

# CHAPTER 3

## Social contexts of information systems

### Learning objectives

By the end of your work on this topic you should be able to:

- Give examples of how political, economic, cultural and legal forces affect IS
- Analyse each of these factors systematically to assess their relevance for a project
- Outline how modern systems affect data privacy and how governments react to this
- Outline how modern systems affect intellectual property and how governments react to this
- Give examples of stakeholders with an interest in how organisations use information
- Evaluate systematically the ethical issues raised by the use of IS

# Google

[www.google.com](http://www.google.com)

Sergey Brin and Larry Page founded Google in 1999 and by 2008 it was the world's largest search engine – 38 per cent of Internet searches in the United States were made on Google.

Its founders' mission is 'to organise the world's information and make it universally accessible and useful'. The demand for search services arose as the World Wide Web expanded, making it progressively more difficult for users to find relevant information. The company's initial success was built on Brin and Page's invention of a new approach to online searching. The details of this remain secret, but the principle is that the **PageRank** algorithm (with 500 million variables and 3 billion terms) identifies material relevant to a search by favouring a page to which another page has been linked. These links were called 'votes', because they showed that the webmaster of another page had decided that the focal page deserved attention. The importance of the focal page is determined by counting the number of votes it has received.

The Google software uses thousands of linked computers to conduct a series of simultaneous equations in a fraction of a second. Having determined which web pages are most important it then analyses their content to decide which are relevant to the current search. By combining overall importance and query-specific relevance, Google claims to put the results most relevant to a search at the top of the list.

The company generates revenue by enabling advertisers to deliver online advertising that is relevant to the search results on a page, appearing next to the search results. Advertisers pay Google a fee each time their ad is viewed, with the rate depending on how much they bid for keywords that link their advert to the search: the more they bid the nearer the top of the page their ad will be. In October 2006 Google took 31 per cent of US online advertising revenue.

When the company offered shares to the public in 2004, Page warned potential investors that Google was not a conventional company and did not intend to become one. In the interests of long-term stability the founders would own about 30 per cent of the shares, but control 80 per cent of the votes.

The company's expansion has sometimes caused controversy. The agreement it reached with the Chinese government in 2006 allowing it to offer search services in that country contained terms to which many Western commentators objected. When Microsoft launched a bid in 2008 to buy Google's main competitor, Yahoo!, Google appealed to the US regulatory authorities to block the deal.

*Sources:* Based on Harvard Business School case 9-806-105, *Google Inc.*, prepared by Thomas R. Eisenmann and Kerry Herman; company website; *Business Week*, 9 April 2007.

## Introduction

Developments in IS mean that people constantly see opportunities to add value by acquiring and processing information in ever more imaginative ways. Google is a prominent example in which two talented people saw a growing demand in society to search the Internet for information, and created a tool that would do this efficiently. That tool – PageRank – was a valuable asset, protected by intellectual property law. The business idea was an immediate success in societies that value free access to information, and whose laws and customs encourage it. In countries with different beliefs some users have been punished for downloading material of which powerful interests disapproved. Some European governments have launched a competing service to Google Library, fearing US dominance of their cultural heritage.

### CASE QUESTIONS 3.1

Before reading on, make notes on the contextual issues that you think Google may have had to deal with to enable it to spread so widely.

Apart from building ever larger technical systems, what issues in the wider social context will it have had to anticipate and manage as it expanded?

Keep your notes and add to them as you work through the chapter.

Wipro, an Indian-based global technology company, took advantage of changes in business regulations to enter the computer business – and has made similar strategic moves as circumstances changed. Microsoft is frequently engaged in lawsuits with competitors or governments that object to what they regard as uncompetitive practices by the company or for alleged breaches of copyright. Website designs vary by country, to take account not only of languages but also of deep cultural differences in the features that people value on a site.

These and many other examples (like the Google case) illustrate the theme of this chapter – that managing information systems depends on being aware not just of factors in the immediate competitive environment (which we examine in Chapter 4) but also of the wider social context. The enduring lesson of managing IS is the link between project and context. While the technology may have the same features wherever it is used, local circumstances vary. Those promoting an IS project need to be aware of the contexts in which they are working, respond to them as they design and implement a system, and recognise that their work will change the context. Such awareness makes it more likely that the IS will complement its context, and so be accepted and used to add value.

Distinctive social arrangements in nation states (and amongst groups within a state) develop as people conduct their personal and professional lives – and in doing so create unique social and legal relationships. These reflect local circumstances, sometimes emerging from invisible processes within the society and sometimes being the result of powerful people protecting their interests. Such human creations – customs, laws, business arrangements – are the social context that shapes how people who are subject to them add value to resources (as producers) and how they value the outputs of others (as consumers).

The chapter outlines in turn the political, economic, cultural and legal dimensions of the social context, showing how each has affected, and been affected by, computer-based IS. It pays particular attention to data protection and intellectual property. It outlines the expectations of stakeholders in relation to IS, leading to a consideration of the links between ethical issues and an organisation's strategy.

## 3.1 Political contexts

Countries' political systems shape what managers can and cannot do. Government regulations may specify which companies can operate within their jurisdiction and how they should do so. Political decisions sometimes affect the pattern of competition quite directly – perhaps obstructing new entrants, but protecting them once they are established.

## ● Rules on market entry

Wipro, based in India, is one of the world's leading IT companies, providing increasingly sophisticated services to companies around the world. It was originally in a different business but Azim Premji, the son of its founder, wanted to diversify, though he had no fixed plan about the direction in which to go. In 1977 the Indian government set rules that required foreign companies to operate through local, Indian-owned partners. IBM, then the world's dominant computer company, left the country, creating an opportunity for Indian companies to enter the market for computer hardware. Premji recalls: 'When IBM left, it created a vacuum. So we decided to zero in on info tech.'

By 1981 the company was designing and selling computers, leading the market for several years: later it moved into software with spreadsheet and word-processing packages. In the early 1990s the Indian government liberalised business regulations, allowing the world's top computer companies to move in again. Their large R&D resources and high sales would soon defeat Wipro if it operated only in India – but the head of the IT unit, Sridhar Mitta, had the idea of selling the company's expertise: 'We saw that while the door was open for others to come in, it was also open for us to go out. So we decided to become a global company' (Boddy, 2008, p. 207).

Rules on market entry still apply in most countries – for example Research in Motion, the Canadian manufacturer of the BlackBerry family of wireless e-mail devices, wished to begin selling the devices in China: with 500 million mobile phone users, the company saw the country as a valuable market. To enter it managers needed permission from the Chinese government – which, after eight years of trying, it received in 2007.

## ● Rules governing how companies operate

In 2004 the European Commission fined Microsoft almost 500m euros for abusing its market dominance, by including valuable software features within the operating system, so limiting the market available to specialist software providers. The Commission later launched two new competition enquiries against the company. A further example of the EU affecting the way companies compete occurred in 2008 when the Competition Commissioner warned Europe's mobile phone operators to cut the cost of texting and Internet access while customers are overseas – otherwise the EU would introduce regulations to fix prices. The new generation of phones had made it easier to surf the Internet and e-mail, and was popular with consumers – but the EU believed that companies were charging too much to users who used the service when they were away from their home country.

Governments at both national and international levels become involved in takeovers – especially in politically visible areas like the Internet – see Chapter Case, Part 2.

