6

Internet Cases and Exercises

World Wide Web Case 1

Southern Papers

Problem: Locating information and investigating the feasibility of electronic commerce on the Internet's World Wide Web

PC skills: Web Searching

Southern Papers is a medium-sized paper manufacturer located in Tasmania, Australia. The company produces a range of paper products which includes newsprint, corrugated card boards, and a number of high margin, specialist stationery lines.

In line with paper recycling trends worldwide, around 40% of Southern Papers' products involve repulping and reusing paper. Tree-based fibers break down quickly, and each time recycled paper is used, this substantially weakens the strength of the resultant product. To produce a product which is sufficiently robust, Southern Papers needs to import around 5million tons of softwood wood chips each year. This is shredded and mixed with the recycled paper pulp to put strength back into the product. This is a costly and escalating expense for the company; around US$2.5m per year.

The supply of woodchips must be sourced from overseas as the demand for timber products cannot be met by Australia's own forest resources. To offset depletion of its natural forests, the Australian government requires all paper producers to set aside areas for reforestation. Southern Papers has many coniferous softwood plantations under various stages of regrowth. However, one of the main problems with plantation timbers is the length of time needed to grow the trees to a sufficient level of maturity where they can be harvested. This can take between 10-20 years depending on the type of timber used. In the meantime, Southern Papers must rely on imported softwoods to continue business operations.

Sam Cagot, the owner of Southern Papers is constantly on the lookout for opportunities that will give his company an edge over the many competitors in its marketplace. He reads with interest an article in the latest issue of *Paper Producers* exploring the many uses of industrial hemp.

Industrial hemp refers to those parts of the *Cannabis sativa* plant which contain less than 1% tetahydrocannabinols (THC), the psychoactive chemical found in some strains of the *Cannabis* species. Industrial hemp is not to be confused with marijuana. It has no psychoactive properties, and can be grown as a profitable, high quality fiber crop without producing marijuana.

Hemp has been valued throughout history as an important and versatile raw material for many products including textiles, cordage and paper. It is the strongest natural fiber in the world, and was used extensively until the 1950's when a prohibition was imposed because of its narcotic associations.

Cagot would like to find out more about industrial hemp. He has recently attended a demonstration of the Internet's World Wide Web, but does not really understand how it works or what it is. He wonders whether the Internet can provide the information he requires. He also wonders whether the Internet could be used as an alternative channel of distribution for the company's products.

Over a cup of coffee with Chris Wang, the company's Marketing Manager, Cagot outlines his needs. He gives Wang the task of preparing a feasibility report on the possibility of using hemp for reducing raw material and production costs. He would also like Wang to investigate what business opportunities the Internet has to offer Southern Papers, and the type of costs that would be involved for an investment in this technology.

Tasks:

You are employed in the Marketing Department of Southern Papers as a business analyst. Wang has asked you to prepare a report that will satisfy Cagot's requirements. Your report should include answers for at least the following:

1. What is the Internet and where did it come from? Provide a short description.

2. What advantages could the use of industrial hemp offer Southern Papers ?

3. How the Internet could be used to conduct, promote and possibly increase business. Is anyone else doing this in Southern Paper's business areas - in Australia or elsewhere ?

4. Whether it is worthwhile for Southern Papers to establish a Web site on the Internet. If so, what sort of presence should it be ?

5. What are the options and costs involved with establishing a Web presence ?

Your report must explain how you located useful information (or where you searched if you did not find useful information) in a way in which Southern Papers could check these sources for themselves. Note: You need to explain reasons for your recommendations, and it is quite legitimate to suggest that Southern Papers take no action re involvement in the Internet.

Additional Problems:

*6. Chris Wang is currently undertaking some market research to explore the benefits Southern Papers' might gain from global expansion. Locate and download from the Web statistics on USA paper use and/or production, to assist him in this task.
*7. What other types of information available on the Internet would be of interest and useful to a business such as Southern Papers ?

Tutorial For Web Case 1

What Is The Internet ?

The Internet is a massive, worldwide network of computers that rides on the shoulders of the phone system. The term "internet" literally means "network of networks". It is the largest information resource in the world and is the ultimate experiment in distributed computing. Over 400 million people use the Web worldwide, and in the US about 170 million people use the Web.

Although the Internet appears to be a single network, it is actually an interconnected "web" of thousands of privately owned networks, that have agreed to co-operate and transport information of every conceivable type. Each network on the Internet is connected to one or more other networks, usually over high-speed telephone lines. Each network is therefore able to access every other network. The Internet doesn't own the many telecommunications networks and systems it passes through, and no single entity owns or manages the Internet.

A profile of the Internet (circa 2001)

Key Users	Individuals, business firms, government agencies, academic institutions, research organizations, Community Groups
No. of Users	400 mllion world-wide, 170 million in US
Coverage Area	100 countries have full internet services. 176 countries have at least email access.
No. of Computers (1/96)	over 85 million host computers
No. of Networks	over 300,00 individual networks
Topology	Packet Switching, Routing
Network Protocols	TCP/IP
Main Services	email, WWW, FTP, Telnet NewsGroups, Chat, etc.

