



## Chapter 4:

# E-environment

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**E-Business**

### Learning outcomes

- ◆ Identify the different elements of an organization macro-environment that impact on an organizations e-business and e-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 governmental e-business policies, economics, taxation and legal constraints.

## سوال؟

- ◆ آیا سازمان ها می توانند بدون توجه به عوامل محیطی به توسعه کسب و کار بپردازند؟
- ◆ نقش و اهمیت عوامل محیطی بر روند توسعه کسب و کارها در گذر سالها چگونه بوده است؟
- ◆ چه عوامل محیطی بر توسعه کسب و کارها تاثیرگذار هستند؟

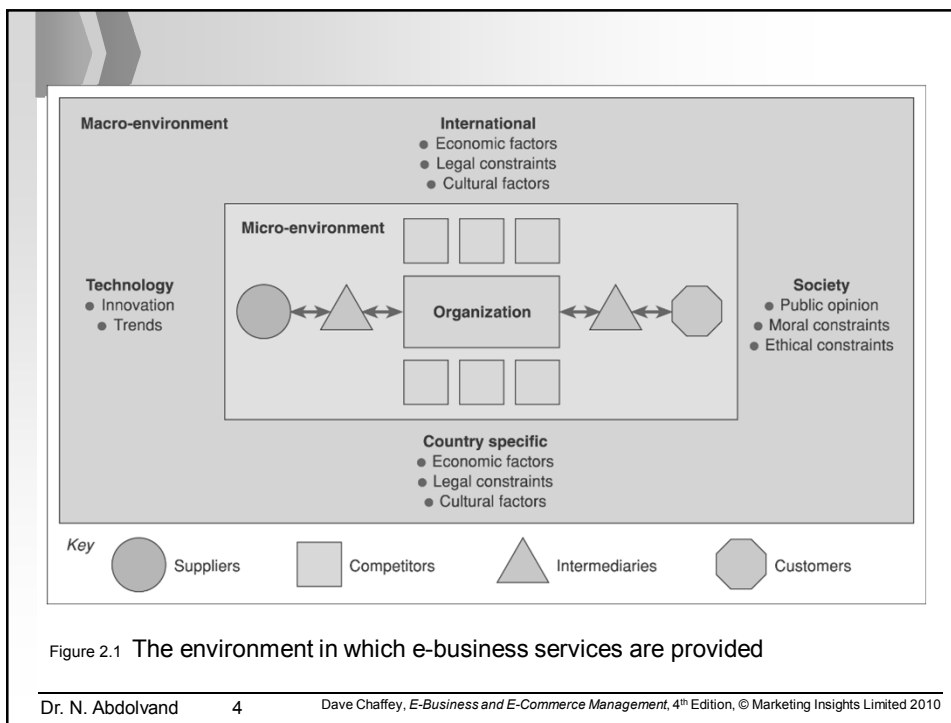


Figure 2.1 The environment in which e-business services are provided

## Environment constraints and opportunities

- ◆ Customers – which services are they offering via their web site that your organization could support them in?
- ◆ Competitors – need to be benchmarked in order to review the online services they are offering – do they have a competitive advantage?
- ◆ Intermediaries – are new or existing intermediaries offering products or services from your competitors while you are not represented?
- ◆ Suppliers – are suppliers offering different methods of procurement to competitors that give them a competitive advantage?

## Environment constraints and opportunities (Continued)

### Macro-environment

- ◆ Society – what is the ethical and moral consensus on holding personal information?
- ◆ Country specific, international legal – what are the local and global legal constraints for example, on holding personal information, or taxation rules on sale of goods?
- ◆ Country specific, international economic – what are the economic constraints of operating within a country or global constraints?
- ◆ Technology – what new technologies are emerging by which to deliver online services such as interactive digital TV and mobile phone-based access?

