Chapter 4
E-environment

Learning outcomes

- Identify the different elements of an organisation macro-environment that impact on an organisation's digital business and digital marketing strategy

- Assess the impact of legal, privacy and ethical constraints or opportunities on a company

- Assess the role of macro-economic factors such as economics, governmental digital business policies, taxation and legal constraints

Management issues

- What are the constraints such as legal issues which should be taken into account when developing and implementing a digital business strategy?

- How can trust and privacy be assured for the customer while seeking to achieve marketing objectives of customer acquisition and retention?

- Assessment of the business relevance of technological innovation.

Macro-environment	Micro-environment (digital marketplace)
Social	The organisation
Legal, ethical and taxation	Its customers
Economic	Its suppliers
Political	Its competitors
Technological	Intermediaries
Competitive	The public at large

Table 4.1 Factors in the macro-and micro-environment of an organisation

Activity 4.1
Introduction to social, legal and ethical issues

- List all the social, legal and ethical issues that the manager of a sell-side e-commerce website needs to consider to avoid damaging relationships with users of his or her site or which may leave the company facing prosecution. You can base your answer on current issues which may concern you, your friends or your family when accessing a website.

Activity answer – this lecture

- Cookies – laws and consumer perception on placing these

- Are we limiting access to information from certain sections of society (social exclusion)?

- Privacy of personal information entered on a website

- Sending unsolicited e-mail

- Replying promptly to e-mail

- Copyright

- Site content and promotional offers/adverts are in keeping with the different laws in different countries

- Providing text, graphics and personality in keeping with social mores of different countries.

SLEPT factors

- Macro-environment
  - *Social*
  - *Legal*
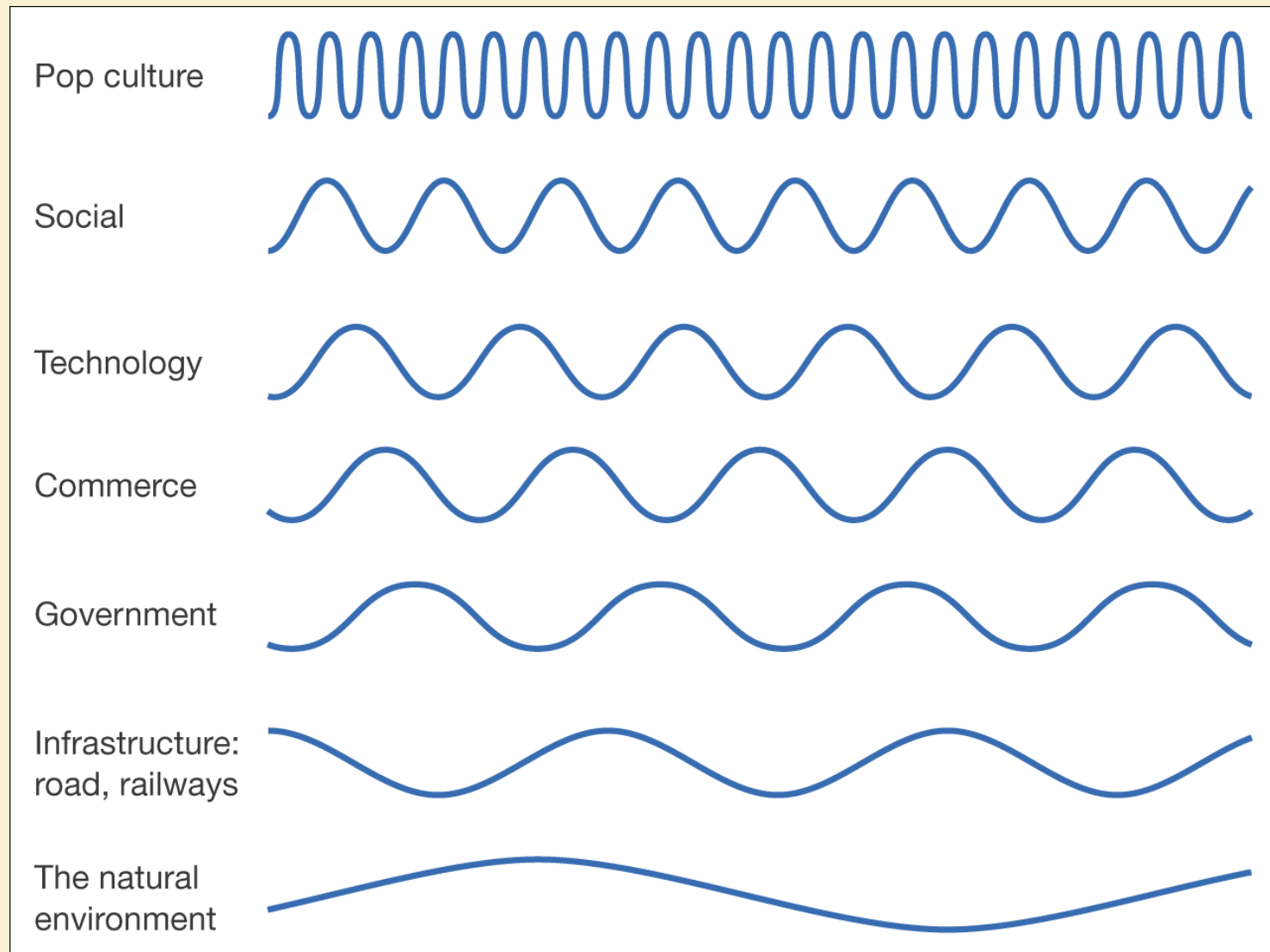 - *Economic*
  - *Political*
  - *Technological*

Figure 4.1 'Waves of change' – different timescales for change in the environment

Legal issue	Digital marketing activities affected
1 Data protection and privacy law	☑ Collection, storage, usage and deletion of personal information directly through data capture on forms and indirectly through tracking behaviour through web analytics ☑ Email marketing and SMS mobile marketing ☑ Use of viral marketing to encourage transmission of marketing messages between consumers ☑ Use of cookies and other techniques for personalising content and tracking on-site ☑ Use of cookies for tracking between sites, for example for advertising networks and company site using 'behavioural ad targeting' ☑ Use of customer information from social networks ☑ Use of digital assets installed on a user's PC for marketing purposes, e.g. toolbars or other downloadable utilities sometimes referred to as 'malware'

2 Disability and discrimination law	☑ Accessibility of content such as images for the visually impaired within different digital environments:
	  ☑ Website
	  ☑ Email marketing
	  ☑ Mobile marketing
	  ☑ IPTV
	☑ Accessibility affecting other forms of disability including hearing difficulties and motor impairment