Making the Connection

The Internet uses TCP/IP (Transmission Control Protocol/Internet Protocol) as the mechanism for allowing the sharing of resources between computers which co-operate across its many networks. A protocol is simply a set of rules which determines the method by which information may be exchanged between different systems. TCP/IP is a routed, connectionless, packet protocol. What this means is that Internet traffic is divided into unequally sized, individually addressed chunks of data which are then routed through the network over a dynamically assigned path. The Internet uses a number of different algorithms to determine the best route at any time. This method is analogous to sending a friend a postcard every day for a month. While the cards may arrive at their destination out of order or take different routes to get there, the friend (ie: the destination host computer) can sort them out at the other end.

TCP/IP uses two types of addressing protocols. For instance, the address of the Melbourne Business School at the University of Melbourne in Australia can be expressed as either:

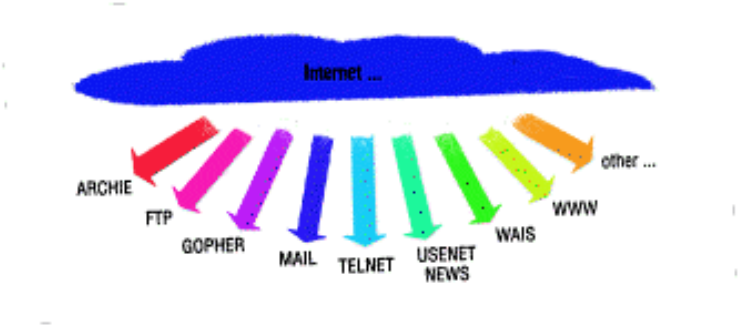
a) Domain Address: **probe.mbs.unimelb.edu.au** or as
b) IP Address: **128.250.180.90**

The domain address identifies **who**, **what** and **where**. The IP address is simply a 32 bit conversion or machine address equivalent of the domain address.

Internet Services

As shown in Figure 6-1, there are a number of different services available through the Internet. These services include electronic mail, interactive conferences, access to information resources, access to data archives, network news, and the ability to transfer files.

Figure 6-1: Internet Services



Source: http://www.srl.rmit.edu.au/pd/surfing/defint.htm

The four most commonly used application services of the Internet are:

Email (electronic mail) - the ability to send and receive messages via computer. When a user sends an email, the file containing the message is forwarded from one computer to another until it reaches its destination. Email comprises around 60% of all Internet traffic, and email only access is still very common with commercial users. Some 45 million email messages are sent via the Internet each day.

FTP (**f**ile **t**ransfer **p**rogram). An Internet feature which is used for the downloading of files stored at remote data archive locations. For FTP to be successful, the user requires a working knowledge of basic Unix commands. The remote archive also requires a valid login name and password before allowing entry to its data store. In many instances, it is possible to download files using an anonymous FTP connection, where login=*anonymous* and password=*guest*.

World Wide Web a client-server based, *graphical interface* to the Internet which supports linked multimedia (color, images, text, video and voice) documents

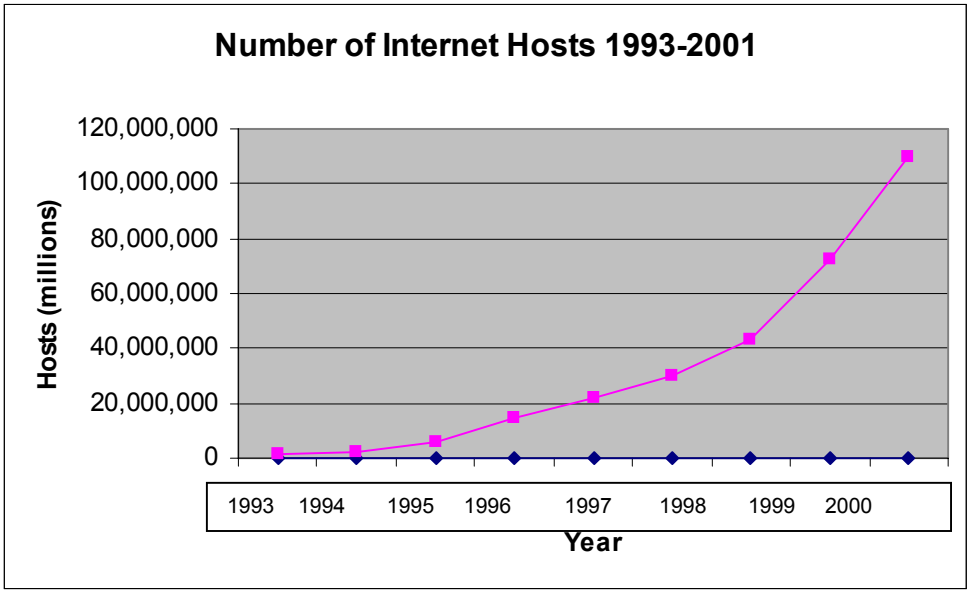
Telnet an Internet feature which enables a user to logon and interrogate databases situated at remote locations. Despite the advent of the World Wide Web, many databases on the Internet are still only accessible through a telnet request.

