

## CHAPTER

# 1

# THE INTERNET - A PLATFORM FOR BUSINESS

### Chapter Objectives

- To define the Internet
- To provide some idea of what can be done on the Internet
- To appreciate how big the Internet is and how fast it is growing
- To provide a brief overview of the history of the Internet
- To describe the link between the Internet and the World Wide Web
- To outline some of the features of the World Wide Web
- To highlight the advantages of the Internet and the World Wide Web as business tools

# 1. The Internet - the Concorde of technologies!

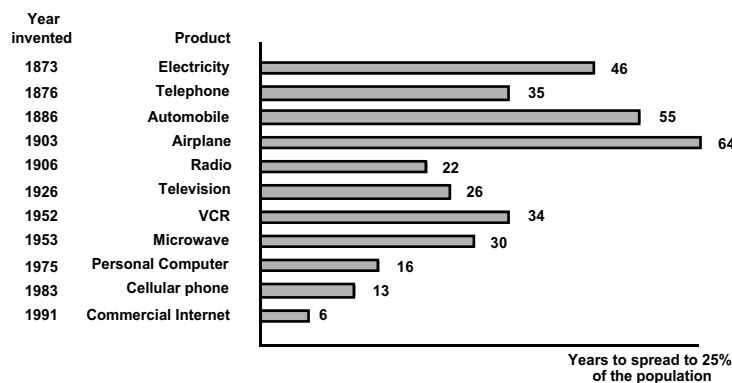
The Internet is said to be the fastest growing phenomenon in modern history. Much like the Concorde leaving the competition in its jet stream at twice the speed of sound, nothing else has come close to the rapid growth being experienced by the Internet - not the industrial revolution, not the electronics revolution and not even the computer revolution.

But in all fairness, it is actually the commercialisation of the Internet in which this tremendous growth is reflected. While the birth of the Internet can be traced back some 30 years to 1969, it is only after the creation of the *World Wide Web* in 1989, little more than 10 years ago, that the growth of the Internet really took off.<sup>1</sup> (The Internet and the World Wide Web are closely linked, with the latter essentially serving as 'window' to the Internet.)

The unique and easy-to-use, multimedia nature of the World Wide Web, combined with its Web-like global reach, was quickly put to use for commercial gain and from about the early 90s, the Internet entered a period of exponential growth.

A quick glance at figure 1.1 shows the growth to maturity of different technologies. You will see from the graph that the commercial Internet has experienced by far the fastest growth rate when compared with other 'revolutionary' technologies such as the aeroplane, the radio, the telephone, television, the PC and the cellular phone.

Figure 1.1: Growth of technology



Source: Korper & Ellis<sup>2</sup>

Already, the Internet has had a dramatic effect on the way we do business, interact with each other, and how we live. But we can expect to see even more dramatic changes taking place as we move deeper into the 21<sup>st</sup> century.

In this chapter, we define the Internet, look at some of the novel ways the Internet is affecting our lives, examine some facts and figures about the Internet, provide a brief history of the Internet, look at the link between the Internet and the World Wide Web, and highlight the unique advantages inherent in the Internet and the World Wide Web as business tools.

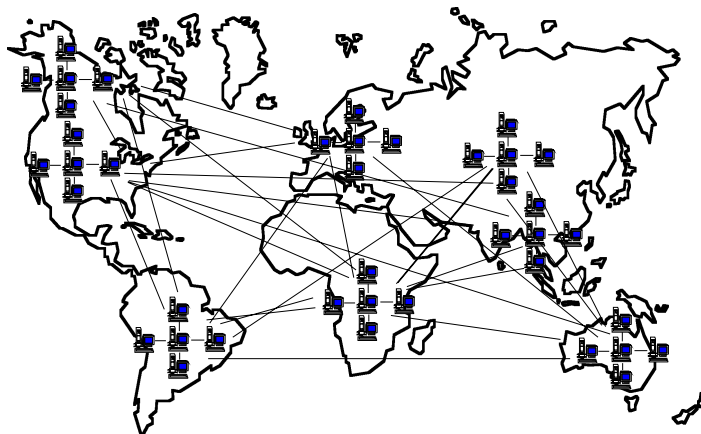
## 2. Defining the Internet

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*The Internet (or often just called the Net) is most commonly defined as a world-wide interconnected network of computer networks.*

The Net enables a computer or network in one part of the world to communicate with a computer or computer network located somewhere else in the world using either an ordinary telephone line or a special dedicated data line.

