

CHAPTER 3

THE INFLUENCE OF THE INTERNET ON THE MARKETING ENVIRONMENT

3.1 INTRODUCTION

In South Africa, as is the case throughout the world, the Internet is progressively being used to market a comprehensive range of goods and services (Mboweni, 1999). The significant growth in usage of the Internet and its World Wide Web service has resulted in the formation of an extensive global-based virtual market (Hoffman *et al.*, 1995; Peterson *et al.*, 1997). This has fuelled a number of significant changes in the environment in which marketers market. These changes present contemporary marketers with new challenges.

To successfully address these new challenges, today's marketers need to clearly comprehend the contemporary environment in which they operate in order to arm themselves with the necessary capabilities and skills. As discussed in chapter two, the greater the marketer's insight into this marketing environment system, the greater the marketer's ability of relating to the market better than competitors and, thus, the greater the chance of the organisation gaining a competitive advantage.

The present-day marketing environment system differs from the traditional system in that it is made up of two broad marketing environment subsystems – the physical marketing system and the Internet-fuelled virtual marketing system. Internet technologies, the World Wide Web and the significant growth in Internet-mediated electronic commerce have given rise to the virtual marketing environment that is juxtaposed upon the physical marketing environment (Rayport & Sviokla, 1995; Weiber & Kollmann, 1998). Rayport and Sviokla (1995) indicate that even those organisations not actively involved in the virtual market are likely to feel the effect of this market's existence.

This virtual marketing system does not replace the physical one. The physical environment of raw materials and tangible resources continues to exist, and will most likely continue to exist (Weiber & Kollmann, 1998). Rather, in an osmosis effect, it has diffused into the physical environment resulting in a dynamic open system of interwoven virtual and physical variables. The two exist as parallel universes that are continuously being crossed over, pollinating each with the changes occurring dynamically in the other.

Rayport and Sviokla (1995) summed the situation up, stating that all organisations in today's world compete in both the physical and virtual market. To operate effectively and efficiently in this new dual interrelated marketing environment system, marketers need to understand the inner workings of both broad marketing subsystems and the influence that each has on the other. The mutual relatedness of the variables in these two market systems means that future competitive advantages will be the product of integrated endeavours in both the virtual and physical worlds of business (Weiber & Kollmann, 1998).

In marketing curricula, redefining the marketing environment system by merely adding the virtual marketing system to the traditional system is not sufficient. Nor is it sufficient to explain the impact of electronic connectivity in terms of a change factor within the technological sub-environment of the macro-environment. Rather, an entirely new marketing environment system paradigm is required to facilitate comprehension of the contemporary marketing environment system.

As indicated by Sheth and Sisodia (1999), many of the established marketing "truths" or fundamental principles, including the contextual nature of the marketing environment, are changing as a result of the advancements in technology, particularly the Internet. Geographical boundary lines, time frames and traditional understandings of competitive strengths, weaknesses, opportunities and threats alter significantly in this new system.

In this chapter, Internet-fuelled changes and challenges to marketers are considered. Globalisation, considered to be both a driver and a consequence of Internet's connectivity

is reviewed in section 3.3. Section 3.4 describes the Internet as the driving force behind the related information revolution and subsequent knowledge economy. Section 3.5 discusses the influence of the Internet on consumer behaviour, while section 3.6 discusses its influence on organisational buying behaviour. Section 3.7 describes how the Internet is fostering an increasingly networked economy. Lastly, these changes are summarised in table 3.1, section 3.8. These changes and challenges are discussed against an overview of the Internet, as set out below in section 3.2.

3.2 OVERVIEW OF THE INTERNET

In order to increase understanding of the influence of the Internet on the marketing environment, this section presents an overview of the Internet and World Wide Web. This overview includes a historical background of the Internet and World Wide Web (Section 3.2.1) and the infrastructure of the Internet (Section 3.2.2). Further, a basic explanation is given as to how the Internet and World Wide Web work (Section 3.2.3). In addition, an indication of the size and growth rate of the Internet both globally (Section 3.2.4) and in South Africa (Section 3.2.5) is provided.

3.2.1 Historical background of the Internet and World Wide Web

The concept of the computer network, upon which the Internet is based, was first developed in the 1960s at the United States of America (USA) Defence Department's Advanced Research Projects Agency for the purpose of linking military and research institutions. The original Internet, known as ARPNET, consisted of four connected host-to-host computers and was completed at the end of 1969. More computers were quickly added and between 1971 and 1972 the initial ARPNET host-to-host protocol was implemented and the development of applications began. In early 1972 the initial e-mail application was introduced. Later that same year this utility was expanded when the

“first e-mail utility program to list, selectively read, file, forward and respond to messages” was written (Leiner *et al.*, 2000; Griffiths, 2002).

Originally, the Internet was used by government and by university sponsored researchers and only became available to individuals and companies in early 1990. Full commercial use of the Internet followed in 1991 when the Commercial Internet Exchange Association was established (Hamill, 1997).

The World Wide Web, first released to the public in 1991 (Griffiths, 2002), is an Internet service based on hypermedia, an interactive multimedia system (Hoffman *et al.*, 1995; Ainscough & Lockett, 1996.) The World Wide Web was an innovation originally designed and developed in 1989 (Griffiths, 2002) by the European Centre for High Energy Physics (Hoffman *et al.*, 1995; Griffiths, 2002.) The purpose of the project was to simplify the search and retrieval of documents on the Internet (Griffiths, 2002).

In South Africa, the first sustainable electronic mail link, using the Fidonet mailing system, was established between Rhodes University and a home in Oregon, USA in 1988. This was due to the efforts of Francois Jacot Guillarmod, Dave Wilson and Mike Lawrie in South Africa, and Randy Bush in Portland, Oregon, USA. Early in 1990, using the Uninet network, an internet link was established between Rhodes University and the University of Cape Town, followed by a second internet link to the University of Natal (Note, the use of the lower-case ‘i’ for Internet here indicates that this link was not to the worldwide Internet). At the end of 1991, a full connection, across a leased line, was established to the worldwide Internet (Lawrie, 1997).

3.2.2 Infrastructure of the Internet

The Internet network is made up of local-area networks (LANs) and wide-area networks (WANs). LANs are small-scale networks, connecting locally centralised computers and devices within, for example, an office, a department or a work group. WANs, such as

virtual private networks (VPNs) or the Internet itself, are large-scale networks, connecting decentralised computers and devices nationally or globally (Elsenpeter & Velte, 2001: 182, 218; Bocij *et al.*, 2003: 161).

The Internet, as a physical network linking computers globally, consists of an infrastructure of network servers connected via communication links. These network servers are used to hold and transport data between client computers and Web servers (Bocij *et al.*, 2003: 178). Client computers access the Internet via local Internet service providers (ISPs) who lease bandwidth capacity from larger ISPs (Kleindl, 2001: 26). These larger national and international ISPs, which are connected to one another via network access points (Naps) (Botha *et al.*, 2004: 17), own high speed links that form the backbone of the Internet that enables communication across national and international borders (Bocij *et al.*, 2003: 178, 179; Botha *et al.*, 2004: 17.)

These network systems use a telecommunication system consisting of physical cables, modems, hubs, switches, bridges and routers (Bocij *et al.*, 2003: 169). Modems are devices that enable computers to receive and send data via a standard telephone line (Worthington-Smith, 2001: 266; Bocij *et al.*, 2003: 169). Other connection options include the integrated service digital network (ISDN), the asymmetric digital subscriber line (ADSL) and the leased-line option (Bocij *et al.*, 2003: 170; Wright, 2003: 26). Routers, combined with a firewall, are used to connect an organisation's internal network to the Internet (Bocij *et al.*, 2003: 171). The purpose of the firewall device is to control outside access to internal data (Worthington-Smith, 2001: 265). Switches and hubs, which are connected to a server (Bocij *et al.*, 2003: 171) direct incoming data and connect the components of the internal network (Elsenpeter & Velte, 2001: 215.)

Further, network systems utilise telecommunication channels and media. Guided media makes use of conventional cables, such as twisted pair, co-axial or fibre-optic cabling, while unguided media uses wireless transmissions, such as microwave or satellite transmissions (Bocij *et al.*, 2003: 171, 172).

Lastly, there are the end-user computers and client software, which enable end-users to interface with the network (Elsenpeter & Velte, 2001: 148; Bocij *et al.*, 2003: 166, 169).

3.2.3 How the Internet and World Wide Web work

The Internet is a network of networks linking computers worldwide that facilitates direct, global communication by allowing the transfer of information between otherwise incompatible computers (Hoffman *et al.*, 1995; Hamill, 1996; Griffiths, 2002). These computers are able to communicate because the Internet, as a packet-switched network, uses the standard TCP/IP protocol to transmit data packets around the Internet (Bocij *et al.*, 2003: 192; Botha *et al.*, 2004: 18, 19).

The Internet protocol (IP) is used to address a message to the appropriate, globally unique address. That is, each host computer linked to the Internet is assigned a unique numerical IP address. Given that it is easier to remember a name, rather than a set of numbers, the Internet's domain-name system (DNS) enables Internet users to make use of domain names when searching for Web sites and other resources on the Internet (Bocij *et al.*, 2003: 193; ICANN, 2003; Botha *et al.*, 2004: 21). Domain names, registered through the Domain Name service, consist of a series of character labels separated by full stops. Working from right-to-left, the first label in the domain name is the top-level domain (TLD). These may be a country-code TLD (ccTLD), for example, the .za domain for South Africa or a generic TLD (gTLD), such as the .com domain for commercial registrants. The TLD is preceded by a second-level domain (ICANN, 2003), for example, the .school.za domain for South African schools.

Once the Internet message is addressed, the transmission protocol (TCP) splits the message up into separate packets. This is done to ensure both the efficiency and fairness of message routing. The TCP then reassembles the message on receipt (Bocij *et al.*, 2003: 193; Botha *et al.*, 2004: 19).

The World Wide Web Internet service, using hypertext transfer protocol (http), facilitates the self-activating search for addresses entered and then the automatic recovery of the document requested (Griffiths, 2002). All Web site addresses start with <http://> followed by 'www' (Ainscough & Lockett, 1996). Whereas the Internet is a network of computers connected by cables, the World Wide Web is a network of Web sites connected by hypertext links (Griffiths, 2002).

Information on the Web can be accessed in one of the following ways: Firstly, when the exact Web site address is known this can be entered directly into the search browser. Alternatively, *surfing the net* can access information on the Web. This refers to linking from subject to subject by clicking on words, phrases, or icons until the desired information is found. Use can also be made of one of the Web's search engines. This simply involves entering keywords in the search box and clicking on the search instruction button. Finally, one of the Web's directories can be used to access information. These directories typically offer broad subject categories that, at a click of a button, disaggregate into more specific topic categories. Most also offer a keyword search function for searching that directory's content (Ainscough & Lockett, 1996).

Being a user-friendly, consumer-oriented service, the World Wide Web has become a highly popular new vehicle for commerce (Hoffman *et al.*, 1995; Ainscough & Lockett, 1996; Herbig & Hale, 1997).

3.2.4 Global Internet size and growth rates

In January 1991 only 313 000 host computers were connected to the Internet. In January 1998 there were 29 670 000 host computers on the Internet, a figure that grew by 46 percent to 43 230 000 in January 1999 and by 68 percent to 72 398 092 in January 2000. In January 2001, 109 574 429 host computers existed on the Internet, a growth of 51 percent from the previous year. In January 2002 this figure grew to 147 344 723 and by January 2003 there were 171 638 297 host computer on the Internet. In January 2004 there were a reported 233 101 481 host computers on the Internet which, by July of that

year had grown to 285 139 107. Thus, in a five-year period (January 2000 to January 2004) the number of host computers connected to the Internet grew by 294 percent and by a significant 90 999 percent since January 1991 (Internet Software Consortium, 2004a). In July 2004, of the 285 139 107 domain names by host count, 53 390 597, that is, 19 percent were commercial or .com domains (Internet Software Consortium, 2004b).

There are a number of different surveys that attempt to measure the size of the global Internet population. It should be noted that different surveys make use of different measurement parameters (NUA, 2003) and measure different time frames (Worthington-Smith, 2001.)

NUA (2003) estimates that there were 605.60 million people online in 2002, compared with 515.86 million in 2001 and 377.65 million in 2000 (NUA, 2001.) Nielsen/NetRating's Fourth Quarter 2002 Global Internet Trends report, drawn from surveys carried out in October 2002, and using consistent research methodology, estimates that the world Internet population increased by an average of four percent from quarter four 2001. This report estimates that for quarter four 2002, 580 million people had Internet access via home personal computers (Anon., 2003b) compared to 498,2 million in quarter four 2001 (Anon., 2002a). ITU (2004) concurs, estimating that global Internet users tallied 580 million in 2002, a figure that increased from 502 million in 2001 and 399 million in 2000. The CIA (2002b) estimates that there were close to 666 million online at the end of 2002, compared to 533 million at the end of 2001 (CIA, 2002a) and 413 million at the end of 2000 (CIA, 2001.) In 2004, it was estimated that the global Internet population tallied 934 million. This figure is forecasted to increase to 1.07 billion in 2005, 1.21 billion in 2006 and 1.35 billion in 2007 (McGann, 2005).