Growth of the Internet

The Internet was originally created as a research and information exchange tool for academic, government and research organizations. The first electronic mail (email) message was sent in 1969. In the early 1990s, access was extended to commercial organizations and individuals. Now anyone with a computer and a modem can connect to the Internet. Interest in the Internet by commercial firms and private individuals also coincided with the development and release of the Internet's Windows and hypertext based World Wide Web (WWW, W^3 or Web) in late 1992, which provided an easy to use and familiar format. For the first time, users could access Internet resources which displayed color, graphics, sound, video and even animation.

Since 1993, the Internet's growth rate has been explosive (refer Figure 6-2). Current estimates are that the Internet doubles in size every 12 months. The business sector forms one of the strongest growth areas. There are over 450,000 commercial firms currently connected to the Internet, with 1,500 new firms connecting up each day.

Figure 6-2: Growth of the Internet (1993-2001)



The World Wide Web

The World Wide Web and the Internet <u>are not</u> interchangeable terms. The Web is a distributed client-server based service available via the Internet. It refers to a body of information - an abstract space of knowledge - while the Internet refers to the physical side of the network - a giant mass of cables and computers. The Web uses the Internet as a mechanism to transmit hypermedia documents between computer users with a Web connection.

WWW Basic Terms

BROWSER: a software tool which enables users to **view** the resources of the Web. Common browsers are Netscape and Mosaic.

HTML: (HyperText Markup Language) a simple tagging language which is used to generate documents for the World Wide Web. Documents are known as **pages**. These are viewed via a **browser**.

HTTP: (Hyper Text Transport Protocol) the TCP/IP access protocol used for the Web.

SEARCH ENGINE: a software tool used to **search** the resources of the Web **via keywords**. Search engines include Yahoo and AltaVista.

WEB SITE (Web Address, Home Page or Domain Address): the **public entry point** of an organization with a presence on the Web
e.g.: http://www.mbs.unimelb.edu.au

The Web is believed to be largely responsible for the sudden growth of the Internet. Current estimates of Web growth exceed 500 gigabytes of information per month, with the total estimated pages being about . There are a number of reasons for this. The Web is:

1. *Easy to use*. The simple Windows-based approach enables any *newbie* to become a productive user of the Internet within 30 minutes.

2. *Multi protocol*. It also supports other Internet applications such as email, Telnet and FTP.

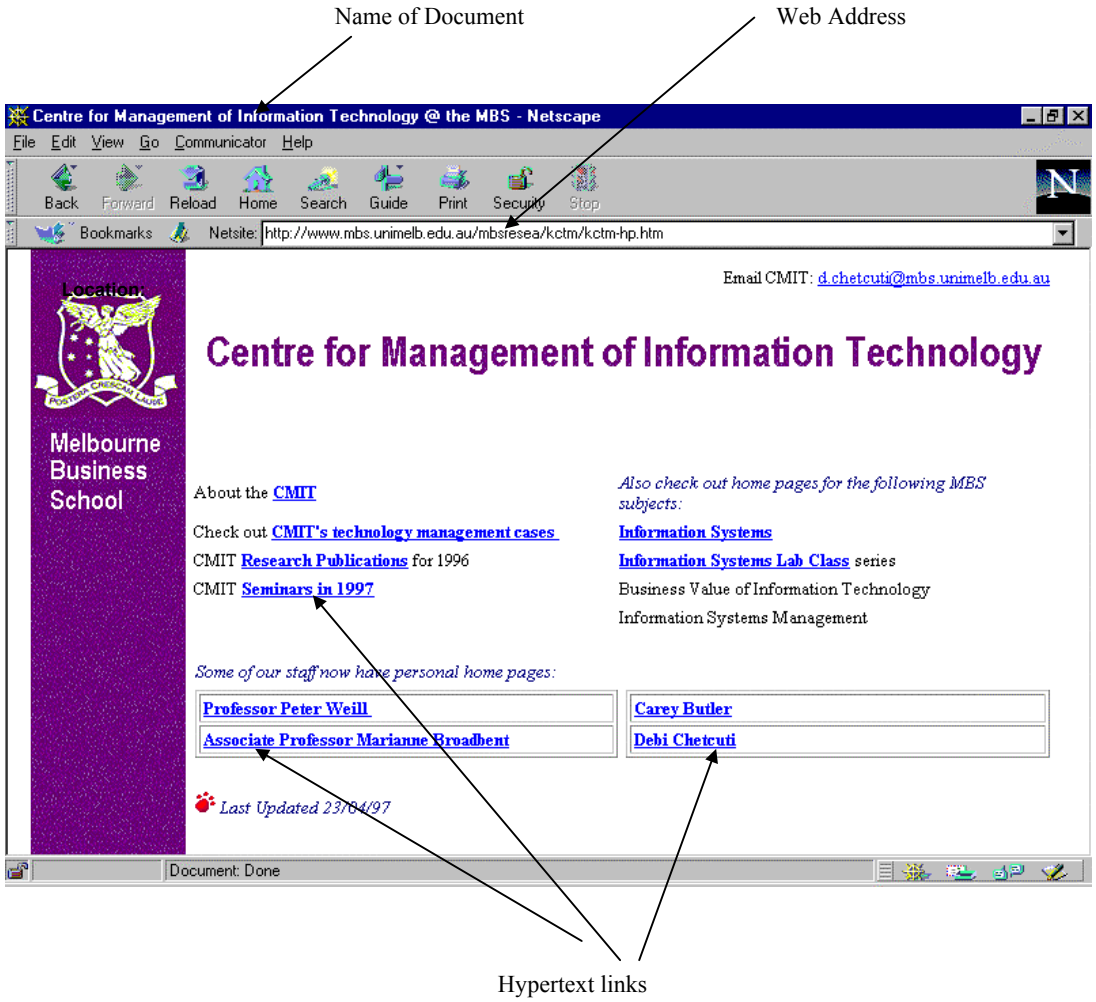
3. *Integrative*. It supports hypertext links to other locations within the same Web document, other documents at the same site, or documents at another site entirely.