Figure 1.2: The Internet - a network of computer networks

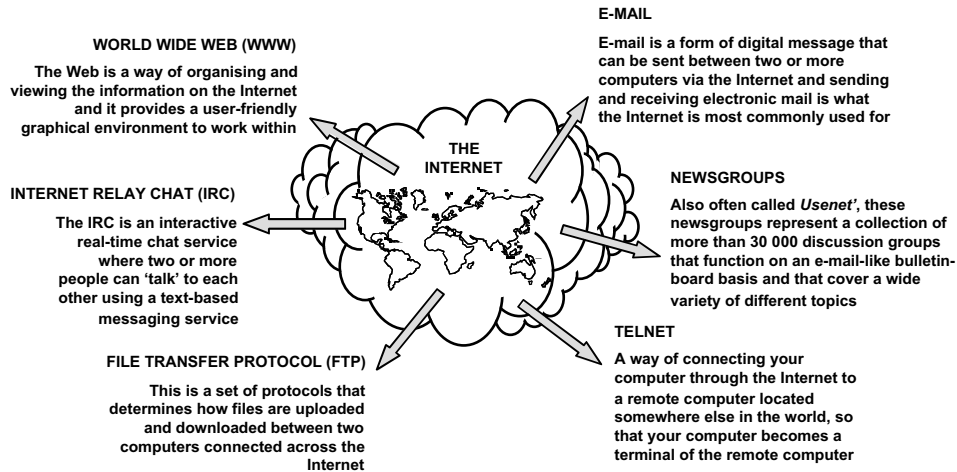


The power of this global system of interconnected computer networks stems from the fact that (a) it provides easy access to one another for millions of individual and corporate Internet users, and (b) the information available on all of these computer networks is now available to everyone. Previously only users on a specific network had access to the information on that particular network. Of course, much of the information is still proprietary and thus password protected. Nevertheless, there remains gigabyte upon gigabyte of information freely available via the Net.

The Internet comprises several 'parts'. Electronic mail (e-mail), for example, is one well-known facility available via the Internet while the World Wide Web is another. There are others and figure 1.3 provides a brief overview of some of the other components of the Internet.

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Figure 1.3: The various components of the Internet



### 3. Let's imagine

**You're an individual. Imagine...**

- a video store or TV station where you can select and download a video or TV programme over the Internet for your viewing pleasure on your home satellite TV system whenever you want to (and not having to keep to a linear TV schedule)
- sitting in your lounge and switching from a television programme to your TV-based e-mail service to quickly send a forgotten reply to an e-mail received earlier that day
- watching a TV programme and seeing an item of clothing you like being worn by one of the actors and then switching to the Internet to immediately order and pay for the item from a local (or perhaps international) clothing store and having it delivered the next day
- watching a rugby or soccer game and switching to the Internet on your TV screen to see how many goals or tries a particular player has scored this season
- watching a rugby game and dialling in to select a particular camera angle to watch the game from
- ordering your shopping online to have it delivered at home (no queues to fight your way through)
- planning and booking your entire holiday trip from home
- your daughter finding all the information she needs for her school project off the Internet, and then collaborating with her classmates to write up the project, all while on the Net
- chatting in real time with your colleague recently transferred to Singapore or a family friend in New Zealand

- listening to a Hong Kong or U.S. radio station or even one closer to home while at the same time watching the DJ in action on your computer screen
- booking a concert ticket from home instead of having to stand in queues at a ticket vending service
- sharing experiences, information, or personal problems with like-minded people from around the world
- being able to track on the Internet exactly where in the world a parcel is presently located that you recently sent to someone overseas
- being able to send or receive e-mail and accessing your bank account over the Internet using your cellular phone
- paying all your accounts from home and at your leisure, or applying for a house mortgage using Internet banking
- learning a new language, attending school, or studying for a degree over the Internet
- finding that hard-to-get book from a bookstore in the U.S. or Europe
- downloading the latest song of your favourite band off the Internet in digital format, to be stored on your pocket-sized, solid-state music player so that you can compile your own selection of songs to be played back as and when you want
- seeing the surface of mars, or the inside of the space shuttle, or what the traffic is like on the highway, or a watering hole at a nearby game park, or what the weather and crowds are like at the beach, using the Internet and video streaming technology
- playing chess or some other interactive game simultaneously with players from around the world, in real-time
- just surfing\* the Net for fun

Imagine doing all of this using your cell phone!

### ▼ LINKS

- Games.com [<http://www.games.com>]
- Megashopper [<http://www.megashopper.co.za>]
- Junkmail [<http://www.junkmail.co.za>]
- McCarthy Call-a-Car [<http://www.mccarthy.co.za>]
- Hubble space telescope [<http://www.stsci.edu>]
- National Geographic site for kids  
[<http://www.nationalgeographic.com/kids/>]
- Computicket [<http://www.computicket.co.za>]
- Standard Bank Internet banking demo  
[<http://www.standardbank.co.za/banking/demo/demo.htm>]
- Radio 5FM [[http://www.5fm.co.za/5fmnew/sound\\_frame.htm](http://www.5fm.co.za/5fmnew/sound_frame.htm)]
- Kalahari.net [<http://www.kalahari.net>]

"In the new millennium, there will only be two types of businesses; those on the Nwf and those out of business."  
*Bill Gates, Chairman - Microsoft*

\* 'Surfing' is the act of going arbitrarily, as the fancy takes you, from one point on the Net to the next without necessarily having a specific goal in mind.