There are a number of factors that complicate the measurement of the Internet population. Firstly, often it is multiple users, rather than a single individual, who are accessing a single dial-up account. Secondly, users accessing the Internet, both from their work and home personal computers, leads to double counting. Thirdly, it is difficult to differentiate between users of e-mail and users of the Internet (Worthington-Smith, 2001: 4).

3.2.5 South African Internet size and growth rates

In July 2004, of the 285 139 107 domain names by host count, 350 501, that is 0.12 percent, were .za domains (Internet Software Consortium, 2004b). South African commercial domains are represented by .co.za (Uninet, 2001). As at 1 March 2005, there were 154 315 South African commercial domains, .co.za domains, registered (Names.co.za, 2005). These figures are not an accurate reflection of the number of South African host computers permanently connected to the Internet, given that there is extensive use made of the .com and .net domains throughout Africa. Examples of South African listed organisations using the .com domain include, <http://www.nampak.com>, <http://www.naspers.com>, <http://www.drdgold.co>, <http://www.mrprice.com>, etc.

While Internet usage in South Africa continues to increase, this growth is sluggish (Anon., 2002b). At the current growth rates, only one in ten people are expected to have Internet access in South Africa by 2006 (Lohmann, 2002). Two factors put forward to explain the slow adoption of Internet by South Africans are the high cost of local Internet access and the low bandwidth that is available (Worthington-Smith, 2001: 262; Gordon, 2002a; Lohmann, 2002; Thomas, 2003: 31). These factors are considered to be the product of restrictive legislation (Thomas, 2003: 31) and Telkom's lengthy statutory monopoly (Worthington-Smith, 2001: 262; Gordon, 2002b; Thomas, 2003: 31; Healing, 2005: 20) that up until July 2002 legally made Telkom South Africa's sole supplier of bandwidth infrastructure (Thomas, 2003: 31.)

Despite the slow growth in Internet usage in South Africa, it is still growing (Gordon, 2004: 20). Locally and internationally the Internet is increasingly being leveraged to market a broad range of products (Mboweni, 1999). It is forecasted that Internet based commerce in Africa will grow to \$6.9 billion in 2006, of which an estimated \$6.1 billion is expected to be generated in South Africa (Sukazi, 2004: 7).

The formation of an extensive global-based virtual market (Hoffman *et al.*, 1995; Peterson *et al.*, 1997) has given rise to a number of significant changes in the marketing

environment. One of these changes presenting contemporary marketers with new challenges is Internet-driven globalisation.

3.3 GLOBALISATION

Globalisation has been a reality now for a number of years (Svensson, 2002). What has changed is the accelerated rate at which globalisation is occurring, mainly as a result of the global-wide connectivity afforded by the Internet (Day & Montgomery, 1999; Dutta & Segev, 1999; Kotler, 1999: 5).

To compete in the contemporary marketing environment, generic marketers, and not just international marketing specialists, need to understand the fundamental realities of this Internet-accelerated globalisation. Marketing educators need to equip generic marketing students with knowledge of the Internet-driven global context of the contemporary marketing environment (Lazer, 1993; Hamill, 1997; Hunt, 2002; Watson, 2003: 24). Internet-driven globalisation is a marketing reality that cannot be ignored (Euick, 2003: 16).

3.3.1 Internet-accelerated globalisation

While international marketing and globalisation are by no means new marketing concepts (Porter, 1986a; Porter, 1986b; Svensson, 2002), Internet technologies are most certainly accelerating the pace at which globalisation is occurring (Day & Montgomery, 1999; Kotler, 1999: 5.) The open and global connectivity of the Internet network (Hamill, 1997; Dutta & Segev, 1999; Arnott & Bridgewater, 2002) accounts for it being the major driving force fuelling globalisation (Day & Montgomery, 1999; Kotler, 1999: 5.)

Internet's global connectivity provides an international information infrastructure within which connected users can interact in real time (Hamill, 1997; Randell *et al.*, 2002) and access a global database of a wide variety of information (Ellsworth & Ellsworth, 1997: 43.) As more and more people around the world connect to the Internet, so more and

more people connect with more and more people, and generate and share a growing amount of global information.

As a result of Internet technologies, the world increasingly resembles a global village (Kotler, 1999: 4; Weeks, 2003: 30) where obstacles created by geographic distance, different time zones and organisational boundaries are eliminated (Quelch & Klein, 1996; Peterson *et al.*, 1997; Riggins, 1999; Weeks, 2003: 30.)

Internet-accelerated globalisation widens the geographical scope of many organisations to include global marketing efforts (Rao & Ali, 2002). Global marketing competencies are fundamental to marketers competing in global industries or even those that are in the process of going global (Keegan & Green, 2003: 5). According to Johansson (2000: 4), an increasing number of organisations of all sizes, in a range of industries, from both emerging and developed economies, are entering the global arena. Every industry today contains “global players” (Cronje & Smit, 2003a: 16) making globalisation an inescapable reality for contemporary marketers (Buick, 2003: 16.) This reality exists regardless of whether or not the organisation is actively engaged in international commerce (Thomo, 2003: 22). McLagan (2003: 23) goes so far as to state that, given this reality, all organisations in the present-day marketing environment are global organisations.

The Internet age is thus marked by an ever increasing advancement from a world of distinguishable and disconnected domestic markets to one of connected global markets (Day & Montgomery, 1999). The implication of this is that all marketers will need to adjust to the new Internet-fuelled global context of the contemporary marketing environment (Arnott & Bridgewater, 2002).

3.3.2 Internet-driven global context of the contemporary marketing environment

Webster (1994b) postulates that in the Internet-driven era of the globalised marketing environment, superior marketing, rather than superior technology will be the true source of sustainable competitive advantage.

For marketers to successfully compete in this Internet-fuelled global environment they need to understand how the Internet is changing the long held, fundamental 'truths' of the workings of this environment (Sheth & Sisodia, 1999). For while Internet-based globalisation offers marketers enticing new opportunities, which would never before have been possible, it also gives rise to new challenges and risks, which affect all marketers, even those not actively engaged in international commerce (Quelch & Klein, 1996; Buick, 2003: 16).

By connecting to the Internet, all Web users automatically become international shoppers, gaining knowledge of and access to a worldwide assortment of products and services (Peterson *et al.*, 1997; Riggins, 1999). This in itself represents a substantial break from the marketing idea of consumers in general being geography bound regarding their consumption choices (Hammer, 2003: 9).

The Internet enables consumers to compare market offerings of local organisations with those of organisations around the world in terms of price, product/service attributes, quality and availability (Cronje & Smit, 2003a: 16). Further, as a result of the growth in globally accepted credit cards and new global shipping options, again Internet-driven (Johansson, 2000: 430, 483), consumers are no longer limited to purchasing from locally based organisations (Cronje & Smit, 2003a: 16.) Organisational buyers are also turning to the Internet to widen their sourcing of supplies to a global level (Sashi & O'Leary, 2002; Mahadevan, 2003).

Such Internet-driven globalisation leads to an increased number of competitors going after the same customers (Hammer, 2003: 9). This increase in the intensity of global competition is not only a product of consumers/customers gaining access to a worldwide selection of market offerings. It is also the result of the ease with which the Internet enables organisations, regardless of size, to compete globally (Quelch & Klein, 1996; Palumbo & Herbig, 1998).

The Internet represents a technological advancement, which significantly reduces the required resources for expanding and competing internationally, thereby encouraging more organisations to seek global expansion (Arnott & Bridgewater, 2002). Where once the province of large, mature organisations, the Internet affords even the smallest of organisations the opportunity to compete in geographically distant markets (Johansson, 2000: 4; Cronje & Smit, 2003a: 14). Further, the Internet substantially reduces the internationalisation process time frame (Hamill, 1997).

This means that organisations today are caught in a mesh of global, as well as local competition, arising from both multi-national and small organisations, which are capable, as a result of the Internet, of internationalising at an unprecedented speed. Of course, on the positive side, the Internet also offers marketers the opportunity to target global customers, as well as enabling existing international marketers to enhance their global marketing efforts. The strategic use of the Internet as an international marketing tool will be dealt with in the following chapter.

Internet's speed of communication and global reach also increases the pace at which new trends are globally shared and accepted (Quelch & Klein, 1996). This fosters the homogenisation of markets, as customers acquire a liking for foreign goods from around the world (Day & Montgomery, 1999; Cronje & Smit, 2003a: 16). In this regard, Internet's connectivity and the increasing integration of world markets also increases local organisations' vulnerability to market trends, for example, health scares, economic fluctuations, *etc.*, occurring in distant markets (Buick, 2003: 16). In the same tone, it should be noted that the Internet likewise increases the organisation's risk of being

subject to fast spread global-wide negative publicity arising from geographically removed special interest groups (Melewar & Smith, 2003).

Continued technological advances, together with the Internet's connectivity, compacts time and geographical distance, creating a fast-paced, connected global village (Zineldin, 2000) characterised by an accelerated pace of change within the system (Kotler, 1999: 5.) Increased globalisation equals increased global competition (Keegan & Green, 2003: 5). Increased global competition forces an organisation to be globally competitive (Johansson, 2000: 5).

To survive in this environment where customers have access to global-wide markets necessitates adopting a global approach to marketing (Morris *et al.*, 1997; Cronje & Smit, 2003a: 16). Local organisations will have to improve their value offering in line with global standards (Lazer, 1993; Keegan & Green, 2003: 24) if they are to remain competitive in the face of global competition (Thomo, 2003: 22.) Marketers will need to become "citizens of the globe" (Olivia, 1997), widening their search for opportunities and threats beyond local borders (Keegan & Green, 2003: 10.) The global market phenomenon requires marketers to conceptualise markets as being borderless and marketing opportunities and threats as seamlessly occurring across geographical regions (Lazer, 1993).

To endure, organisations across the globe need to develop world-class marketing competencies (Webster, 1994b). Given the importance of this Internet-driven globalisation to today's marketer, there is little wonder that one of the common criticisms levelled against marketing educators is that greater stress should be placed on international marketing, rather than concentrating on domestic marketing (Hunt, 2002). Academic marketing needs to build global research infrastructures that encourage cross-cultural research for the purpose of grounding a global perspective into marketing thinking (Day & Montgomery, 1999). Further, it is imperative that the marketing implications of the Internet on globalisation be integrated into existing marketing syllabi

(Hamill, 1997). Bearing this in mind, this study puts forward that generic undergraduate marketing students should understand that:

- *Contemporary marketers are competing in an Internet-accelerated global marketing environment.*

In this connected global environment it is knowledge, rather than physical assets, that constitute an organisation's main source of competitive advantage (Zack, 1999; Clarke, 2001; Dlamini, 2004: 7). As such, one of the focal challenges for marketers operating in this Internet-driven competitive global marketing environment is the management of knowledge (Schlegelmilch & Penz, 2002).

3.4 KNOWLEDGE ECONOMY

In addition to accelerating the rate of globalisation (Day & Montgomery, 1999; Kotler, 1999: 5), Internet's connectivity is also the major driving force behind the related information revolution (Jallat & Capek, 2001) and the increasingly knowledge-driven economy (Clarke, 2001; Jallat & Capek, 2001.) Day and Montgomery (1999), note the "connected knowledge economy" to be one of the major trends impacting marketing.

Due to this Internet-fuelled data revolution and resulting knowledge-driven economy, "every business is an information business" (Evans & Wurster, 1997) and all organisations in the contemporary marketing environment system compete in both the physical market of resources and the virtual market of information (Rayport & Sviokla, 1995.) This being so means that all marketers need to understand the dynamics of this knowledge-driven marketing environment.

The Internet-fuelled information revolution (Jallat & Capek, 2001) and subsequent avalanche of marketing information creates new challenges, as well as new opportunities for marketers (van Bruggen *et al.*, 2001; Wind & Mahajan, 2001: 18.) Fundamental economic principles underlying marketing decisions change as Internet's connectivity

brings about new economics of information (Evans & Wurster, 1997; Ruefli *et al.*, 2001: 27). Within this information rich environment, knowledge becomes the fundamental strategic asset for competing (Zack, 1999; Smith & Culkin, 2001; Keegan & Green, 2003: 244; Dlamini, 2004: 7), subtly changing the marketing decision-making process (Keegan & Green, 2003: 244) and increasing the importance of knowledge management within marketing (Achrol & Kotler, 1999; Schlegelmilch & Penz, 2002.)

3.4.1 Internet-driven information revolution

Internet technologies have served to breakdown previous inhibitors of information flow, facilitating the ever-increasing freedom and frequency of information flow that characterises today's marketing environment system (Day & Montgomery, 1999). As a result of Internet's open universal standards, millions of people are communicating around the globe (Evans & Wurster, 1997; Jallat & Capek, 2001).

