success for an
E-commerce company". The author used the definition from Kalkota in an interview with Leader Talk (2001), "Being successful is adding value to customers."

The year 2000 was characterized by an extreme optimism and an exaggerated market capitalization of E-commerce by analysts of Internet based companies. In just a couple of years some dot-com companies reached values that took decades for traditional companies to reach. Amazon had reached a market capitalization of $18B, dwarfing Barnes and Nobles $2B market capitalization. The online brokerage firm, Charles Schwab, had a market capital of $39B compared to Merrill Lynch's $25B. America Online (AOL) was valued at $120B in 1999 belittling Disney's value of $62B (Godelf, 1999).

However the sentiment changed when investors started to realize that companies could not meet the huge expectations, certainly not in an overcrowded market that demanded enormous investments in technology and skills (Engen and Rutenbeck, 1999). By the end of the year 2000 many of these Internet companies lost over 80% of their market capitalisations on the Nasdaq. Even Yahoo, one of the leading Internet companies, profitable since 1998 and continuously expanding its services, was losing market share. Many other Internet companies such as Amazon.com, Expedia.com and Internet Capital Group and infrastructure companies like Cisco, Exodus and Nortel lost considerable amounts of their market capitalisation.

A real shakeout happened, with very few winners and many losers. Studies show that over 200 dot-coms did not survive the year 2000, resulting in a loss of over 15,000 jobs and 1.5 billion US dollars in investment money (Anon, 2000). Even more companies were absorbed through mergers and acquisitions, often at bargain prices. Nearly 60% of the dot-com deaths were recorded in the 4th quarter of 2000 and are still fresh in the memory of venture capitalists (VCs). Some well known examples of dot-com failures are the on-line pet supply store, Pets.com, the furniture retailer
Furniture.com, on-line auction sites, Bid.com and Auctions.com, health and beauty E-commerce site, Clickmango.com, and fashion shop, Boo.com (Hinseen, 2001). There is, therefore, an urgent need to better understand those factors that are critical to the success of E-commerce initiatives, in order to help reverse the unacceptably high levels of failures witnessed, thus far in the dot.com era.

A manager should be continually aware of the current level of performance in each of the critical areas of a business as a basis for decision-making (Holsapple and Whinston, 1996). Ward and Griffiths (1997) report that the current status of performance in each area should be constantly measured and that information about that should be made widely available. A suitable technique for that is the Critical Success Factor (CSF) theory (see Rockart, 1979). It has been widely applied in many aspects of Information Systems and Technology Management (see Teo and Ang, 1999 and others). More recently, CSFs in software development were investigated by (Reel, 1999) and Tackett and Van Doren (1999). In another publication, Liu and Arnett (1999) empirically study the factors associated with web site success in electronic commerce. The question that must be asked is how applicable are the findings of the above studies to incorporate the CSF right from the decision stage of offering E-commerce.

The main aim of this chapter is to identify the factors that companies should incorporate to ensure success, thus it was necessary to study published literature of company experiences to learn of mistakes and failures. This chapter was to be the introduction and a stepping-stone to build the rest of the thesis research by identifying what companies should do to avoid failures and risk to businesses.
4.3 Research on Critical Success Factors

Critical Success Factors can be defined as a small number of easily identifiable operational goals shaped by the industry, the firm, the manager, and the broader environment that are believed to ensure the success of an organization. If these goals can be attained, the success of the firm or organization is ensured (Rockart, 1979). Bullen and Rockart (1981) define critical success factors as follows:

"Critical success factors are the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department, or organization. Critical success factors are the few key areas where "things must go right" for the business to flourish and for the manager's goals to be attained."

In essence critical success factors are those few things that must go well to ensure success for a manager or an organization and therefore they represent those managerial or enterprise areas that must be given special and continual attention to bring about high performance (Boyton and Zmud, 1984). The key to success for most managers is to focus their most limited resource (their time) on those aspects that really make the difference between success and failure (Bullen and Rockart, 1981).

The critical success factor methodology is a process that attempts to make clear those few key areas that dictate organizational or managerial success. According to Ward and Griffiths (1997), critical success factors enable management to use their judgment in two ways:

- to assess the relative importance of systems opportunities in terms of how well they support the achievement of business objectives; and
- to identify the information required by management to manage and plan business executives' information needs. As they indicate, it is always better to have a crude measure of something important, rather than a refined measure of
something that does not matter. Critical success factors help to differentiate the two.

The idea behind CSF theory is simple: in any organization certain factors will be critical to the success of that organization, in the sense that, if objectives associated with the factors are not achieved, the organization will fail. According to Pollalis and Frieze (1993), the concept of critical success factors is easy to apply, flexible and does not require a rigorous format in their use. This offers an advantage as critical success factors can be tailored to different applications (as seen in the growing number of uses critical success factor analysis is a powerful and "deservedly popular technique" in IS strategy planning and business planning (Ward and Griffiths, 1997). Thierauf (1982) notes that in addition to its use by top management and the corporate planning staff, critical success factor analysis is useful at each level of general management. Prague and Watson (1996) indicate that the critical success factor process can also be used to identify critical failure factors (CFFs). CFFs are developments that can significantly impair performance (e.g. a strike or environmental damage are potential critical failure factors for many organizations). While a critical failure factor may not come to mind readily when thinking of success, its occurrence can have disastrous consequences.

In a recent paper detailing the critical success factors involved in software projects, Reel (1999) indicates that in order to achieve success in software projects, developers need to identify factors crucial to their projects. Five factors have been indicated by Reel: start on the right foot; maintain the momentum; track progress; make smart decisions; and conduct a post-mortem analysis. However, software development is only one aspect of E-commerce so these five factors cannot be considered sufficient for an E-commerce venture.

This section has shown the importance and value of deriving critical success factors. At the start of this research project little research had been reported on the critical success factors for E-commerce. This chapter attempts to fill this gap.
4.4 Existing studies of E-commerce success and failure

As of early 2000, there have been many failures of dot-com companies, however the important thing is to learn from the failures of others (Useem, 2000). It has been argued that between 68 and 80 percent of all businesses fail within the first five years of their existence (Clark and Monk, 2000) and E-commerce ventures appear to be even more vulnerable. It is important to look at reasons why companies failed and use those factors and points for improvement and success. This section examines some of the reported studies of reasons for E-commerce failure and the resulting warnings and advice given by other authors pre-2001.

Mason (2000) stated a list of possible reasons for business failure to be that the basic idea was wrong; startup capital was inadequate, wasteful use of capital, inability to deal with suppliers, customers and employees. Clark (2000) noted that the four most common reasons for business failures are poor organizational management, unbalanced managerial experience, lack of managerial ability and lack of market specific experience. These reasons are similar to those reported by Birley and Niktari (1996), in their study of owner managed businesses. A key finding of the study was that two-thirds of the respondents believe that the business failure could have been avoided if corrective action has been taken to address the problems. Problems blamed on issues such as a poor management team with insufficient experience, an inappropriate mix of skills, a weak business concept, and lack of planning. Summarizing their findings, Birley and Niktari noted that about 80 percent of the reasons for failures identified related to managerial issues.

A review of the literature relating to the failure of E-commerce initiatives, suggests that managerial issues, rather than technical issues, are also the most significant contributory factor. A significant extra problem and one of the biggest mistakes for E-commerce companies, according to Hattar (2000), is that they have certain incorrect assumptions in developing E-commerce. Among these assumptions are (Hatter, 2000):
1. Technology is the answer to problems
2. Having a website means doing E-commerce
3. E-commerce is often regarded as a temporary hype and projects not taken seriously.

A more comprehensive study devoted to E-commerce businesses is reported by Godenhielm (1999), on the interactive media consultancy firm, Siegel & Gale (1999), interviews of over a hundred firms that had tried, but failed to capitalize on the Internet. The firms were all billion-dollar companies. Given below are the principal reasons the survey found for the failures:

- lost staff to other firms 6%
- not integrated to business 12%
- lack of project specification 15%
- improperly funded 15%
- lack of internal culture 25%
- improperly staffed 31%
- wrong development partner 37%
- no support procedures -outsourcing? 42%
- brand inconsistency 56%
- lack of strategy 62%

The figures clearly show that E-commerce projects rarely fail because of lack of project specification, nor because companies lost staff to other organizations.

The companies interviewed by Siegel and Gale were companies with large revenues, brick and mortar companies who tried capitalizing on the net. Therefore the statistics cannot directly be applied for small startup companies, some aspects have too high a value. Companies with an existing traditional internal culture and values are more likely to suffer from internal conflicts than the fresh start-ups. Brand inconsistency is also a problem for bricks and mortar companies. A strong traditional off-line brand can
be hard to market on the Internet without confusing the customers. However, even if brand inconsistency isn’t a relevant factor for small companies, branding definitely is.

Based on the statements of Bill Gross, founder and chairman of Idealab, Jeff Bezos, founder of Amazon, and many other dominant figures in E-commerce as well as the study made by Siegel & Gale, the list of advice to E-tailers, was gathered by Godenhielm (1999) as follows:

- Create a smart strategy
- Test relentlessly
- Be first! Scale fast!
- Brand your barriers of entry
- Get great people
- Get finance
- Form partnerships
- Outsource your way to rapid growth
- Insanely focus on the customer

Godenhielm(1999) identified four factors for dot-com companies to follow to avoid failures:-

1) Companies must maintain customer loyalty. The possibility of 1-1 marketing and personalization of the services on the Internet allows much greater customer satisfaction and retention. Once companies have acquired the customers and created a good relationship with them it will be hard for competitors to win them over.

2) The Internet obeys the laws of increasing returns. As more people sample and select a product, they generate interest and excitement and unleashing positive-feedback loops that increase momentum. When products for the Internet get
distributed over the Internet, these feedback loops operate with remarkable speed.

3) There is great media value and brand value in being first. The press is eager to write about a new promising business in the hot Internet market. The first public offering in a specific segment gets wide attention.

4) Big established brands in E-commerce like Amazon are using their good reputation and their customers' trust as a bridge to enter new market niches. With the trust and money of wealthy venture capital firms they can easily overrun small competitors. Amazon, as an example, has recently entered the auction, toys and games markets. With its huge customer basis it is a formidable competitor, especially for firms that haven't yet established a good presence in the market.

Another author, Mougayar (1998), recommends conducting necessary education and training, reviewing current distribution and supply chain models, understanding what customers and partners expect from the web, reevaluating the nature of products and services, developing a web centric marketing strategy, tracking new competitors and increasing market share.

Kiffer (1999) took a slightly different approach, pointing out that successful businesses develop their own unique style, form and ways of doing business. A firm's competitive advantage is embedded in its unique business processes and its communal knowledge. By leveraging existing mission-critical processes and extending them to its customers, suppliers and partners, a corporation can build bridges to the digital economy (Kiffer, 1999).

The literature, reviewed in this section, demonstrates that, prior to 2001, there was a great deal of interest in how the success of E-commerce initiatives could be improved. However, very little came from academic journal articles, and none of it was presented
in the form of a comprehensive and well focused set of critical success factors. The aim of the following section is to use the fairly fragmented literature, that was available at the outset of the PhD, to derive a candidate set of E-commerce CSFs, which could then be rigorously validated.

4.5 Critical Success Factors (CSF) for E-commerce

There are number of key factors that determine the success and failures of a company, in E-commerce there are some factors which may seem obvious but are critical. The aim of this section is to derive a comprehensive, yet parsimonious, set of critical success factors, based upon a comprehensive review of the pre-2001 E-commerce literature.

The literature review discussed – in the previous section - shows that many critical success factors are mentioned. In order to produce a coherent and well supported list of critical factors for E-commerce the literature was collated to see which factors were most frequently encountered. A list of critical factors was produced where each critical factor:

- was supported by at least three references by separate authors
- there were no references that contradicted the critical factor

For the purposes of this research, it is necessary to define what is meant by “supported” by a reference. This requires a closer look at the definition of a critical success factor. The definitions given in section 4.3 imply that if all success factors are in place a business should succeed and if any one factor is absent it will fail. This is also implied by the word “critical” in this context which the Oxford Compact Dictionary defines as marking transition from one state (failure) to another (success). If this definition is to be followed, it would mean that references to a factor could only be used if described as “essential”, “required” or some similar phrase. This is too strict an interpretation. Many authors refrain from the use of such extreme terminology and the English
language is flexible enough to imply a level of criticality without saying so precisely. For example, a factor could be described as "important" or can be "strongly recommended". To ignore all such references which do not use language as precise as the word "essential" will potentially mean missing a large proportion of the success factors described in the literature.

For this reason, for this research a more general definition of a critical success factor is used as:

"a factor which significantly increases the chances of success"

or alternatively

"a factor which significantly reduces the chances of failure".

While this is a less precise term it does mean that all factors can be counted if described as "essential", "required", "important", "beneficial", "recommended" or any similar term.

These critical success factors, and how they are derived are given in the 12 subsections of 4.6 below. Organizations which are already trading online, or thinking of trading online, should consider these critical success factors as each one, if overlooked in the wrong circumstances, could lead to problems or even company failure.

4.6 The twelve critical success factors, and how they are derived

This list of critical success factors is presented in the order that they were first encountered in the literature search. It is tempting to assert that those factors mentioned more often are the more important critical factors. In which case having the right product, listening to customers and quality of service would be the most important. However, there does not appear to be any clear agreement on the relative importance in the literature for any firm conclusions to be drawn. In fact, from the descriptions of case studies (some of which are discussed in Section 4.8) it can be seen that different companies attribute their success to different success factors. While it is important,
therefore, for companies to ensure they achieve all the twelve factors listed below, each company must decide for themselves, which should have, priority based on their own individual circumstances.

4.6.1 Ensure the website is secure

This is the first factor that needs to be looked at, as consumers are reluctant to provide their credit card details if the site is not secure. This factor is raised in many journal and conference papers, such as Hagel and Rayport (1997), Aldridge et al (1997), and Bennett and Eustis (1999). This factor was also observed to be a significant concern at E-commerce exhibitions held in UK during 1999-2002, where customers and the general public were constantly raising the issue of security.

Some websites allow regular customers to create their own accounts by entering their details, including credit card number, when they first register. This avoids re-keying the details on subsequent purchases but assumes the customer is confident enough to provide the details in the first place and then let them be stored on some else's computer as in, for example, Amazon.com or Great Universal Stores' website. Customers create a password to protect these details and must provide it when they enter the site to tell the system they have the authority to proceed. Customers rely on companies like Amazon and Great Universal Stores to safeguard their private credit card details - any breech of this security would give rise to a serious loss of faith in the companies which clearly would impact on their future business.

4.6.2 Keep the website simple and easy to navigate

If the website takes time to download or is cluttered with information, or does not have contact details, users can become frustrated and can convey their frustration to others
with a resulting loss of business. This factor is raised in many journal papers such as Elofson et al (1998), Selz and Schuert (1997), Wilson (2000) and Hoffman and Novak (1997). It is also covered by the analysis of Godenhielm (1999) as part of his suggestion to “insanely focus on the customer” and to maintain customer loyalty. This factor is illustrated by the author’s own experience of shopping online when visiting a website which was cluttered with information and taking time to download. The author observed that in her own case that keeping it simple was a route for customer retention. User success rates on E-commerce sites are only 56%, and most sites comply with only a third of documented usability guidelines. Given this, improving a site's usability can substantially increase both sales and a site's odds of survival. Examples of successful E-commerce operations through a simple, easy to use websites are given by Easyjet.com and Lastminute.com.

4.6.3 Listen to customers

To build a loyal customer base, companies must identify customer needs and preferences, and send emails to confirm orders. This factor raised in journal papers such as Bum and Barnett (2000), Timmers, (1998) and Modhal (2000) and is again part of Godenhielm's (1999) advice to “Insanely focus on the customer”. Amazon.com is a good example of meeting the needs of consumers. This again is the author’s own experience of shopping from Amazon.com, experiencing the E-satisfaction of purchasing online, with email confirmation of the order, quick delivery of the ordered goods, and without any problems of paying online. Amazon also took note of their customers' demand for lower prices. Amazon.com had a rationale “to build a customer base of loyal site users and profitability will follow”(Jeffrey, 2001) though it is only in very recent years has it shown any sign of making a profit. Companies wanting to trade online should follow good customer relationship management principles by listening to customers to achieve success factor raised in journal papers such as Day (1997) and Gebauer and Scharl (1995).
4.6.4 **Sell the right product or service**

Not all products and services can be sold as easily online as companies would through a physical store as stated by Strader and Hendrickson (1997), Mougayar (1998), and Kiffer (1999). However, with improvements in technology and better image quality, the situation is changing with consumers now purchasing even clothes and footwear online. This factor of selling the right product was verified by research carried out by interviewing customers to identify if they would buy footwear online (see chapter 9). The answer was that they prefer to go into shops to get the touch and feel concept. This is seen as an important warning for companies not to rush to sell their products online if the customers are not ready. This is further illustrated in a journal paper by Roberts (2000) on the failure of Boo.com selling clothes.

4.6.5 **Have the right infrastructure and link with the backend system**

It is important to have a vision and invest in the right infrastructure. Companies should analyze their resources and ensure the system can cope with numbers of users. Linking with the back end system to ensure fulfillment is key to ensuring a company can deliver their stock in time. This factor was derived from the published literature on Toys-R-Us and their failure to deliver their products when the back end system failed as discussed in the journal article by Turban et al (2000) and Chaston (2001).

Dot-com companies have to ensure delivery to complete a sale and this is known as e-fulfilment. An example of a company already successful in delivering products is Ambassador.com.hk, a floral business in Hong Kong. The company had experience in the floral business before entering E-commerce and had successfully linked its backend fulfilment operations to its front-end customer interface (Turban et al, 2002).

The costs of building and maintaining an efficient infrastructure should not be underestimated, but having the right infrastructure in place will significantly reduce
business-operating costs. Amazon's website is able to take orders any time of the day and up to the minute data about what is being sold is available instantly. A customer service enquiry by phone costs several pounds to administer, on the web it is virtually free once the appropriate infrastructure is in place.

Many companies consider developing their own solutions from scratch by using toolkits, but often regret this later as it usually turns out to be very expensive and lengthy process. For example Boo.com built its own technology to run E-commerce operations, handling the sale of goods on the website and tracking them from supplier to buyer. These functions are available in software packages, but Boo.com poured a large part of its funding into building in-house systems which cost them a lot. This shows that companies should consider purchasing ready-made systems or outsourcing to other companies. Godenhielm (1999) found that the failure to outsource appropriately was one of the main reason for E-commerce failures. For example, when evaluating the company's return process, the return infrastructure must be examined. How are returns going to be processed? Where will the customer send the returns? The infrastructure for handling returns can be very costly, but outsourcing companies exist to enable returns to be processed by a third party. These outsourcing companies will receive the returns and give a percentage of the item's value back to the supplier company. They then sell these items, usually in bulk, to discount stores.

Forming acquisitions and mergers is another way companies can minimize failures identified by Bodow (2000). Well-known brand names, such as the John Lewis departmental store in the UK, are forming alliances with dot-com companies, such as buynet.com, to sell their products since the dot-com companies have their infrastructure in place. Some bricks and mortar companies are providing multi-channel shopping for example Uniglobe.com, Staples.com, Homedept.com and 1-800 flowers. However, with the dot-com company failures, the support companies and consultants that worked for dot-com companies also suffered losses or even failed (Glater, 2000).
Clearly, obtaining the right infrastructure for E-commerce is important. Many companies attempt to obtain this through outsourcing, mergers or acquisitions. However, it then becomes important to obtain the right partnerships or the failure of one partner may bring down the other. Having the wrong development partner was one of the more significant reasons for E-commerce failure identified by Godenhielm (1999). It could be argued, therefore, that having the right partnerships is a success factor. However, it is not included as a separate critical success factor in this list as it does not apply to all companies. The nature or size of some companies means that the development of the infrastructure is well within its means. Mail order companies, for example, would already have much of the distribution and returns infrastructure in place to enter E-commerce. Partnerships, are nevertheless, an important means of acquiring the right infrastructure for managers to consider. For this reason, the topic is covered in this thesis in chapter 5 on key questions for managers.

4.6.6 Keep up with innovation

There is constant change in technology such as the wireless application system, digital media and so on. This factor was drawn from published sources such as in the journal paper by Jahng et al (1999). An example is in the hotel industry where hotels can use WAP phones to enhance their operations more evidently than a company selling clothes. Industries and companies should keep up with innovation to ensure they use technology effectively Shiffler (2000), Gilbert et al.(2000).

The message from Siegel and Gale (1999), Lindsay (2000) and Young (2000) is that for companies to be successful in the online world there is a need to encourage widespread adoption of new technology throughout the business, providing appropriate support and training as systems are introduced.
4.6.7 Market the website

It is important to promote the site and advertise, there is no point having a website if no one knows about it. As discussed by Han and Noh (2000) and Turban et al (2000), this factor is further illustrated by the website of In2netlogic, an E-commerce software company designing websites for companies, as their service includes advising clients of the importance of advertising. In another example, merchants participating in an IBM venture, the World Avenue Mall, complained that IBM did not adequately promote the project. IBM claims it learned a valuable lesson from the project that IBM’s name alone is not sufficient to bring enough customer traffic to the site to make it a success (Rayport and Jaworski, 2000).

This critical success factor was also from author’s own observation at a trade fair exhibition in November 2000-E biz expo exhibition where a company called Amivo was discovered selling household goods online at wholesale prices, which has been operating since 1997 and yet there was little interest as no one had heard of it.

An important aspect of marketing includes keeping the website up to date. The site needs to be updated regularly to remain fresh and reflect changes in viewing and buying patterns of customers to enable follow-up sales activities to maximize the business return from the site. For example Next and Gap Company websites are constantly updated according to fashion changes.

This critical success factor shows the need to employ good marketing management practices which suggests that traditional marketing theory applies to E-commerce. This is confirmed in a case study discussed in chapter 6.

4.6.8 Build brand name and image

Shopping online is different to that in physical stores. A brand name that consumers can recognize and encourages them to keep coming back is even more important in
online shopping as discussed by Gonsalves et al (1999) and Godenhielm (1999). An example is Amazon.com's tactic of building up its brand name (Deise, 2000; Godenhielm, 1999), which did eventually lead to the company's success. Barnes and Noble then had difficulty trying to compete with Amazon.com who had already established their name as the leaders in selling books online. It is worth mentioning that these factors are not stand-alone and need to be incorporated with other factors. For example, having bad experiences of a website taking time to load or deliveries not being made, will inevitably affect a company's image.

Hybrid retailers\(^1\) with global brand names have an added advantage over pure dot-com companies since their web addresses and brands give some feeling of security and trust. For example, Debenhams.co.uk, a retailer in the UK, the Walmart.com supermarket chain in the USA, Reebok.com and Nike.com all have strong brand names. The strong corporate image and long standing relationship with their customers, which traditional companies have nurtured over the years, were something, which many dot-com companies lacked, such as, for example Boo.com (Roberts, 2000).

### 4.6.9 Build in quality within the website, products and services

Good quality products keep customers happy and offering good services keeps customers coming back according to Wei and Riggins (1999), Athey (2000), and Bennett and Eustis (1999). An example is the author's own experiences of shopping from Amazon.com, which offered a good quality service, described earlier. The author has been encouraged by this experience to shop from Amazon again. Such customer retention has helped to make Amazon.com a successful company.

Many good websites are let down by poor delivery, inaccurate invoices and poor follow up service. An example is Toys-R-us who failed to deliver goods on time for Christmas 1999. Customers are more likely to forgive mistakes if their complaints are

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\(^1\) Retailers with a bricks and mortar presence who also offer services online.
recognized, understood and dealt with effectively and sympathetically. This is confirmed by Wilson (2000) who lists among the primary causes of E-commerce failures, not keeping online information up-to-date and not managing customer relationships effectively. These are quality issues that are critical for E-commerce success.

4.6.10 Follow all the legal issues, patent and trading laws

Trading online has widespread legal issues as trading takes place globally. Companies therefore need to be familiar with the trading laws for all countries to avoid penalties that would result in a loss for the company. The importance of following all legal issues and trading boundaries was gathered from published sources such as “E-commerce a Managerial Perspective” by Turban (2002), and publications by Hagel and Rayport (1997), and Aldridge et al (1997). This factor was verified during interviews with a Clotheslocker.com manager who raised issues of trading between the UK and Turkey (see chapter 8). An obvious aim for selling online is broadening customer reach. However, in order to achieve this objective, companies need to ensure that systems are equipped to handle different payment mechanisms such as credit cards, debit cards or telephone billing. The system must also handle multiple currencies, cross border tax issues and associated legal implications of worldwide shipment (Alper, 1999).

4.6.11 Have the right skilled workforce

Training courses and recruitment policy are needed to give the right skills balance so that companies can introduce the right changes in a systematic order according to Lee et al (2000), Selz and Schubert (1998), and Manchala (2000). Siegel and Gale’s (1999) research showed one of the reasons for failure was that companies were improperly
staffed for E-commerce. Mougayar (1998) stressed the importance of companies informing employees of the change, training them and finding ways to retain them. The Internet allows a number of business processes to be linked together (e.g. order entry to procurement to invoicing) but people are still needed to develop and manage the system. Siegel and Gale’s research shows that staff are vital to the success of an E-commerce initiative. This factor was re-enforced from comments and suggestions of employees involved in E-commerce in a number of companies at the Ebiz expo exhibitions in 1999 to 2002.

To obtain the best from their staff, companies need to keep their employees fully informed and involved and reassure them that appropriate and detailed training will be provided. According to Lindsay (2001), staff must understand the shift in emphasis that trading electronically brings, with shortened timescales and the need to respond electronically to electronic messages. Because people are different, some will make the transition quickly while others will feel threatened and display responses ranging from apprehension to distrust or a refusal to co-operate (ukonlineforbusiness.gov.uk).

The author’s own background of a BSc in Information and Computing and an MSc in management has shown that a mixture of business and technical skills have been necessary in this research. The importance of this factor is also described in a paper by the author on whether UK universities were preparing students for the new economy with E-commerce courses. Results of the research were published in the paper titled “Education Needs for Professionals in E-commerce”, presented at the Software Quality Management/Inspire conference in August 2000 (Shah and Dawson 2000).

4.6.12 Have a well-defined strategy

The importance of this is shown by published sources and casestudy material concerning Boo.com, which shows that not having a well-defined strategy, can lead to failure as discussed by Drobik (2000), in his article “In Search of E-tailing

The need for a well-defined, E-commerce strategy is discussed in detail in chapter 7 and forms the core part of the research for this thesis. The lack of a clear strategy has been identified being the major cause of failure, as is shown by the collapse of Boo.com, and the concern surrounding the future funding of higher profile dot-com companies. Separate elements of an E-commerce strategy if implemented correctly can increase revenues, or at the least allow revenues to remain stable in the changing market (Brock, 2000). Drobik (2000) noted that the lesson learned from the failure of Internet companies is to ensure that the strategies and technologies are aligned with reality and that the attributes of physical businesses are not all forgotten.

4.7 Verification of the Critical Factors by a Focus Group

NSB Retail organized a customer focus meeting in January 2001. Part of the meeting was conducted by NSB where discussion on E-commerce was introduced, after which the author did a presentation to 30 high store retail managers. The aim was to get an awareness of E-commerce, raise issues and concerns that the managers had, discussed and give advice. The derivation of what was considered as critical factors was a further objective of the meeting. Thus, during the question and answer session, the managers were asked what they regarded as the critical factors of E-commerce.

The discussion on critical factors lasted about 40 minutes. The author chaired this part of the meeting and from time to time summarized the discussion with comments such as "So we seem to have a consensus that building a brand name and image is one of the critical success factors, is everyone in agreement with this?". This tended to stimulate more discussion and so the summary often went through several iterations before the final version was established. In general, the participants were given the freedom to discuss the issues in the order of their own choosing, though the author did provide a
few prompts where a complete subject area had not been discussed with comments such as "What about legal aspects, are they significant?"

During the discussion notes were taken. While no mechanical means was used to record the discussions it was possible to note some of the quotes given. When some particularly long quotes were recorded it was necessary to write out the quote in full after the meeting and then ask the speaker whether the reconstructed quotes, some of which are given here, were accurate. This means that while some of the quotes are not necessarily word for word as given in the meeting, they do represent the spirit of what was said and are as agreed with the speakers to who the quotes are attributed.

The following is the outcome of the discussion forum. The points were not raised in the order given below, but are presented in the order listed in Section 4.6 for ease of reading. In practice several of the critical success factors were raised many times at different points in the discussion.

1. **Ensure the website is secure**
   This was one of the first points raised by the group and was immediately agreed by all 30 managers as a major issue. In fact, there was little further discussion as all managers were of the same mind over this issue.

2. **Keep the website simple and easy to navigate**
   This factor was discussed as a quality issue (this is also critical success factor 9). There was general agreement that all quality issues were important, and that usability of the website was part of this. Harvie, Head of IT at Wedgwood, stated, "... when they find an interesting site design, which is easy to navigate and leads to desire to shop for products, they become potential buyers and loyal customers"

3. **Listen to customers**
   This factor was discussed in relationship to customer relationship management which again all managers thought was important and was part of a quality service (also CSF9). For example, Kennedy from Broadvision Inc. stated "the important success
factor was to have the right product and maintain customer relationships”. Marshall, Head of IT from Clarks, emphasised this third critical success factor with “Success factors also will be to identify what customers want, they want fast information, responsiveness, ease of use, delivery, return process, contact us information, and reliability. Nothing is more critical to a successful E-business strategy than maintaining the highest levels of customer satisfaction.” This statement also supported critical success factor 2 above.

4. Sell the right product or service
This success factor was generally agreed by all the managers present. For example, Kennedy from Broadvision Inc. in the quote given in critical success factor 3 above also included having the right product as an “important success factor”.

5. Have the right infrastructure and link with the backend system
This was discussed initially in its component parts. It was generally agreed that getting the supply chain well organised, and facilities to cope with delivery and returns were important. The skills base and personnel issues were also discussed as part of the infrastructure as well as being a quality issue and a critical success factor in its own right. Some of the managers (about ten) thought organisational issues would come under the infrastructure critical success factor. Mellor, Head of Marketing for E-commerce applications at British Telecom summed up the support for this fifth critical success factor when he said “success would be being able to have the right infrastructure in place.”

6. Keep up with innovation
This factor was discussed in the context of security (CSF1), of quality (CSF9) and of infrastructure. There was not a great deal of discussion over this issue as the managers seemed to think this point was obvious.

7. Market the website
This was considered an important success factor, but there was some uncertainty over whether it was a critical success factor. About a third of the managers thought it was a critical success factor from the outset. Others became convinced as the discussion
progressed. In the end, some managers were still not fully convinced but there was no dissent about it being included in the list. As Harvie, Head of IT at Wedgwood, stated “Visitors are attracted through marketing programs that consistently stimulate attention.”

8. Build brand name and image
Most of the managers agreed on the importance of building brand name and image and considered this factor to be critical. A few (less than ten) were not certain of its importance but were willing to accept the views of the others, though all agreed that the image in terms of quality of service was particularly important.

9. Build in quality within the website, products and services
This factor came up many times in the discussion. It was clear that all managers thought this was a critical success factor. Many of the managers believed it incorporated many, if not all the other success factors and quality was frequently mentioned in the same sentence as other critical success factors.

10. Follow all the legal issues, patent and trading laws
Surprisingly this critical success factor was not mentioned at first. Only when the author asked if it was important did the managers discuss it. However, they then all agreed immediately that it was not only important but critical to comply with legal issues, especially when trading globally.

11. Have the right skilled workforce
This was generally agreed to be important. Some managers pointed out that it was not necessary to employ people with all the skills if part of the business could be outsourced. However, if outsourcing could be considered as a means of obtaining the right skills there was full agreement to this critical success factor. As one manager pointed out, the right skills were essential to provide a quality service and that the managers had already agreed that this was critical.

12. Have a well-defined strategy
This point was raised several times in the discussion and it is clear that all the managers felt strongly that this was a critical success factor for any business, and
particularly so if E-commerce is to be a significant part of the business. As stated by Harvie, Head of IT at Wedgwood, "A successful site is far more than merely an online presence - it is living front end of a vibrant business." However, for this critical success factor it is necessary to note that the discussion forum was organised by NSB for those managers interested in planning for E-commerce. It would have been surprising, therefore, if the managers who took the time to attend the meeting did not believe that forming a well defined strategy was not important.

The importance of the focus group discussions for the verification of the derived twelve critical success factors was that, given the open question of what managers thought were critical factors, all twelve of the author's critical success factors were raised and generally agreed with little or no prompting from the author. Although there was initially some uncertainty over whether some of the factors could be considered critical, it is notable that there were no dissenting voices raised for any of the twelve critical success factors listed in Section 4.6. Some further critical factors were mentioned but these could all be considered to be aspects of the already identified twelve critical factors. The most significant of these extra critical factors was the ability and willingness to handle returns. However, it was agreed in the focus group that the ability to handle returns is a company infrastructure issue while the willingness to do so is a quality issue.

The range of aspects that the focus group managers believed to be critical is given by a manager from Debenhams who summarised the findings with: "To identify critical success factors, the main areas of concern, which are related to customer factors, are usability, site navigation and performance, timing, 'the shopping experience', speed of response, completeness, delivery, terms, return process, contact-us information on the website and data integrity - the efficiency of maintaining data real time. The merchant factors are branding - trading electronically under different name, supply chain integration, site and transaction security - service, quality, delivery, help desk facilities, trust, reliability, costs, changes, capability, backing from board level, customers
response, and products – get it right, the Internet does not change the way you manufacture. Establish a dialogue. What proved correct in traditional advertisement won’t work on the web. Adopt your offline strategies to the opportunity offered by the Internet. Use all E-channels, and infrastructure to support, for example, SMS to target teenagers, and WAP phones. This very long quote took a few attempts to get right when reconstructed afterwards, but when agreed included nearly all the twelve success factors in just a few sentences!

In general all managers found the discussion on critical success factors to be useful. David Oliver from KSA summed it up with “There were 3 seasons in E-commerce from 1995 to 1997 the Internet was recognized, from 1997 to 2000 there were lots of new companies set up, everything ended in ‘.com’ , ideas were rushed to be first in the market, and everything looked rosy. But since then valuations of companies have fallen and investment has stopped. Some businesses were profitable, such as Tesco, Amazon, and Jobserve, but the majority of the dot-coms lost their sparkle. What we need to learn from this are the success factors to implement an E-commerce strategy.”

4.8 Published Case Studies

The failure of so many dot-com companies has accounted for much adverse publicity in the media in recent years and, as a result, E-commerce is perceived by some as no more than a fad (Kendall and Kendall, 2001). However there are some companies that have succeeded, such as Amazon.com selling books, Argos.co.uk selling household goods, Easyjet.com, a successful site selling airfares, Dell.com selling computers, Webrx.com, a successful health and beauty product store, Campusfood.com serving students and universities, Monster.com, a job finding business, and Alloy.com, a successful young adult shopping and entertainment portal. These companies have transformed their businesses to achieve competitive advantage.
The next sections summarize some of the more comprehensive case studies available from the companies' own web sites. Some of these case study publications cover all aspects of the business, others focus on parts which the companies concerned wish to promote as examples of good practice. While the company web sites are not independent views of their performance, the case studies are, nevertheless, useful as they highlight the aspects which the companies feel proud to describe and which they feel contribute to their success. Material from published sources on a case study of a failed company, Boo.com also described shows how this company failed to address many of the critical success factors identified in this research. Together, these case studies provide a further verification of the twelve critical success factors. It should be noted that whilst the following discussion of each case study seeks to provide an overview of how relevant the CSFs were to each company, more specific evidence is provided in table 4.2.

4.8.1 Amazon.com

Amazon.com is an example of a successful, high quality company offering products and services online, one of the pioneers in the field, which has just started to show profits. Amazon has built a strong brand name (CSF8) selling the right product (CSF4). Amazon provides an excellent example of customer relationship management (CSF2 and CSF9), they offer products at good prices, have a simple, easy to use website (CSF2), have their backend integrated offering stock availability information (CSF5).

Offering good quality service is critically important to any organization. Amazon is most effective example in achieving service quality (CSF9), access to the site is extremely fast, the user is presented with search engines, book reviews, purchase decision review screen summarizing the cost of items in the trolley, and a wide variety of delivery alternatives (CSF2). Once the order is placed, the site automatically confirms the order by email and permits online checking of delivery status (CSF9). This case study information was obtained from http://www.amazon.com website observation.
4.8.2 Dell.com

Dell.com is an example of a successful, high quality company offering products and services online. Dell.com has built a strong brand name (CSF8) selling the right product (CSF4). Dell provides an excellent example of customer relationship management (CSF2 and CSF9), as they offer personalized products at good prices, have a simple, easy to use website (CSF2), have their backend integrated offering stock availability information (CSF5) and the ability to view order processing. Computers can be built according to customer’s requirements, offering a unique and effective means of innovation (CSF6).

Offering good quality service is critically important to any organization. Dell.com is a most effective example in achieving service quality (CSF9). Once the order is placed, the site automatically confirms the order by email and permits online checking of delivery status and security signs (CSF1).

4.8.3 Staples

To emphasize and re-enforce the lessons of the need for successful implementation, it is useful to consider the example of Staples, a company dealing in stationery. Details of the Staples experience was collated from Staples’ own website (http://www.Staples.com). Through a series of front and back-end initiatives, Staples expanded its channel offering by integrating Staples.com with its catalogue and retail businesses. This integration has allowed Staples to achieve new levels of customer service while reducing order processing costs and improving organizational efficiency. Staples achieved the goal of making its retail stores, Internet channel, mail-order catalogs, in-store kiosks, point-of-sale systems, and more than 50,000 employees work together to create a seamless customer experience (CSF 11) having the right skilled workforce.

Having the right infrastructure and link with the back end system is important for customer relationship management (CSF 5). Front end integration is related to the
concept of applying traditional marketing principles as being able to fulfill orders leads to satisfied customers and, in turn, can be strong advertisement tool as it builds a good reputation for its delivery and order tracking system.

Staples had an initial presence on the web, but online orders had to be manually re-entered by customer service representatives at Staples' call center. Thus their first assignment was to connect their Internet channel to the back-end host systems used for inventory and automated order entry. “The back-end integration project has enabled stronger customer service capabilities with customers getting better order-status information faster,” according to Mike Ragunas, chief technology officer of staples.com. He also stated, "We are seeing tremendous savings through lower order-processing costs".

The experience of Staples suggests it is not sufficient for a company trading on the web to have a world-beating website. It is also necessary to ensure the whole business functions in an integrated manner with the visible ‘front end’. There is a need to deliver the goods or services being sold in an appropriate timeframe and in a quality way. (CSF 9) building in quality. A company also needs to be able to respond to queries promptly and efficiently and deal with complaints in a positive way. Many good websites are let down by poor delivery, inaccurate invoices and poor follow up service. Customers are more likely to forgive mistakes if their complaints are recognized, understood and dealt with effectively and sympathetically (CSF 3) listening to customers.

This company experience suggests that, before launching an E-commerce website, it would be wise to follow the established good business practice and well defined strategy (CSF 12) of following an order, an enquiry, a complaint and a request to return goods, step by step through the system. A check must be made that all processes are handled smoothly and that customer service does not falter. Special attention is needed concerning the storage of order information to make sure it is secure and easy to retrieve at a later stage (CSF 1).
Businesses often ignore the issue of responsibility and ownership (Wilson, 2000). Who is responsible for making sure that the total customer experience is as close to perfect as possible? Good business practice suggests it is important that revenue and customer service targets for E-commerce are clearly stated. There should be clear responsibility for monitoring, investigating and initiating corrective action for any failure to meet these targets.

4.8.4 Argos

Argos is a catalogue company and has recently expanded into selling clothes online at Argos.co.uk. Argos is an example of a traditional retail presence in the UK selling everything from household goods to clothing. Argos has built a strong brand name (CSF 8) selling the right products (CSF 4). Argos provides an excellent example of customer relationship management (CSF 2 and CSF 9), they offer products at good prices, have a simple, easy to use website (CSF 2), have their backend integrated offering stock availability information (CSF 5).

Offering good quality service is critically important to any organization. Argos is most effective example in achieving service quality (CSF9). They follow the effective return handling process, if the clothes are not the right size or color it is easy to make the return. Argos aims to offer value and quality at outstandingly low prices (CSF9). So if, for any reason, the items purchased are not according to requirement, the customer simply returns it within 16 days of delivery, unused in its original packaging together with the receipt, to any Argos store or arranges for the item to be collected free of charge. They exchange it or offer a full refund and that's guaranteed! This quality of service for returned goods has contributed to the success of the Argos E-commerce business of listening to customers (CSF3). The clothing E-commerce Company ClothesLocker.com reported in chapter 8 was unable to provide this level of service accepting returned goods on the grounds of quality (poor workmanship) only. This will have contributed to this company's eventual failure.
4.8.5 Boo.com

What happened to Boo.com? They were a large fashion retailer that failed in 2000 after spending very heavily to attract hits but didn't succeed in turning the visitors into repeat customers. That is because their web site was cluttered with information (Wilson, 2000) - providing a good customer experience matters! (CSF3).

Clearly there is a market for selling clothes on the Internet. However, companies have to get over the problem that people want to see and touch the clothes before they buy. High quality photography and well-written descriptions are important factors in getting people to buy from a distance (CSF9). In addition, ease of ordering, a strong sense of trustworthiness and a host of other factors are also critical for turning both print catalogue and web store clothing shoppers into buyers. In order to practice good customer relationship management a company must identify what customers want from a website (CSF3) (Butler, 2000). Usually they want fast information, responsiveness, ease of use and good interactivity (Seow, 2001). For a quality system, all these factors should be incorporated into the web site during the design stage.

4.9 Case Study Summary

The case study information described in the last few sections is summarised in Table 4.1. The information in this table is mainly collected from the company web sites (apart from Boo.com where published material was referred to) with the reasoning behind each “Yes” or “No” categorization shown in table 4.2. Blanks in the table indicate that this topic has not been covered by the case study descriptions available. It is notable that the one company that did not incorporate the critical success factors has now failed.
### Table 4.1: Critical success factors applied by online companies

<table>
<thead>
<tr>
<th>CSF</th>
<th>Amazon</th>
<th>Dell</th>
<th>Staples</th>
<th>Argos</th>
<th>Boo.com</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Secure website</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Keep the website simple</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3. Listen to customers</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4. Sell the right product</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>5. Right infrastructure</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>6. Keep up with innovation</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Market the site</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Build the brand name</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>9. Build in quality</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Follow legal issues</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Have the right skills</td>
<td>Yes</td>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>12. Well defined strategy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Table 4.2: Evidence of Critical Success Factors

<table>
<thead>
<tr>
<th>CSF</th>
<th>Company</th>
<th>Present?</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Secure website</td>
<td>Amazon</td>
<td>Yes <em>2</em></td>
<td>“The secure server will encrypt your information”</td>
</tr>
<tr>
<td></td>
<td>Dell</td>
<td>Yes <em>2</em></td>
<td>“Dell only uses your personal information for specific purposes”</td>
</tr>
<tr>
<td></td>
<td>Staples</td>
<td>Yes <em>2</em></td>
<td>“At Staples, we value the trust of our customers. To earn your trust, we respect your privacy”</td>
</tr>
<tr>
<td></td>
<td>Argos</td>
<td>Yes <em>2</em></td>
<td>“Your browser will go into secure mode as soon as you access the 'checkout' or 'login' pages, i.e. before you enter any personal or payment details. You can check that you are shopping in a secure environment by looking for either a locked padlock or a key icon in the grey bar at the bottom of your screen.” (Argos website)</td>
</tr>
</tbody>
</table>

*(Note: CSF = Critical Success Factors, * = evidence presented)*
<table>
<thead>
<tr>
<th>2. Keep the website simple</th>
<th>Amazon</th>
<th>Yes $^{1,3}$</th>
<th>Amazon provides keyword searching like most electronic shopping malls (Turban, 2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell</td>
<td>Yes $^1$</td>
<td>Website is easy to use, not cluttered</td>
<td></td>
</tr>
<tr>
<td>Staples</td>
<td>Yes $^1$</td>
<td>Website is easy to use</td>
<td></td>
</tr>
<tr>
<td>Argos</td>
<td>Yes $^1$</td>
<td>Very simple to use</td>
<td></td>
</tr>
<tr>
<td>Boo.com</td>
<td>No $^3$</td>
<td>Site cluttered with information (Wilson, 2000)</td>
<td></td>
</tr>
<tr>
<td>3. Listen to customers</td>
<td>Amazon</td>
<td>Yes $^{1,3}$</td>
<td>The customer feels connected, branding at Amazon is due to high quality customer service (Plant, 2000) ability to view readers comments.</td>
</tr>
<tr>
<td>Dell</td>
<td>Yes $^{1,2,3}$</td>
<td>Manufacturing computers according to customers needs- (Turban, 2000)</td>
<td></td>
</tr>
</tbody>
</table>
| Staples                   | Yes $^2$ | "Staples is a growing company that cares about its customers and employees."

| Boo.com                   | No $^3$ | Boo had highly ambitious plans from the start. It was trying to achieve something that even leading E-commerce companies such as eBay, Yahoo! And Amazon never attempted (Devasish 2001) |
| Argos                     | Yes $^2$ | "Different options open to customers, instore pickup, delivery, over the telephone" |
| 4. Sell the right product | Amazon | Yes $^{1,2}$ | Books and music, users can read reviews online, does not need to be tried on eg clothes |
| Dell                      | Yes $^{1,2}$ | Computers can be bought online |
| Staples                   | Yes $^{1,2}$ | Office supplies, furniture |
| Boo.com                   | No $^3$ | Roberts (2000) describes the problems of Boo.com in selling clothes |
| 5. Right Infrastructure   | Amazon | Yes $^{1,2}$ | Delivery, refund policy works very well, "Our 30-day returns guarantee" |
| Dell                      | Yes $^2$ | "We focus resources on what matters to our customers. With a highly efficient supply chain and manufacturing organization, a concentration on standards-based technology developed collaboratively with our industry partners, and a dedication to reducing costs through business process improvements."

