# Chapter 1

Introduction to e-business and e-commerce

### **Outcomes:**

- Define the meaning and scope of e-business and ecommerce and their different elements
- Summarize the main reasons for adoption of e-commerce and e-business and barriers that may restrict adoption
- Use resources to define the extent of adoption of the Internet as a communications medium for consumers and businesses
- Outline the business challenges of introducing e-business and e-commerce to an organization.

# Management issues

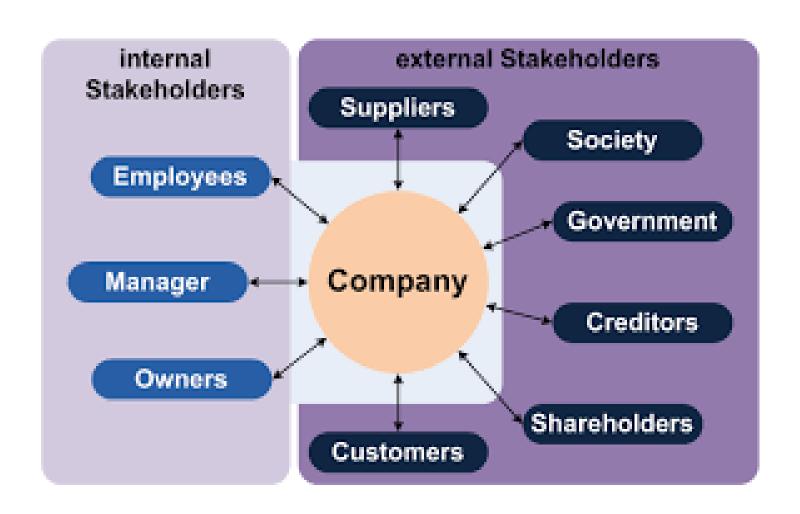
- How do we explain the scope and implications of ebusiness and e-commerce to staff?
- What is the full range of benefits of introducing e-business and what are the risks?
- How great will the impact of the Internet be on our business? What are the current and predicted adoption levels?

# E-business opportunities

- Reach:
  - Over 1 billion users globally
  - Connect to millions of products
- Richness
  - Detailed product information on 20 billion + pages indexed by Google. Blogs, videos, feeds...
  - Personalised messages for users
- Affiliation
  - Partnerships are key in the networked economy

### E-business

- E-business:
  - All electronically mediated information exchanges both within organization and with external stakeholders supporting the range of business processes.
- Key business processes such as Customer Relationship Management (CRM), Supply Chain Management (SCM) and Enterprise Resource Planning (ERP)



### What is E-commerce

- E-commerce
  - All electronically mediated information exchanges between an organization and its external stakeholders
  - Different perspectives of E-commerce:
    - Communication perspective: delivery of information, products or services or payment by electrnic means
    - Business process perspective: the application of technology towards the automation of business transaction and workflow
    - Service perspective : enabling cost cutting at the same time as increasing the speed and quality of service delivery.
    - Online perspective: the buying and selling of products and information online.