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**You're a business.** Imagine...

- the savings you could achieve by making a catalogue of your products available on the Internet for customers to order from and then delivering the goods to the customer's premises - there would be no need for a large physical store and you could, in turn, order stock from your suppliers as and when required, all via the Internet
- your secretary planning and booking your entire business trip from his/her desk
- the PR value for a radio station which enables listeners to peek 'behind the scenes' using the Internet and video streaming technology to watch how things work
- an engineer keeping track of a remote building project in the North West province (or even overseas) from an office in Cape Town using the Internet and video technology
- gathering intelligence about your company's competitors from the comfort of your office
- researching a new foreign market or industry without leaving South Africa
- selling your company's products via the Internet in Beijing or Europe or elsewhere, 24 hours a day, 365 days a year
- sending a spreadsheet, CAD drawing, photograph, or a new price list to your office in Dubai, all at the press of a button
- tightly integrating your suppliers and customers with your order processing, billing and payment systems into one automated whole that allows you achieve just-in-time supply and delivery efficiencies
- providing customer support 24 hours a day, 7 days a week, 365 days a year
- being able to reach your customers on their cell phone 24 hours a day
- allowing your customers to keep their own records up to date and to access your product catalogues and other information when and where they want
- reaching a global market of 305 million people
- creating a central trading hub which allows buyers and sellers to come together on the Internet to trade goods and services
- creating a central procurement hub that allows a number of buyers of similar products to work together on the Internet to gain volume benefits from suppliers
- keeping track of the latest developments in a particular industry and having this information sent to you automatically
- automatically learning about customer preferences as they navigate your Web site
- accessing your firm's inventory program and ordering essential spares from your warehouse while in the field, using your cell phone

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### ▼ LINKS

- Metalnet [<http://www.metalnet.co.uk>]
- BRAIN [<http://www.brain.org.za>]
- ITWeb [<http://www.itweb.co.za>]
- INet Bridge [<http://www.inetbridge.co.za>]
- Plastics.net [<http://www.plasticsnet.net>]
- Chemdex [<http://www.chemdex.com>]

All of these are already possible on the Internet and the list just goes on and on. In fact, every day companies are finding new and innovative ways to leverage commercial value from the Internet.

With the ability today to deliver Web-based information over a cell phone, the reach of the Internet is being extended to anyone with a mobile phone. This opens up a whole new world of opportunities. The point being, that what and how you do things today, will almost certainly be different tomorrow. Whether you are a consumer or a business, the world around you is changing rapidly. As you enter the world of Internet-based (or *online*\*) business, you need to be especially sensitive to these changes and you will need to reconsider your own particular internal and external environments to see how they are likely to change and how you can benefit from these changes. Indeed, tomorrow's successful Internet businesses are often those that drive the changes.

## 4. The physical world will not disappear

While the virtual world of the Internet is expected to have a considerable impact on how you do business, the physical world is not about to disappear. It is almost certainly likely to change in nature and function, but it will still require your attention and will still be a significant source of income for you. But it is the integration of the virtual with the physical that requires your focus, rather than the replacement of the physical with the virtual. As a manager, your challenge will be to strategically manage the integration of these two worlds.

"Seven new people  
gain access to the  
Internet every  
second."  
*John Chambers,*  
*CEO - Cisco*  
*Systems*

### ▼ LINKS

- Does your life belong to the Net?  
[[http://www.zdnet.com/anchordesk/story/story\\_3486.html](http://www.zdnet.com/anchordesk/story/story_3486.html)]

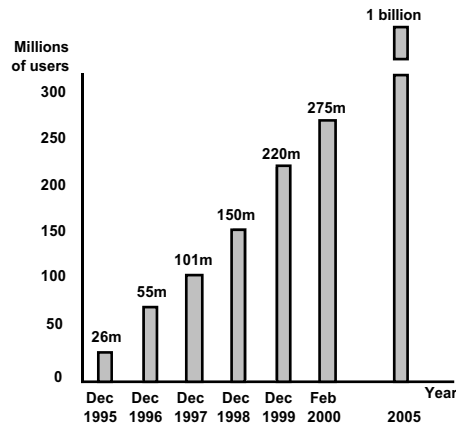
## 5. How big is the Internet?