<p>| Argos                     | Yes $^2$ | &quot;Most items are usually delivered within 2 working days from when you place your order but you can select an alternative delivery date when ordering&quot; |</p>
<table>
<thead>
<tr>
<th>Critical Success Factors</th>
<th>Boo.com</th>
<th>No</th>
<th>Amazon</th>
<th>Yes</th>
<th>Dell</th>
<th>Yes</th>
<th>Staples</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Keep up with innovation</td>
<td>Boo.com</td>
<td>No</td>
<td>Amazon</td>
<td>Yes</td>
<td>Dell</td>
<td>Yes</td>
<td>Boo.com</td>
<td>No</td>
</tr>
<tr>
<td>E-commerce operations</td>
<td>Boo built its own technology to run E-commerce operations, handling the sale of goods on the website and tracking them from supplier to buyer. These functions are available in software packages, but Boo poured a large part of its funding into building its own. (Devasish, 2001)</td>
<td>“Order tracking and user information storage facility”</td>
<td>“Facility to tailor make users needs –“Build to order”</td>
<td>Boo.com</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Market the website</td>
<td>Amazon</td>
<td>Yes</td>
<td>Dell</td>
<td>Yes</td>
<td>Dell</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon.com have created a vast network of business affiliates. By profit margin resulting from sales or referrals. (Cunningham, 2000)</td>
<td>Dell uses proactive marketing channel, contacting customers directly (Turban, 2000)</td>
<td>Selling supplies online to large corporate customers (Chaston, 2001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Build brand name</td>
<td>Amazon</td>
<td>Yes</td>
<td>Dell</td>
<td>Yes</td>
<td>Argos</td>
<td>Yes</td>
<td>Boo.com</td>
<td>No</td>
</tr>
<tr>
<td>Amazon.com established a campaign to build brand recognition. (Deise, 2000)</td>
<td>“Dell's commitment to customer value, to our team, to being direct, to operating responsibly and, ultimately, to winning continues to differentiate us from other companies”</td>
<td>Well known brand name</td>
<td>Boo was founded on the tenet that when it comes to fashion, people around the world are interested in the same brands (Devasish, 2001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Build in quality</td>
<td>Amazon</td>
<td>Yes</td>
<td>Dell</td>
<td>Yes</td>
<td>Argos</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service quality is competence for successful E-commerce strategy (Chaston, 2001)</td>
<td>“To understand the specific needs of specific customers - without customer needs being &quot;translated&quot; by inefficient resellers and middlemen.”</td>
<td>Household products have a reputation for quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Follow legal issues</td>
<td>Amazon</td>
<td>Yes</td>
<td>Dell</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controllers of personal information</td>
<td>“Dell's success is built on a foundation of personal and professional integrity. We hold ourselves to standards of ethical behavior that go well beyond legal minimums”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.2: Evidence of Critical Success Factors (continued)

<table>
<thead>
<tr>
<th>11. Have the right skills</th>
<th>Dell</th>
<th>Yes²*</th>
<th>“Dell’s success directly impacts each and every employee at the company”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boo.com</td>
<td>No³*</td>
<td>Boo paid its staff well - £50,000 on average - but most were not given stock options. But the hours were long and hard and stories abound of working through the night and at weekends. (Devasish, 2001)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Well defined strategy</th>
<th>Amazon</th>
<th>Yes³</th>
<th>Amazon’s successful strategy is quoted by many authors (e.g., Deise 2000, Jeffrey 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell</td>
<td>Yes³</td>
<td>Dells success story is very impressive, so competitors must have a desire to imitate Dells strategy (Turban, 2000) “Dells direct model strategy”</td>
<td></td>
</tr>
<tr>
<td>Staples</td>
<td>Yes¹*</td>
<td>Staples have been very successful in their E-commerce venture</td>
<td></td>
</tr>
<tr>
<td>Argos</td>
<td>Yes¹*</td>
<td>Argos have been very successful in their E-commerce venture</td>
<td></td>
</tr>
<tr>
<td>Boo.com</td>
<td>No³</td>
<td>With the collapse of Boo.com and concern surrounding future funding, what is becoming clear is that companies need business plans. (Butler, 2001)</td>
<td></td>
</tr>
</tbody>
</table>

Notes in the “Present?” column:
1. Observed by the author
1*. Implied by the author’s observation
2. Claimed by the company’s own website
2*. Not directly stated, but implied by the company’s own website
3. Confirmed by an independent author in a refereed journal or conference paper
3*. Not directly stated, but implied by an independent author in a refereed journal or conference paper

From tables 4.1 and 4.2 it can be seen that some of the critical success factors are more in evidence than others. However, due to the reliance on the information being published by other authors, each with his or her own agenda, and on the companies’ own web sites, it is not really possible to draw any conclusions from this as to the relative importance of these critical success factors.
4.10 Conclusions

Despite the problems companies are starting to see successful use of the Internet and enhanced use of IT to reduce costs and realize more efficient processes. IT is becoming the engine of change it once promised to be, so, for example, the airline business can shortcut the travel agency industry using online services. The dot-coms are already bouncing back and new ones are being created. “Looking at the failures and the predictions of the growth of E-commerce, the Internet is a revolution that has only just begun. It’s onwards and upwards for the Dot-strong” (Bert, 2002). Successful E-commerce ventures are out there and more will follow if they apply the right strategy. The truth is there are no simple answers; every E-commerce business is either viable or not viable. How each business is run determines a company’s success. So the success of the E-commerce businesses will depend largely on the art of management even as it is enabled by the science of technology (Bock, 2001).

Businesses of all sizes and complexities are looking long and hard at options for web survival and over and over again keep coming back to issues like security, shareholder value, ability of IT infrastructure to match unpredictable consumer demand, 24 hours a day, 7 days a week operating cycles, brand value and customer relationship management (Shanker, 2000).

This chapter has reported systematic research to identify the critical success factors that are needed for success in E-commerce. The factors were first derived from the literature, in the first instance from papers in refereed journals and conference proceedings. The twelve critical success factors were then tested by comparing them with the aspects of E-commerce that a focus group of retail managers thought important. Finally the success factors were compared with the experiences of companies who had given case study details of their E-commerce ventures. It was found that the successful E-commerce companies had paid close attention to the critical success factors identified in this chapter, and that one company who had not followed these critical success factors eventually failed. It must be concluded, therefore, that these critical success factors are a reasonable representation of the
aspects E-commerce must take into account to ensure success. These critical success factors are further tested in chapter 9.

The following chapters will now build on the identified critical success factors, covering some aspects in detail, such as the managerial issues in chapter 5, building in quality in chapter 6, and formulating an E-commerce strategy in chapter 7.
CHAPTER 5 - KEY QUESTIONS FOR MANAGEMENT

Chapter Preface
This chapter identifies the key issues facing managers when contemplating a new E-commerce venture. In the early stages of this study, the author attended many E-business exhibitions and company seminars, and the key message to emerge from these forums was the lack of board level support for, and lack of managers' understanding of, E-commerce (Shah and Dawson, 2000a). Moreover, whilst the message that management involvement is imperative for the success of electronic commerce implementation was beginning to emerge in the literature (e.g. Chan and Swatmann, 1999) there was very little evidence that a coherent set of managerial considerations had been derived, and subjected to critical academic scrutiny. Consequently, the overall aim of this chapter is to identify and validate the key issues facing managers when contemplating a new E-commerce venture. It was envisaged that whilst the critical success factors, identified in the previous chapter, would primarily be used to monitor the success of an E-commerce strategy, once implemented, the managerial issues would be used at the outset of the strategy formulation exercise to assess the project' viability.

5.1 Methodology
In order to identify steps to formulate an E-commerce strategy, it must be recognized that the critical decision-making comes from higher-level managers. For this reason this chapter is aimed at these higher level managers by devising a set a questions that managers need to think about if they are to develop a sound strategy, taking into consideration all the issues and factors that would affect the business aims and objectives. To devise the questions the views of a large number of retail managers was sought. Twenty key questions were compiled from an NSB customer focus meeting held in January 2000 and after carrying out extensive interviewing of retail managers.
The NSB customer focus meeting was arranged by the NSB Retail IT managers to present their software products supporting the e-market. This was a timely opportunity for the author’s research as the target audience represented a range of companies from medium to large size, some well established and some relatively new. Out of 30 retail companies, 10 were large, 15 were small and 5 were medium companies. The views of the retail managers were sought on their concerns and interests in offering E-commerce for their businesses, with the objective of determining the key questions that managers must address when entering into E-commerce. There were 30 retail managers present from high street outlets such as Stead and Simpson, Clarks, Debenhams, Next and Mother Care. The main objective was to determine whether retailers wanted to offer E-commerce as an additional channel of shopping and, if yes, how to go about it and what were their concerns and fears. At the time of the meeting in 2000, E-commerce was a topic of great interest but there were a number of issues and concerns. By combining the initial experiences and concerns of the whole group, the aim was to determine what were the main questions to be addressed for the companies to devise a strategy to enable them to offer E-commerce.

Preparation for the focus group meeting included a brainstorming interview with John Makin, a manager from In2netlogic, collating ideas for the meeting and what questions to ask managers. In2netlogic were used for this purpose as they offer E-commerce services to companies, and so they had a similar requirement to have a set of questions to ask their customer companies during their consultancy meetings. The experience of In2netlogic helped shape the questions to put to the focus group arranged by NSB.

At the NSB focus group meeting, the author gave a presentation on what E-commerce can offer to a retail industry. The purpose of this presentation was to stimulate the discussion that followed. By talking about the potential advantages and problems of E-commerce and relating these to case studies taken from the published literature (see Chapter 4) the aim was to encourage the managers to relate their own experiences and concerns about entering E-commerce. The presentation consisted of slides showing the benefits of E-commerce and the importance of multi channel retailing with case study examples.
The enthusiasm for offering E-commerce varied over the 30 IT managers present, so for a more detailed discussion, eight of the managers most interested were asked to stay behind after the main meeting to discuss their concerns. These managers were all interested in starting E-commerce so the detailed questions from the brainstorming session with In2netlogic were put to them in a form of a structured interview, though the questions were phrased in such a way as to allow the managers to elaborate and expand on their answers as necessary. The resultant data was analyzed and compiled as a set of twenty key questions for managers. Due to confidentiality reasons, the names of managers and companies cannot be given in this thesis.

5.2 The Questions Put to the Managers

The set of questions, below, were asked to the 8 retailers during the extensive interview. In conjunction with In2netlogic, a decision was made that the questions to be used should be general so that they could be asked of any company no matter what type or size of industry, as long as they are interested in offering E-commerce. The questions put also became the basis of a decision pack for companies considering E-commerce, devised by In2netlogic and the author. This pack has also been used extensively by In2netlogic to market their services. The full decision pack used by In2netlogic is given in Appendix 3. The author used only the questions needed to determine which were key aspects for the managers' awareness.

The questions put to the managers were:-

1. What is your business core competency?
2. Who is your current target market and customers?
3. What products and services do you offer and do you plan to offer new products?
4. What is your organizational structure?
5. Does the company have all the resources such as personnel, infrastructure?
6. Does the company have the income?
7. Who are your competitors?

8. What pricing structure would you employ?

9. What is your company's mission and customer support?

10. What is the future plan for the business?

11. What are the objectives?

12. How much will it cost (e.g. staffing costs, annual maintenance costs, development and deployment costs, hosting)?

13. How will you incorporate the Web into existing lines of business, supply and channels of distribution?

14. Does the company have a website?

15. Do you operate as a multi-channel retailer, multiple channel retailer or neither? (For clarification: Multi channel involves one stock inventory, which all channels go into. Multiple channel requires two or more separate inventories)

Subsidiary questions asked if the answer to question 15 was "Multiple channel" were:
   i) What are the reasons for being multiple channel (e.g. Systems are single channel, Business/Financial reasons such as outsourcing, channel is a trial web-only products which wouldn't be allocated across the channels)?
   ii) Are you looking to be Multi channel in the future (with a single inventory) and if not, why not?

16. Which of the following types of channels do you have now or expect to have in one year or two years:
   i) Catalogue?
   ii) Bricks and Mortar?
   iii) In-store?
   iv) Web?
   v) Kiosk?
   vi) Gift registry?
   vii) Other (to be specified)?

17. What proportion of transactions are made in the above mentioned channels now, and what proportions do you expect in one year and in two years?
18. If an order is placed from any one of these channels, where would the delivery be made?
   i) Delivered at home?
   ii) Delivered at any store?
   iii) Delivered to store where purchased?
   iv) Delivered elsewhere, local to the customer?

19. Where would you fulfill orders?
   i) Warehouse?
   ii) Any store?
   iii) Suppliers?
   iv) Other (example to be specified)?

The first few questions (1 to 6) were aimed at establishing the companies' attributes and resources, with questions 5 and 6 being particularly aimed at establishing if the resources were adequate for a move into E-commerce. Questions 7 and 8 were aimed at establishing if companies had thought about the changes that may occur with a move into E-commerce. Questions 9 to 12 were aimed at establishing the general state of business planning in the company. Questions 13 and 14 examined the technological readiness of the companies for E-commerce. The last few questions (15 to 19) examined the particular plans for E-commerce within each company. The idea behind these questions was not just to find out the current situation at each company but also to stimulate thought. Question 7 on competitors, for example, brought out the managers' concern about new competitors that operated without traditional physical retail outlets and Question 13 raised concerns about company suppliers and their readiness for E-commerce.

Due to restriction on time of having only one and a half hours, the interviews were undertaken concurrently with all 8 retail managers were asked to sit in a group. The author was in the center asking the questions, and writing the answers for each company. During the interview stage the managers were also asked to comment on the relevance of the questions themselves to help determine the key questions to consider. Some of the key questions were direct derived from the original questions put to the managers, the key question on competitors, for example. Others key questions arose indirectly from the discussions, such as the key question on timing to market, which came from discussions on
products, competitors, income, mission, technology and delivery infrastructure. Much of the derivation of the key questions actually took place during the interviews with the eight managers, the author summarizing the concerns and forming them into questions as the discussions proceeded. This allowed the questions to be instantly tested by asking the managers if the questions were necessary and relevant. The questions proved to be a particularly useful exercise for the IT managers in helping to clarify their own thoughts on what was essential information to gather before designing a proposal for their companies’ board. After the focus group meetings and interviews the notes were studied carefully to enable the questions to be refined and rephrased into the final form given in Section 5.5.

5.3 Results of the Question Answers and Comments from the Managers

Each one of the questions asked of the group helped to determine the twenty key questions that IT managers of retail companies had to answer to propose an E-commerce project to their Board members. Although each company varied in their readiness and enthusiasm to offer E-commerce, the general principles and key questions derived from this exercise applied to all.

The managers were also invited to elaborate and comment on the previous meeting’s discussion of the wider group of 30 managers. The importance of E-commerce was recognized within the group though it was felt that business as a whole had underestimated its importance. For example, David Oliver from Next stated "Retailers are acting as if E-commerce will eventually account for two to three percent of sales rather than twenty percent plus". David Little from House of Frasier said that common excuses for not entering E-commerce were that customers didn’t use the Internet or that it was not the company’s main competency. He also noted that many companies think about E-commerce but won’t actually do anything about it, others just hope that E-commerce will just go away. These comments illustrate the need for guidance for companies entering E-commerce to help them build a realistic strategy. All the managers affirmed the larger group’s support for
the twelve critical success factors with Mark Beating of Great Universal Stores presenting a very strong case that the most critical factor was that of security.

Some managers stressed the importance of business issues, for example Marson Harvey Head of IT at Wedgewood said "What is important when offering services and products online is to see the return on investment". Others could see organisational and structural problems. For example, the manager of Stead and Simpson was concerned about how E-commerce is impacting the organisational structure and raised the issue in the context of managing resistance to change. He commented: "How are we going to inform our employees of the change, will we replace their jobs?" Another manager could see that the whole customer relationship would change, stating "Our company prides itself in customer relationship management - how can we offer a personalized service online?"

For some companies the managers had more specific issues and questions that they needed to ask, such as concerning international trading regulations or language barriers. However, for the purpose and objective of providing guidelines for business such questions were considered too company specific. Only general questions that the majority of managers would need to ask were included in the list of key questions generated. The set of questions can then be adapted to suit each individual company if required.

As for the managers themselves, they reported that they found the exercise of answering the questions posed to them in the meeting and discussing the key questions that need to be considered, to be helpful and rewarding. The following quotes from different managers after the meeting illustrates this point:

"That is great, I never thought that the basics of business principles need to be looked at when offering E-commerce, but obviously it applies, such as carrying out the competitor analysis".
"You are right in pointing out the supply side, my concern is will our suppliers be ready to trade online if we are? That is a question worth asking the board members. I didn’t see the overall picture but in reality the whole business is affected. It is not only the IT department’s responsibility it affects everyone in the organization".

"Timing to enter the market I think is crucial. That’s why I am here as I think our company has left it too late and therefore our competitors are out there making the profits. I wanted to clear the issues, get guidance which I got from today’s meeting. Thank you!"

"There is too much information overload out there and, therefore, when we were told part of the NSB customer meeting will be looking at E-commerce offering and questions that managers like us who have been given the responsibility need to answer before we can help our companies go online, I was very interested."

The companies were given contact details for In2netlogic to get further help, expert advice and consultancy for their E-commerce operations. The author’s objective was to determine the key questions that managers should ask and that was achieved successfully from the meeting and extensive interviewing of the eight managers.

5.4 The Key Questions for Managers

Bringing together the various aspects from the meetings and interviews described earlier in this chapter, it is possible to frame these considerations in the form of a series of questions for managers to answer. The intention of these questions was to provide a clear set of guidelines for managers and organizations wanting to offer E-commerce, such that in answering the proposed questions the essential issues are considered and the appropriate action ultimately taken. The following twenty key questions were compiled from three sources. Firstly, data was gathered during NSB customer focus meeting held in January 2000, where there were thirty marketing and IT managers from high store retailers, raising questions about their company offering E-commerce and concerns about what products or
services to sell. Secondly, more extensive interviewing of eight retail managers that were particularly interested in entering E-commerce was carried out. Thirdly, the brainstorming interviews conducted with In2netlogic to prepare the interview questions for the focus group helped set the direction for the focus group discussions, thus indirectly affected the derivation of the key questions.

For example the first question on new opportunities was derived from the focus group meeting, brainstorming session, and interviews carried out, as this was a most significant question on the managers mind that of exploring new opportunities, reviewing existing methods and comparing to what is being done now and how it will bring return on investment to move into this new area. A similar process was used to derive the rest of the nineteen questions.

The twenty key questions are as follows:

Q1) New opportunities
What is it that we can now do that we couldn't do before the availability of the Net? How does it affect the nature of existing products and services? Will E-commerce replace existing processes or will it be an additional process?

Q2) E-commerce customer
Who is our current and future E-commerce customer? Will the previous customer base adapt to E-commerce or will E-commerce attract new customers?

Q3) Adding value
How can we add compelling value to our present and future customers and still make a profit and maintain core competency? Will existing customers be attracted to the electronic medium by the easy access and extra information available or will they regret the loss of the personal touch? What do our E-commerce customer’s want, convenience, lower prices, new products or services? Can the proposed company E-commerce process meet the expectations of the customer?
Q4) Change to existing business
Should we cannibalize our own business? How is E-commerce going to be introduced? If it becomes a new, additional process, can existing staff handle it or will new staff be needed? If so, how can the customer and product expertise be transferred to the E-commerce process? If, on the other hand, existing staff are used, can the run down or abandoning of existing processes be justified?

Q5) Outsourcing
What can and should we outsource? Can we outsource much of the risk of introducing E-commerce by bringing in specialist companies who have experience in the technology and business expertise required? However, if E-commerce is likely to be the company’s main business in the future, the loss of control could be a serious disadvantage.

Q6) Organization change
How will the introduction of E-commerce affect the company’s organization and structure? Will new tiers appear in the company hierarchy or will it have the effect of flattening the organizational structure?

Q7) Supply chain improvement
Can the introduction of E-commerce have a positive effect on the existing distribution network or supply source? Does the electronic medium allow us to increase the product range by becoming a supply-chain portal using the existing suppliers and distribution network?
Q8) Legal issues
What legal issues do we face? The company must understand the legal issues of contracts, taxation, confidentiality and intellectual property? It is likely that the company will need to seek expert advice on these issues.

Q9) Competition
What E-commerce competitive threats do we face? Competition may not come from traditional competitors! For example in case of Internet banking, there was Egg.com, which emerged from nowhere. How do we compare with our competitors in the introduction of E-commerce, are we leaders, fast followers or laggards?

Q10) B2B E-commerce
Are our trading partners ready to participate in E-commerce, or how soon will they be? To gain the full advantage of E-commerce it is necessary to make as many steps as possible electronic. It is possible that the success of the company’s efforts in E-commerce may depend on its suppliers’ and customers’ own E-commerce infrastructure.

Q11) Pricing policy
How does E-commerce change our pricing policies? Does E-commerce mean a loss of price flexibility, the transparency of the pricing reducing the ability to negotiate and offer discounts. The pricing of products compared with that of competitors becomes more critical when competitors are just a mouse click away.

Q12) Streamlining the business
How can we use the Internet to streamline business processes, reduce cycle time and become cost competitive? Can the electronic medium be used throughout all processes from purchase of supplies to distribution to the customer reducing costs and time to delivery?
Q13) Customer touch points
What customer touch points do we need to reach now and in the future? What balance is required for electronic touch vs. people touch? In particular, when do we need a personal touch and when is an electronic touch satisfactory?

Q14) People skills
What are the people skills required? New skills can range from the technical skills to handle the software and hardware to the business skills of E-marketing and organization. Does the company possess these skills and, if not, is retraining possible or will new appointments be necessary?

Q15) New technology
What technology is needed for the new architecture? Is the technology infrastructure aligned with current business objectives of cost and company growth and is it scalable, reliable, up to date and secure?

Q16) Timing to market
How important is the speed to enter the market? How do we measure, on a scale from world class to seriously inadequate? Is there a danger that we may come to the market too soon, before it is ready, or could we be too late and lose market share to our competitors?

Q17) Level of investment
What level of investment is required? What are the costs, including implementing the hardware and software technology, outsourcing, training and recruitment? It must also be remembered that the rapid changes in E-commerce technology mean this investment will be ongoing, as new developments are appearing every day (for example even before computer E-commerce had established itself, mobile phones introduced completely new technology and business issues to be considered).
Q18) Objectives
Do we have well defined and up to date objectives? Do we have a vision of where we will be in one year? E-commerce has brought such rapid changes that many companies are being forced to revise strategies. Predicting the expansion of E-commerce is extremely difficult with even the “experts” being taken by surprise.

Q19) Critical success factors
How can the twelve critical success factors be achieved and which are the most important critical success factors to prioritise? These must be based on sound business principles. For example, Amazon.com has clearly been a marketing and technological success but its business success is yet to be proven. The stock market has certainly not been a reliable indicator of success with companies like E-bay.com and Boo.com moving from high valuation to bankruptcy almost overnight.

Q20) Future trends
What are the E-commerce trends and the future and how will this impact the business? This means keeping a careful watch on all new technological developments, changes in market and the effect of developments by new and traditional competitors.

5.5 The Relationship between the Key Questions and Critical Success Factors
The list critical success factors, as described in Chapter 4, and the set of twenty managerial questions, derived in this chapter, have very different purposes. The twenty questions are for use when managers need to make decisions over which direction to take in their E-commerce planning. These questions are particularly important when the initial decision to enter E-commerce is being taken as they ensure all issues are considered. However, some of these questions will still be relevant in the later stages such as when implementing the plan as is described in Chapter 7. Furthermore, as the E-commerce environment is changing so quickly, they can be used in any review to check whether the conditions on which an E-commerce strategy is based still apply, and if not, what change of direction is required.
The critical success factors represent a state that needs to be achieved for E-commerce success. They are testable in that any company can be examined to see if the twelve factors are in place. Tests can be made, for example, to see if a web site is secure and easy to use, and to see if the processes and practice exists to ensure customers’ views are obtained and appropriate action taken. The critical success factors are particularly important in any assessment of a company’s E-commerce activity as they can be reviewed to see if the necessary conditions are in place for success. Put succinctly, the critical success factors can be used in a review of E-commerce strategy to see if the E-commerce venture is “on-track”, whereas the twenty key questions should be used to check the “track” is still relevant and whether, perhaps, a different direction is required.

There is an important relationship between these two significant, new managerial tools. More specifically, in order to achieve the state required by the critical success factors, it is necessary to consider each of these factors in the early stages. For this reason they appear in question 19. This question asks managers to consider, early in the strategy formulation process, the specific set of critical success factors that will be pertinent to the long-term success of their own initiative. Whilst this set of CSFs can be based upon the set of twelve factors derived in Chapter 4, it is recognised that priorities will probably have to be tailored to the company’s own specific circumstances and requirements.

Many of the other key questions will help managers to make the necessary decisions to enable certain success factors to be put in place. For example, in the first instance, it is important for a company to identify a clear new opportunity for its web-site to exploit. However, in the longer term, it needs to follow the third critical factor of identifying customer needs, and the sixth critical success factor of keeping up with innovation to ensure that it maintains its competitive position. Table 5.1 shows how the twenty managerial questions are related to the twelve critical success factors discussed in Chapter 4, indicating which key questions will introduce the considerations needed to achieve each success factor.
Table 5.1 The Relationship Between the Twenty Key Questions and the Critical Success Factors.

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5.6 Conclusion

In order to have a successful E-commerce development it is necessary to have board level commitment, and support from all departments, people involved and stakeholders. Projects have been known to fail without such commitment. Thus, if the twenty questions are answered and understood by all parties this would help and would also minimize the risks encountered. E-commerce is not an end state. It is a new business platform that will grow and evolve. The secret to sustainable E-commerce success is to think and plan in terms of overall architecture, but act in incremental steps. To manage risk, a company's very first E-commerce initiative might well be a simple "paper replacement" project to demonstrate the proof-of-concept in a well-controlled, internal environment. This implies the answers to the twenty questions should be continually reviewed. The effort required to implement E-commerce successfully has to be sustained. It requires support from the highest level, with managers asking themselves these key questions at each stage with a willingness to rethink organisational processes.

By drawing on the collective experience of those considering E-commerce it has been possible to derive a list of common concerns. The use of a focus group has been very successful in this respect. In addition, input has been obtained from published sources and from an expert in the field, in the form of a manager in an E-commerce service providing company. The degree of agreement amongst the information sources gives a high confidence that the proposed twenty questions will indeed cover all the main issues that need to be considered when entering E-commerce. These key questions, therefore, have become a principle component in the guidelines for formulating an E-commerce strategy described in Chapter 7. The questions are further tested in Chapter 8 which discusses how the approach of the twenty key questions was used to determine the feasibility for a footwear company in UK to offer E-commerce. They are also tested in Chapter 9 to see how well they can be applied retrospectively to companies that have already proved to be successful or unsuccessful in their E-commerce ventures.
In a world which is increasingly competitive and where organisations are required to undertake greater levels of risk in order to compete, those companies that fail to act now may find they have left it too late as E-commerce becomes the dominant way of doing business in their sector. By contrast, companies that have vision, a strategy, and a long-term outlook will find that by embracing E-commerce now, they will reinforce their market position. However, this will not occur if the issues are not properly understood. This chapter has provided twenty key questions for which managers must know the answers in order to enter E-commerce with sufficient understanding to give the company a reasonable chance of success.
CHAPTER 6 - APPLYING QUALITY CONSIDERATIONS AND TRADITIONAL MARKETING PRACTICE TO E-COMMERCE

Chapter Preface

This chapter examines the role of quality and traditional marketing theory when setting up of a Dot-Com company. A case study looks at the Prezzybox.com company and how quality issues were incorporated within the website by looking at the traditional marketing theory which was applied to Prezzybox.com to tie both quality and strategy together to make a successful business (Shah and Dawson, 2002e). This chapter discusses the phases of the strategic marketing planning and briefly looks at the decision phase the company underwent in starting its E-commerce business.

6.1 Methodology

An essential step towards achieving the aims and objectives mentioned in chapter one was to find out how an online business varies from traditional businesses and whether the traditional marketing and business theories apply in the online environment. Therefore a case study approach was used. The author employed the skills learned in her Management degree to analyse the following aspects of the Pezzybox.com business:

- The use of business and marketing theory
- The company’s first moves and initiatives of going online
- The resources needed, including capital, technology
- The research carried on the E-commerce industry, including competitors strategy, factors affecting industry, and legal issues
- The customer analysis, including the consumer buying behaviour.
Prezzybox.com was chosen as the author wanted to apply the concept of traditional marketing theory to a pure dot-com company, which did not have a high street presence. This was to satisfy the objective of testing whether traditional marketing theory does apply to Internet companies and in particular Internet start-up companies. The result shows that marketing theory can be applied and is important for any type of business. The first contact with Prezzybox.com was made in July 2001. The contact was made through In2netlogic, the E-commerce consultancy firm in Loughborough who in 2000 developed the Prezzybox.com website so Prezzybox.com was a customer of In2netlogic. Two Prezzybox managers were interviewed, Zak Edwards and Jason Edwards, the first interview was conducted at the site in Warwickshire near Tamworth and, thereafter, two further telephone interviews were conducted.

The aim of the first interview at the site was to get some background on the company, how and when it started, whether any traditional marketing principles were used in setting up the business and what steps were taken to draw up a business plan and conduct market research. Preparation for the interview consisted of the compilation of the following set of questions:-

1. In which year did Prezzybox start trading?
2. Where did the idea of selling presents online come from?
3. How did you compile the supplier list?
4. What were the costs associated with start up?
5. How does E-commerce change your pricing policies? Does E-commerce mean a loss of price flexibility, the transparency of the pricing reducing the ability to negotiate and offer discounts? (The pricing of products compared with that of competitors becomes more critical when competitors are just a mouse click away.)
6. How can the use of Internet streamline business processes, reduce cycle time and become cost competitive? Can the electronic medium be used throughout
all processes from purchase of supplies to distribution to the customer, reducing costs and time to delivery?

7. How important is the speed to enter the market? Was there a danger that the company may come to the market too soon, before it is ready, or could it have been too late and lose market share to the company’s competitors?

8. Do you have well defined and up to date objectives? Do you have a vision of where the company will be in one year? (E-commerce has brought such rapid changes that many companies are being forced to revise strategies. Predicting the expansion of E-commerce is extremely difficult with even the “experts” being taken by surprise.)

9. What are the critical success factors? (The stock market has certainly not been a reliable indicator of success with companies like E-bay.com and Boo.com moving from high valuation to bankruptcy almost overnight.)

10. How did you advertise prezzybox.com?

11. How do you manage to fulfil orders, what are your links to suppliers, and do you have your own warehouse?

The Prezzybox business plan was shown and explained by the managers as were the company processes. Future plans and directions were also discussed.

After the interviews, the author emailed reports to the managers to confirm the accuracy of the recordings of the interviews. The Prezzybox experience was then analysed by retrospectively applying the twenty key questions generated in Chapter 5 to their existing strategy and business.

Thereafter two interviews took place in summer of 2002, where any changes or improvements to the business were identified. The final interview was structured around the application of strategy formulation questions, described in Chapter 8 which
had been previously sent by email to give a chance for the managers to prepare the answers which were then discussed over the phone. The final set of questions proved useful for Prezzybox.com as they could analyse where they were and where they were going. Zak Edwards stated "Thank you for the checklist of questions to assess our existing strategy, which was useful exercise as we could identify whether our strategic direction was clear cut." Answers for the strategy formulation questions by Prezzybox.com are discussed in Chapter 8.

This chapter identifies that traditional marketing theory does apply to E-commerce companies as shown by Prezzybox.com and that an E-commerce business is just a business with the same business considerations as any other business.

6.2 The Applicability of Traditional Market Principles

E-commerce consists of transactions and relationships. Quality management’s purpose is to make all transactions complete and correct; while all relationships are to be successful. The global reach of online stores automatically involves new customer and legal requirements. Misunderstandings can easily arise and sour relationships. An online storefront can help minimize risks and make quality an integral part of online sales provided the store was designed and built with these goals.

Initially some management theorists saw E-commerce as a completely new way of doing business, one that totally overturned the existing management paradigm. Analysis of actual commercial operations would suggest, however, that some existing management theories could be transferred into the world of E-commerce. This means that managers and individuals with management background can use their previous experience to develop and implement E-commerce marketing strategies Chaston, (2001).
Developing a business over the Internet requires many of the same major activities as starting any bricks and mortar business where basic business planning is necessary. A company needs a product, funding to get the business going and customers. It must market its products to customers, it needs to have strong customer service, and have the infrastructure in place to be able to manage and deliver products at the right time and in the right place. It needs to find ways to promote business, decide on the pricing policy and offer customer value. All of these basic marketing principles were applied in Prezzybox.com's decision phase when starting to offer its services online.

In setting up any business, whether it is bricks and mortar stores or starting out as a pure play company offering E-commerce, companies should embark on the formal process of constructing a marketing plan. The stages in the plan should consist of:

- stating the aims and objectives of the business,
- carrying out customer analysis to identify target market(s),
- performing a competitor analysis to identify competitive advantage,
- completing an external marketing audit looking at the macro environment,
- completing an internal marketing audit considering of the marketing mix effectiveness of the 4Ps (Product, Promotion, Price, Place),
- carrying out a SWOT analysis (Strengths, Weakness, Opportunities and Threats).

Deciding whether to outsource functions or carry out in-house development can be identified in the SWOT analysis, which should determine whether the company has sufficient resources, and skills to carry out in-house development. Strategy evaluation needs to be carried out to monitor actual versus planned performance and provide data to review the ongoing viability of the plan.

The next sections examine how Prezzybox.com followed the phases in the strategic marketing plan to start an E-commerce business. The application of traditional marketing theory to this dot-com start up company shows how they went about the
marketing plan. For confidentiality reasons, the market analysis carried out by the company prior to opening its E-commerce business has not all been disclosed in this chapter, and therefore only some of the research results have been included.

Research material was gathered from interviewing Prezzybox.com managers and from reviewing their business plan. During an interview, a Prezzybox Manager, Zak Edwards stated "We started off with a lot of desk research, qualitative and quantitative, as well as sending out a questionnaire to hundreds of people. We then obviously did all sorts of analysis on the market place and our competitors, including all sorts of models - Porter, the 4 P's, Ansoff (especially the bridging model), BCG, etc. Traditional marketing models are very important. Selling online is exactly the same as selling off line. You need to instil the same values and ethics within the company framework. We have therefore concentrated on producing a good product, and then entering a phase of brand growth, without concentrating too much on profitability. We are, however, trying to keep costs to an absolute minimum. We therefore try to market ourselves online as opposed to offline and do so by adding value to our customers and third party customers." Material was also gathered from published sources and by examining the Prezzybox.com website.

6.3 The Background of the Prezzybox.com Case Study

Prezzybox.com started trading online in August 2000. Selling gifts online, Prezzybox.com has a reputation for quality and innovative product development. The quality and consistency of its service distinguishes it from its competitors. With online trading companies, a website's performance is only as reliable as the servers behind it. Quote from an interview with Jason Edwards "A site that "goes down" due to too much traffic will quickly become a site that gets no traffic at all".

For any business to be successful within online trading it is important to build in quality throughout the design stage coupled with the right strategy. The main quality
issues within E-commerce are if the site is reliable, easy to use and navigate, secure, and available. In2netlogic, a company that specializes in effective business communication, used these factors to design and build Prezzybox.com’s E-commerce facility.

Reliability is the key to customer loyalty with competition on the Internet only “a few clicks away”. That is why it is imperative that servers be tested for stability, scalability and performance using the latest workload simulations. Downtime is costly and if the site can’t handle the traffic, customers will click to one that can.

Prezzybox.com’s web site was designed by In2netlogic who provide high quality web based solutions by concentrating on a standards based approach to development normally only seen within much larger organizations. This ensures that the finished solution has always been thoroughly designed, developed and tested.

Security also requires a formal approach to minimize the risk. In2netlogic periodically perform security vulnerability assessments to allow the customer to have the opportunity to determine the level of security they feel most fits their budget, given enough information to make such a judgment.

Prezzybox.com is available 24 hours a day, 7 days a week, and the site has only had approximately 30 minutes unplanned downtime in 18 months of operation. They have internal and external uptime management services to guarantee a fast response to any unplanned problem, and regular maintenance is performed.

Prezzybox.com has secure features with the machine physically located in a custom built area in North Manchester. The whole shopping cart is 128 bit, SSL secured (as opposed to the more usual credit card details only), and credit cards are not kept in the system to reduce collateral damage in the event of a security breach. The system is kept
patched against vulnerabilities - after the patch is tested internally. Backups are encrypted and kept in a safe.

The website is easy to navigate and use and was recently tested by a Loughborough University related organization, PRUE, that rated the site as “good” overall. The site is constantly being tested and a complete redesign is in the early stages of production.

6.4 Discussion of Strategic Pathway and How Prezzybox.com Follows It.

![Diagram of Marketing Strategy Components]

**Figure 6.1 – Interactions of Strategy Components**
(Source Nigel Piercy: Marketing Principles Strategic Pathway)
The next part of this chapter looks at the application of traditional marketing theory in the decision phase of starting an E-commerce business. According to Nigel Piercy (1998), "The strategic pathway is made up of three categories: Market Choices, Value Proposition and Key Relationships" as shown in Figure 6.1. Having a strategy helps to decide which markets to go for, what value to give to the market and which people to work with.

6.4.1 Market definition

From an interview with Zak Edwards, the manager of Prezzybox.com, he stated that they define their market as looking at "core customer needs and the core products that would satisfy them by carrying out segmentation and deciding on positioning."

6.4.2 Market Segmentation

Market segmentation is a fundamental issue of market strategy. Market segmentation provides the basis for the selection of target markets. A target market is a chosen segment of market, which a company has decided to serve Jobber (1998).

Prezzybox.com followed a market analysis consisting of:

- identifying the market size, growth rates and trends;
- customer analysis including who they are, what choice criteria they use, how they rate competitive offerings and how the market is segmented;
- distribution analysis, which covers significant movements in power bases, channel attractiveness analyses, physical distribution analyses and analysis of the role and interests of decision-makers and influences with distributor organizations.

A choice of target market(s) had to be made. A target market is a group of consumers/organizations (segment) where the company wishes to aim its offering and communications. It defines where the company wishes to compete. Prezzybox.com
identified its target market by carrying out customer research through questionnaires to determine their preferences and what age groups to target. Prezzybox.com decided the target market should be the 18-60 year olds who were most likely to purchase gifts as shown in Figure 6.2.

Who is the Gift for?

Relationship to spend  Age  Sex  Character  Interests  Personality  ££

Several gift permutations within the stated criteria, (gift ideas taken from consumer research)

*Figure 6.2 Prezzybox.com customer segmentation*

(Source: Prezzybox.com business plan)
In order to identify core customer needs consumer research was carried out. Zak Edwards stated “Consumer research was an important critical success factor” for two primary reasons. Firstly, through a questionnaire it became possible to establish a host of determining factors such as the consumers’ favourite gifts, money spent on gifts, and how often gifts were purchased. The type of gifts preferred can be established through quantitative and qualitative consumer research to produce a wish list. Secondly consumer research can form a platform for product selection.

Research results concerning the strategic segmentation enabled the company to offer customer benefits and improve on the service provided. Prezzybox.com wanted to be flexible and respond rapidly to changing needs.

6.4.3 Market attractiveness and positioning

Prezzybox.com makes choices on the attractiveness of different markets or segments on how well the business can perform. Market position depends on the value proposition that is market mission and also on key relationships. It is vulnerable as customers change their minds.

Prezzybox.com’s manager’s objective for success “Was to meet customer needs and to provide a competitive advantage by offering facilities to attract customers.” Prezzybox.com’s initial thoughts of achieving this was to provide gift categories consisting of a list of gifts under different types of occasion – Jason Edward in a telephone interview stated “this option assists the user to view suitable gift categories to make a decision on what they would want to buy”. If the user needs a gift to arrive in 24 hours, they will want a service called “gift emergencies”. An extra charge is levied for this distribution.

A members’ sign-in facility was seen as a possible method of obtaining consumer information. A reward scheme must be some method of giving consumers an incentive
to return to the site. Ideas employed by Prezzybox.com include a voucher or reward point scheme. Once the gift has been purchased then Prezzybox.com offers a number of services, such as gift-wrapping with a card or speedier delivery.

The company can also provide a reminder service for birthdays, anniversaries etc. Prezzybox.com recognize the importance of listening to customers as part of their strategy to manage satisfaction. Prezzybox.com follows a strategy to manage customer complaints, queries, orders, comments and questions.

6.4.4 Strengths, Weakness, Opportunities, and Threat (SWOT) Analysis

In an interview, the Prezzybox.com manager, Zak Edwards stated, "It was very useful to carry out a SWOT analysis". It provided a structured approach to evaluating the strategic position of their business. Their SWOT analysis revealed:

Strengths

- Prezzybox.com had the right product (gifts) to sell online.
- Prezzybox.com had the necessary funding to start an online business.

Weaknesses

- The company had little supporting technological infrastructure and hence needed to outsource functions.
- There was no physical space to hold stock.

Threats

- Several gift companies were already trading online selling, for example, CDs, books all flowers. Prezzybox.com needed to offer customers an advantage different to that of their competitors.

Opportunities

- There is a proven market for selling gifts online and with the use of technology there is great potential for growth.
As a result of the marketing audit and SWOT analysis, relevant, achievable objectives were set. These are described later in the chapter.

6.4.5 Marketing Mix

By defining a target market and understanding the needs of their consumers/organizations, a marketing mix can be created to meet those needs better than the competition. Decisions have to be made regarding product, promotion, price and place.

Product

The initial decision to selling products online was developed from an idea from the manager of Prezzybox.com, Zak Edwards, in 1999. Knowing that everybody at some point buys gifts, and that the term “gifts” encompasses a copious number of connotations, he concluded that a wide scope of consumer segments could be targeted. Deciding on type of products to sell involved choices regarding brand names, features (that create customer benefits), quality and design, packaging, warranties, and the services that will accompany the product offering.