The Internet significantly reduces the cost and time of obtaining information (Wind & Mahajan, 2001: 18). It enables marketers to gather vast amounts of rich customer data and other valuable marketing information in real time from anywhere in the world (Rao & Ali, 2002). Vast amounts of information can be easily and cost effectively stored digitally in electronic databases (Hanson, 2000: 44). The Web itself constitutes a massive database of both current and archived information on a wide range of subjects (Bickerton *et al.*, 1996: 24; Ellsworth & Ellsworth, 1997: 43). Further, Internet's connectivity, together with other technological applications, such as intranets, extranets, in-store scanners, loyalty cards and credit cards (Burke *et al.*, 2001: 226), allow for these databases to be updated in real time (Cronje & Smit, 2003b: 26) from geographically removed data sources (Day & Montgomery, 1999.)

For the first time in the history of marketing, a technology exists to facilitate marketers' ability to get to know large numbers of customers in penetrating detail. Such enhanced customer profiling allows for an exact understanding of underlying individual customer behaviour, rather than relying on mere estimates (Franzak *et al.*, 2001). This represents a

substantial shift from past normative market segmentation principles (Kara & Kaynak, 1997) and presents new relationship marketing opportunities (Kara & Kaynak, 1997; Franzak *et al.*, 2001.) In addition, the Internet provides marketers with instant access to continuous information on a range of marketing environment variables, a topic that will be discussed in more detail in the following chapter.

Suffice to say, that as a result of the Internet the marketer now has access to significantly greater amounts of, and more detailed data. This should potentially increase their market insight and decision-making performance. In reality though, more data leads to increased complexity and a greater likelihood of poor decision quality (van Bruggen *et al.*, 2001). Many organisations are being overwhelmed with data as electronic connectivity and information technology capabilities provide exponential access to data. While successful in their endeavour of collecting the data, transforming the data into knowledge and then into informed strategic actions appears to be a problem (Zack, 1999; Davenport *et al.*, 2001). Further, the unethical collection and use of information using Internet technologies is in fact destroying trust, rather than enhancing relationship-marketing efforts (Franzak *et al.*, 2001).

In this age of abundant information (Wind & Mahajan, 2001: 18), leveraging data to foster a market-oriented learning organisation, as proposed by Slater and Narver (1995), necessitates that information be translated into knowledge using knowledge management processes (Clarke, 2001; Davenport *et al.*, 2001.) Further, the principles governing the ethical collection and use of data via the Internet will need to be strictly adhered to if this medium is to be used to enhance, rather than destroy, relationships (Franzak *et al.*, 2001).

3.4.2 New economics of information in the Internet age

According to Evans and Wurster (1997), Internet's connectivity and resulting information revolution has created an underlying change in the "economics of information", causing changes in the way organisations compete. Both Hanson (2000: 33) and Ruefli *et al.*

(2001: 27) stress the importance of marketers understanding the new economic principles that govern information in this Internet information age.

The combined effect of Moore's law and Metcalfe's law (Clarke, 2001; Ruefli *et al.*, 2001: 31) are fundamental to understanding what Evans and Wurster (1997) termed as the "new economics of information".

According to Moore's law, computer-processing capacity doubles every eighteen months (Hanson, 2000: 34; Clarke, 2001; Ruefli *et al.*, 2001: 29) at a cost that is constant, implying that the cost of digital technologies and processes continue to decrease over time (Ruefli *et al.*, 2001: 29.) Metcalfe's law, which deals with network externalities, states that, the value of a network increases with the number of users that connect to it. That is, the more individuals that connect to the network, the more compelling it becomes for additional users to connect (Hanson, 2000: 63; Chen, 2001: 165; Clarke, 2001). Further, while the cost of establishing a network is high, the variable cost of adding each additional user is low, reinforcing the value of the network as it grows (Clarke, 2001). Such positive externalities increase as open standards, such as Internet's TCP/IP universal standard of communication gain widespread acceptance (Ruefli *et al.*, 2001: 52).

In the age of Internet's universal open standard of communication, the combined effects of Moore's law and Metcalfe's law results in an exponential growth in the value of the Internet network (Clarke, 2001; Ruefli *et al.*, 2001: 31). As more and more individuals and organisations connect to this network of networks so the flow of information becomes less inhibited, in terms of both cost and location, and more frequent (Day & Montgomery, 1999).

Such information flow changes the fundamental economic principle governing the exchange of information – the required trade-off between reach and richness. Conventional economics of information necessitate that a compromise be made between reach, which pertains to the sum total of individuals that can exchange information at any

one time, and richness, which refers to the amount of information and level of customisation and interactivity of the information being communicated (Evans & Wurster, 1997; Day & Montgomery, 1999).

Internet's connectivity, positive network externalities and increasing computer capacity at a decreasing cost translates into individuals and organisations having extended reach that is global in scope, which requires no compromise in richness. This changes a number of the established economic truths governing marketing (Evans & Wuster, 1997).

For example, small organisations can now utilise the Internet and its combined reach and richness of information exchange to effectively compete in markets, including global markets, where large, resource rich organisations traditionally dominated (Rayport & Sviokla, 1995). Using the Internet, consumers can now, time and cost effectively, gather rich information on a wide range of consumption related alternatives from a large variety of sources, both locally and globally (Tapscott, 2001). This eliminates the monopoly power marketers had in pre-Internet days over consumer related information, in that it provides the consumer with the same richness of information on the various purchase alternatives as marketers possess (Evans & Wuster, 1997). Further, organisations, both small and large, can harness this reach and richness information capability of the Internet to foster closer relationships with a larger number of strategic partners (Allie, 2001: 18; Clarke, 2001).

Uninhibited by the compromise between richness and reach, knowledge too is changing in value. Knowledge is subject to increasing returns in that unlike physical assets, which depreciate over time with use, knowledge increases in value the more it is shared and used (Zack, 1999). Given that Internet's information reach and richness facilitates such access to and sharing of knowledge, it contributes to the exponential growth in the value of knowledge (Clarke, 2001), thereby increasing the importance of knowledge as a strategic asset and reinforcing the necessity of managing knowledge as a strategic asset (Davenport *et al.*, 1998; Zack, 1999.)

3.4.3 Knowledge as a strategic asset in the Internet age

In this knowledge-driven economy, knowledge is increasingly elevated to being the critical strategic resource of the competitive organisation, and learning the critical strategic capability (Zack, 1999; Clarke, 2001; Dlamini, 2004: 7). As a result of the emergence of the virtual marketing environment system, information has become both a facilitator of value construction and a source of value in itself (Rayport & Sviokla, 1995). The value of today's organisation is increasingly being measured in terms of "what it knows rather than what it owns" (Smith & Culkin, 2001), thus altering the strategic role of information from a support mechanism to a value generating strategic asset (Keegan & Green, 2003: 244.)

In today's world, knowledge is considered to be the only true competitive advantage (Dlamini, 2004: 7). As a source of competitive advantage, superior knowledge has the advantage over traditional resources in that competitors cannot imitate or develop substitutes for it. Further, creating a competitive advantage based on knowledge is sustainable in that having superior knowledge fosters the ability to learn (Zack, 1999) and rapid organisational learning is a critical success factor in an age characterised by an accelerated rate of change (Kotler, 1999: 5.) The added advantage of knowledge over physical resources, as mentioned in section 3.4.2, is that it provides an increasing rate of return as it is used (Zack, 1999).

3.4.4 Growing importance of knowledge management in marketing

As indicated in section 3.4.1, in the Internet age of intensive information, where, as discussed in section 3.4.3, knowledge signifies a critical strategic asset, knowledge management becomes a strategic imperative.

Achrol and Kotler (1999) postulate that in the age of information knowledge management efforts represent the most significant activity of marketing as a business function. In a

similar vein, Evans (2003: 274) proposes that knowledge management constitutes an important platform for shifting marketing to a more strategic level in this information-driven era. Schlegelmilch and Penz (2002) concur, indicating that knowledge management is an integral element of all marketing activities and central to competing in the contemporary marketing environment.

Taking cognisance of the growing importance of knowledge management in marketing, Evans *et al.* (2002), call for knowledge management to take up a pivotal place in generic marketing curricula. The authors argue that the importance of this field of study to marketers is such that it should be fully integrated into marketing modules and not just offered as a separate module within marketing courses.

Knowledge management is a holistic approach (Rowley, 2002a; Rowley, 2002b) to systematically (Cronje & Smit, 2003a: 17) optimise the exploitation of the knowledge resources of an organisation (Rowley, 2002a; Rowley, 2002b; Bocij *et al.*, 2003: 29.) These knowledge resources encompass both explicit knowledge, which can readily be recorded, and implicit knowledge that is typically of an intuitive and intangible nature (Bennett & Gabrial, 1999; Rowley, 2002a; Rowley, 2002b; Bocij *et al.*, 2003: 29).

Following a study of thirty-one knowledge management projects in twenty-four large organisations, Davenport *et al.* (1998) identified the following four interdependent key dimensions of knowledge programmes. Firstly, knowledge repositories within which information and knowledge are stored. The authors identified three basic categories of repositories – those containing external knowledge, those including structured internal knowledge and those embracing internal or implicit knowledge. The second identified dimension is knowledge access, which deals with the tools and technologies that facilitate access to and sharing of knowledge. Thirdly, the dimension of knowledge environment was identified. This pertains to having an environment favourable to improved knowledge creation, sharing and application. The last dimension identified, knowledge assets, deals with recognising knowledge as a strategic asset and managing it as such.

Regarding the process of knowledge management, Bennett and Gabriel (1999) submit, following a review of different definitions of knowledge management, that the main steps of the process are “knowledge capture, storage, dissemination and use”. Using the value chain approach, Schlegelmilch and Penz (2002), identify the steps of the process to be “knowledge creation, storage, distribution and application”. The difference between these two descriptions is really a mere matter of semantics.

To ensure successful knowledge management programmes it is essential that marketers appreciate the necessity of having a knowledge management strategy in place that is carefully aligned with the business strategy (Clarke, 2001). To successfully transform data into knowledge and then into results necessitates the grounding of knowledge management into the strategy formulation process (Zack, 1999), thereby integrating knowledge management and strategy (Clarke, 2001.)

Adapting Zack’s (1999) proposed method of linking knowledge to strategy, marketers’ need to first formulate their strategic marketing intent. Next, they need to establish what knowledge is required to successfully implement that strategy. This should be followed by a knowledge gap analysis in order to establish the gap between required knowledge and existing knowledge, and whether such gaps are internal or external in nature. The marketing knowledge strategy can then be formulated in terms of the planned action to be taken to align marketing strategy knowledge requirements with marketing and organisational-wide knowledge resources and capabilities.

As the holder of market- and customer-related knowledge within the organisation, marketers need to be able to communicate this knowledge in a clear and understandable manner to people in other functions in order to facilitate the delivery of superior value to customers (Webster, 1994a). Collaboration is key to knowledge management given that having a common understanding of what something means facilitates sharing, which in turn is what gives knowledge substance and value (Davenport *et al.*, 2001). Clearly stating the objective of the knowledge and using terminology that is understandable across the organisation enhances collaboration and sharing and, thus, the value of that

knowledge (Davenport *et al.*, 1998). Such collaboration is paramount if the ultimate objective of knowledge management is to be achieved - that of facilitating organisational learning (Cronje & Smit, 2003a: 17).

One of the fundamental principles of knowledge management is that information technology, especially Internet technology, must be integrated into management processes (Keong *et al.*, 2001) and, by implication, into marketing processes. Electronic databases, data mining software, video-conferencing, Internet, intranet, extranet and e-mail services are just a few examples of digital technologies that facilitate knowledge management (Bennett & Gabriel, 1999). In this regard, Davenport *et al.* (2001) suggest that it would be valuable for marketers to have an understanding of the software and hardware involved in database management, together with contemporary data modelling techniques and a knowledge of how data is organised. Achrol and Kotler (1999) concur, indicating that marketers will need to be skilled in database management and related software applications, such as data mining. According to Olivia (1997), managing knowledge using new information technology tools and data modelling techniques signifies a key challenge facing contemporary marketers. As a key challenge to modern marketers, this implies that generic undergraduate marketing students should understand that:

- *The Internet-fuelled information revolution has resulted in the contemporary marketing environment being knowledge-driven.*

As Internet's connectivity fuels the information revolution and subsequent knowledge-driven economy, with new economic principles governing information and where knowledge in itself has become a strategic asset, so it is increasingly necessary for contemporary marketers to be equipped with knowledge management competencies. The following section reviews the influence of this globally connected knowledge environment on consumer behaviour, followed by its influence on organisational buying behaviour.

3.5 CONSUMER BEHAVIOUR IN THE INTERNET AGE

One of the most significant consequences of the advent and subsequent growth of Internet-based commerce is the shift in market power from the marketer into the hands of the consumer (Hoffman & Novak, 1997).