The size of the Internet is estimated at about 305 million<sup>3</sup> people world-wide as of March 2000 (representing approximately 5% of the world's population). This represents a 1 425% increase in the number of Net users since 1993 during which year only a paltry 20 million<sup>4</sup> people were connected to the Net. It is estimated that by 2005 almost a billion people<sup>5</sup> will be online - a sixth of the world's population! The two graphs on the following page (figures 1.4 and 1.5) provide an outline of the growth in the number of Internet users over the past five years and the geographic distribution of Internet users.

\* The term *online* is often used in the context of *Internet-based* or *Web-based*.

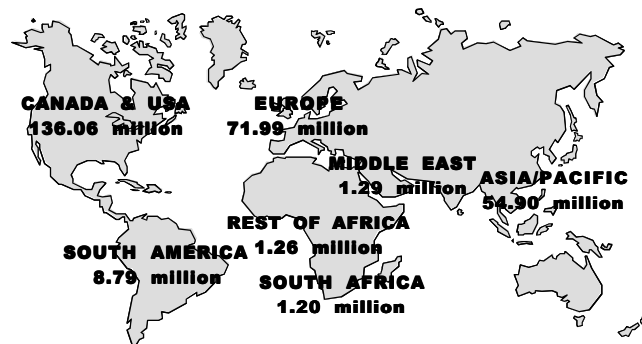
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Figure 1.4: Growth in the number of Internet users since 1995



Source: NUA Internet Surveys<sup>6</sup>

Figure 1.5: Global distribution of Internet users



Source: NUA Internet Surveys<sup>7</sup>

(This global break-down relates to Feb 2000, when the global total was estimated to be 275 million)

From figure 1.5, it is evident that North America still represents the bulk of Internet users globally. This is expected to change dramatically and by 2005 about 700 million of the projected one billion online users are expected to be non-U.S.<sup>8</sup> Clearly, developments and growth outside of the North American region represent an area of opportunity for the online entrepreneur.

As far as the demographics of Internet users are concerned, 46% of all users are women, over 47% of users are married (while 31.8% are single - the others are either divorced, separated or widowed), and more than 70% have no children. The average annual salary of Net users is about US\$ 50 000 and most users are well educated, in their mid-30s and are involved in professional careers (45% are in senior or middle management or professional positions).<sup>9</sup> South African Net user demographics appear to be very similar (see later in this section).



The above demographics suggest that the Web represents a growing market of educated, wealthy, professional and influential users in their mid-30s. For many companies, these represent exciting demographics. For other companies, however, this user-profile does not represent their target market. In the latter instance, the Internet may not be suitable for marketing or transacting business, although it could still prove to be a valuable communications and business tool in other areas within the business in question.

We said early in the chapter that it has been the explosive commercial growth of the Internet that has resulted in the huge numbers of online users that we see today and obviously the one also feeds the other - the more business that is done online, the more users will migrate to the Internet; the more users there are, the more business will be accomplished. With total Internet business-to-business e-commerce expected to reach US\$ 7.29 trillion\* in 2004, this represents a 364 900% increase over the eight years since 1996, when Internet business amounted to a mere US\$ 2 billion.<sup>10</sup> Today, almost 60% of the U.S. Internet population have shopped online (i.e. researched opportunities, compared prices and purchased goods online), while about 11% have actually bought goods online.<sup>11</sup> The Internet clearly represents an environment that no business can afford to ignore.

### ▼ LINKS

- Forty percent growth in nine months  
[<http://www.commerce.net/news/press/ann061699.html>]
- World Wide Statistics  
[<http://www.commerce.net/research/stats/wwstats.html>]

As far as South Africa is concerned, a recent 1999 study<sup>12</sup> undertaken by Arthur Goldstuck and Cathy Stadler of Acuity Media Africa, revealed that the number of Internet users in South Africa, rated within the top 30 Internet user countries in the world<sup>13</sup>, is estimated to be 1.2 million, expected to rise to 2 million by 2000. The authors consider this to be the critical mass of users needed in this country. By 2002, this number should reach the 3 million mark.<sup>14</sup>

Add to this, total consumer spending online in the country expected to amount to R2,7 billion in 1999 and business-to-business purchases reaching the R4 billion mark,<sup>15</sup> then the South African e-commerce market represents an equally attractive environment for many local businesses. These figures should rise to about R35 billion in total by 2002.<sup>16</sup>

A brief look at the demographics of the South African Internet user reveals a profile similar to that which exists in the U.S. The average user age is 35, approximately 45% are women, 56% are married, the average annual salary is quite high at R121 000, and users are generally well educated. More than 40% of SA users have already purchased goods online.<sup>17</sup>

\* Statistics and projections for online business vary dramatically with different research groups coming up with different figures. Generally, projections for business-to-business e-commerce varies from about US\$ 3 - 7 trillion in 2003, with business-to-consumer e-commerce varying from about US\$ 150 - 500 billion.

Clearly, a potential problem exists in South Africa if our disadvantage and less affluent communities are disenfranchised from the virtual world, although a number of initiatives are underway to address this imbalance.