It was important to identify a market of consumers purchasing gifts for any occasion. Research results carried out by Prezzybox.com showed that social and work pressures of working long hours leave no time to go shopping, hence it is easier for consumers to shop online and get their purchases delivered. Right from initiation Prezzybox.com had the consumers in mind, looking at their needs and preferences, identifying gaps, making sure that customers get a suitable choice. For this the web site needed to be convenient to use, having features that would make it easy for consumers to shop and make their daily lives more organized.

Internet shopping for gifts was found to be becoming more prevalent in the buyer behavior pattern, with the main reason being shopping for convenience. The research
results suggested a target market of 20-30 year olds, especially graduates, identified as people who have higher disposable income and have longer working hours (less leisure time).

Prezzybox.com realized that not all products are compatible with selling over the Internet. For example, some products may require a lot of face-to-face selling or they may cost a lot to ship. However there are some features unique to E-commerce such as the ability to offer customers reviews of products, or lists of similar products related to their interests. For example, Amazon.com offers a personalized service for customers who purchase items on a particular title, notifying them if there are new products in that title. Prezzybox.com manager Zak Edwards stated that "selling gifts is possible on the net as items can be seen and purchased."

**Promotion**

Promotion decisions involve choices regarding advertising, personal selling, direct and Internet marketing, sales and promotions and public relations. Promotion was seen to be one of the critical success factors with regard to the web site's prosperity for Prezzybox.com as it was a pure play Internet company. There is an abundance of superb sites on the Internet, both technically and aesthetically, but they fail because they do not attract enough consumer traffic. A strategic promotional distribution is a necessity, which was considered to be consumer driven (word of mouth), and thus the direction was based around demographic segmentation models.

Possible avenues of utilization considered by Prezzybox.com included:-

- Straight advertising-in media such as radio and magazines, which lend themselves to the target segments.
- Advertorials - a mix between an advert/competition/editorial.
- Web links - preferably links from other sites without it being reciprocal.
- Web promotion -use of banners and advertisements on relevant websites, which have substantial consumer traffic.
Applying Quality and Traditional Marketing Practice to E-commerce  

Chapter 6

- Email - customers can be targeted through emails with promotions.
- Exhibitions-conference centers have billboards that can be used for advertising.

Advertising through search engines was considered important. Two types of search engines used were Web Crawlers, which provides links from various websites and registered engines. Prezzybox.com ensured that they had sufficient keywords and metatags to attract traffic through crawlers and they registered with all of the prevalent registered sites.

Jason Edwards stated that "another approach was Duel Branding where 3rd party promotions are based around consumer research to get a number of potential 3rd party partners for promotional activity". For example, if 95% of respondents’ favorite gift is Thornton’s chocolate then they approached Thornton’s to negotiate a link from their web site.

Price

Prezzybox.com had to decide whether to have a set margin or variable margin, with choices regarding list price, discounts, credit terms and payment periods. Research was carried out by Prezzybox.com to look at competitors’ prices and to create a pricing strategy and psychological pricing policy. Zak Edwards, in a telephone interview, observed "Because of our business model, we hoped to avoid high running costs. Because we carry no stock, our running costs will only grow proportionally to our turnover." Due to confidentiality reasons the pricing policy is not discussed in detail in this chapter.

Place

Prezzybox.com’s place decisions involved choices regarding the distribution channels to be used and their management, the location of outlets, the methods of transportation and inventory levels to be held.
Decisions on inventory holding and sourcing are based around the extensive consumer research. There appeared to be a number of options available with regards to stock requisition. For example, one option is to carry no stock of gifts, which in turn will reduce the warehouse costs and stock holding. This is possible with gifts as there is a wide selection and variety that can be obtained directly from the suppliers. The disadvantage is this means relying on distributors to fulfill orders, which can be dangerous. After due consideration, Prezzybox.com chose not to hold stock, using suppliers to deliver directly to consumers. Suppliers were chosen from the exhibitions, such as the Spring Fair held every year in the UK, which focus predominantly on the gift market.

6.5 Market mission

A mission statement should be produced before defining the market or carrying out market segmentation and market positioning. Drucker stressed the need for a business to define its purpose because without a clear definition of the mission there are no clear objectives Larsen, Tonge, Midori (1998). Mission statements are used in a number of ways, including in external relations, motivating staff and definition of the business target market. All these aspects can be seen at Prezzybox.com, where the mission statement, to satisfy customer needs, has influenced the way staff deliver its services.

Before taking the critical step of entering E-commerce, start-ups should set out their aims and objectives. Information gathered from an interview with Zak Edwards of Prezzybox.com established their list of aims for E-commerce to be the following:

- To improve customer service and interaction.
- To increase brand awareness and awareness of the company.
- To increase revenue and market share.
- To reduce operating costs
The company provides a focus of its efforts in areas where it gives a good return on investment. This requires clear well-defined objectives such as:

- To sell more goods and services by using the web.
- To provide customer “e-care”, i.e. online support.
- To support its business partners over the web: e-care for partners.
- To improve communication within the company: e-care for employees.
- To work more closely with customers and suppliers to improve the tendering process and better administer the huge number of transactions involved in e-procurement. This objective was the most significant for Prezzybox.com.

Prezzybox.com aimed to provide value for money, keeping customers interest by keeping services at the forefront of activities, and by maintaining the quality and consistency of its service, following a policy of “Getting it right the first time”.

6.5.1 Competitor analysis and differentiation

Competitor analysis examines: Who are the competitors to the company (actual and potential)? What are there objectives and strategies, strengths and weaknesses, market shares, size and profitability? Finally, are there any entry barriers that make market entry from new competitors difficult? Prezzybox.com decided that quality of products and service was their key to competitive advantage. Quality gives a clear performance differential over competitors on factors that are important to target consumers and organizations. This provides the basis of how the company competes. Major success is dependent on the company creating a competitive advantage by being better in their products and services, being faster at anticipating and responding to customer needs, and being closer to customers by establishing close long-term relationships with customers.

When analysing the competition to Prezzybox.com, it was considered necessary not to be limited by Theodore Levitt’s ‘marketing myopia’ by purely looking at other online gift stores as the only source of competition. It is therefore beneficial to briefly look at
all sources of competition in a pictorial format (Jobber, 1998). As is evident from Figure 6.3, Prezzybox.com’s competition does not just come from online gift shops, but from a number of sources.

\[ \text{On-line} \rightarrow \text{Competition} \rightarrow \text{Off-line} \]

\[ \text{Direct Competition} \]

\[ \text{Indirect Competition} \]

\[ \text{Mass Market} \]

\[ \text{Niche Market} \]

*Figure 6.3 – Competition*

*(Figure by Prezzybox.com)*

6.5.2 Competition

**Offline Competition**

Prezzybox.com are competing with offline gift shops and providers of leisure, just as a train is competing with other methods of transport. In short, the very premise of buying somebody a gift is to provide happiness for the recipient. A gift could therefore be a bunch of flowers, a CD or a weekend in a health hydro. All are available offline, and all are, therefore, competitive forces to Prezzybox.com.

**Online Competition**

It was more important, however, to focus on the online competitor, as it is the online consumer who will initially be the target market for Prezzybox.com. The online
competition can be split into 2 main groups – direct and indirect. It is important to include the indirect competitor, in this instance ‘non gift shops’, as at this moment they make up the biggest online players. According to the Mintel report, ‘On-line shopping 1999’ (although this is now dated) 17% of shoppers who had purchased on-line had purchased either books or CD’s. The likes of Amazon.co.uk and Bol.com therefore have to be the benchmark. Also some traditional retailers, such as Argos, are creating large online businesses selling consumables as gifts. Encouragingly, according to the same report, 8% of users had also purchased gifts – such as flowers or chocolates on line.

With regards to direct competition, in these instance online retailers who sell gifts, this can again be divided into two segments, mass-market competition and niche market competition.

**Mass Market Competition**

Mass Market competition can be defined as those competitors whose target market appears to be all users of the Internet whom are potential purchasers of gifts. There are obviously a huge number of online gift stores who operate in a similar way to Prezzybox.com with varying in degrees of competency from good to poor.

In the company’s opinion, some of the better competitors include:

**I-love-you.com**

Its strengths are good added value features (although difficult to use) and it is aesthetically pleasing. Its weaknesses are that it is graphical intensive (slow), with a traditional and expensive product range, they also charge for delivery and have some poor user interfaces (e.g. opening a number of windows during the same session).
Presents Direct
This is a simple site, which is friendly to use with a unique product portfolio. The site, however, is very slow to load with large graphics initially. It doesn't incorporate any added value features or data capture mechanisms.

Codygifts.com
This company has the backing of an international offline operation and thus have a sizeable product portfolio, which they can fulfil, from their local warehouses. The site also has a number of added value features and a data capture portal. They also appear to have an automated marketing driver as they have a regular newsletter. The fact that they have an offline operation is possibly to their detriment because it would appear that they have not focused enough efforts on the website.

The Alternative Gift Company
This is a good site with a large product portfolio. They also have a number of added value features and a data capture portal, this allows them to market themselves through their regular newsletter. In the author's opinion, however, the site shows poor ethical standards showing prices without the VAT. Furthermore, a poor standard of the images means the majority of the gifts are not particularly well represented.

6.6 The Price-Quality Matrix
Because of the very nature of the Internet, consumers have much greater empowerment. They have greater choice and greater flexibility. For this very reason it is difficult to produce a comprehensive matrix of any description. It is, however, useful to look at Prezzybox.com in relation to some of the 'better competitors' so as to ascertain the internal perception.

Figure 6.4 shows the price-quality matrix positions, which are deduced on perception. By price it means the price perception that the site emanates and by quality it means the
‘overall quality’ of the site. This includes aesthetics, added value features, product portfolio, ‘feel’ and general usability.

As is shown in Figure 6.4, it would appear that I-love-you.com target the ‘highbrow’ market, as their product portfolio is very traditional and, on the whole, expensive. Codygifts.com attempt to utilize a number of added value features at standard prices (2.35% mark up). They, however, do not portray their products in too favorable a light.
Presents Direct have a well-presented ‘catalogue’ site with a nice product portfolio. The products are well presented, but they lack a great deal of functionality. A standard pricing policy again appears to be evident. The Alternative gift company has a number of added value features and has an aesthetically pleasing site hence they have more quality than Presents Direct. Their product portfolio appears to be on the cheaper side hence their position on the matrix.

The added value features and their ease of use on Prezzybox.com combined with their product portfolio and customer driven policy, would indicate that the Prezzybox.com site is the one with the most quality. They have a standard pricing policy (bottom up) in the first instance (multiplying products by 2.35%) but all products are market sensitive.

Zak Edwards in an interview explained the position on the matrix was because Prezzybox.com are slightly cheaper than Cody gifts, who appear to adopt a similar pricing policy.

6.7 Brand

Branding issues are also a main input to an evaluation of market attractiveness and positioning, as it is not possible to finalize the competitive differentiation without assets and brand identification.

Managers have come to the conclusion that traditional business considerations, such as having the right brand awareness and business processes, remain key to success in all businesses (Computing staff of network news, 2001).

Attractiveness also depends on branding Hooley, Graham and Saunders (1993). Thus the strategic pathway in reality is not linear, as shown below, as the components interact when decisions are made.
6.8 Does the Pathway Help Explain Prezzybox.com’s Successful Development?

The strategic pathway is not followed clearly within Prezzybox.com but its success and development can be indirectly applied to the contents of the pathway. It differentiates from other companies who maybe following a strategic pathway simply by the way it carries out its business. For example, Prezzybox.com only looks for suppliers that can meet at least four out of the following five criteria: their products must be innovative, challenge authority, offer value for money, be of good quality, and the market must be growing. The strategic pathway interacts as shown in Figure 9.4 and is not followed linearly.

By listening to customers (*Key relationship-customer relationship management*) and employees and by trying to find out what they want and by then meeting their needs with a high quality service (*market mission*), the target audience and market segmentation can be identified. The customer relationship management was established at an interview with Zak Edwards where he stated "We have worked to create a ‘customer-centric’ ethos. We are completely customer focused, both online and offline. Online for example we have worked tirelessly to incorporate a number of ‘added value’ features (for example the Gift Wizard, Gift Reminder Service, Wish List etc). Likewise the way the image is portrayed (both pictorially and editorially) is very important. This is in tandem with an easy to navigate site, free delivery, free phone number etc.” It also helps to identify what position the business holds in the market and how attractive it is. (*Market choices in the pathway*)

Prezzybox.com achieves a strong *competitive differentiation* by means of its product, service, image, and personnel simply by the way it carries out its business. By differing in many ways from its competitors (*key relationships*) and also by following it’s mission of offering good service at low price and actually implementing that policy, Prezzybox.com is a cost leader and a differentiator.
Prezzybox.com employs a website that is easy to use, reliable, secure, available and customer friendly, with the result that customers keep coming back and recommend the site to others (word of mouth advertising). This shows that quality built in within the website does play a role in successful business when used with the right strategic pathway, and to be successful it is important to ensure quality at all functional operations of the system.

Prezzybox.com is following a strategy of focusing on customer needs and demands. This is essential in the more traditional business but Prezzybox.com has shown it is also required for the E-commerce and Dot-Com world. The overall result is that Prezzybox.com is a successful E-commerce company in a highly competitive environment.

The experience of Prezzybox.com is that attention to quality and established good business practice is as necessary for an E-commerce company as it is for traditional businesses. It is shown that a total solution is required with quality processes across all aspects of E-commerce for a company to be successful.

6.9 Conclusions

To achieve high quality processes, a strategy used by many successful companies is to use the Internet to support existing marketing channels. This enables a company to succeed in E-commerce by building on the quality and success of existing business operations Daniels (1998). This chapter has also shown how a dot-com company applied the traditional marketing theory and principles to its decision-making when going into E-commerce. This suggests that in order to be a successful E-commerce business it is important not to forget the old rules, and traditional methods of doing business.
If a website is easy to use, reliable, secure, available and customer friendly, it keeps customers coming back and ensures they recommend the site to others (word of mouth advertising). Results from the Prezzybox.com research have shown that quality built in within the website does play a role in successful business when used with the right strategic pathway. In order to be successful it is important to ensure quality at all functional operations of the system. Markets are based on customer needs and demands and that's where the strategy should focus. This was true in the more traditional business but it is also true for the E-commerce and dot-com world. Prezzybox.com seems to be following just this strategy, which, with the emphasis on quality, is gaining customer satisfaction. The overall result is that Prezzybox.com is a successful E-commerce company in a highly competitive environment. Other companies would be well advised to follow this recipe of quality and strategy if they too wish to be successful in E-commerce.

The Internet may be a new and exciting medium but any company that tries to exploit its potential must be prepared to implement a full range of quality processes to ensure all aspects of E-commerce trading work effectively. The findings of the Prezzybox.com case study in this chapter agree with the published experiences of other E-commerce companies described in Chapter 4. In each case it can be seen that good business practice as applied to traditional companies is also very relevant to E-commerce. The bottom line is that a business is a business whether it is trading electronically or not and, as this chapter has shown, good business practice, from initial planning through to business operation, needs to be applied to E-commerce companies just as much as it is needed in others. This, when coupled with a strong drive for quality, is then a recipe that will greatly enhance the chances of a successful E-commerce business.
CHAPTER 7-FORMULATING AN E-COMMERCE STRATEGY

Chapter Preface

This chapter discusses the core of the author's research following the aims and objectives as mentioned in the first chapter. The result of this research is a set of guidelines for companies who are entering into E-commerce to create an E-commerce strategy, or who already have an E-commerce presence to revise their existing strategy (Shah and Dawson, 2001c).

This chapter brings together the published research described in Chapter Two, the case studies and derived critical success factors from Chapter Four, the twenty key questions derived from the focus group meeting described in Chapter Five and the traditional market theory and business strategic planning from Chapter Six to form guidelines for a business to produce an E-commerce strategy. Further input was obtained from in-depth, "brainstorming" meetings with In2netLogic and Prezzybox.com.

The chapter shows how an organisation can create an E-commerce strategy following a framework that gives guidelines to take the company from the initial stages of forming an E-commerce vision through the planning and implementing of the E-commerce initiative to finish with an evaluation of the E-commerce venture. For each stage in the framework a set of questions has been included that need to be asked and answered by the organization.

In conclusion, the chapter also identifies that implementing an E-commerce strategy is neither straightforward nor cheap. It involves a complete rethink of traditional modes of behaviour with a need to involve internal staff and external suppliers and customers
right from the conceptual stage, there is a need to re-evaluate the company’s core competences, and substantial investment in IT is required.

7.1 Methodology

This chapter is the core part of the research showing the steps to formulate an E-commerce strategy. Material was gathered from previous chapters, through further brainstorming sessions with In2netlogic, a company that provides E-commerce advice to other companies and with Prezzybox.com, the successful E-commerce company discussed in the previous chapter. The suggested steps to build a strategy were developed and further designed as an E-commerce strategy pack to be distributed to companies by In2netlogic, a copy of which can be found in Appendix 3.

Chapter Six establishes that traditional market theory still applies to E-commerce so consequently a typical strategic planning lifecycle, as suggested by Turban (2000) and reproduced in Figure 7.1, is used as the starting point for the framework for E-commerce strategy formulation. This lifecycle has then been modified to show the E-commerce decision-making stages and the feedback loops that occur. The critical success factors and key questions derived in chapters four and five are then used where appropriate through the lifecycle. Other influences in the forming of this strategy planning lifecycle were the case studies in published literature, the Prezzybox case study described in Chapter Six and the interviews with John Makin, a manager at In2netLogic. As In2netLogic had knowledge of a wide range of customers’ experiences when entering E-commerce, their input was particularly valuable. After the initial interview with John Makin that helped to derive the set of questions to put to the first NSB customer focus meeting, a further interview with John Makin helped to flesh out the ideas and twenty questions derived from the focus meeting to turn it into strategy formulation framework and method described in this chapter. These ideas were then simplified by In2netLogic to became the Internet Decision Pack given in Appendix 3, which was then used by In2netLogic to give to their customers.
As stated in the literature review in chapter 2, published research shows no attempt to formulate any E-commerce strategy guidelines. This chapter aims to fill this gap.

7.2 The Purpose of the E-commerce Strategy Framework

From the author’s research described in the earlier chapters, it was possible to create a framework for the formulation of an effective strategy discussed in this chapter. Buyitnet.org, in conjunction with the UK government, have subsequently published a similar framework for CEOs to use in April 2002, which can be accessed at <http://www.buyitnet.org>. The fact that the CEO’s framework conveys essentially the same message as proposed by the author in this chapter helps verify the author’s
proposals and suggests the framework and associated method derived is valid and feasible for companies to adopt.

The definition of strategy for the purpose of this chapter is a set of directions used to bring an idea or goal to fruition (Teltech Resource Network, 2000). It contains the blueprints that define the direction a company will take based on its current position. An E-commerce strategy identifies the specific direction the company will take regarding trading in the electronic marketplace. It helps define the business goals for its E-commerce venture and lays out an action plan for achieving them.

The definition of a strategy formulation framework is a comprehensive set of considerations and guidelines for creating a strategy applicable across a wide range of companies. The strategy formulation method, therefore, becomes that of assessing which parts of the framework are applicable in any particular case and then applying those parts of the framework appropriately.

The proposed strategy framework is not assumed to be the only answer to success and is not the only set of strategy guidelines that can be used. It is intended to provide a stepping-stone for E-commerce entrepreneurs to use as a guide to avoid overlooking critical issues and rushing too quickly into uncharted territory. This chapter also identifies options for a company website and takes readers through the stages of system design. It is recommended that users and readers of the strategy framework and method should consider the various issues mentioned within the thesis in detail, seeking professional advice where necessary. As Chapter Six shows, the key to success in E-commerce is to consider it as carefully as you would any other marketing strategy or sales channel.
7.3 The E-commerce Strategy Lifecycle

Figure 7.2 shows the steps taken to formulate an E-commerce strategy. The figure is a modification of Turban’s strategy derivation model, altered to take into account the decision processes required for E-commerce to take into account all considerations described in the previous chapters. The set of guidelines proposed in this chapter also appears in the simplified form in the decision pack used by In2netlogic.

![Diagram of the E-commerce Strategy Lifecycle]

*Figure 7.2: Showing steps used to formulate an E-commerce Strategy*
Figure 7.2 is different from those suggested by other researchers mentioned in the literature review in chapter 2 as this figure shows the actual stages of decision making when considering offering E-commerce. It shows the stages of identifying aims and objectives, identifying if it is feasible to offer services, planning how to carry out online business, and then implementing and finally assessing what has been achieved. It goes through the systems lifecycle of a project.

The strategy life cycle model in Figure 7.2 goes further than Turban’s strategic planning cycle in “E-commerce a Managerial Perspective” (Turban, 2000), which is reproduced in Figure 7.1, in that although he advocates the industry analysis, and the carrying out of strategy formulation, implementing and then assessing, Turban does not mention the project specifications, decisions, planning, design decisions, or what research needs to be carried out in the feasibility study. Turban's model is also modified to include a set of feedback loops showing the more iterative process of E-commerce strategy formulation. As E-commerce is heavily dependant on technology as well as business and social attributes, it is necessary to incorporate the feedback iteration loops of modern technological development (Knott and Dawson, 2000).

7.4 Step 1: Scope and Vision

This is the first step of the decision making phase where a company decides whether it should offer E-commerce. The purpose of this stage is to decide the scope of the E-commerce project to be undertaken. ie.:

1. When, if ever, should the company offer E-commerce?
2. If it is offered, what form should the E-commerce take?

The output of this initiation stage, therefore, is in the first instance, a vision of the E-commerce venture the company aspires to undertake.
Managers should ask themselves the twenty managerial questions given in Chapter 5 during this first step. Note, however, that the company may not be able to answer all questions at this stage; some questions will take significant research for an answer to be obtained. It is likely, for example, that an in-depth competitor analysis will be needed to answer question 9. Other market research may be needed to answer questions such as:

- Are customers happy with existing services or do they require more?
- Are customers interested in buying on-line?
- Will supplier companies be willing to interact on-line?

As question 19 of the twenty key questions involves the twelve critical success factors, the critical success factors also contribute to this first step in the framework. However, at this stage the critical success factors have a relatively minor role with question 19 simply ensuring that the topic covered by each factor is considered. The critical success factors play a more critical role as conditions for sustainable success in the later stages of the framework.

To determine the possible options available for a company to exploit the Internet, a company need look no further than the examples on the Internet already. An analysis of the current company websites shows that companies have normally adopted one of the following five models. The company can decide, therefore:

1) not to go for E-commerce, at least for the time being, with the risk that a do nothing strategy could mean lost opportunities and other threats from competitors. This aspect is addressed in key question 9 on competition. This option is usually only taken by small companies who have not got the resources to develop a website, or who have simply not got around to it. However, there are some surprisingly large organisations who do not seem to have any Internet presence. An example is Ugandan Airlines, a national airline with no apparent website of its own.
2) to use the web just as a means of advertising. This option is popular as it involves low cost, no cost of security, payment, web hosting etc. The level of investment is considered in key question 17. An example of a company using its website for advertising only is Camperland, a camping equipment company.

3) to open online stores to complement existing stores. An example is Tesco’s “e-tailing” initiative. This helps to build on the company’s existing brand name and image (this is critical success factor 8).

4) to establish a separate online division within the company. This may be the outcome of consideration of key questions 4 and 6 on business and organisational change. John Lewis is an example of a company that has adopted this strategy.

5) to dissolve their regular business and go for a full online business operation such as Egg’s online banking. The aim would be to streamline the business as suggested by key question 12.

Before starting a strategic plan there is a need to identify which out of the five options described is best suited to the overall company vision. The choice depends not only on the nature of the business the company conducts but also on the environment it operates in, internal resources available and the company’s position and initiatives (key questions 2, 7, 8, 9, 10, 14, 15, 16, 17, 18 and 20).

E-commerce strategy needs to be continuously refined based on learning from the changing market. For this reason the twenty questions need to continually reviewed. It is possible that changes in the environment could affect the chosen strategy direction at any time. For example, changes in the position of competitors or in supply chain partners (key questions 9 and 10) may affect what the company intends to do and how they wish to position themselves in the market. This means that at any stage a strategy rethink may be necessary. For this reason, in Figure 7.2, feedback loops are shown back to step one from all subsequent steps.
The output of the first step will be a vision of when the company will enter into the E-commerce market, how it will do so and what form the E-commerce offering will take. It will also include the identification of areas for further research to be carried out later in the feasibility stage (step 3). It must be stressed, therefore, that the vision of when and what form of E-commerce should be offered, is purely an aspiration at the end of step one. Indeed, because of the uncertainty over areas identified for further research, the aspirations will inevitably be provisional pending on the outcome of the research. At the end of the feasibility stage the research may show that the aspired E-commerce venture is not practical, in which case a rethink of when and how to offer E-commerce is required. This is shown in Figure 7.2 as a loop back from step three to step one.

This first step and the next two steps were used to carry out the feasibility study for a footwear company discussed in Chapter 8.

7.5 Step 2: Aligning the Business Aims for E-commerce with the Company’s Corporate Strategy

This step is similar to step one but with a different emphasis. Given that company has determined the timing and direction of its E-commerce plans, this step forms a reality check from the business point of view by asking if the chosen E-commerce direction fits in with the company’s overall business plans. In theory, a company should be conscious of its corporate strategy in everything decision it makes, so for an astute organisation this step will be indistinguishable from step one. However, as revealed in chapter two, many companies have rushed into E-commerce without fully considering the business consequences and have often failed as a result. For this reason, therefore, the examination of a company’s E-commerce aspirations from the business perspective is made into a separate step to emphasise its importance and ensure this aspect is not overlooked.
An example of a company needing this step would be if, say, at the end of step one Company ‘X’ had decided that it wanted to model its strategy on Amazon.com. Amazon, however, traded at a loss for several years while it built up its name and brand image. Company X’s corporate strategy may be to give the shareholders an early return on their investment to build confidence. This means the corporate strategy and the E-commerce strategy is clearly incompatible and the aim of this second step is to highlight this type of incompatibility as early as possible in a company’s E-commerce initiative.

To undertake this step involves a company first identifying its overall business aims and objectives and then revisiting many of the twenty questions to consider the alignment of the answers with these aims and objectives. This, in practice, is again an iterative process as the company may well wish to adjust its overall business aims to take into account new opportunities offered by the Internet. For example, at the end of step one a company may decide it wants to offer the same level of personal and back-up service as its major competitor. This would be likely to involve relatively high numbers of service personnel. If the company’s overall strategy is to cut costs by reducing staff numbers there is again an incompatibility. In this case the company may decide to modify its overall corporate strategy to redeploy people from other areas into its new E-commerce project. This would be an example of corporate strategy being modified to be compatible with the E-commerce aims. The important aspect is that the corporate strategy and the E-commerce strategy align so that they are compatible and based on sound business principles.

Rather than simply asking the 20 key questions a second time, to consider the answers from a different point of view, that of aligning the E-commerce aims with the overall business aims, it may be useful to consider the questions in a different form. The suggestion by Efraim et al. (1999) that the business aims behind an E-commerce strategy should include some or all of the list below is a useful means of considering
the E-commerce aims in relation to the corporate strategy. These suggestions are related to the answers to the key questions (as indicated in brackets) but give a completely new viewpoint. Efraim et al's suggested business aims for E-commerce are:

1. To improve customer service and interaction (key question 3).
2. To increase brand awareness and awareness of the company (critical success factors 7 and 8 via key question 19).
3. To expand geographic reach (key question 2).
4. To expand into new markets (key question 2).
5. To increase revenue and market share (key questions 1, 2, 9, 11 and 17).
6. To reduced operating costs (key questions 1, 7, 12 and 17)
7. To increasing awareness of corporate profile. Eg.

   o To be seen as an innovative and progressive company through being an E-commerce leader (key questions 3 and 15 and critical success factor 6 via key question 19).

   o To compete with bigger rivals on more even terms (such as Egg's competition with traditional banks) (key question 9).

Ashgar (2001) makes similar suggestions to those of Efraim et al. (1999) in aiming for increased market and market share, a better service for customers and reducing supply chain costs. However, it may not be clear at this stage whether these benefits outweigh the costs of entering and operating an E-commerce facility. It is likely, therefore, that this stage will also establish the need for a full cost-benefit analysis to be carried out in the feasibility study in step three.

7.5.1 The Business Role of the Company Web Site in E-commerce

At the end of step one the company should have an idea of the overall aims for its web site as part of its overall vision for E-commerce. However, it is also useful to focus on the business aims for this web site in relation to the overall company strategy (key questions 1, 2, 3, 10 and 18). The company may or may not already have its own web
site. An examination of aims needs to take into account how this web site will be
developed into an E-commerce facility. If the company does not have a web site or its
web site is very simple, then developing a web site can be a simple way of exploring
ideas for a more ambitious full E-commerce implementation later. When considering
the business role it requires for the web site it should ask itself:

- Is it for image? Is there a need to be seen to keep up with technology and
  competitors?
- Is it purely for information, for example to supply addresses and contact
  numbers?
- Is it purely for internal use or for use by partner companies?
- Is it to advertise products? In which case, are existing customers the target or is
  the objective to reach new customers?
- Is it to supply services? Could the site be used to provide a help line or other
  backup service?
- Is it for delivery? Can the products be delivered through the web site?

If a company does not have a website at all it may well wish to produce a prototype
website so that the reaction of users can be monitored. Experiences from the initial web
site can then help the company determine whether it wishes to further develop the
facility and whether to take the step of buying and selling over the Internet.

When considering to what extent a company wishes to utilize the Internet, it is
necessary to understand how the proposal matches the existing company business (key
questions 4, 5, 6 and 7). The company must establish how the Web can be incorporated
into existing lines of business, supply and channels of distribution. Targets may need to
be determined for the number of visitors to the web site and the number of resulting
transactions for the move into E-commerce to be worthwhile. This will require a full
feasibility analysis to be carried out. This shows that step two is not only closely linked
with step one but also to step three. It may be necessary to carry out parts of the
feasibility study to answer some of the questions concerning the business aims, so a feedback loop from step three to step two is included in Figure 7.2.

The outputs from step two are similar to those of step one, a vision of the timing and direction of the E-commerce initiative and an identification of areas for further research to be carried out in the feasibility study (step three). This time, however, the vision is verified as being compatible with the overall business strategy and there may be additional areas identified for further research such as a cost-benefit analysis and analysis of trials of a prototype web site. The company should, therefore, be better prepared for the feasibility study than it was at the end of step one.

7.6 Step 3: Analysing the Feasibility of the E-commerce Initiative

Once the business aims and objectives for E-commerce have been established as far as possible from step two, the company needs to carry out a feasibility study and analyze whether it is possible for the organization to offer the desired online services with the resources available (key questions 14, 15 and 17). This step involves re-visiting the twenty key questions to ensure that detailed answers are available. Market research identified in steps one and two will need to be completed to ensure all missing or incomplete answers can be produced.

The research required to answer the twenty key questions will vary from company to company. However, there are a number of areas which most companies will need to investigate to some depth. These are described in the next sub-sections.

7.6.1 Customer attitudes

To answer key question 2 on who will be the E-commerce customers and question 3 on how to give added value to the customers, a detailed customer survey may be required. The business objectives may be to give a better service to and increase business from
existing customers or the aim may be to gain new customers. If the latter is the objective, the aim may be to gain customers over a wider geographic area, possibly from all round the world. In either case some form of customer survey is likely to be required to see whether the customers are interested in the E-commerce to be offered. Depending on the E-commerce objectives it may be necessary to survey existing customers, non customers or both. If a global reach is the objective there is likely to some considerable effort required to determine the attitudes from different parts of the world. Although such a customer survey may be costly and time consuming, its importance is likely to be crucial - there is no point in setting up an E-commerce facility if no-one is interested in using it.

A survey of customer attitudes could also help determine the answers to key question 11 on pricing policy and key question 13 on customer touch points.

7.6.2 Competitors

It is also likely to be necessary to carry out research to determine the E-commerce activities of competitors to answer key question 9. Ghosh (1998) identified the following question relating to key question 9:

Will I be at a significant disadvantage if my competitors provide these capabilities to customers before I do?

Competitor analysis can take the form of passive observation or active enquiry. Passive observation means examining the published accounts, reports to shareholders and other company statements and of noting what facilities and merchandise is provided on the website of each competitor. Although this is relatively straightforward it reveals nothing about what a company plans to do in the future so this form of analysis is of limited use on its own.

Active enquiry means putting questions to competitor companies to determine their future plans. This has the obvious disadvantage that companies are unlikely to want to
reveal their future plans to their competitors. It is likely, therefore, that some form of independent consultant will be needed to help obtain the information required. This will still be difficult and often impossible because of company secrecy, but even the smallest piece of information from a competitor could be very significant when formulating an E-commerce strategy.

7.6.3 Business options

An important aspect of E-commerce introduction is the transformation required of core business processes (key questions 4 and 12), infrastructure (key question 7) and organisation structure (key question 6). This requires a thorough understanding of the existing business. The company needs to carry out a full SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). By giving executives a tool that is familiar, such as SWOT, and yet targeted to the fast changing environment, companies can quickly react to changes in their own environments (Hackbarth, 2000).

From the SWOT analysis the company can find, for example, an opportunity to sell E-commerce software developed for internal purposes to others or an opportunity to add new products. Threats may come from competitors. Strengths can be from internal operations and sound logistics and weaknesses may involve a lack of skilled personnel. By mapping out the weaknesses and opportunities, risks can be identified and action planned to reduce the risks so that advantage can be taken of the opportunities.

Performing a SWOT analysis will also assist the company to answer key question 5 on outsourcing, question 10 on business to business E-commerce, question 14 on staffing, question 17 on investment and possibly even question 15 on new technology.

7.6.4 Timing of E-commerce Entry

Key question 16 on timing to market will require particularly careful consideration as this is one of the principle components of the vision created in steps one and two of the framework. If a customer analysis, competitor analysis or SWOT analysis has been
carried out as part of step three then the timing question must also be examined again as these will inevitably affect the answer to question 16. For example, those companies that are seizing the opportunities offered by the internet can establish a lead over their competitors. Tesco, a supermarket chain in the UK, for example, have built a substantial lead over their rivals by their early entry into the E-commerce marketplace. However, the timing can be critical and there are many examples of companies trying to establish themselves before the market was ready and have failed as a result. For example, Boo.com was probably trying to sell clothing too early for the public to use E-commerce for this purpose in sufficient numbers for the company to be viable. An analysis of customer attitudes may have prevented Boo.com from making this mistake. The timing to market is as important for E-commerce as it is for traditional marketing, making key question 16 on timing particularly important.

7.6.5 Cost-benefit analysis

The answers to several key questions should reveal the benefits of offering E-commerce in the form of new customers (question 2) improved supply chain (question 7) and a streamlined business operation (question 12). To answer question 17 on level of investment the balance must be understood between these benefits and the costs of introducing and operating an E-commerce project. This will involve reviewing what is present at the moment in terms of skilled staff, technology and resources, and estimating costs of building, implementing, and supporting the hardware, software and human resources needed (key questions 14, 15 and 17). Regrettably, as the recent fall in the technological stock market shows, the excitement of entering a new and innovative technological market seems to give some managers an unjustified, over optimistic view of their position. In many E-commerce projects, costs have been underestimated and benefits overestimated (Bicknell, 2000) so companies entering this field should exercise some caution. This cost benefit analysis will support step two of the strategy formulation in establishing the business aim of offering E-commerce. If the cost-benefit analysis shows there were mistaken assumptions in stage two, the business
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aims will need rethinking, hence the feedback loop from stage three to stage two in Figure 7.2.

In performing the cost-benefit analysis, care must be taken not to view everything in simple financial terms. Amazon.com outlined a number of key measurements that it tracks. "We first measure ourselves in terms of the metrics most indicative of our market leadership: customer and revenue growth, the degree to which our customers continue to purchase from us on a repeat basis, and the strength of our brand." It is interesting to note that only one of these four measurements is directly financial in nature, reflecting the fact that current financial performance is not the only consideration (Mathieu, 2001). In performing the feasibility study, the experiences of companies such as Amazon must be noted so that ALL considerations are taken into account. The thorough answering of all twenty key questions should ensure that managers do take all necessary aspects into consideration.

At the end of step three the output is a "solid" vision of the E-commerce timing and direction that not only makes good business sense for the company but is known to be a practical way forward. A full set of answers to the twenty key questions will be available and this will mean that all uncertainty from the previous steps is now removed. The vision is no longer provisional in nature but is now firm enough for a full system design and implementation to proceed. In determining what is and is not feasible, a by-product of the feasibility study will also be that many of the system design decisions of the next stage will have already been taken. This is explained in the next section.

7.7 Step 4: Planning and Design of E-commerce

The purpose of this step is to make the detailed design and planning decisions for the construction and eventual shape of the E-commerce system to be developed. As strategy formulation should depend on the development of strengths and opportunities,
the design and planning of the E-commerce project will be heavily based on the findings of the first three steps of the strategy formulation framework. In particular, many of the answers to the twenty key questions and considerations of the critical success factors will have a direct influence on the E-commerce system design. For example, the critical success factor on security and the key questions on outsourcing and staff resources may have lead to the conclusion that the only feasible option for a particular company is to outsource its electronic payment facility to a well respected third party. This then will have dictated the design of this part of the E-commerce system. In many cases the design and planning step of the framework, therefore, will amount to simply filling in the detail for the outline derived through the feasibility study. In the case of this example this will amount to choosing which particular well respected third party to work with and how this company’s services will connect with the rest of the E-commerce system.

As well as having a close relationship with previous steps of the strategy formulation framework, the planning and design stage can also have a close relationship with subsequent stage, step 5 - Implementation. As an E-commerce system has a major technical component it is constructive to adopt the best practice of technological development and, whenever possible, aim for an incremental development of the technical facility. A first step is to establish a web site with general information about the company and products. Initial experiences from this can help determine future directions of development. Subsequent steps may be to:

- Connect the web site to the stock database so that the site can list products and their availability.
- Personalise the site so users can set up an account and place orders over the Internet.
- Enable a full E-commerce facility that allows secure payment over the web.

This iterative development is shown in Figure 7.2 as the feedback loop from step five to step four. Unfortunately it may not be appropriate for all companies to employ an incremental development plan. A pure-play dot-com company, for example, will need
to have full payment facilities available from the outset or it will not be able to generate any income!

The details of the E-commerce system design will vary from company to company and each organisation will need to concentrate on different aspects depending on the outcome of the previous steps. However, there are a number of design suggestions that will be helpful for all companies to consider based on the strategies employed by other successful companies and these are listed in the next sub-section (7.7.1). Sub-section 7.7.2 then lists four essential design considerations and sub-section 7.7.3 lists some common pitfalls to avoid at this stage. All of these design suggestions and considerations should have been covered to some extent when deriving the complete answers the 20 key questions in step three of the framework, but they are included here to ensure they have sufficient emphasis and attention when adding the detail to the system design. An indication of which key question answers would support the suggested design considerations is given in brackets in the relevant parts of the following sub-sections.

7.7.1 Suggestions for E-commerce system design

Managers should consider the following processes which have been employed by successful E-commerce companies to develop their strategy. These suggestions for E-commerce system design are related to questions that were raised by some of the high store retailers during a question and answer session at the focus meeting at NSB Retail described in Chapter 5.

1. The company should consider creating an independent E-commerce division or department with employees having specialist skills. A mixture of skills is needed (key question 14). As well as the technical skills to implement the hardware and software required for E-commerce transactions, there will be a need for specialists in sales and marketing, purchasing, human resources, training, finance and business process re-engineering. An example of a
company that created and independent E-commerce division is the high store retailer John Lewis. Trading online as JohnLewisdirect, they acquired skills from an existing dot-com company called Buy.com and created a separate division. When interviewed the managing director of John Lewis, Simon Paltehrope, stated in January 2002 “by creating a separate division the existing management structure and operations have not been affected” (key questions 4 and 14).

2. Companies should introduce E-commerce as a corporate culture as a top down led management initiative. This may require education and training of managers in the first instance so they understand the benefits (and risks) associated with E-commerce introduction. Many E-commerce consultancy companies such as IBM.com, KPMG state the importance of managerial training (Bicknell, 2002) (key questions 6 and 14).

3. The SWOT analysis should have identified the company’s strengths. An E-commerce initiative needs to build on these strengths. The cost benefit analysis should enable managers to set targets and prioritise E-commerce activities to give the greatest opportunities for the earliest financial return with the minimum risk (key question 17). Prezzybox.com carried out a SWOT analysis when the company started its online business.

4. Companies should not underestimate the amount of business re-organization required to introduce E-commerce (key question 4). These changes should, therefore, be harmonized with any other change initiatives the company is undertaking (key question 18). The changes need to be seen as part of the company development and not as an add-on extra. Clotheslocker.com underestimated the change and this contributed to its failure.

5. Companies need to consider whether they can carry out the development work themselves or whether they should subcontract part or all of this work (key question 5). Who, for example, is going to design the web site? How will the content be maintained and updated? Who will administer and control the system after it is installed? The company must consider whether it has the
appropriate development resources and experience to build E-commerce systems or whether there are existing products that could provide the foundation of a new system (key questions 14 and 15). The importance of outsourcing was emphasised during a seminar held in London at Pricewaterhouse coopers training centre event held by the British Computer society by Andrew Whinston from PriceWaterhouse Coopers, (BCS seminar 2003).

7.7.2 Designing the system

The twenty key questions, including the question on critical success factors, should ensure that all relevant aspects are considered at each stage of formulating a strategy. However, there the following four questions can help focus attention on areas that must be taken into account at the earliest possible design stage. These questions correspond to frequently asked questions reported by In2netLogic from their customers considering E-commerce.

1. How can an existing web site be developed to maintain customer loyalty? The design should take into account the values the company wishes to promote, the image it wished to build and maintain, as well as the customer requirements of convenience and ease of use (key questions 2, 11 and 13 and critical success factors 2, 8 and 9 via key question 19). There are both the long-term goals to be considered and the short-term stages needed to work towards the goals in a logical progression (Kalin, 1999).

2. Who will process the credit card orders? Will E-commerce be employed to transmit credit card orders to the company's merchant account provider (key question 10)? The extent of E-commerce introduction can also depend on the company's partner organizations (Treese and Stewart, 1998).

3. How will the order and fulfillment information be integrated into the accounting system (key question 12)? It is important to remember that a sale
continues beyond the point of order. The E-commerce system needs to be able to handle the whole process (Young, 1999).

4. How can a company be sure that their data and that of their customers, suppliers and partners will be secure (critical success factor 1)? This is an important technical issue that needs to be addressed from the outset. Without secure transactions, there will not be the customer confidence for the E-commerce system to succeed (Whipple, 1999).

7.7.3 Some Pitfalls to Avoid During Planning

If attention is paid to the twenty key questions, companies should avoid serious problems when entering E-commerce. However the following are included to focus attention on the more common pitfalls. Companies should not:

1. Neglect planning for customer service both before and after a sale (key questions 2 and 13 and critical success factor 9 via key question 19).

2. Fail to integrate their E-commerce with their traditional business (key question 4).

3. Fail to prepare for success and the volume of business it may generate, e.g. avoiding network traffic jams (key question 15).

4. Underestimate the need to advertise the web site and E-commerce facility (critical success factor 7 in key question 19).

5. Assume that the web site interaction is the only aspect that will make the company different to its competitors - the underlying systems are equally important and must be developed from the outset to avoid failure (key question 4, 7, 10, 12 and 15).

6. Make hasty (and costly) decisions because of the pressure to get into the market as quickly as possible. It is important to react quickly but it cannot be done without a minimum of thought (key question 17).
7. Neglect issues of scalability. If the company is successful it may have to grow its E-commerce business very quickly. It is important that the E-commerce system does not itself impose limits on growth (key questions 15 and 17).

The outputs at the end of this stage will be a set of detailed design and planning decisions for the construction and eventual shape of the E-commerce system to be developed. This will give detail ranging from the technology and interfaces to be used to the processes to obtain and supply the goods and handle enquiries and returns. In practice, however, the output of this step may only have sufficient detail for a first phase of implementation if some form of evolutionary development is planned. In this case further system design decisions will be made after the first phase of implementation when the company returns to the design and planning stage for the next phase of the development.