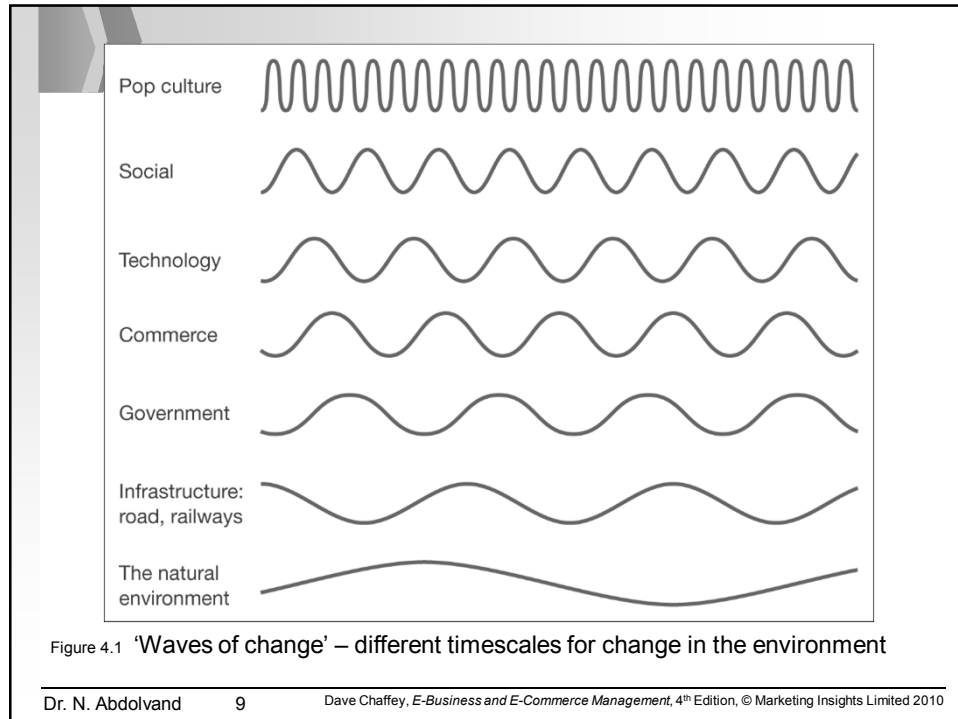
Table 4.1

Factors in the macro- and micro-environment of an organization

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

## SLEPT Framework

- ◆ Social-influence consumer perception of Internet use for e-commerce
- ◆ Legal & Ethical-determine what can be promoted and sold online
- ◆ Economic-affect spending patterns
- ◆ Political-Determine the adoption and the future of Internet
- ◆ Technological-offer new opportunities



## SLEPT Framework

- ◆ E-Commerce Manager has to monitor the changes of the Macro-environment (also called environment scan)
- ◆ Among the 5 factor type, Legal factor is one of the most important.
  - Data protection and privacy law
  - Disability and discrimination law
  - Brand and trademark protection
  - Intellectual property rights
  - Contract law
  - Online advertising law

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## Factors Govern

### E-commerce Adoption

- ◆ Cost of Access
- ◆ Value proposition
- ◆ Ease of use
- ◆ Security and trust
- ◆ Fear of the unknown
- ◆ Skills

### E-commerce Barriers

- ◆ No perceived benefit
- ◆ Lack of trust
- ◆ Security problems
- ◆ Lack of skills
- ◆ Cost

## Motivation for Using Online Services I

- ◆ The four motives which cut across cultures are:
  - Research (information acquisition),
  - communication (socialization),
  - surfing (entertainment) and
  - Shopping

Source: The revised Web Motivation Inventory (WMI) identified by Rodgers *et al.* (2007)

## Motivation for Using Online Services II

### ◆ **Community**

- Get to know other people
- Participate in an online chat
- Join a group.

### ◆ **Entertainment**

- Amuse myself
- Entertain myself
- Find information to entertain myself.

### ◆ **Product trial**

- Try on the latest fashions
- Experience a product
- Try out a product.

### ◆ **Information**

- Do research
- Get information I need
- Search for information I need.

### ◆ **Transaction**

- Make a purchase
- Buy things
- Purchase a product I've heard about.

### ◆ **Game**

- Play online games
- Entertain myself with Internet games
- Play online games with individuals from other countries.

## Motivation for Using Online Services II

### ◆ **Survey**

- Take a survey on a topic I care about
- Fill out an online survey
- Give my opinion on a survey.

### ◆ **Downloads**

- Download music
- Listen to music
- Watch online videos.

### ◆ **Interaction**

- Connect with my friends
- Communicate with others
- Instant message others I know.

### ◆ **Search**

- Get answers to specific questions
- Find information I can trust.

### ◆ **Exploration**

- Find interesting web pages
- Explore new sites
- Surf for fun.

### ◆ **News**

- Read about current events and news
- Read entertainment news.

## Trust in Different Information Sources

- Price comparison web sites (61%)
- Web sites of well-known brands (59%)
- Newspapers/magazines (58%)
- Customer web site reviews (58%)
- Expert web site reviews (57%)
- Retailer web sites (57%)
- Sales people in shops (50%)
- Content provided by ISPs (38%).