Table 4.2 Significant laws which control digital marketing

Legal issue	Digital marketing activities affected

3 Brand and trademark protection	☑ Use of trademarks and brand names within:
	  ☑ Domain names
	  ☑ Content on site (for search engine optimisation)
	  ☑ Paid search advertising campaigns (e.g. Google AdWords)
	☑ Representation of a brand on third-party sites, including partners, publishers and social networks
	☑ Defamation of employees

4 Intellectual property rights	☑ Protection of digital assets such as text content, images, audio and sounds through digital rights management (DRM)

5 Contract law	☑ Validity of electronic contracts relevant to:
	  ☑ Cancellations
	  ☑ Returns
	  ☑ Errors in pricing
	☑ Distance-selling law
	☑ International taxation issues where the e-commerce service provider is under a different tax regime from the purchaser

6 Online advertising law	☑ Similar issues to traditional media
7 Social media	☑ Representation of offer ☑ Causing offence (e.g. viral marketing) ☑ Misrepresenting a company by posting a recommendation although the employee works for the company ☑ Defamation – libel against other social network users ☑ Privacy of customer information in social media ☑ Intellectual property – ownership of customer information in social media ☑ Promotions and competitions within social media sites

Table 4.2 Significant laws which control digital marketing (Continued)

Social factors

- E-commerce service adoption
  - *Cost of access*
  - *Value Proposition*
  - *Ease of use*
  - *Security*
  - *Fear of the unknown*
- *Understanding user's access requirements*
- *Usage of the online channel*
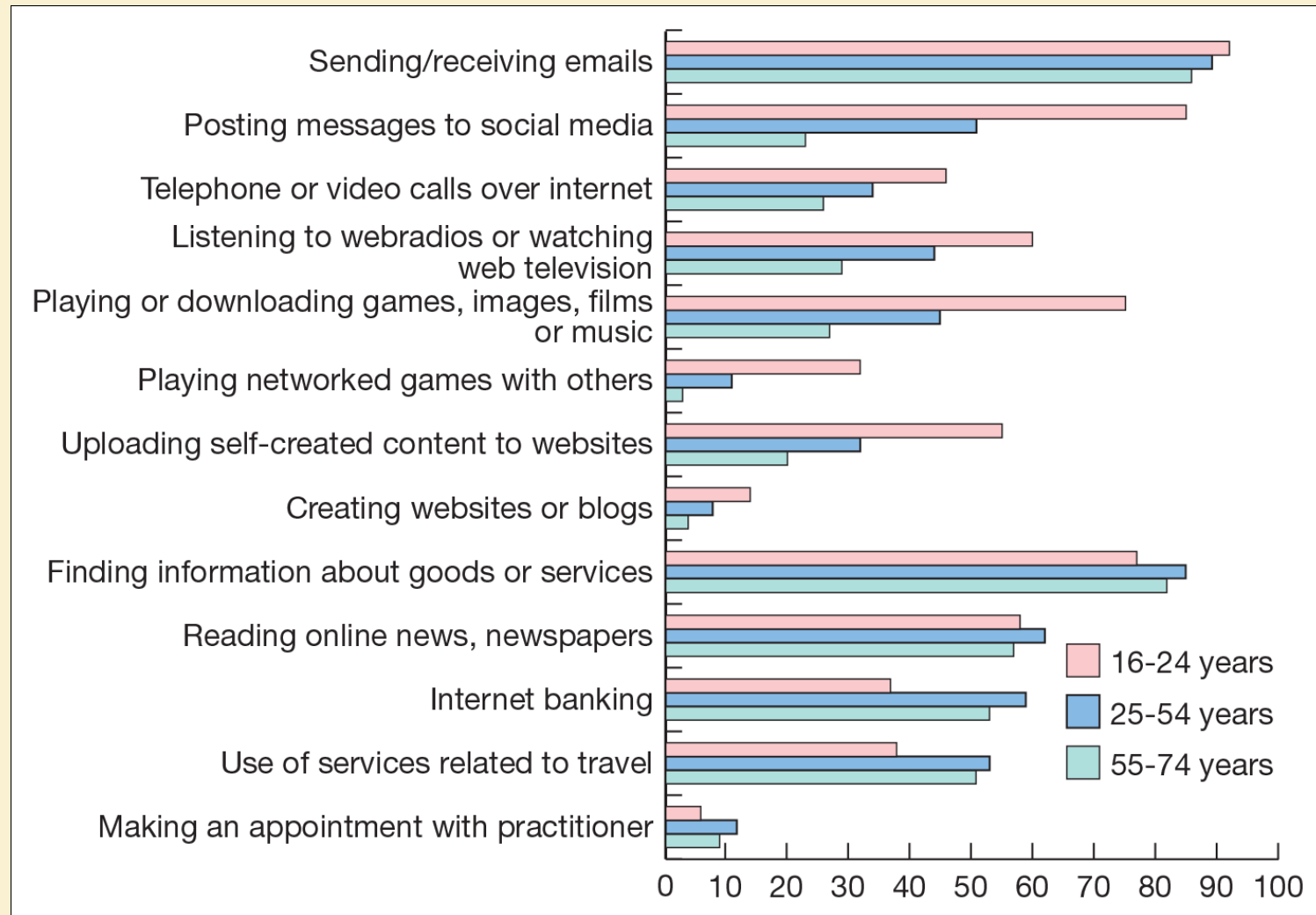
Social factors – usage of the online channel

Figure 4.2 Applications of using the Internet
Source: EuroStat (2012).
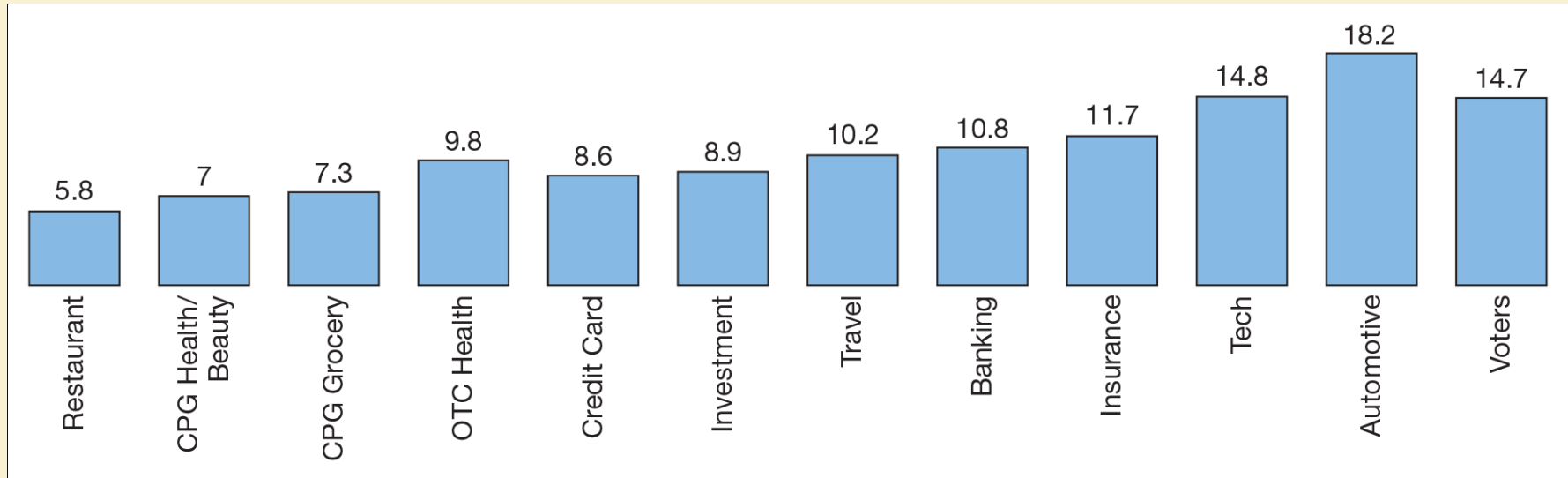
Social factors – usage of the online channel