In the traditional marketplace, marketers invited the customer to enter into a relationship and then controlled the terms of that relationship. Consumers' lack of information and restricted access to the marketplace meant that generally the consumer was at a disadvantage and that most of the elements in the relationship were under the marketer's control (Schultz, 2000). Marketers had control over the identification, development, maintenance and enhancement of relationships (Gronroos, 1996). Marketers controlled information databases, as a result of their greater control of and access to information and information technology (Schultz, 2000). Consumers' databases tended to be based on their own knowledge and experiences and, as such, were limited and of poor quality (Wang *et al.*, 2000).

Internet technologies equip the customer with a greater amount of consumer related information and a greater number of purchasing alternatives from which to choose from, together with the ability to effortlessly – just a click of their mouse – compare various competitors' offerings (Tapscott, 2001). This eliminates the monopoly power marketers had in pre-Internet days over consumer related information, in that it provides the consumer with the same amount of information on the various available purchase alternatives as marketers possess (Evans & Wurster, 1997).

On the Web it is the customer who seeks out the marketer. They control the initiation of contacts and the type and extent of the information flow (Hoffman *et al.*, 1995; Aldridge *et al.*, 1997). Access to intelligent shopping agents (Schultz, 2000), market research and analysis tools, together with greater communication between individual consumers and the resulting increase in consumer knowledge sharing gives rise to consumers developing sophisticated consumer databases. These databases enable consumers to identify and

target marketers and market offerings that match their needs and preferences with greater precision than has ever been possible before (Wang *et al.*, 2000).

With the growing number of consumers gaining Internet access (Rasch & Linter, 2001; McGann, 2005) and using the Internet for consumption related activities (Rasch & Linter, 2001) it has become increasingly necessary for marketers to widen their knowledge of consumer behaviour to include models of consumer online behaviour (Mahajan & Venkatesh, 2000.)

Specifically, generic marketers need to understand those constructs explaining the consumer online navigation experience (Novak *et al.*, 2000; Dholakia & Bagozzi, 2001: 170); their use of Internet technologies to supplement or substitute areas of the decision-making process (Häubl & Trifts, 2000; Rowley, 2000) and how this virtual marketing channel influences the consumer's decision-making process (Häubl & Trifts, 2000.) Further, they need to understand those variables that can be used to predict the consumer's use of the Internet in their decision-making process (Schoenbachler & Gordon, 2002).

3.5.1 The consumer online navigation experience

One of the unique features of the virtual Web environment is the greater level of control consumers have over all of the elements of the information gathering process. The consumer decides which Web sites to visit, which places to visit within the Web site and when to exit the site (Dholakia & Bagozzi, 2001: 174). Consumers actively undertake a process of network navigation in the virtual Web environment (Hoffman & Novak, 1996), requiring real-time decisions concerning the various elements of this navigation process (Dholakia & Bagozzi, 2001: 174.)

From a marketing perspective, understanding the variables that serve to optimise consumers' online navigation experience is fundamental to understanding online consumer behaviour. Models specifying the components of the consumer online

experience and their interrelationships facilitate the marketing task of creating a compelling commercial Web site (Novak *et al.*, 2000).

Two well-cited and important models that seek to explain this online consumer experience are the network navigation in a hypermedia computer-mediated environment model (Hoffman & Novak, 1996; Novak *et al.*, 2000) and the theoretical model of mind-set formation and influence in digital environments (Dholakia & Bagozzi, 2001: 171.)

The first model uses the construct of flow to explain a consumer's Web experience (Hoffman & Novak, 1996; Hoffman & Novak, 1997; Novak *et al.*, 2000), while the second model postulates that the consumer's mind-set formation determines their online experience (Dholakia & Bagozzi, 2001: 170.)

3.5.1.1 Consumers' online experience and the construct of flow

Hoffman and Novak (1996) define network navigation as "the process of self-directed movement through a hypermedia computer-mediated environment", and use the concept of flow to explain consumers' experience in the Web environment. The concept of flow provides a useful construct for describing a consumer's inclination to peregrinate an Internet Web site (Hoffman & Novak, 1996; Hoffman & Novak, 1997; Novak *et al.*, 2000). Flow refers to the heightened levels of enjoyment experienced during an interaction process consisting of a stream of sequential actions (Hoffman & Novak, 1996).

The probability of experiencing flow increases in the Web environment due to the perceived higher levels of competence required to navigate a Web site. Additional contributing factors include the seamless experience possible in a single online navigation session, the real-time performance feedback to all actions, and the complete control the consumer perceives to have over every facet of the experience (Dholakia & Bagozzi, 2001: 165, 166).

According to the conceptual model proposed by Hoffman and Novak (1996), when a consumer enters a commercial Web site and undertakes the process of navigation, the likelihood of an extended navigation session through the site, as opposed to exiting the site, depends on the level of flow experienced.

The authors suggest that both focused attention and a perceived match between the consumer's competence and the challenges presented within the Web site need to exist for the consumer to experience flow. These two conditions they hypothesise as being the primary antecedents of flow.

Further, the model proposes that interactivity, together with the consumer's perceptions of being present in the virtual environment – telepresence – serve to augment this flow experience. Telepresence and interactivity are hypothesised as being the secondary antecedents of flow.

The authors identify two content characteristics that influence a consumer's attention focus during the process of Web site navigation. The first, vividness, refers to the intensity and variety of sensory stimuli offered, plus the clarity quality of the presentation. The second, interactivity, relates to the Web site layout and the level of difficulty involved in navigating through the site, the speed of loading pages, together with the range of options available within the site.

The degree to which attention is focused and the consumer's level of involvement is further moderated by the consumer's motives for engaging in the process. The authors differentiate between extrinsic motivation, associated with goal-directed search behaviour and intrinsic motivation, associated with pleasure seeking experiential behaviour. They postulate that intrinsic motivation is more likely to result in the consumer experiencing flow. In terms of marketing strategy, the authors suggest that experiential behaviour is applicable for strategies designed to stimulate opinion leaders, cater for entertainment, escapism and recreational needs, and raise consumers' marketing offering knowledge. In

contrast, goal-directed behaviour is applicable for enhancing task-specific, utilitarian consumer actions, such as pre-purchase information search.

The authors theorise that the consequences of a consumer experiencing flow include, positive reinforcement encouraging future Web site navigation, greater consumer learning, greater sense of perceived control over the interaction process and a greater propensity to engage in exploratory and participatory online actions.

In a subsequent research study, Novak *et al.* (2000) empirically validated a structural model encompassing those elements that contribute to an enjoyable online consumer experience. This model provides an important foundation upon which marketers can build predictive models of online consumer behaviour.

According to this empirically tested model, experiencing flow in the computer-mediated Web environment is a product of both direct and indirect influences.

The direct influences that correspond with experiencing greater flow include, greater skill and control, greater challenge and arousal, greater telepresence and time distortion and, lastly, greater speed of interaction. Indirect influences found to correspond with greater flow experience include, greater focused attention, greater perceived importance of the Web in general and greater experience in using the Web.

The authors argue that consumer engagement rules on the commercial Web differ from the traditional commercial environment and, as such, Internet marketing programmes need to address the elements that make up a consumer's online experience. In the Web commercial environment, consumers interact not only with organisations and other consumers, but also with the computer itself. Further, on the Web the consumer is able to add his or her own content to the commercial medium and, what that content is falls outside the marketer's control.

3.5.1.2 Limitations of the flow construct

The concept of flow has been criticised as being too narrow to adequately explain all facets of the online consumer experience. Given that experiencing flow is viewed as the ultimate online experience, dependent on the perfect combination of the consumer's mind-set, situational factors and task characteristics, a consumer's propensity to experience flow is unlikely to be constant (Dholakia & Bagozzi, 2001: 166, 167). While Hoffman and Novak (1996) agree that the flow state is not constant, they argue that marketers can influence the control, content and process variables that determine flow.

A further limitation highlighted is that the consumer online flow experience research pertains to a particular online session, rather than to a specific Web site flow experience (Novak *et al.*, 2000; Dholakia & Bagozzi, 2001: 168). While this somewhat mitigates the research finding's potential use by the individual organisation's marketer (Dholakia & Bagozzi, 2001: 168), it does provide an important basis for understanding the consumer's online experience evaluation (Novak *et al.*, 2000.)

Dholakia and Bagozzi (2001: 170) argue that the mind-set concept provides a more useful construct for understanding the consumer's online experience. Using this construct, the authors developed the mind-set formation and influence model in digital environments. Novak *et al.* (2000), acknowledge the theoretical mind-set formation and influence model as an important step in building a structured model to studying consumer behaviour in the Web environment.

3.5.1.3 Consumers' online experience and the construct of mind-set

According to the mind-set formation model, cognitive orientation, or mind-set, offers a more useful construct for explaining consumers' online experience. The model suggests that a combination of three antecedent factors determine the consumer's mind-set at the beginning of a Web navigation session. These factors include: the goals that the

consumer has set for the session, the consumer's Web navigation knowledge and experience and, the consumer's emotional or affective state at the start of the session.

The authors assert that the consumer's mind-set will determine the consumer's navigation behaviour in terms of the specific Web sites visited, the length of each site visit and the extent and type of information search undertaken. They distinguish between three mind-sets: the action-oriented implemental mind-set, the evaluative-oriented deliberative mind-set and, the experiential-oriented exploratory mind-set.

The navigation behaviour, together with the consumer's mind-set, then determines the consumer's general online experience evaluation. They also influence the consumer's experience evaluation of specific Web sites including, both the organisation's and the brand's image, as well as their evaluation of specific Web site features.

The consequences of the Web experience evaluation may then lead to modified goals and/or an altered mind-set or, alternatively, the same mind-set and altered goals (Dholakia & Bagozzi, 2001: 170, 171, 172).

While the constructs of flow and mind-set provide the foundations for understanding online consumer behaviour, a fundamental truth of consumer behaviour in the Internet age, is that consumers are increasingly using the Internet in conjunction with traditional marketing channels in their decision making process (Peterson *et al.*, 1997; Rasch & Linter, 2001; Schoenbachler & Gordon, 2002). In formulating a consumer-oriented marketing strategy, it is no longer sufficient for marketers to understand offline consumer behaviour and online consumer behaviour in isolation from one another. The trend toward multi-channel consumer behaviour, whereby consumers cross between different channels during the course of their decision-making process, necessitates an understanding of consumer behaviour as multi-channel behaviour (Schoenbachler & Gordon, 2002).

3.5.2 Multi-channel consumer behaviour

Rapid increases in the number of consumers connecting to the Internet (Rasch & Linter, 2001; McGann, 2005) and the coexistence of both Internet and traditional consumer marketing channels (Peterson *et al.*, 1997) have resulted in many consumers utilising these different channels at different stages in their decision-making process (Peterson *et al.*, 1997; Rasch & Linter, 2001.) More and more consumers are in fact showing a preference for using a combination of Internet-based and traditional marketing channels in their purchase decision-making process (Rasch & Linter, 2001; Schoenbachler & Gordon, 2002; Kotler, 2003: 40). This trend toward the multi-channel consumer (Sarel & Marmorstein, 2002; Kotler, 2003: 40) necessitates that marketers strive to gain a holistic understanding of consumer behaviour across channels (Sarel & Marmorstein, 2002.)

For example, in this age of Internet, consumer need recognition may be triggered in the virtual Web environment, as well as in the physical offline environment (McGaughey & Mason, 1998). This provides marketers with a new environment for exploiting need recognition triggering opportunities. As indicated by Kotler (2003: 204), marketers need to identify those stimuli that activate consumer interest in a product category and then formulate strategies to trigger that interest. Identifying and creating hyperlinks between the organisation's Web site and those sites that contain content on interest areas associated with the organisation's marketing offering is one possible strategy for activating need recognition online (McGaughey & Mason, 1998). The use of banner advertising on other Web sites and the setting-up of online newsgroups can also be used to trigger need recognition online. In the case of individuals who agree to register with the Web site and receive e-mail notifications, need recognition may be stimulated through e-mail communicated product updates, special offers and so forth (O'Keefe & McEachern, 1998: 73, 74).

Online need recognition may lead to online pre-purchase information search or offline pre-purchase information search. The same holds true for offline need recognition (Rasch & Linter, 2001). For this reason, it is critical that online and offline marketing

communications be integrated to support each other and maintain a consistent brand image (Schoenbachler & Gordon, 2002). Web site addresses need to be clearly displayed on product packaging and labelling and in the organisation's other mass media advertisements, including print and broadcast advertisements (O'Keefe & McEachern, 1998: 73; Silverstein *et al.*, 2001a).

Consumers may use Internet technologies to supplement or substitute an offline pre-purchase information search (Peterson *et al.*, 1997; Rasch & Linter, 2001). As such, the first decision consumers are faced with is whether to conduct the information search online or offline, or to use a combination of both (Peterson *et al.*, 1997; Ratchford *et al.*, 2001). It seems more likely that consumers will use an assortment of information sources. Ratchford *et al.* (2001) agree, postulating that in striving to maximise the net benefits of a pre-purchase search, the consumer is likely to combine various sources, where the combination is dependent on the benefits and costs of each source, as perceived by the individual consumer. Given that the Internet represents only one potential information source, marketers should consider it in connection with other conventional information sources (Rowley, 2000).