7.8 Step 5: Implementation

Ideas, plans, and strategies are one thing - implementation is something entirely different. Jeff Bezos (2001) of Amazon.com claims that nothing Amazon.com does is very original - it just executes better than anyone else. In other words, strategy is nothing without implementation.

As in the design stage, the twenty questions should prepare a company to execute an implementation in the best possible way, building on the strengths of the company. The SWOT analysis will have identified strengths within the company that may be usable in the E-commerce project. For example, if a company already has a good distribution network this may be the foundation for developing the infrastructure for E-commerce distribution (critical success factor 5).

In the design stage the twenty key questions are more important as design involves decision making about the various possible options. During the implementation stage
the critical success factors become more important as these are more concerned with long term sustainability than with decision making. To assist in the consideration of the relationship between implementation and critical success factors, the following points are suggested for the company to consider:

1. **Incremental development.**

Many E-commerce implementations fail because they promise long term gain but no immediate benefits (Bradbury, 2000). Amazon.com, for example, has been trading for seven years and yet has only recently started to make a profit. It is, therefore, important to keep in sight the business transformation as well as the long-term aim. Whenever possible, E-business projects should be divided into incremental steps with some shorter term targets so that immediate benefit can be delivered with flexibility in the overall plan. These targets need to include putting each of the twelve critical success factors in place at the earliest possible incremental step as well as ensuring the financial return.

2. **An commitment for a quality implementation**

In order to have a successful E-commerce development, an organisation should ensure there is board level commitment and support for a quality implementation from all departments, people involved and stakeholders (critical success factor 9). Projects have been known to fail without such commitment (Hill, 1999). To put this “E-commerce culture” in place, some education and training will need to be implemented before any further development is attempted, with managers being the first to be trained.

3. **Obtaining the right skills**

As well as education on the benefits of E-commerce, it will be necessary to introduce training on the business and technical issues of creating an E-commerce system. No one person can do everything, separate training will be required for the different disciplines of hardware, software, networks, marketing, finance, human resources, process reengineering and law in order to build the necessary competence team (critical
success factors 11 and 10). Where necessary, new staff will be required. This may involve hiring individuals or working with other companies through outsourcing or other partnerships (critical success factor 5). Once the staff with the right skills are in place, the technical staff and operational managers can be involved in the decision process. To maintain the E-commerce culture this should continue throughout the development and operational life cycle.

4. Partnerships
Many of the advantages of E-commerce will be lost if it is implemented in isolation. It is beneficial to involve suppliers and distributors. This involves spreading the E-commerce culture beyond the company boundary. However, if partner companies are willing, it may be possible to cooperate in development work and training. It can be constructive to review current distribution and supply chain models used and examine the potential effect E-commerce will have on the current logistics. It is likely to be possible to increase the number of electronic connections, and as a consequence simplify inter-organizational processes with financial advantages for all concerned. This is important for companies who rely on partner companies to provide its overall infrastructure (critical success factor 5). The relationship with partner companies will need to be continually reviewed as other companies make and follow their own initiatives.

5. Satisfying the customers
In the feasibility stage surveys and interviews may be conducted to learn of customer attitudes. Once the customer base is identified the company can build a close-knit community with its customers, encouraging customers to find out more about their products and services through message boards and emails (critical success factor 3). This builds the company’s image (critical success factor 4). Also the more that can be found out about the customers, the more the products can be tailored the customer and the less likely they will be to switch to another supplier. However, this will need to be an on-going activity throughout the development and operation of the system as
customers' needs and wants are changing as rapidly as the technology advances (Seybold, 2001).

6. **Web marketing**

To take advantage of the on-line customer community a web centric marketing strategy needs to develop alongside the technical developments (critical success factor 7). Even if the current marketing strategy has taken the Internet into account, it is necessary to develop a marketing strategy that clearly targets the Internet as a primary marketing channel.

7. **Keeping up with technology**

The technical issues of E-commerce implementation will also need to be continually reviewed throughout the system life cycle. The technology is moving at such a pace that it is likely that advantage can be taken of developments worldwide of technology and standards that were not available at the start of the project (critical success factor 6). Security is a particular area of concern as it is critical to ensure that the company's systems keep up to date with expected standards of security, both within the organization and across all trading partners (critical success factor 1).

8. **Allowing for maintenance**

It is advisable to build scalability and flexibility into the solution and to standardize wherever possible to enable the technology to grow with the system. It is also important to keep testing and re-testing the E-commerce web site to ensure that as it grows with development, it remains easy to use (critical success factor 2) and remains compatible with the latest developments in Internet browsers on all common hardware and operating system platforms (critical success factor 6).

During the implementation phase it is possible that conditions will be found that will prevent the implementation being carried out as planned in the design stage. For example, the decision may have been taken in the design stage to recruit staff with the
necessary technical abilities. This may prove impossible to implement if there is a shortage of these skills. This will necessitate a rethink of the plan. An outsourcing company could, perhaps, be used instead. For this reason a feedback loop is shown in Figure 7.2 from the implementation in step 5 back to the design in step 4. In any case, if an incremental development is produced this will involve bits of new design after every incremental step so this feedback loop may be followed several times over and this could even involve looping back to the feasibility or earlier stages of the strategy formulation framework.

The output for this step will a working system. This may not be the full system if an evolutionary development is planned, but the part of the system that has been developed should be fully working and usable (Knott and Dawson, 2000). For example, the first phase may be to produce a website that reports on the range and availability of goods that can be purchased in conventional retail outlets. The second phase may allow the goods to be ordered through the internet, but with payment to be sent later, and the final phase would allow full online transactions. At the end of the final iteration of an evolutionary development the full E-commerce system that had been planned should be working and usable.

7.9 Step 6: Strategy Assessment

"Everything has been thought of before, but the problem is to think of it again".

Johann W. von Goethe

Like any other project, E-commerce projects need to be assessed during and after implementation. Bicknell (2000) stated that because E-commerce is a rapidly changing landscape, firms couldn't afford to spend too much time deliberating over the best plan. Hosbam (2000), creative director of Agency.com, confirmed this, stating that "companies' biggest problem is speed, they are too slow". Bicknell (2000) believes that
with the changing market conditions companies have to plan quickly but then revise their E-commerce strategy every few months.

The objectives of strategic reassessment are: -

- To find out if the E-commerce system is delivering what it was supposed to deliver. A common pitfall is to think that selling over the web means the company must be making money over the web. This is not necessarily the case. A lack of profit in the beginning need not be a problem if it was part of the overall strategy, as Amazon has illustrated.

- To learn from both the successes and failures of the system reviewed. Whether the system is living up to expectations or not it should be possible to learn from mistakes and improve future planning.

- To identify failing projects or projects likely to fail as soon as possible and determine the reasons for failures. The twelve critical success factors are important for this. A company must ensure that each of these CSFs are being achieved or otherwise their E-commerce project is likely to fail.

7.9.1 Review questions

Feedback and corrective actions to give a policy of continual improvement are needed for any development, including E-commerce. For companies who have implemented an E-commerce strategy, an example set of review questions were compiled for use as a checklist by the review team. The set of questions were compiled from notes gathered from seminars, such as the Ebiz expo exhibition held in October 1999, Summer 2000 and November 2001, conferences such as the 2001 International Centre of E-commerce in Vienna, the 2002 International Academy of E-business in Orlando and three NSB customer focus meetings held in October 2000, February 2001 and January 2002. These customer focus meetings were organised by NSB to discuss E-commerce provision and each was attended by 10 retail managers. Although the meetings were
not specifically called for the author's research, the author was able to attend and take notes. The set of questions below are not intended to be a definitive list of questions but an example of the type of review questions a company should use. A company could compile their own list of questions that may be more specific to their own needs. The important point is that a list of review questions should be compiled in advance to ensure that all aspects of the E-commerce development are considered. The author's suggested review questions are:

1. What were the expectations and targets for E-commerce for the company, were the targets achieved and were they realistic?
2. What products and services did the company want to offer and is the system delivering them?
3. Have unanticipated problems occurred? If so, were they handled successfully?
4. What costs did the company hope to reduce? What cost reductions were actually achieved?
5. Did other costs increase unexpectedly? If so, why? What extra costs were incurred?
6. What were the sales objectives and were they realistic? How well were they achieved?
7. Did web and Internet communications reduce previous communication costs and if so, by how much?
8. Did the company improve customer relations and what evidence is there for this? If not, what went wrong?
9. Have suppliers provided adequate services? If not, what cost was incurred?
10. What internal issues have arisen? For example, has it had an effect on employees' resistance to change, cultural change, etc? Can any problems be quantified?
11. Is the web site making the best use of available technologies? How will the company stay on top of online developments in the field?
12. Does the web site effectively convey the image and message the company needs?

13. What information has been gained from customer surveys, monitoring the use of the company web pages and sales made through E-commerce?

14. Does the company's business offer other services or customer support functions that could be provided online? If so what are the projected sales?

15. Are there further efficiencies that could be achieved by more effective electronic communication?

16. Could the company's database of electronic contacts be further extended and used more effectively for marketing? (Note however, that care must be taken over privacy. The company should ensure it follows a clear privacy and ethical policy in all its use of customer data.)

17. Have all the twelve critical success factors been achieved, and if not, is there a plan in place to ensure they will be achieved. It is particularly important for those critical success factors identified as being the most significant in the feasibility study are achieved quickly and comprehensively or the E-commerce project is likely to fail early in its life.

The above 17 questions differ from the original 20 key questions for managers in their purpose and format. The 20 key questions for managers are designed to raise issues for consideration and tend to be forward looking for the purpose of decision making. The above 17 questions should be used to look back at the progress and achievements. Many of the 17 questions given in this section involve quantification of answers. This helps identify the significance of the information revealed and this will then help prioritise future initiatives. The 17 questions also aid in reviewing what has been missed out and how improvements can be made, so that companies can use it as a guide to their future E-commerce operations.
7.9.2 Web traffic analysis

The electronic nature of a web site means that information can be collected much more easily and effectively than is possible for other types of commerce. In particular, it enables the following questions to be asked:

1. Are there any obvious patterns in the Internet traffic, or do the paths the company's visitors follow give any insights into their preferences or provide opportunities for further E-commerce growth?
2. What are the common routes users take through the web site and what are the top exit points? Are these appropriate? Can these be changed by better site design?
3. Which external sites link to the web site? Are these appropriate? How often are they used? Is sufficient return being generated on investment in online advertising?
4. If the web site has a search facility, what are the most common search phrases and do they give any ideas for new areas of business development?

The answers to these questions can help answer some of the 17 review questions, particularly question 17 referring to the critical success factors. They can determine whether the web site is simple and easy to navigate (critical success factor 2) and is a means of determining what customers really want (critical success factor 3). To a lesser extent they can also help determine whether the marketing of the site has been successful (critical success factor 7) and whether a quality service is being provided by the website (critical success factor 9).

7.9.3 Assessing the achievement of the critical success factors

The last of the 17 review questions is the most significant and should always appear on a review checklist. The twelve critical success factors represent testable conditions that a review should check have been measurably achieved. Each company can decide its
own measures that these twelve critical success factors have been achieved to their own satisfaction. The following is suggested as a typical set of tests for critical success factor achievement:

1. **Ensure the website is secure** - Is secure encryption used for every possible transaction through the website? Have there been any breaches of security so far?
2. **Keep the website simple and easy to navigate** - Has there been any adverse feedback concerning ease of use? Is there any evidence of customers being put off by the interface? Have customers made mistakes when using the site?
3. **Listen to customers** - Is there a means of eliciting customer opinions (eg. A feedback facility)? Is there a process in place to enable the company to consider and react to customer opinion?
4. **Sell the right product or service** - Is there evidence of demand from (1) the number of enquiries received? (2) the number of sales made?
5. **Have the right infrastructure and link with the backend system** - Has any part of the infrastructure failed to perform its task or has not performed in an acceptable time?
6. **Keep up with innovation** - Are there any new hardware or software facilities demanded by customers that the company has not implemented? Is the company likely to be at a competitive disadvantage through not adopting any newly available technology?
7. **Market the website** - Is there a marketing strategy in operation? Has the site been marketed in a sufficient number of places? Is there evidence that potential customers know of the site by the number of visitors to the website?
8. **Build brand name and image** - Is there any evidence of the brand name being recognised from independent surveys or reviews? If so, are the reviews positive?
9. **Build in quality within the website, products and services** - Have there been any errors from the website, or mistakes made in the processes? Do customers give
positive feedback on products and services? Is the number of returned goods acceptable? Is the number of repeat customers as high as expected?

10. *Follow all the legal issues, patent and trading laws* - Do all the company procedures, products and services fully comply with the law, not just in the UK but in every country where customers are targeted or likely to be targeted in the future?

11. *Have the right skilled workforce* - Has there been any occasion when a process was not executed quickly and effectively through lack of adequately trained staff? Is there any process the company cannot follow because of a lack of staff with appropriate skills?

12. *Have a well-defined strategy* - Is the strategy documented and publicised to all staff? Has the strategy been followed in all respects?

### 7.9.4 Re-visiting the 20 key questions

The final part of the strategy review is to, once again, ask the 20 key questions. The original 20 key questions are still relevant and should be used again in the strategy assessment stage to see what has changed and how it has changed. These questions should be re-examined on a regular basis to keep the strategy relevant and up to date. If one or more of the answers have significantly changed, then a change of strategy direction may be necessary. For example, a change in competitor activities may bring new pressures or a change in supplier e-readiness may bring new opportunities that must be considered.

If the answers to the 20 key questions are substantially the same then, provided the 17 review questions have been answered satisfactorily and the twelve critical success factors are being achieved, it can be concluded no change in strategy is required. However, if any of the 17 review questions cannot be given a satisfactory answer, if any of the 12 critical success factors is not being achieved, or any of the 20 key questions indicates a change in circumstances then the strategy life cycle will require a
loop back to the earlier steps of the strategy formulation framework. In extreme cases the whole vision of the E-commerce provision may need to be changed which would involve going right back to step 1. In other circumstances a change in design or implementation may be all that is needed. For this reason a major decision diamond is shown in Figure 7.2 to decide if a change in direction is needed, and if so, to what step in the framework must the loop go back to. Even if no change in strategy is required, there is still a loop back to the start of the assessment phase as this step must be executed on a regular basis to ensure the E-commerce venture remains on-track and that no new circumstances are requiring a change. How often the assessment stage is repeated is up to each company's procedures, but with the fast moving nature of E-commerce it is suggested that the review is carried out at least once a year.

7.10 Conclusions

The strategy guidelines have been developed by applying the research from previous chapters to modify a standard strategy creation model suggested by Turban(2000). The critical success factors and key questions for managers derived in chapters 4 and 5 showed that it was necessary to highlight the decision points in the strategy formation guidelines. While all the key questions are particularly important in the initial stage of deciding whether or not to offer E-commerce, they also have an influence throughout the strategy formation as this chapter has shown. While the critical success factors are more important in the implementation and assessment stages the topics they cover must also be taken into consideration in the early stages as, again, this chapter has shown.

To finalise the strategy formulation framework of this chapter, two further interviews were held with John Makin of In2netLogic following the initial interview that prepared the way for the NSB focus group meeting. In these interviews clarification was sought on areas of uncertainty in the strategy formulation model. In these interviews it is difficult to say who generated what ideas as the two way interaction between the author and John Makin produced a synergy that helped to create, clarify and consolidate ideas.
The opportunity was also taken to discuss the framework with the managers during the case study of Prezzybox.com discussed in the previous chapter, and this also helped to consolidate the framework and method. In2netLogic later produced their Internet Decision Pack for their customers, given in Appendix 3, based on these discussions and from the author's conference paper given at the International Centre of E-commerce at Vienna in November 2001 (Shah and Dawson, 2001e). This paper provided a further verification of the strategy formulation framework as it was well received by the conference referees and delegates, all of which had an interest in E-commerce development.

To test how the strategy formulation framework and method would work in practice, the first three steps were carried out for a footwear company in the UK that was thinking of offering E-commerce, and this is discussed in Chapter 8. The last three steps of the E-commerce strategy formulation framework and method were then applied retrospectively to two pure dot-com companies and one bricks-and-mortar company trading online to show how well they would work in practice, and this is discussed in Chapter 9.
CHAPTER 8 – FEASIBILITY STUDY FOR OFFERING E-COMMERCE

Chapter Preface
This chapter addresses the second aim of the research, as presented in Chapter One, by exploring how a feasibility study for companies thinking of offering E-commerce, can best be accomplished (Shah and Dawson, 2002f). More specifically, it seeks to investigate how appropriate the first three steps of the E-commerce strategy framework as presented in Chapter 7, were in this context. Moreover, the chapter provides a further test of the validity of the twenty managerial questions, as they form an integral part of this framework. To this end, this chapter presents the case of a large international retail company selling footwear, which was considering offering services on-line (Shah and Dawson, 2002f). A particular point of interest to emerge from the feasibility study was the use of a customer survey, which revealed that customers were reluctance to buy footwear online. However, it was ultimately concluded that the company should still provide an online service once the logistics and costs are worked out to enable new customers to be found.

8.1 Introduction
The chapter will present material from a summarized report prepared by the author for the board of directors of a footwear company concerning a feasibility study carried out for their company. The report outlined the following: -

- An investigation of the demand for people to buy on the net
- An indication of how fast E-commerce is moving forward
- How other companies within the footwear industry were performing
- Recommendations for the company
8.2 Approach and Methodology Used to Carry Out the Feasibility Study

In order to carry out a feasibility study for the company, the twenty key managerial questions were used, as an integral part of the framework for formulating an E-commerce strategy. More specifically, the first three steps from initiation through to the full feasibility study were therefore used. The last three steps of the framework, those of planning and design, implementation and assessment were not used, as the company was not yet ready for these stages. The study had two purposes, the first was to perform a feasibility study that would enable the company concerned to act on the findings, the second was to determine that framework and method proposed did work in reality, verifying that the research was valid.

The initial contact with the case study company came through the NSB focus group meeting described in chapter five. The company was an established footwear retail company that traded through traditional bricks and mortar retail outlets. They were aware of the many issues surrounding E-commerce, but with so many considerations and options available, they required some help in producing a clear analysis of whether or how to proceed into E-commerce. The IT manager of the company, therefore, approached the author for help.

From the initial consideration of the key questions it was evident that more information was required on customer attitudes and competitor actions. For the third stage of the framework, therefore, a questionnaire was drawn up and put to the company’s customers. This was then compared with a similar survey carried out by the company four years before to identify changing customer attitudes and trends. A separate study of competitor companies was also carried out by searching the Internet to discover current initiatives and producing a questionnaire to identify future initiatives. Then, by looking at the customer survey results, the competitors’ initiatives, the timing of entering into E-commerce, a SWOT analysis and an analysis of future trends, answers to the twenty key questions that were applicable were obtained. Finally, it became possible to make a recommendation to the company.
8.3 The First Step of the Framework: Scope and Vision

This step consists of making the first attempt to answer the 20 key questions derived in chapter 5. As discussed in chapter 5 the main objective of compiling the twenty key questions was to guide managers or IT managers who are given the responsibility of introducing E-commerce in the business. Answering key questions helps ensure they are carefully considering all factors. The set of questions was what the IT manager of the company needed to clarify his thinking, so the author used the set of questions as interview questions in the first meeting conducted at the client site.

The manager reported that he had a problem with information overload, but by breaking the issues down into key questions, considerations became clearer and he could explore each potential option. As he stated "The twenty key questions proved a very useful exercise for me to determine what we already have in place, what we want and it also made it easier for me to help you with the proposal!".

Below are the answers to the 20 questions given by the IT manager:

Q1) What is it that we can now do that we couldn't do before the availability of the Net? How does it affect the nature of existing products and services? Will E-commerce replace existing processes or will it be an additional process?

Answer: "We want to use the net as an additional process to our retail shops, to operate multiple channels."

Q2) Who is our current and future E-commerce customer? Will the previous customer base adapt to E-commerce or will E-commerce attract new customers?
Answer: “This needs further research, maybe by questionnaires to our existing customers. This is a key point as we pride our service by offering customer quality, and customer needs comes first, so if customers don’t want it we won’t offer it! Simple.”

This answer made it clear that research into existing customer attitudes was necessary, which lead to the decision to carry out a survey.

Q3) How can we add compelling value to our present and future customers and still make a profit and maintain core competency? Will existing customers be attracted to the electronic medium by the easy access and extra information available or will they regret the loss of the personal touch? What do our E-commerce customer’s want, convenience, lower prices, new products or services? Can the proposed company E-commerce process meet the expectations of the customer?

Answer: “Once we have the research on the customer needs identified in the last question, I think I will then have a clear idea to answer this question.”

This question was included as a question in the customer questionnaire and also helped the IT manager to realize what they needed to do to maintain customer relationships.

Q4) Should we cannibalise our own business? How is E-commerce going to be introduced? If it becomes a new, additional process can existing staff handle it or will new staff be needed? If so, how can the customer and product expertise be transferred to the E-commerce process? If, on the other hand, existing staff are used, can the run down or abandoning of existing processes be justified?

Answer: “I am having discussions with the board, who at the moment are against E-commerce. Therefore, I want to conduct this study to report the findings to help me make the decision on whether we should or not. The main problem is funding - we will want to integrate it with our business.”
This answer showed the manager had some uncertainty on the way forward, particularly on how E-commerce would integrate with the existing business. The SWOT analysis of step 3 of the framework, the feasibility study stage would help clarify this aspect.

The answer also shows the IT Manager is already looking at his answers from the business perspective. This was a good sign, indicating that step two of the framework should be largely covered in the process of undertaking step one.

Q5) What can and should we outsource? Can we outsource much of the risk of introducing E-commerce by bringing in specialist companies who have experience in the technology and business expertise required? However, if the E-commerce is likely to be the company's main business in the future the loss of control could be a serious disadvantage.

Answer: "I think we will outsource the design and implementation as we do not have in-house expertise."

Q6) How will the introduction of E-commerce affect the company's organization and structure? Will new tiers appear in the company hierarchy or will it have the effect of flattening the organizational structure?

Answer: "I think we will have to redefine the structure, and create a department dealing with E-services."

Q7) Can the introduction of E-commerce have a positive effect on the existing distribution network or supply source? Does the electronic medium allow us to increase the product range by becoming a supply-chain portal using the existing suppliers and distribution network?
Feasibility of offering E-commerce

Chapter 8

Answer: “This will be the biggest impact, as at the moment I know our suppliers are not ready, however I think we can use the existing methods to supply.”

The answers to questions 5, 6 and 7 again shows the IT Manager is already thinking in a business sense, identifying the companies existing strengths and weaknesses.

Q8) What legal issues do we face? The company must understand the legal issues of contracts, taxation, confidentiality and intellectual property? It is likely that the company will need to seek expert advice on these issues.

Answer: “If we do decide to trade online, I would want to limit to first selling in the UK, and then expanding for overseas trading.”

Q9) What E-commerce competitive threats do we face? Competition may not come from traditional competitors! For example in case of Internet banking, there was egg.com, which emerged from nowhere. How do we compare with our competitors in the introduction of E-commerce, are we leaders, fast followers or laggards?

Answer: “Again I think this needs research”.

This answer lead to the company questionnaire being prepared and conducted in step 3 of the framework to identify what existing competitors were doing.

Q10) Are our trading partners ready to participate in E-commerce, or how soon will they be? To gain the full advantage of E-commerce it is necessary to make as many steps as possible electronic. It is possible that the success of the company’s efforts in E-commerce may depend on its suppliers and customers’ own E-commerce infrastructure.
Feasibility of offering E-commerce

Answer: “At the moment some suppliers are not ready. Again more thought will be needed and once we determine how our competitors are overcoming this barrier I think I will have a clearer idea.”

This showed that the competitor analysis needed to examine not only what competitors were doing and planning to do, but also how they were doing it.

Q11) How does E-commerce change our pricing policies? Does E-commerce mean a loss of price flexibility, the transparency of the pricing reducing the ability to negotiate and offer discounts? The pricing of products compared with that of competitors becomes more critical when competitors are just a mouse click away.

Answer: “We will keep the same prices as our off line shop prices, as we want customers to get the same product, giving them the option of using either channel to shop.”

Q12) How can we use the Internet to streamline business processes, reduce cycle time and become cost competitive? Can the electronic medium be used throughout all processes from purchase of supplies to distribution to the customer reducing costs and time to delivery?

Answer: “Products can be picked up at the store, we can meet demand according to orders. For example, by having a facility on the website to order if out of stock, we can then produce as much as is needed.”

This clearly identifies the existing supply infrastructure as one of the company’s strengths.
Q13) What customer touch points do we need to reach now and in the future? That is electronic touch vs. people touch? In particular when do we need a personal touch and when is an electronic touch satisfactory?

Answer: “We would personalize our service.”

This answer reflects the customer-oriented culture of the company. The company is very aware of its existing good relationship with its customers and any future development would need to take this into account.

Q14) What are the people skills required? New skills can range from the technical skills to handle the software and hardware to the business skills of E-marketing and organization. Does the company possess these skills and, if not, is retraining possible or will new appointments be necessary?

Answer: “We will need to recruit and outsource some functions.”

Q15) What technology is needed for the new architecture? Is the technology infrastructure aligned with current business objectives of cost and company growth and is it scalable, reliable, up to date and secure?

Answer: “We will need to update our technology.”

Q16) How important is the speed to enter the market? How do we measure, on a scale from world class to seriously inadequate? Is there a danger that we may come to the market too soon, before it is ready, or could we be too late and loose market share to our competitors?

Answer: “Due to our well known brand name we could be able to take measures to offer some services online now.”
Questions 14 to 15 again showed that the IT Manager had already identified many of the strengths and weaknesses of the company.

Q17) What level of investment is required? What costs include implementing the hardware and software technology, outsourcing, training and recruitment? It must also be remembered that the rapid changes in E-commerce technology this investment will be ongoing, as new developments are appearing every day (for example even before computer E-commerce had established itself mobile phones introduced completely new technology and business issues to be considered).

Answer: "I think once I get the report on whether it is viable for us to offer our services online only then I can come to this cost breakdown."

This answer is, in fact, very revealing of the company ethos. It shows the level of investment and profitability is not the main driver for E-commerce to be "viable" for the company. What became clear from the earlier questions and discussions with the IT Manager was that the most important driver for the company was service and customer satisfaction. If the company thought there was sufficient customer demand then it would want to offer E-commerce even if it was done at a loss, particularly if competitors were likely to do so. The company was large enough and was sufficiently financially sound to be able to do this. As the manager had already considered the possibility of entering into E-commerce from a business perspective he had already accepted that there would be costs for new technology, training of staff and outsourcing of development, but knew that the use of existing infrastructure for the supply of goods would prevent costs escalating too far. This means a SWOT analysis to confirm the company strengths and weaknesses would be sufficient for the company to make its decision whether to offer E-commerce or not. It was decided, therefore, that a full cost-benefit analysis would NOT be required in the feasibility stage.
Q18) Do we have well defined and up to date objectives? Do we have a vision of where we will be in one year? E-commerce has brought such rapid changes that many companies are being forced to revise strategies. Predicting the expansion of E-commerce is extremely difficult with even the “experts” being taken by surprise.

Answer: “We want to expand, grow and satisfy our customers.”

It was clear they considered that keeping their customers satisfied would be the key to any expansion and growth.

Q19) What are the critical success factors? These must be based on sound business principles. For example, Amazon.com has clearly been a marketing and technological success but its business success is yet to be proven. The stock market has certainly not been a reliable indicator of success with companies like eBay.com and Boo.com moving from high valuation to bankruptcy almost overnight.

Answer: “The main critical success factor for us is ensuring the product we have is it the right one to sell online.”

This re-enforces the view that if their customers didn’t want E-commerce then the company was not interested in selling it.

Q20) What are the E-business trends and the future and how will this impact the business? This means keeping a careful watch on all new technological developments, changes in market and the effect of developments by new and traditional competitors.

Answer: “Because I am aware that we could be left behind I want to conduct this study, and the company has to get the funding to keep up with the infrastructure required.”
Because the manager was uncertain of what the future of E-commerce would be in the footwear industry, it was decided to investigate this further in the feasibility stage.

The twenty key questions were very helpful for both the company IT manager and for the author’s analysis as it immediately established some of the analysis parameters that would affect any company initiative in entering E-commerce:

1. The company acknowledged that their suppliers were not ready for trading online so this established that, for at least the initial venture into E-commerce, the company should concentrate on B2C (Business to Customer) E-commerce rather than B2B (Business to Business) E-commerce.

2. The company was very aware of its brand image and the need to maintain its image and reputation for quality with its existing customers. Their focus, therefore, was to concentrate on establishing new channels and improved service for its existing customers. Extending their customer base was an important aim but it was secondary to maintaining and enhancing their existing customers’ satisfaction.

3. The company acknowledged that they were unsure of their customers’ attitudes to online trading and of their competitors’ ambitions in E-commerce. This established the need for customer and competitor surveys in the feasibility study stage.

4. The company was aware that entering E-commerce would require significant investment in hardware, software and personnel. It will affect the company’s whole mode of operating, though there is some scope for using existing retail outlets for distribution. A SWOT analysis would be required to confirm these views and help form the basis of the decision to offer E-commerce.

5. A full cost-benefit analysis would not be required at this stage. The SWOT analysis would be sufficient for the company to know whether they could provide the service to customers the customers desired.
6. It would be helpful to gain a better understanding of future trends for E-commerce in the footwear industry in order to decide if and when to offer E-commerce.

As well as putting the twenty key questions to the IT manager, the first step of the E-commerce strategy formulation described in Chapter 7 required the case study company to consider the following options:

1) Not to go for E-commerce, at least for the time being, with the risk that a do nothing strategy could mean lost opportunities and other threats from competitors.
2) To use the web just as a means of advertising - this option is popular as it involves low cost, no cost of security, payment, web hosting etc.
3) To open online stores to complement existing stores, such as Tesco’s “e-tailing” initiative.
4) To establish a separate online division within the company.
5) To dissolve their regular business and go for a full online business operation.

As mentioned in Chapter 7 the choice depends not only on the nature of the business the company conducts but also on the environment it operates in, internal resources available and the company’s position and initiatives. Before starting a strategic plan there is a need to identify which out of the five options described is best suited to the overall company vision.

The twenty questions had revealed that the company’s prime driver was to build on their strong brand name and reputation and any entry into E-commerce would be to add an additional high quality service for their customers. It was considered that options one and two would not offer a sufficient level of service. Options five, on the other hand, would not build on the company’s current successful traditional retail reputation and there is a danger that option four may lead to a new operation that would not do so either. The company decided, therefore, to explore the opportunities of offering their
products over the Internet with an online store (option three above) to complement their existing stores. The twenty questions also revealed that for the timing of the E-commerce entry, the company was prepared to do so immediately if this was what their existing customers wanted, though there remained some considerable uncertainty over this. It was therefore necessary to carry out steps two and three of the strategy formulation framework to see if this vision was fully aligned with the overall company aims and a feasible way forward.

8.4 Aligning the Business Aims with Corporate Strategy

The second stage of the E-commerce formulation guidelines described in Chapter 7 is to ensure the E-commerce strategy would align with the company's overall business aims and objectives. The aims behind an E-commerce strategy should include some or all of those given by Efraim et al. (1999), listed in section 7.5. This was found to be the case with the case study company's objectives for E-commerce being:

- Improving customer service and interaction, In particular to be available to customers 24 hours a day, 365 days a year without the uneconomical overheads that would be incurred by using any other method.
- To increase the company's brand awareness.
- To take advantage of the dynamic nature of the Internet to increase revenue and market share and to sell more to the existing customers.

In addition to Efraim's list the company added:

- To work more closely with customers and suppliers.

These E-commerce objectives fitted well with the company's overall strategy of building its brand name by providing quality products and services in the footwear industry. However this alignment would only be valid if the customers really wanted an E-commerce facility. This further emphasised the need for a questionnaire to determine customer attitudes.
8.4.1 The Role of the Company Web Site in E-Commerce

An examination of aims needs to take into account how the current web site will be developed into an E-commerce facility. The IT manager was asked to consider what business role it requires for the web site with the following questions taken from Section 7.5.1:

- Is it for image? Is there a need to be seen to be keeping up with technology and competitors?
- Is it purely for information? For example to supply addresses and contact numbers.
- Is it purely for internal use or for use by partner companies?
- Is it to advertise products? In which case, are existing customers the target or is the objective to reach new customers?
- Is it to supply services? Could the site be used to provide a help line or other backup service?
- Is it for delivery? Can the products be delivered through the web site?

These questions help ensure that any E-commerce role for the web site aligns with its business role.

The IT manager responded that the company wanted to use the website to maintain its brand identity and use the website to show the range of products the company has on offer. This answer showed that the company saw its main business interest in the Internet was to use it to further their advertising and strengthen their already strong brand name. While this did not exclude E-commerce it shows that from the business perspective, the move into E-commerce was not a high priority.

This second step of the E-commerce strategy formulation plan given in Chapter 7 proved to be relatively straightforward. The company was a successful business and already had a clear focus on their business aims. As a result many of the business priorities became apparent in the answers to the twenty key questions. Nevertheless, this step was useful as the business focus helped in the analysis of the answers to the
twenty questions. The first two steps of the strategy formulation framework provided a clear direction for the feasibility study, which is the next step in the framework described in Chapter 7.

8.5 Feasibility Study: Customer Questionnaire

The feasibility study stage involved revisiting, in more detail, those issues highlighted as requiring further attention, as a result of addressing the twenty key questions in step one. One of the results of step one was that more information was required concerning customer attitudes, particularly for the company's existing UK customers, as satisfying these customers was a prime focus for the company. This section describes how this research was carried out by means of a customer questionnaire. As the company's business priority was to maintain and improve their existing customers' satisfaction, it was decided to focus the questionnaire primarily on the company's existing customers.

The customer questionnaire was compiled in collaboration with the company's IT manager and marketing department who had carried out a similar survey 4 years earlier. The earlier company survey gave the opportunity to identify changes and trends in customer attitudes. The meeting to construct the questionnaire was held in October 2000. The key message was to get results on whether customers would like the company to offer its services online, and whether they were ready to take advantage of this facility.

The survey was undertaken at one of the company's retail outlets. The target group for the audience was mainly 18 to 50 years. The study was carried out by standing near the door of the shop, asking customers as they left if they could spare two minutes to answer questions. The company's branch in London's shopping centre was very busy, however, so some customers were reluctant to answer questions as they had little time.
The questionnaire was designed to be simple and short, to ask only the relevant questions and to take only few minutes to answer. To avoid taking up too much customer time, most questions were designed to be answered with a simple “yes” or “no” response or a selection from a small range of options. A copy of the questionnaire can be found in Appendix 5. Each person was asked twelve questions. The first two questions were to establish if the customer had the technical capability for trading online. The next three questions were to establish the type of use customers currently made of the Internet. Questions 6 and 7 were to establish if the customer could and would use their credit card to buy online. Question 8 asked if the customer purchased from catalogues as this, being another form of remote buying, is considered the nearest equivalent to purchasing over the Internet. The remaining questions were designed to see if the company's customers would like to have the opportunity of E-commerce purchasing and whether they thought they would use it.

8.6 Results of the Customer Survey

- Out of 51 responses, 32 people said they would not like the company to offer its services on the web and 19 people said they would like to see the company offer on-line services.
- When asked how they felt about buying products over the net, 31 people said they wouldn’t buy, 9 said they wouldn’t mind and 9 said they would buy.
- The most common reason for not wanting to buy online, was that they prefer to come in to the shops and try the shoes.
- 10 respondents said they would use the Company’s website as an option to buy for convenience, and 2 thought is was a good idea to have an option of shopping on the web.

The significant outcome of this study is that, at the moment, the majority of existing customers are not interested in the internet as a medium for purchasing shoes. Only around 20% of customers are likely to buy their shoes in this way. This indicates that
the introduction of E-commerce for buying shoes is unlikely to revolutionise the shoe industry. However, the 20% who would buy shoes in this way is a significant number for a company with a large company base so E-commerce could still be viable.

The results were compared with those of the company’s marketing department who had carried out a survey 4 years previously on general consumer perception of the products. This comparison showed that more customers are now more willing to purchase online than four years ago, which indicates there is more awareness and growth of internet usage within the community. This indicates that while the timing of entry into E-commerce may not be right at the time of the survey, the trend may well make a move into E-commerce more viable in the future and that the company needs to keep a close watch on customer attitudes if they are going to fulfil the market demand in future years.

8.7 Feasibility Study: Competitor Analysis

Step one of the framework had also revealed that a competitor analysis was necessary for the feasibility study. Both the passive observation and the active enquiry methods of competitor analysis described in Section 7.6.2 were employed:

1) Examining the websites of companies trading shoes over the net in the UK to determine what range of shoes was on offer. The main objective was to assess the market and competition in trading via the net.

2) Contacting companies either through email or telephone to get more information. A company oriented questionnaire was devised to find out what they are doing (for example, the range offered, how long they have had websites, what channels of distribution they use, what they do about returns, cost benefit analysis etc). A competitor analysis is useful and revealing, but to elicit honest responses from competitors is clearly a problem. However, for this research, the author was able to present herself as an independent body in her role as a university PhD student. This was useful in encouraging the companies
to reveal information they may have been reluctant to pass directly to a competitor.

As with the customer questionnaire, the author compiled the questionnaire for competitors in discussion with the IT manager of the case study company. The questions concerned when they started trading online, their return rate, the return on investment (ROI), the range of shoes they offered, and how they advertised. The questionnaire was kept simple as companies would not have time to answer many complex questions.

A list of companies offering footwear was found from the Internet by doing a search on "footwear industry". A British Footwear Association directory was found with a list of companies selling shoes on www.britfoot.com. 35 companies were contacted from the British Footwear Association list of names, of which 13 companies replied with completed questionnaires. The company questionnaire was sent mainly by email and post, and followed up by phone calls.

8.8 Results from the Questionnaires Sent to Companies.

Out of the 35 shoe companies, 13 companies replied. Out of the replies from the 13 companies, only 2 shoe companies in the UK were found to have an E-commerce presence and of the 35 companies listed in the directory 15 had websites advertising and providing product information.

Profiles of the two companies offering services online from their replies to the questionnaire are as follows:

Company One

The company started trading online in 1996. It has a bricks and mortar store and offers men’s and women’s sports shoes and boots. The reason for trading online was as a way of expanding without opening more "bricks and mortar" stores. It also allowed them to
diversify, without leaving the industry. The channels of distribution used are UPS and US Air mail. The return rate of shoes is not high for Internet or catalogue sales with fewer than 50% returns. The company claims there is a very profitable future in the online industry.

Company Two

This company started trading online in March 2000. It has a bricks and mortar store and the types of shoes offered are women’s shoes, men’s shoes, casual, formal and sports wear, bridal shoes, evening shoes, party shoes, work shoes, trainers, small sizes, large sizes, and wide fitting. They have a free delivery and return within 30 days policy. Distribution is through various couriers from various warehouses and suppliers. The return rate of shoes is not higher than non-returned sales. The methods of advertising used are public relations, magazines, train tickets and the London underground. They believe there is a future for the online industry.

A major concern for the case study company for which this research was undertaken was to find out if the return rate was high. Answers from the questionnaire sent to the companies offering shoes online gave the following information:

- One of the companies reported that the return rate for shoes is amazingly low, considering that customers have no opportunity to try the products on before purchasing. Of the returns, it was estimated that 75-80% are due to the customer miss-ordering sizes (this is based on the number of returns that request exchanges in size only, particularly requesting the brand name purchased initially as opposed to an exchange for another shoe altogether, or a refund). 10% are people who did not like the shoes at all (no particular brand seems to stand out). The rest appear to be chronic catalogue and Internet shoppers who would almost always return their purchases.
The satisfaction rate, documented from a survey taken online by one of the companies surveyed, when a customer fills out return information forms scores 4.07 out of a possible 5 ("0"- being extremely poor..."5"- being excellent). This is an overall rating based on a customer's experience in dealing with the company. They are very proud of this accomplishment and are striving to increase it through automation and training of new employees. They have managed to stay in business and continue to grow by leaps and bounds.

Many of the people who buy from the surveyed companies would rather have the option of buying in person as well. The reason the online services do so well is that local stores frequently do not sell an entire line of any given manufacturer. Therefore a person is left to either search high and low for a particular shoe or buy online. Online companies can sell a vast majority of shoes offered without having to hold the stock. The reason why they succeed is because, firstly, no one else offers 20+ different manufacturers' entire lines, and secondly, they sell so much that they get preferred shipping out of manufacturers’ warehouses, and they can be shipped to the store or the customer directly. This speeds turn around time, especially for the elderly and home bound who don't get out much, for those looking for selection, and for those who live in rural areas without access to larger shoe stores. They also do very well with upper-level business people who have no time to go searching for shoes. There is a market and they plan to tap it to it's full potential.

The conclusion of the competitor analysis is that the problem of a potentially high return rate is not as significant as feared. The return rate, in fact, being comparable with that of shoes sold in the traditional method. Furthermore, the business model of the two existing on-line competitors of introducing on-line purchasing as an addition to, rather than alternative to traditional bricks and mortar stores, seems to be successful, and this is the type of model that would also suit the company for whom the feasibility study was carried out. The competitor analysis, therefore shows no significant barriers for
entering E-commerce. However, the analysis also shows there is not a strong immediate need to enter E-commerce either. Very few of the company's competitors were trading over the Internet at the time of the survey so the company were not going to "loose out" by failing to enter E-commerce. The company could, therefore, afford to wait until the market for shoes sold on-line had grown.

8.9 SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis

An important aspect of E-commerce introduction is the transformation required of core business processes. As described in step three of the strategy formulation strategy in Chapter 7, this requires a thorough understanding of the existing business by carrying out a full SWOT analysis and this was identified in both steps one and two of the strategy framework as being an area for further research. By mapping out the weaknesses and opportunities, risks can be identified and action planned to reduce the risks so that advantage can be taken of the opportunities. The SWOT analysis will identify strengths within the company that may be usable in the E-commerce project. For example, if a company already has a good distribution network (as is the case for the case study footwear company) this may be the foundation for developing the E-commerce distribution.

The SWOT analysis for the case study footwear company was carried out through discussions and "brain storming" with the IT Manager of the company. The following was identified:

**Strengths**

- The company has a strong brand name.
- The brand name is known globally and there is a global market.
- The company already has a web site advertising its products.
- The company has a well-developed distribution system to its stores.
Feasibility of offering E-commerce

- The company has management skills to know how to do standard retail activities well, such as cost control, logistics, fulfilment, delivering on time and customer service.

Weaknesses
- The company has little supporting technological infrastructure.
- There is a lack of enthusiasm and commitment from the board for entering E-commerce.
- The company will need to do a lot of training to have right skills for implementing E-commerce and to bring about the organisational and cultural changes required.

Threats
- Two competitors are already trading online.
- Not using the new technology may inhibit business growth.

Opportunities
- The customer trust in the company could be utilised. One of the critical success factors mentioned in chapter 4 was having a strong brand name which the company has, thus customers can trust and identify the product quality when shopping online.

In summary the SWOT analysis shows that the company is in some ways well poised to take advantage of the internet. It has the strong brand name, the trust, the distribution infrastructure and the management skills. However, the company would need to address its lack of a technical infrastructure and the cultural issues, especially the attitude of the board before it can enter the on-line market. Furthermore, the threats for not entering E-commerce do not appear to be very significant, especially as only two UK companies have so far entered the market.
8.10 The Timing for the Company to Offer E-commerce Services

Section 7.6.4 in Chapter 7 describing the strategy framework, emphasizes the importance of timing when entering into an E-commerce project. It was decided to examine this aspect from the perspective of the potential financial benefits of the Internet which Turban et al (2000) gives as:

- *It adds tremendous marketing power to any type of business for a fraction of the cost of traditional advertising and marketing methods.* This is less significant for the company studied as their customer base is already well established and their principle aim is to give a better service to these customers rather than extending their market share.

- *It opens up a global marketplace that would normally be unattainable for most companies.* This is not important for the company if they are going to build on their existing brand name, which is essentially known only in the UK.