Figure 4.3 Variation in number of sources on information used to inform buying decision by sector

Source: Google Shopper Sciences (2011).

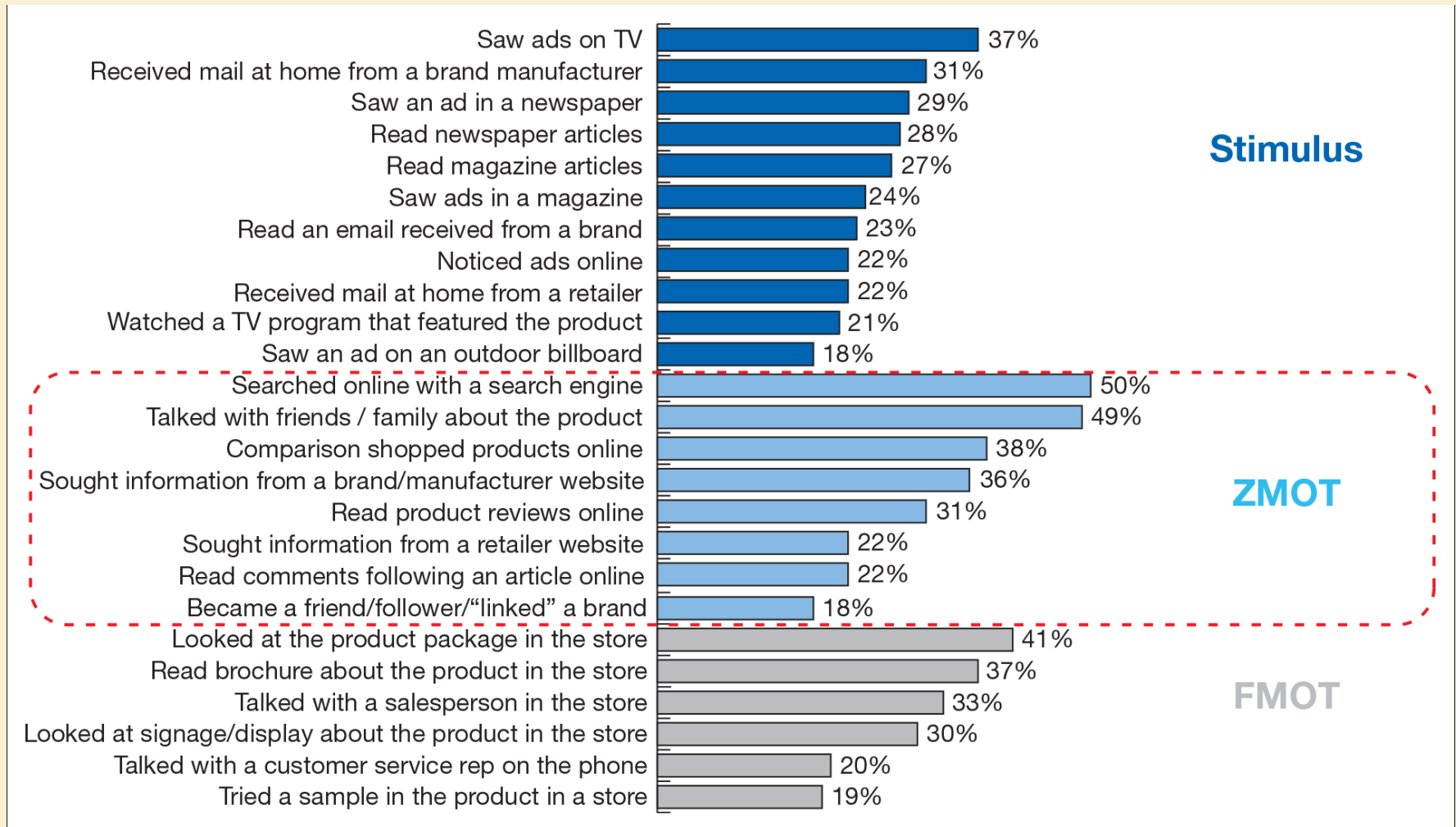# Social factors – usage of the online channel

Figure 4.4 The influence of different information sources on purchase. ZMOT = Zero Moment of Truth (before visiting store), FMOT = First Moment of Truth (in-store)

Social factors – motivation and online purchases

- Motivation for use of online services

  - Community
  - Entertainment
  - Product trial
  - Information
  - Transaction
  - Game