Internet search tools and online decision aids, such as recommendation agents and comparison agents, are significantly influencing consumer preference construction and, hence, consumption behaviour both online and offline (Alba *et al.*, 1997; Häubl & Trifts, 2000; Rasch & Linter, 2001; Häubl & Murray, 2003). In one research study, it was found that eighty-eight percent of Internet users conduct at least a portion of their pre-purchase deliberation online. While only forty-two percent of these consumers made the actual purchase online, forty-eight percent reported using the Internet in their pre-purchase search, even though they executed the actual purchase offline. Of this forty-eight percent, twenty percent used the Internet to help formulate their brand awareness set; thirty-six percent used the Internet to assist in the formulation of their consideration brand set and; eight percent reported using the Internet to decide on a specific brand of product (Rasch & Linter, 2001).

Given the strategic importance of ensuring that the organisation's brand is included in the consumer's awareness brand set, consideration brand set and choice brand set (Kotler, 2003: 205), it is becoming increasingly clear that the generic marketer needs to understand consumers' pre-purchase search and evaluation behaviour in the online environment, as well as in the offline environment.

Moving from a purchase intention to the actual purchase decision involves decisions regarding which brand to purchase, which merchant to purchase from, which payment method to use, when to make the purchase and which marketing channel to purchase from (McGaughey & Mason, 1998; Kotler, 2003: 1998).

In one European study, it was found that forty-two percent of Internet users purchased online and forty-eight percent of Internet users utilised the Internet in making their purchase decision but continued to utilise the traditional marketing channel to execute their purchase decision. Of these forty-eight percent, eighty-five percent purchased the product and brand identified online and thirty-five percent purchased from the same merchant identified online. Those who switched merchants when executing their purchase decision cited "closer proximity" as their main reason for buying from a rival retail offline store. Those who purchased a different product and brand offline to the one selected online claimed that price and the influence of viewing the physical product as being the two main reasons for their switching behaviour (Rasch & Linter, 2001).

When executing the actual purchasing decision online, there are a number of online merchant attributes that consumers use in their choice of a specific online merchant site from which to purchase. These attributes vary in their level of importance to individual consumers. Overall though, product prices, true and detailed descriptions of products, product assortment, together with the appropriate shipping and handling of the product have been identified as being the most critical attributes in choosing an online merchant. Delivery promptness, ordering ease, customer support levels, quality of product information, privacy policies, site appearance and navigation ease follow these as important attributes in selecting an online merchant (Reibstein, 2001: 217, 218).

Alba *et al.* (1997) submit that the consumer's use of Internet during their purchase decision-making process enables them to make a better purchase decision and, as such, is likely to increase post-purchase satisfaction, regardless of whether they make the actual purchase online or not. Internet, as an aid to better consumer decision-making will be explored in more depth in the following section.

Concerning the post-purchase evaluation of an online purchase, the most important attributes used by consumers in deciding to purchase from the same online merchant again include, extent of customer support, meeting promised delivery dates, received product matching its online description, condition and suitability of product packaging, together with the merchant's privacy policy (Reibstein, 2001: 223, 224).

Marketers cannot afford to ignore this trend toward multi-channel consumer behaviour. Being market oriented in the contemporary marketing environment necessitates having a holistic understanding of consumer behaviour across channels (Sarel & Marmorstein, 2002).

3.5.3 Consumers' use of the Internet to optimise their purchase decision

According to Alba *et al.* (1997), consumers that utilise the Internet to search for and learn about alternative consumption related solutions are more likely to make an optimal purchase decision and, as a consequence, experience greater post-purchase satisfaction. The Internet expands the universe of potential consumption related solution alternatives from which the consumer's awareness set is drawn and facilitates more in-depth comparison between alternatives, decreasing the possibility of foregoing a more attractive solution.

Factors, such as limited cognitive ability, plus the amount of time, effort and cost involved in searching for and evaluating pre-purchase information severely limits the number of alternatives considered by most consumers in the conventional marketplace

(Loudon & Della Bitta, 1993: 508; Häubl & Murray, 2003; Schiffman & Kanuk, 2004: 565, 566). In an effort to prevent information overload and reduce pre-purchase effort, consumers frequently rely on internal memory to generate alternatives (Loudon & Della Bitta, 1993: 506; Alba *et al.*, 1997) or settle for flawed or partial information (Kolesar & Galbraith, 2000) and a sub-optimal purchase decision (Alba *et al.*, 1997; Häubl & Trifts, 2000.)

Internet search tools and online decision aids enhance both the consumer's search abilities and the consumer's information processing capacity (Hoffman & Novak, 1996; Alba *et al.*, 1997; Häubl & Trifts, 2000).

The use of Internet search tools significantly lowers consumers' pre-purchase search costs, in terms of time, effort and monetary costs (Alba *et al.*, 1997; Häubl & Trifts, 2000; Bakos, 2001; Trifts & Häubl, 2003). The search tools available to consumers on the Web can be classified into two broad categories – search system and browser tools for conducting general or common searches (Rowley, 2000; Bakos, 2001), and specialised search system tools, or decision aids, for conducting product and price searches, such as recommendation agents and comparison agents (Rowley, 2000; Bakos, 2001; Trifts & Häubl, 2003.)

Using these Internet search tools and decision aids enables consumers to gain fast access to close-to-perfect information concerning the what, where, from whom, and at what price products and services are available (Anon., 2000). This enables them to engage in speedy comparison-shopping (Hoffman *et al.*, 1995) without the effort or expense of travelling from shop to shop (Hammer, 2003: 9.)

Besides substantially lowering the cost and effort involved in conducting a pre-purchase search, these Internet-based decision aids act to supplement the consumer's cognitive capacity (Hoffman & Novak, 1996; Häubl & Trifts, 2000; Häubl & Murray, 2003), thereby enhancing the quality of the final product preference decision (Alba *et al.*, 1997; Häubl & Trifts, 2000; Häubl & Murray, 2003.)

Firstly, these Internet search tools expand the universe of potential consumption related solution alternatives from which the consumer's awareness set is drawn (Alba *et al.*, 1997; Kolesar & Galbraith, 2000). This implies that the consumer's potential opportunity cost of missing an optimal solution is reduced (Alba *et al.*, 1997).

Secondly, using initial attribute preference criteria, a recommendation robot's automatic sort facility enables the consumer to retrieve a reduced, better-delineated awareness set of brand alternatives (Häubl & Trifts, 2000). This decreases the potential hazard of information overload (Alba *et al.*, 1997).

Thirdly, supplying explicit attribute preference criteria, including specified attribute salience weightings and minimum acceptable attribute standards to the recommendation agent enables the consumer to effortlessly and instantaneously form a highly personalised consideration set (Alba *et al.*, 1997; Häubl & Trifts, 2000). This offers a marked improvement over merely relying on memory (Alba *et al.*, 1997).

The empirical findings of Häubl and Trifts (2000) indicate that consumers' use of online recommendation agents result in less pre-purchase effort, a smaller consideration set of a higher quality and improved consumer confidence in their purchase decision.

Internet-based comparison agent decision aids enable consumers to make side-by-side comparisons of products on attributes and prices (Kolesar & Galbraith, 2000; Häubl & Trifts, 2000; Bakos, 2001). Some sites also offer product reviews (Rowley, 2000) and ratings of marketers' reputations on aspects such as, product and service quality and delivery speed (Bakos, 2001.)

Use of online comparison agents enables consumers to effortlessly conduct a more in-depth comparison of a greater number of alternatives. It also allows the consumer to formulate a more accurate and smaller consideration set faster. As with recommendation agents, this leads to a better quality final purchase decision (Häubl & Trifts, 2000).

Incorporating the Internet into the buying decision-making process thus enables consumers to make better purchasing decisions, which, as indicated by Alba *et al.* (1997), should lead to greater post-purchase satisfaction. For the marketer striving to formulate marketing strategies that enhance consumer satisfaction in the face of this increasingly multi-channel consumer trend, it is necessary to understand those variables that influence consumers' channel preference through the various stages of their decision-making process.

3.5.4 Variables that influence consumer channel preference

A number of research studies have sought to identify those factors that can be used by marketers to predict consumers' choice of marketing channel for the various stages of their consumption-related behaviour (Schoenbachler & Gordon, 2002).

The key factors identified in these studies include, shopping motivation (Donthu & Garcia, 1999; Schoenbachler & Gordon, 2002; Moe, 2003; Rohm & Swaminathan, 2004), personality characteristics (Donthu & Garcia, 1999; Randell & Goldsmith, 2002; Hoffman *et al.*, 2003), attitude toward the online channel (Donthu & Garcia, 1999; Devaraj *et al.*, 2002; Schoenbachler & Gordon, 2002; Korzaan, 2003), level of perceived risk (Bhatnagar *et al.*, 2000: 99; Bobbitt & Dabholkar, 2001; Smith & Rupp, 2003) and socio-cultural factors (Rasch & Linter, 2001; Smith & Rupp, 2003.) For the generic marketer, following the bricks-and-clicks strategy, one of the main challenges is to understand those factors that influence consumer preference for the offline or online channel at the various stages of their decision-making process (Schoenbachler & Gordon, 2002).

Regarding the influence of motivation on channel preference, the need for convenience is well cited as the overriding factor consistently found to motivate consumers to purchase online, rather than from physical outlets (Donthu & Garcia, 1999; Rasch & Linter, 2001; Schoenbachler & Gordon, 2002; Smith & Rupp, 2003; Rohm & Swaminathan, 2004).

In contrast, consumers motivated by the social aspects of shopping, together with those consumers with a high need for instant gratification in terms of gaining immediate possession of a purchased tangible product, are more likely to utilise the physical marketing channel (Vijayasathy, 2003; Rohm & Swaminathan, 2004).

Consumers with a high need for variety and for pre-purchase information (Rohm & Swaminathan, 2004), as well as the bargain motivated consumer (Schoenbachler & Gordon, 2002) tend to utilise multiple marketing channels in their decision-making process (Schoenbachler & Gordon, 2002; Rohm & Swaminathan, 2004.)

Consumers also have different motives that drive their online behaviour (Hoffman & Novak, 1996; Dholakia & Bagozzi, 2001: 171; Moe, 2003). Hoffman and Novak (1996), proposed two broad categories of motives to differentiate consumers' online behaviour – intrinsic motivation and extrinsic motivation. Intrinsically motivated individuals engage in the action of Internet navigation for the sheer enjoyment of the navigation process itself. Such motivation drives the individual to explore the Web environment, seeking to be exposed to new and interesting experiences. They are engaged in experiential behaviour, seeking hedonic rather than utilitarian benefits. Extrinsically motivated consumers navigate the Web to achieve a specific objective, such as research a product or service category or brand, or purchase a product or service online. Their motivation is goal-directed, driving them to seek out utilitarian benefits.

Concerning the personality construct, Donthu and Garcia (1999) found that the personality traits of consumer innovativeness, risk-taking and variety seeking, characterise the online shopper. These personality traits are consistent with those used to discriminate consumer innovators from non-innovators (Schiffman & Kanuk, 2004: 126). In line with Donthu and Garcia's (1999) findings, Randell and Goldsmith (2002), established that there is a direct link between both consumers' Internet involvement and Internet innovativeness and their future intent to purchase online.

Hoffman *et al.* (2003), use the personality theory of locus of control to explain online consumer behaviour. According to this theory, individuals with a high internal locus of control generally attribute outcomes to be a product of their own actions. In contrast, those with a high external locus of control attribute outcomes to outside forces, such as destiny, luck or powerful others (Robbins, 1989: 510; Hoffman *et al.*, 2003). Following an empirical study, Hoffman *et al.* (2003), conclude that internals, rather than externals, are more likely to engage in the goal-directed consumer behaviour of online shopping, online transacting and online product information gathering.

A number of studies have also been undertaken to research the link between attitude and intention to purchase online. These studies reveal a significant positive relationship between the formation of a positive attitude toward purchasing online as a result of a satisfying experience with this channel and future intentions to purchase online (Devaraj *et al.*, 2002; Korzaan, 2003).

Using constructs set out by three well-established theories – the Technology Acceptance Model (TAM), the Transaction Cost Analysis (TCA) theory and the Service Quality (SERVQUAL) model – Devaraj *et al.* (2002) empirically established that satisfaction with and, hence, positive attitude formation toward the online channel, is significantly related to online channel preference. Using metrics from the three theories, the authors found that the TAM elements of perceived ease of use and usefulness, the TCA elements of ease of use and time saving, and the SERVQUAL dimension of assurance, incorporating security, constitute the antecedents of consumer satisfaction with the online channel and preference thereof.