## ● Actions on specific markets

Government policies can directly affect the use of the Internet by citizens and businesses. They can, for example:

- encourage or discourage citizens' use of the Internet;
- enact legislation to protect data privacy and intellectual property (see Sections 3.4 and 3.5);
- create regulations that affect competition between Internet companies;

## Microsoft, Yahoo! and Google

In February 2008 Microsoft announced that it was bidding to buy Yahoo!, a rival search engine to Google. Microsoft claimed that the merger of the two companies would create more competition, by creating a stronger rival to Google, which now had about 75 per cent of the search market. The company also insisted that it was committed to openness, innovation and the protection of privacy on the Internet.

Google disagreed with this view, arguing that Microsoft might attempt to exert an inappropriate

degree of control, and pressed the industry regulators (and initially the US Congress Judiciary Committee) to investigate the proposed deal. Google expressed fears that the Microsoft–Yahoo! link could limit the ability of consumers to access competitors' e-mail and instant messaging services.

*Source: BBC News, 4 February 2008.*

- offer training and incentives to people to acquire relevant IT skills;
- encourage the online delivery of government services;
- create companies to offer online services.

An example of the latter is the initiative taken by the French government to create an online digital library as a rival to Google. That company announced in 2004 it had reached agreement with some leading US and UK libraries to digitise millions of printed books that were no longer protected by copyright, which users would then be able to access over the Internet. French librarians (Jeanneney, 2007), and their government, acknowledged the potential benefits of such a scheme to make access to part of the world's published knowledge more readily available, but expressed deep concern about aspects of the proposal. These concerned the perceived bias towards American, or at least English language, works; the danger of overlooking works in the other 25 major European languages; and the market-centred nature of the Google proposal. These anxieties led the Bibliothèque nationale de France (BnF) to create a new portal, Europeana, which plans to digitise some 100,000 items a year. This is matched by linked initiatives in other European countries to create the European Digital Library, which will ensure multilingual access to Europe's cultural heritage.

### MIS in Practice

### Governments aim to compete with Google

*The [Japanese] government, alarmed at the dominance of Google and other online services, is launching a project to encourage companies to develop new search technologies. It hopes to use Japan's strength in developing devices such as mobile phones and car navigation systems to create proprietary search and information retrieval functions. But some question whether a state-led project is capable of [overtaking] Google. France and Germany have also launched a plan to seed development of a 'next generation' European search engine, although Germany then pulled out of the plan.*

*Source: Financial Times, 5 September 2007, p. 1.*

### Activity 3.1 Gathering information about political contexts

Identify one new example of a government action affecting use of the Internet.

- What was the action?
- What had led to the intervention?
- What were the implications for those affected?
- Is there any evidence about how those affected reacted?

#### ● Summary

- The political context affects the management of business information systems as it reflects the interests of powerful players and vested interests in a country. These are often expressed in regulations governing business activity, including those based on the Internet.
- It includes the ability to grant or withhold permission to operate in a country.
- It may also affect the freedom with which individuals can use the Internet.
- Political interests also launch business activities as rivals to commercial interests.

## 3.2 Economic contexts

One of the main factors affecting decisions on IS investment is the pattern of customer usage in potential markets. Ideally managers need to know, for each type of customer and for each digital channel (Internet, mobile phone, digital TV, etc.), the proportion of customers who:

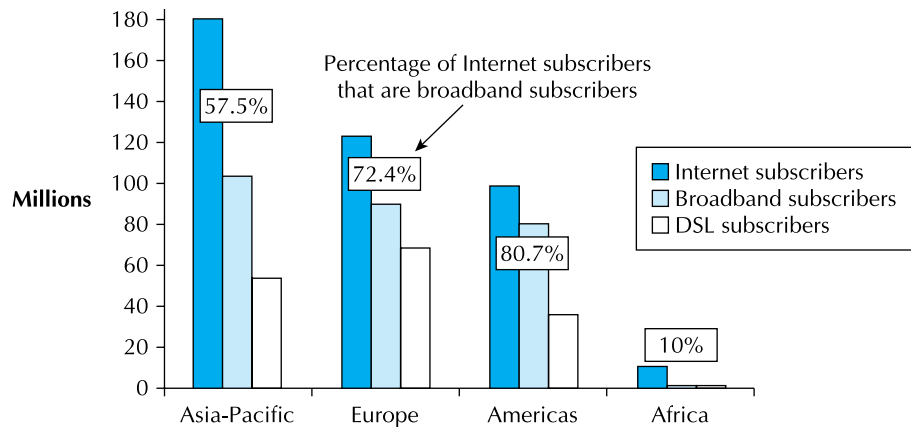
- have access to the channel;
- are influenced by using the channel;
- purchase using the channel.

The following sections illustrate this with information about Internet access.

#### ● Internet access

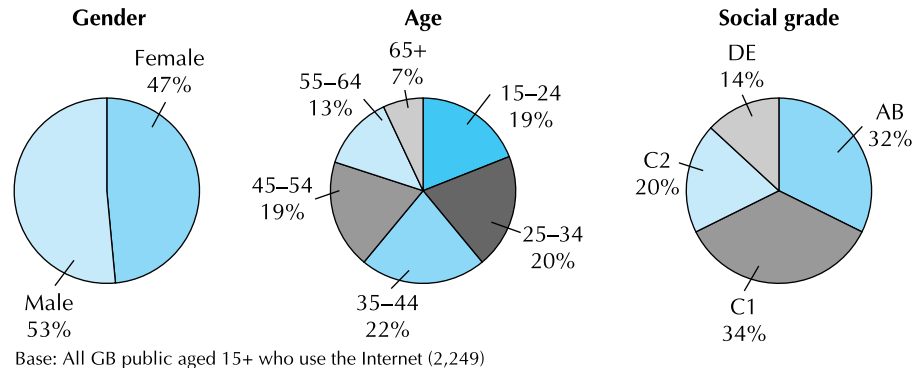
The International Telecommunications Union (ITU) estimates (see Figure 3.1) that in 2006 about 400 million people were Internet subscribers – of whom 180m were in the Asia-Pacific region, 120m in Europe, 90m in the Americas and only 10m in Africa. Such figures are of course very approximate, and count the number of *subscribers*: the number of users will of course be higher (because of families). Some believe that lack of access to modern IS hinders economic development and advocate policies to make it more available to people in poorer countries. Mobile phone usage in Africa is growing rapidly, allowing those nations to avoid costly investment in fixed-line telephone systems.

There will be similar variations in access within a country. While the Office for National Statistics in the UK estimates that in 2006 over 58 per cent of households have access to the Internet, the proportion will vary according to demographic characteristics



**Figure 3.1** Internet subscribers by region and access type, 2006

Source: ITU ([www.itu.int/ITU-D/ict/statistics/](http://www.itu.int/ITU-D/ict/statistics/)).



**Figure 3.2** Variation in demographic characteristics of UK Internet users by gender, age and social class

Source: eMori Technology Tracker.

– such as social class, gender, age and income. Figure 3.2 shows how Internet use varies on these demographics.

### ● Customers who are influenced by using the Internet

Those wishing to develop an effective online service need to understand their customers' online buying behaviour. Finding information online is a popular activity, but companies need to know more about the specific actions of their target group. A study quoted in Chaffey (2007, p. 155) found the following.

1. The Internet is a vital part of the research process with 73 per cent of Internet users agreeing that they now spend longer researching products. The purchase process is considered and complex.
2. The Internet is used at every stage of the research process from the initial scan to the more detailed comparison and final check before purchase.