4. *Interactive*. It has *multimedia* presentation (combination of video, audio, still images, text, graphics, animation, etc) capabilities.

Using the World Wide Web

There are literally millions of documents which may be accessed through the World Wide Web. These documents or pages are viewed via a *browser*, and are stored on a *server*. A browser is a piece of software that enables a user to view the resources of the Web by sending requests for documents to a server. For this tutorial we have used the Netscape Communicator browser Version 4.01. A server is simply a computer (or allocated part of a computer) that is dedicated to performing one function - in this instance, storing and retrieving Web documents. Figure 6-3 below uses the Netscape browser to view the contents of a Web document called the Centre for Management of Technology @ the MBS. Let's have a brief look at the salient points of this screen.

Figure 6-3



As with any Windows-based application you will notice the familiar pull down menus, toolbar buttons, and scrollable bars. Take some time to examine and familiarize yourself with these features as they relate to your browser.

The first thing of interest to note on Figure 6-3 is the Net site bar (also known as a Location or URL - Uniform Resource Locator in earlier versions of Netscape) which displays the Web Address of the document: *http://www.mbs.unimelb.edu.au/mbsresea/kctm/kctm-hp.htm*. This tells us where on the Internet the KCTM Home Page is located. The segments comprising this address are decoded as follows:

http://	This is a Web address (as indicated by *http* – TCP/IP's hypertext transfer protocol)
www	located on a World Wide Web server
mbs	of the Melbourne Business School
unimelb	which is part of the University of Melbourne

edu	which is an educational institution
au	in Australia.
mbsresea	This is a directory on the MBS web site
kctm	and this is a subdirectory within the *mbsresea* directory
kctm-hp.htm	which contains a document called *kctm-hp.htm*

All web addresses follow a similar construct. Let's look some more at just the institutional part of the address.

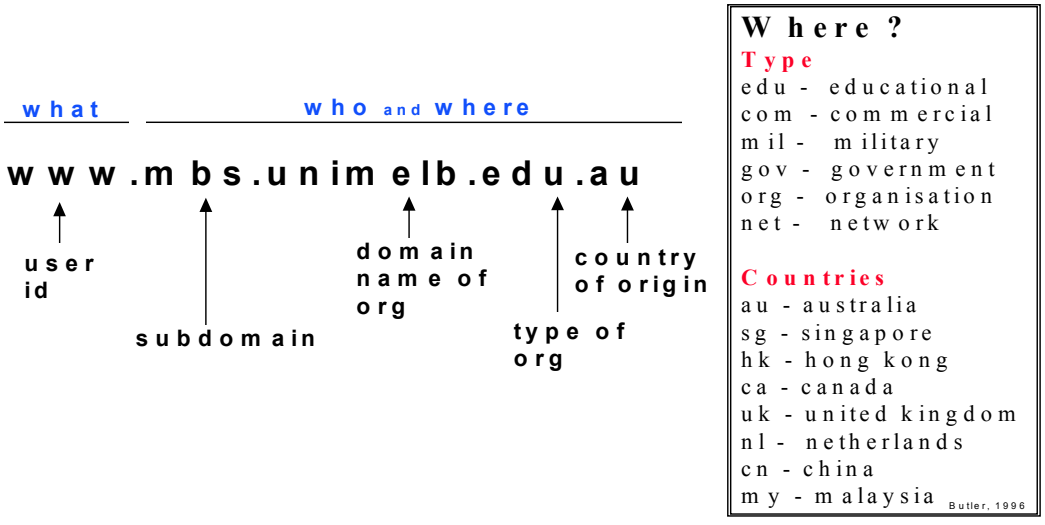
www.mbs.unimelb.edu.au

Just like any address you may write on an envelope, the address moves (left to right) from the specific to the general.