Other studies suggest that previous experience and resulting attitude toward other forms of direct marketing channels can be used to predict consumers' future online purchase intentions (Bobbitt & Dabholkar, 2001; Schoenbachler & Gordon, 2002). In empirical testing, Donthu and Garcia (1999) validated that consumers purchasing from the Internet channel have a more favourable attitude toward direct marketing channels than those who do not purchase online. Attitudes formed from past experiences with self-service

technologies, such as computers and ATMs, is also thought to influence consumers' intention to purchase online (Bobbitt & Dabholkar, 2001).

The level of risk perceived by consumers with regard to the online channel has been found to be an important determinant of whether or not they will purchase from the Internet-based channel. Of all the factors contributing to perceptions of risk regarding the use of the Internet channel, the two empirically found to be the most significant are security fears and loss of privacy fears (Liebermann & Stashevsky, 2002).

Schoenbachler and Gordon (2002), hypothesise that certain factors lower consumers' risk perceptions regarding the online environment which, in turn, serve to increase the likelihood of them purchasing from this marketing channel. According to the authors, perceptions of risk will be lower in the case of low cost goods which carry a guarantee and which have a recognised brand name and which are offered for sale by a recognised organisation. Further, the authors hypothesise that the consumers' Internet experience, together with their perceptions of both the transaction security and information privacy of the site all serve to moderate consumers' risk perceptions in the online purchasing environment.

While some consumers may perceive the Internet to be highly risky as a purchasing option, they may not consider it as a risky consumption related information source option (Bobbitt & Dabholkar, 2001). Some consumers, such as the deal-prone consumer, may even perceive higher levels of risk in foregoing the use of the Internet in a pre-purchase information search (Bobbitt & Dabholkar, 2001; Schoenbachler & Gordon, 2002).

Conversely, other consumers may perceive a time risk to be associated with using the Internet to conduct a pre-purchase information search. Such consumers may perceive the process of conducting a pre-purchase Internet search as excessively time consuming. Still others may associate a perceived psychological risk of being overwhelmed by too much information or a perceived performance risk of being confronted by either insufficient consumption related information or the wrong type of information. Further,

the very real risk of loss of personal privacy remains, whether the Internet is used as a purchasing channel or as a commercial information source (Bobbitt & Dabholkar, 2001).

Product or service category attributes have also been found to influence consumers' choice of marketing channel for the various stages of their consumption related behaviour (Schoenbachler & Gordon, 2002).

In terms of the type of information required to evaluate a product/service category, consumer behaviour literature differentiates between search goods, experience goods and credence goods. (Wilkie, 1990: 576; Alba *et al.*, 1997; Bobbitt & Dabholkar, 2001).

According to Bobbitt and Dabholkar (2001), for search goods, the Internet channel offers consumers an effective alternative for the pre-purchase search, evaluation and purchase consumer behaviour stages. Regarding experience goods, the authors suggest that the Internet is unlikely to be used for the purchase stage, but may be used for pre-purchase information search and, in the case of certain types of experience goods, for the evaluation stage, for example, virtual online travel tours. The authors postulate that consumers are not likely to use the Internet to purchase credence goods, though they are likely to use this channel to conduct knowledge-building information searches.

Alba *et al.* (1997) argue that all goods contain a combination of search, experience and credence elements. How the individual consumer classifies an item will depend on the benefits desired from the item and the extent to which available information can be used to predict those benefits. The authors postulate that in the case of consumers having experience with an experience product/service category, together with the consistency of the benefits offered, the conventional channel offers no advantage over the Internet-based channel. The authors further suggest that information on experiential benefits of certain product/service categories may even be more effectively communicated via the Web.

Approaching the link between product/service category attributes and channel choice from the perceived risk angle, Bhatnagar *et al.* (2000: 103) conclude that product/service

categories that are expensive, technologically complex or which contain ego-related attributes are unlikely to be purchased via the Internet channel.

In classifying products/services according to whether they are discretionary items or necessities; research findings indicate that discretionary categories have experienced both greater online retail penetration and growth compared to the necessity category (Rasch & Linter, 2001; Silverstein *et al.*, 2001b).

Regarding socio-cultural influences, van der Walt (2002) subjects that consumers living in countries with a well-developed culture of in-home shopping are more likely to make the transition to online purchasing, than those living in countries where such shopping behaviour is not considered the norm. Further, consumers living in developing countries with emerging economies are less likely to use the Internet for consumption related activities due to poor Internet connectivity (Bandyopadhyay, 2001; Smith & Rupp, 2003), lack of access to credit card facilities and a poor transportation and delivery infrastructure (Bandyopadhyay, 2001.)

Smith and Rupp (2003) postulate that income- and education-related factors, such as home Internet access, access to expensive higher speed Internet connections, computer literacy skills, an understanding of online transaction methods and access to credit card facilities, all influence the likelihood of consumers purchasing online. As such, the authors suggest that individuals falling into the higher social class strata are likely to purchase more online than those in the lower strata. Rasch and Linter (2001) disagree, arguing that online shoppers in developed countries are increasingly falling into the middle-class strata in terms of education and income.

Regarding the influence of reference groups on a consumer's inclination to purchase from the online marketing channel, Smith and Rupp (2003) suggest that individuals are more likely to engage in online shopping if their friends and family members are already purchasing online.

Concerning the influence of family members on online purchasing, children are often more computer and Internet literate than their parents and, as a result, they often play an important role in the consumer socialisation of their parents in this marketing environment (Schiffman & Kanuk, 2004: 352). The so-called generation Y age segment, born after 1977, represent an important segment for marketers to target using the Internet channel (Kotler, 2003: 291; Schiffman & Kanuk, 2004: 454).

Consumers' use of Internet in their consumption lives significantly influences their consumption behaviour online as well as offline (Häubl & Trifts, 2000; Bakos, 2001; Rasch & Linter, 2001). Consumers are harnessing the Internet to make more informed and more intelligent buying decisions from a potentially global selection of goods. Consumers are crossing between offline and online channels at various stages during their decision-making process. The new challenge facing consumer marketers in this age of information empowered multi-channel consumer behaviour is to understand consumer behaviour across channels. To do so requires an understanding of the variables that predict consumer channel choice at the various stages of the consumer decision-making process. It also requires a solid grounding in the constructs that explain consumer online navigation behaviour.

In light of this growing challenge, it can thus be subjected that generic undergraduate marketing students need to understand that:

- *Contemporary consumers are utilising the Internet in conjunction with conventional marketing channels to make better-informed buying decisions.*

Business marketers face the same challenge as organisational buyers, in a similar fashion, increasingly incorporate Internet technologies into their professional buying decision-making process.

3.6 ORGANISATIONAL BUYING BEHAVIOUR IN THE INTERNET AGE

As is the case in the consumer market, Internet technologies are also significantly influencing organisational buying behaviour (Kotler, 2003: 223; Botha *et al.*, 2004: 321). Organisational buyers are increasingly using the Internet in conjunction with traditional marketing channels for their purchasing activities (Kennedy & Deeter-Schmelz, 2001; Porter, 2001; Lichtenthal & Eliasz, 2003; Sain *et al.*, 2004). Organisational buyers' use of the Internet to execute purchasing activities range from online sourcing to Internet-based electronic procurement (e-procurement), right through to electronically integrated supply/value chain management (Botha *et al.*, 2004: 369). In South Africa, as is the case globally, business-to-business Internet-based commerce is growing (Coetzer, 2002; Gordon, 2002a; Anon., 2003a) and is expected to reach a transactional value of R205 billion in 2005, of which sixty percent is expected to be derived from e-procurement (Coetzer, 2002.)

Given that understanding customer-buying behaviour is of central importance to successful business marketing (Sain *et al.*, 2004), contemporary marketers need to understand the role of the Internet in organisational buying behaviour (Kennedy & Deeter-Schmelz, 2001; Sain *et al.*, 2004.) Specifically, marketers need to be aware of the benefits that organisations derive from engaging in Internet-based e-procurement as this will help explain why organisations are motivated to adopt such systems. Further, they need to understand the various types of Internet-based electronic business-to-business markets that exist in the contemporary marketing environment, as well as the variables that influence organisational buyers' channel preference.

3.6.1 Organizational benefits derived from implementing Internet-based e-procurement

E-procurement as a component of value chain management (Botha *et al.*, 2004: 357) refers to “the electronic integration and management of all procurement activities, including purchase request, authorisation, ordering, delivery and payment between a purchaser and supplier” (Sain *et al.*, 2004.)

While e-procurement is by no means a new practice, the significant growth in this practice is largely due to the Internet (Attaran & Attaran, 2002), which enables organisations, both small and large, to benefit from electronically automating the procurement process (Rajkumar, 2001.)

Internet based e-procurement initiatives being undertaken today include joining one of the many electronic business-to-business markets already in existence (Kotler, 2003: 224) or forming an online buying alliance with organisations with similar purchasing needs (Kotler, 2003: 230; Botha *et al.*, 2004: 358.) Alternatively, it may involve the organisation implementing its own e-procurement system (Botha *et al.*, 2004: 358).

Internet based e-procurement offers organisations several advantages over the mostly paper-based procurement processes traditionally used (Attaran & Attaran, 2002; Bocij *et al.*, 2003: 264).

These advantages include, reduced procurement costs (Rajkumar, 2001; Attaran & Attaran, 2002; Bocij *et al.*, 2003: 265), less maverick purchasing (Attaran & Attaran, 2002) and superior audit trails of individual transactions (Rajkumar, 2001.) It also enables speedier purchase cycle times (Rajkumar, 2001; Attaran & Attaran, 2002; Bocij *et al.*, 2003: 264), which reduces inventory holding costs (Attaran & Attaran, 2002; Bocij *et al.*, 2003: 264.) Further, fewer clerical mistakes occur, given that it reduces the need to re-enter data (Attaran & Attaran, 2002).

By automating the validation of pre-approved purchasing budgets for individual employees or departments, the procurement team is able to shift its focus from transaction processing to strategic procurement (Rajkumar, 2001; Attaran & Attaran, 2002). This includes global sourcing. In addition, the Internet enables the organisation to communicate better with suppliers, both local and global (Attaran & Attaran, 2002). As a result of these benefits a large and varied number of Internet-based business-to-business electronic markets have come into being (Kaplan & Sawhney, 2000; Kotler, 2003: 224; Mahadevan, 2003).

3.6.2 Types of Internet-based business-to-business electronic markets

Organisational buyers are increasingly utilising the growing number of Internet-based electronic markets for much of their organisation's purchasing requirements (Kotler, 2003: 224, 229). As such, an important step toward understanding contemporary organisational buying behaviour is to understand the various types of electronic markets and market structures that have come about as a result of Internet's connectivity (Casper, 2000; Kaplan & Sawhney, 2000; Mahadevan, 2003). Over the past few years a number of alternative classification models have emerged (Stockdale & Standing, 2002; Mahadevan, 2003).

One widely cited model is that of Kaplan and Sawhney (2000). According to this model, electronic markets can be broadly classified into four basic categories, according to what is purchased and how the products/services are purchased. The authors distinguish between maintenance, repair and operating (MRO) hubs, yield managers, exchanges and catalogue hubs. MRO hubs refer to horizontal markets for operating inputs that utilise systematic sourcing. Yield managers are also horizontal markets for operating inputs, but that enable spot sourcing. For manufacturing inputs that are generally purchased from vertical markets there are exchanges that enable spot sourcing and catalogue hubs that utilise the systematic sourcing mechanism. The authors argue that electronic markets seek to create value in one of two ways – aggregation or matching. Use of the

aggregation mechanism involves bringing together many buyers and sellers conveniently in one virtual space. This mechanism is static, in that prices are pre-negotiated. The matching mechanism, on the other hand, is dynamic in that it brings together buyers and sellers virtually to negotiate prices in real time, such as, for example, online auctions.

According to Casper (2000), electronic business-to-business markets are best classified according to the level of functionality that they offer. The author distinguishes between information-based exchanges, facilitation markets, transaction Web sites and integration-based markets. Information-based exchanges are industry-focused sites that facilitate the exchange of industry information and feature directories of buyer and seller product databases. Facilitation markets focus on facilitating sourcing by enabling requests for proposals (RFPs)/ requests for quotations (RFQs), postings of product/service offerings, negotiations and collaborative planning. Such markets also often host auctions. Transaction Web sites go further by providing the transactional capabilities required for registered users to consummate transactions online. The author indicates that the most advanced electronic market, in terms of functionality, is that offered by integration-based electronic markets. Such markets enable both the buyer's and the seller's back-office systems to be integrated with that of the exchange's thereby facilitating seamless data exchange between the involved parties back-office systems.

Electronic business-to-business markets can also be classified according to their type of ownership. These markets may be private (either buyer centric or supplier centric), buyer led, supplier led or consortia led (either buyer centric or supplier centric). Alternatively, they may be neutral, that is, owned and administered by a third party intermediary (Mahadevan, 2003). According to Stockdale and Stander (2002), the type of ownership of these markets influences the organisational buyer's choice of market given the influence ownership has on which party the market tends to favour.