**Table 3.1** Variation in amount and number of purchases in Europe

Country	Amount spent online per Internet shopper (in euros)	Average number of items bought online per Internet shopper
UK	1285	12
Denmark	1078	9
Norway	1074	7
Belgium	701	4
Netherlands	612	3
Germany	594	10
Sweden	577	5
Spain	521	2
Italy	449	3
France	373	6

Source: EIAA (2006), quoted in Chaffey (2007, p. 158).

3. Consumers are more informed from a range of sources; price is not the primary driver.
4. Online information and experience also translates into offline purchases.

### ● Customers who purchase on the Internet

Most of the growing number of people who purchase online do so after gradually building up their confidence in the medium. They typically start their online purchasing with low-value items in which there is little personal involvement – such as travel tickets or books. If this experience is satisfactory, they are likely to move to higher-value purchases, and also to buy things with which they have a high personal involvement, such as expensive electronic products. Table 3.1 also shows significant differences between European countries in the value and number of Internet purchases.

The European Interactive Advertising Association (EIAA) conducts regular surveys of online purchasing – the Activity encourages use of the site to find up-to-date information.

#### Activity 3.2 Latest trends in online shopping

Visit the EIAA website ([www.eiaa.net/news/](http://www.eiaa.net/news/)).

- Have they provided more recent data than that shown in Table 3.1?
- If so, what are the main differences in the pattern, if any?
- What other information can you find on the site about recent trends in online shopping?

### ● Summary

- Significant aspects of the economic environment that affect management decisions about IS investment include the number with access to the technologies, how they use them and how much they buy.

- We illustrated these factors in relation to Internet usage, but similar data is available for other technologies.
- Internet access varies by country and demography.
- How customers use the Internet varies by demographic, such as age and gender.
- Internet purchase behaviour varies according to experience and demographic.

### 3.3 Cultural contexts

Cultures influence the way people live and work together, and vary between places and social groups. It affects, for example, how people use social networking sites and their attitudes to online information.

#### ● What is culture?

**Culture** is distinct from human nature (features that all human beings have in common) and from an individual's personality (their unique way of thinking, feeling and acting). It is a collective phenomenon, shared with people in the common social environment in which it was learned. Hofstede and Hofstede (2005) describe it as the unwritten rules of the social game:

*the collective programming of the mind which distinguishes one group or category of people from others (in which 'group' means a number of people in contact with each other, and a 'category' means people who have something in common, such as people born before 1940). (p. 4 and p. 377)*

While humans share common biological features, those in a particular society, nation or region develop a distinct culture.

Tayeb (1996) distinguishes between high- and low-context cultures. A **high context culture** is one in which information is implicit, and can only be fully understood in conjunction with shared experience, assumptions and various forms of verbal codes. High context cultures occur when people live closely with each other, where deep mutual understandings develop that then provide a rich context within which communication takes place. In a **low context culture** information is explicit and clear. These cultures occur where people are typically psychologically distant from each other, and so depend more on explicit information to communicate:

*Japanese, Arabs and Mediterranean people, who have extensive information networks among family, friends, colleagues and clients and who are involved in close personal relationships, are examples of high context cultures. Low context peoples include Americans, Germans, Swiss, Scandinavians and other northern Europeans; they compartmentalise their personal relationships, their work and many aspects of day-to-day life. (Tayeb, 1996, pp. 55–6)*

#### ● Culture and social networking

Many people use the Internet to meet new people, which encouraged entrepreneurs to launch **social networking sites** – some of which are now the most popular sites on the web. They allow people to communicate interactively with others who share their

interests, and millions of people use them enthusiastically for social purposes. MySpace is launching locally targeted sites, and now has 24 local language sites in 20 countries, including French, German and Japanese. In 2008 it was the biggest social networking site across Europe as a whole, but in France the local Skyrock dominated, with about 70 per cent of the social networking market. In the UK Facebook recently had more users.

Businesses are seeking ways of using the social networks' ability to bring people with similar characteristics together. Bands use MySpace (owned by News Corporation) to promote their work, and the MIS in Practice features below give examples relating to sales and recruitment. Poynter (2008) reports on how consumer products companies use Facebook to supplement conventional market research methods.

**MIS in Practice** BurdaStyle [www.burdastyle.com](http://www.burdastyle.com)

Burda, an established German publisher of sewing patterns, has launched an English language website to boost sales in the US. Each week it publishes a different pattern online as a PDF document that visitors can copy or print and modify to make new designs. As soon as each pattern is posted, the BurdaStyle online community springs into action. Members swap tips and post photographs in the forum, and exchange blogs on how to alter the designs. They create guides on how to alter the posted design – which some users then make into clothes they sell commercially: one said that 'having the community makes it so easy to figure out how to make different alterations'.

In 2008 the site had 29,000 members, and received 1.65 million page views a month. Burda makes no profit from the designs it publishes on the site, but hopes that word-of-mouth recommendations will boost sales of its other patterns.

Source: *Business Week*, 14 January 2008.

**MIS in Practice** Recruiting on social networking sites  
[www.facebook.com](http://www.facebook.com)  
[www.myspace.com](http://www.myspace.com)

Large employers who wish to recruit the most able graduates from around the world are exploring how best to respond to the user-led boom in social networking sites. The ability of sites such as Facebook and MySpace to gather people together could create opportunities for companies to reach young adults who might not otherwise come their way. They see that social networks are central to the way in which young adults move between business and leisure, with many organising much of their life through online communities.

So if a company wants to talk to them about professional opportunities, they may need a presence on the site. One option is to create a sponsored group on, say, Facebook for anyone interested in a career with the company. This enables the company to present corporate information, and potential applicants to hold online discussions and to ask current employees about their experience.

Source: *Financial Times*, 10 July 2007, p. 16.

### Activity 3.3 Reflecting on social networking sites

Reflect on how you use social networking sites, and make notes on these questions.

- Which sites do you use, and are you using them more or less than you did three months ago, and one year ago?
- What are the main benefits you obtain from using them?
- How does the fact that information you share on the site will be visible for many years affect what you post?
- Do you consider yourself to be in a high context or low context culture? Does that affect how you use these sites?

Compare your answers with others on your course, and explore if any differences in use reflect membership of high context or low context cultures.

### ● Technology as tool or fashion?

One of the reasons behind Nokia's dominance of the mobile phone market (as well as its mastery of the logistics of getting millions of phones to customers around the world) was that its managers were quick to recognise that mobile phones were not a commodity but a fashion accessory. By offering smart designs, different ring tones and coloured covers Nokia became the cool mobile brand for fashion-conscious people. In personal computers, Apple has for many years delivered distinctive stylish designs, which were part of its appeal to the market. PC makers are now:

*focusing as never before on turning utilitarian machines into fashion statements, and not just for the young and hip. Lenovo, the world's No. 3 PC maker is . . . expanding from commercial into consumer markets. The company is introducing three splashy notebooks – super-svelte and colorful, with textured covers that make them easy to grip. The lightest, at 2.3 pounds, is aimed at sophisticated, globe-trotting professionals. . . . And Netherlands-based Tulip Computers is showing off ultra-high-end notebooks that look like expensive purses and are pitched at wealthy, middle-aged women. (Business Week, 14 January 2008)*

### ● Producing and consuming

Modern information systems are changing the relationship between production and consumption. Alvin Toffler (1980) observed three distinct phases in human history. In the pre-industrial wave most people consumed what they produced – within their families or isolated village communities. Very little was traded. Industrialisation changed that, creating a situation in which most goods and services were produced for exchange, with people specialising in distinct aspects of the process:

*industrialism broke the union of production and consumption, and split the producer from the consumer. The fused economy of the First Wave was transformed into the split economy of the Second Wave. (p. 53)*

He went on to point out that now, in what he termed the Third Wave, that distinction is breaking down in many spheres of life. More people do more things for themselves, rather than rely on professionals – seeking advice on medical problems from the Internet

or engaging in small-scale craft production (see BurdaStyle in the MIS feature) in community enterprises that enable a greater degree of self-sufficiency from the market economy.