  - Survey
  - Downloads
  - Interaction
  - Search
  - Exploration
  - News

- Purchased online
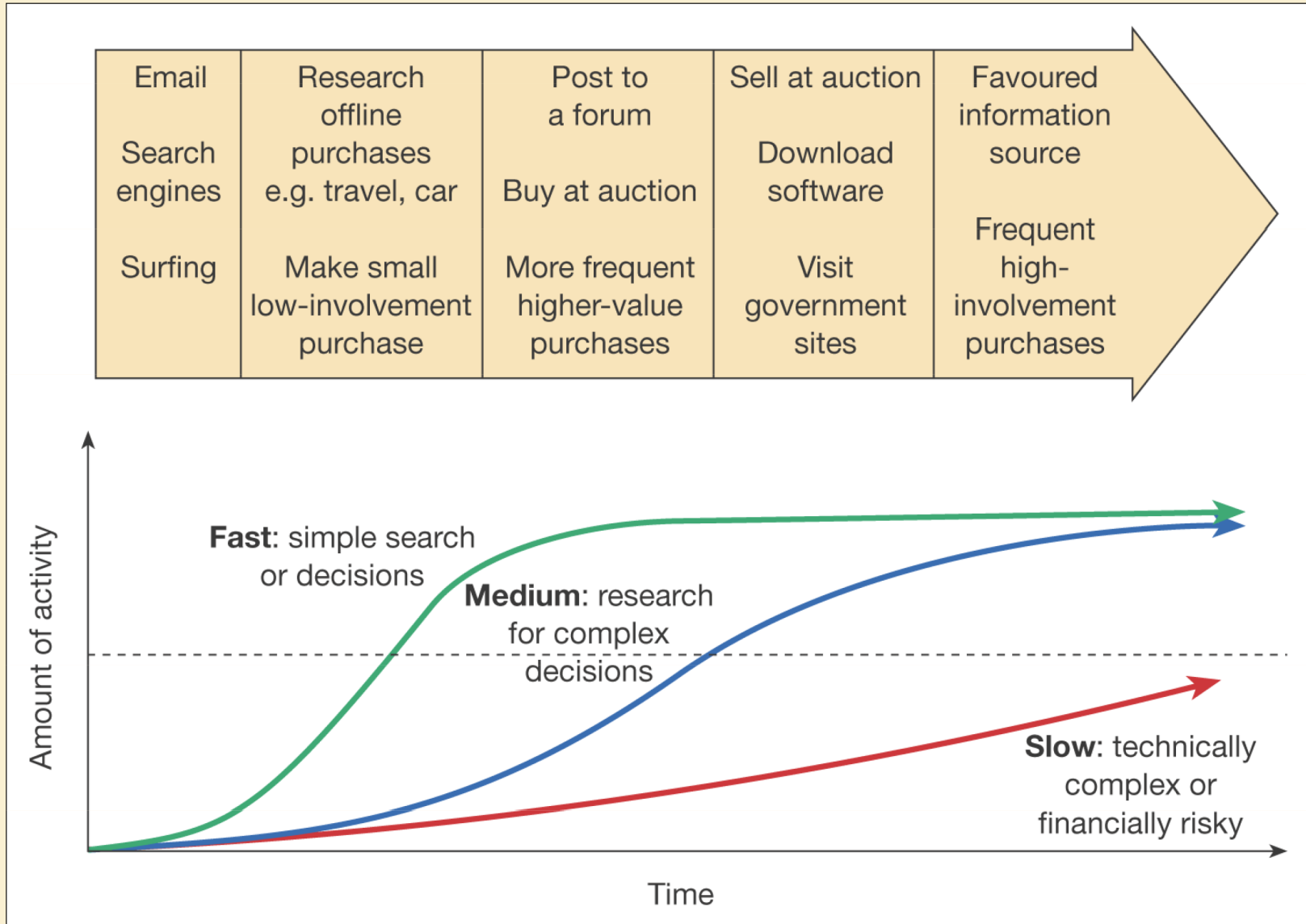
Social factors – online purchases

Figure 4.5 Development of experience in Internet usage
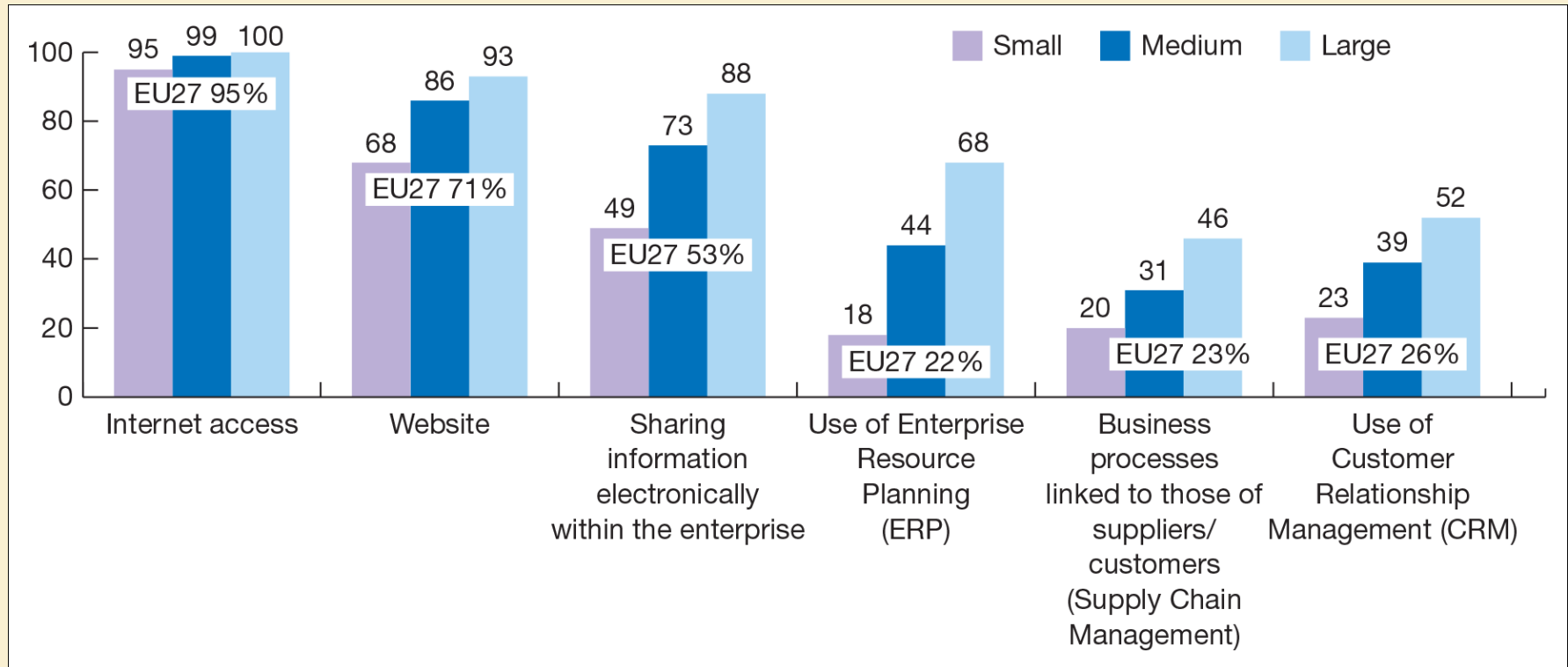
Adoption of digital business by organisations

Figure 4.6 Enterprises adopting technologies for digital business, by size class, EU27, 2012

Source: EuroStat (2013).