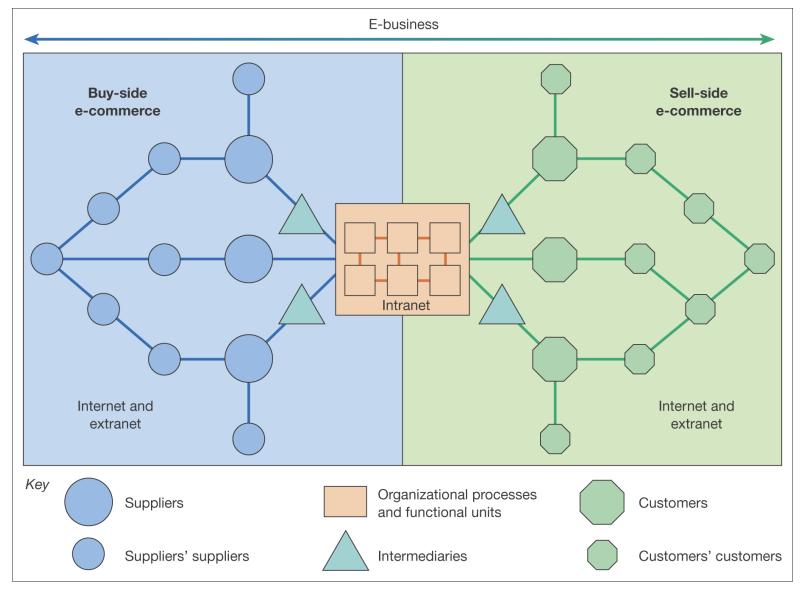


Figure 1.1 The distinction between buy-side and sell-side e-commerce

- Different types of sell- side E-commerce
  - Transactional E-commerce sites: Purchase of products online.
    - e.g: retail site, travel site and online banking services
  - Service oriented relationship- building web sites:products are not available. encouraging offline sales and generating enquiries
    - or leads frompotential customers.
    - Brand building sitesTheir main focus is to support the brand by developing an online experience of the brand.
    - Portal or media sitesProvide information, news or entertainment about a range of topics. Social networks can also be considered to be in this category since they are often advertising-supported.

		From: Supplier of content/service	
	Consumer or citizen	Business (organization)	Government
ice Consumer or citizen	<ul> <li>Consumer-to-Consumer (C2C)</li> <li>eBay</li> <li>Peer-to-Peer (Skype)</li> <li>Blogs and communities</li> <li>Product recommendations</li> <li>Social networks: MySpace, Bebo</li> </ul>	<ul> <li>Business-to-Consumer (B2C)</li> <li>Transactional: Amazon</li> <li>Relationship-building: BP</li> <li>Brand-building: Unilever</li> <li>Media owner – News Corp</li> <li>Comparison intermediary: Kelkoo, Pricerunner</li> </ul>	<ul> <li>Government-to-Consumer (G2C)</li> <li>National government transactional: Tax – inland revenue</li> <li>National government information</li> <li>Local government services</li> </ul>
Consumer of content/service Business (organization) Co	<ul> <li>Consumer-to-Business (C2B)</li> <li>Priceline</li> <li>Consumer-feedback, communities or campaigns</li> </ul>	<ul> <li>Business-to-Business (B2B)</li> <li>Transactional: Euroffice</li> <li>Relationship-building: BP</li> <li>Media Owned: Emap business publications</li> <li>B2B marketplaces: EC21</li> </ul>	<ul> <li>Government-to-Business (G2B)</li> <li>Government services and transactions: tax</li> <li>Legal regulations</li> </ul>
To: Government	Consumer-to-Government (C2G)     Feedback to government through pressure group or individual sites	Business-to-Government (B2G)     Feedback to government businesses and non-governmental organizations	Government-to-Government (G2G)     Inter-government services     Exchange of information

Figure 1.2 Summary and examples of transaction alternatives between businesses, consumers and governmental organizations

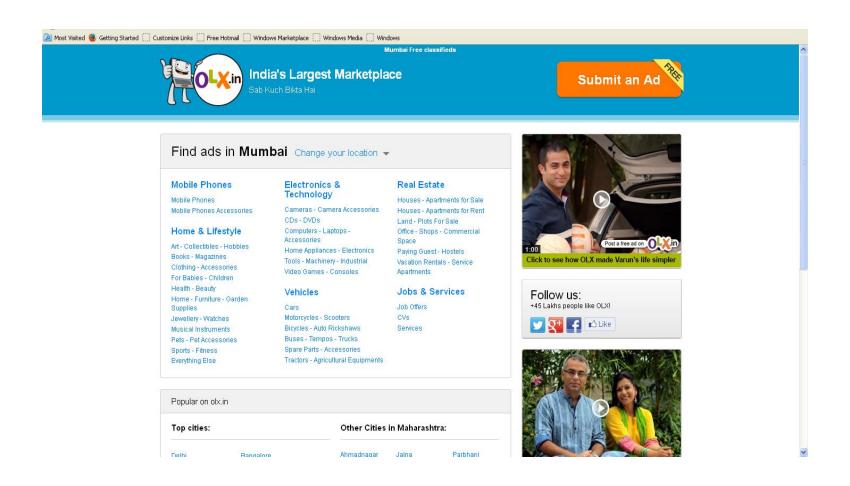


Figure 1.3 C2C site (http://mumbai.olx.in/)