## 6. A brief history of the Internet

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The Internet was started in 1969 as a military project in the U.S. called *ARPANet*.<sup>18</sup> The purpose behind ARPANet was to connect the then major supercomputer sites in the U.S. with one another in such a way that if any one or more of these computer sites were destroyed - by nuclear explosion for example - the remaining computer sites would continue to communicate with each other.

This early network proved so successful (remember, this was in the days when computers were large, unyielding creatures that often 'crashed' without the help of explosions of any kind), that soon other large computer sites located within universities, government and large corporations began linking to this network.

As the network grew, so its benefits and advantages quickly became apparent. Academics, government officials, scientists and computer programmers could communicate with each other easily and were able to share information. Naturally, the form of this communication and the type of information that was shared over this network was very computer-orientated and user-unfriendly. Still, instead of being restricted to working within a single computer environment, computer users could now share the resources located on other computers in other parts of the country. As this network grew, so it attracted the attention of organisations outside of the U.S.

Thus, in a similar fashion large computer sites located outside of the U.S. began connecting to the U.S. network with the agreement to share resources. In this way the Internet was born. Of course, it did not take long before these resources were made available to smaller computer networks and eventually to individuals at home who could now dial in to the Internet on an ad hoc basis using their PCs connected to a modem and telephone line.

With the advent of the World Wide Web, access to the information on the Internet was made more graphic and more user-friendly, incorporating a range of multimedia features. The advantages of having huge amounts of information available at your finger tips attracted the numbers of people to the Internet that we see today, numbering hundreds of millions.

The real driving force behind the growth of the Internet came with the commercialisation of the Internet in the early 90s. Not only could companies now get access to all of the information on this global network, but they also began to advertise and sell their products and services on the Net. With the development of secure encryption technologies, the ability to transfer funds across the Internet, and new business models for leverage value from the unique nature of the Internet, e-commerce and online transactions are expected to provide the impetus that will ensure the Internet's future success.

## ▼ LINKS

- An Internet time-line

[<http://info.isoc.org/guest/zakon/Internet/History/HIT.html>]

## 7. The World Wide Web

*The World Wide Web (or simply the Web) is a way of looking at and organising the information on the Internet.*

The Web is basically a subset of the Internet and organises information according to *pages* - more than one billion<sup>19</sup> of them - that lie all over the Internet. These pages are interlinked with each other using *hypertext* (also called *hyperlinks*) - see the next section. In other words, each page is connected to other pages that are connected to other pages that in turn are connected to still more pages and so on.

The Web was created in 1989 at CERN, Switzerland's nuclear research facility, by Tim Berners-Lee.<sup>20</sup> The term "Web" was coined by Berners-Lee in 1990 to describe information spanning the planet like a giant spider's Web, with threads linking knowledge and information from all over the globe, making it available to a world-wide audience.

There have been few developments in the modern world that have grabbed the imagination of people across the globe as has the World Wide Web. In a complex world of technology, the Web is easy to use and incorporates pictures, sounds, animations, photographs, video and other multimedia features, adding to its attraction and intuitiveness.

There are few commands necessary, as the Web incorporates a simple 'point-and-click' environment using your mouse. It also provides access to a greater range of topics from more sources than any other single information system on the planet. It doesn't matter whether you're operating a Macintosh computer, a PC, a Unix operating system or an Amiga computer; the Web is about compatibility, and the best of all is that the user doesn't have to worry about how it works! Finally, the Web empowers its users by allowing them to explore different ideas and topics using the concept of hypertext, without having to follow a linear train of thought.

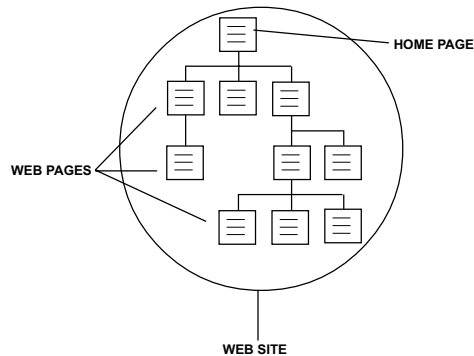
As a businessperson, the Web will be the tool that you will probably use the most.

### ■ Web pages, Web sites and home pages

We have said that the World Wide Web is made up of pages - called Web pages - that are linked to each other using hyperlinks. Several Web pages that are linked together and which cover a common subject area are collectively called a Web site and the first page of a Web site is termed the home page - see figure 1.6.

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Figure 1.6: Web sites and home pages



### ■ Hypertext and hyperlinks

The term hypertext was invented by Ted Nelson in the mid-60s to describe his vision of information linked together within a document.<sup>21</sup> Hypertext has become the foundation stone of the World Wide Web.