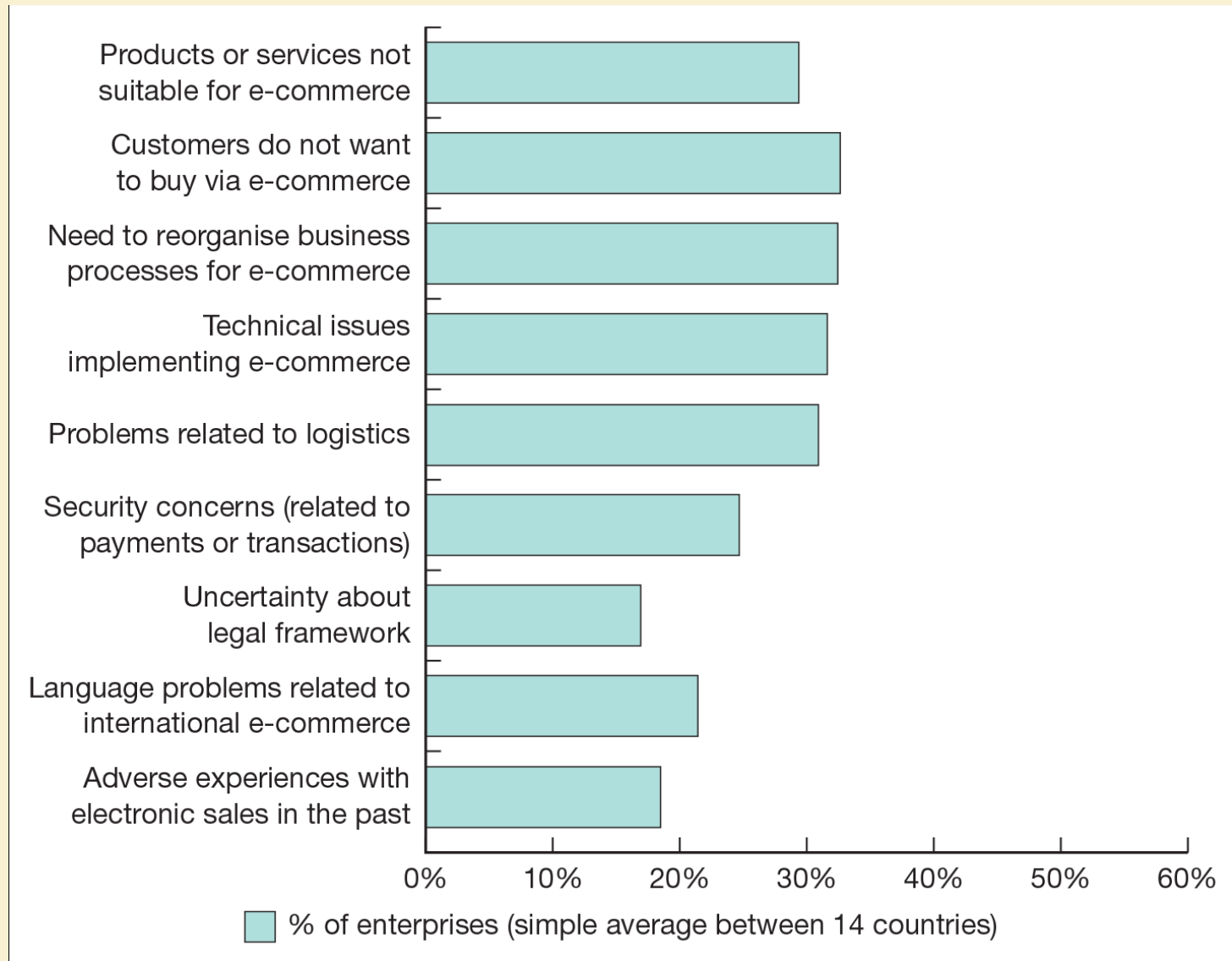# Adoption of digital business by organisations

Figure 4.7 Barriers to adoption of e-commerce services of European countries

Source: European Commission (2010): http://ec.europa.eu/information_society/digitalagenda/documents/edcr.pdf. No longer available.

Legal factors

- ## Ethical Standards

  - *Practice or behavior which is morally acceptable to society*

- ## *Privacy legislation*

  - *Moral right of individuals to avoid intrusion into their personal affairs by third parties.*

Fraud Type	2011	2012	% Change
Identity Fraud – Total	113,259	123,589	+9.1%
Application Fraud – Total	43,263	39,868	−7.8%
False Insurance Claim	396	279	−29.5%
Facility Takeover Fraud	25,070	38,428	+53.3%
Asset Conversion	532	337	−36.7%
Misuse of Facility	53,996	45,824	−15.1%
Victims of Impersonation	96,611	112,179	+16.1%
Victims of Takeover	25,250	38,686	+53.2%

See more at: www.cifas.org.uk/fraudtrendstwentytwelve#sthash.gmmvYOlJ.dpuf

Notes:

Identity fraud cases include cases of false identity and identity theft.

Application fraud/false insurance claim relates to applications or claims with material falsehood (lies) or false supporting documentation where the name has not been identified as false.

Facility takeover fraud occurs where a person (the 'facility hijacker') unlawfully obtains access to details of the 'victim of takeover', namely an existing account holder or policy holder (or of an account or policy of a genuine customer or policy holder) and fraudulently operates the account or policy for their own (or someone else's) benefit.

Asset conversion relates to the sale of assets subject to a credit agreement where the lender retained ownership of the asset (for example a car or a lorry).

Misuse of facility is where an account, policy or other facility is used fraudulently.

Table 4.3 Identity fraud categories in the UK
Source: CIFAS (2013).

Legal factors

- *Value of personal data*

  - *Main information types*

    - *Contact information*

    - *Profile information*

    - *Platform usage information*

    - *Behavioral information (on a single site)*

    - *Behavioral information (across multiple sites)*

Type of information	Approach and technology used to capture and use information
1. Contact information	• *Online forms* – online forms linked to customer database • *Cookies* – are used to remember a specific person on subsequent visits
2. Profile information including personal information	• *Online forms* • Cookies can be used to assign a person to a particular segment by linking the cookie to a customer database record and then offering content consistent with their segment
3. Access platform usage	• Web analytics system – identification of computer type, operating system and screen characteristics based on http attributes of visitors

Table 4.4 Types of information collected online and related technologies

Type of information	Approach and technology used to capture and use information
4. Behavioural information on a single site	• Purchase histories are stored in the sales order database. Web analytics store details of IP addresses against clickstreams of the sequence of web pages visited • Web beacons in e-mail marketing – a single-pixel GIF is used to assess whether a reader had opened an e-mail • First-party cookies are also used for monitoring visitor behaviour during a site visit and on subsequent visits • **Malware** can collect additional information such as passwords
5. Behavioural information across multiple sites	• Third-party cookies used for assessing visits from different sources such as online advertising networks or affiliate networks (*Chapter 9*) • Search engines such as Google use cookies to track advertising through its AdWords pay-per-click programme • Services such as Hitwise (www.hitwise.com) monitor IP traffic to assess site usage of customer groups within a product category

Table 4.4 Types of information collected online and related technologies (Continued)

Ethical issues and data protection

- Ethical issues concerned with personal information ownership have been usefully summarised by Mason (1986) into four areas:

1. *Privacy* – what information is held about the individual?