Modern IS enable this shift, making it easier for ‘producers’ and ‘consumers’ to contribute to the product or service. Online reservation and ordering systems have long allowed consumers to perform some of the work previously done by the producer, and many manufacturers offer customers the chance to specify the features of their product online before ordering. More radical developments in the media sector include encouraging customers (as readers, listeners or viewers) to contribute to online discussion groups that include professional broadcasters or public figures – see MIS in Practice feature below. Figure 2.10 on page 62 illustrated this.

### MIS in Practice

### The BBC – ‘Have your say’ [www.bbc.com](http://www.bbc.com)

The British Broadcasting Corporation (BBC) is one of the world’s largest broadcasting organisations, with a staff of thousands delivering its output on radio, television and now in digital formats. Aware of the increasing tendency of younger people to contribute to blogs, and to be active rather than passive news consumers, the corporation now hosts many online discussion forums to which members of the public contribute. Through the BBC website they can suggest topics for discussion and/or take part in those already under way, by posting their e-mail comments on the website, which then appear as part of the discussion. As licence-payers they have paid an annual fee to receive programmes, but now choose to help make them for no financial reward.

*Source:* BBC website.

## ● The Internet and national differences

While the Internet as a communication technology transcends national boundaries, societies vary in how their citizens respond to values such as:

- open access to information;
- freedom of expression;
- individual privacy;
- individual security;
- democratic and transparent governance.

A culture that values freedom of expression, for example, will generate a regulatory context supporting freedom of information at the expense of protecting individual rights to privacy.

## ● Summary

- Some societies are characterised as high context cultures, and others as low context: this is likely to affect how people in those cultures use forms of IS, such as social networking sites.
- Although social networking sites are used primarily for social communications, organisations are beginning to use this new contextual factor for commercial purposes.
- Some forms of IS, such as mobile phones and personal computers, meet both fashionable and functional needs.
- Some applications of IS are altering the boundary between producer and consumer, as media companies in particular involve consumers in the production process.

## Google in Europe

[www.google.com](http://www.google.com)

In some countries, such as Russia, Google has struggled to compete against local rivals such as Yandex and Rambler: 'Our support for the Russian language was not great, so we opened an office in Russia and got Russian engineers to look at the problem' (Nelson Mattos, Google's head of engineering for Europe).

Meanwhile Google is launching products such as mapping services that by their nature require regional expertise. A team in Israel is leading developments that include reading Internet pages from right to left. There is also fear in the company that unless Google is sensitive to concerns voiced by European governments it could become embroiled in long legal disputes. European data protection officials,

for example, question the length of time Google keeps the results of search queries, amid concern that these could compromise users' rights to privacy.

Local touches are something the company is increasingly keen to add. It is staging a recruitment drive across Europe, seeking to hire thousands of engineers to help it create products suited for markets outside the US.

*Europe is different from the US and there are certain topics that are taken a lot more seriously here. Engineers from Europe will be more sensitive to these topics.* (Nelson Mattos)

Source: *Financial Times*, 27 September 2007, p. 16.

### CASE QUESTIONS 3.2

Review the Google website, especially the pages headed 'Corporate Information' in order to gain an insight into the range of its activities.

'*Google succeeds because it's in tune with modern cultures*'. Evaluate this point of view by considering the following:

- In what ways does Google reflect the cultures in which it operates?
- In what ways is Google changing these cultures?

## 3.4 Legal context (1) – data privacy

Governments create the legal framework within which companies operate, most obviously in areas like health and safety, employment, consumer protection and pollution control. Two themes relevant here are data privacy and intellectual property (see Section 3.5).

### ● Technical developments and data privacy

Company websites learn the identities of visitors who choose to register on the site by using **cookies** – files deposited on a user’s computer when they visit a site. When the user returns, the website searches their computer, finds the cookie, and knows what the person did on previous visits. This enables the cookie to customise the contents of the site for that person – such as suggesting products that are likely to interest them. Banks (like Tesco in Chapter 1) use personal data about customers to design promotional incentives. Companies can also share information in their databases with other sources to develop quite comprehensive customer profiles.

Technology can monitor and record online activities, including which online news-groups or files a person has visited, which websites they use, and what they have purchased. Much of this tracking and monitoring occurs in the background, without the visitor’s knowledge. Electronic surveillance systems monitor the location of people and vehicles, while systems to monitor employee e-mails or Internet use can ensure they do not break company rules.

All these applications may benefit customers, employees or citizens – but may equally cause them harm if the data is used in a way that violates the privacy of their data – in terms of not acquiring, using or distributing data without the person’s permission.

### ● Protecting personal data

Laws protecting personal data are stronger in the European Union (EU) than in the US or Japan (Baumer et al., 2004). In 1973 a task force at the US Department of Health Education and Welfare (HEW) developed a **Code of Fair Information Practices (FIP)**, and most developed countries have passed **data protection laws** that reflect these principles. In contrast, the US has not codified them into a comprehensive federal law, though they have informed some state law. In summary the FIP principles cover the following.

Notice/awareness	Consumers have a right to know if personal information is being collected and how it will be used.
Choice/consent	Consumers have a choice about whether or not information collected for one purpose will be used for other purposes and they have a choice about whether or not information will be shared with third parties unless it is required by law.
Access/participation	Consumers have a right to access information and to correct errors.
Integrity/security	Organisations should protect personal information from unauthorised access during transmission and storage.
Enforcement/redress	Consumers have a right to ensure that organisations comply with these core privacy principles either through external regulation (audits) or certification programs. (Schwaig et al., 2006)

Schwaig et al. (2006) examined the extent to which Fortune 500 companies adhered to these principles, by analysing their websites against the FIP requirements. They studied not only the extent to which companies met the requirements but also the extent to which they undertook ‘advanced disclosure’, by including factors beyond the minimum. This enabled them to construct a privacy policy assessment matrix, showing the extent to which companies in the sample complied with FIP, and the extent to which they made advanced disclosure. This gives four categories.

- Insufficient protection/no policies – sites offer little or no protection.
- Public relations policies – sites cover all the categories, including some indicating advanced disclosure, but little information about enforcement – so offering only the illusion of protection.
- Focused/narrow policies – strong protection, but only in some areas.
- Mature policies – cover most FIP areas and offer genuine protection.

Figure 3.3 shows that only 16 per cent of firms had mature policies: many more appeared unconcerned with privacy or regarded it as a public relations exercise. In general, the authors found that larger firms provided stronger protection than small, and that information-intensive companies were more likely to provide protection than less information-intensive ones. They conclude that their method of analysis, and the assessment matrix, provide useful tools that managers can use to assess their company’s compliance with fair information practices.

### Activity 3.4 Evaluating privacy policies

Choose a website you visit regularly, go to the ‘Privacy Policy’ page, and read the privacy policy.

- Which of the FIP principles does it mention either explicitly or in some other way?
- Where would you place it in Figure 3.3?

Advanced disclosures	HIGH	Public relations 99 (26%)	Mature policies 63 (16%)
	LOW	Unconcerned with privacy 174 (45%)	Limited/Focused protection 47 (12%)
		<b>FIP compliance</b>	
		<b>Low</b>	<b>High</b>

**Figure 3.3** Privacy Policy Assessment Matrix applied to the Fortune 500

Source: Adapted from Schwaig et al. (2006).