Hypertext is a way of linking together elements of information (such as text, graphics, pictures, etc.) that are somehow related to each other, to enable readers to explore these related snippets of information in a non-linear fashion.<sup>22</sup> By clicking on a word or picture on a Web page, you are automatically transported to some point in either the same document or in another document. This other document may be located on the same computer or on a computer situated in another country half-way across the world. On this second document, there may be more hyperlinks to other documents located elsewhere on the Internet. (see figure 1.7).

Figure 1.7: Interlinked pages on the Web

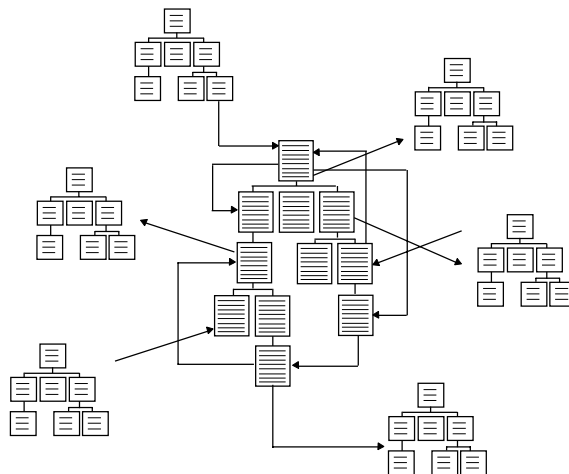


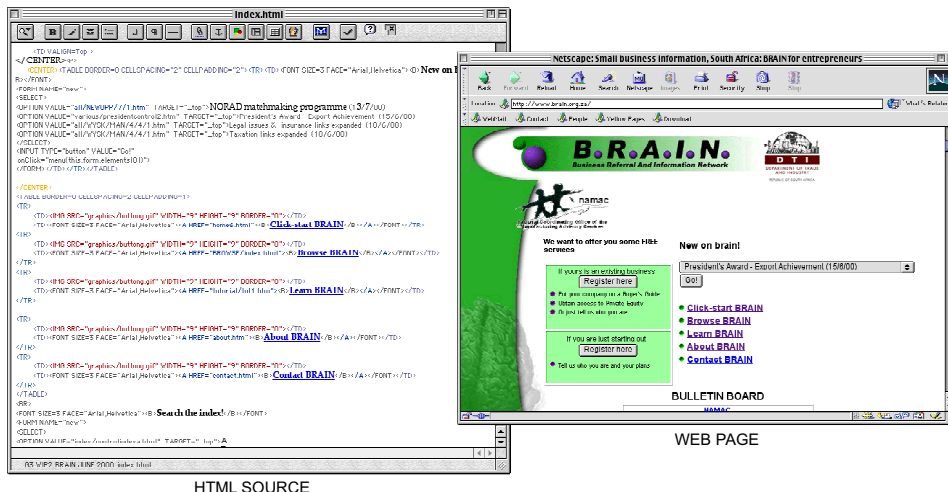
Figure 1.8 provides an example of what hyperlinks look like on a Web page.

Figure 1.8: Examples of hyperlinks



All the information on Web pages (the text, graphics, photographs, buttons, pictures, etc.) is edited in such a way as to be viewable within special software program called a *Web browser*. This editing is done using an editing or 'mark-up' language, called *Hyper-Text Markup Language* (or *HTML* for short) which adds specific *tags*, such as bold, page breaks, horizontal lines, italics, centre, justify left, justify right, underline, table formats, hyperlinks, etc., to the text and/or graphics. Figure 1.9 provides an example of what the HTML code underlying a typical Web page looks like.