- *It is available to potential customers 24 hours a day, 365 days a year without the uneconomical overheads that would be incurred by using any other method.* This is probably the most significant advantage for existing as well as new customers.

- *It can reduce administration costs, as all communications are electronic. This, in turn, can lead to faster processing of orders, reduced turn round time and the consequential saving of administration costs (key question 12).* As the company are looking to compliment their existing traditional store rather than replace them, this is not likely to produce any savings in the short term.

- *It can reduce costs and processing time when working with supplier organizations if they too are using E-commerce (key question 10).* The business-to-business harmonization of the supply chain can reduce costs even if a company does not itself sell its products through the Internet (key question 7). It was established that supplier companies are not yet ready for business to business internet trading.

- *It is a low cost alternative to traditional physical retail outlets.* The company is looking to E-commerce to be an additional outlet, not an alternative
From the above analysis, it can be seen that most of the advantages of E-commerce will not be realised for the company at this time, so is it worth pursuing? After looking at the SWOT analysis, the competitors' success, predictions for E-commerce future and consumer perceptions, it was concluded that the company should not rule out the option of offering services online in the near future. In the author's judgement, based on the overall analysis, the company should consider E-commerce in the next 2-3 years as shown in Figure 8.1.

![Diagram showing growth in billions from 2001 to 2005](image)

**Key**
- E-commerce future based on growth in billions:
- Predicted number of competitors in the footwear industry:
- Point when the company should offer online services: 0

*Figure 8.1 Timeline for the company to offer its services online*

Step one of the strategy formulation framework showed the company needed more research into future trends. For this the company should carry out similar customer surveys in the future to determine changes in the position and, in the next 3 years, it is
expected that there will be further improvements in the E-market, customers buying patterns and available infrastructure. They also need to carry out a more detailed study over a longer time period on what other successful online companies were doing within the footwear industry.

Finally, to prepare the senior management of the company they should investigate other industries where trading over the net is more established, such as supermarkets, to understand the issues they face, distribution channels they use, payment methods and policy on goods returned. The company may then be in a position to make a significant investment. An online presence would then help the company to drive additional revenue and sales through a new channel. This would attract new customers and use the power of the channel to sell more to existing customers with increased flexibility. The company may also be able to take advantage of other ‘E-channels’, such as interactive TV, if their future analyses showed these were becoming more prominent.

8.11 Options and Recommendations for the Company to Consider

Based on the above analysis two alternatives for the company to consider were suggested:

- The company could continue to offer its services and products through its traditional bricks and mortar retail outlets. In addition, the current website, which gives information on what type of products are available, can be developed to add other features such as ability to view stock online. This is a low risk option with the company building its online operation in stages with the big advantage of established brand loyalty. Management can use its existing expertise while gradually building new knowledge by applying this expertise to their Internet venture.
• It can allow people to order online but with the purchased goods to be picked up from the shops nearby. By using this option, the existing delivery system from the warehouse to the shops can be used. Furthermore, the shops don’t have to hold a lot of stock but can still offer the full range. The risk to customers would be that if they cannot collect their goods, within, say, 15 days then the order would be returned to the warehouse. This option gives small stores the ability to sell the wider range of products, which will be particularly useful for customers in small towns. The company should try and target new customers with their online services, as existing customers prefer coming into the shops and trying shoes. The online service should be linked to the back office system to be able to inform customers whether or not the product they have selected is in stock and what the alternatives are.

With the company clearly not yet ready for a full-scale E-commerce venture, these options could be intermediate steps in an incremental implementation of a full E-commerce operation. The company also needs to keep a close watch on the market and the activities of its competitors to determine how fast it needs to move through the incremental stages in the future. The company also needs to monitor E-commerce progress in their suppliers as it will be in their interest to work with suppliers of materials for the footwear when they become ready to do so.

8.12 Potential New Opportunities

It should be remembered that there are multiple channels a customer may want to use and that the customer’s channel of choice may vary according to the time of day. They might phone from home first thing and then want a status update on the order via their WAP phone later, or they could look at the website during lunchtime at work. When they come home from work at night and are sitting in front of the TV, they’ll want to click onto their Internet channel to see the latest news about their purchase.
Feasibility of offering E-commerce

It was recommended to the company that they should try and target new customers as the existing customers prefer coming into their shops and trying shoes. Surveys should be carried out globally as the company is well known worldwide and sells globally. The potential of a global market was illustrated at a conference in Las Vegas where the results of the customer survey were published. Conference delegates at the presentation were asked if they had shopped online for shoes. The response was that out of 20 people, 15 had shopped online, the main reason being for convenience, with delegates finding it similar to purchasing from a catalogue. Additionally, delegates did not have any problems with returns and ordering the wrong size.

When customers click their mouse, they should know whether or not the product they have selected is in stock and what the alternatives are. The system should be linked to the back office system for customers to know immediately if the product is available or not. What the bricks and mortar companies can do successfully is manage a multichannel strategy as it has been shown that shops, mail order and the Internet can work together rather than cannibalise sales from each other.

8.13 Case Study Conclusion

The first three steps of the strategy formulation framework proved to be a useful guide for the company. The twenty key questions successfully helped form the company's vision for E-commerce, identified areas for further research and, when detailed answers were obtained, showed what was feasible. Carrying out the SWOT analysis was useful to help identify options, timings and an incremental way forward. Conducting a customer survey was found to be useful but took time and effort, and also only give a view at a particular time. Longer term trends also have to be considered with, perhaps, surveys undertaken at regular intervals. The author would also like to emphasise the dangers of limiting research to existing customers as illustrated at the Las Vegas conference which showed that there is a potential market outside the existing customer
base. The twenty key questions were also suggested for the company board of directors to continually review their position in the future.

A competitor survey was found to be possible, though the fact that the author was a university student undoubtedly helped get the responses. It is therefore suggested that for a competitor analysis an independent analyst is needed and that companies would do well to look to universities to provide this service.

The three steps of the strategy formulation framework worked well. All aspects of step one proved appropriate for the case study company and, apart from the cost-benefit analysis this was also true of step three. Step two was not as helpful as the other two steps and for this case study company could have been omitted altogether without any serious detrimental effect on the overall analysis. However, this is as predicted in the framework. As the company was very astute when it comes to its business aims, much of the purpose of step two was achieved in the answering of the twenty questions in step one. This effect will have been heightened by the fact that the author posed the questions to the company and discussed the answers. Clearly the author was aware of the need to consider the business aims and this is bound to have affected the discussions in step one. Nevertheless, the analysis of alignment with business aims in step two did prove to be a useful check, and allowed the author to proceed to step three with confidence.

In this case study, the feedback loops from step three back to steps one and two have not been used. However, if the company follows the suggestions of the author and regularly reviews the customer attitudes and trends they will, in the future need to employ these feedback loops to return to step one to consider whether to enter E-commerce at that time.

From this research it was concluded that although existing customers do not currently require online facilities, the company should not rule out offering online services in the
next 2-3 years. This analysis and the recommended options and timings were presented to the company in December 2001. On the basis of the findings, the company decided not to progress into E-commerce at that stage, but decided to keep a close watch on the situation and regularly review the options in the future.

The next chapter looks at the remaining steps of the strategy formulation framework and the critical success factors, as well as reviewing the twenty key questions to complete the testing of the author’s research.
CHAPTER 9: TESTING THE VALIDITY OF THE 
E-COMMERCE STRATEGY FRAMEWORK

Chapter preface
This chapter describes how applying it retrospectively to a number of E-commerce projects tested the strategy formulation framework -described in the Chapter 7. To this end, managers from three companies were interviewed to determine how closely their strategy formulation approaches matched the prescribed framework. As two of these companies had successfully adopted E-commerce, whilst the other had been unsuccessful, it was anticipated that any identified differences in their approaches to planning might help to explain why two of the case companies were ultimately successful, whilst the other was not (Shah and Dawson, 2003b). The results of this exercise provided strong evidence that the E-commerce strategy formulation framework is a valid and useful tool, as the approaches of the two successful companies were both very close to that prescribed by the framework, whilst the planning practices of the unsuccessful company fell a good way short of the framework.

9.1 Introduction and Initial Attempts to Carry Out a Survey
A set of questions for the retail industry was composed, based on the critical success factors derived in Chapter Four, the twenty key questions for managers from Chapter Five and the strategy guidelines from Chapter 7. Further suggestions on the format of the questionnaire were suggested by Tanya Bowen and Robin Cole of NSB Retail Solutions in a meeting in December 2001. The questionnaire was then finalized, with the questions prioritized and ordered in early January 2002. The survey was carried out as a Loughborough University study, though the 120 retailers contacted were all from the NSB customer list. The retailers were contacted by telephone and email to put
the strategy questions, but the response was very low, with the common reason being “it was company policy not to participate in surveys”.

Telephone calls were made Monday to Friday between 9.00 am - 6.00 pm, and some calls were made again to speak to the right person. Of the 120 NSB customers only 8 replies were received. Most companies had a policy of not answering questions. Most of the time it was difficult to get the right person, due to illness, holiday, meetings, being out of the office or having no time to answer questions. As a result it took more than a month to get the few replies received.

Letters were sent by post and fax to certain companies who requested a questionnaire be sent in writing, as they could not answer questions over the phone. 78 letters were posted with self-addressed envelopes to customers. Unfortunately not one response to the letter was received.

During the second week of January 2002, emails were sent to the companies to prompt them to respond and an electronic copy of the questionnaire was attached for respondents to fill if they preferred to answer questions by email. Only seventy emails were sent as up-to-date email addresses were not held in the NSB database for some companies. Of these seventy companies emailed, six replied instantly stating they do not have plans to offer E-commerce, these were followed up with a thank you letter.

As a result of the poor response, it was decided not to pursue the survey approach further.

9.2 Research Method

In order to ensure that the strategy guidelines from the previous chapter are valid, it was decided to “apply” the guidelines retrospectively to companies who had already entered E-commerce and to check to see if they had taken an approach similar to that advocated in this research to assess whether the E-commerce formulation framework
and method was valid. In-depth interviews with three companies were carried out in face-to-face meetings, by telephone or by email. The participating case study companies – Prezzybox, Clothelocker, and the John Lewis Partnership can to a certain extent be viewed as a ‘convenience’ sample, as in all cases, personal contacts were used to gain access. However, the case companies were chosen very carefully, as it was anticipated that they would ‘produce contrasting results, but for predictable reasons’ [Yin, 1994; p. 46].

For each case study company, questions were asked over the phone and some questions were sent by email. A successful dot-com company, Prezzybox, was chosen to see how closely the company had followed the guidelines and methods proposed in Chapter 7 when forming their strategy. The assumption is that if they had followed an approach similar to the proposed strategy formulation method then the strategy formed would have been equally successful had they formally used the proposed strategy framework and method. This would then show the framework was valid. A secondary objective was that by retrospectively applying the strategy formulation method and, in particular, by carrying out the final assessment step, it would be beneficial for the company as a review their existing strategy using the questions from the framework as a checklist could give pointers to issues that had not initially been considered by the company.

To enlist the help of Prezzybox, a letter was sent through the In2net Logic contact with a clear statement of the aims and objectives of choosing the company as a case study of a successful E-commerce company. In return, the author offered to report back her analysis to the company. This offer meant that the company would receive:

- An independent, external review of the company at no cost other than the time to answer questions.
- An analysis of their current strategy, identifying past successes and future opportunities
- Detail of the review process and questions to enable the company to undertake their own reviews in the future.
The last point also gave the company the opportunity to comment on the review process. The company reported that they found the questions and analysis to be very useful allowing them to appreciate their own successes and to revise and refine their future strategy.

A failed dot-com company, ClothesLocker, was chosen to identify what went wrong and whether it would have made a difference if the strategy approach had been applied and issues thought about beforehand. As the strategy formulation method was not specific to any company and was presented as a general framework that could be applied to companies of varying size, large or small, and of any type of industry, it was noted that for the failed company, some of the questions did not apply. Some questions only applied to multichannel operators who were trading with both a bricks and mortar presence and online. This application of selected parts of the framework illustrates the strategy formulation method well, and is how the strategy formulation framework is intended to be used. The manager of ClothesLocker was interviewed twice, firstly on the key questions for managers given in chapter five and secondly on the remainder of the questions in this chapter.

John Lewis, a departmental store in UK, was selected as they had an established chain of physical stores and had also been trading online, though the latter for only a year. They had also shown a willingness to respond to questions on their E-commerce approach. The Assistant IT Manager of the John Lewis Partnership was interviewed only once.

For each company reference was also made to the companies' published literature and web sites to obtain further clarification and elaboration of the answers received. The next sections of this chapter provide a summary of the questions put to the three companies and the answers received.
The interviews of the three companies were structured, based round the questionnaire prepared for the abandoned survey described previously. However, the managers interviewed were also given the freedom to elaborate on their answers and give extra information during the interviews. In each case, before the face to face and telephone interviews, the managers had been sent the questions in advance by email so that they could be prepared for the questions. Having the questions in writing in front of the interviewees also helped the managers to answer the questions asked without being side-tracked.

9.3 The Background of the Three Case Study Companies

9.3.1 Prezzybox - Case study one

Prezzybox started trading online in August 2000. Selling gifts online, it is a pure Internet business with no physical, “bricks and mortar” presence. It first started thinking of offering its services in early 1999. Prezzybox was also the subject of the case study in Chapter Six, and further details of the company can be found in that chapter.

9.3.2 ClothesLocker - Case study two

ClothesLocker was first started in 1992, selling textiles, primarily children's and women's nightwear, but also men's and women's sportswear and casual wear. ClothesLocker aimed to provide the consumer with a choice of top quality clothing coupled with a hassle free, enjoyable shopping experience. ClothesLocker was a small to medium sized enterprise (SME) with 10 employees (not counting warehouse staff) and a turnover of around £4 million. Its major customers were Debenhams, Asda, Freemans, La Senza, Etam, Tammy. It was a pure online shop with no bricks and mortar outlet. The manufacturing factory was in Turkey with 200 employees.
9.3.3 John Lewis - Case study three

John Lewis is the UK’s largest department store group, with a network of 26 selling branches, plus distribution centres and production units, stretching from Aberdeen in the north east of Scotland to Bristol in the south west of England. The decision to go online followed email requests from existing customers expressing an interest in shopping online. To be able to meet the customer demand, John Lewis Direct was launched in October 2001.

John Lewis sells fashion and household goods. Of course, tastes constantly change and so does the range of goods, but the objective has stayed very much the same: to offer customers a wide choice of styles and prices in every category, while guaranteeing high quality standards and competitive prices. John Lewis department stores offer over a million different lines. There are fashion goods for men, women and children of whatever age; electrical goods, from the latest IT hardware to huge American fridges; furnishing fabrics; furniture for every room in the house; lighting; gardening equipment; sports goods; toys; watches; cameras; books; and more.

9.4 Case Study Objectives

As the validity of the first three phases of the strategy formulation framework had been explicitly tested, using the case of the footwear company, as described in Chapter 8, the objectives of these case studies were to explore the validity of the framework’s later stages. More specifically, the case study interview script, was divided into six separate sections, covering the following broad areas of interest:

1. To identify if the theoretical benefits of trading online were achieved in reality by each company. These benefits are based on the research published by Turban et al. (1999). This section was aimed at establishing just how successful each company was in practice.

2. To assess whether the companies’ own aims derived in stage two of the strategy plan were achieved. This section is closely related to the previous section and had both a similar aim of establishing the extent of each companies’ success.
and a new aim of establishing if each company had properly considered their business aims for E-commerce.

3. To determine which planning and design issues, and implementation issues given in stages 4 and 5 of the strategy plan the companies should and did consider.

4. To carry out a strategy assessment for each company using the questions described in stage 6 of the strategy plan.

5. To continue the assessment of the strategy by checking that all the critical success factors derived in Chapter 4 were in place. This section would also test the validity of the critical success factors themselves.

6. To identify whether there are any changes in circumstances that would involve a change in direction for the strategy by using the twenty key questions from Chapter 5. This section would also test the validity of the twenty key questions themselves.

Overall these questions were aimed at firstly establishing the success of the companies in adopting E-commerce [sections 1-2], before exploring how closely their planning practices had matched the prescribed strategy formulation framework [sections 3-6].

9.5 Section One: The Benefits of Trading Online
To identify how successful each case company’s E-commerce initiatives had been, each respondent was asked about the benefits achieved, using the following questions modified from Turban et al. (1999):

Q1) Does trading online add tremendous marketing power for a fraction of the cost of traditional advertising and marketing methods?

Q2) Does it open up a global marketplace that would normally be unattainable for most companies?
Q3) Does offering products online to customers 24 hours a day, 365 days a year reduce the uneconomical overheads that would be incurred by using any other method?

Q4) Does it reduce administration costs, as all communications are electronic, leading to faster processing of orders, reduced turn round time and the consequential saving of administration costs?

Q5) Does it reduce costs and processing time when working with supplier organizations if they too are using E-commerce.

Q6) Is it a low cost alternative to traditional physical retail outlets?

9.5.1 Prezzybox’s Experience of the Benefits

When asked the questions in the last section on the benefits of E-commerce, Prezzybox agreed the benefits asked about in questions 1, 2, 3 and 6 all existed. Zak Edwards from Prezzybox agreed on how the internet can enhance sales, he quoted that “people have less tangible shopping time therefore time is important”. However, they did not believe the benefits asked about in questions 4 and 5 existed.

For question 4 it was felt the administration cost benefits could not be realized as there is still human intervention required.

For question 5 it was found the benefits of electronic communication with suppliers could not be achieved as the suppliers need to be ready to offer services online with the right infrastructure, and in most cases for Prezzybox, time was spent in chasing the suppliers to deliver goods on time.
9.5.2 ClothesLocker’s Experience of the Benefits

In answer to the first question on marketing power, it was ClothesLocker’s experience, as it has been for many other dot-com companies with no physical presence on the high street, that, by itself, the web is not a great marketing channel. It is a valid channel, but, without a physical high street presence, a significant amount of money has to be spent through more traditional marketing channels (posters, television, radio, press, localized marketing) to make people aware of a company’s existence. Even this does not guarantee success as BOO.com, among others, has shown, and when added to this the costs of developing and maintaining a web site (staff, hosting etc.), the Internet does not prove to be as economical a channel as first thought to be.

With regard to the second question on opening up a global marketplace, ClothesLocker had initially considered that global boundaries would not exist and people from any country would buy from a web site no matter where it is based. However, the market experience shows that people tend to spend money on domestically based Internet brands, for example, in the UK, brands which have “.co.uk” attached to their name or those, which are clearly UK brands such as Dixons.com.

The large dot-com companies, which have succeeded in becoming global companies, have had to do so by launching separate country based subsidiaries. For example, in the UK customers do not buy goods from Amazon.com they will predominately buy them from Amazon.co.uk, which has been set up and tailored to the UK market, and which has a distribution and administration network based in the UK. While in theory there is no need to do this, in practice dot-com companies have been forced to open subsidiaries in targeted countries in order to succeed. This has meant that there has actually been very little difference between dot-com companies and more traditional companies when they try and expand over national borders.

The idea of a level global playing field was thought to be of particular benefit to smaller dot-com companies like ClothesLocker but their experience was that it was
hard enough to get noticed even in the domestic marketplace without having a large marketing budget. If the company had tried to sell in, say, Germany it is unlikely that it would have had much success. Also, the increased postage costs to those countries would virtually wipe out the profit margin, especially when all that was ordered was low value goods such as a single T-shirt.

In answer to question 3 on offering products online to customers 24 hours a day, 365 days a year, ClothesLocker found it was true that a company can leave their e-store open 24 hours a day with no real overheads. If, however, a dot-com company is really concerned about customer satisfaction, it will probably need a 24-hour call center. This represented a significant increase in costs for ClothesLocker.

For Clothes Locker administration costs were low anyway as the warehouse and the office were based next to each other. However, while the orders arrived electronically, there was then a manual process to print them out and enclose the receipt and a shipping order with the garment. Also the receipt was printed twice internally, one copy was used for management records, and one copy was used by the accountant for VAT and stock control purposes. This shows that electronic ordering will not necessarily mean efficient, streamlined processes unless the whole company is structured to take advantage of E-business.

For question 5, ClothesLocker's manager agreed that trading online does reduce costs and processing time when working with supplier organizations if they too are using E-commerce. However in Clothes Locker's case it is not really applicable, as they own their own factory in Turkey. They have not been able to set up a good electronic infrastructure with Turkey as the Internet system is not as developed as in the UK and cannot cope with large amounts of data being sent. When the company was trading, ISDN did not exist in Turkey so virtual private networks wouldn't work and satellite Internet connections were very expensive. Their customers (such as Asda, Debenhams,
La Senza, etc.) did start to place orders electronically, but in reality it was found that each order tended to be followed up with phone calls and faxes.

In respect to the last question as to whether E-commerce offered a low cost alternative to traditional physical retail outlets, it was found that this was not the case for ClothesLocker - they would have achieved far greater sales by having a physical high street presence where the increased costs would have been offset by increased sales. As a result, ClothesLocker are not continuing with their original E-commerce business as originally planned. In a new venture in sportswear, ClothesLocker’s e-store will be used to support a brochure and physical marketing approach. The company no longer considers the Internet to be a viable alternative to having a physical presence.

The ClothesLocker manager states “....we have all but written off the expenditure that we made on the project. .... I do not believe any more that a stand alone internet based clothing store is viable, Internet clothing sites will in my opinion (and in the current internet climate) only succeed if they are used in conjunction with a more traditional bricks and morter shop (e.g. Debenhams, Next etc). Even the large catalogue retailers have not been able to succeed in their web based strategies. ..... Over the summer the website will be heavily revamped to fit in with our new marketing strategy and rather than being a main driver of business it will be used to support our new venture.”

9.5.3 John Lewis’s Experience of the Benefits

When asked the questions on the benefits of E-commerce, the Assistant IT Manager from John Lewis agreed that all the benefits in questions 1 to 5 existed. However, for question 6, they believed that operating with a large physical outlet would be a lowest cost alternative. Simon Paltherope Manager of JohnLewis Direct states “that offering products online appeals to most customers, it is convien to shop at any time and they trust JohnLewis due to the strong brand name.”
9.5.4 Summary of the Benefits

The perceived benefits achieved by each company are summarised in Table 9.1

**Table 9.1: Benefits Achieved by the Case Study Companies**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Prezzybox</th>
<th>John Lewis</th>
<th>Clothes Locker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing power</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Global market place</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Reduced overheads with 24/7 opening</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Reduced administration costs</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Reduced costs through B2B harmonisation</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Low cost alternative to traditional methods</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

From this table it can be seen that Prezzybox and John Lewis had achieved most of the benefits, but ClothesLocker had achieved none of them. It can be concluded, therefore, that these three companies do represent two successful companies and one unsuccessful company as originally presumed when the companies were chosen as case studies.

9.6 Section Two: Aims

To identify whether the three companies have achieved their own business aims of E-commerce, the companies were asked about the from Efraim et al. (1999) listed in Section 7.5 describing stage two of the strategy framework. These aims were phrased into questions as follows:

1. **Customer satisfaction** - Has the company identified whether there customers are happy with existing services or do they require more?

2. **Brand awareness** - Has the company increased company brand awareness?
3. **Expand globally** - Did the company find that they were able to expand globally, offering services and products worldwide?

4. **New markets** - Was the company able to expand into new markets?

5. **Increase revenue** - Did the company managed to increase revenue and market share?

6. **Reduce costs** - Did the company reduce operating costs?

7. **Innovative company** - Is the company seen to be an innovative and progressive company through being an E-commerce leader?

8. **Equal competitor** - Has the company been able to compete with bigger rivals on even terms?

The answers to these questions from Prezzybox and JohnLewis are presented in table form in Table 9.2. ClothesLocker achieved few of their aims as it failed.

**Table 9.2 Achievement of Aims**

<table>
<thead>
<tr>
<th>Aims</th>
<th>Prezzybox</th>
<th>John Lewis</th>
<th>ClothesLocker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction</td>
<td>Yes, customers are happy and are retained</td>
<td>Yes, customers are happy</td>
<td>Yes, customers happy</td>
</tr>
<tr>
<td>Brand Awareness</td>
<td>Yes, the brand is slowly getting known</td>
<td>Not a business aim</td>
<td>Not achieved</td>
</tr>
<tr>
<td>Expand Globally</td>
<td>Not a business aim</td>
<td>Not yet a business aim</td>
<td>Not achieved</td>
</tr>
<tr>
<td>New markets</td>
<td>Yes, all sales represent new markets</td>
<td>Some achievement</td>
<td>Not sufficiently achieved</td>
</tr>
<tr>
<td>Increase revenue</td>
<td>Managed to increase</td>
<td>Too early to say trading online for a year</td>
<td>Not sufficiently increased</td>
</tr>
<tr>
<td>Reduce costs</td>
<td>No, costs increased</td>
<td>Not a business aim</td>
<td>Not achieved</td>
</tr>
<tr>
<td>Innovative company</td>
<td>Not a leader but partner In2netlogic is</td>
<td>Not an innovative company</td>
<td>Unable to say</td>
</tr>
<tr>
<td>Equal competitor</td>
<td>Yes, is competing with all competitors</td>
<td>N/A The company is already one of the larger competitors</td>
<td>Not achieved</td>
</tr>
</tbody>
</table>
The answers given in table confirm the findings for section one. Prezzybox had achieved most of its business aims, though in some cases there is room for improvement. The one business aim they had failed to achieve, that of reduced operating costs, they believe will be achieved with more time. John Lewis had relatively few business aims, as at the time of asking they were mainly interested in keeping their customers happy getting the online business established. Although it was too early to say whether some aims were going to be achieved as the online business had only been trading a year, they had achieved their principle aim of customer satisfaction and, significantly, the company did not believe they would fail to achieve any of their aims in the future. ClothesLocker, on the other hand, failed to achieve most of their targets for these business aims. This confirms that Prezzybox and John Lewis can be considered to be successful E-commerce companies and ClothesLocker was an unsuccessful company. The fact that ClothesLocker failed to achieve most of their own business aims also indicates that the aims were probably unrealistic and this is freely admitted by the company. This verifies the need for a separate step to emphasise business aims in the strategy formulation framework.

9.7 Section Three: Planning, Design and Implementation

9.7.1 Planning for E-commerce

The managers of all three companies were asked whether they had considered the five planning issues—highlighted in table 9.3—during their E-commerce planning stage. The planning questions correspond to the five planning considerations listed in Section 7.7.1 describing step four of the strategy formulation framework.
Table 9.3: Answers on Planning

<table>
<thead>
<tr>
<th>Planning issues</th>
<th>Prezzybox answers</th>
<th>John Lewis answers</th>
<th>ClothesLocker answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent E-commerce division</td>
<td>Separate division created</td>
<td>Separate division created</td>
<td>Not big enough to create a separate division</td>
</tr>
<tr>
<td>Corporate culture</td>
<td>Too small company to have as a corporate culture</td>
<td>Was a separate E-commerce division</td>
<td>Was responsibility of the marketing department</td>
</tr>
<tr>
<td>SWOT analysis</td>
<td>Had carried out a SWOT analysis</td>
<td>Had carried out a SWOT analysis</td>
<td>Didn’t carry out SWOT analysis but, on hindsight, considered it important</td>
</tr>
<tr>
<td>Business re-organisation</td>
<td>Were a small company and planned well</td>
<td>Had created a separate E-commerce division</td>
<td>Had been underestimated</td>
</tr>
<tr>
<td>Outsourcing or in-house</td>
<td>Subcontract designing of website</td>
<td>Acquired Buy.com</td>
<td>Carried out own in-house development</td>
</tr>
</tbody>
</table>

These answers show a clear difference in the attention paid to these suggestions. With the exception of the issue of corporate culture, Prezzybox and John Lewis had considered all the suggestions and acted on them. In terms of the corporate culture, the companies could have given this issue more attention but the fact that Prezzybox is a small company and John Lewis had created a separate division means this aspect will be less significant. ClothesLocker, on the other hand, had not seriously considered any of the suggestions for E-commerce system design listed in the framework. This verifies the importance of these suggestions in the design stage of the strategy formulation framework.
9.7.2 Designing the system

The design questions correspond to the questions listed in Section 7.7.2 describing the design stage of the strategy plan. The three companies used as case studies were asked if, during the design stage, the following four questions were considered:

Q1) How can the web site be developed to maintain customer loyalty?
Q2) Who will process the credit card orders? Will E-commerce be employed to transmit credit card orders to the company’s merchant account provider? The extent of E-commerce introduction can also depend on the company’s partner organizations.
Q3) How will the company get order and fulfillment information into the accounting system?
Q4) How can the company be sure that their data and that of their customers, suppliers and partners will be secure? This is an important technical issue that needs to be addressed from the outset. Without secure transactions, there will not be the customer confidence for the E-commerce system to succeed.

The answers to these questions are summarized in Table 9.4

<table>
<thead>
<tr>
<th>Design Issues</th>
<th>Prezzybox</th>
<th>John Lewis</th>
<th>ClothesLocker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer loyalty</td>
<td>Targets customers needs</td>
<td>Sought customer feedback</td>
<td>Too few customers ready to purchase online</td>
</tr>
<tr>
<td>Credit card orders</td>
<td>Outsourced</td>
<td>Acquired Buy.com</td>
<td>Carried out in-house</td>
</tr>
<tr>
<td>Order and fulfillment</td>
<td>Outsourced</td>
<td>Acquired Buy.com</td>
<td>In-house development</td>
</tr>
<tr>
<td>Data security</td>
<td>Outsourced</td>
<td>Acquired Buy.com</td>
<td>In-house development</td>
</tr>
</tbody>
</table>

Prezzybox achieved customer loyalty, by offering free delivery as well as replying to customer queries promptly through phone and email. John Lewis looked at maintaining
customer loyalty by getting customer feedback. ClothesLocker did not have any specific customer loyalty schemes in place which may have contributed to their problem of too few customers for the business to be viable.

Prezzybox had considered all the design questions and these were largely answered by outsourcing the maintenance as well as the development of their services to In2netlogic. Similarly John Lewis's acquisition of Buy.com helped it handle these design issues. ClothesLocker admitted that, in carrying out in-house development, they had not fully considered these questions. This verifies that these questions are valid considerations to make in the design stage and that the companies need their attention to be drawn to these issues.

9.7.3 Pitfalls
The three case study companies were not asked directly about whether they had considered the pitfalls of E-commerce design listed in 7.7.3 as each company had freely admitted where they believed they had gone wrong during the interviews. Prezzybox and John Lewis as successful companies had not suffered from any of the pitfalls. ClothesLocker had neglected their customer service in that they had not planned adequate helpdesk support in the first instance, which then became a significant unplanned cost later. They had also underestimated the effort and cost of advertising their website and they believed they had entered E-commerce too hastily, without thinking through all the issues. Overall the ClothesLocker had failed to avoid three of the seven pitfalls listed in section 7.7.3. This suggests that had they had the strategy formulation framework and had been alerted to these dangers, they may have avoided these pitfalls.

9.7.4 Implementation
As the questions were put to companies looking back at their experiences in retrospect it was inevitable that the answers to the planning and design questions would describe the actual implementations that had taken place. It was, therefore, not considered
necessary to ask any specific questions based on implementation suggestions in Section 7.8 as the answers had been already provided when elaborating on answers to earlier questions. In particular:

- None of the case study companies had been able to follow a realistic incremental development as two were new startup companies and one had a new division for E-commerce.

- Prezzybox and John Lewis both believed they had a commitment to quality and in both cases this is why they had not attempted to develop the technology in-house as neither felt they had the skills required. Both had chosen their partners, In2netlogic and Buy.com, respectively, on the basis of their quality. Clothes Locker were also interested in a quality system but found they had not paid enough attention to quality in the design stage. This lead to a prolonged development of the technological systems and an initial insufficient support for their helpline.

- Prezzybox and John Lewis recognised they needed skills their respective companies did not possess so had turned to partner companies for the skills. ClothesLocker, did not do so but then found that acquiring the skills through training and recruitment took much longer than expected.

- John Lewis and ClothesLocker were their own suppliers of goods. This worked well for the well established John Lewis, but ClothesLocker had some problems with their Turkish supply chain. Prezzybox had to work closely with supplier companies, but found not all were reliable. It took Prezzybox a while to discover which companies it needed to work with for a streamlined supply chain.

- Prezzybox and John Lewis felt they adequately established and monitored the customer demand for their products, but ClothesLocker admitted this was their biggest failing. ClothesLocker never achieved the customer numbers to build the brand name and a loyal customer base.
• All three companies felt they had adequately marketed their web sites, but ClothesLocker found this took a lot more time, effort and resource than they had expected.

• None of the three companies felt they were technologically innovative. However, this was less of a problem for Prezzybox and John Lewis as they had partner companies they could rely on for their technological solutions. ClothesLocker found keeping up with technology a problem for their workforce as all development and maintenance was kept in-house.

• Prezzybox and John Lewis did not have a problem with the maintenance of their IT systems as this was carried out by their partner companies. ClothesLocker found maintenance took more time and resource than expected.

The above topics for consideration given in Section 7.8 covered all the problems experienced by the companies. In particular, it is clear that ClothesLocker had not adequately considered many of the points. This suggests that if ClothesLocker had been using the strategy formulation framework given in Chapter 7, they may not have experienced as many difficulties with their implementation. It must be concluded, therefore, that the implementation stage considerations in the framework are valid.

9.8 Section Four: Strategy Assessment

Like any other project, E-commerce projects need to be assessed during and after implementation. As Prezzybox and John Lewis had already implemented their E-commerce systems, the assessment review checklist, derived in Section 7.9 describing stage six of the strategy plan, was applied to see if the objectives the company set out at the beginning were met. ClothesLocker were not asked the strategic re-assessment questions, as they had stopped trading online.

Prezzybox and John Lewis managers were asked the following questions to carry out an assessment:
Q1) What were the expectations and targets for E-commerce for the company, were the targets achieved and were they realistic?

- Prezzybox aimed to get 50 orders a day, which they thought was realistic. This they have obtained.
- John Lewis Direct's main aims are to attract new customers, gain market share, increase geographical reach within UK, reinforce and extend the brand and improve customer relations. Their target is to be profitable in 3-4 years and to spend £30-£40 million. This they believed was realistic and, although it is too early to know if the targets will be achieved, they believe they will be.

Q2) What products and services did the company want to offer and is the system delivering them?

- Prezzybox wanted to sell presents online. The idea of selling presents and delivering them gift-wrapped, bearing the needs of customer in mind, is what the company set out to offer. Identifying customer needs and the process of buying a gift has worked well. Prezzybox has also included added features on their website for customers to set reminder dates of birthdays, anniversaries, etc. and for the customers to have a wish list of what presents they would like to receive. Prezzybox confirmed the system is delivering the products and services intended.
- John Lewis wanted to sell a limited range of products online compared to what they offer at their bricks-and-mortar shops. The company confirmed their system is delivering the products.

Q3) Have unanticipated problems occurred? If so, were they handled successfully?

- Prezzybox experienced problems of distance selling regulations when attempting to trade globally, but this was resolved by getting trade agreements from the government. There was a virus that brought the system down in 2000,
no damage was done other than a temporary loss of service which was resolved by an anti virus company.

- John Lewis face minor problems daily but nothing that cannot be solved.

Q4) What costs did the company hope to reduce? What cost reductions were actually achieved?

- Prezzybox wanted to avoid high running costs. The company do not carry stock and therefore it was hoped that as the company turnover grew the running costs would not grow as quickly. So far this has been true.

- John Lewis had set a budget of £30-£40 million over 3-4 years and has managed to stay within the budget.

Q5) Did other costs increase unexpectedly, and if so, why? What extra costs were incurred?

- Prezzybox found the costs of development of the website increased when outsourced. This was not unexpected because the functionality of the website had increased, offering a better proposition to the user.

- For John Lewis the costs did not increase and were well within the budget.

Q6) What were the sales objectives, were they realistic and how well were they obtained?

- For Prezzybox the sales objectives in the business model were relatively modest. If the company achieved 50 sales a day (350 a week) at the average sale price, then their turnover would be approximately £400K. This would be achievable without incurring further costs. The company thought the sales figures were realistic and they were, in fact, achieved.

- For John Lewis the sales objectives were realistic and they obtained more than expected.
Q7) Did web and Internet communications reduce previous communication costs and if so, by how much?

- This question was not relevant for either company. As Prezzybox was a new company and John Lewis had set up a completely separate division there were no previous costs to compare with. In the case of John Lewis the operation of the traditional part of the company was not affected by the setting up of John Lewis Direct so the communication costs were similarly unaffected.

Q8) Did the company improve customer relations and what evidence is there for this? If not, what went wrong?

- Prezzybox had worked to create a ‘customer-centric’ ethos. The company is completely customer focused, both online and offline. For example, they have worked tirelessly to incorporate a number of ‘added value’ features such as the Gift Wizard, the Gift Reminder Service, and the Wish List. Likewise the way the image of the gift is portrayed (both pictorially and editorially) is very important to the company. Their website gives information about each gift and a clear image of what the gift is. This is in addition to customer service features such as an easy to navigate site, free delivery, and a free phone number. Offline the company is also committed to Customer Services. For example, Prezzybox policy is to respond to all emails within 1 hour. Customers, customer acquisition and customer retention are the company’s primary focus.

- John Lewis has received very encouraging feedback from its customer survey. Feedback is also obtained from many online enquiries, as customers are encouraged to ask any questions over the web using email, which is answered promptly. This also reduces telephone costs.

Q9) Have the company’s suppliers provided adequate services?

- Prezzybox has over 150 suppliers, which have given the company mixed experiences. Some are very good, others are very bad. The good suppliers send products on time, notify the company if the product is out of stock or if there
are price increases. They provide good pictures and images that Prezzybox can display on their website, which is important for Prezzybox to explain and give details about the products. The bad suppliers do not send products out on time (and do not notify) and provide no clear pictures or details of the gifts. They also fail to tell Prezzybox when products are discontinued or out of stock. Prezzybox intends to expand, which will give it more leverage with suppliers.

- John Lewis have two major suppliers who provided adequate services, I-Force who provided the fulfilment centre and Client logic who provided the call centre, acquired with Buy.com.

Q10) What internal issues have arisen? For example, has it had an effect on employees' resistance to change, cultural change etc? Can any problems be quantified?

- This did not affect Prezzybox as they are a new company with no prior bricks-and-mortar presence.
- John Lewis created a separate online division with skilled staff from Buy.com. This was kept separate from the main company so it gave no internal issues.

Q11) Is the website making the best use of available technologies? How will the company stay on top of online developments in the field?

- Prezzybox stated that they are constantly keeping an eye on the available technology and are amongst the most advanced in the market sector. They work closely with their business partners in this field, In2netlogic, who act in an advisory role, ensuring that Prezzybox can benefit from technological advancements.
- John Lewis make regular updates to their website, and are using affordable and cost-effective technology. By acquiring Buy.com, John Lewis benefited by having skilled and experienced staff.

Q12) Does the company web site effectively convey the image and message the company needs?
For Prezzybox the answer was “yes” as the entire business is currently web based. The company aims to utilize new media to promote the site.

John Lewis believes their website conveys the desired image and maintains its strong brand name.

Q13) What information has been gained from customer surveys, from monitoring the use of the company web pages and from sales made through E-commerce?

- As outlined earlier, Prezzybox is customer focused. The company’s initial business plan in 1999 contained consumer research conducted internally. Customer comments, combined with internal logic, have ‘persuaded’ Prezzybox to modify certain aspects of the operation.
- John Lewis performed usability tests by filming customers to see where they get stuck in the website. They consulted customers when naming navigational aids, for example what phrase would assist customers when looking for baby clothes.

Q14) Does the company's business offer other services or customer support functions that could be provided online?

- As Prezzybox has no bricks and mortar presence all customer support is offered online with emails and telephone answers.
- John Lewis, however, has a bricks and mortar presence and would like, in the future, to offer the curtain making online that it offers in its departmental stores. However, to offer that service the website needs good simulation, graphics and higher bandwidth. At the moment John Lewis assumes a basic 15” screen and 19k modem.

Q15) Are there further efficiencies that could be achieved by more effective electronic communication?
Testing the E-commerce strategy framework by applying it to companies  Chapter 9

- Prezzybox and John Lewis both agreed that further efficiencies and cost reductions can be achieved in reducing customer service costs by encouraging use of email for any query or complaint.

Q16) Could the company’s database of electronic contacts be further extended and used more effectively for marketing?

- Prezzybox plans to use their database extensively for marketing purposes. They have a registration process (offering users gift vouchers for registering) where they capture details about the user, including personal demographic data such as age, personality, and interests. They will then use this data to target users on the database with ‘user specific’ product promotions, etc. In the future they could sell this database to third parties – but this would have Data Protection Act implications. Prezzybox has a clear privacy policy stated on their website, http://www.Prezzybox.com, and are careful to adhere to the data protection act.

- John Lewis believes they could use the database of customer contacts to target existing and new customers, offer promotions with account cardholder points. This is currently under consideration so has not been implemented.

The answers to the first 16 questions are summarised in Table 9.5. The answers to these questions show that both companies have generally considered all the issues raised and are on-track to be successful. This confirms the findings from sections one and two of the questionnaire. However, some doubt could be expressed over the depth that some issues had been considered. For question 12, for example, on the image conveyed by the website, both companies expressed satisfaction over what they had achieved, but this could simply be because the issue had only been considered superficially. The more telling questions were those that referred to previous targets such as questions 1 and 6, and those probed for new ideas such as questions 15 and 16. Both company managers agreed that the questions enabled a useful review of progress, but it is suggested that when companies compile their own list of review questions they should concentrate on questions that are target related or relating to new opportunities.
Table 9.5: Answers on Strategy Assessment Questions

<table>
<thead>
<tr>
<th>Strategy Assessment</th>
<th>Prezzybox</th>
<th>John Lewis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Realistic targets for trading products</td>
<td>Yes, aimed to get 50 orders/day</td>
<td>Yes, aimed to increase geographical reach, extend brand, to be profitable in 3-4 years</td>
</tr>
<tr>
<td>2. Products and services</td>
<td>Selling presents online was achieved</td>
<td>System is delivering</td>
</tr>
<tr>
<td>3. Unanticipated problems</td>
<td>Distance selling regulations</td>
<td>Minor problems</td>
</tr>
<tr>
<td>4. Cost reductions</td>
<td>No stock so avoided high running costs</td>
<td>Stayed within budget</td>
</tr>
<tr>
<td>5. Costs increase</td>
<td>Cost of website development increased</td>
<td>Costs not increased, stayed within the budget</td>
</tr>
<tr>
<td>6. Sales objective</td>
<td>Sales figures were realistic and were achieved</td>
<td>Sales objectives were realistic and obtained more than expected</td>
</tr>
<tr>
<td>7. Reduced communication costs</td>
<td>N/A as new company</td>
<td>Traditional part of company unaffected as new division created</td>
</tr>
<tr>
<td>8. Improve customer relations</td>
<td>Created customer centric ethos</td>
<td>Encouraged customer feedback</td>
</tr>
<tr>
<td>9. Suppliers provided adequate service</td>
<td>Mixed: some suppliers better than others</td>
<td>Suppliers provided adequate service</td>
</tr>
<tr>
<td>10. Internal issues arisen</td>
<td>No issues as company started from scratch</td>
<td>Acquired skilled staff from Buy.com</td>
</tr>
<tr>
<td>11. Making best use of technologies</td>
<td>Constantly updating and keeping up with technology</td>
<td>Making regular updates and using cost effective up to date technology</td>
</tr>
<tr>
<td>12. Website convey desired image</td>
<td>Yes, company plans to utilize new media to promote site</td>
<td>Website conveys right image maintaining strong brand name</td>
</tr>
<tr>
<td>13. Information gathered from customer survey</td>
<td>Targeted customer needs</td>
<td>Performed usability tests</td>
</tr>
<tr>
<td>14. Customer support functions</td>
<td>Customer support offered online by email as well as telephone</td>
<td>Have a bricks and mortar presence and telephone based customer service</td>
</tr>
<tr>
<td>15. Can further efficiencies be achieved?</td>
<td>Reducing customer service costs by encouraging greater use of email</td>
<td>Reducing customer service costs by encouraging greater use of email</td>
</tr>
<tr>
<td>16. Further use of database</td>
<td>Use for marketing and data gathering to target and meet customers needs</td>
<td>Use to target existing and new customers and to offer promotions</td>
</tr>
</tbody>
</table>
9.9 Section Five : Critical Success Factors

All three companies were asked about the list of twelve critical success factors from Chapter Four. They were asked if they had had any difficulties in implementing and achieving any of the 12 CSFs and also, which they would consider to be the most important factors for their companies to achieve success when trading online. They were also asked the more general question about whether the list of CSFs were valid and relevant.