**Table 3.2** Summary of the provisions of the UK Data Protection Act

Principle	Examples of required practices
Data shall be fairly and lawfully processed	Organisation must appoint a <b>data controller</b> responsible for data protection and advise people how to contact them; a person must give informed consent before data is processed.
Data to be processed for limited purposes	Must make clear at point of collection why and how personal data will be used – e.g. for marketing promotions.
Adequate, relevant and not excessive	Specifies that only the minimum data necessary for the purpose must be collected.
Accurate	Not only when collected but that the organisation keeps it up to date to avoid incorrect credit rating, for example.
Not kept longer than necessary	May be obvious if a customer relationship has ended, but if the data is about an occasional purchaser, criterion less clear.
Processing recognises data subject's rights	Rights include being able to receive a copy of the personal data that is held about them, not causing distress, being able to unsubscribe from mailings.
Secure	Must protect against unauthorised processing and against accidental loss, damage or destruction of personal data.
Not transferred to countries without adequate protection	An important protection against international companies transferring data to places with weaker individual protection.

Source: [www.informationcommissioner.gov.uk](http://www.informationcommissioner.gov.uk)

The Organisation for Economic Cooperation and Development (OECD) has also formulated guidelines similar to the FIP (OECD, 1980) that aim to balance commercial and private interests in privacy law. This guided the European Commission's Directive on Data Protection, which requires member states to enact data protection legislation requiring companies and public bodies to inform people when they collect information about them, and explain how they will store and use it. In the UK this requirement is met by the Data Protection Act (DPA) 1984, 1988, which is typical of the pattern throughout the EU. Any company or public body that holds personal data on computers must register with the relevant agency – in the UK this is the Information Commission. Table 3.2 summarises the data protection principles to which the DPA gives effect.

National legislation is clearly intended to protect individuals against the misuse of their data, and reflects a balance at the time it was formulated between the perceived interests of individuals and those who wish to use data about them.

## ● Summary

- Developments in IS make it possible to collect and process unprecedented amounts of personal data about people and customers.
- While many claim this enables them to offer better service, others see it as a threat to privacy, especially if misused.
- Fair Information Principles give guidance on good practice in relation to customer data, but few websites in the United States follow these principles fully.
- Legislation to protect personal data is stronger in Europe than in the United States, with member states being obliged to legislate on the matter.

- The Data Protection Act sets out requirements for UK companies in terms of acquiring, protecting and distributing personal data.

## 3.5 Legal context (2) – intellectual property

**Intellectual property rights (IPR)** is a set of rights that protects those who create ideas and information that have commercial value. They give them exclusive rights over the knowledge and information they create, to prevent others using it without permission. Most governments have developed laws that protect the owners of IP, to encourage them to create and disseminate knowledge. The guiding principle is that ideas are expensive to produce but cheap to copy. If creative people know that others can copy and use their ideas without payment, they will have less incentive to spend time and effort in creating new music, books or films. Protecting the rights of those who own IP is intended to encourage them to produce more and to make it public so that others can benefit.

### ● Protecting intellectual property

There are three main ways to protect IP – copyright, patents and trademarks.

#### Copyright

**Copyright** is a legally enforceable grant that aims to protect the creators of IP from having their work copied, distributed, performed or lent without the consent of the owner. It applies to a wide range of creative outputs, including written works, films, software, paintings, radio and TV broadcasts and sculpture. Copyright comes into effect as soon as the work is created and ‘fixed’ in some way – on paper, film or as an electronic record on the Internet. The intent behind copyright law is to encourage creativity and authorship by ensuring that creative people receive the financial and other benefits of their work. Most industrial countries have copyright laws, supported by international conventions and agreements. There is a balance – strong property rights create monopolies that can exploit their position, while weak property rights may discourage artistic work and innovation.

#### Patents

A **patent** is a set of rights that the state grants to a person for a fixed period of time (20 years in the UK) in exchange for the regulated, public disclosure of certain details of an invention. The right granted is that of preventing anyone else from using or selling the invention. As with copyright, the intention is to encourage creativity by ensuring that inventors of machines and methods receive financial rewards for their skill and inventiveness, while at the same time ensuring that business benefits from using the device in return for a payment to the patent’s owner.

#### Trademarks

A **trademark** is a badge of origin that distinguishes goods or services – it can be a word, name, logo, colour, shape or sound. Once registered it gives the trademark owner the right to prevent others from using the same or similar marks on similar products.

## ● Technological developments and IP

Before the advent of networked computing, printed material, films, music or computer software had to be stored in a physical form – as paper, computer discs or video, making distribution somewhat difficult. Legal protection was to some extent strengthened by the practical difficulties of breaking the law. Modern IS challenge this protection, as digital media make it much easier to copy and distribute a work, perhaps altering it to disguise its origin:

*the UK's music and film industries lose around twenty per cent of their annual turnover through pirated CDs and illegal online file sharing.* (Gowers, 2006, p. 3)

Such protection as exists usually applies only to a single state, offering little protection in a global economy.

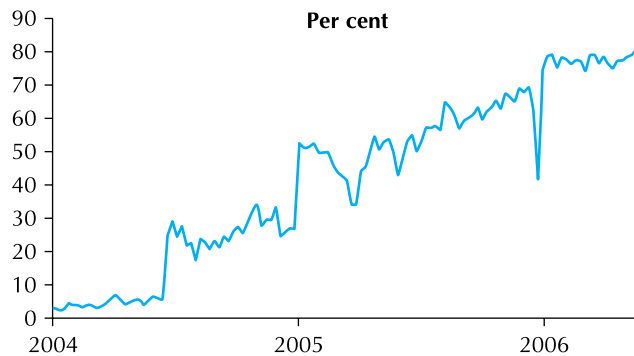
The number of households in developed countries with computing and broadband connections is increasing very rapidly, and is expected to exceed 12 million in the UK by 2008. Fast digital networks increase the ability of production companies to distribute films, music and games digitally, but at the same time make it easier to copy that information without the permission of the copyright owner – see Figure 3.4.

*Downloading music and films from the Internet is now the most common legal offence committed by young people aged between 10 and 25 in the UK. Up to 80 per cent of music downloads are not paid for, even though most consumers recognize it to be illegal.* (Gowers 2006, p. 27)

The development of broadband facilitates music sharing and millions of files of copyright material being downloaded every day, of which over 60 per cent are estimated to be music (Zentner, 2006). The most popular albums are available for online sharing almost immediately after release and in some cases even before.

*Napster (an early and very popular music-sharing website) and its successors were banned in many universities because the very fast connections induced so much file sharing that there was little bandwidth left for anything else. In the case of the University of Illinois at Urbana-Champaign, this amounted to 75 per cent of the total bandwidth.* (Zentner, 2006, p. 65)

Zentner (2006) concluded that file sharing reduced legal sales of music by about 30 per cent. File sharing is not limited to music. The development of fast connections is extending downloading to other digital goods such as movies, software, video games,



**Figure 3.4** Downloads as a proportion of singles sales in the UK, by week, 2004–2006

Source: British Phonographic Industry, quoted in Gowers (2006), p. 28.

and books. Some movies are available online during the opening week of theatrical release and before the authorised DVD is available.