2. *Accuracy* – is it correct?

3. *Property* – who owns it and how can ownership be transferred?

4. *Accessibility* – who is allowed to access this information, and under which conditions?

Ethics – Fletcher's view

- Fletcher (2001) provides an alternative perspective, raising these issues of concern for both the individual and the marketer:

1. Transparency – who is collecting what information?

2. Security – how is information protected once collected by a company?

3. Liability – who is responsible if data are abused?

The eight principles for data protection

- Fairly and lawfully processed
- Processed for limited purposes
- Adequate, relevant and not excessive
- Accurate
- Not kept longer than necessary
- Processed in accordance with the data subject's rights
- Secure
- Not transferred to countries without adequate protection.
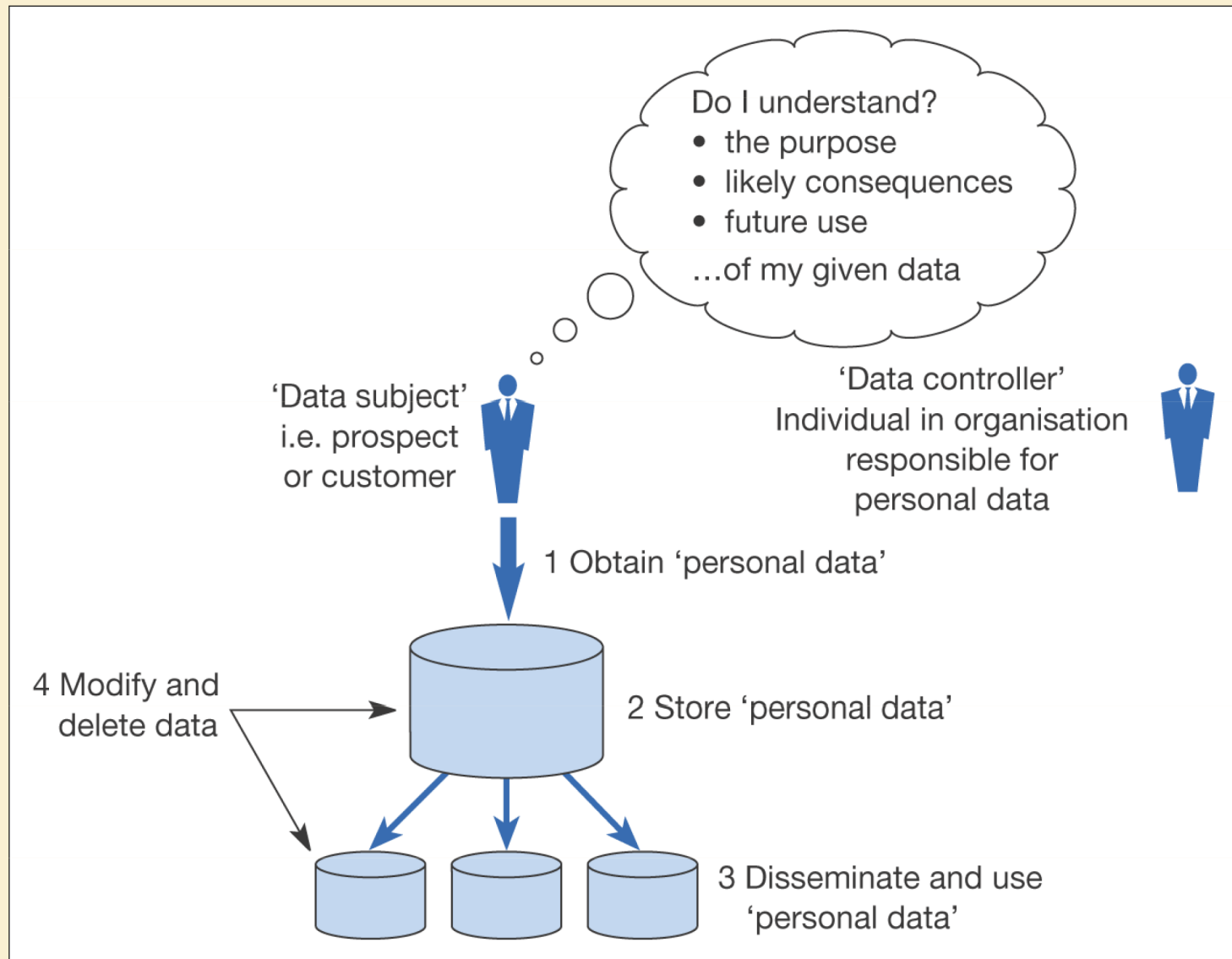
www.dataprotection.gov.uk

Figure 4.8 Information flows that need to be understood for compliance with data protection legislation

Legal factors – other e-commerce legislation

1. Marketing your e-commerce business

2. Forming an electronic contract

3. Making and accepting payment

4. Authenticating contracts

5. Email risks

6. Protecting intellectual property

7. Advertising on the internet

8. Data protection

Economic factors

- ## *E-economy*

  The dynamic system of interactions between a nation's citizens, businesses and government that capitalise upon online technology to achieve a social or economic good

- ## *Globalisation*

  The increase of international trading and shared social and cultural values

- ## Localisation

  Tailoring of web-site information for individual countries or regions

Economic factors - Localisation

- Singh and Pereira (2005) provide an evaluation framework for the level of localisation:

  – **Standardised websites (not localised)**. A single site serves all customer segments (domestic and international).

  – **Semi-localised websites**. A single site serves all customers; however, there will be contact information about foreign subsidiaries available for international customers. Many sites fall into this category.

  – **Localised websites**. Country-specific websites with language translation for international customers, wherever relevant. 3M (www.3m.com) has adapted the websites for many countries to local language versions. It initially focused on the major websites.

Economic factors - Localisation (Con't)

- **Highly localised websites**. Country-specific websites with language translation; they also include other localisation efforts in terms of time, date, postcode, currency formats, etc. Dell (*www.dell.com*) provides highly localised websites.

- **Culturally customised websites**. Websites reflecting complete 'immersion' in the culture of target customer segments; as such, targeting a particular country may mean providing multiple websites for that country depending on the dominant cultures present.