The companies' opinions of which CSFs they considered most important are given in Table 9.6.

Table 9.6: The Most Important Critical Success Factors

<table>
<thead>
<tr>
<th>Critical Success Factor</th>
<th>Prezzybox</th>
<th>John Lewis</th>
<th>ClothesLocker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure the website is secure</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Keep the website simple and easy to navigate</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listen to customers</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sell the right product or service</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Have the right infrastructure and link with the backend system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keep up with innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market the website</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build brand name and image</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Build in quality within the website, products and services</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow all the legal issues, patent and trading laws</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have the right skilled workforce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have a well-defined strategy</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
John Lewis, Prezzybox and ClothesLocker all agreed that the above list of critical success factors played a part towards the overall success of trading online and therefore confirming the validity of the critical success factors. However, for their own individual company application, John Lewis stated that building brand name and image, ensuring the website is secure, listening to customers, and having a well-defined strategy to be particularly important. Prezzybox stated listening to customers, ensuring the website is secure, keeping the website simple and easy to navigate, building in quality within the website, products and services, and having a well-defined strategy to be most important to the company. For ClothesLocker selling the right product or service, and having a well defined strategy were the most important to survive and succeed.

In terms of implementation and achievement of the critical success factors, Prezzybox believed they had measurably achieved all twelve success factors. However, three of the critical success factors had given some problems. For their infrastructure (CSF 5) the company relies heavily on prompt and reliable goods from supplier companies. Some of these companies proved to be neither prompt nor reliable. Furthermore, some supplier companies could not provide the high quality photographs of their products that Prezzybox needed for their website marketing (CSF 7). These two problems were eventually overcome by working closely with suppliers and in some cases abandoning the problem suppliers for more cooperative alternative companies. The other problem encountered was in distance selling regulations when trading overseas (CSF 10). This problem was eventually overcome but was not a serious issue for the company as its main target was the UK market.

John Lewis also believe they have achieved all twelve critical success factors. However, they admit that they will have to be more careful to maintain the critical success factor 6, keeping up with innovation, if they launch some of the additional services such as curtain making which will require higher grade technology.
ClothesLocker were not able to report the same success in achieving the critical success factors. Had they listened to customers more closely (CSF 3) they would probably not have launched the product lines they did on the Internet. They certainly now feel they were not selling the right products by this medium (CSF 4). Providing sufficient support infrastructure (CSF 5) for their helpdesk had been achieved, but only at additional, unexpected cost. The technological infrastructure in Turkey was also a problem, though as this was a national problem this would be difficult to overcome. Marketing the website (CSF 7) had also been achieved but again it took more effort and cost than anticipated, and they did not manage to establish the brand name and image to the level they felt was necessary (CSF 8). Trying to do all the development in-house gave problems in achieving the quality of systems and service they wanted (CSF 9) as they were not able to obtain sufficient staff with the right experience and qualifications (CSF 11). Overall the company believed they had not fully thought out their E-commerce strategy (CSF 12). The company itself highlights CSF 8 and CSF 12 as being the most important. The company believes that their failure to achieve the critical success factor on selling the right product and service was the main reason they failed. However, the difficulty in obtaining so many of the CSFs shows that they had also seriously failed to work to an effective E-commerce strategy. The results from the questions in this section suggest that even if the company had been selling the right product, their failure to achieve other CSFs, particularly producing an adequate E-commerce strategy, would have put the company in very serious danger of failing.

The results of this section of the questionnaire have shown the importance of assessing the critical success factors in the review of strategy in step 6 of the strategy formulation framework. The CSF analysis had discovered a large number of failings that ClothesLocker would have had to address if it had survived, and correctly predicted the demise of the company. Although they had achieved all the critical success factors, analysis of the CSFs had also highlighted some of the more problematic areas for the two successful companies. These are areas the companies will need to watch carefully to ensure their continuing success. These results verify the need for step 6 of the
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strategy formulation framework, and also show the critical success factors are valid and play an important role in any strategy assessment.

9.10 Section Six: The Twenty Key Questions

The twenty key questions discussed in chapter 5 that managers must answer in order to enter E-commerce were asked of all three companies. Normally in the strategy assessment phase the purpose of these questions is to compare answers with the initial answers obtained in steps 1 to 3 of the framework. Then, if some significant change is discovered, a rethink will be required necessitating a loop back to one of the previous steps of the strategy framework. For the three case study companies, however, there were no previous answers as the framework was being applied retrospectively. The questions in this section of the questionnaire, therefore, take on an additional purpose of trying to discover to what extent the issues raised by these questions had been considered in the companies’ initial planning.

Table 9.7 shows summarized answers to the twenty key questions applied to all three companies.

<table>
<thead>
<tr>
<th>20 Key Questions</th>
<th>Prezzybox</th>
<th>John Lewis</th>
<th>ClothesLocker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1) New Opportunities</td>
<td>Pure play internet company. Decision on what products and services to offer was made from scratch.</td>
<td>Use strong brand name for wider geographic range of customers. New services to be offered in future.</td>
<td>Aimed to reach global customer base</td>
</tr>
<tr>
<td>Q2) E-commerce customer</td>
<td>Customer survey showed target audience</td>
<td>Wanted to attract new customers as well as meeting needs of existing customers willing to purchase online</td>
<td>Catalogue buyers targeted</td>
</tr>
<tr>
<td>Q3) Adding value</td>
<td>Online shopping considered convenient</td>
<td>Wanted to maintain customer loyalty and offer price matching service</td>
<td>Offer low prices and convenience</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Q4) Change to existing business</td>
<td>No existing business to change</td>
<td>Take offline model and apply it online.</td>
<td>Should be an additional process to business</td>
</tr>
<tr>
<td>Q5) Outsourcing</td>
<td>Design and maintenance was outsourced</td>
<td>Acquired Buy.com to carry out online trading</td>
<td>Maintenance should be outsourced</td>
</tr>
<tr>
<td>Q6) Organisation change</td>
<td>Small company no change</td>
<td>Created a separate online division called John Lewis Direct</td>
<td>E-commerce should be tied in within organisation departments</td>
</tr>
<tr>
<td>Q7) Supply chain improvement</td>
<td>New company, so no existing network or supply chain</td>
<td>For delivery, they partnered with I-Force warehouse operators</td>
<td>Suppliers need to use updated technology</td>
</tr>
<tr>
<td>Q8) Legal issues</td>
<td>Trade agreements required</td>
<td>Trading locally therefore no global issues</td>
<td>Trading globally involves legal issues</td>
</tr>
<tr>
<td>Q9) Competition</td>
<td>High competition from companies selling gifts</td>
<td>Want to offer a competitive advantage by offering high quality service</td>
<td>Not many competitor threat as selling clothes online has not taken off</td>
</tr>
<tr>
<td>Q10) B2B E-commerce</td>
<td>Suppliers using traditional methods</td>
<td>Suppliers prefer trading online</td>
<td>Suppliers prefer traditional means of trading</td>
</tr>
<tr>
<td>Q11) Pricing Policy</td>
<td>Pricing policies geared towards buying from Internet</td>
<td>Assortment of pricing policies geared to local competition</td>
<td>Need to have consistent prices</td>
</tr>
<tr>
<td>Q12) Streamlining business</td>
<td>Not applicable to Prezzybox</td>
<td>Important all processes are linked</td>
<td>Link all processes together</td>
</tr>
<tr>
<td>Q13) Customer touch points</td>
<td>Wants to be more customer focused</td>
<td>Likes to maintain human intervention and personal service to customers</td>
<td>Need to have a 24 hour call centre</td>
</tr>
</tbody>
</table>

Table 9.7 Answers to Twenty Key Questions (continued)
Testing the E-commerce strategy framework by applying it to companies  Chapter 9

Table 9.7 Answers to Twenty Key Questions (continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>People skills</th>
<th>New technology</th>
<th>Timing to market</th>
<th>Level of investment</th>
<th>Objectives</th>
<th>Critical success factors</th>
<th>Future trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q14)</td>
<td>Outsourced thus not many skills were required</td>
<td>Both technical and business skills required</td>
<td>Mixture of skills required</td>
<td>Confidential</td>
<td>Confidential</td>
<td>Never underestimate level of investment</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
</tr>
<tr>
<td>Q15) New technology</td>
<td>Basic technology required</td>
<td>New technology through Buy.com. Bandwidth makes new service possible</td>
<td>Have a basic infrastructure in place</td>
<td>JohnLewis acknowledged they were late in offering online services</td>
<td>Important to enter market at the right time - for ClothesLocke the customers were not ready</td>
<td>Have a well defined strategy and sell the right product</td>
<td>Continue to have a multichannel strategy. New services may become possible with clearer images</td>
</tr>
<tr>
<td>Q16) Timing to market</td>
<td>Timing to enter market is crucial</td>
<td>Important to enter market at the right time - for ClothesLocker the customers were not ready</td>
<td>Important to enter market at the right time - for ClothesLocker the customers were not ready</td>
<td>Important to enter market at the right time - for ClothesLocker the customers were not ready</td>
<td>Important to enter market at the right time - for ClothesLocker the customers were not ready</td>
<td>Important to enter market at the right time - for ClothesLocker the customers were not ready</td>
<td>Important to enter market at the right time - for ClothesLocker the customers were not ready</td>
</tr>
<tr>
<td>Q17) Level of investment</td>
<td>Confidential</td>
<td>Confidential</td>
<td>Have a well defined strategy and sell the right product</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
</tr>
<tr>
<td>Q18) Objectives</td>
<td>Has clear long term objectives</td>
<td>Long term objectives and vision, offer more functionality and extend product range</td>
<td>Had objectives set out but did not survive</td>
<td>Have a well defined strategy and sell the right product</td>
<td>Have a well defined strategy and sell the right product</td>
<td>Have a well defined strategy and sell the right product</td>
<td>Have a well defined strategy and sell the right product</td>
</tr>
<tr>
<td>Q19) Critical success factors</td>
<td>Customer relationship management and well defined strategy</td>
<td>Maintain brand name and customer relationship</td>
<td>Have a well defined strategy and sell the right product</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
</tr>
<tr>
<td>Q20) Future trends</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
<td>Keepes careful watch on all new technological developments, changes in market and competitors moves.</td>
</tr>
</tbody>
</table>

What was more significant was not what answers were given but the way the answers were given. It was clear that some of the questions were being answered with the benefit of hindsight, particularly by ClothesLocker. Prezzybox and John Lewis had clearly thought about most of the issues in the initial stages. Prezzybox had clearly not identified all the legal hurdles to global trading in the first instance (Q 8) nor did they appear to have fully understood their suppliers' readiness to interact online (Q 10) but
otherwise they had prepared themselves well. John Lewis admitted they had not considered the timing to market (Q16) at the appropriate time and had consequently entered the E-commerce market later than they should have done, but once they had decided to consider E-commerce they clearly considered all the issues carefully.

On considering the questions as a review process, neither company wanted to make any major changes in strategy direction. Prezzybox, in fact, are so convinced that their focus on customers is correct that they wish to do more in this respect by introducing yet more customer care facilities onto their website. John Lewis considered the wider availability of broadband and the ever improving graphical technology has opened opportunities to offer new interactive services, but they do not want to make any changes to their existing strategy direction.

ClothesLocker had clearly not considered all the questions sufficiently well when they first started. They had not fully thought through their target customer base either locally or globally (Q1 and Q2). The issue of outsourcing (Q5) and the skills base needed (Q14) was not considered sufficiently. The supply chain problems had not been foreseen (Q7 and Q10) and the level of investment to provide a helpdesk service (Q13 and Q17) was also unexpected. Perhaps their biggest error was in their timing to market (Q16) where neither the current readiness of customers to buy online nor the delays caused by in-house development were not considered. It is concluded that had ClothesLocker fully considered the 20 key questions in the first instance they would not have undertaken the strategy direction that led to failure. Furthermore, if the company had still been trading and they were using the questions as a strategy assessment and review, the manager admitted they would have wanted to change direction as a result of the issues raised. This probably would have involved going right back to step one of the strategy formulation framework. This verifies that the 20 questions are needed when first entering E-commerce and provide a useful check when used later in a strategy assessment to see if any change in direction is required.
9.11 Case Study Conclusions

The suggested E-commerce strategy formulation framework and method suggested in Chapter 7 were applied retrospectively to three companies to see whether the use of the framework and method would have made a difference to the companies. It was found that Prezzybox and John Lewis had more or less followed the guidelines anyway and it is concluded that the fact that they had considered all the issues and devised a carefully thought out strategy undoubtedly contributes towards their success in E-commerce. Having a well thought out strategy has been shown to be a particularly important success factor. It is the one thing mentioned as important by all three companies. The strategy formulation framework has been shown to be of use in that it forces the companies to consider all the issues thoroughly.

However, just because the framework was successful it does not mean that it cannot be refined and improved. All procedures and methodologies can benefit from a process of continual improvement and there were lessons learned from the case study tests of the framework that can be used to improve the strategy formulation framework and method proposed in this thesis.

The set of questions that were least informative in the three case studies in this chapter was section 4 of the questionnaire, the strategy review questions from Section 7.9.1. These questions were never meant to be a definitive list, as companies are encouraged to develop review questions to suit their own circumstances. Nevertheless, it would improve the strategy formulation framework if the set of suggested questions provided were more helpful as they will undoubtedly become a starting point for most companies to develop their own. The questions in section four of the questionnaire suffered from two problems.
1. Some of the questions could easily be answered with only superficial thought. It was too easy, for example, to answer yes, the website was being marketed adequately without really considering if it could be marketed better.

2. Several of the questions were similar to the questions concerning achievement of the critical success factors or the 20 key questions, of which both sets of questions are part of the same review stage, step 6 of the framework.

The questions in this section that provoked the most informative answers were the ones concerning targets and the ones that asked about new initiatives, but even the latter to some extent overlapped the 20 key questions so did not provide anything new. Overall, in terms of assessing how successful the E-commerce strategy had been, the questions from section one and two of the questionnaire were more revealing.

To take into account these experiences of applying the strategy formulation framework the following modifications are, therefore, suggested.

1. Include in step 2 of the framework an explicit suggestion that quantitative targets should be set for development costs, development timescales, the number of products sold, turnover, the number of visitors to the site, the number of mistakes made, the number of goods returned, etc. This should be done in step 2 as the targets should be set according to business needs.

2. Emphasize the objective review of achievement of the quantitative business targets in the review questions in step 6, the strategy assessment.

3. Include the questions from sections one and two of the questionnaire used in this chapter in step 6 of the strategy formulation framework.

4. Remove from the strategy review questions in step 6 those questions which largely duplicate the questions concerning achievement of critical success factors. For example remove review question 12 on the image and message conveyed as it is similar to consideration of critical success factor 8 on building the brand name.
It is likely that the questions reviewing the achievement of critical success factors will still be the most revealing and informative part of the strategy assessment stage because of the nature of CSFs - they are critical for success. However, the above improvements to the strategy formulation framework should make other parts of the assessment stage more objective and therefore even more useful in a review of strategy.

These suggestions, however, represent a refinement of the strategy formulation framework. The majority of the framework has worked well as proposed in Chapter 7. The main lesson is that, whatever variation of the framework is used, the important point is to use it. Failure to do so could lead to failure to consider all the issues adequately and, in turn, this research has shown this could lead to failure of the company.
CHAPTER 10: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER WORK

Chapter Preface
This chapter summarises the whole thesis, relating the work to the aims, objectives and hypothesis set out in Chapter 1 and refined in Chapter 2. Conclusions and recommendations for further work are included to provide direction for future research work for NSB retail or other interested parties.

10.1 Meeting the Research Aims and Objectives
The general aim of research for this thesis has been to produce guidelines to assist companies to formulate a feasibility study or strategy for entering E-commerce. An E-commerce strategy framework and associated method have been produced for companies thinking of going into E-commerce, prompting consideration of why they want to trade online and what do they want the website for in the initial stages, and then taking the companies through the necessary steps to achieve their aim. These steps can be applied to different companies in different industries at different levels of E-commerce involvement. For example, the company may have already gone through the initial stage of deciding why they want a website and may be on the planning or design stage, or there could be companies already trading online who want to evaluate and revise their current strategy, in which case they can look at the strategic assessment to see if they have achieved their target. The essence of the strategy method is to use the parts of the overall strategy framework that are appropriate for each particular company.

To move towards these aims the specific objectives of this research were defined as follows.
1) To study published literature and case studies to determine the critical success factors (CSFs) for E-commerce companies to assist companies to learn the lessons from others' experiences.

2) To study the application of traditional marketing and business theory to an E-commerce company case study to see if the theory is still applicable in practice.

3) To draw up a set of guidelines for managers to form an E-commerce strategy, based on the review of published material, on the opinions of managers involved in E-commerce, and on new case studies carried out as part of this research. The guidelines will include a set of questions to be answered to ensure all necessary considerations are taken into account.

4) To test these guidelines by retrospectively applying them to known successful and unsuccessful E-commerce companies in business to consumer trading.

5) To test the findings and proposals by publishing in peer reviewed conference proceedings and journals at the earliest opportunity.

6) To publish case study details for use as training and learning material for individuals and companies entering E-commerce.

The first objective is covered in Chapter 2 and Chapter 4. The second objective is covered in Chapter 6. Chapters 4, 5 and 7 describe how the guidelines in the third objective were created in the form of an E-commerce strategy formulation framework and associated method. Chapters 8 and 9 then describe the testing of the framework and method as specified in objective four. The last two objectives have also been achieved with a number of publications described in Section 10.3.

The next two sections will describe how each objective has been tackled and achieved in more detail. Of course, whenever trying to solve a problem questions are inevitably raised. Some of the questions raised during the research are still unanswered and form the basis of the future research section towards the end of this chapter.
10.2 Analysis of the Methodology for Objectives One to Four

In general, the methodology pursued during this research has been very successful. A study of published literature helped to identify the areas of research that were not well covered. It showed that, although there were papers on strategy applied to E-commerce, there was very little based on practical research on real cases. Indeed, there was a shortage of independent research on E-commerce case studies. Furthermore, there was no available framework to enable managers to make the best use of the case studies that did exist. This gave the motivation for the direction of the research with its emphasis on practical solutions for real companies. An approach based on real case studies and the views of real managers therefore suggested itself. Nevertheless, the literature did provide a useful starting point.

One important conclusion from the literature was that deriving critical success factors would provide a useful basis for E-commerce decisions. Furthermore, if these critical success factors were derived from real published experiences, they would provide an easy-to-use means of benefiting from these experiences. The list of critical success factors was, therefore, drawn up from the literature as described in Chapter 4. A focus group of managers involved in, or considering becoming involved in E-commerce was then used to verify the list of critical success factors to ensure they were likely to be useful in practice.

Another suggestion for the E-commerce research also came from the literature. It was noted that some authors had used a series of questions to raise awareness of issues amongst managers. This provides a very flexible framework for managers of all types of businesses to consider the issues, each question varying in significance depending on the company concerned and each highlighting issues that may be unique to that companies line of business. For this reason, a set of questions was derived and used as the basis of the strategy formulation framework. Once again, the questions were founded on practicality with Chapter 5 describing the in-depth interviews of managers.
with guidance from an experienced manager from In2netlogic, a successful E-commerce consultancy company.

Some papers reviewed suggested that, despite the new and revolutionary attributes of E-commerce, traditional marketing methods and considerations should still apply. However, there was little evidence in the literature of this assertion being applied to E-commerce companies in practice. If traditional methodology was to be taken into account in deriving guidelines for E-commerce formulation, it needed to be checked with real case studies. Chapter 6 describes how this was done though, in fact, time only permitted one such case study. The suggestions for further research at the end of this chapter include carrying out more case studies to examine this issue.

With the critical success factors and key questions for managers, and with traditional marketing methods also considered, it was then possible to devise the framework for formulating a strategy for E-commerce described in Chapter 7. A method for forming a strategy for traditional businesses by Turban (2000) was adapted for E-commerce businesses to take into account the findings described in Chapters 2 to 6. This provided guidelines for companies at the beginning stages, considering the feasibility of E-commerce, through to companies already involved in E-commerce who need to review their strategy. The framework derived in Chapter 7 is the main research output to satisfy the aims of this thesis. This were then tested on real case studies as described in Chapter 8 on the feasibility stages of the framework and in Chapter 8 on the later stages. These case studies showed that when companies followed the equivalent of the strategy formulation method they were successful, and a case study where they were not applied proved to be unsuccessful. The framework and method in these case studies were applied retrospectively to obtain results in the time available for a PhD. A case study where the strategy formulation framework and method are applied from the outset with the progress and success of the company then being measured over time is a recommendation for further research in Section 10.5.
A potential criticism of the research that the author acknowledges is that the critical success factors and the key questions are subject to the author's interpretation. A different researcher could go through the same process and produce different results, though they would be substantially similar. For example, the fourth critical success factor "Sell the right product or service" indicates that companies must try to sell the products the public will accept over the Internet at the time. An alternative way of looking at this would be to say for any given product, the timing for its introduction to the Internet market is the critical success factor. While, at first glance these two interpretations appear quite different they both refer to the same issue. So does the difference matter? The purpose of the critical success factors and of the key questions is to ensure a company considers all the relevant issues. Providing this is achieved it does not really matter how the critical success factors and key questions are focussed and phrased. However, the critical success factors also serve as a set of tests that a company has reached a state which can lead to longer term success in E-commerce. Though it may be possible to base a test round the timing of the introduction of products for sale over the internet, the author suggests that the critical success factor as it has been phrased in Chapter 4 provides a simpler, more workable solution. All the critical success factors as stated in this thesis have the benefit of being tried and tested in chapters 8 and 9.

The feedback for the critical success factors and for the key questions has been very positive and the tests carried out on the case studies in Chapters 8 and 9 indicate that the objectives have been achieved. The author believes, therefore, that her framework and the associated method make a very positive contribution to E-commerce research. To overcome the identified problem of lack of awareness and understanding in E-commerce, the framework included a set of questions to be considered at each stage of E-commerce implementation, taking the systems development lifecycle from initiation right through implementation and assessment. These questions should ensure that no company is ill prepared for E-commerce and that all the necessary consideration of the issues has taken place.
10.3 Objectives Five and Six, Publishing Research Material

An important part of the research plan was to test the findings and proposals made by seeking publication in peer reviewed journals and conference proceedings. The feedback from referees, each an experienced researcher in their field would serve to verify the ideas presented or to warn of potential flaws in the research findings. In addition, the conference presentations also gave the opportunity for other experts to comment. Research was also published in peer reviewed journals and conferences to make a contribution to the industry and academia at the time when there was a gap in the knowledge on the area covered by this research. All the conference papers and journals were published when there was hype associated with trading online but there were no clear rules on how to make it work.

A paper on managerial issues titled “Management Issues Regarding E-commerce and the Internet” was published at the time when there was pressure on managers from their respective companies to offer E-commerce with companies fearing their competitors will leave them behind. At the NSB Retail customer focus meeting described in chapters 4 and 5, it had been observed that many managers of retail companies were confused and unaware of what needed to be done. The paper was presented and published in the proceedings of the IEEE International Conference on Management of Innovation and Technology in November 2000 (Shah and Dawson, 2000a).

When looking at the success of companies such as Dell.com, automating supply chain management and back end integration was identified to be crucial when delivering products and services (see Chapter 4 regarding and back end integration and the Dell case study and Chapter 5 on the key question on supply chains). A paper on this topic titled “E-commerce and Information Flows in the Supply Chain Management” was presented at the International Academy of E-business Conference in March 2002 and
subsequently published in their journal, the E-Business Review in 2002 (Shah, Seow and Dawson, 2002a).

Quality was also identified as important success factor in Chapter 4 and is also covered in Chapter 6. A paper, titled “Is Quality the key to successful E-commerce marketing”, was presented and published in the proceedings of the Software Quality Management conference in April 2002 (Shah and Dawson, 2002e).

A key paper covering the main aim of this research titled “Formulating an E-commerce Strategy” was presented and published in the International Centre of E-commerce conference in November 2001 (Shah and Dawson, 2001c). This paper became the basis of Chapter 7 on strategy formulation. The strategy approach was also covered in “How to be an E-survivor in current economic climate”, published in June 2002 in the online Journal of E-commerce, after the dot-com collapse and the subsequent economic shake out (Shah and Dawson, 2002b).

The findings of the case studies of Prezzybox and Clotheslocker in Chapter 8 were presented at the Software Quality Management conference in 2003 in a paper titled “Practical Experiences of Applying Guidelines to Form an E-commerce Strategy”. The feasibility study, described in Chapter 9, carried out for a company wanting to offer E-commerce, titled “Research for a Footwear Company in the UK to Offer E-commerce - A Case Study”, was published in the IS OneWorld conference in April 2002 (Shah and Dawson 2002f).

Other published papers related to the papers mentioned above are a paper titled “E-commerce strategies and tactics to adopt for success” in India’s first E-commerce Magazine (Shah and Dawson, 2002c). A conference paper, titled “Electronic Business in the Hotel Industry”, was presented at the 1st Annual Business Innovation in the Knowledge Economy (BIKE) Conference, sponsored by IBM at Warwick in June 2002 (Shah et al, 2001b).
The above publications cover nearly all chapters of this thesis and, therefore, meet objective five in testing the research findings through refereed publications. The final objective of publishing case studies to be used by students and employees or managers has been achieved as a chapter "Formulating an E-commerce strategy for success" for a strategic management book, titled "Managing E-business for the 21st century", published for a MBA students by Prentice Hall (Shah and Dawson, 2003a).

A detailed list of publications is given in Appendix 1. In all of these papers, the referees have generally been very supportive. Although there have been some criticisms of the style (for which the papers were then amended) there have been very few criticisms of the content. The only criticism of any significance was on the evidence for the findings which two referees described as being "anecdotal". This is a valid criticism but it is the inevitable result of a case study approach. It is evident from the enthusiasm and demand for case studies in E-commerce that these are found to be useful and informative to people working in the E-commerce field. Therefore, while the author accepts the anecdotal nature of the case study evidence means that none of the findings can ever be conclusively proven, it is nevertheless clear that such research has significant value in adding to the body of knowledge in the subject area.

The papers presented at conferences all tended to generate interesting and often lively discussion. This discussion and the comments made were all supportive in nature, however. Many of the delegates added comments of their own experiences that agreed with the findings presented. Some gave suggestions on directions to take the research forward for which the author is grateful.

Perhaps the most significant of all delegate contributions came at the International Academy of E-business conference in Las Vegas, where the delegates from all round the world were able to demonstrate the willingness of the public to buy footwear online. This is reported in detail in Chapter 8.
10.4 Summary

The research in this thesis has significantly contributed to three areas of research. Firstly, it has provided a framework to assist companies to formulate a feasibility study or strategy for entering into E-commerce that can help companies to be successful. Secondly, it has established that E-commerce is not an entirely new way of doing business, as it is shown that traditional business and marketing theory does still apply to setting up an E-commerce business. Thirdly, it has helped build case studies that can assist in the learning and training of managers and employees entering into E-commerce and can be used by students learning about E-commerce to reflect on real life experiences.

Overall the aims of this research have been achieved by the research contributions reported in this thesis and the published papers list given in Appendix 1. Copy of the paper on Education needs can be found in Appendix 2.

Companies can avoid failures and be effective when setting up in E-commerce if they follow the method of applying appropriate parts of the strategy formulation framework and by carefully considering their answers to the questions posed. They can also become and remain successful if, when they have set up their E-commerce business, they regularly review their strategy as suggested in the last step of the framework.

10.5 Recommendations for Further Research

There are a number of suggestions for further research that can build upon the results of this thesis, and in particular on the aims of this thesis, to be able to assist those companies committed to moving into E-commerce to form an E-commerce strategy and those companies considering offering E-commerce to carry out feasibility study. The author's suggestions for further research are as follows:
Further case studies need to be looked at to get a balanced view of different industries. It would be beneficial to apply the E-commerce strategy guidelines or perform feasibility studies on more companies wanting to offer E-commerce or already offering E-commerce within different sectors. It would then be possible to observe whether the findings in this thesis could be reproduced in a wider variety of companies. Although it is believed that the proposed strategy approach is of general benefit, further case studies are needed to verify this. It may be useful to learn if the strategy can be applied with each particular nature of business. For example, is the approach to strategy formulation only useful to businesses in the specific retail sectors? This kind of information might prove helpful in providing industry-specific guidelines in the future.

The E-commerce strategy formulation framework proposed in the research needs reviewing as E-commerce is constantly developing and changing. Change can be driven by business as new companies become prominent in the E-commerce market, or by technology with new developments such as wireless technology. The latter aspect is known as M-Commerce, which is predicted to become another channel for future shopping (Baldy, 2001). Thus, research should be continually carried out to update the strategy approach and to carry out assessment of its value.

Research can be carried out to update the existing list of success factors and identify any new critical success and failure factors emerging from experiences of further companies either trading in Business-to-Business or Business-to-Consumer E-commerce. This is a continual requirement for further research as the pace of change in E-commerce technology and environment is so fast.

The whole of the E-commerce strategy formulation framework and method should be applied to a company to form a complete case study. The progress of the company should then be followed to see if it receives a return on investment or makes a profit. This will be a long-term research project as it may take a number of years before the profitability of a company becomes apparent (cf.
Amazon.com). It is likely, therefore, to be beyond the scope of a single PhD research project.

- Further research can be carried out to discover whether traditional marketing theory applies to E-commerce as it was only briefly covered with a single case study in the thesis. This aspect could do with more of an in-depth study, with a number of case studies to create more confidence in its conclusions.

- Research can be carried out to look at the legal issues of E-commerce. The newness of the E-commerce field means that legislation is not well established in this field. The law is forced to be continually changing to keep up with the advances in technology and the global nature of E-commerce. This is clearly an important issue but, as there were the limitations of time and as research was aimed to focus on companies trading in the UK, the author did not cover legal issues, taxation, global trading agreements, or cultural issues to the depth these topics deserve.

- The growth of the World Wide Web means that people with serious sight problems now have the opportunity to enjoy a wealth of information and services that was previously unavailable to them, from up-to-the-minute news and travel timetables to online shopping and banking. With the help of synthesised speech and technology, even completely blind people can use the Internet. For these access technologies to work properly, web pages must be appropriately designed and must be written in valid hypertext mark-up language (HTML).

Many sites are unusable by visually impaired people simply because they are poorly designed and are written in invalid HTML. People with disabilities have as much of a right to be able to access websites as anyone else, but many designers fail to recognize this. The Web is an information medium, but too many web designers still think of it as a purely visual medium, and are unaware even that visually impaired people can access the web. The Disability
Discrimination Act (HMSO, 1995) means that such ignorance and poor web design is no longer acceptable, which means that extensive changes to some web sites will be required to take account of the appropriate guidance from the W3C and other sources (W3C, 2005).

To cater for everyone, websites should be flexible in design, enabling individual users to use their own browser to adjust the text and color settings to suit their own particular needs and circumstances. Good design is essential for disabled people accessing the web - poor design can render a site completely inaccessible.

An accessible website is one that can be accessed by anyone. It is perfectly possible to produce an attractive, dynamic design that is fully accessible. Websites that are designed intelligently benefit everyone - not only people with disabilities. Further research can be carried out to identify how companies should follow the disabilities legislation during the designing of website and when trading online. It is important to consider that E-commerce websites are of good quality to meet the needs of the high target market of disabled users.

- Future work can be carried out to examine the use of E-commerce with a view to exploring issues of the business impact. Examples of issues to explore are:
  
  o What are the risks in terms of financial outlay and business disruption during the change compared with the marketing gains, and gains in administration efficiency?
  
  o Where should the boundaries be drawn in the first instance - e.g. should confidential data be made available (e.g. order details, delivery dates)? Should on-line payments be possible, and if so, will this take away some of the flexibility to tailor prices to individual customers? Will making company data available (such as stock levels) affect the market?
  
  o What are the implications for organizational change when introducing E-commerce? Are there certain organizational structures that will
particularly lend themselves to E-commerce and, equally, are there and structures that will be subjected to excessive disruption by the change?

- Research can be carried out to see if the different culture amongst different ethnic groups affects the behavior of E-commerce customers and the viability of E-commerce in general. The author is carrying out research to identify the Indian consumer buying behavior when shopping online, looking specifically at a small segment and category of Indians known as Jains. Research is and will be carried out looking at the Jain population in London but due to the time restrictions of the 3 years of a PhD the author has not been able to complete this research in time to include it in this thesis. This study is to be compared with a similar survey by Raj Kumar Prasad of Srijan solutions, editor of E-commerce magazine in Delhi India (Prasad, 2002). The results will be able to be used by companies offering their products and services online to allow them to target the Jain community and try and meet their customers’ needs.

10.6 Conclusions

The future of E-commerce is difficult to predict, but it is safe to say that it will continue to grow at a considerable rate. This is mainly due to the ever-increasing advancements in technology and the continuing number of businesses that are connecting to the Internet. Investment in E-commerce will enable them to keep up with the competition in the market and continue to fulfill customer expectations.

Research has been slow to identify the critical success factors of E-commerce. Individuals can gain not only from knowing these specific factors that constitute success, but also from understanding how to avoid mistakes and approach these success factors under different situations. As E-commerce continues to grow, so too will the need for organizations to know the success factors to survive and then benefit from the use of technology.
Overall this thesis has managed to establish a framework to formulate an E-commerce strategy and has shown how this can be achieved. The results have been interesting and informative. They have led to a much greater understanding of what constitutes the success of surviving in E-commerce by identifying mistakes made by pioneers who overlooked critical factors that led to failures of online trading.

As this study has brought to the surface factors that have not been addressed elsewhere in current literature, the author believes that the findings make a significant contribution to the understanding of success and failure in E-commerce. As explained earlier in this chapter the author's three main research contributions have been:

i) Identifying the critical success factors of E-commerce and producing a framework and method for formulating an E-commerce strategy

ii) Establishing that traditional marketing theory applies to E-commerce companies

iii) Publishing case study for use as training and learning material for individuals and companies entering into E-commerce

The author's research has made contributions to both academia and industry. The author has produced ten conference papers and three journal papers, which are detailed in Appendix 1 of this thesis.

While the author has been undertaking the PhD there have been many enquires from industry and academia regarding the research. For example such companies as In2netlogic, Stead and Simpson, Wedgwood, Great Universal Stores, the Danwood Group, Shop Creator, E-ware Interactive, and Dales Shoes Online have contacted the author for the research material. These companies and other managers who have studied the research output have all made very favorable comments about the results. The research outlined in this thesis can help companies to consider issues and use the questions in the framework as a checklist when entering into E-commerce or revising
their current E-commerce business. This research can enable companies to avoid mistakes and failures, which achieves part of the first aim of this thesis. The research has also made a significant step towards the first aim of this thesis, by producing and publishing E-commerce case studies.

The experiences reported in this research of companies that have failed will help companies to realize that, to have a successful business, they must plan well and have a good strategy. Strategic planning clarifies where an E-commerce project should focus with respect to the company’s mission and the given business environment. It is essential to have a well thought out strategy for E-commerce and to identify the critical success factors. Long-term winners on the web will be those who remember that the business fundamentals still apply.

E-commerce will not disappear. It is not a fad, trend or fashion that will soon be discarded, so traditional business and E-commerce are both here to stay, and each will have an important part to play. Wise companies will create their E-commerce strategy with the same care they use in crafting their traditional strategy (Kendall, 2001).

It is difficult to predict the impact technology will have on business in the long term. Returning to these thoughts, Drucker summarizes and prescribes, "It is not so very difficult to predict the future. It is only pointless. But equally important, one cannot make a decision for the future. Decisions are commitments to action, and actions are always in the present, and in the present only. But actions in the present are also the one and only way to make the future. Using the first principles of business and technology architecture now is the time to act” (Drucker, 1995).

As stated by Bob Metcalfe, Vice President of Technology, at the International Data Group Founder, 3COM, “The best mindset to have is that the Internet has just begun. We’re not in the thick of it yet. And now the velocity of activity has really picked up. There are big things happening but implications of the Internet are decades away”
(Metcalfe, 2002). It is clear that the fast moving nature of the Internet makes the future of E-commerce unpredictable, exciting and dangerous for businesses. However, the author believes this research will provide a better foundation on which to move forward which can only increase the chances of success.
APPENDIX 1:-

List of Publications
Publications

The research carried out as part of this thesis has led to the following publications and conference presentations:

**Journal Publications:**

**Magazine Publication:**

**Chapters in Books**

**Conference Proceedings:**


APPENDIX 2: -

COPY OF

EDUCATION NEEDS PAPER
Education Needs for Professionals in E-Commerce

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Abstract

The drivers for electronic commerce are both technological (under the tremendous pressure of innovation) and business oriented. This paper looks at the importance of E-commerce and its rapid expansion in recent years and notes that this has lead to a shortage of trained professionals in the field. It concludes that neither Computer Science nor Business degree courses adequately prepare a graduate to become an E-commerce professional.

The skills needed for E-commerce are identified and it is found that a combination of technical and business education is required. The technical aspects are relatively obvious so the management issues of E-commerce are identified in more detail.

This paper then proposes a degree course in E-commerce that incorporates both technical and business topics. Some detail is given of suggested modules for the course which include the management subjects that Chan and Swatmann [1] noted are imperative for the success of electronic commerce implementation. The proposed course in E-commerce should provide a guideline for any university wanting to develop an E-commerce course of its own.

Keywords. Education, Skills, E-Commerce

1. Why the Internet and E-Commerce is Important

E-commerce is a hugely encompassing area for business and industry, but there is rarely a consensus on the meaning of the term. A working definition of E-commerce for this paper is "buying things on the Internet" [2]. Whether trading between business and consumer or business-to-business, a transaction normally involves a transfer of value between two or more parties in exchange for physical goods or services.

There is not a single day that goes by without an article about some aspect of electronic commerce in such publications as the New York Times, Wall Street Journal, Business Week, US news. There is a reason for such extensive coverage by the press. Firms are spending billions of dollars on information technology to create the infrastructure needed to compete in a digital economy. As the process of "getting wired" continues, the need to understand how the
new environment is and will affect enterprises and individuals increases. Every aspect of a business is in the process of being transformed; firms are being forced to adapt or fail.

The Internet, in general, and the World Wide Web, in particular, has had a dramatic impact on how individuals and organizations exchange goods and services. The Internet has given rise to new organizational forms (e.g., virtual organizations) and markets, which feature electronic transaction models in new categories of goods and services. These developments have profound implications for society and raise several legal and policy issues that are yet largely unresolved (e.g., copyright, taxation, etc.). The convergence of computing and communications technologies is having a dramatic impact on such organizational processes as new product development, resource acquisition, order fulfillment and customer service.

Figure 1 below shows the growth of E-commerce world-wide and its predicted trend in 2002.

![Business-to-business e-commerce growth](image)

**Figure 1.**
Business to Business e-commerce growth world-wide

Neamond advice’s that managers dealing with IT should filter out the buzz words, ensure that the key system initiatives tie in with the business objectives, and ensure there is strong partnership with the IT department to achieve this [3]. The e-commerce growth shows the importance of skilled employees required to make it happen.

2. The Skills and Training Needed for E-commerce

Companies, which have been successful, rate having the right skills and strong team as the highest, factor in the implementation of e-commerce [4]. The latest big news, the e-commerce skills shortage is stalling e-business initiatives and threatening industries. Only the countries and companies that take positive action to educate their workforces will be the ones who survive the e-commerce revolution. The Association of Technology Staffing companies (ATSCo) recently released survey results, which highlighted the real extent of the problem. More than half of the respondent IT directors said they had recently been forced to slow down or reduce the adoption of new technologies because of e-commerce skills shortages [5].

Forrester research [6] has shown that universities, training organisations and vendors alike are failing to teach the right spread of skills. Examples from Price Waterhouse Coopers showed that five percent of UK consultants were made redundant and replaced with E-commerce
skilled personnel [5]. Employees who understand the architecture of e-commerce and the business strategies behind it are scarce to find.

This paper examines how E-commerce professionals should have the right balance of technical and business skills. There will always be certain fundamentals that graduates must be equipped with. For students entering into web marketing and E-commerce, the basics of marketing and business should be learned as well as some programming languages used in E-commerce; simply as a means of understanding how these can be used to the client's advantage, and how they can be detrimental to ecommerce and web design in a marketing context. So it is a strange mix, to say the least; the education would almost have to be liberal arts in nature, encompassing many disciplines, then have a technology focus as well. One further area, which is often neglected, is communication. Many people who come from a technological background may be able to do wonders with a keyboard and mouse, but how well would they be able to get their point across to clients or understand exactly what the client's needs are to keep them satisfied?

Computer Science graduates tend to be very interested in moving into E-commerce. Their degree provides them with most, if not all the technical skills needed. These graduates, however, lack the business training needed to make them effective E-commerce professionals. Similarly graduates of business and management degrees lack the technical skills. There are few degrees that could offer both the computing technical skills and the business skills necessary to enter E-commerce, yet E-commerce is currently revolutionising business and industry. There is clearly a need for universities to provide degree courses that give the necessary skills. Ignoring it could be very damaging to a university's interests. Having a course, which is in high demand can keep the universities' computing departments up-to-date with the outside world.

3. Managerial Issues of E-commerce

The technical aspects of E-commerce implementation are relatively obvious, with professionals clearly needing to know about web page design, online interactivity, networking and security. The management issues, however, require more examination. There have been general managerial issues, which are discussed below, each showing the importance of skilled personnel required for the successful implementation of E-commerce. Managers must decide how E-commerce can be used to increase the efficiency and effectiveness of their organization's processes, add value to current business practices, aid in the development of new products and services, and improve dealings with the organization's stakeholders.

The fast growing and changing field of e-commerce means the following issues must be considered:

(1) Managing resistance to change and increasing awareness
E-Commerce can result in a fundamental and radical change in the manner in which business is done. Therefore, resistance to change from employees, vendors and customers may develop. Education, training and publicity over an extended time period are possible solutions to the problem. Research has shown that organising training and awareness programs to make staff conversant with what happens has had significant effect in improving understanding of systems and technologies, which in turn has lead to greater acceptance of the implementation [7]. It is
also important to demonstrate the advantages and benefits gained, addressing the motivating factors.

(2) Integration of electronic commerce into the business environment
Electronic commerce needs to be integrated with the rest of the business. Some integration issues involve planning, competition for corporate resources with other corporate projects and interfacing e-commerce with databases, existing IT applications and infrastructure. It should take account of all functions within the organisation such as enterprise resource planning, customer relationship management, supply chain as well as people and processes. That means management needs to deliver integrated skill sets alongside the understanding of the end-to-end business design and the implications that an e-business initiative has throughout the entire organisation.

(3) Lack of qualified personnel and outsourcing
A possible difficulty in implementing e-commerce relates to human nature. The technology is new to many IS directors and employees and so may require new sets of skills. Very few people have expertise in e-commerce. There are many implementation issues that require expertise, such as when to offer special promotions on the Internet, and what kind of customer incentives is appropriate. For this reason, it may be worthwhile to outsource some electronic commerce activities. Companies who recruit should follow the Belbin analysis of team working and personal characteristics of each individual suited for the job to get the right set of people working together [8].

(4) The human element in sales
Another human factor relates to the operation of sales. Sales people who work on commission are accustomed to being in control of the flow of certain information, and the implementation of an e-commerce can lead to personnel dissatisfaction as customers bypass the sales person and revenues become more widely distributed within the company. E-commerce can also produce issues of lack of flexibility and transparency. For example a company that previously set all prices by negotiation with customers will be restricted in its flexibility if prices are made available to all on the Internet. This can cause jobs to be redefined within the sales team and elsewhere in the company.