Infringement of copyright is now common, with Gowers (2006) concluding that piracy is now a significant drag on the performance of UK creative industries:

*Total losses to the film industry in 2005 are estimated at £719 million, on industry box office and video sales of £3.5 billion. Enforcement through the civil courts is costly, and cases are difficult to prove. [Enforcement agencies] are all aware of the problem, but it remains one of many competing priorities. (p. 41)*

Differences in the professional values of those working in the software industry also help to explain the growth of copyright infringement (see Research Summary feature below).

### Research Summary

### Contrasting values of software designers

McGowan et al. (2007) examined the varying attitudes within the IS profession towards copyright laws that are intended to protect software from being copied without paying a fee to the creator. They identified four groups within the profession, with different views about the role of law and ethics in relation to software development.

- **Proprietary Proponents:** believe that software can be protected, and that owners will compete for sales in the market. For competition to be fair, owners must be able to protect their software, or there will be no incentive to develop it.
- **Software Anarchists:** express the view that technology is critical to social progress and it is morally wrong to restrict access to the latest software developments. Use **hacking** tactics to enter and copy software that frequently breach copyright laws.
- **Open Source/Free Software Advocates:** with slight differences in tactics, both groups advocate that software should be designed so that other designers can read, modify and redistribute the underlying code within a piece of software. They believe that this is a more effective way of developing quality software, and having it widely and quickly used.

Source: McGowan et al. (2007).

### ● Summary

- Most developed countries have sought to encourage innovation by protecting intellectual property.
- Modern IS make unauthorised copying and distribution of IP easy and cheap, and illegal copying of music, software and films is widespread.
- Companies that depend on income from creative products are seeking new ways of countering this threat to their businesses.

## 3.6 Ethics, stakeholders and contexts

Many management issues raise ethical dimensions, and the IS area is no exception. Given rapid technological developments that make possible new products and services, and enable people to have much greater information about others, it is inevitable that new

issues arise – which are not illegal, but some people believe challenge accepted ethical codes of behaviour.

### ● Ethical issues in IS

Modern systems raise new questions about the rights and obligations of people in relation to data, information and knowledge. Laws to protect data privacy and intellectual property are frequently ignored or deliberately broken. Copying music or software is both easy and often illegal – but many ignore this because, in their view, the law favours large music production companies and hinders free expression. As people consider how best to use IS, they face situations that involve a conflict between the needs of the part and the whole – the individual and the organisation, groups within the organisation or the organisation and society.

- Should a company monitor websites to check if staff are:
  - using company time and resources for private purposes;
  - downloading pornographic or paedophilic material?
- Should an Internet search engine provide information to government about the sites an individual has visited or their contributions to an Internet discussion group?
- Should a healthcare computer system that contains information about, say, a parent's alcohol problem share that information with a social care system which holds information about his or her children?
- How carefully should companies protect individual data?
- Is it right for companies to send unsolicited messages (**spam**) to mainly vulnerable people inviting them to send money to the advertiser in return for which they will receive large sums of money (that of course never arrive)?

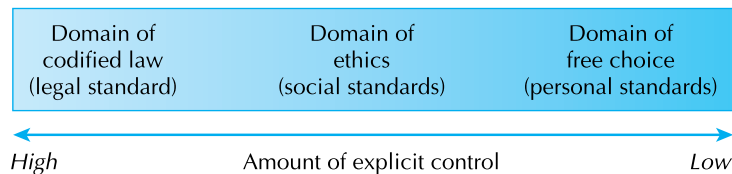
Often the actions illustrated are not illegal – but some believe they are unethical.

### ● Three domains of human action

Figure 3.5 identifies three 'domains' of human action. Some actions fall within the domain of codified law – they are the subject of legislation that can be enforced in the courts. Some nations have laws about data privacy and intellectual property that influence what some people choose to do.

At the other extreme is the domain of free choice – areas not covered by the law in a particular jurisdiction, so that individuals can act as they wish.

In between is the ethical domain, covering activities that laws do not prohibit, but in respect of which some people are constrained by shared principles in their society about



**Figure 3.5** Three domains of human action

Source: From Daft, *Management* (5th edition) (2000). Copyright © 2000. Reprinted with permission of South-Western, a division of Thomson Learning.

acceptable behaviour. To them, an ethically acceptable action is one that is legal *and* meets the shared ethical standards of the society. Boddy (2008) discusses alternative ethical codes more fully – see also the Research Summary below.

### Research Summary

### Criteria for justifying an action

Philosophers have identified principles that people use to justify an action – including moral principles, utilitarianism, human rights.

- **Moral principles:** This approach evaluates whether or not a decision is consistent with an accepted moral principle. Societies develop rules that members generally accept as the way to behave – such as not to steal from each other, and that people have a right to privacy. If an act would breach this principle, it would be unethical.
- **Utilitarianism:** Someone following this approach would consider the effect of an action on overall human well-being, and would see an act as ethical if it produces more pleasure than pain. If it harms some people but benefits more, then it is ethical – and vice versa.
- **Human rights:** This is the idea that people have fundamental rights, such as consent, privacy, free speech or fair treatment. Monitoring employee e-mails could violate the right to privacy, and so be unethical – unless there were good reasons to believe the e-mails were being used to harm others.

Source: Boddy (2008), pp. 149–50.

### Activity 3.5 Justifying actions

Choose one of the ethical dilemmas posed earlier in the section.

- Identify three arguments you could use to justify a course of action, each based on one of these ethical reasons.
- Then identify three arguments, each based on one of these ethical reasons, stating why that action would be unethical.
- Compare your answers with another student's.

### ● Ethics and stakeholder interests

'Acceptable behaviour' is clearly a highly subjective matter, yet someone managing an IS project needs a practical way of considering ethical issues that arise. One way of doing so is to consider ethics not as an abstract set of ideas, but in relation to the organisation's stakeholders. They have interests, including views about what constitutes ethical behaviour.

Stakeholders are individuals, groups or other organisations with an interest in, or who are affected by, what the enterprise does (Freeman, 1984). Organisations depend on acquiring resources from their environment, which is made up of a network of stakeholders. Managers (whether in the private or public sector) need to ensure that they understand what other stakeholders expect and that they meet those expectations to an acceptable degree or they may withdraw their support:

*Failure to attend to the information and concerns of stakeholders clearly is a kind of flaw in thinking or action that too often and too predictably leads to poor performance, outright failure or even disaster. (Bryson, 2004, p. 23)*

### Stakeholder expectations

Stakeholders typically include customers, shareholders, employees, suppliers and the communities in which the organisation works – and in the present context that could include hackers or members of the Open Software movement. Table 3.3 lists likely stakeholders in an IS, and their possible interests – which would then shape how they see an IS-related decision.

Those responsible for IS projects need to be aware not just of stakeholder interests, but also their relative power. Boonstra and Harison (2008) studied a project to install an electronic patient record system in a region of the Netherlands. All agreed that a common record, containing up-to-date information about a patient from the hospital, GP and chemist, would benefit patient care. However, the proposed system was never implemented, because the hospital that proposed the system had no power over GPs and chemists. Doctors and chemists refused to join the project, even though all agreed it would benefit patients.

Google's experience in opening its search business in China illustrated very clearly the conflicting expectations of some stakeholders: it was very much in the interests of shareholders to expand the business, and many potential customers were keen to use the service. The Chinese government had other views, which required Google to agree to conditions to which others objected – see chapter case Part 4. What this suggests is that ethics cannot usefully be considered in isolation, but within a context.