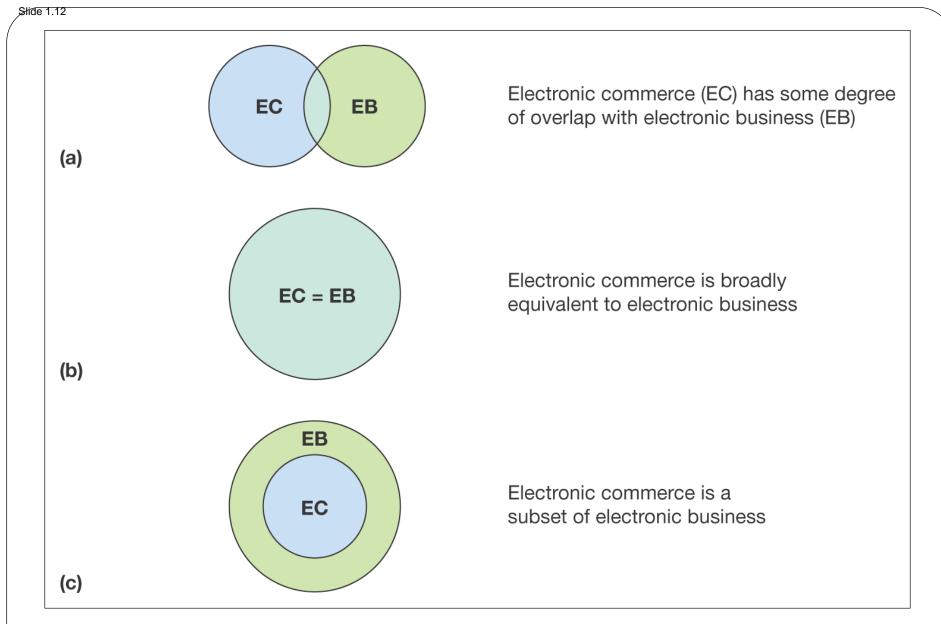


Figure 1.4 Three definitions of the relationship between e-commerce and e-business

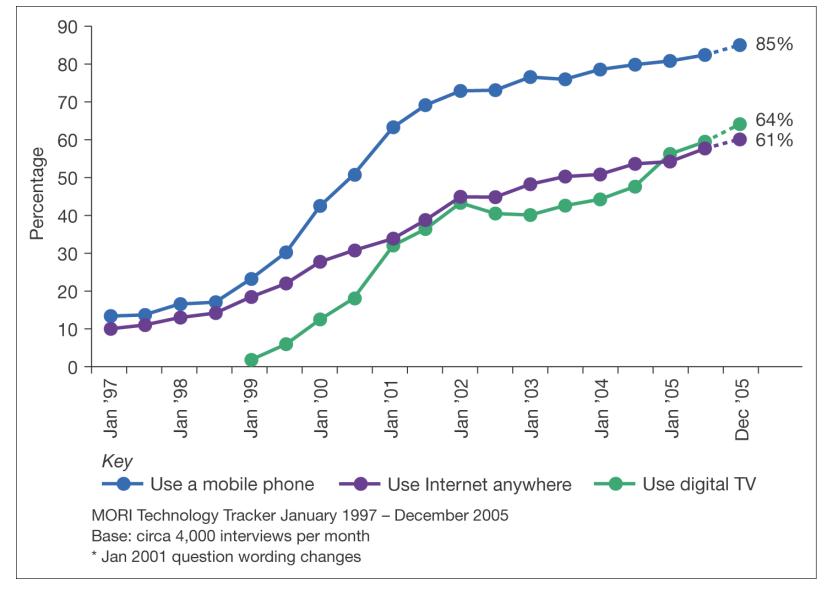


Figure 1.5 UK rate of adoption of different digital media

Source: MORI Technology Tracker, January 2006. See <a href="https://www.mori.com/technology/techtracker.shtml">www.mori.com/technology/techtracker.shtml</a> for latest details

# **Business adoption of digital technologies** for ecommerce and e-business

In e-business adoption two main categories of drivers concerned how the benefits of e-business will impact on profitability or generating value to an organization.