## E-Business Adoption by SMEs

SMEs have a lower adoption rate in comparison to larger enterprises. They can be classified into 4 categories

- Developers
- Communicators
- Web presence
- Transactors



## E-Business Adoption by SMEs

Assessing the risk and reward for SME adoption

- ◆ Revenue
- ◆ Reputation
- ◆ Strategic importance
- ◆ Regulatory compliance

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## Adoption

Number of new adopters

Time

1. Innovators (2.5%)  
 2. Opinion leaders (13.5%)  
 3. Early majority (34%)  
 4. Late majority (34%)  
 5. Laggards (16%)

Leading edge

Conservative adopters

Figure 4.12 Diffusion–adoption curve

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# INFORMATION & ECOMMERCE

## Personal Data and E-Commerce

Online businesses and e-marketer typical need these data

- Contact info
- Profile info—segmentation
- Access platform
- Behavioural info on a single site
- Behavioural Info on multiple sites

Type of information	Approach and technology used to capture and use information
1. Contact information	<ul style="list-style-type: none"> <li>• <i>Online forms</i> – online forms linked to customer database</li> <li>• <i>Cookies</i> – are used to remember a specific person on subsequent visits</li> </ul>
2. Profile information including personal information	<ul style="list-style-type: none"> <li>• <i>Online forms</i></li> <li>• 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</li> </ul>
3. Access platform usage	<ul style="list-style-type: none"> <li>• Web analytics system – identification of computer type, operating system and screen characteristics based on http attributes of visitors</li> </ul>

Table 4.6 Types of information collected online and related technologies

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Type of information	Approach and technology used to capture and use information
4. Behavioural information on a single site	<ul style="list-style-type: none"> <li>• 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</li> <li>• Web beacons in e-mail marketing – a single-pixel GIF is used to assess whether a reader had opened an e-mail</li> <li>• First-party cookies are also used for monitoring visitor behaviour during a site visit and on subsequent visits</li> <li>• Malware can collect additional information such as passwords</li> </ul>
5. Behavioural information across multiple sites	<ul style="list-style-type: none"> <li>• Third-party cookies used for assessing visits from different sources such as online advertising networks or affiliate networks (<i>Chapter 9</i>)</li> <li>• Search engines such as Google use cookies to track advertising through its AdWords pay-per-click programme</li> <li>• Services such as Hitwise (<a href="http://www.hitwise.com">www.hitwise.com</a>) monitor IP traffic to assess site usage of customer groups within a product category</li> </ul>

Table 4.6 Types of information collected online and related technologies (Continued)

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## Privacy and Trust in E-Commerce

- ◆ What are ethical standards?
- ◆ Why is it so important for e-commerce?
  
- ◆ What's privacy?
- ◆ Why privacy a big deal for e-commerce?

## Ethical issues and data protection

- ◆ Ethical issues concerned with personal information ownership have been usefully summarized 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 is 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](http://www.dataprotection.gov.uk)

## ECONOMIC, GLOBALIZATION & ...

### Economic & Competitive Factors

- ◆ The e-commerce potential would be determined by the economic health and competitive environment of the country.
- ◆ A 4-layer model was proposed to assess such e-economy environment by Booz Allen Hamilton (2002)

## Localization

- ◆ Singh and Pereira (2005) provide an evaluation framework for the level of localization:
  - **Standardized web sites (not localized).** A single site serves all customer segments (domestic and international) Many sites, especially small business sites fall into this category
  - **Semi-localized web sites.** 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 <http://scotiabank.com/>
  - **Localized web sites.** Country-specific web sites with language translation for international customers, wherever relevant. 3M ([www.3m.com](http://www.3m.com)) has adapted the web sites for many countries to local language versions.

## Localization (Continued)

- **Highly localized web sites.** Country-specific web sites with language translation; they also include other localization efforts in terms of time, date, postcode, currency formats, etc. Dell ([www.dell.com](http://www.dell.com)) provides highly localized web sites
- **Culturally customized web sites.** Web sites reflecting complete ‘immersion’ in the culture of target customer segments; as such, targeting a particular country may mean providing multiple web sites for that country depending on the dominant cultures present

## B2B International E-Trading

- ◆ Large organizations are doing fairly well.
- ◆ How about SMEs?
- ◆ What's your opinion on SME B2B international trading?

## Economic / political

- ◆ Ensuring companies competitiveness
  - Funding for education and technology
- ◆ Achieving government efficiencies
  - Singapore 'Intelligent Island'
- ◆ Taxation regimes
  - Legislation for offshore trading



## Identifying Emerging Technologies

- ◆ Technology networking—monitoring, scouting, and sharing
- ◆ Crowd-sourcing—facilitate access to ideas from customers, partners, inventors, etc. e.g., [innocentive.com](http://innocentive.com)
- ◆ Technology hunting—structured review of start-up companies for new tech capability
- ◆ Technology mining—search the published documentations. E.g., [googlealert](http://googlealert)

# Questions?