**Table 3.3** Stakeholders and their expectations in relation to IS ethics

Stakeholders	Expectations
Employees	Transparent policies about surveillance and monitoring at work.
IT professionals	Policies consistent with their (diverse) ethical views on (e.g.) intellectual property rights.
Shareholders	Acceptable return on investment.
Suppliers (e.g. to retailers)	Fair use of information about products from electronic point of sales systems.
Customers (e.g. of banks)	That companies which hold data about them respect their privacy AND ensure data is secure against fraud or financial loss.
Citizens	That public bodies holding data about them respect their privacy AND ensure data is secure against fraud or financial loss. That others cannot use the Internet for criminal activities.
Creative writers, musicians, etc.	Payment, respect for copyright, patents and/or intellectual property rights.
Governments	Obey laws and regulations on data security, not using the Internet for illegal purposes.
Open source advocates	Software code to be public, so that others can use, modify and distribute the work.
Hackers	Being able to gain access to computer files to alter or copy them.

# Google in China

[www.google.com](http://www.google.com)

In early 2006 Google received unwelcome publicity in the Western media over the terms on which the company had launched its search engine service in China. To obtain permission to offer the service there, the company had acquiesced to the Chinese government's tough censorship laws, which mean that sites containing politically sensitive terms such as 'Tiananmen Square' or 'political prisoners' cannot be accessed by a search using those terms. The Chinese government's Internet censorship policy raised international concern about freedom of expression and human rights violation, in a country

that has traditionally blocked the free flow of information.

Google managers defended their decision by arguing that they have to comply with local law in China, just as they would in any country. One argued that 'in an imperfect world, we had to make an imperfect decision', and recognised that the constraints Google operates under in China are inconsistent with the company's core commitments to user interests and providing access to information (Fry, 2006, p. 137).

*Source:* Fry (2006) and other published sources.

## CASE QUESTIONS 3.3

Which ethical principles appear to have guided (a) the Chinese government; (b) Google management; (c) Western critics of Google?

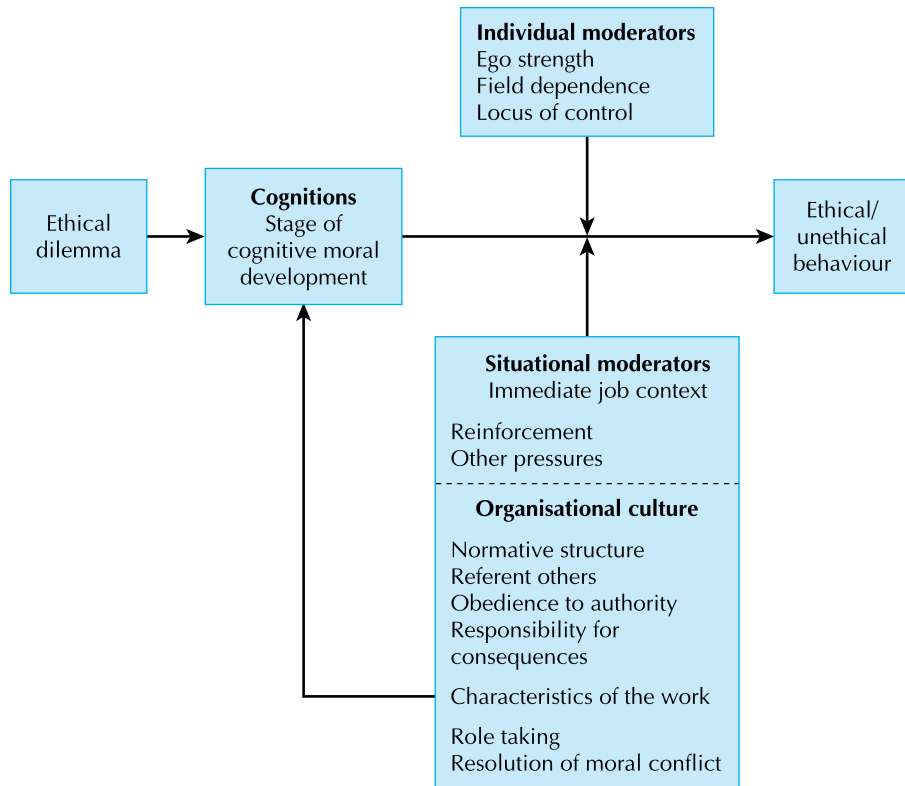
Would it be possible for Google to have reconciled its commercial interests with its stated ideal of making the world's information accessible to all?

### ● Ethics in context

The ethical choices people make reflect the social context, so understanding why people act the way they do may be helped by using an **ethical decision-making** framework. This examines the influence of both individual characteristics (such as personal value systems) and organisational contexts (such as its structure and distribution of power) on ethical choices. Trevino (1986) sees ethical (or unethical) action as the result of individual and situational components – shown in Figure 3.6.

### ● Summary

- Stakeholders have expectations of an organisation, and assess how an IS project will affect those interests.
- Those managing such projects are most likely to succeed if they take account of stakeholder power and interests.
- Guidelines that people use to justify their actions as ethical include:
  - moral principles – a decision is consistent with generally accepted principles within a society;



**Figure 3.6** Trevino's model of ethical decision-making

Source: Trevino (1986). Reproduced with permission.

- utilitarianism – a decision that benefits more people than it harms;
- human rights – a decision that enhances or protects a person's human rights.
- Stakeholders' expectations, including those relating to ethical issues, may conflict, and a task for management is to decide which of those interests to take into account, in that context.
- Trevino's ethical decision-making model shows how a person's choice of behaviour is affected not only by personal considerations but also by their beliefs about the social context in which they work (what others do, what is acceptable).

### 3.7 Can ethical behaviour pay?

In deciding how to deal with the political, economic, cultural, legal and ethical dimensions of the context, managers relate them to what they perceive to be the interests of the business. At one extreme, some people and companies take the view that it is profitable to act illegally, and to make money quickly by evading the law – unauthorised copying, software piracy, illegally downloading music or videos. Others act in ways that

do not break the law, but others see as unethical – sending junk e-mails offering non-existent prizes in return for money. Others act carelessly or choose not to spend sufficient time or money on data security. Others decide to act ethically.

It is easy to advocate ethical behaviour – but unless this contributes in some way to an organisation's performance, the business may not survive. Competitors who avoid the costs and distractions of ethical behaviour may perform better and satisfy their shareholders more fully. David Vogel suggests that in a competitive economy virtuous behaviour is only sustainable if it brings some competitive benefit to the company – see the Research Summary below.

### Research Summary

### David Vogel on responsibility and strategy

Vogel (2005) examines the claims for and against the idea that corporations should act responsibly, by analysing the forces driving the corporate responsibility (CR) movement. He concludes that ethical behaviour is only sustainable if 'virtue pays off'. He acknowledges that not every business expenditure or policy needs to directly increase shareholder value, and that many of the benefits of responsible action are difficult to quantify. But ultimately ethical action is both made possible and constrained by market forces.

Market forces encourage and also limit responsible corporate action. Encouraging forces include demand for responsibly made products, consumer boycotts or challenges to a firm's reputation by pressure groups. These lead many firms to accept that they need to be accountable to a broad community of stakeholders. Virtuous behaviour can make business sense for some firms in some areas in some circumstances:

*There is a place in the market economy for responsible firms. But there is also a large place for their less responsible competitors. (p. 3)*

While some companies can benefit from acting responsibly, market forces alone cannot prevent others from acting in less responsible ways, and profiting from doing so.

Source: Vogel (2005).