Political Factors

- ## Political actions enacted to control the adoption of Internet

  – Promoting the adoption benefits

  – Define legislation to protect privacy or control taxation

  – Lead companies to follow legislation

  – Establish international components for Internet coordination

- ## Political actions intented to improve the economic competitiveness

  – Establish a brand in e-commerce both domestically and internationally.

  – Transform existing businesses

  – Foster e-commerce creation and growth

  – Expand the e-commerce skills

  – Provide leadership in policy development

  – Government online should be a priority

Political Factors

- ## Approaches by governments to encourage use of the Internet
  - Increasing the penetration of 'access devices'
  - Increasing skills and confidence of target groups
  - Establishing 'passport' qualifications
  - Building trust, allaying fears
  - Direct marketing campaigns
- ## Approaches by governments to encourage e-business
  - Access, participation, and skills
  - Adoption of e-business
  - Confidence, trust, and security
  - E-government strategies and implementation
  - Environment for information economy firms
  - International dimensions

Technological factors

- Issues faced by managers when a new technology emerges
  - – 'wait-and-see' approach
  - – 'early adopter' approach
  - – intermediate approach
- Diffusion – adoption process
  - – innovators
  - – early adopters
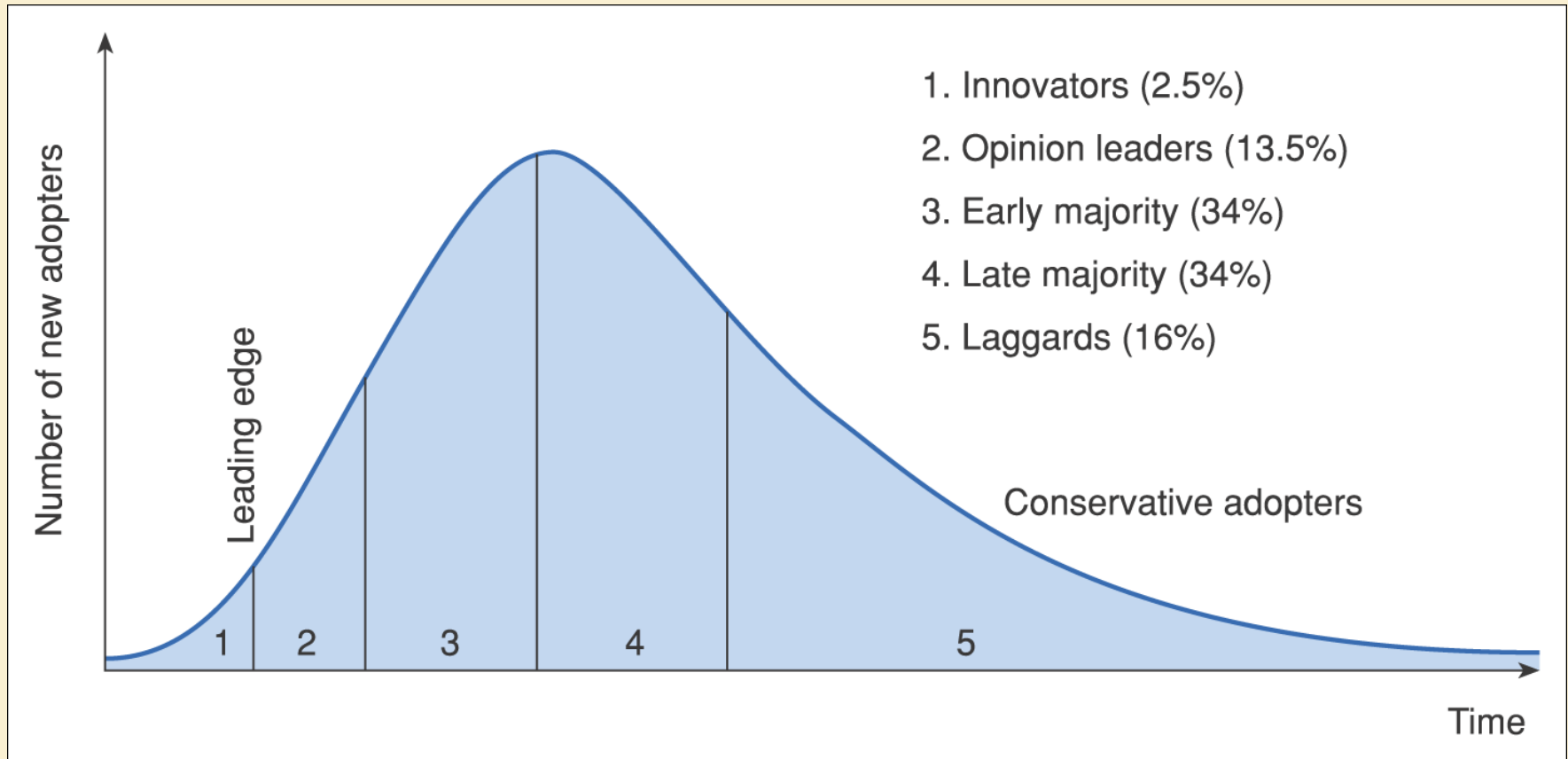 - – early majority
  - – late majority
  - – laggards