www.mbs	The WWW server at the MBS	(*most specific*)
unimelb	The University of Melbourne has many web addresses	
edu	There are many Australian educational institutions on the Web	
au	There are many Web addresses in Australia	(*most general*)

This is sometimes known as domain addressing. *Figure 4* provides further illustration of how this works. The least specific parts of an address are the last two segments - the organisational type and the country. Figure 6-4 lists a sampling of these. Similarly, most web addresses need a country code. The general exception is the United States. Web addresses for the USA usually omit the country code.

Figure 6-4: Web Addressing



Exercise 1

Try decoding the following addresses for their organizational type and country of origin:

a) *http://www.harvard.edu*
b) *http://www.vicnet.net.au*
c) *http://www.oup.co.uk*
d) *http://www.wellsfargo.com*

Navigating the Web

Now let's go back to Figure 6-3. The second thing to note on this screen is the reference *to Hypertext Links*. Hypertext is the same as regular text (it can be viewed, searched, saved or edited) with one important exception: hypertext contains embedded connections within the text to other documents. These are also sometimes known as *Hot Links* or *HyperLinks*, and will generally appear on your Netscape browser screen as blue or red underlined text, or form a blue or red frame around a graphic. Either indicates an active item. Clicking with your mouse on the active item of your choice, will take you to either another location within the same Web document, another Web document at the same site, or a document at another site entirely.

Hyperlinks are the basic navigation tool of the Web. Generally each document which appears on your screen will itself have links and connections to other documents again. Continually selecting hyperlinks takes you on a free-associative tour of information. In this way hyperlinks can create a complex virtual web of connections.

Exercise 2

Let's visit three of the Web sites shown in Exercise 1:

a)	Harvard University	*http://www.harvard.edu*
b)	VicNet	*http://www.vicnet.net.au*
c)	Oxford University Press	*http://www.oup.co.uk*

Type each address in turn into the Netsite bar (refer *Figure 3*), of your browser and then press *Enter* to go to that address. Browse each site using the HyperLinks provided.

Exercise 3

A more recent development for navigating within Web documents is the *image map*. This refers to another category of active item graphics. This approach is well illustrated by the Security First Network Bank (SFNB) web site. Type the address into the Location bar of your browser and then press *Enter.*

d)	Security First Network Bank	*http://www.sfnb.com*

The SFNB home page contains an interactive graphical image. Move your mouse over different areas of the graphic. Notice how the mouse pointer changes to a pointing hand symbol - ☝. This indicates a clickable item which works in exactly the same way as a HyperLink. Notice also that you are given a short description of the function for each of these clickable items as you move your mouse around the graphic.

Search Engines on the Web

Search Engines are software programs that enable users of the Web to locate documents of interest through keyword searching. Most of them also allow the searcher to use Boolean logic (AND, OR, NOT operators) to refine searches It is estimated that there are around 900 search engines available for use on the Web. *Free-to-user* search engines are accessed by simply typing in the relevant Web address, entering text into the search bar, and then clicking on the search

button. Some of the most popular *free-to-user* search engines include:

WORD-ORIENTED SEARCH ENGINES

Google
www.google.com

AltaVista
http://www.altavista.com

Web Crawler
http://www.webcrawler.com

Lycos
http://www.lycos.com

Excite
http://www.excite.com

SUBJECT-ORIENTED SEARCH ENGINES

Yahoo
http://yahoo.com

Each of these search tools displays results in very different ways. *Alta Vista* is true keyword searching of document titles and text within documents, and is possibly the most comprehensive search engine of its type. *Yahoo!* is thesaurus-based directory or index, and presents results sorted into subject categories. *Web Crawler, Excite* and *Lycos* present results as lists of documents in ranked in order of keyword relevancy.

Exercise 4

With so many search engines available, it can be difficult to decide which is the best one to use. One of the ways you can do this is to use a number of different ones to search for the same text, and then evaluate your results.

Salt Lake City (Utah) will be hosting the Winter Olympic games in 2001. Evaluate each of the five search engines listed above using the words **Salt Lake Olympic Games.** Browse through the results and compare the differences.

Sites of Interest on the Web

The following web addresses provide further information on the Internet and the World Wide Web. Also included are some introductory business-oriented sites.