Vogel's ideas are valuable because they offer some guidance as to how managers can decide between conflicting stakeholder interests, including those that involve ethical issues. Ethical beliefs are part of the context in which people introduce IS, which managers balance alongside other contextual pressures expressed by stakeholders. Ethical behaviour in relation to, say, data privacy or intellectual property is most likely to be sustainable if it contributes to corporate performance, which it may do in one of four ways – enlightened self-interest, corporate mission, negative publicity and corporate strategy.

### ● Enlightened self-interest

Shareholders expect an acceptable financial return and managers may sometimes be able to deliver that by meeting, to some degree, the expectations of other stakeholders. This may have a cost, but can also avoid negative publicity or enhance the company's reputation – it is enlightened self-interest.

*Firms with this perspective will invest in social initiatives because they believe that such investments will result in increased profitability. (Peloza, 2006)*

### ● Corporate mission

Some companies place ethical behaviour at the heart of their business, reflecting the beliefs and values of founders and senior managers. They gain media attention and increase customer loyalty with little advertising. An example is the Co-operative Bank (now known as Co-operative Financial Services), founded as a cooperative enterprise in the 1870s. It launched its present ethical policy in May 1992 and is a prominent example of this approach. Google's mission statement 'don't be evil' is an example from the online world.

### ● Negative publicity

Many companies differentiate themselves less by their products than by the ideas, emotions and images that their brand conveys. Managers who allow their brand to become associated with being indifferent to privacy issues, careless with information or unfair in dealing with copyright issues are risking their reputation. Adopting responsible practices in these areas enables a firm to imbue the brand with positive themes that coincide with the beliefs of many customers. The value of a positive reputation is:

*precisely because (developing one) takes considerable time and depends on a firm making stable and consistent investments. (Roberts and Dowling, 2002)*

### ● Corporate strategy

If customers have concerns about the use of personal information collected during an online transaction, they will be less inclined to use that medium. It makes sense for any business that wants to build an online presence to ensure customers are confident the company will handle data responsibly. Roman (2007) developed and tested an instrument to measure consumers' perceptions regarding the ethics of online retailers, which have a strong influence on repeat buying behaviour – see the Research Summary, right.

Some firms invest in educational projects to improve the social climate in which the firm operates or to ensure long-term supply of staff. In coordinating such a programme, Cisco (a supplier of switching equipment for computer networks) aligns its economic and social goals by ensuring a future supply of well-trained employees.

### ● Summary

- Ethical behaviour is only sustainable if it contributes in some way to organisational performance.
- It can do so in several ways, by developing IS policies that are ethical *and* contribute to:
  - enlightened self-interest;
  - corporate mission;
  - avoiding negative publicity;
  - corporate strategy.

## Research Summary

### What factors do consumers value in online retailers?

Roman (2007) observed that, while online retailing is growing rapidly, so are customers' concerns about the ethics of such retailers. Identifying, and then addressing, these concerns will affect the development of this business method.

Through a process of literature review, in-depth interviews and focus group interviews with online customers, the research team developed a set of measures that appeared likely to shape consumer attitudes to online retailing. These were then refined and tested in two large surveys, through which the researchers confirmed the validity of the measures. These were the following.

- **Security:** the safety of the financial aspects of the transactions, and the protection of credit card data from unauthorised access.
- **Privacy:** individual control over the disclosure and later use by the organisation of personally identifiable information about the consumer – for example about not selling data to other companies for marketing purposes, expressed in a clear and credible privacy policy.
- **Non-deception:** the extent to which the consumer believes the online retailer does not use deceptive practices to persuade consumers to buy things they may not want, making exaggerated claims about a product or offering services (like air tickets) at invitingly low prices, but which it is in practice almost impossible to buy.
- **Fulfilment/reliability:** relating to the accurate display and description of a product so that what consumers receive is what they thought they had ordered, as well as the delivery of the product within the promised time.

The paper concludes that the research has developed a scale to measure consumers' perceptions of the ethics of online retailers (CPEOR) made up of four measurable dimensions – privacy, security, non-deception and fulfilment. The more companies are able to meet consumers' expectations in these areas, the more likely they will buy online.

*Source:* Roman (2007).

## Conclusions

Stakeholders promoting and developing an IS do so within a context that shapes how they design it, the features they value and how they expect people to use it. As people use the system *their* social context will shape their responses – which may or may not be what the system's designers or promoters expected. The outcomes will reflect the system's technical features – which will be much the same for everyone – and the social context in which people use it. The interaction model predicts that, as people in a society come to accept and use a system as part of their normal experience, and in doing so bring about changes in that society, the change becomes embedded as normality.

Stakeholders – people and groups with expectations of the organisation – give expression to the political, economic, cultural and legal dimensions of the context. They have their distinct interests and draw upon evidence and ideas in the social context to add legitimacy to their case – seeking support in political arrangements, relating their concerns to cultural differences or calling for legal redress to solve conflicts of interest. At the same time they will be trying to change or support aspects of the context so that it serves

them better – lobbying for more (or less) data privacy, for access to markets (or protection from competition), or for more (or less) protection of intellectual property.

Some stakeholders will try to influence an organisation's ethical policies regarding IS, especially in the areas of data protection and intellectual property. Vogel advises, a company that chooses to act ethically may face severe competitive challenges from those that do not. To be able to operate a sustained ethical policy, the company should aim to ensure that its ethical policies add value to the business in some way, such as by meeting the needs of a particular group of customers or being in some other way consistent with wider strategy.

Throughout the chapter we have stressed the interaction between context and organisation. While the political, cultural and legal contexts clearly affect an organisation's position and policies, managers are not passive – they can themselves aim to change the context in a way that helps their strategy.

## Chapter questions

1. Explain, with new examples, how the political context has affected a company's Internet business, and how companies seek to shape that political context.
2. The cultural context has many dimensions. Which of these are most likely to affect an information system, and how may this vary between countries?
3. Give examples of how IS can threaten individual data privacy.
4. What are the principles underlying the different approaches to data protection in the United States and in Europe?
5. What do you understand by the term 'intellectual property' and why has the Internet made this harder to protect?
6. Give examples from the chapter of specific instances in which stakeholders have affected the outcomes of an IS project.
7. Explain the three ways of justifying a decision as ethical, and give an example to illustrate your explanation.
8. What is the central theme of David Vogel's theory that there is a 'market for virtue'?
9. How can a company ensure that ethical information practices contribute to company performance?

## Further reading

Fishman, K.D. (1982) *The Computer Establishment*, McGraw-Hill Osborne Media, San Francisco, CA. One of the first books to treat computing as a serious business. The author describes a mature industry of mainframe computing that was about to be overwhelmed by the microprocessor revolution – a dramatic change in context.

Two sources with more information about Google – the first an inside story of its growth, the second a European reaction to the GoogleLibrary project:

Vise, D.A. (2005) *The Google Story*, Macmillan, New York.

Jeanneney, J.-N. (2007) *Google and the Myth of Universal Knowledge*, University of Chicago Press, Chicago.

These three empirical studies are useful for their results, and are also good examples of how to conduct research in this area from the initial idea, through developing the research instruments, analysing results and presenting conclusions:

McGowan, M.K., Stephens, P. and Gruber, D. (2007) 'An exploration of the ideologies of software intellectual property: the impact on ethical decision making', *Journal of Business Ethics*, 73(4), 409–24.

Roman, S. (2007), 'The ethics of online retailing: a scale development and validation from the consumer's perspective', *Journal of Business Ethics*, 72(2), 131–48.

Schwaig, K.S., Kane, G.C. and Storey, V.C. (2006), 'Compliance to the fair information practices: how are the Fortune 500 handling online privacy disclosures?', *Information & Management*, 43(7), 805–20.