Noting the emergence of new market structures and the use of multiple market structures within many markets, Mahadevan (2003) provides the taxonomy of twelve identified market structures, classified into three market mechanisms. According to the author,

collaborative market mechanisms that focus on exploiting seamless inter-organisational integration utilise the extranet, trading partner network (TPN) and Web Electronic Data Interchange (EDI) market structures. These market structures are leveraged to enhance collaboration between partners in the networked organisation – a subject that will be discussed in more detail in the following section. The second category, quasi-market mechanisms, includes the market structures of buyer-side markets, supplier-side markets, forward auctions, reverse auctions and consortia-led markets. The third category identified by the author, neutral market mechanisms, involves exchanges, catalogue aggregators, online community markets and neutral auction market structures. Such market structures involve the participation of large numbers of both buyers and sellers, resulting in neither one being favoured over the other.

Berthon *et al.* (2003), describe the online business-to-business landscape using dimensions of economic control over the said market and type of interaction, where the authors differentiate between discrete transactional and enduring relational transactions. Using these two dimensions, the authors differentiate between the following value-adding processes. Firstly, the matching process, which is transactional and where economic control is the result of many buyers and sellers interacting. Secondly, the aggregation process, again transactional, but where economic control is in the hands of one powerful organisation acting as an intermediary between buyers and multiple suppliers. Thirdly, the integration process, where interaction is relational, but where directive control is the means of achieving economic coordination. Lastly, the authors refer to the creativity process, where interaction is relational. Here economic coordination is emergent with no clear controlling organisation.

While a significant portion of procurement has moved online, utilising the various types of electronic business-to-business markets which exist or that are emerging (Mahadevan, 2003), it is essential for marketers to be clear that organisational buyers do still continue to purchase via traditional marketing channels as well (Porter, 2001.) With this in mind, the following section addresses organisational buyers' channel preferences.

3.6.3 Variables that influence organisational buyers' channel preferences

Even though the Internet is changing the way in which organisations purchase goods and many organisations are investigating ways in which they can use the Internet to enhance their value chain management (Rajkumar, 2001), this does not eliminate the need for traditional marketing channels (Porter, 2001.) Predictions that the Internet will replace the sales force function (Sheth & Sisodia, 1999) and that organisations will eventually shift all procurement online (Attaran & Attaran, 2002) fail to take into account that various factors influence the suitability of and preference for Internet over traditional marketing channels (Webb, 2002; Lichtenthal & Eliaz, 2003.) There appears to be wide spread agreement that a tightly integrated multi-channel approach, incorporating both the online and offline channels is strategically the most suitable route to go in business marketing (Porter, 2001; Webb, 2002; Lichtenthal & Eliaz, 2003; Piercy & Lane, 2003).

Aligning the distribution channel with organisational buyers' needs, preferences and buying situation in order to maximise convenience is a marketing imperative (Lichtenthal & Eliaz, 2003). Doing so in the Internet age necessitates that marketers understand the conditions under which organisational buyers are likely to use the Internet to supplement or substitute offline purchasing activities (Kennedy & Deeter-Schmelz, 2001; Lichtenthal & Eliaz, 2003).

According to Kennedy and Deeter-Schmelz (2001), convenience-seeking organisational buyers that perceive themselves as being innovative are more likely to utilise the Internet channel. The authors also found that organisational pressure to decrease costs encourages organisational buyers' use of the Internet for procurement activities.

Regarding the type of buying situation, the empirical findings of Sain *et al.* (2004) suggest that Internet-based procurement is more likely to be preferred over traditional marketing channels in the straight re-buy situation. This supports the findings of an

earlier study conducted by Kennedy and Deeter-Schmelz (2001), which suggested that the Internet was more likely to be used in less complex, routine buying situations.

Concerning the strategic salience of the input, strategically important inputs are generally more likely to be procured via traditional marketing channels (Botha *et al.*, 2004: 358; Sain *et al.*, 2004), with Internet being used more as a supportive tool (Sain *et al.*, 2004.) Internet-based procurement is used more for items of low strategic importance (Botha *et al.*, 2004: 358; Sain *et al.*, 2004) that are routinely purchased (Kennedy & Deeter-Schmelz, 2001; Botha *et al.*, 2004: 358) in large volumes (Botha *et al.*, 2004: 358.)

For products with widely recognised specification standards, Internet-based procurement is ideally suited. The Internet is likely to play more of a supportive role for items requiring customised specifications (Sain *et al.*, 2004).

Internet-based business-to-business practices are changing at such a rapid rate that deriving the marketing principle of success in this field is very much a moving target (Lichtenthal & Eliaz, 2003). Yet, this increasing trend toward Internet-based procurement is a fact that must be taken into account by both marketing practitioners (Kotler, 2003: 223; Lichtenthal & Eliaz, 2003) and marketing educators. This being so, this study asserts that generic undergraduate marketing students should understand that:

- *Today's organisational buyers are using the Internet together with traditional channels to optimise their procurement activities.*

Procurement represents but one element of the organisation's value chain (Botha *et al.*, 2004: 357) and the influence of the Internet extends beyond this one business process to incorporate the virtual integration of the entire value chain (Ho *et al.*, 2003.) Organisations are increasingly using Internet's connectivity to integrate the activities of whole value systems, where the end of one organisation's value chain is electronically linked to the start of another organisation's value chain (Kandampully, 2003). This connectivity capability is a major driving force behind the proliferation of business

networks of strategic partnerships (Achrol & Kotler, 1999; Kandampully, 2003), a topic that will be discussed in the following section.

3.7 THE NETWORK ECONOMY

Internet technology is the catalyst force behind the emergence of broad managed networks of organisations (Achrol & Kotler, 1999). Internet's open communication platform is facilitating the organisation's ability to form networks of internal relationships, as well as networks of external relationships that transcend traditional internal and external organisational boundaries (Cronje & Smit, 2003a: 18; Cronje & Smit, 2003b: 26).

Such networks are born out of the recognition of the strategic importance of integrating the activities of the organisation's value chain and value system and Internet's capability of facilitating such integration (Walters & Lancaster, 1999a; Kandampully, 2003). Internet's connectivity is being used to virtually integrate and optimise the value adding activities performed within the organisation's value chain and within the organisation's wider value system of suppliers, strategic partners, channel members and customers (Porter, 2001).

Given Internet's capability of integrating value-adding activities across external organisational boundaries, contemporary organisations are forming more intricate and more frequent collaborative relationships with other organisations (Kotler, 2003: 504) and strategic stakeholders (Cronje & Smit, 2003a: 18.) These networks of relationships even extend to collaborations between competitors (Day & Montgomery, 1999; Pels *et al.*, 2000; Cronje & Smit, 2003b: 26). In this networked environment one-to-one competition is increasingly being replaced by network rivalry (Achrol & Kotler, 1999; Srivastava *et al.*, 1999; Kandampully, 2003) and being part of a superior network has now become fundamental to success (Srivastava *et al.*, 1999.)

This tendency toward the extended business network is also fostering an evolution in organisational design (Pels *et al.*, 2000) as hierarchical bureaucracies increasingly give way to the network design (Piercy & Cravens, 1995; Achrol & Kotler, 1999.)

These new network organisation forms disrupt many commonly accepted marketing principles (Webster, 1992; Sheth & Sisodia, 1999). The network form of organisation, together with the other Internet-driven changes previously discussed, change the role of marketing within the organisation (Webster, 1992; Achrol & Kotler, 1999). This has created a need for a new conceptualisation of the marketing function within the organisation (Webster, 1992; Piercy & Cravens, 1995), which needs to be incorporated into modern marketing curricula (Evans *et al.*, 2002.) This includes the virtual integration of value adding activities, the networked marketing environment and characteristics of the network organisation design, plus the changing role of marketing in the networked organisation.

3.7.1 Virtual integration of value adding activities

The value chain and value system models are widely accepted as essential tools for determining ways of creating and enhancing customer value (Kotler & Armstrong, 1999: 553; Rayport & Sviokla, 1995; Porter, 2001; Kotler, 2003: 70).

All organisations are made up of a collection of discrete value activities that are executed for the purpose of conducting the business for which the organisation is designed. The value chain systematically categorises these activities into nine generic groups connected by various linkages. These nine groups are further subdivided into five groups of primary activities involving inbound logistics and the creation, delivery, marketing and after sales service of a market offering and four groups of support activities that provide the primary activities with continuous input and infrastructure (Porter, 1986b; Porter, 2001). This model conceptually connects an organisation's supply side value activities with its demand side activities (Rayport & Sviokla, 1995) and marries these to the organisation's support activities (Porter, 1986b; Kotler, 2003: 71.)

The individual organisation's value chain exists within a larger system of value activities known as the value system. The value system conceptually extends the value chain to include the value-adding activities of the organisation's suppliers, distributors, strategic partners and buyers (Porter, 1986b).

Generating, processing and disseminating information forms an important part of every activity of the value chain and value system in that it facilitates integration and coordination between the various activities. The greater the degree to which the individual activities of the organisation's value chain and value system are integrated and synchronised, the greater the operational efficiencies achieved. Further, the greater the degree of integration and coordination of value chain and value system activities, the more unlikely it is that competitors will be able to imitate its strategy. This then fuses a level of sustainability into the competitive advantage (Porter, 2001).

While information technology has, for a number of years, had an important influence on the operation of these value models (Archer & Yuan, 2000; Porter, 2001), it is Internet's connectivity capabilities that are breaking down inter- and intra- organisational barriers, thus enabling true integration and coordination of activities within the value chain and value system (Walters & Lancaster, 1999b; Ho *et al.*, 2003.)

Within the individual organisation's value chain, early information technology systems were used to automate discrete processing activities (Worthington-Smith, 2001: 16; Porter, 2001). These information technology solutions then evolved into Enterprise Resource Planning (ERP) systems, which integrate individual internal processes within the organisation. The major problem areas with these pre-Internet ERP systems were their high cost, lack of flexibility, limited accessibility and slow speed (Worthington-Smith, 2001: 18).

Electronically exchanging data between trading partners in the value system involved using EDI systems which, necessitated the use of costly proprietary networks (Allie, 2001: 18; Elsenpeter & Velte, 2001: 412) with complex proprietary exchange formats

that required a custom integration between the two trading partners (Elsenspeter & Velte, 2001: 413; Rajkumar, 2001.) Again, the cost and complexity of such systems limited their accessibility to all but the larger organisations (Allie, 2001: 18; Elsenpeter & Velte, 2001: 412).

The value of Internet over previous generations of information technology solutions lies in its connection accessibility (Worthington-Smith, 2001: 18) that is ubiquitous in nature (Ghosh, 1998.) Internet technology, with its open platform, commonly accepted standard protocols and simple browser interface (Porter, 2001) allows for the cost effective connection (Allie, 2001: 18) of any device, regardless of geographical location (Worthington-Smith, 2001: 239.) In other words, the Internet enables cost efficient, direct electronic connectivity between multiple trading partners, regardless of their geographical location or type of operating system (Elsenspeter & Velte, 2001: 412; Rajkumar, 2001; Botha *et al.*, 2004: 346).

Thus, it facilitates the two-way, real-time (Porter, 2001), global-wide, ubiquitous (Ghosh, 1998) exchange of multimedia information (Herbig & Hale, 1997; Breitenbach & Van Doren, 1998) in a user-friendly application format (Hoffman *et al.*, 1995.)

The Internet, has in effect, allowed for the development of a second virtual value chain and value system, that operates in tandem alongside the physical value models (Rayport & Sviokla, 1995). By enabling the detachment of the physical flow of value adding activities from the related information flow, new value creating possibilities occur (Evans & Wurster, 1997; Jallat & Capek, 2001).

In the age of Internet's connectivity, information metamorphoses into a source of value in itself, rather than merely a supporting element in the value chain and value system (Rayport & Sviokla, 1995; Weiber & Kollmann, 1998). Value creation using Internet technologies revolves around information – acquiring, coordinating, extracting, synchronising and disseminating of information – and the integrating of this information

into the activities of the physical value chain (Rayport & Sviokla, 1995), thereby creating more value and new value creating opportunities (Porter, 2001; Ho *et al.*, 2003.)

Using the Internet to generate and disseminate real-time, bio-directional data flows between multiple activities, both within the organisation and between the organisation and multiple value system members, facilitates the true integration of the value models (Porter, 2001).

The virtual value system, as a reflection of the physical value system, lends visibility to the entire value-adding process, thereby enabling tighter coordination over all the value adding activities (Rayport & Sviokla, 1995). This facilitates operational efficiencies, such as faster cycle times, faster customer response, lower inventory holding costs, *etc.* (Kleindl, 2001: 127). Such visibility also enhances opportunities for identifying new value creating or value enhancing opportunities (Rayport & Sviokla, 1995).

The cost of connecting to the Internet network is such that even small and medium sized organisations can capitalise on its benefits – a far cry from previous generations of information technology solutions used to enhance the operation of value chains and value systems (Clarke, 2001; Allie, 2001: 18).

As such, an increasing number of organisations of all sizes are harnessing the power of Internet's connectivity to form and nurture a constellation of complex strategic partnerships and alliances, thus fuelling the networked marketing environment (Jüttne & Wehrli, 1994; Walters & Lancaster, 1999a).