John December's Guide to the Internet	http://www.december.com/web/text/index.html
WhatIs ? - a guide to Internet terminology	http://www.whatis.com/
Internet Society	http://info.isoc.org/
Internet Statistics	http://lcweb.loc.gov/global/internet/inet-stats.html
Internet Tutorial	http://www.waisman.wisc.edu/~colantonio/aauap/int01.htm
A Business Researcher's Interests	http://www.brint.com
The MBA Page	http://www.cob.ohio-state.edu/dept/fin/mba.htm
Yahoo's Directory of BSchools	http://www.yahoo.com/Business/Business_Schools/

World Wide Web Case 2

Grapelli Grapes[1]

Problem:	Locating information on the Web
Web Skills:	Advanced Web Searching Downloading graphics from the Web Creating bookmark files

Steven Grapelli looked anxiously at the darkening sky as he tended the well-ordered rows of grapevines of his vineyard. Grapelli Grapes is a medium-sized vineyard of some 1000 acres, located in the Fresno region of California. The Fresno area is California's premier agricultural producing county, with more than 200 commercially produced crops from grapes (for wine, raisins and the fresh market) and cotton to kiwis, pomegranates and a wide variety of specialty vegetables. Each year, Grapelli produced a small amount of premium white wine (primarily Riesling and Chardonnay), which was highly valued by wine buffs around the world. Grapelli's main business however, came from growing and offering for sale: fresh grapes for the table, partially dried grape products such as sultanas and raisins, and grapes for the purpose of producing grape juice.

Grapelli hurried back to his office and sat down at his personal computer. He logged on to the Internet's World Wide Web (the Web), and then using the bookmarks file of his Web browser, quickly connected to a database on the University of California's (Davis) Web site to look at weather reports for his area. Concerned about an approaching rainstorm, he again consulted his bookmarks file and this time connected to a national weather database for the Western region of the United States. Grapelli then printed off a weather map generated by a satellite less than an hour earlier. He was relieved to see that the rain would pass to the North.

Two hundred miles away in Sacramento, Enrico Santos, manager of the All Pure fresh produce store, consulted a different database on a different Web site at U.C. Davis that tracked the availability of table grapes from California, Arizona, and Mexico. Another option on the database supplied prices for different varieties of grapes. As he drank from his carton of Grapelli grape juice, he noted that Arizona supplies were very low, and that the price difference between the imported Mexican and the California grapes wasn't enough to justify the longer shipment time. Using his email application, Santos then sent an order for Californian grapes to his wholesale supplier.

Back at work among his lines of grapevines, Steven Grapelli frowned in concern at the appearance of a white powdery substance on the leaves of some of his plants. In his 15 years as a grape grower, his vines had been remarkably disease free. He wondered if the affected vines were suffering from powdery mildew – an ectoparasitic fungal disease known to attack grapes. When he returned to his office for lunch, Grapelli again connected to the Web. He wanted to locate

[1] Some ideas for this case scenario were adapted from: Falk, Bennett (1994). The Internet Roadmap. pp. 2-3.

information on powdery mildew as it affected grapes, and how he should treat this condition. Grapelli also wanted to locate and download a graphic of an affected leaf so he could see whether it was the disease he suspected.

In an industrial park in San Francisco, a molecular biologist at a small biotechnology company was putting the finishing touches to documentation for a patent application on a process for the obtention of must on bunches of grapes. She then sent it via electronic mail to the company's patent attorney in Washington DC. She sat back to relax, pulled a bunch of fresh Grapelli table grapes from her lunch sack, and checked the weather maps on the Web's national weather database: *"Hey, it looks like it's going to rain"*, she remarked to no one in particular. A co-worker threw open the door of the windowless room. Across the hallway, heavy raindrops splattered against the window.

Seconds later the patent application documentation arrived in the attorney's online mailbox. He skimmed the text, forwarded a copy to his clerk, and saved the message for his own use. Something in the application sparked a recollection in his memory. As he munched on a handful of Grapelli raisins, he connected to a US Patents database on the Web. Seconds later he was keyword searching through a list of recent US Patents.

Later that day Grapelli once more sat down in front of his computer and logged on to to the Web. As he sipped on a chilled glass of Grapelli Chardonnay, he connected to his favorite search engine. He was due to leave for Australia next week on a business trip to investigate the vineyards of South Australia's Barossa Valley, Australia's best-known wine-growing district. Grapelli was hoping to locate a list of the vineyards in that region, and possibly also a map of the area.

Tasks

This case has six multi part questions. As you locate answers to each of the questions, you should save the Web addresses in the bookmarks file you will create in Question 1.

1. Create a bookmarks file called GRAPELLI.HTM and save this file to a floppy disk. Save all your answers (ie: web addresses and graphics) to the following questions in this bookmarks file.

2. Using the Web, locate the weather databases in California and Illinois. Now download and save a weather map graphic onto floppy disk.

3. Locate a database on the Web that allows the tracking of grape prices and their availability.

4. Using the Web, locate information on powdery mildew as it affects grapes. Now locate, download and save to disk, a graphic of powdery mildew on grapes.

5. Locate a US Patents database on the Web, and search it to find a recent patent on *obtention of must on bunches of grapes*. See if you can also find a full description of the patent and a diagram of the invention.

6. Using the Web, locate and print out a listing of wineries in Australia's Barossa Valley region. Now locate, download, and save to disk, a map of the Barossa Valley area.