Figure 1.9: What HTML looks like and the resulting Web page

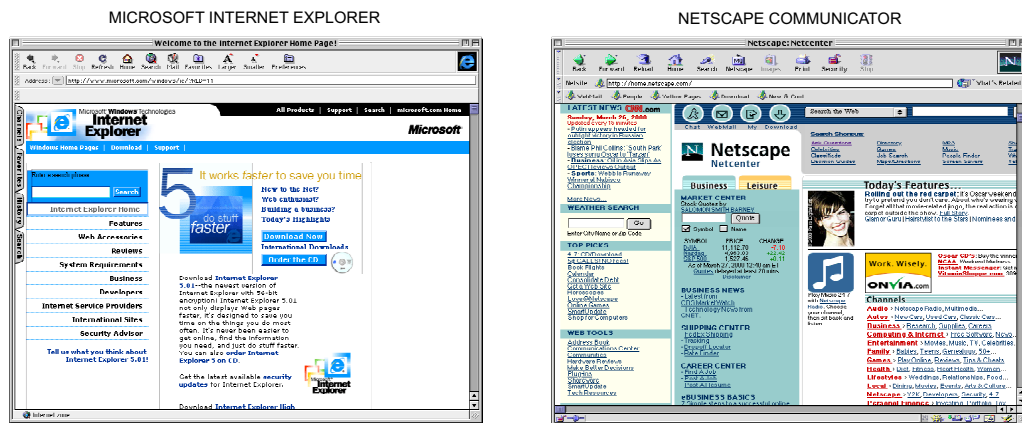


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### ■ Web browsers

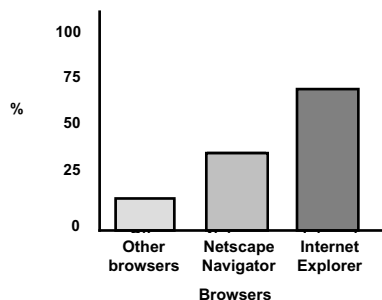
A Web browser, we said, is a software program that provides you with access to the information on the World Wide Web, allowing you to navigate - or *surf*\* - from one Web page or hyperlink to another - it is essentially a window through which you can look at the information on the Internet and the Web. Using a Web browser such as Netscape Communicator or Microsoft Internet Explorer (see figure 1.10 below), the hypertexts that are embedded in a Web page are interpreted by the browser and they control the way the information is presented on your computer screen.

Figure 1.10: Examples of Web browsers



The most popular browser in use today is Microsoft's Internet Explorer with between 55-74% of the market share, followed by Netscape Navigator with between 26-35% of the market (the variance is as result of the difficulty in determining exactly which browsers are being used).<sup>23</sup> The remaining share of the browser market is occupied by all the other browsers put together. Both Netscape and Explorer can be downloaded off the Net.

Figure 1.11: The Browser Wars



Source: ZDNet: Browser Wars<sup>24</sup>

\* 'Surfing' is about navigating randomly from one Web page to the next, without any objective and as the mood takes you.

## ▼ LINKS

- Want to know more about browsers?  
[<http://home.cnet.com/Internet/0-3773.html>]
- Who's winning the browser wars?  
[<http://statmarket.com/SM?c=stat080599>] &  
[<http://www.zdnet.com/products/browserwars/index.html>]
- Download Internet Explorer and Communicator from Tucows  
[<http://www.tucows.co.za/web95.html>]

## ■ Web addresses and URLs

There is a standardised addressing system for all Web pages on the Internet. It is important to note that every Web page has its own unique address (when someone gives you a Web site address, they are in fact giving you the address of a Web site's home page). This Web address is called the *Universal Resource Locator* (URL) and looks something as follows:

<http://www.dti.gov.za/policy/mission.htm>

The URL is made up of different components. These include the following

- The tool the Web browser uses to get to the target page
- The address of the computer the Web page is on (called the computer's *domain name*)
- The specific instructions necessary to find the page on the computer concerned, such as the directory and sub-directory paths
- The target file name

The first part of the URL indicates whether it is a hypertext, FTP or some other type of Internet resource\*. The second part of the address indicates the target computer where the file is located, while the next part of the address, which may consist of one or more levels, indicates the directory and sub-directories in which the actual target file is located. The last part of the URL indicates the actual file name. Each part of the URL is separated by a forward-slash (except for the first part which is separated by a colon and double forward-slash).

There are more than  
13 million domain  
names registered  
world-wide.  
*NetNames*

\* Recall that earlier in this chapter we said that the Internet comprises different 'parts' or 'tools'; we mentioned FTP and Telnet as examples. In most instances, these facilities are also accessible using your Web browser. The Web address (i.e. URL) will reflect the facility being used, that is, whether it is FTP, Telnet or perhaps a secure Web page (indicated by the prefix 'https').

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### ▼ EXAMPLE

If we look at the following three examples,

**Example 1:**

`http://www.ireality.co.za/sport/skyrider/Welcome.html`

**Example 2:**

`ftp://sun.su.ac.co.za/marketing/direct/plans.txt`

**Example 3:**

`http://www.ireality.co.za`

we can identify the following....

**Example 1:**

`http://` = a HyperText Transfer Protocol file and contains  
hypertext links

`www.ireality.co.za/` = the address (domain name) of the target  
computer

`sport/skyrider/` = the directories and sub-directories in which  
the target file is located

`Welcome.html*` = the name of the target file

**Example 2:**

`ftp://` = a File Transfer Protocol file

`sun.su.ac.co.za/` = the address (domain name) of the target  
computer

`marketing/` = the directory in which the target file is located

`direct/` = the sub-directory in which the target file is located

`plans.txt` = the name of the target file

**Example 3:**

`http://` = a HyperText Transfer Protocol file and contains  
hypertext links

`www.ireality.co.za/` = the address (domain name) of the target  
computer

Although there appears to be no file name in this URL, there  
will be a default file name associated with the address (in the  
above example, it is `http://www.ireality.co.za/Welcome.html`,  
although it might be 'home.htm', or 'index.htm', or something  
similar). In fact, by typing in

`http://www.ireality.co.za/Welcome.html`,

you will arrive at the same home page as if you had typed in

`http://www.ireality.co.za` only.