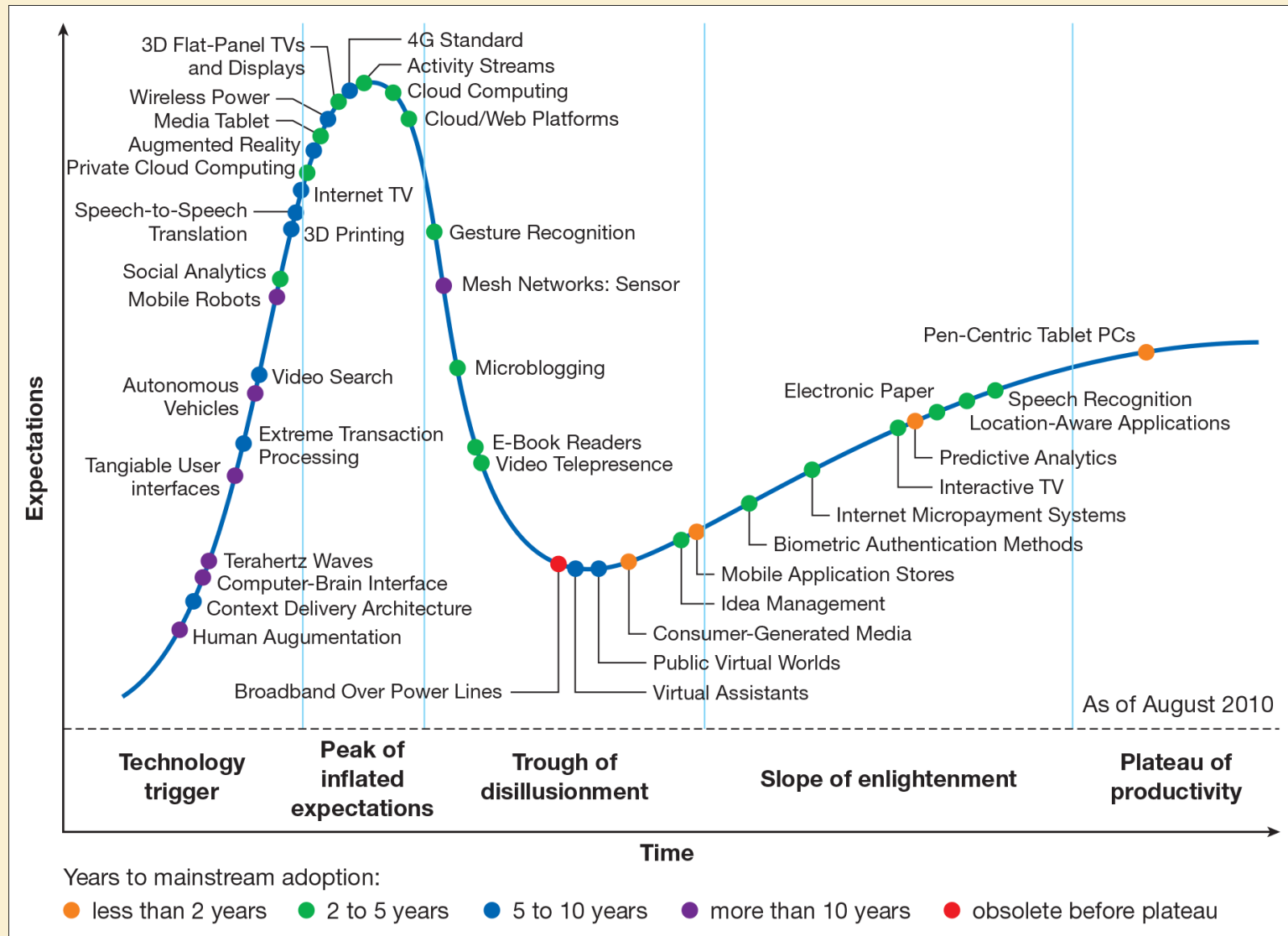Figure 4.12 Diffusion–adoption curve of a Gartner hype cycle

Figure 4.13 Example of a Gartner hype cycle
Source: Gartner (2010).

Technological factors

- Approaches to identify emerging technology
  - technology networking
  - crowdsourcing
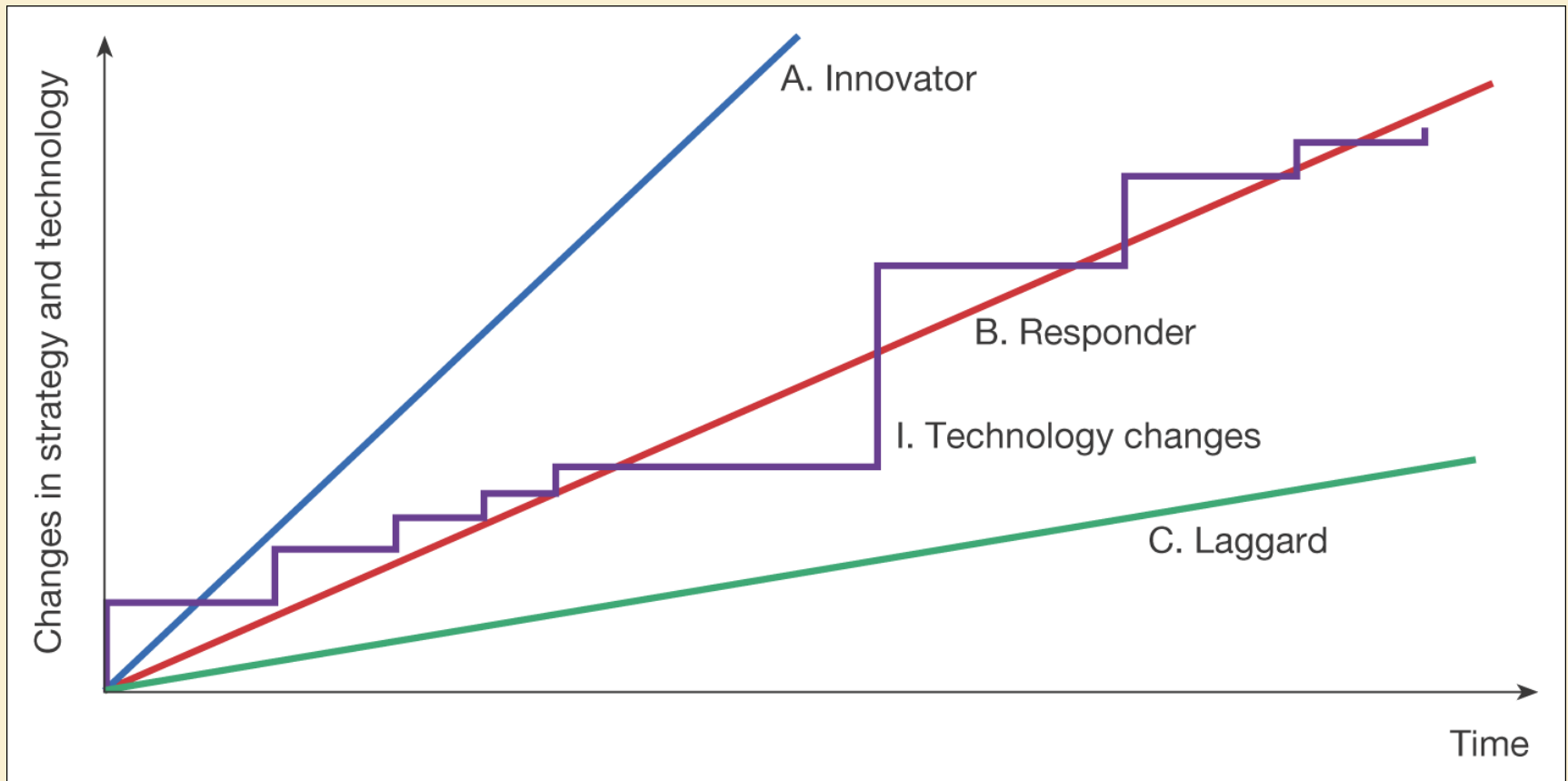 - technology hunting
  - technology mining

Figure 4.15 Alternative responses to changes in technology