(5) The impacts
The impacts of e-commerce on organisational structure, people, marketing procedures, and profitability may be dramatic. Therefore establishing a committee or organisational unit to develop strategy and to manage electronic commerce is necessary. The success or failure of electronic commerce within an organisation can be summarised as a response to both internal factors driven by critical issues such as managerial responses and organisational culture and by external factors (as described by Thong and Yap[9]) such as the need for competitiveness and adding business value. Intranets and GroupWare force people to cooperate and share information. Therefore their use can lead to significant changes in both organisational culture and the execution of business process reengineering. Further impacts may be felt in corporate structure and the redistribution of organisational power. Companies must be prepared for the internal politics caused by such an organisational change.
4.0 Suggested Course in E-commerce

As has been mentioned in previous sections neither a degree in Computer Science nor a degree in Business will adequately prepare a graduate to be an E-commerce professional. It is therefore instructive to consider what would be required in a degree leading to a career in E-commerce. The degree course should provide with an understanding of the tools, skills, business concepts, strategic opportunities, and social issues that surround the emergence of electronic commerce on the Internet. Students should develop an understanding of the current practices and opportunities in electronic shopping, electronic distribution, and electronic collaboration. The course should also explore many of the problems surrounding electronic commerce such as security and authentication, privacy and encryption, intellectual property rights, acceptable use policies, and legal liabilities.

4.1 Goals of an E-commerce Course

Upon completing an E-commerce degree, students should:

- Have a general understanding of the Internet and related technologies.
- Have built a web site similar to some of the simpler commercial web sites that one finds on the Internet. The web site will produce dynamic web pages that, at a minimum, are based upon information from a corporate database.
- Gain an appreciation of the current and future obstacles to electronic commerce.
- Understand how business strategy and technology strategy & implementation are intertwined.
- Be aware of the current trends in the use of Internet for commerce.
- Be in a position to help develop an electronic commerce strategy for a business.
- Be familiar with some of the new developments that may drive future electronic commerce initiatives.
- Distinguish, and understand, the difference between E-Commerce and E-Business.
- Explain and communicate effectively the essential reasons why a company would want to be involved in E-Commerce
- Describe the important marketing issues involved in conducting E-Business.
- Evaluate the security and risk factors involved in conducting E-Commerce.
- Explain the legal implications of conducting E-Business as it relates to the use of material on a web site. This includes understanding some copyright issues that relate to being able to use certain material on web sites. Understand and recommend to clients/employers the fundamentals of what makes a web site attractive for e-customers.
- Describe the advantages of corporate Intranets and understand how they can be advantageous to a business achieving its corporate goals more competitively.
- Understand the nature of the business of Internet Service Providers and how that industry is directly related to the spread of e-commerce.
- Be able to describe the impact of an e-commerce strategy on stakeholders such as suppliers, customers, and shareholders.

4.2 Other Learning Outcomes

In addition to acquiring the above skills, individuals should also:
• Develop communication and people skills.
• Demonstrate, individually and in teams, the ability to locate, research, and produce information for a given task.
• Practice effective individual time management techniques.
• Use available resources to improve the skills of listening, reading, note taking, studying, writing, and learning from past decisions.

4.3 Specific Abilities that a Student Should Acquire

At the end of the course, student should be capable of:
• Identifying organizational processes and relationships that may have value added through the application of an e-business strategy.
• Assisting in the incorporation of an e-commerce strategy into the organization's goals and objectives.
• Understanding the current state of e-commerce and the possible advantages and disadvantages of an e-business strategy.
• Aiding in the development of managerial e-commerce tactics and objectives for the organization's supply chain management functions.
• Analyzing and understanding who the winners and losers will be, as the market space assumes greater importance in the global business community.
• Analyzing the impact that e-commerce is having, and will likely have, on key sectors of the economy, and assess the strategic implications that this analysis holds for an organization.

5. A Suggested Course Structure

The suggested degree course in E-commerce should employ a combination of lectures, classroom demonstrations, self-learning, case studies, computer lab sessions, and project work. Experience with programming languages need not be a requirement, although basic computer literacy would be expected. A group project that will require a significant time commitment would be a very important aspect of the course. A project can be set where the groups can actually implement a web site that will incorporate many of the types of activities for which the Net is now used by organizations. The course would include roughly equal coverage of technical & non-technical issues. The technology discussions should be complemented by actual demonstrations and hands-on lab sessions, when possible.

To satisfy the aim for students to recognize and explain business processes, identifying and recommending Internet and/or E-Commerce opportunities that can enhance service quality and cost effectiveness, topics should include:
• challenges, opportunities, and issues related to the origins of the Internet
• ISP's - Internet Service Providers
• Intranets and Extranets
• marketing concepts in the context of the Internet
• basics of marketing a site on the Net
• using search engines
• understanding what e-customers want and the key points to satisfy them
• web copyright issues

Students should be able to combine a strategic, analytical mindset with creativity and have strong business, financial planning and organizational skills.

5.1 Suggested Modules

The following would be components or modules of the suggested E-commerce course, though the size of each module could vary, depending on the students background and the perceived market at the time the course is taken:

• Introduction to E-commerce
This would cover the basics of the Internet technology, overview of e-commerce, definitions, difference between e-commerce and electronic data interchange, benefits and disadvantages, general understanding of the architecture.

• Technologies behind E-commerce
This would cover web site security, computer applications, operating systems, electronics, networking, data transaction security, electronic payment systems.

• Programming languages
This module would cover web languages and programs such as HTML, XML, Java, Javascript, VBScript, Perl, and design languages such as UML. Depending on the students background it may also be necessary to include other languages to teach basic programming principles.

• Business to Consumer E-commerce
This would cover e-commerce business models, online retailing, and customer relationship management and can include case studies such as IBM. Modules in this subject area would include marketing, management, human resource and strategic planning modules. Other topics could be International Business with a focus on cultural differences, business impact, pricing, product advertising and branding.

• Business to Business E-commerce
This would include material on supply chain management and electronic data interchange. It should include the associated accounting and finance, logistics, statistics, project management and risk management required to support business to business E-commerce.

• Internal business operations
This would cover intranet and extranets, data warehousing, data mining and general information systems.

• Legal issues
This would cover issues on copyright, data protection, intellectual property rights and contract law.

• Web interface design
This would cover information content, quality, ease of use, human computer interaction, graphical user interfaces.

• Starting an Internet business
This would give case studies of Internet entrepreneurs, producing a business plan, growth patterns, competitor analysis, customer behavior, future predictions, market growth analysis, industry and market position.

• Mobile computing and future innovations
This would examine mobile computing and WAP (Wireless Application Protocol), and its potential growth in the future. Other innovations, such as the digital market place, would be included as they became known.

- **Strategy for E-business**
  The course could provide an overview of the managerial side of e-business, using the Supply Chain Management model as a base for discussing the strategic and managerial implications of this new and emerging phenomenon.

- **Other topics can be**
  - Management of Technology
  - Telecommunications for Competitive Advantage
  - Electronic Commerce & the Virtual Organization
  - Internet & the Information Superhighway
  - Decision Support Systems
  - Introduction to Data Base Management Systems
  - Wireless Communication
  - Financial management
  - Environmental Issues in Marketing
  - Operations, Planning, and Control

### 5.2 The Project

A project could involve the technical aspects of designing and implementing an E-commerce site. However, students could do a more business oriented project looking at existing companies who have adopted e-commerce and identify issues such as:

- Why are some companies successful in E-business?
- Are current business designs sufficient?
- Understand that integration (of everything!) is key
- Do companies manage customer expectations?
- How will e-business change customer priorities?
- How can the organization build a business design to meet new customer priorities?
- What technologies must be invested in and used to survive and thrive?
- Does management understand the way e-business will change the environment?
- Does any organization have flawed assumptions?
- Are the right people making the right decisions?

Alternatively a project could be set which analyses and develops an e-business strategy for an organization chosen by the student. The organization may be a typical business, a public sector organization or a non-profit organization. It may be an organization with which the student is associated (this would actually be preferred) or a case study of an organization to which the student has no connection. In this case, the student would be expected to perform significant research to fully understand the organization's business strategy, environment and future plans. The student would be expected to analyze the environment and current strategies of the organization, and then develop an e-business strategy for the organization. While this type of project would not involve the actual design and implementation of a site, the student should suggest what general technologies should be utilized in the strategic recommendations. The
analysis and development of the e-business strategy would be expected to be detailed and thorough, as opposed to general. It should include, but not be limited to:

- An analysis of the organization's current business operations
- An analysis of the organization's current operating environment
- An analysis of the organization's current business strategies
- An analysis of the organization's current e-business strategies, if any
- A detailed e-business strategy (including justification) for the organization
- A plan to implement the detailed e-business strategy
- An analysis of all supporting materials

6.0 Conclusions

Although e-commerce is a relatively recent phenomenon, those companies that are seizing the opportunities it offers are establishing a lead over the rest. However the effort required implementing e-commerce successfully has to be sustained. In a world which is increasingly competitive and where organisations are required to undertake greater levels of risk in order to compete, those companies that fail to act now may find they have left it too late as e-commerce has become a dominant way of doing business in their sector. By contrast, companies that have vision, a strategy, and a long-term outlook will find that by embracing e-commerce now, they will reinforce their market position. However, this will not occur if there is no right skill of people. This paper has demonstrated the need to educate students in the field of E-commerce.

In order to have a successful E-commerce development it is necessary to recruit professional employees with the right mix of technical and business skills to implement the processes needed for a high quality E-commerce system. This paper has identified the skills needed and has suggested a course in E-commerce that could be given as an undergraduate degree. The course would provide skills that could not be obtained from either a Computer Science degree or a degree in Business and Management as it is a combination of these disciplines that is needed.

The suggested course can be used as a guideline for any university to develop an E-commerce course of its own. It would not be necessary to follow the suggested course in every detail but for the graduates to be able to make an effective contribution to E-commerce development in the real world the course proposed in this paper would be a good starting point.
APPENDIX 3: -

THE IN2NETLOGIC INTERNET DECISION PACK AND E-COMMERCE STRATEGY PACK
The Internet Decision Pack

in2netlogic

Loughborough University

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2. DECISION PACK OVERVIEW

This document has been written by In2netlogic Limited and Nilpa Shah from Loughborough University. In2netlogic are a New Media organisation who specialise in developing e-commerce web sites. Though there may seem a conflict of interests between this document and the organisation, great care has been taken to try and make this literature as independent as possible.

The set of guidelines included in this documentation are designed as questions for individuals to think about and follow to aid in making decisions on having a website. Also included are pointers to various factors that can influence decision-making and open up new ideas and concepts of taking their business into a new field.

2.1 THE INTERNET STORY

2.2 THE HISTORY

Perhaps one of the greatest inventions of our time is the Internet. Without a doubt, the net has had a profound effect on almost every aspect of our lives. The formation of the Internet has changed the way we do business, communicate, entertain, retrieve information, and even educate ourselves. US government started the Framework for the Internet in late 1960s. In particular the Department of Defence decided to fund a network of computers that would be connected to researchers, government workers and defence contractors. Nevertheless, the Internet might have never materialized if it had not been for some innovative thinkers from the Advanced Research Projects Agency, who created "ARPANET." In collaboration with several educational and research institutions, the agency created the packet-switching technologies that form the basis of the Internet today.

2.3 THE PRESENT

Internet usage in the UK has continued to grow at a phenomenal rate. The number of people using the internet every month from home has leapt by almost a third over the past year from 7.8 million in October 1999 to 21million in January 2001.

The UK Internet user

- Spends six hours online each month
- Typical Internet user is 18-44 years old.
- More than 10,000 new users try the Internet each day in UK
- 48% of all establishments in Britain are now connected to the Internet
- Most people surf online on the weekends
- 46 percent of all British Internet users are female
- There has been a significant increase in Internet usage growth among blue-collar and manual workers in the UK.
- Busy mums are using the Internet more and more with their family in mind. 96% identified the Internet as a great tool/resource for finding answers to questions they have about their children and family.
- Kids have a strong influence over their parents' online habits and purchases. More than 50 percent of respondents said their child has influenced them to purchase a product from a Web site and 42 percent have been influenced by their child to click on an online ad.
• The amount of time they spend online is now equal to the amount of time spent watching television (approximately 16.1 hours per week spent online versus 16.0 hours per week watching cable and network television).
• Currently, more than 40% of Internet commerce takes place from home

The average activity for a Web user in January 2001, as reported by Nielsen NetRatings Inc.

2.4 THE FUTURE

Online shopping is predicted to exceed £10 billion this year, according to the findings of an NOP survey published today.

The Internet User Profile Survey found that over 3 million of the Web's regular 12 million users had shopped online in the four weeks before Christmas, a three-fold increase over the same period in 1998. NOP estimates that British consumers spent £3.2 billion online in 1999 and forecasts that online spending in 2000 will easily exceed £10 billion.

The biggest growth category for online sales is groceries, with over 200,000 people doing at least some of their everyday shopping through the Web. Online book buying continues to storm ahead, with the number of Web users buying books increasing by over 50% in 1999. Almost half (49%) of all Web users now buy books online; 31% buy CDs or music.

• There will be 41 million mobile Internet users in the UK by 2005.
3. MAKING THE DECISION

3.1 FLOWCHART – DO I NEED A WEB SITE?

The flowchart is intended as a rough guide to determine if a web site is required. It is advised that you refer to the questions in the generic and e-commerce sections as you are using the flowchart to get a more accurate result.

```
Start

Do you want to:
- Increase Company Profile
- Gain Extra Customers
- Expand Market Channels

At present you don't require a web presence

Do you want to sell on-line?

Do you know much about the following?
- SSL, PDQ, Hosting
- Do you have the time & resources?

E-Commerce Site Required
(See E-Commerce questions in pack)

Seek Professional Guidance

DIY Have a go at building it yourself

Web Site Required
(See Generic Questions in pack)

Seek Professional Guidance

DIY Have a go at building it yourself
```

T Appendix 3a-In2netlogic pack.rtf
Company In-Confidence. © In2netlogic Limited.
3.2 DO I NEED A WEB SITE (GENERIC QUESTIONS)

- Why do you need a website? For example, do you need it to keep up with technology and competitors?

- What do you need the website for? For example selling products/service, expanding your marketing channel, using it for promotion, convenience, and access to your business, sales, and delivery of the products or services, for competition.

- What are the benefits of having a web presence? Speed, accessible 24 hours 7 days a week.

- What kind of website do I need? Informative, to trade, to have a catalogue of products.

- Who is going to design the web site? For example In-house staff or use of a professional web site organisation.

- What can we do to ensure there is loyalty on the website with values, convenience, Confidence, rewards, customer service?

- Do you have the resources? Such as manpower, equipment, finances.

- Do you have the appropriate development resources and experience to build e-commerce systems? How will the content be maintained and updates? Who will administer and control the system after it is installed? Do we have existing products that could provide the foundation of a new system?

- How much will it cost? Staffing costs, annual maintenance costs, development and deployment costs, hosting etc.

- Who will process your credit card orders? How will you transmit your credit card orders to your merchant account provider?

- How will you get your order and fulfilment information into your accounting system?

- How much time do we have?

- Analyse what your competitors are doing? Need to analyse whether you are a follower, laggards etc.

- What do your customers want? Find a customer need that has not been well met and fill that narrow niche with excellence, identify customer needs by carrying out surveys, market research.

- How many visitors would you like to have at your website? What messages do you want them to get? Do you want to build a community?

- Do we want to sell online if so what products and services will you offer?

- How will you incorporate the Web into existing lines of business, supply and channels of distribution?

- How can I be sure that my data and that of my customers, suppliers and partners will be secure?
3.3 HOW WILL A WEBSITE CHANGE THE BUSINESS? (ECOMMERCE)

In order to have a successful e-commerce development it is necessary to have board level commitment, and support from all departments, people involved and stakeholders. Projects have been known to fail without such commitment. Thus, if the twenty questions are answered and understood by all parties this would help and would also minimise the risks faced by the issues.

E-commerce is not an end state. It is a new business platform that will grow and evolve. The secret to sustainable e-commerce success is to think and plan in terms of overall architecture, but act in incremental steps. To manage risk, a company's very first e-commerce initiative might well be a simple "paper replacement" project to demonstrate the proof-of-concept in a well-controlled, internal environment. Processes are untouched, just the user interface is modified. Then the scope of the project can be expanded to include easily managed process changes. Therefore the 20 questions should be continually reviewed.

Although e-commerce is a relatively recent phenomenon, those companies that are seizing the opportunities it offers are establishing a lead over the rest. However the effort required implementing e-commerce successfully has to be sustained. It requires support form the highest level, identification of the questions that managers should ask them, and a willingness to rethink organisational processes. In a world which is increasingly competitive and where organisations are required to undertake greater levels of risk in order to compete, those companies that fail to act now may find they have left it too late as e-commerce has become a dominant way of doing business in their sector. By contrast, companies that have vision, a strategy, and a long-term outlook will find that by embracing e-commerce now, they will reinforce their market position.

However, this will not occur if the issues are not properly understood. These twenty key questions for which managers must know the answers in order to enter e-commerce with sufficient understanding to give the company a reasonable chance of success.

Before taking the critical step of entering e-commerce managers must be able to answer the following key questions:

Q1) What is it that we can now do that we couldn't do before the availability of the Net? How does it affect the nature of existing products and services? Will e-commerce replace existing processes or will it be an additional process?

Q2) Who is our current and future e-Commerce customer? Will the previous customer base adapt to e-commerce or will e-commerce attract new customers?

Q3) How can we add compelling value to our present and future customers and still make a profit and maintain core competency? Will existing customers be attracted to the electronic medium by the easy access and extra information available or will they regret the loss of the personal touch? What do our e-commerce customer's want, convenience, lower prices, new products or services? Can the proposed company e-commerce process meet the expectations of the customer?

Q4) Should we cannibalise our own business? How is e-commerce going to be introduced? If it becomes a new, additional process can existing staff handle it or will new staff be needed? If so, how can the customer and product expertise be transferred to the e-commerce
process? If, on the other hand, existing staff are used, can the run down or abandoning of existing processes be justified?

Q5) What can and should we outsource? Can we outsource much of the risk of introducing e-commerce by bringing in specialist companies who have experience in the technology and business expertise required? However, if the e-commerce is likely to be the companies main business in the future the loss of control could be a serious disadvantage.

Q6) How will the introduction of e-commerce affect the company's organisation and structure? Will new tiers appear in the company hierarchy or will it have the effect of flattening the organisational structure? The introduction of e-commerce can lead to the entire business's processes being re-engineered.

Q7) Can the introduction of e-commerce have a positive effect on the existing distribution network or supply source? Does the electronic medium allow us to increase the product range by becoming a supply-chain portal using the existing suppliers and distribution network?

Q8) What legal issues do we face? The company must understand the legal issues of contracts, taxation, confidentiality and intellectual property? It is likely that the company will need to seek expert advice on these issues.

Q9) What e-commerce competitive threats do we face? Competition may not come from traditional competitors! For example in case of Internet banking, there was egg.com, which emerged from nowhere. How do we compare with our competitors in the introduction of e-commerce, are we leaders, fast followers or laggards?

Q10) Are our trading partners ready to participate in e-commerce, or how soon will they be? To gain the full advantage of e-commerce it is necessary to make as many steps as possible electronic. It is possible that the success of the company's efforts in e-commerce may depend on its suppliers and customers' own e-commerce infrastructure.

Q11) How does e-commerce change our pricing policies? Does e-commerce mean a loss of price flexibility, the transparency of the pricing reducing the ability to negotiate and offer discounts. The pricing of products compared with that of competitors becomes more critical when competitors are just a mouse click away.

Q12) How can we use the Internet to streamline business processes, reduce cycle time and become cost competitive? Can the electronic medium be used throughout all processes from purchase of supplies to distribution to the customer reducing costs and time to delivery?

Q13) What customer touch points do we need to reach now and in the future? That is electronic touch vs. people touch? In particular when do we need a personal touch and when is an electronic touch satisfactory?

Q14) What are the people skills required? New skills can range from the technical skills to handle the software and hardware to the business skills of e-marketing and organisation. Does the company possess these skills and, if not, is retraining possible or will new appointments be necessary?

Q15) What technology is needed for the new architecture? Is the technology infrastructure aligned with current business objectives of cost and company growth and is it scalable, reliable, up to date and secure?

Q16) How important is the speed to enter the market? How do we measure, on a scale from world class to seriously inadequate? Is there a danger that we may come to the market too soon, before it is ready, or could we be too late and lose market share to our competitors?

Q17) What level of investment is required? What costs include implementing the hardware and software technology, outsourcing, training and recruitment? It must also be remembered that the rapid changes in e-commerce technology this investment will be ongoing, as new developments are appearing every day (for example even before computer e-commerce had
established itself mobile phones introduced completely new technology and business issues to be considered).

Q18) Do we have well defined and up to date objectives? Do we have a vision of where we will be in one year? E-commerce has brought such rapid changes that many companies are being forced to revise strategies. Predicting the expansion of e-commerce is extremely difficult with even the "experts" being taken by surprise.

Q19) What are the critical success factors? These must be based on sound business principles. For example, Amazon.com has clearly been a marketing and technological success but its business success is yet to be proven. The stock market has certainly not been a reliable indicator of success with companies like E-bay.com and Boo.com moving from high valuation to bankruptcy almost overnight.

Q20) What are the e-business trends and the future and how will this impact the business? This means keeping a careful watch on all new technological developments, changes in market and the effect of developments by new and traditional competitors.

3.4 COMMON PITFALLS

- We're selling over the Web so we must be making money over the Web. Selling over the web doesn't guarantee your company money e.g. Amazon though they are not making any money they have a sound business plan.
- Our differentiation on the Web will come from our front-end processes
- We can always do backend Integration later
- Underestimation of costs
- Over estimation of benefits
- Inexperienced management
- Lack of customer centred focus
- Making hasty (and costly) decisions
- Neglecting customer service
- Forgetting to integrate your web site with your traditional business
- Neglecting to test (and re-test) your site
- Failing to prepare for success, e.g. avoid traffic jams
- Underestimating marketing needs

3.5 BENEFITS

- The Internet adds tremendous marketing power to any type of business for a fraction of the cost of traditional advertising and marketing methods.
- Opens up a global marketplace that would normally be unattainable for most companies.
- Availability to potential customers 24 hours a day, 365 days a year without the uneconomical overheads that would be incurred by using any other method.
- A website can enhance a company's image so that it is seen as innovative and progressive.
- Can be used to provide information and customer support in addition to generating sales and allows you to compete with bigger rivals on more even terms.
- Increase revenue by generating further business.
- Low cost/high payback alternative to traditional physical store or mail order catalogue.
- Reduce phone cost due to customer support via email.
- Create customized mailing list.
- Reduction of paperwork.
- Reduction of administrative lead-time.
- Provides quicker and easier access to information.
- Enhance competitiveness or create strategic advantage.
- Enhances the credibility and prestige of the organization.
- Enables faster retrieval or delivery of information or reports.
- Help establish useful linkages with other organizations.
- Enhances employee productivity or business efficiency.
- Differentiate their products and services from their competitors and to focus on particular customers.

Long-term winners on the web will be those who remember that the business fundamentals still apply.

3.6 GETTING ON-LINE ADVICE

Enterprise Zone
www.enterprisezone.org.uk
Essential guide on the net for small and growing UK businesses. A whole section now dedicated to net business

Business Bureau UK
www.businessbureau-uk.co.uk
For years the only resources for business entrepreneurs on the web.

First Tuesday
www.firsttuesday.co.uk/
The club of Internet entrepreneurs – acts as an information meeting place

Shell livewire
www.shell-livewire.org
The LiveWIRE organization is a great source of funding, advice and support for startups by the under 30s and well worth a look

The Princes Trust
www.princes-trust.org
Small business advice and support and funding for young people.

E-commerce on a budget
If you have a great product or service to sell, but very little money. Is it still possible to set up an effective E-commerce site? Of course it is check out the following sites

http://www.freemerchant.com
Free webstores (really free-no catches-they make money through the banner ads)

http://www.frenetweb.com/
Free web page development and hosting for the businesses that has unique products or services to sell
E-commerce Strategy Pack

Loughborough University

By Nilpa shah Phd Research student

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SECTION 2: DECISION PACK OVERVIEW

This document has been written by Nilpa Shah (Phd research student) and Ray Dawson (lecturer) from Loughborough University. Contents of this document was written as a conference paper title "Formulating an E-commerce strategy" presented at the International Centre of E-commerce at Vienna in November 2001 (Shah N.N and Dawson R. 2001). Though there may seem a conflict of interests between this document and the organisation, great care has been taken to try and make this literature as independent as possible.

This document shows how an organisation should follow a structure of exploring ideas of having an online presence, going onto defining the business aims, looking at the feasibility of the project, where the industry environment and competitor analysis will be looked at moving on to the planning and design phase, and finally implementing and assessment which needs to be done continually as an iterative process to learn from mistakes, improve and further meet new aims. Throughout the various stages set of questions have been included that needs to be asked and answered by the organization.

Definition of strategy for the pack is a set of directions used to bring an idea or goal to fruition. (Teltech Resource Network, 2000) It contains the blueprints that define where the company is and where to go, based on its position. E-commerce strategy helps in identifying the core competences and what an organisation can offer to the electronic marketplace. It helps define the business goals and lay out an action plan for achieving them.

The set of guidelines included in this documentation are designed as questions for individuals to think about and follow to aid in making decisions on having a website. Also included are pointers to various factors that can influence decision-making and open up new ideas and concepts of taking their business into a new field.

2.1 WHO SHOULD USE THE E-COMMERCE STRATEGY PACK?

The Strategy pack has been aimed for companies that are thinking of offering their products/services online and those companies that are already trading online. No matter what size company large or small, it is to target various organisations and help them formulate a strategy. Project managers, IT department, CEOs and Managers, can use this document. It is particularly useful for bricks and mortar companies who are offering multi channel shopping as it allows them to review their operations.

2.1.1 This pack can be used as a checklist by companies at various stages example:-

1. Companies thinking of offering E-commerce, guiding them to make decisions
2. Companies already trading online and have an existing E-commerce strategy, can use the pack as an assessment and a checklist to see if they are on the right path and if certain factors have been omitted.
3. Pureplay dot-com companies
4. Bricks and mortar companies also offering services online.

2.1.2 Aims of the strategy pack

Main aim is to help companies to realize what they need to follow to have a successful business if they plan well and have a good strategy.
2.2 HOW TO USE THE STRATEGY PACK
The pack has been divided into four sections depending on what stage the company is in. Please go to the relevant sections and answer the questions in the space provided. Alternatively you can go through all the sections and follow the process of formulating a strategy for your company. Overview of each section is given below:

Section 3: Introduction to the process of formulating an E-commerce strategy contains the steps taken for the strategy guidelines and questions for managers to ask before implementing E-commerce, please go to this section and answer questions.

Section 4: Identifying the need of having a website and offering services online-it covers the initiation stage, if you already have a website and offering services online please go to section 5.

Section 5: Guide to formulating an E-commerce strategy contains all the five steps identified in the process of developing a strategy this section also has a questions that companies already trading online or thinking of going online can answer to identify whether the claimed aims, objectives and benefits of the internet are true, and whether the critical success factors mentioned can be agreed on for the path to success.

Section 6: Assessment of strategy, if you already have an E-commerce strategy please answer questions in this section to see if what was set out has been achieved, in this section there is an opportunity to review back from the initiation stage to see if some Issues were omitted in practice, please identify if you have omitted any mentioned factors as to whether it would have made a difference if it was applied.

2.3 BENEFITS TO YOUR COMPANY BY USING THIS PACK
By using this decision pack it will help identify facts that may or may not have been looked at, and users of the pack can go back and apply concepts and Issues to their company strategy. It provides guidance for companies to revise their strategy or to develop one, and guide companies who want to trade online.

2.4 FACTS OF HAVING AN E-COMMERCE STRATEGY
Currently fewer than 15% of the UK top 100 companies have a formal E-commerce strategy in place for 2001 (Ashgar Zag 2001). Many UK manufacturers lack an E-commerce strategy or are investing in E-commerce without having a strategy in place, according to an E-Manufacturing survey by Benchmark Research (Poston Toby 2000). Of the 700 UK senior-manufacturing executives 42% did not have an E-commerce strategy and 13% have or intend to invest without a strategy in place.

Bicknell David (2001) states, "For many organizations, what they really need is the right information to help them, there are too many suppliers out there with lot of Information". The set of guidelines and strategy suggested in this chapter is aimed to help those organizations.

E-commerce has a lot in common with high impact strategies. Too little change can have virtually no impact on the outcome, too much can risk the fundamentals of the business. As most organisations implement change incrementally, determining the acceptable levels and risk factors influences strategy development. Factors such as external regulation, internal culture, how organisation handles change, whether current strategies work or fail all determine the level of E-commerce adoption. (Mike, 2000)
The suggested formulation of strategy has been compiled by the author’s training and experience of both management and technical issues. The strategy pack has been given to In2netlogic a company in Loughborough who provides high quality E-commerce solutions and has been presented in conferences and journals worldwide. The company distributed the decision pack to local companies small and large and potential clients to guide them into making decisions on having a website or to conduct business online and to produce a well-defined strategy.
SECTION 3: INTRODUCTION TO THE PROCESS OF FORMULATING AN E-COMMERCE STRATEGY

(Turban, Lee, King, Chung, 1999) Many companies approach E-commerce with no clear idea of where they are going. Often they view the industry leaders accomplishments superficially and try to imitate the front-runners. What they fail to consider is the level of commitment to organizational redefinition that must occur behind the scenes. The proposed strategy in this chapter should provide a guideline for companies to develop their E-commerce strategy. Figure 1 below shows steps taken by the author to formulate an E-commerce strategy.

![Diagram showing steps to formulate E-commerce strategy](image)

*Figure 1: Showing steps used to formulate E-commerce Strategy*
Although e-commerce is a relatively recent phenomenon, those companies that are seizing the opportunities it offers are establishing a lead over the rest. However the effort required implementing e-commerce successfully has to be sustained. It requires support from the highest level, identification of the questions that managers should ask them, and a willingness to rethink organisational processes. In a world which is increasingly competitive and where organisations are required to undertake greater levels of risk in order to compete, those companies that fail to act now may find they have left it too late as e-commerce has become a dominant way of doing business in their sector. By contrast, companies that have vision, a strategy, and a long-term outlook will find that by embracing e-commerce now, they will reinforce their market position.

However, this will not occur if the issues are not properly understood. These twenty key questions for which managers must know the answers in order to enter e-commerce with sufficient understanding to give the company a reasonable chance of success.

### 3.1 QUESTIONS MANAGERS SHOULD ASK?

(PLEASE PROVIDE ANSWERS TO QUESTIONS IN THIS SECTION) IF YOU HAVE ALREADY ANSWERED SOME OF THESE QUESTIONS BEFORE CAN YOU PLEASE STATE IF IT MADE A DIFFERENCE TO ADOPT THEM IN PRACTISE, AND IF YOU HAVE NOT APPLIED SOME FACTORS WOULD IT HAVE MADE A DIFFERENCE?)

Before taking the critical step of entering e-commerce managers must be able to answer the following key questions:

**Q1)** What is it that we can now do that we couldn't do before the availability of the Net? How does it affect the nature of existing products and services? Will e-commerce replace existing processes or will it be an additional process?

**Q2)** Who is our current and future e-Commerce customer? Will the previous customer base adapt to e-commerce or will e-commerce attract new customers?

**Q3)** How can we add compelling value to our present and future customers and still make a profit and maintain core competency? Will existing customers be attracted to the electronic medium by the easy access and extra information available or will they regret the loss of the personal touch? What do our e-commerce customer's want, convenience, lower prices, new products or services? Can the proposed company e-commerce process meet the expectations of the customer?

**Q4)** Should we cannibalise our own business? How is e-commerce going to be Introduced? If it becomes a new, additional process can existing staff handle it or will new staff be needed? If so, how can the customer and product expertise be transferred to the e-commerce process? If, on the other hand, existing staff are used, can the run down or abandoning of existing processes be justified?

**Q5)** What can and should we outsource? Can we outsource much of the risk of Introducing e-commerce by bringing in specialist companies who have experience in the technology and business expertise required? However, if the e-commerce is likely to be the companies main business in the future the loss of control could be a serious disadvantage.

**Q6)** How will the introduction of e-commerce affect the company's organisation and structure? Will new tiers appear in the company hierarchy or will it have the effect of flattening the organisational structure?
Q7) Can the introduction of e-commerce have a positive effect on the existing distribution network or supply source? Does the electronic medium allow us to increase the product range by becoming a supply-chain portal using the existing suppliers and distribution network?

Q8) What legal issues do we face? The company must understand the legal issues of contracts, taxation, confidentiality and intellectual property? It is likely that the company will need to seek expert advice on these issues.

Q9) What e-commerce competitive threats do we face? Competition may not come from traditional competitors! For example in case of Internet banking, there was egg.com, which emerged from nowhere. How do we compare with our competitors in the Introduction of e-commerce, are we leaders, fast followers or laggards?

Q10) Are our trading partners ready to participate in e-commerce, or how soon will they be? To gain the full advantage of e-commerce it is necessary to make as many steps as possible electronic. It is possible that the success of the company's efforts in e-commerce may depend on its suppliers and customers' own e-commerce infrastructure.

Q11) How does e-commerce change our pricing policies? Does e-commerce mean a loss of price flexibility, the transparency of the pricing reducing the ability to negotiate and offer discounts. The pricing of products compared with that of competitors becomes more critical when competitors are just a mouse click away.

Q12) How can we use the Internet to streamline business processes, reduce cycle time and become cost competitive? Can the electronic medium be used throughout all processes from purchase of supplies to distribution to the customer reducing costs and time to delivery?

Q13) What customer touch points do we need to reach now and in the future? That is electronic touch vs. people touch? In particular when do we need a personal touch and when is an electronic touch satisfactory?

Q14) What are the people skills required? New skills can range from the technical skills to handle the software and hardware to the business skills of e-marketing and organisation. Does the company possess these skills and, if not, is retraining possible or will new appointments be necessary?

Q15) What technology is needed for the new architecture? Is the technology infrastructure aligned with current business objectives of cost and company growth and is it scalable, reliable, up to date and secure?

Q16) How important is the speed to enter the market? How do we measure, on a scale from world class to seriously inadequate? Is there a danger that we may come to the market too soon, before it is ready, or could we be too late and lose market share to our competitors?

Q17) What level of investment is required? What costs include implementing the hardware and software technology, outsourcing, training and recruitment? It must also be remembered that the rapid changes in e-commerce technology this investment will be ongoing, as new developments are appearing every day (for example even before computer e-commerce had established itself mobile phones introduced completely new technology and business issues to be considered).

Q18) Do we have well defined and up to date objectives? Do we have a vision of where we will be in one year? E-commerce has brought such rapid changes that many companies are being forced to revise strategies. Predicting the expansion of e-commerce is extremely difficult with even the “experts” being taken by surprise.

Q19) What are the critical success factors? These must be based on sound business principles. For example, Amazon.com has clearly been a marketing and technological success but its business success is yet to be proven. The stock market has certainly not been a reliable indicator of success with companies like E-bay.com and Boo.com moving from high valuation to bankruptcy almost overnight.
Q20) What are the e-business trends and the future and how will this impact the business? This means keeping a careful watch on all new technological developments, changes in market and the effect of developments by new and traditional competitors.

In order to have a successful e-commerce development it is necessary to have board level commitment, and support from all departments, people involved and stakeholders. Projects have been known to fail without such commitment. Thus, if the twenty questions are answered and understood by all parties this would help and would also minimise the risks faced by the issues.

E-commerce is not an end state. It is a new business platform that will grow and evolve. The secret to sustainable e-commerce success is to think and plan in terms of overall architecture, but act in incremental steps. To manage risk, a company's very first e-commerce initiative might well be a simple "paper replacement" project to demonstrate the proof-of-concept in a well-controlled, internal environment. Processes are untouched, just the user interface is modified. Then the scope of the project can be expanded to include easily managed process changes.
SECTION 4: STEP 1: INITIATION

4.1 FLOWCHART – DO I NEED A WEB SITE?
The flowchart is intended as a rough guide to determine if a web site is required. It is advised that you refer to the questions in the generic and e-commerce sections as you are using the flowchart to get a more accurate result.

Start

Do you want to:
- Increase Company Profile
- Gain Extra Customers
- Expand Market Channels

No

At present you don't require a web presence

Do you want to sell on-line?

Do you know much about the following?
- SSL
- PDQ
- Hosting
Do you have the time & resources?

No

Seek Professional Guidance

Yes

E-Commerce Site Required
(See E-Commerce questions in pack)

Web Site Required
(See Generic Questions in pack)

Do you know much about the following?
- ISP
- Domain Names
- HTML e.g. Front Page
Do you have lots of spare time?

No

DIY Have a go at building it yourself

Yes

Seek Professional Guidance
4.2 DO I NEED A WEB SITE (GENERIC QUESTIONS)

- Why do you need a website? For example, do you need it to keep up with technology and competitors?

- What do you need the website for? For example selling products/service, expanding your marketing channel, using it for promotion, convenience, and access to your business, sales, and delivery of the products or services, for competition.

- What are the benefits of having a web presence? Speed, accessible 24 hours 7 days a week.

- What kind of website do I need? Informative, to trade, to have a catalogue of products.

- Who is going to design the web site? For example In-house staff or use of a professional web site organisation.

- What can we do to ensure there is loyalty on the website with values, convenience, confidence, rewards, customer service?

- Do you have the resources? Such as manpower, equipment, finances. Identify strengths, weaknesses, opportunities, and threats.

- Do you have the appropriate development resources and experience to build e-commerce systems? How will the content be maintained and updates? Who will administer and control the system after it is installed? Do we have existing products that could provide the foundation of a new system?

- How much will it cost? Staffing costs, annual maintenance costs, development and deployment costs, hosting etc.

- Who will process your credit card orders? How will you transmit your credit card orders to your merchant account provider?

- How will you get your order and fulfilment information into your accounting system?

- Analyse what your competitors are doing? Need to analyse whether you are a follower, laggards etc.

- What do your customers want? Find a customer need that has not been well met and fill that narrow niche with excellence, identify customer needs by carrying out surveys, market research.

- How many visitors would you like to have at your website? What messages do you want them to get? Do you want to build a community?

- Do we want to sell online if so what products and services will you offer?

- How will you incorporate the Web into existing lines of business, supply and channels of distribution?

- How can I be sure that my data and that of my customers, suppliers and partners will be secure?
SECTION 5: GUIDELINES TO FORMULATING AN E-COMMERCE STRATEGY

5.1 STEP 2: IDENTIFYING THE BUSINESS AIMS FOR E-COMMERCE

The aims behind an E-commerce strategy should include some or all of the following:

- To improve customer service and interaction.
- To increase brand awareness and awareness of the company.
- To expand geographic reach.
- To expand into new markets.
- To increase revenue and market share.
- To reduced operating costs.
- To be seen as an innovative and progressive company through being an E-commerce leader.
- To compete with bigger rivals on more even terms (such as Egg’s competition with traditional banks).

According to Ashgar Zeg (2001) the company should focus its reengineering into areas where it gives more return on investment and focus on its core competencies. This requires clear well-defined objectives such as:

- To sell more goods and services by using the web.
- To provide customer “e-care”, i.e. Online support.
- To support its business partners over the web: e-care for partners.
- To improve communication within the company: e-care for employees.
- To work more closely with customers and suppliers to improve the tendering process and better administer huge number of transactions involved e-procurement.

When considering to what extent you wish to utilize the Internet it is necessary to understand how it matches the existing company businesses. It is important to establish how the Web can be incorporated into existing lines of business, supply and channels of distribution? In addition it is necessary to determine targets for the use of the new web facility. Targets need to be determined for the number of visitors to the web site and the transactions that result in order to make the move into E-commerce worthwhile. For this a feasibility analysis must be carried out.

5.2 STEP 3: ANALYSING THE FEASIBILITY OF THE E-COMMERCE INITIATIVE

Once the business aims and objectives for E-commerce are clear, the company needs to carry out a feasibility study and analyse whether it is possible for the organization to offer online services with the resources available. A detailed feasibility study should be carried out to identify critical success factors. This will involve examining human as well as technology aspects, looking at the benefits of E-commerce and analysing the risks and pitfalls.

Some of the early questions to consider when developing an E-commerce strategy include:

Q1) How can the Internet further my business objectives? To answer this question the company has to accurately articulate at the strategic level the linkage between the current business objectives and the objectives in the market place.

Q2) What products and services will I offer and deliver on the Internet? Does the business have a product, or can it develop a product, which can be sold online?

Q3) How do I incorporate the Web into existing lines of business, supply and existing channels of distribution?

Q4) How can I improve customer service and satisfaction?
Q5) How can I be sure that my data, and that of my customers, suppliers and partners will be secure?

An important aspect of E-commerce introduction is the transformation required of core business processes. This requires a thorough understanding of the existing business. The company needs to carry out a full SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). By giving executives a tool that is familiar, such as SWOT, and yet targeted to the fast changing environment, companies can quickly react to changes in their own environments (Gary Hackbarth 2000).

From the SWOT analysis you can find, for example, an opportunity to sell E-commerce software developed for internal purposes to others or an opportunity to add new products. Threats may come from competitors. Strengths can be from internal operations and sound logistics and weaknesses may involve a lack of skilled personnel. By mapping out the weaknesses and opportunities, risks can be identified and action planned to reduce the risks so that advantage can be taken of the opportunities.

Industry and competitive analysis for E-commerce involves monitoring, evaluating and disseminating information from external and internal environments. The goal is to identify the critical factors that will determine the success of the E-commerce project in the competitive marketplace.

Cost Benefit Analysis
After identifying the opportunities the next objective is identifying the costs of introducing and operating an E-commerce project. This will involve reviewing what is present at the moment in terms of skilled staff, technology and resources, and estimating costs of building, implementing, and supporting the hardware, software and human resources needed. Regrettably the excitement of entering a new and innovative technological market seems to give managers a over optimistic view of their position. However, as the recent fall in the technological stock market shows this view is not necessarily justified. In many E-commerce projects costs have been underestimated and benefits overestimated so companies entering this field should exercise some caution.

5.3 STEP 4: PLANNING AND DESIGN OF E-COMMERCE
Strategy formulation should depend on the development of strengths and opportunities. It includes examining the corporate or project mission by specifying achievable objectives. An organizations mission states the purpose for its existence. Based on its E-commerce mission a company can formulate the objective of E-commerce. An E-commerce objective is the measurable goal that the company wants to achieve with E-commerce.

A first step is to establish a web site. Initial experiences from this can help determine future directions of development. A longer term E-commerce strategy must then be put in place based on the business aims and objectives within the constraints of feasibility.

PROCESS OF FORMULATING E-COMMERCE STRATEGY
Organizations should develop a sound strategy to meet its goals and the following processes have been employed by successful E-commerce companies to develop their strategy: For companies who already have an E-commerce strategy in place, please state whether the below set of guidelines have been applied by your company in practice?
Company should consider creating an independent E-commerce division or department with employees having specialist skills. A mixture of skills are needed. As well as the technical skills to implement the hardware and software required for E-commerce transactions, there will be a need for specialists in sales and marketing, purchasing, human resources, training, finance and business process re-engineering.

Companies should introduce E-commerce as a corporate culture as a top down led management initiative. This may require education and training of managers in the first instance so they understand the benefits (and risks) associated with E-commerce introduction.

The SWOT analysis should have identified the company's strengths. An e-commerce initiative needs to build on these strengths. The cost benefit analysis should enable managers to set targets and prioritize E-commerce activities to give the greatest opportunities for the earliest financial return with the minimum risk.

Companies should not underestimate the amount of business re-organization required to introduce E-commerce. These changes should, therefore, be harmonized with any other change initiatives the company is undertaking. The changes need to be seen as part of the company development and not as an add-on extra.

Companies need to consider whether they can carry out the development work themselves or whether they should subcontract part or all of this work. Who, for example, is going to design the web site? How will the content be maintained and updated? Who will administer and control the system after it is installed? The company must consider whether it has the appropriate development resources and experience to build E-commerce systems or whether there are existing products that could provide the foundation of a new system.