Time Estimates (excluding task marked with *):

Expert: 2 hours
Intermediate: 3 hours
Novice: 4+ hours

Tutorial For Web Case 2

Creating your own Bookmarks/Favorites File for use on the Web

Bookmarks are simply a shortcut way of accessing frequently used Web addresses. Bookmarks (used by Netscape and many other browsers) or Favorites (used by Microsoft Internet Explorer) files are a feature of most Web browsers. This feature enables users to :

- save frequently used or interesting Web addresses to a specific HTM/HTML file by simply selecting an *Add Bookmark* (or similar command) option from the browser menu. The browser will then save and record the path to the selected address;

- rapidly return to a chosen location without having to retype the Web address each time, by firstly selecting the *Go to Bookmarks* (or similar command) option from the browser menu, and then selecting the title of the saved address

Most browsers will also allow deletion and editing of book marked addresses. Here's how to create and use your own Bookmarks file:

1. Insert a floppy disk into drive A:\
2. Now open your word processing application.

If you are using **Word for Office 1997 or Office 2000**, do the following:

- create a new document using FILE/NEW and then click OK

- save the document according to the following steps:
  - from the menu, select FILE/SAVE AS HTML. HTML is the language which underlies most documents on the Web, and is readily understood by your browser
  - give the file a name e.g.: GRAPELLI.HTM and make sure the drive path is set to A:\., and then click on the Save button.
- Now exit from Word

If you are using an **earlier version of Word or another word processor** which does not have an automatic HTML saving option, do the following:
- create a new document using FILE/NEW and then click OK
- save the document according to the following steps:
  - from the menu, select FILE/SAVE AS and within the Save As dialog box, change the File Type to **Text**

- give the new file a name e.g.: GRAPELLI.HTM (the extension must be .htm (not .doc or .txt) in order for your browser to recognize it). Make sure the drive path is set to A:\, and then Save the file.
- Now exit from your word processor

You have now created an empty bookmark file.

Using your Bookmark File

These instructions are based on the Netscape browser. If you are using a different browser, your Instructor will assist:

1. Open your Web browser
2. Select Bookmarks/Go to Bookmarks from the menu
3. From the File menu, select Open
4. Change the drive path to A:\. Click and highlight the file you have just created and click OK (this will make your file the active default for bookmarks).
5. Click outside the Bookmarks window to return to the main Netscape browser screen.

   Browse/surf the Web in the usual way. As you come across hyperlinks that you would like to save to your bookmarks file:

6. Click on the link to highlight, and then select Bookmarks/Add Bookmark from the menu to append the link to your bookmarks file.
7. Netscape should automatically save the added link.

Accessing Saved Bookmarks

1. Follow steps 1-4 in the previous section.
2. Double click on the wanted bookmark to go to that location.

   Happy Surfing !!!!

Downloading Image Files (*.gif, *.jpeg, etc) from the Web

The Web contains a huge and wonderful range of graphical images most of which can be very simply captured, saved to disk, and then used to enhance your own Web pages or even PowerPoint presentations or Word documents. If you have downloaded a graphic from a commercial Web site, please note that it may be proprietary artwork, and you should therefore acknowledge the source of the graphic (e.g.: the Web address you located the graphic at) in a footnote or something similar.

Here's how to do it:

1. Using your Web browser, locate a Web page that contains a graphic you wish to capture to disk. Select your graphic by:

- pointing to the graphic with your mouse; and then
- clicking the **right mouse** button

2. This will bring up a short menu allowing you to save the graphic to disk. from the menu. Select the *Save This Image As ....* option, choose your drive path (e.g.: A:\), and then click OK to save.

3. The graphic can now be used directly to enhance Web pages, PowerPoint presentations or Word documents.

Using Graphics Files In Microsoft PowerPoint

1. Open the PowerPoint application

2. Open a new, blank presentation

3. Select *Insert/Picture* from the menu:
   - choose your drive path (e.g.: A:\)
   - double click on the filename of the graphic

4. PowerPoint inserts the graphic into the presentation. The graphic can now be used as part of a PowerPoint presentation or slideshow (select *View/Slideshow* from the menu to active this latter option)

Using Graphics Files In Microsoft Word

1. Open the Microsoft Word application

2. (a) Open A New Document (e.g.: File/New from the menu) or (b) an existing document that would be enhanced by inclusion of the graphic (in the case of (b), you will need to choose the point of insertion before proceeding to Step 3)

3. Select Insert/Picture from the menu:
   - choose your drive path (e.g.: A:\)
   - double click on the filename of the graphic

4. Word inserts the graphic into the document.

World Wide Web Case 3

Green Thumb Gardening Supplies

Problem: Locating information and investigating the feasibility of electronic commerce using the Internet's World Wide Web and other Internet-based computing models

PC skills: Advanced Web Searching

Green Thumb is one of Australia's largest gardening supply wholesalers, and plant mail order firms. The company supplies and distributes a range of fertilizers, potting mixes, gardening tools, trees, and plant seedlings to some 2,000 commercial gardening outlets, landscaping firms, hardware stores, and supermarkets around Australia. It also has around 500 mail order customers who regularly purchase plants (roses and spring bulbs) and seeds (herbs and vegetables). Green Thumb has established exclusive agreements and strategic partnerships with 45 of Australia's best plant growers and garden products suppliers. These relationships allow Green Thumb access to a very large inventory of quality products, and has gained the company a solid reputation for being able to supply rare or unusual plants. The phrase: *"Get it at Green Thumb"* is frequently used by Green Thumb's many customers.