The two main ways in which this can be achieved are:

- Potential for increased revenue arising from increased reach to a larger customer base and encouraging loyalty and repeat purchases among existing customers.
- Cost reduction achieved through delivering services electronically. Reductions include staff costs, transport costs and costs of materials such as paper.

### Business adoption of digital technologies for ecommerce and e-business

In e-business adoption two main categories of drivers

#### **Cost/efficiency drivers**

Increasing speed with which supplies can be obtained Increasing speed with which goods can be dispatched Reduced sales and purchasing costs
Reduced operating costs.

### **Competitiveness drivers**

Customer demand

Improving the range and quality of services offered Avoid losing market share to businesses already using e-commerce.

Tangible and intangible benefits from e-commerce and e-business

Tangible benefits: which monetary savings or revenues can be identified e.g sales, orders

Intangible benefits: which it is more difficult to calculate cost savings eg:feedback from customers,improved customer service

# Tangible and intangible benefits

Tangible benefits	Intangible benefits	
<ul> <li>Increased sales from new sales leads giving rise to increased revenue from:         <ul> <li>new customers, new markets</li> <li>existing customers (repeat-selling)</li> <li>existing customers (cross-selling).</li> </ul> </li> <li>Marketing cost reductions from:         <ul> <li>reduced time in customer service</li> <li>online sales</li> <li>reduced printing and distribution costs of marketing communications.</li> </ul> </li> <li>Supply-chain cost reductions from:         <ul> <li>reduced levels of inventory</li> <li>increased competition from suppliers</li> <li>shorter cycle time in ordering.</li> </ul> </li> <li>Administrative cost reductions from more efficient routine business processes such as recruitment, invoice payment and holiday authorization.</li> </ul>	<ul> <li>Corporate image communication</li> <li>Enhancement of brand</li> <li>More rapid, more responsive marketing communications including PR</li> <li>Faster product development lifecycle enabling faster response to market needs</li> <li>Improved customer service</li> <li>Learning for the future</li> <li>Meeting customer expectations to have a web site</li> <li>Identifying new partners, supporting existing partners better</li> <li>Better management of marketing information and customer information</li> <li>Feedback from customers on products</li> </ul>	

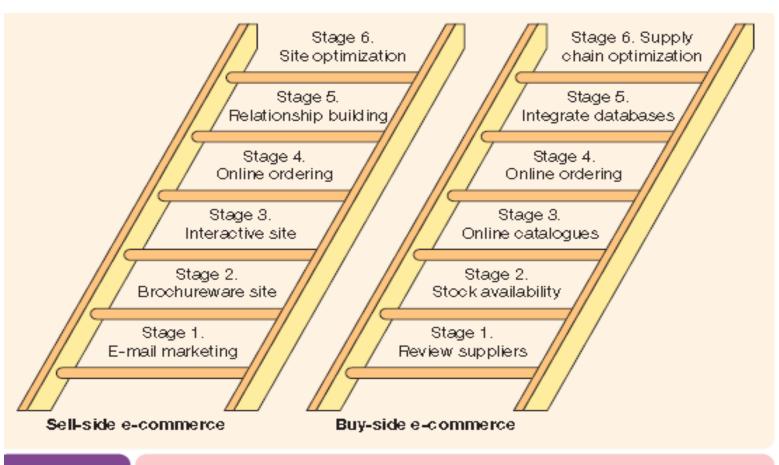


Figure 1.13

A simple stage model for buy-side and sell-side e-commerce

### Activity – drivers and barriers to adoption

- You are in a team of advisers at a local business link (a local government agency encouraging adoption of e-commerce)
- List:
  - Drivers to adoption of sell-side e-commerce by business and how you can reinforce these by marketing benefits. (example:free tlogin)
  - Barriers to adoption of sell-side e-commerce by business and how you can reinforce these by stressing benefits.(security,cost)