3.7.2 Networked marketing environment

While the formation of business networks is by no means a new strategy, the electronic connectivity of the Internet has made it much more the norm today (Achrol & Kotler, 1999; Porter, 2001; Walters & Lancaster, 1999b; Kandampully, 2003). According to

Piercy (2003: 541), such collaborating networks of organisations have emerged as the primary strategic development in numerous industries today.

The rationale behind such collaborative efforts is that for an organisation to develop true competence it needs to combine its own capabilities with the capabilities of other organisations. This should be done in such a way that their combined efforts overcome the individual proficiencies and constraints of the individual organisation acting alone (Lazer, 1993; Awuah, 2001). Thus, for an organisation, even a large organisation, to isolate itself from potential partnerships it, in effect, limits its ability to develop all but a few competencies (Webster, 1994b; Awuah, 2001).

The Internet enables different organisations, including those separated by physical distance, to collaborate in a flexible and often *ad hoc* basis to capitalise on market opportunities in real time. Even within organisations, geographically separated teams of specialists can be electronically connected to collaborate on market opportunities and/or to resolve customer problems as they occur (Sawhney, 2001). Being a global information network, the Internet enables the formation of global business networks (Quelch & Klein, 1996; Poon & Jevons, 1997; Cronje & Smit, 2003b: 26) within which both small and large organisation can collaborate (Quelch & Klein, 1996; Poon & Jevons, 1997.)

In many markets today an organisation can take on the persona of a customer, a supplier or a competitor simultaneously (Day & Montgomery, 1999). This notion of collaborating with competitors is far removed from the competitor-centred concept so ingrained in the discipline of marketing (Sheth & Sisodia, 1999). With this so-called co-opetition (Pels *et al.*, 2000), the organisation's primary competitor may also be its most valuable collaborator (Byrne, 2000.)

The negative consequences of the zero-sum game in mature markets have encouraged a move away from the traditional one-on-one competitive orientation toward the formation of collaborative relationships between competitors (Day & Montgomery, 1999). The co-occurrence of competition and cooperation facilitates resource sharing thus avoiding

destructive resource wastage and focuses on market growth rather than market share (Sheth & Sisodia, 1999). In the contemporary marketing environment the conventional notion of one-to-one competition is thus increasingly being replaced by network-to-network rivalry (Achrol & Kotler, 1999; Srivastava *et al.*, 1999; Kandampully, 2003; Kotler, 2003: 13).

Further, the arm's length supplier relationship mindset of organisations is evolving into viewing suppliers more as strategic partners (Webster, 1992; Walters & Lancaster, 1999b). This offers a significant change from viewing suppliers as adversaries (Webster, 1992; Sheth & Sisodia, 1999) where organisations sought to limit their reliance on suppliers by dealing with numerous suppliers that competed against each other for the organisation's business (Webster, 1992; Achrol & Kotler, 1999), often on the basis of price (Webster, 1992.)

Organisations today are striving to nurture a greater number of partnerships with a smaller group of suppliers, which are carefully selected for their value adding potential (Achrol & Kotler, 1999; Kotler, 2003: 666). Here the focus is on mutual benefit, and the standpoint adopted is one of cooperation (Sheth & Sisodia, 1999).

Internet's connectivity is also being used to partner customers in relationship building collaborative value adding endeavours (Porter, 2001; Kotler, 2003: 666). The same holds true for other strategic stakeholders, such as academic institutions (Kotler, 2003: 551) and regulatory agencies (Cronje & Smit, 2003a: 18; Kotler, 2003: 551.) In this value network approach to creating added value, the organisation does not just look at its immediate customer and immediate supplier. Rather, it extends its view to incorporate the supplier's supplier and the customer's customer, right through to the end customer, as well as value adding relationships with all strategic stakeholders (Kotler, 2003: 503, 551).

In increasing its network of strategic alliances and partnerships and, hence, its influence over the capabilities and resources beyond that which it owns (Sawhney & Zabin, 2002), today's organisation is, paradoxically, increasingly concentrating on a more narrowly

focused set of core competencies (Webster, 1992; Achrol & Kotler, 1999; Sawhney & Zabin, 2002; Kandampully, 2003.) Sawhney and Zabin (2002) refer to this paradox as the “shrinking core, expanding periphery”. As competition increasingly occurs between such extended networks instead of between individual organisations (Achrol & Kotler, 1999; Srivastava *et al.*, 1999; Kandampully, 2003) and where each organisation focuses on being a specialist rather than a generalist (Kandampully, 2003), so being part of a superior network becomes increasingly fundamental to success (Srivastava *et al.*, 1999.)

3.7.3 Network organisation design

In this networked age, organisation structures are also evolving (Pels *et al.*, 2000). The Internet-driven changes in the marketing environment, as discussed in this chapter, are, out of necessity, giving rise to new organisational forms (Achrol & Kotler, 1999). These new organisational designs tend to be flatter (Pels *et al.*, 2000; Cronje & Smit, 2003b: 27; Kotler, 2003: 666), leaner (Cronje & Smit, 2003b: 27), team-based (Cronje & Smit, 2003a: 18; Kotler, 2003: 666) and focused around core business processes rather than functions (Kotler, 2003: 666; Piercy, 2003: 538.)

Such network organisation designs are characterised as being flexible (Achrol & Kotler, 1999; Cronje & Smit, 2003b: 27) and as having superior information processing capabilities (Achrol & Kotler, 1999), together with being superior learning organisations (Piercy & Cravens, 1995; Achrol & Kotler, 1999.) Such organisational qualities are necessary when operating in today’s turbulent, dynamic global knowledge economy (Achrol & Kotler, 1999).

Information sharing (Srivastava *et al.*, 1999), cooperation (Srivastava *et al.*, 1999; Kandampully, 2003; Piercy, 2003: 542) and trust are fundamental elements of the networked organisation (Srivastava *et al.*, 1999; Awuah, 2001.) This networked organisation typical in the contemporary marketing environment has important implications regarding the role of marketing in today’s organisation (Webster, 1992; Piercy & Cravens, 1995; Achrol & Kotler, 1999).

In this network design, as noted in the previous section, resources are focused on core competencies and all other non-core activities are outsourced (Achrol & Kotler, 1999; Kandampully, 2003). It is worth noting here that Porter (2001) warns against excessive outsourcing, stating its dangers to include erosion of distinctiveness and subsequent increased price competition, lower barriers to market entry and increased supplier power. Some may argue that Porter's competitive mind-set stance, so frowned upon by the network organisation design advocates, is perhaps more realistic than the cooperative, mutual benefit stance. Indeed, Piercy and Cravens (1995) argue that power and political issues in inter-organisational relationships should temper over enthusiasm for partnering and outsourcing. In this regard, Webster (1992) stresses the importance of clearly defining what the organisation's actual core competencies are. The author argues that those activities that the organisation is not proficient in performing would be best outsourced to those organisations that can perform them better.

Piercy and Cravens (1995) submit that, at the end of the day, organisational design is a means to an end. The authors underscore that the network design, together with the decision to outsource should only be adopted if identified as being the best strategic alternative for implementing that particular organisation's strategy. The authors go on to note that the adoption of the network design will most certainly result in fundamental changes in the role of marketing. The implications regarding the role of marketing in the networked organisation are reviewed next.

3.7.4 Changing role of marketing in the network organisation

The networked organisation typical in the contemporary marketing environment has important implications regarding the role that marketing plays in today's organisation (Webster, 1992; Piercy & Cravens, 1995; Achrol & Kotler, 1999).

According to Webster (1992), the marketer's role in the network organisation is to nurture and manage relationships, not only with customers, but also with suppliers and distributors. To this end, the author contends that marketing principles need to be

extended to include the principles governing marketing relationships – “negotiation, coordination and cooperation”.

In a similar tone, Achrol and Kotler (1999) postulate that while time-honoured marketing skills remain important, marketers in network organisations need to be proficient in “negotiation, inter-organisational coordination and conflict management”.

At the corporate level, marketer’s added role in the network organisation is to assist in planning and negotiating partnerships with both upstream and downstream value system members, through which the organisation deploys its core competencies to exploit specific opportunities. Marketing’s additional task at the business level is to determine which marketing activities should rather be bought in the market, together with determining which marketing activities would be best performed internally and which would be best performed by strategic partners. At the operational level, marketing’s focus should be on developing sustainable customer relationships by ensuring that the organisation is being more responsive to customer needs (Webster, 1992).

Being customer responsive means that the marketer should not only focus on the demand side of the value delivery process, but also on the supply side to ensure that the entire network is geared toward customer satisfaction (Kotler, 2003: 504). Indeed, Webster (1992; 1994a; 1994b) stresses that marketing’s most significant role in the networked organisation is to ensure that the network in its entirety remains focused on the customer.

Network marketing, as an element of relationship marketing, focuses on the establishment, development and maintenance of relationships in these networks (Pels *et al.*, 2000). Leveraging Internet’s interactivity as a network-marketing tool enhances marketer’s ability to coordinate network activities and foster network cooperation between network partners for the purpose of ensuring that the network remains focused on the customer.

In this networked age, Evans *et al.* (2002), call for marketing education to be extended beyond the relationship marketing model that focuses narrowly on the customer side, to include the network marketing paradigm with its cross-functional, inter-organisational demand and supply side focus. This implies that it is necessary for generic undergraduate marketing students to understand that:

- *The Internet is the driving force behind the emergence of a complex network of strategic partnerships between organisations.*

As can be seen from the above discussion, the Internet has fuelled a number of key changes in the marketing environment. These key changes are summarised below.

3.8 KEY CHANGES AND CHALLENGES IN THE MARKETING ENVIRONMENT RELEVANT TO GENERIC MARKETERS

As a result of the Internet, five key changes and, hence, marketing challenges have occurred in the marketing environment that are of relevance to generic marketers. These changes include rapid globalisation, the information revolution, the information empowered multi-channel consumer and organisational customer and the increased trend toward the formation of networks of strategic partnerships. Table 3.1, provides a summary of these Internet-driven marketing environmental changes, together with a sample of the published sources from which they were derived.

Table 3.1 Internet-driven marketing environmental changes identified as relevant to generic marketers as derived from published sources

Fundamental Internet marketing elements	Researcher(s)
Internet-driven global context of the marketing environment.	Quelch & Klein (1996); Hamill (1997); Day & Montgomery (1999); Arnott & Bridgewater (2002); Buick (2003)
Internet-fuelled data revolution and resulting knowledge-driven economy.	Evans & Wurster (1997); Olivia (1997); Achrol & Kotler (1999); Day & Montgomery (1999); Clarke (2001)
Consumers' use of the Internet in conjunction with traditional marketing channels to make more informed decisions.	Hoffman & Novak (1996); Hoffman & Novak (1997); Alba <i>et al.</i> (1997); Peterson <i>et al.</i> (1997); Häubl & Trifts (2000); Bakos (2001); Rasch & Linter (2001); Sarel & Marmorstein (2002); Schoenbachler & Gordon (2002); Hammer (2003); Häubl & Trifts (2003)
Organisational buyers' use of the Internet in conjunction with traditional channels to optimise their purchasing activities.	Kaplan & Sawhney (2000); Kennedy & Deeter-Schmelz (2001); Porter (2001); Rajkumar (2001); Attaran & Attaran (2002); Webb (2002); Lichtenthal & Eliaz (2003); Berthon <i>et al.</i> (2003); Mahadevan (2003); Piercy & Lane (2003); Sain <i>et al.</i> (2004)
The Internet-driven network marketing environment.	Achrol & Kotler (1999); Day & Montgomery (1999); Srivastava <i>et al.</i> (1999); Walters & Lancaster (1999b); Pels <i>et al.</i> (2000); Awuah (2001); Porter (2001); Evans <i>et al.</i> (2002); Sawhney (2002); Kandampully (2003)

3.9 SYNOPSIS

The significant growth in usage of the Internet and its World Wide Web service has resulted in the formation of an extensive Internet market that is of global proportions (Hoffman *et al.*, 1995; Peterson *et al.*, 1997). This has stimulated a significant number of changes within the marketing environment, which, in turn, have created new challenges that contemporary marketers need to address.

This chapter focused on the Internet-driven changes and challenges relevant to generic marketers. Globalisation, considered to be both a driver and a consequence of Internet's connectivity was discussed in section 3.3. Section 3.4 reviewed Internet as the driving force behind the related information revolution and subsequent knowledge economy. Section 3.5 described the influence of the Internet on consumer behaviour, while section 3.6 described its influence on organisational buying behaviour. Section 3.7 discussed how the Internet is fostering an increasingly networked economy. Lastly, section 3.8 provides a summary of the key changes and challenges in the marketing environment relevant to generic marketer, as depicted in table 3.1. These changes and challenges were reviewed against an overview of the Internet as set out in section 3.2.

The following chapter, chapter four, identifies the fundamental elements that need to be considered in using the Internet as a marketing tool for executing generic marketing tasks.