Green Thumb is owned and managed by Declan Corgi. The gardening supply industry is not renowned for being high-tech, but Corgi is proud that his company has used technology to automate the firm's ordering, inventory, and financial processes. To run his business, Corgi relies on his eight Pentium PC's which are linked in a local area network (LAN). Spreadsheet, database, and word processing software is used to do accounts, correspondence, produce product catalogues, and keep track of stock and orders. Orders are usually received by fax, phone or post. Corgi advertises his business through occasional line advertisements in gardening journals such as the *Nurseryman* and *Your Garden*.

Corgi recently attended a seminar at the Melbourne Business School, on *Business Use of the Internet*, and he is interested in the possibilities it could offer for his type of business, particularly as an alternative selling and distribution channel. He also wondered whether the Internet could be used as an avenue for gathering intelligence about his market and competitors.

At the seminar, Corgi learned that there were four main types of Web sites commonly used by businesses with a presence on the Internet's World Wide Web:

- promotional or billboard. This type of site was usually static in nature. It often included large graphical images, but had little information content or value. Often this type of site represented a company's first *entre* on the Web.
- informational. This site type often contained a rich variety of information on the company and its various products or services, and allowed some interactivity with the user. It did not have transactional capabilities.
- transactional. These sites allowed the purchase and payment of goods and/or services. Usually a variety of payment mechanisms were offered.

- intelligent agent. This type of site contained programs that supported limited independence of action. Typically an agent program permitted the user to personalize a profile of their interests. Other types of agents included site watchers that informed the user when a specific Web site or a variety of sites had been updated. This latter capability is sometimes referred to as push technology.

These categories were not mutually exclusive (ie: it was possible for a company's Web site to have concurrent informational, transactional and intelligent agent capabilities).

Corgi wondered whether a Green Thumb Web site could be used to further enhance relationships with his customers and suppliers, and possibly to increase business. Several of his larger *customers* had already inquired whether his company is on the Web, and he knew that a number of his *suppliers* already were. In addition, Green Thumb had a sales force of 25 staff. These individuals were largely field-based, and spent their time visiting customer sites around Australia, taking orders for Green Thumb products. Corgi noticed that there was often a considerable delay between when an order was placed by a customer, and when a sales rep actually phoned or faxed it in. Typically, sales reps tended to accumulate orders over a two or three day period, before phoning or faxing them through to Green Thumb in a single batch. Corgi wondered whether involvement with the Internet might assist in reducing order receipt delays.

At the seminar he attended, Corgi also heard about Intranets and Extranets. He knows that a number of companies are using them, but he is not really sure about what the terms actually mean, and how they are actually used, how they fit in with Web sites, and what opportunities and/or advantages they might offer for his business.

Tasks

You have been contracted by Corgi to advise on the suitability and appropriateness of using the Internet in the Green Thumb business. Your task is to prepare a report for Green Thumb recommending a future course of action for involvement with the Internet. Your report should include answers for at least the following:

1. (a) How do businesses use the Web and why? (b) Is anyone else doing this in Green Thumb's particular business area (i.e. the Australian gardening supply industry)?

2. Use the Web to locate an example of each of the four types of Web sites (i.e. promotional, informational, transactional, and intelligent agent) that businesses may use.

3. Now locate an example of each of the four types of Web sites in Green Thumb's industry. Note: the sites you locate should be Australian sites (i.e. xx.com.au). Thinking back to Question 1b, do any of these companies represent threats to Green Thumb ? Why or why not ?

4. Should Green Thumb have a Web site ? If so, what type of Web site would you recommend, and what benefit would the company derive ? If not, explain why.

5. What is an Intranet, and what is an Extranet ? Provide a brief explanation of what these terms mean, how they relate to each other, and how they relate to a Web site. Now locate on the Web and download to disk a graphical depiction of (a) an Intranet and (b) an Extranet. Paste these into your report.

6. Would you recommend an Intranet and/or Extranet solution for Green Thumb ? If so, what benefit would the company derive ? If not, explain why.

Your report must explain how you located useful information (or where/how you searched if you did not find useful information) in a way in which Corgi could check these sources for himself. This should be done in a bookmark/favorite file. Note: You need to explain reasons for your recommendations, and it is quite legitimate to suggest Corgi take no action re involvement in the Internet.