# Drivers of consumer adoption

Driver	Marketing approach
1	
2	
3	
4	
5	
6	

# Barriers to consumer adoption

Barrier	Marketing approach
1	
2	
3	
4	
5	
6	



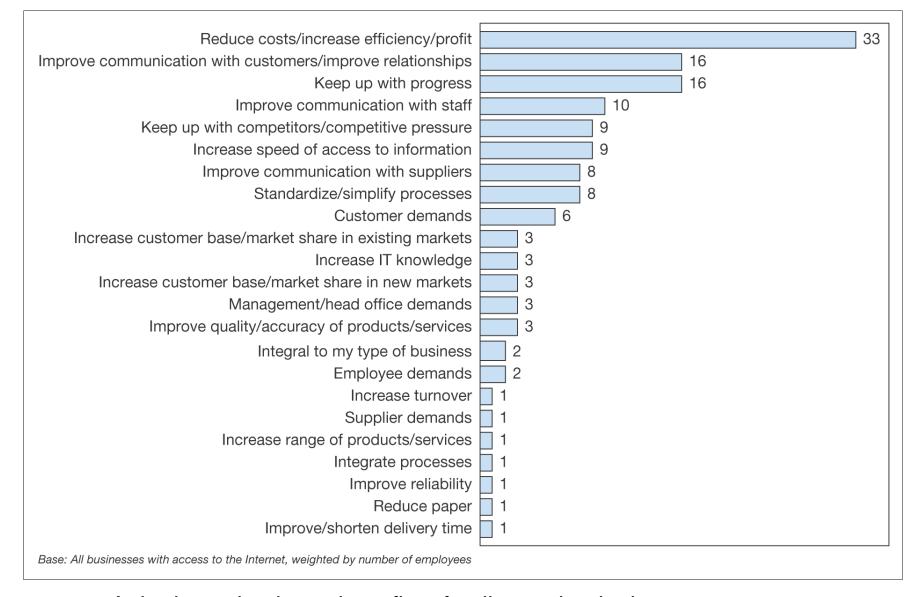


Figure 1.6 Attitudes to business benefits of online technologies

Source: DTI (2002)

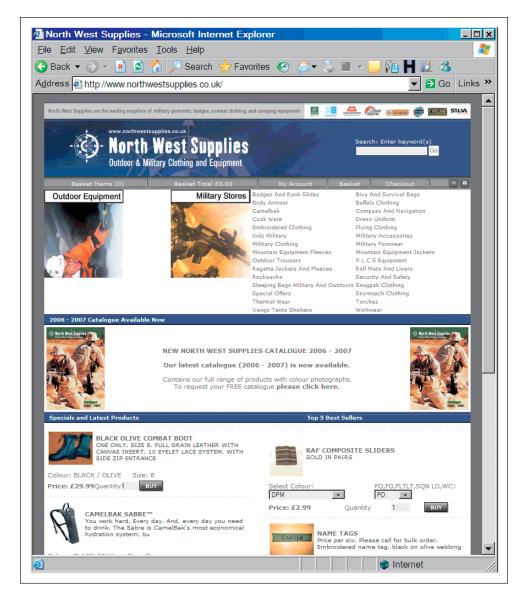


Figure 1.7 North West Supplies Ltd site (www.northwestsupplies.co.uk)