5.4 DESIGNING THE SYSTEM

There are a number of considerations that must be taken into account at the earliest possible design stage.

How can an existing web site be developed to maintain customer loyalty? The design should take into account the values the company wishes to promote, the image it wished to build and maintain, as well as the customer requirements of convenience and ease of use. There are both the long-term goals to be considered and the short-term stages needed to work towards the goals in a logical progression.

Who will process the credit card orders? Will e-commerce be employed to transmit credit card orders to the company's merchant account provider? The extent of e-commerce introduction can also depend on the company's partner organizations.

How will you get your order and fulfilment information into your accounting system? It is important to remember that a sale continues beyond the point of order. The e-commerce system needs to be able to handle the whole process.

How can you be sure that your data and that of your customers, suppliers and partners will be secure? This is an important technical issue that needs to be addressed from the outset. Without secure transactions, there will not be the customer confidence for the e-commerce system to succeed.

5.5 SOME PITFALLS TO AVOID DURING PLANNING

Companies need to ensure they do not
- neglect planning for customer service both before and after a sale.
- fail to integrate their E-commerce with their traditional business.
• fail to prepare for success and the volume of business it may generate, e.g. avoiding network traffic jams.
• underestimate the need to advertise the website and e-commerce facility.
• assume that the website interaction is the only aspect that will make the company different to its competitors - the underlying systems are equally important and must be developed from the outset to avoid failure.
• make hasty (and costly) decisions because of the pressure to get into the market as quickly as possible. It is important to react quickly but it cannot be done without a minimum of thought.
• neglect issues of scalability. If the company is successful it may have to grow its e-commerce business very quickly. It is important that the e-commerce system does not itself impose limits on growth.

5.6 Step 5: Implementation
E-Commerce is not an end state. It is a new business platform that will grow and evolve. To sustainable E-Commerce success is to think and plan not just in terms of overall architecture, but act in incremental steps. For example, to manage risk, a company's very first E-Commerce initiative might well be a simple "paper replacement" project to demonstrate the proof-of-concept in a well-controlled, internal environment. Processes are relatively untouched, with only the user interface being modified. In later increments the scope of the project can be expanded to include easily managed process changes.

In order to have a successful E-commerce development organisation should ensure there is board level commitment, and support from all departments, people involved and stakeholders. Projects have been known to fail without such commitment (Hill Malcolm 1999). To put this “E-commerce culture” in place some education and training will need to be implemented before any further development is attempted.

As well as education on the benefits of e-commerce it will be necessary to introduce training on the business and technical issues of creating an E-commerce system. No one person can do everything, separate training will be required for the different disciplines of hardware, software, networks, marketing, finance, human resources and process reengineering in order to build the necessary competence team. Where necessary new staff will be required.

Once the staff are trained or hired the technical staff and operational managers can be involved in the decision process. To maintain the E-commerce culture this should continue throughout the development and operational life cycle.

Many of the advantages of E-commerce will be lost if it is implemented in isolation. It is important to involve suppliers and distributors. This involves spreading the E-commerce culture beyond the company boundary. However, if partner companies are willing it may be possible to cooperate in development work and training. It can be constructive to review current distribution and supply chain models used. It is necessary to examine the potential effect E-commerce will have on your current logistics. It is likely to be possible to increase the number of electronic connections, and as a consequence simplify inter-organizational processes with financial advantages for all concerned. The relationship with partner companies will need to be continually reviewed as other companies make and follow their own initiatives.

The SWOT analysis will have identified strengths within the company that may be usable in the E-commerce project. For example, if a company already has a good distribution network this may be the foundation for developing the E-commerce distribution.
It is necessary to identify and understand what your customers and partners expect from the Internet and from E-commerce. It is necessary to know how many customers are able and willing to interface over the electronic networks and conduct electronic transactions. This may require surveys and interviews to learn of customer attitudes. Once the customer base is identified the company can build a close-knit community with its customers, encouraging customers to find out more about their products and services through message boards and emails. This builds the company's image. Also the more that can be found out about the customers, the more the products can be tailored the customer, the less likely they will be to switch to another supplier. For example Tesco built its online image on products and services they offer. However, this will need to be an on-going activity throughout the development and operation of the system as customers needs and wants are changing as rapidly as the technology advances.

To take advantage of the on-line customer community a web centric marketing strategy needs to develop alongside the technical developments. Even if the current marketing strategy has taken the Internet into account, it is necessary to develop a marketing strategy that clearly targets the Internet as a primary marketing channel.

The technical issues of e-commerce implementation will also need to be continually reviewed throughout the system life cycle. The technology is moving at such a pace that it is likely that advantage can be taken of developments worldwide of technology and standards that were not available at the start of the project. It is advisable to build scalability and flexibility into the solution and to standardize wherever possible. Security is a particular areas of concern it is critical to ensure that the company's systems keep up to date with expected standards of security, both within the organization and across all trading partners. It is also important to keep testing and re-testing the e-commerce web site to ensure it remains compatible with the latest developments in Internet browsers on all common hardware and operating system platforms.

5.7 E-COMMERCE CRITICAL SUCCESS FACTORS AND ISSUES THAT PLAY AN IMPORTANT PART FOR AN ONLINE COMPANY.

CSF 1. Ensure the website is secure, this is the first factor that needs to be looked at, as consumers are reluctant to provide their credit card details if the site is not secure.
CSF 2. Companies trading online should keep the website simple and easy to navigate if the website takes time to download or is cluttered with information, not having contact details it can lead to frustrated users and bad word of mouth with competitors a click away.
CSF 3. Listen to customers to build a loyal customer base, identify customer needs and preferences, send emails to confirm orders, Amazon.com is a good example of meeting the needs of consumers.
CSF 4. Selling the right product/service not all products and services can be sold easily online as companies would with bricks and mortar, however with improvements in technology and better image quality it is changing and consumers are purchasing clothes, and footwear online.
CSF 5. Have the right Infrastructure and link with the backend system, it is important to have a vision and invest in the right infrastructure, companies should analyse their resources and the system should be able to cope with number of users. Linking with the back end system to ensure fulfilment is key to success for a company if they can deliver their stock in time.
CSF 6. Keeping up with Innovation and the constant change in technology such as Wireless application system, digital media and so on.
CSF 7. Marketing the site, it is important to promote the site and advertise, there is no point having a site and no one knows about it.
CSF 8. Build brand name and image shopping online is different than having a bricks and mortar presence, it is vital to build a brand name that consumers can recognise and keep them coming back.

CSF 9. Build in quality within the website and in the products and services, as good quality products keeps customers happy and offering good services keeps customers coming back.

CSF 10. Follow all the legal issues, patent and trading laws, trading online has legal issues as trading takes place globally, therefore companies should be familiar with the trading laws for countries so as to not get charged, resulting in a loss for the company.

CSF 11. Having the right skilled workforce, ensure training and awareness, to make it work, it is important to have the right skills and thus ensure courses and introduce change in a systematic order.

CSF 12. Having a well defined strategy
SECTION 6:- STEP 6: STRATEGY ASSESSMENT

Like any other project, E-commerce projects need to be assessed during and after implementation. Whether a company implements a full scale plan of E-commerce or a limited market entry, speed is of essence. Bicknell (2000) stated that because E-commerce is a rapidly changing landscape, firms cannot afford to spend too much time deliberating over the best plan. Andy Hosbawm creative director of Agency.com, quoted that "companies biggest problem is speed, they are too slow." Bicknell believes that with the changing market conditions companies have to revise their E-commerce strategy every few months. One of the obstacles in this process can be senior and middle management. Their lack of understanding of E-commerce may mean that they fail to realize the importance of staying abreast of new technologies in order to incorporate them into organizations E-commerce operations.

The objectives of strategic reassessment are: -

- To find out if the E-commerce system is delivering what it was supposed to deliver. A common pitfall is to think that selling over the web means the company must be making money over the web. This is not necessarily the case as Amazon has illustrated. A lack of profit in the beginning need not be a problem if it was part of the overall strategy. Amazon, for example, have only just started showing profits however they do have a sound business plan.

- To learn from both the successes and failures of the system reviewed. Whether the system is living up to expectations or not it should be possible to learn from mistakes and improve future planning. E-commerce is a continually changing environment so initiatives that work in the first instance may cease to be cost effective at a later stage.

- To identify failing projects as soon as possible and determine the reasons for failures. There may be fundamental flaws in the original assumptions or outside changes may have completely altered the online market. There is no point in continuing with a project if it can't be saved. It is better to learn from the mistakes to avoid the same problems on subsequent systems.

Feedback and corrective actions to give a policy of continual improvement are needed for any development including E-commerce. For companies implementing an E-commerce strategy, a set of questions are given below which can be used as a checklist by the review team:

(Please answer these questions to assess your existing strategy)

1) What were the aims and objectives for E-commerce? Were they met?
2) What were the expectations? Were they realistic?
3) What products and services did the company want to offer? Is the system delivering them? Can the proportion of offered services be quantified?
4) Have unanticipated problems occurred? If so, what proportion were handled successfully?
5) What costs did the company hope to reduce? What cost reductions were actually achieved?
6) Did other costs increase unexpectedly? If so, why? What extra costs were incurred?
7) What were the sales objectives were they realistic? How well were they obtained?
8) Did web and Internet communications reduce traditional communication costs, if so, by how much?
9) Did you improve customer relations? What evidence is there for this? If not what went wrong?
10) Have your suppliers provided adequate services? If not, what cost was incurred?
11) What internal issues have arisen? For example, has it had an effect on employees' resistance to change, cultural change etc? Can any problems be quantified?
12) Is your site making the best use of available technologies? How will you stay on top of online developments in your field? Are all appropriate staff involved and if not who else should be involved?
13) Does your web site effectively convey the image and message the company needs? Are there new media or public relations outlets that you could tap for further promotion?
14) What information has been gained from customer surveys, monitoring the use of the company web pages and sales made through e-commerce. Does this point to further opportunities for e-commerce expansion?
15) Does your business offer other services or customer support functions that you could provide online? If so what are the projected sales?
16) Are there further efficiencies that you could achieve by more effective electronic communication? If so what is the projected saving?
17) Could the company's database of electronic contacts be further extended and used more effectively for marketing? Note however, that care must be taken over privacy. The company should ensure it follows a clear privacy and ethical policy in all its use of customer data.

For companies already trading online—(Please answer the questions below)

Section 1: To identify whether E-commerce claimed aims have been achieved by a company already offering services online

1. Did your company find that they were able to expand globally? Offering services and products?
2. Did you manage to increase revenue and market share?
3. Did your company reduce operating costs?
4. Is your company seen to be an innovative and progressive company through being an E-commerce leader?
5. Has your company identified whether there customers are happy with existing services or do they require more?
6. Are customers interested in buying on-line?
7. Are supplier companies willing to interact on-line?

Section 2: Does Your company agree to the below listed facts of potential financial benefits the Internet offers (Please circle Yes/No)

8. It adds tremendous marketing power to any type of business for a fraction of the cost of traditional advertising and marketing methods. Yes/No
9. It opens up a global marketplace that would normally be unattainable for most companies. Yes/No
10. It is available to potential customers 24 hours a day, 365 days a year without the uneconomical overheads that would be incurred by using any other method. Yes/No
11. It can reduce administration costs, as all communications are electronic. This, in turn, can lead to faster processing of orders, reduced turn round time and the consequential saving of administration costs. Yes/No
12. It can reduce costs and processing time when working with supplier organisations if they too are using e-commerce. The business to business harmonisation of the supply chain can reduce costs even if a company does not itself sell its products through the Internet. Yes/No
13. It is a low cost alternative to a traditional physical retail outlets. Yes/No

Section 3: -Process of formulating E-commerce strategy

14. Did your company create an independent E-commerce division or department with employees having specialist skills.? 
15. Did your company carry out a SWOT analysis?
16. Did your company underestimate the amount of business re-organization required to introduce e-commerce?
17. Did your company identify if the website is developed to maintain customer loyalty?
18. Does your company get order and fulfillment information into their accounting system?
19. Can your company be sure that data and that of customers, suppliers and partners will be secure?.
20. Does your company suppliers able to deliver products to customers on time?

Section 4: -Review your Web traffic analysis:

21. Are there any obvious patterns in the Internet traffic, or the paths Prezzybox.com visitors follow that may give insights into their preferences or provide opportunities for further e-commerce growth.
22. What are the common routes users take through the web site and what are the top exit points from your site? Are these appropriate? Can these be changed by better site design?
23. Which external sites link to you? Are these appropriate? How often are they used? Are you generating sufficient return on investment for paid for online advertising?
24. If you provide a web site search facility, what are the most common search phrases and do they give any ideas for new areas of business development?

Did you or your company ask any of this questions before starting to trade online: if the answer is no, not considered would it have made a difference if it was taken into account, please state your answers:-

25. Who is our current and future e-Commerce customer? Will the previous customer base adapt to e-commerce or will e-commerce attract new customers?
26. How can we add compelling value to our present and future customers and still make a profit and maintain core competency? Will existing customers be attracted to the electronic medium by the easy access and extra information available or will they regret the loss of the personal touch? What do our e-commerce customer's want, convenience, lower prices, new products or services? Can the proposed company e-commerce process meet the expectations of the customer?
27. Should we cannibalise our own business? How is e-commerce going to be introduced? If it becomes a new, additional process can existing staff handle it or will new staff be needed? If so, how can the customer and product expertise be transferred to the e-commerce process? If, on the other hand, existing staff are used, can the run down or abandoning of existing processes be justified?

28. What can and should we outsource? Can we outsource much of the risk of introducing e-commerce by bringing in specialist companies who have experience in the technology and business expertise required? However, if the e-commerce is likely to be the companies main business in the future the loss of control could be a serious disadvantage.

29. How will the introduction of e-commerce affect the company’s organisation and structure? Will new tiers appear in the company hierarchy or will it have the effect of flattening the organisational structure? The introduction of e-commerce can lead to the entire business’s processes being re-engineered.

30. Can the introduction of e-commerce have a positive effect on the existing distribution network or supply source? Does the electronic medium allow us to increase the product range by becoming a supply-chain portal using the existing suppliers and distribution network?

31. What legal issues do we face? The company must understand the legal issues of contracts, taxation, confidentiality and intellectual property? It is likely that the company will need to seek expert advice on these issues.

32. What e-commerce competitive threats do we face? Competition may not come from traditional competitors! For example in case of Internet banking, there was egg.com, which emerged from nowhere. How do we compare with our competitors in the introduction of e-commerce, are we leaders, fast followers or laggards?

33. Are our trading partners ready to participate in e-commerce, or how soon will they be? To gain the full advantage of e-commerce it is necessary to make as many steps as possible electronic. It is possible that the success of the company’s efforts in e-commerce may depend on its suppliers and customers’ own e-commerce infrastructure.

34. How does e-commerce change our pricing policies? Does e-commerce mean a loss of price flexibility, the transparency of the pricing reducing the ability to negotiate and offer discounts. The pricing of products compared with that of competitors becomes more critical when competitors are just a mouse click away.

35. How can we use the Internet to streamline business processes, reduce cycle time and become cost competitive? Can the electronic medium be used throughout all processes from purchase of supplies to distribution to the customer reducing costs and time to delivery?

36. What customer touch points do we need to reach now and in the future? That is electronic touch vs. people touch? In particular when do we need a personal touch and when is an electronic touch satisfactory?

37. What are the people skills required? New skills can range from the technical skills to handle the software and hardware to the business skills of e-marketing and organisation. Does the company possess these skills and, if not, is retraining possible or will new appointments be necessary?

38. What technology is needed for the new architecture? Is the technology infrastructure aligned with current business objectives of cost and company growth and is it scalable, reliable, up to date and secure?
39. How important is the speed to enter the market? How do we measure, on a scale from world class to seriously inadequate? Is there a danger that we may come to the market too soon, before it is ready, or could we be too late and lose market share to our competitors?

40. What level of investment is required? What costs include implementing the hardware and software technology, outsourcing, training and recruitment? It must also be remembered that the rapid changes in e-commerce technology this investment will be ongoing, as new developments are appearing every day (for example even before computer e-commerce had established itself mobile phones introduced completely new technology and business issues to be considered).

41. Do we have well defined and up to date objectives? Do we have a vision of where we will be in one year? E-commerce has brought such rapid changes that many companies are being forced to revise strategies. Predicting the expansion of e-commerce is extremely difficult with even the "experts" being taken by surprise.

42. What are the critical success factors? These must be based on sound business principles. For example, Amazon.com has clearly been a marketing and technological success but its business success is yet to be proven. The stock market has certainly not been a reliable indicator of success with companies like E-bay.com and Boo.com moving from high valuation to bankruptcy almost overnight.

43. What are the e-business trends and the future and how will this impact the business? This means keeping a careful watch on all new technological developments, changes in market and the effect of developments by new and traditional competitors.

Finally would you agree/disagree with the below list of E-commerce critical factors to achieve success. (Please circle yes/no)

CSF 1. Ensure the website is secure, this is the first factor that needs to be looked at, as consumers are reluctant to provide their credit card details if the site is not secure. Yes/No

CSF 2. Companies trading online should keep the website simple and easy to navigate if the website takes time to download or is cluttered with information, not having contact details it can lead to frustrated users and bad word of mouth with competitors a click away. Yes/No

CSF 3. Listen to customers to build a loyal customer base, identify customer needs and preferences, send emails to confirm orders, Amazon.com is a good example of meeting the needs of consumers. Yes/No

CSF 4. Selling the right product/service not all products and services can be sold easily online as companies would with bricks and mortar, however with improvements in technology and better image quality it is changing and consumers are purchasing clothes, and footwear online. Yes/No

CSF 5. Have the right infrastructure and link with the backend system, it is important to have a vision and invest in the right infrastructure, companies should analyse their resources and the system should be able to cope with number of users. Linking with the back end system to ensure fulfilment is key to success for a company if they can deliver their stock in time. Yes/No

CSF 6. Keeping up with innovation and the constant change in technology such as Wireless application system, digital media and so on. Yes/No

CSF 7. Marketing the site, it is important to promote the site and advertise, there is no point having a site and no one knows about it. Yes/No

CSF 8. Build brand name and image shopping online is different than having a bricks and mortar presence, it is vital to build a brand name that consumers can recognise and keep them coming back. Yes/No

CSF 9. Build in quality within the website and in the products and services, as good quality products keeps customers happy and offering good services keeps customers coming back. Yes/No
CSF 10. Follow all the legal issues, patent and trading laws, trading online has legal issues as trading takes place globally, therefore companies should be familiar with the trading laws for countries so as to not get charged, resulting in a loss for the company. Yes/No

CSF 11. Having the right skilled workforce, ensure training and awareness, to make it work, it is important to have the right skills and thus ensure courses and introduce change in a systematic order. Yes/No

CSF 12. Having a well defined strategy. Yes/No

Many of the above questions involve quantification of answers. This helps identify the significance of the information revealed and this will then help prioritise future initiatives. Long-term winners on the web will be those who remember that the business fundamentals still apply. The key to success in E-commerce is to consider it as carefully as you would any other marketing strategy or sales channel.

GETTING ON-LINE ADVICE

Ukonline for business www.buyitnet.org

E-commerce@its.best.uk

Enterprise Zone
www.enterprisezone.org.uk
Essential guide on the net for small and growing UK businesses. A whole section now dedicated to net business

Business Bureau UK
www.businessbureau-uk.co.uk
For years the only resources for business entrepreneurs on the web.

First Tuesday
www.firsttuesday.co.uk/
The club of internet entrepreneurs – acts as an information meeting place

Shell livewire
www.shell-livewire.org
The LiveWIRE organization is a great source of funding, advice and support for startups by the under 30s and well worth a look

The Princes Trust
www.princes-trust.org
Small business advice and support and funding for young people.

E-commerce on a budget
If you have a great product or service to sell, but very little money. Is it still possible to set up an effective E-commerce site? Of course it is check out the following sites

http://www.freemerchant.com
Free webstores (really free-no catches-they make money through the banner ads)

http://www.freenetweb.com/
Free web page development and hosting for the businesses that has unique products or services to sell
APPENDIX 4:- NSB Reports
Report for NSB

Current Mission statement

To be the leading retail solutions provider in the chosen markets.

Using the current mission statement and maintaining the leadership position can still be achieved by adopting E-commerce. With the help of E-commerce factors such as increased customer sophistication, global competition, mergers and acquisitions, use of the Internet can accelerate the pace of change and the sheer unpredictable nature of the business.

Aims of the E-commerce initiative

Business will change more in the next ten years than it has in the last fifty. Main aim of the E-commerce initiative is to introduce the change that is the new way of doing business as smoothly as possible considering all the factors as with any significant change in business practice, there are factors to be considered and managed during the implementation process such as:

Cost- as with all major business initiatives, E-commerce systems require significant investments in hardware, software, staffing and training.
Value-a business should always expect its investment in E-commerce systems to produce a return by meeting business objectives such as lead generation, business process automation and cost reduction.
Interoperability-That is the linking of trading partners applications to exchange business documents. These systems must work together to achieve business objectives.

Objectives of an E-commerce strategy may include:
- Improved customer service and interaction
- Expanded geographic reach
- Increased revenues and market share
- Reduced operating costs

Goal is to have an effective E-commerce strategy that is sustainable, have high barriers to entry for competitors and have high switching costs for users, as the competitors are a click away.

What is E-commerce/E-business?
Electronic commerce is the term given to the advertising and selling of products and services on the World Wide Web and is a subset of e-business to encompass a much broader set of benefits available from web technology. These include
• E-commerce-incorporating all transaction activity on the web.
• E-customer service- using the web to bring together customers, vendors, suppliers and employees in new and innovative ways. It can also include online marketing, customer and supplier extranets, self-service facilities and much more.
• E-collaboration-Improving the business processes through the use of intranets to supply information between departments or even companies within the same supply chain.

This type of relationship requires that the vendor's E-commerce system provides the customer with the ability to perform any or all of the following:-

• Order products and perform routine enquiries without assistance from sales staff.
• Place orders electronically using real time pricing and inventory availability.
• Order recommended alternatives if there is insufficient inventory of the requested items.
• Obtain the status of different orders such as completed, in process and on back order.
• Request quotations
• Enquire about inventory levels of items and their corresponding net prices.
• Receive new product announcements
• Read and print manufacturers specification sheets
• Browse through an on line catalog

Internet based E-commerce has settled into two main segments: business to consumer and business-to-business. Business to consumer is the buying and selling conducted between one business and one consumer typically using credit cards. Business to business E-commerce is the buying and selling conducted between two businesses most typically using purchase orders or their equivalent. In business-to-business transactions speed is extremely important, as time is money.

Why NSB should adopt this new way of doing business?
E-commerce may seem too much of a challenge. But if you don't act now someone else would be targeting your customers with better customer service, cheaper products or more flexible payment methods. Reason to act on it now is that the companies that are first can establish their customer base and create brand loyalty before your competitors offer an alternative. NSB would be a successful business by going online and combined with the Virtual showroom can create a very user friendly and unique website which can leave new and existing customers coming back. It can build a lasting image. The virtual show room can also have some kind of videoconferencing audio or someone showing the products, which can help the on-line customers to have some kind of human interaction as it is doing now.
What the Web can do for NSB:-

Yes, the Internet will change the way business is done. Here's what it can do for NSB.

- **Automate the dissemination of routine information.** How many people call every day asking the same questions that could be more completely and effectively answered in a written communication? Questions about products, fax numbers, directions, etc.

- **Make your company available 24 hours a day** so that customers can find out more about you at their convenience.

- **Act as an extension to your advertising.** In comparison to space, radio, and television advertising, web space is virtually free. You still need to advertise to "drive" people to your site, but, once they get there, you can supply lots of information to help cement customer relationships.

- **Collect orders 24 hours a day** without requiring time-consuming sales call back.

- **Distribute slide shows or video demonstrations** of your products and services.

If NSB is taking steps to become a player in the e-business markets, it is necessary to be aware that it is not only about setting up a fancy homepage and a shopping cart system on the web. It is about developing a complete business strategy including online web based solutions, and EDI solutions for structured business communication with customers, suppliers, distribution centers, transporters, banks and financial institutions and government for statistics and reporting.

**Benefits/Costs/ Changes it will bring if adopted?**

There are many benefits to selling over the Internet but there are also many pitfalls. It is important to look at your e-business from the technical, business and marketing perspectives. Primary causes of e-business failure include not keeping online information up to date, not managing customer relationships effectively, not processing orders accurately, or failing to integrate with real world business processes.

The benefits that E-commerce has had for businesses in the late 1990's are tremendous. By doing business online, companies have been able to reach customers all over the world, thereby enabling them to expand their business as well as increase profits.

Businesses can also collect information about their customers through the use of cookies. Cookies are small files that are placed on to a users hard drive when that user
logs on to a web site. The cookies help the operator of the web site to collect information about the buying habits of particular groups of people. This information is invaluable to businesses because it allows them to better target their advertising with better information about demographics.

Another benefit that E-commerce offers to businesses is a reduced amount of overhead cost. A company that does business on the Internet will have reduced overhead costs because it is not spending as much money on buildings and customer service as compared to a typical traditional business. This helps companies to increase their profits.

Small and medium sized enterprises can now complete HM Customs and Excise import/export documentation over the Internet, cutting the bureaucratic paper chain and saving time and money in turn. The most successful organizations have been those who have comprehensively reviewed and rebuilt their processes from scratch to conduct business over the Internet. They provide their customers with reliable and current information in a user-friendly format. Examples include Amazon.com who offer online book ordering, Charles Schwab who provide the ability to buy and sell shares over the Internet. Over 77% of big and medium size UK companies have a presence on the web.

**Benefits of E-commerce to Consumers**

Just as businesses have been willing to embrace E-commerce as a legitimate way to do business, consumers have been eager to take advantage of all the possibilities that E-commerce has to offer. The biggest advantage for consumers to do business online is convenience. An Internet shopper can use his PC day or night seven days a week to buy almost anything. A consumer does not have to wait in long lines in stores or even leave the house; all he has to do is click on a product that he wishes to purchase, enter his credit card information, and sit back and wait for the product to arrive by mail.

Some E-commerce companies have made this process even more convenient than this. Many online "stores" store the shopper's credit card information on their server, so the information needs to be entered only one time.

Another benefit that E-commerce offers to consumers is reduced cost. Companies that sell stocks online, such as e-trade.com often charge only about $10 a trade, which is much cheaper than buying stock through a traditional stock broker. Many online companies that sell books, videos, and CD's offer low prices, and when shipping and handling is added in, the final cost to the consumer is often comparable to prices found in traditional stores.
Summary of the Main advantages of E-commerce?

The Internet adds tremendous marketing power to any type of business for a fraction of the cost of traditional advertising and marketing methods.
Opens up a global marketplace that would normally be unattainable for most companies.
Availability to potential customers 24 hours a day, 365 days a year without the uneconomical overheads that would be incurred by using any other method.
A website can enhance a company's image so that it is seen as innovative and progressive.
Can be used to provide information and customer support in addition to generating sales and allows you to compete with bigger rivals on more even terms.
Increase revenue by generating further business.
Low cost/high payback alternative to traditional physical store or mail order catalog.
Reduce phone cost due to customer support via email.
Create customized mailing list.
Reduction of paperwork.
Reduction of administrative lead-time.
Provides quicker and easier access to information.
Enhance competitiveness or create strategic advantage.
Enhances the credibility and prestige of the organization.
Enables faster retrieval or delivery of information or reports.
Help establish useful linkages with other organizations.
Enhances employee productivity or business efficiency.
Differentiate their products and services from their competitors and to focus on particular customers.

Costs
Like any major business investment, the implementation of an E-commerce system must be a sound decision. This means that it is necessary to evaluate whether e-commerce is right for the business and whether customers will use it sufficiently to provide the necessary return on investment.

Cost of implementing E-commerce varies, there will be costs of buying equipment, on going maintenance, training and communication and organizational costs. If there is lack of skills within the organization it will incur further recruitment costs.

Overall potential of the Internet the way it's heading that is Government driven?
The Blair government wants the UK to be "the best environment in which to trade electronically", since its views this as a critical factor in extending UK's competitiveness over the next few years.
"We stand on the threshold of a revolution in the way we do business. The phenomenal speed of change poses huge challenges to business-the need to change working practices, open up new markets, create new products, new forms of distribution. It is vital that all companies, whatever their sector of business, understand how electronic commerce can bring them competitive advantage-and use that knowledge."


The quotation above leaves no doubt that the Government takes e-business very seriously.
Report for NSB on Customer Order Management Opportunities in the UK.

February 2002.

Introduction

Study Objective

The objective of this study is to assist NSB in understanding the size of the Customer Order Management market in the UK and to identify future and current opportunities in this area.

Specifically, the deliverable of this study is to provide answers to the following 5 strategic questions. Answers to these questions should assist NSB in market planning for Customer Order Management:

Q1) What combination of tier/sector represents the best opportunity?
Q2) What is the size of the opportunity by tier?
Q3) What is the size of the opportunity by sector?
Q4) Where customer order management opportunities exist what are the overall systems opportunities e.g. planning, merchandising, store systems?
Q5) When can these opportunities be realized i.e. now, 1 or 2 years?

Scope

This study will be targeting tier 1 and 2 retailers defined as:

Tier 1: £500million +
Tier 2: £50 million to <£500 million

Retail sectors to be targeted are:

Department store
DIY
Fashion/apparel
Fashion footwear
General merchandising eg WhSmith, Woolworths
Sports
Electrical/hard goods
Jewellery/accessories
Home furnishings?

Retail contacts should be:

IT Directors, Managers

Number of respondents:

To complete questionnaires for 100-125 retailers
To have a balanced representation of tier 1 and tier 2 retailers
Figure 1: Background to Customer Order Management

Front end

Tier 1
- Kiosk/web
- Customer orders
- POS transaction

Tier 2
- Fulfillment

Tier 3
- Suppliers
- Purchase Order Management
- Inventory management
- Warehouse management
- Allocation/replenishment
**Approach**

In order to carry out the survey a questionnaire was designed to ask the appropriate questions to the IT/project manager’s (copy of the questionnaire can be found at the end of the report in Appendix A). Decisions on the questions were decided by Tanya Bowen and Robin Cole after a brainstorming session in December 2001. After which they were finalized and questions were prioritized in order in early January 2002.

During the second week of January emails were sent to the companies to prompt them of the study and also the questionnaire was attached for respondents to fill if they preferred to answer questions by email, out of 70 emails sent as some companies in the database did not have a correct email address, 6 replied instantly. Which was followed up with a thank you letter.

Calls were targeted to 60-70 customers a day. Out of calling 189 Nsb customers only got 23 replies. Calls were made Monday-Friday between 9.00 am - 6.00 pm. And some calls were made again to speak to the right person. Most companies had a policy to not answer questions, most of the time it was difficult to get the right person, due to illness, holiday, meetings, out of office and no time to answer questions. The survey was carried out as part of Loughborough university study and letters were sent by post and fax to certain companies who requested a questionnaire to be sent in writing, as they could not answer questions over the phone. (Copy of the letter can be found at the end of the report in Appendix B). 78 letters were posted with self addressed envelopes to customers and 19 replied.

**Limitations**

The main limitation of the low result of replies and not being able to get 100-125 responses as was aimed, was mainly that it was difficult to get hold of the right person to answer questions over the phone after a number of attempts. Also due to the timeframe only one person calling 189 customers it took more than a month to get replies.

Not all the questions were answered when asked over the phone thus a low response rate, Appendix B includes each question with an overall count per result. From the replies of questionnaires sent by post, some were found to be incomplete as the respondents didn’t know or couldn’t answer. Similarly questions asked over the phone some couldn’t answer due to confidentiality of the figures.

**Summary results of the five strategic questions**

Q1) What combination of tier/sector represents the best opportunity?
Out of 47 companies that replied in total, 34 companies in Tier 2 replied and 7 companies replied in Tier 1. Replies got from 3 companies were not identified which tier and sector they belong to in the database.

In Tier 1 - 3 companies did not have any customer order plans.
4 companies wanted to improve their Customer order management
1 company did not answer

Chart 1 below shows the sector opportunity in Tier 1 for Customer order management. Excel spreadsheet attached has a detailed summary of tier 1 and 2 answers on customer order management by sector.

![Tier 1 sector opportunities for Customer order management](chart)

**Tier 2**
10 Companies in Tier 2 wanted to improve their Customer order management
12 companies did not answer
1 company is currently improving Customer order management
15 companies do not have a customer order management system in place. The chart on the next page shows the sector opportunity in Tier 2.

As shown from the chart, Tier 2 represents the best opportunity within the Clothing sector.

Q2) What is the size of the opportunity by tier?

Replies were got from 34 - Tier 2 companies and 7- tier 1 companies.

Results were:

10/34 companies in Tier 2 would like to improve their Customer Order management and 3/7 companies in Tier 1.

Q3) What is the size of the opportunity by sector?
Tier 2
2 companies in miscellaneous sector out of 2 companies in total who replied in the sector.
3 companies in clothing sector out of 11 companies who replied in that sector
1 company in jewelers sector out of 1 company in total who replied in the sector
2 company in electrical sector out of 4 companies in total who replied in the sector
1 company in health and beauty sector out of 1 companies in total who replied in the sector
1 company in off license sector out of 1 company in total who replied in the sector.

Kingfisher plc is interested but which sector and which tier does it belong to???

Tier 1
1 company in mixed good sector out of 3 companies in total who replied in the sector.
1 company in DIY out of 2 companies in total who replied in the sector
1 company in booksellers/stationery out of 1 company in total who replied in the sector.

Q4) Where customer order management opportunities exist what are the overall systems opportunities e.g. planning, merchandising, store systems?

According to the rating given in the questionnaire.

1= Ready; 2= Will be ready, improvements currently being made 3= not ready; 4= partially ready, but improvements required; 5= Don’t Know

Summary

Nsb retail should consult the companies whose replies were got from this survey and to concentrate on those companies who wanted to replace their existing Customer order management. This survey should be carried out again using a team of people to get many replies and a balanced representative of Tier 1 and 2.
Appendix A for the report—Questionnaire with an overall count per result on each question

Questionnaire

This questionnaire is being conducted by Loughborough University, the Retail Department. I am completing a PHD on E-Business and one area that we are currently studying is multi-channel retailing. We are interested in knowing whether retailers in the UK are planning to become more multi-channel centric and how geared up they are for this from a systems infrastructure point of view. To keep the questionnaire short and focused, we will be concentrating on one part of the multi-channel systems infrastructure—customer order management/fulfillment—however, any other comments you have will be included in the study.

Q1) Do you operate as a multi-channel retailer, multiple channel retailer or neither?

(For clarification: Multi channel is 1 stock inventory, which all channels go into. Multiple is 2 separate inventories)

i) If answer to q1 is Multiple
   Reasons
   a) Systems are single channel?
   b) Business/Financial reasons eg to outsource
   c) Trial product (e.g. web-only products which wouldn't be allocated across the channels)

Answer to Question 1
Replies out of 48 companies in total

26 replied they are Multi channel
8 replied they operate as a Multiple channel
5 replied they operate Neither
5 replied the reason being Single channel
1 replied Business/financial reason
2 didn't know
1 replied they operate as Semi multichannel

ii) Are you looking to be Multi channel in the future (with a single inventory)?

iii) If no – why?
What types of Channels do you have:

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<th>Now</th>
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<th>2yrs</th>
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<td>Catalogue</td>
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<td>Other</td>
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46 answered Catalogue, Now, 1 year and 2 years.
2 didn’t answer

Q2) What proportion of transactions are made in above mentioned channels? If you are not in a particular channel, but forecast that you will be, also indicate the % of transactions that you foresee will be made in these new channels).

Currently

1 year

2 years

15 answered, 11 couldn’t answer as figures were confidential in the company, 20 omitted the question, and 1 didn’t know.

Q3) If an order is placed from any one of these channels, where would the delivery be made?

a) Delivered at home
b) Delivered at any store
c) Delivered to store purchased at
d) Delivered elsewhere, local to customer

35 replied where the delivery was made, and 12 did not reply. (To see the detailed answer of which means delivery was made for each company please see the excel spreadsheet with all the detailed answers.)

Q4) Where would you fulfill orders?

a) Warehouse
b) Any store
c) Suppliers

d) Other – give example.

35 replied on the means of fulfilling orders, 12 did not answer. (To see the detailed answer way orders were fulfilled for each company please see the excel spreadsheet with all the detailed answers.)

Q5) With your Existing systems how would you judge the readiness of your systems against your growth projections for multi-channel retailing?

Rate 1-5

1= Ready; 2= Will be ready, improvements currently being made 3= not ready; 4= partially ready, but improvements required; 5= Don’t Know

Fulfillment
Planning
Merchandise
In store
Customer order management
Warehouses pick and pack to individual orders

32 answered and 15 didn’t answer. (To see the detailed answer of the rating of each functionality for each company please see the excel spreadsheet with all the detailed answers.)

Q6) Are you planning to secure a:

a) New customer order management system?

b) Replace existing one?

c) Improve existing one?

d) No customer order plans

34 replied and 13 did not reply

Q7) Which Customer Order Management system do you have in place?

31 replied, 4 did not answer, 4 didn’t know which system they had, and 8 said they did not have Customer order management.

Q8) a) If you have Customer Order Management, is your allocation and replenishment part of Customer Order Management or a separate system?

Yes/No
b) If you don’t yet have Customer Order Management but require it – would allocation and replenishment be part of the solution?

Yes/No

For both part a and b of the question 28 replied and 17 did not answer this question. (For a more detailed answer on whether it was part of the system or separate for the companies that replied please see the excel spreadsheet.)

Q9) What major components do you believe make up a Customer Order Management system which would meet your needs as a multi-channel retailer: e.g. fulfillment, allocation, replenishment, etc...

20 replied and 27 did not reply. (For a more detailed answer on components for the companies that replied please see the excel spreadsheet.)

Q10) If you have a Customer Order Management/fulfillment system – how sophisticated is this system?

i) Is it manual? Yes/No

ii) Is it Automatic? If so, does your fulfillment system allow you to automatically:

- re-order
- Decide which supplier to order from
- Move stock from another store
- Move automatically from warehouse

28 replied and 19 did not reply (For a more detailed answer on whether it manual or automatic for the companies that replied please see the excel spreadsheet.)

Q11) Is the movement of stock optimized at the cost base (i.e. does it take cost into consideration in automating the decision)

20 replied and 27 did not reply

Q12) Who would you see the major players (vendors) to be in customer order management?

18 replied on competitors, 20 did not answer the question, and 14 didn’t know. (For a more detailed answer on competitors for the companies that replied please see the excel spreadsheet.)
Q13) Where is the requirement of customer order management coming from within the organization (IT, Finance, Merchandise, Retail Operations, etc).

25 replied and 21 did not answer (For a more detailed answer on where the requirement is coming from for the companies that replied please see the excel spreadsheet.)

i) Who is responsible for the purchasing decision?

20 replied and 27 did not reply (For a more detailed answer on who is responsible for the companies that replied please see the excel spreadsheet.)

ii) Who would hold the budget for a Customer Order Management system (IT, Finance, etc)?

22 replied and 25 did not reply (For a more detailed answer on who would hold the budget for the companies that replied please see the excel spreadsheet.)

iii) What was your company revenue for 2001?

13 replied, 12 couldn't reply as the figures were confidential, and 22 did not answer the question (For a more detailed answer on company revenue for the companies that replied please see the excel spreadsheet.)

Q14) What % of revenue do you spend on IT?

16 replied 11 couldn't reply as figures were confidential and 20 did not answer (For a more detailed answer on revenue spent on IT for the companies that replied please see the excel spreadsheet.)

i) Does that fluctuate year to year?

27 replied 18 did not answer and 3 said figures were confidential

(For a more detailed answer on fluctuation for the companies that replied please see the excel spreadsheet.)
APPENDIX 5:-

Questionnaires on Shopping for Shoes Online
I am a PhD student at Loughborough University researching on E-commerce; I am looking at the shoe industry and companies in UK offering shoes on the net. I would be grateful if you could please answer some questions below to get an understanding of how the shoe industry is doing online, due to a lot of consumer perception of buying things that fit and personal preference. The survey aims to find the future of the shoe industry, how successful companies trading online are dealing with frequently answered questions such as security, return policy, distribution etc. and whether you think there is a future in this industry.

Dear Customer,
This questionnaire is targeted at companies offering shoes online; summarized results will be reported back to your company to show how the shoe industry is doing as a whole in this new way of trading electronically. This information will be valuable to your company offered free of charge.

Please tick in the appropriate boxes and fill the blanks.

Q1) When did you first start trading on the net? Which Year?

Q2) Does your company have a bricks and mortar store? Yes □ No □

Q3) What made your company decide to go online to trade and not only use the internet and the web as a marketing tool?

Q4) What range of shoes do you offer:

Women shoes □ Men □ Children □ Casual □ Formal □ Sports wear □ Bridal shoes □
Other types please state:-

Q5) What is your average order value?

Q6) What is your average order frequency

Q7) What percentage of your sales come from online marketing?

Q8) What percentage of your sales come from offline marketing?

Q9) What percentage of your sales come from mobile marketing?

Q10) What percentage of your sales come from search engine marketing?

Q11) What percentage of your sales come from social media marketing?

Q12) What percentage of your sales come from email marketing?

Q13) What percentage of your sales come from affiliate marketing?

Q14) What percentage of your sales come from referral marketing?

Q15) What percentage of your sales come from direct marketing?

Q16) What percentage of your sales come from trade shows?

Q17) What percentage of your sales come from print advertising?

Q18) What percentage of your sales come from print advertising?

Q19) What percentage of your sales come from print advertising?

Q20) What percentage of your sales come from print advertising?

Q21) What percentage of your sales come from print advertising?

Q22) What percentage of your sales come from print advertising?

Q23) What percentage of your sales come from print advertising?

Q24) What percentage of your sales come from print advertising?

Q25) What percentage of your sales come from print advertising?

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Q45) What percentage of your sales come from print advertising?

Q46) What percentage of your sales come from print advertising?

Q47) What percentage of your sales come from print advertising?

Q48) What percentage of your sales come from print advertising?

Q49) What percentage of your sales come from print advertising?

Q50) What percentage of your sales come from print advertising?
Q5) What is your delivery and return policy?

Q6) What channels of distribution do you use?

Q7) How are you dealing with security issue over the net?

Q8) Is the return rate higher than sales?

Q9) How can you measure Return on Investment or carry out Cost benefit analysis?

Q10) What method do you use to advertise and attract customers to buy shoes online?

Q11) Can you see a future in the online-shoe industry?
Questionnaire for finding consumer behavior of shopping for shoes online

Dear Customer,
This questionnaire is targeted at individuals of age 18-60 years to get the opinions on buying shoes on-line. Data will be used to identify whether it is feasible for the company to offer its services online.

Please tick in the appropriate boxes.

Q1) Have you got a computer at home? Yes ☐ No ☐
Q2) Have you got access to the Internet? Yes ☐ No ☐
Q3) How often do you use the internet? Monthly ☐ 1-2 times a week ☐ Daily ☐
Q4) Please tick any search engines/directories that you regularly use?
   Yahoo ☐ Lycos ☐ Excite ☐ LookSmart ☐
   Altavista ☐ Google ☐ AskJeeves ☐ HotBot ☐
   Other _____________________________

Q5) What do you use the internet for?
   News ☐ Shop ☐ Surf ☐ Get information ☐

Q6) Have you got a credit card/Switch card? Yes ☐ No ☐

Q7) Do you have any worries about using a credit card over the internet?
   Yes ☐ No ☐

Q8) Have you shopped from a catalogue? Yes ☐ No ☐

Q9) Do you shop from company? Yes ☐ No ☐

Q10) Would you like to see the company offer its services over the Web? Yes ☐ No ☐

Q11) How do you feel about buying shoes over the net?
   Won’t mind ☐ Won’t buy ☐ Will buy ☐

If you ticked on Won’t buy can you please state your reasons.
Q12) If you ticked on Will buy would you shop for shoes online for cheaper prices □ faster □ Convenience □ Avoid queues □

Thank you for your time and effort!!!!
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