### ▼ TIP

When entering URLs, be careful of your spelling and  
punctuation and the case you use (i.e. upper or lower case).  
URLs may be case sensitive and the spelling and punctuation  
must be exactly correct.

\*\* Note that the file extension, while commonly, .htm, may sometimes be .html - you must type in the URL exactly as it is



## 8. Internet Service Providers (ISPs)

An Internet Service Provider (ISP) is a company that provides individuals and companies with access to the Internet, as well as other related services such as Web site development and/or the hosting of Web sites. It is usually a commercial organisation that maintains a direct and permanent connection with the global Internet via the Telkom telecommunications infrastructure to the U.S. and/or Europe (although the connection may be via a non-Telkom satellite connection). The ISP leases space (called *bandwidth*) on this telecommunications infrastructure.

The ISP then lets users - who may be individuals, small businesses or large corporations - connect to its Web servers in order to access the Internet, using either a telephone dial-up connection over a modem, or a direct connection (over a permanent telephone line - called a *leased-line* - provided by Telkom). This is done on a fee basis which may be per hour of usage or for a fixed amount per month.

ISPs generally provide an Internet connection, an e-mail address and maybe some Web browsing software as part of their package (modems and long-term contracts are also more common today). Many ISPs may offer space on their Web servers where users can host their respective Web sites for free. You should only use an ISP that offers an access number in your local calling area (called a *Point-of-Presence* or *PoP*), in order to save on telephone costs by paying only for local phone calls to the ISP's local PoP.

### ▼ TIP

If you don't yet have an ISP and are looking to select one, try visiting the Internet Service Providers' Association (ISPA) [<http://www.ispa.org.za>] where you will find a list of the ISPs that are members of the association. Appendix A also provides a list of factors that you need to consider when selecting an ISP.

### ▼ CHECKLIST

- ☐ Does your company have access to the Internet?
- ☐ Does your company have its own Web site?
- ☐ Does your company have its own e-mail newsletter?
- ☐ Does your company have its own internal Web site (Intranet)?
- ☐ How familiar are you and your staff with the Internet and the Web?
- ☐ Have you or any of your staff done any Internet training?
- ☐ Does your IT staff have the skills to develop your Web site?
- ☐ How many of your staff have access to the Internet?
- ☐ How much time are they spending online?

"The market capitalisation of Yahoo! is about five times that of the New York Times."  
*Michael Dell, CEO - Dell Computer Corporation*

### A book worth reading

For readers interested in learning about the Internet in general, an excellent book worth reading is "*The Hitchhiker's Guide to the Internet: An African Handbook*" by Arthur Goldstuck. It provides a comprehensive overview of what is available on the Net for the everyday user. It can be purchased from most popular bookstores.

## 9. What makes the Internet and Web such powerful business tools?

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Why have the Internet and the Web proved so successful in business? Well, together they have some unique advantages that make them powerful business tools. These advantages include the following:

- Large amounts of information can easily be stored and updated on the Internet and are accessible to anyone connected to the Net
- Information that is normally filed away as paper-based documents and only made available to a limited audience because of the cost involved in wider distribution, can now be made available quickly and easily to all interested parties and to a much wider, international audience
- Any information disseminated on the Web by a firm is immediately available to a global audience
- The information can be presented in multimedia form, including text, sound, video, photographs and animations, making it very user-friendly
- The information is interactive - the reader can complete a reply or order form, or send an e-mail message to the company concerned, and can also navigate between sites located at the opposite sides of the globe
- A Web-based document and its contents can be linked by hypertext to a wealth of supporting documentation also available on the Web that may be spread across the world
- Information on the Web is available 24 hours a day and 365 days a year
- The Web is easy and intuitive to use
- The Web is an affordable environment to use for both the user and supplier of information and services
- The Web allows you reach the masses - a market of close to 305 million users presently, expected to rise to one billion in the next few years
- The Web allows you to customise your information for individual needs
- You can transact sales directly on the Web
- In the case of many digital products such as software programs, books and photographs etc. the Internet can even be used to distribute products

## 10. Summary

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The Internet represents a massive new virtual digital environment with the potential to change your life. The World Wide Web is a subset of the Net and provides a dynamic, user-friendly way of organising and accessing the information on the Internet. The non-linear, multimedia, 24 hours a day, 7 days a week, 365 days a year nature of the Web makes it a powerful tool for conducting business.

In the remainder of this book we will endeavour to help you leverage the power of the Internet for your firm; we will put e-commerce under the microscope, examine how it works, what business opportunities it offers you, and how you can put it to work.

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