Source: Opportunity Wales

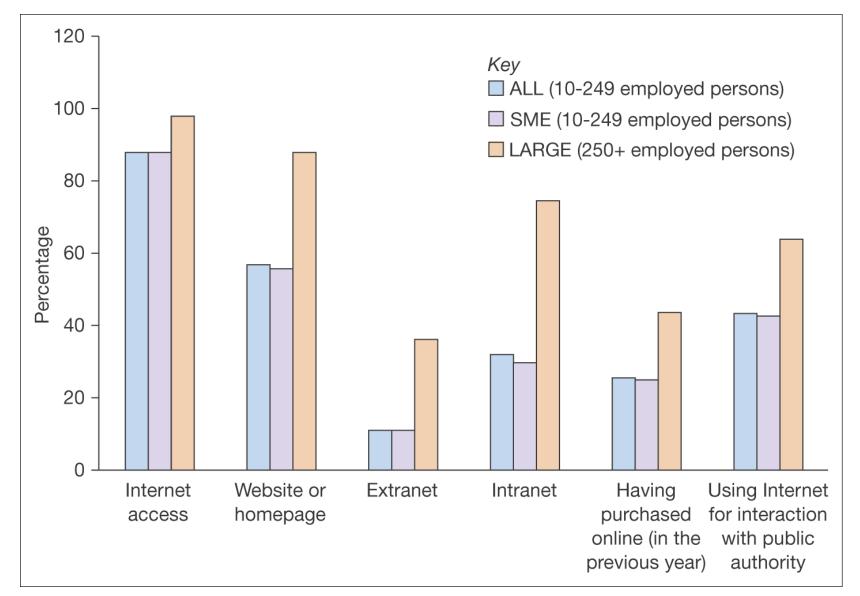


Figure 1.8 Adoption of Internet and e-business services across Europe

Source: Eurostat, Community Survey on ICT usage in enterprises, eEurope (2005) Information Society Benchmarking Report, © European Communities 2005, http://europa.eu.int/information\_society



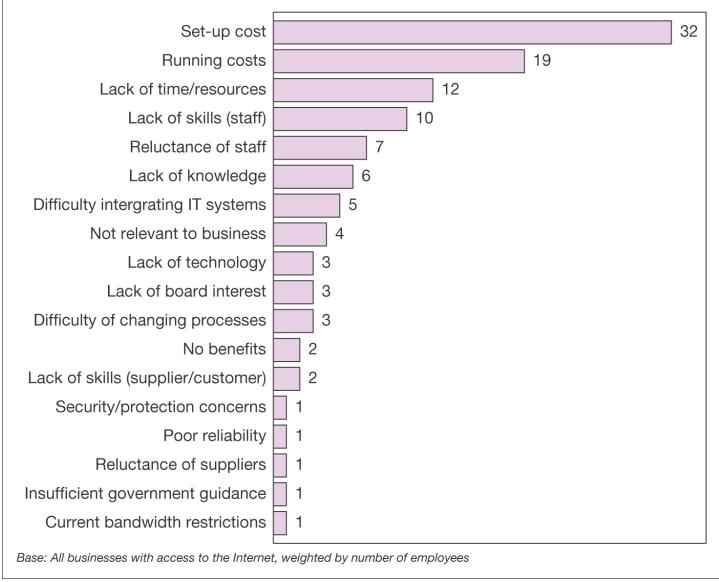


Figure 1.9 Barriers to development of online technologies

Source: DTI (2002)

#### **Drivers of consumer Internet adoption**

The 'Six Cs'show different types of customer value Content – In the mid-1990s it was often said that 'content is king'. Well, relevant rich content is still king. This means more detailed, in-depth information to support the buying process for transactional or relationship-building sites or branded experiences to encourage product usage.

- **2** Customization In this case mass customization of content, whether received as web site pages such as 'Amazon recommends' or e-mail alerts, and commonly known as 'personalization'.
- 3 Community The Internet liberates consumers to discuss anything they wish through forums, chat-rooms and blog comments

4 Convenience – This is the ability to select, purchase and in some cases use products from your desktop at any time: the classic 24 × 7 × 365 availability of a service. Online usage of products is, of course, restricted to digital products such as music or other data services.

5 Choice – The web gives a wider choice of products and suppliers than via conventional distribution channels.

Tesco with a platform to give consumers a wider choice of products (financial, travel, white goods) with more detailed information than are physically available in-store.

6 Cost reduction — The Internet is widely perceived as a relatively low-cost place of purchase. Often customers expect to get a good deal online as they realize that online traders have alower cost-base as they have lower staff and distribution costs than a retailer that runs a network of high-street stores.

#### **Barriers to consumer Internet adoption**

It noted that consumer barriers to adoption of the Internet included:

No perceived benefit

Lack of trust

Security problems

Lack of skills

Cost.

### Traditional commerce Vs E-Commerce

BASIS FOR COMPARISON	TRADITIONAL COMMERCE	E-COMMERCE	ternet
Meaning	Traditional commerce is a branch of business which focuses on the exchange of products and services, and includes all those activities which encourages exchange, in some way or the other.	e-Commerce means carryng out commercial transactions or exchange of information, electronically on the internet.	
Processing of Transactions	Manual	Automatic	
Accessibility	Limited Time	24×7×365	
Physical inspection	Goods can be inspected physically before purchase.	Goods cannot be inspected physically before purchase.	
Customer interaction	Face-to-face	Screen-to-face	

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Customer interaction	Face-to-face	Screen-to-face
Scope of business	Limited to particular area.	Worldwide reach
Information exchange	No uniform platform for exchange of information.	Provides a uniform platform for information exchange.
Resource focus	Supply side	Demand side
B <mark>usiness</mark> Relationship	Linear	End-to-end
Marketing	One way marketing	One-to-one marketing

### Advantages of Ecommerce

- Low Financial Cost
- 24/7 Potential Income
- Sell Internationall
- ,
- Easy to Showcase Bestsellers
- Personalized Online Experience
- Affordable employees
- Easier to Encourage Impulse Buy eg: product photography
- Gain Access to Customer Data Easily
- Able to Process a High Number of Orders
- Can Scale Business Quickly
- Can Grow Business Organically with Content

### Disavantages of Ecommerce

- No One Can Buy During a Site Crash
- Customers Can't Try Before They Buy
- Ecommerce Is Highly Competitive
- Customers Can Be Impatient
- You Need To Ship Your Products
- Physical Retail is Still More Popular Despite Decline

#### E business Role



### Intro to B2B Company

- Employs 600 people worldwide
- Turnover £100m
- Products composites and speciality polymers
  - See <u>www.globalcomposites.com</u>
- Distribution 90 companies worldwide via joint ventures and agents
- Competitors:
  - Derakan (<u>www.dow.com/derakane</u>)
  - Scott Bader (<u>www.scottbader.com</u>)
  - Owens Corning (<u>www.owenscorning.com</u>)

# Intro to B2C Company

- Established 1984, 80 staff
- Products Kitchenware
- Distribution
  - Through retailers and transactional web sites
- Competitors
  - Cooking.com (<u>www.cooking.com</u>)
  - Lakeland (<u>www.lakelandlimited.com</u>)
  - Tupperware (www.tupperware.com).

# Activity – Benefits to B2B and B2C Company

#### Purpose

 To illustrate some of the key strategy issues of implementing e-business.

#### Question

 Take an organization you are familiar with and consider organizational changes that may be required for each of the 7 Ss. Which factors do you feel are ignored by the 7 Ss?

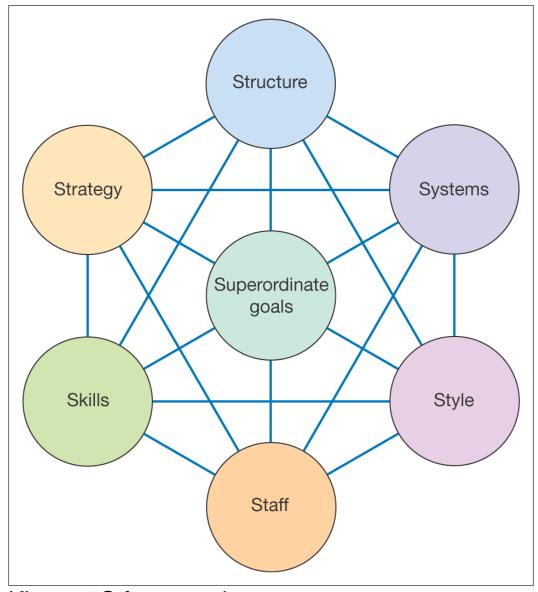


Figure 1.10 The McKinsey 7S framework

Source: Adapted from Waterman et al. (1980)

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Give examples of these benefits of an online presence. Which of these are most important to each:

Cost reduction

New capability

Communication

Customer service

Control

Competitive advantage

Stide 1.40

# The trade cycle

- Conducting a commercial transaction involves the following steps:
  - Pre-Sale:
    - Search finding a supplier
    - Negotiate agreeing the terms of trade
  - Execution:
    - Order
    - Delivery
  - Settlement:
    - Invoice
    - Payment
  - After-sales, e.g. warrantee and service

- ■The first stage of the trade cycle is search and the facilities of the Internet can be used to locate sites offering, or advertising, appropriate goods or services; a function, as already mentioned, that is similar to an electronic market. In many instances, Internet sites offer only information and any further steps down the trade cycle are conducted on the telephone or at a conventional shop outlet.
- An increasing number of sites offer facilities to execute and settle the transaction, to make a purchase delivery may be electronic or by a home delivery service depending on the nature of the goods or service being offered. The use of the Internet for on-line purchasing may or may not follow a search publishing a web site address is an increasingly common feature on conventional advertising.
- ■The final use of Internet e-Commerce is for after-sales service. Many IT providers now offer on-line support and on-line services such a banking are, arguably, a special case of the use of after-sales transactions.

# Advantage/benefit to business

- Help increase profits and decrease costs; reduced overhead; <u>facilitates</u> "pull"-type supply chain management
- Wide base for customers internationally; geographically scattered; areas not previously reached
- Identify new suppliers and business partners
- Ability to create highly specialised businesses
- Lower communication costs
- Buyers have wide range of choices of vendors and products
- Availability 24/7
- Competitive market causes decrease in prices, discounts or "freebies" thrown in
- Customers receive relevant and detailed information in seconds, as opposed to days or weeks
- Allows individuals to work from home, do less travel

# Disadvantage to business

- Some businesses processes may not work using ecommerce
  - Perishable goods
- Difficult to calculate return-on-investment (ROI)
- Potential cultural and legal obstacles
  - Legal environment still unclear and have conflicting laws
- No "touch-and-feel" aspect
  - Loss of ability to inspect products from remote locations

# Issues Surrounding E-Business /E-commerce

- Trust
- Language
- Culture
- Culture and government
- Infrastructure

#### Trust Issues

- How do I know who you say you are?
- How can I guarantee that you will supply me with the products you offer within the timeframe you gave?
- Established companies, especially those with offline presence, have easy time creating trust on the Web
- New companies face difficulties due to anonymity that exists
  - Visitors won't just buy from anyone, especially if they have never heard of the company before

# Language Issues

- "Think globally, act locally"
- Providing local language conversions of a site
  - Customers more likely to buy products or services from a site in their own language
- About 60% of content on Web is in English; more than 50% of current Internet users do not read English

Stide 1.4

## Culture Issues

 Common language and common customs provide an easier time for consumers to determine how companies will react in situations of misrepresentation of quality, etc

Product acceptance

## Culture and Government

- Government controls that limit forms of open online discussions
- Laws vary from county to country

### Infrastructure Issues

- Local connection costs in developing countries high; some countries required payment for time spent online
  - This could lead to people spending less time online
  - Introduction of flat-rate access required
- More than half of businesses on web turn away international orders as do not have capacity or processes in place to fill them

#### Impact of the E\_business

- Price transparency
- Increased competition
- •Faster response to customer demands
- Conducting business
- Costs
- Profit
- Time

- Customer relations
- Employees
- Vendors
- Policy

- e-commerce will eliminate mediation process as producers can sell direct to consumers.
- firms will have fast knowledge of what customers want.
- Firms can use this knowledge to guide the development of their product lines and to identify new growth areas at their earlier stages.
- e-commerce will also help small- and medium-sized enterprises (SMIs) to gain greater market reach for their products and services.

- In fact, e-commerce can be an efficient and economical way for many SMIs to enter an export market.
- E-commerce offers consumers a wide range of new opportunities to do direct shopping and banking using the convenience of a home computer or other communication devices.
- Consumers will also benefit in terms of lower final prices due to lower transaction costs as described above.
- e-commerce consumers will have a wider and direct access to producers of goods and services without intermediaries.

 With a wider choice of products and services offered to them, they can cast their preferences by describing what they want.

 As a result, this process will lead to greater competition among firms to protect their market share.

 e-commerce will result in higher investment by the Government, firms and consumers.

 Coupled with higher investment in IT, e-commerce will result in higher efficiency and productivity of the economy.

• E-commerce will create new activities and a variety of new industries which utilize IT.

This will lead to the creation of new job opportunities.