

IT6506 - eBusiness Technologies

**1. Introduction to eBusiness and
eCommerce**

Level III - Semester 6

Overview

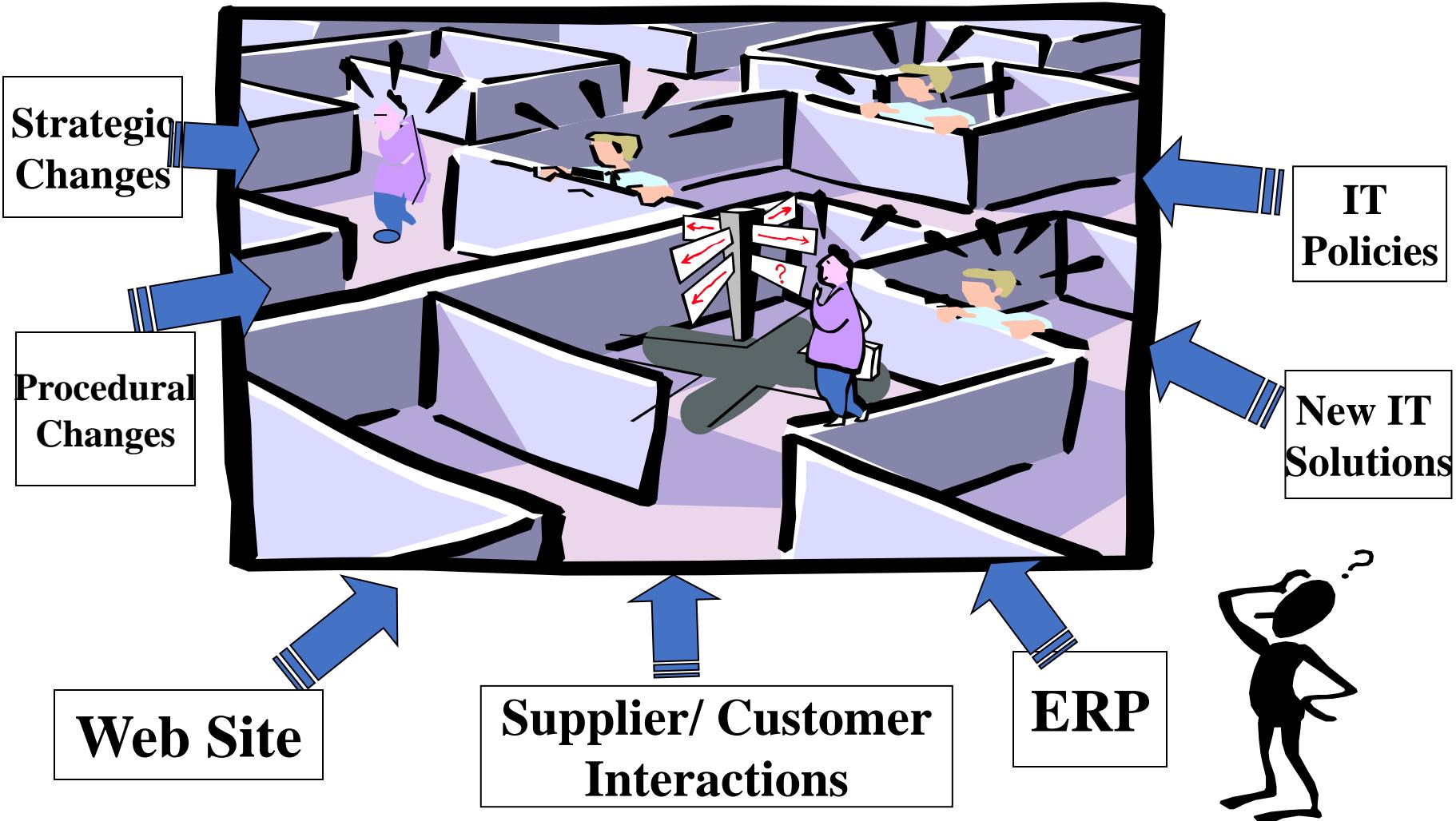
What is eBusiness ?

- eBusiness, or electronic business, refers to the conduct of business processes and transactions using electronic means, such as the internet, computer networks, and other digital technologies. This includes Marketing, buying, selling, delivering, servicing, and paying for products, services and information across (non-proprietary) networks linking an enterprise and its prospects, customers, agents, suppliers, competitors, etc. and managing supply chain activities.
- eBusiness has revolutionized the way companies do business, enabling them to reach a global audience, reduce costs, increase efficiency, and improve customer service. Some examples of eBusiness include online shopping, online banking, e-commerce platforms, digital marketing, online payment systems, and enterprise resource planning (ERP) software.
- eBusiness is a vital component of the modern economy and plays a critical role in enabling businesses of all sizes to compete and thrive in the digital age.

Overview

What eBusiness **should not be!**

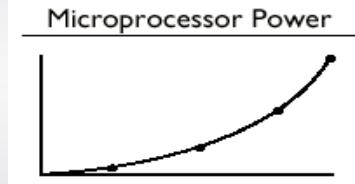
With all the new changes in the IT solutions, policies, the eBusiness solution should not complicated!



Overview

ICT is changing many things!

Computing Power



© Athula Ginige, UWS

Storage Capacity and Bandwidth



Electrical and
Electromagnetic

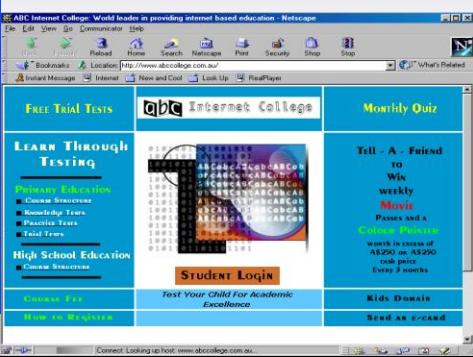
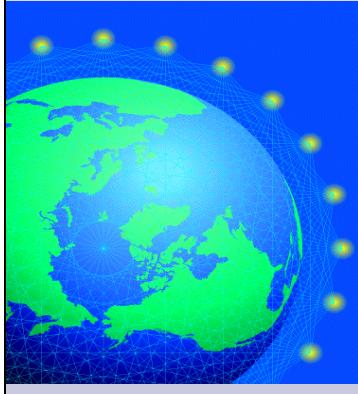
X 10 to 10000

Optical



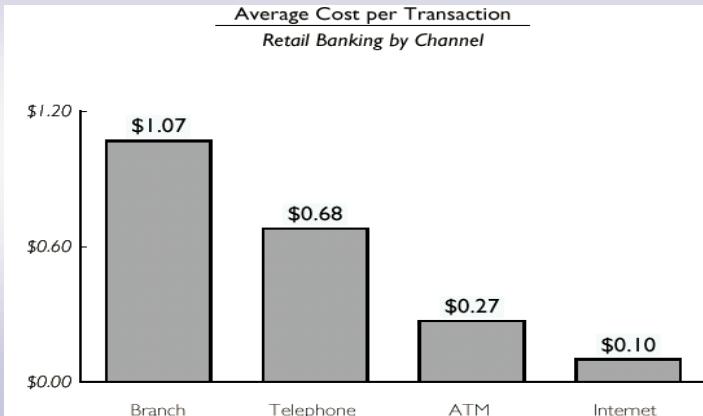
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The Internet and the World Wide Web



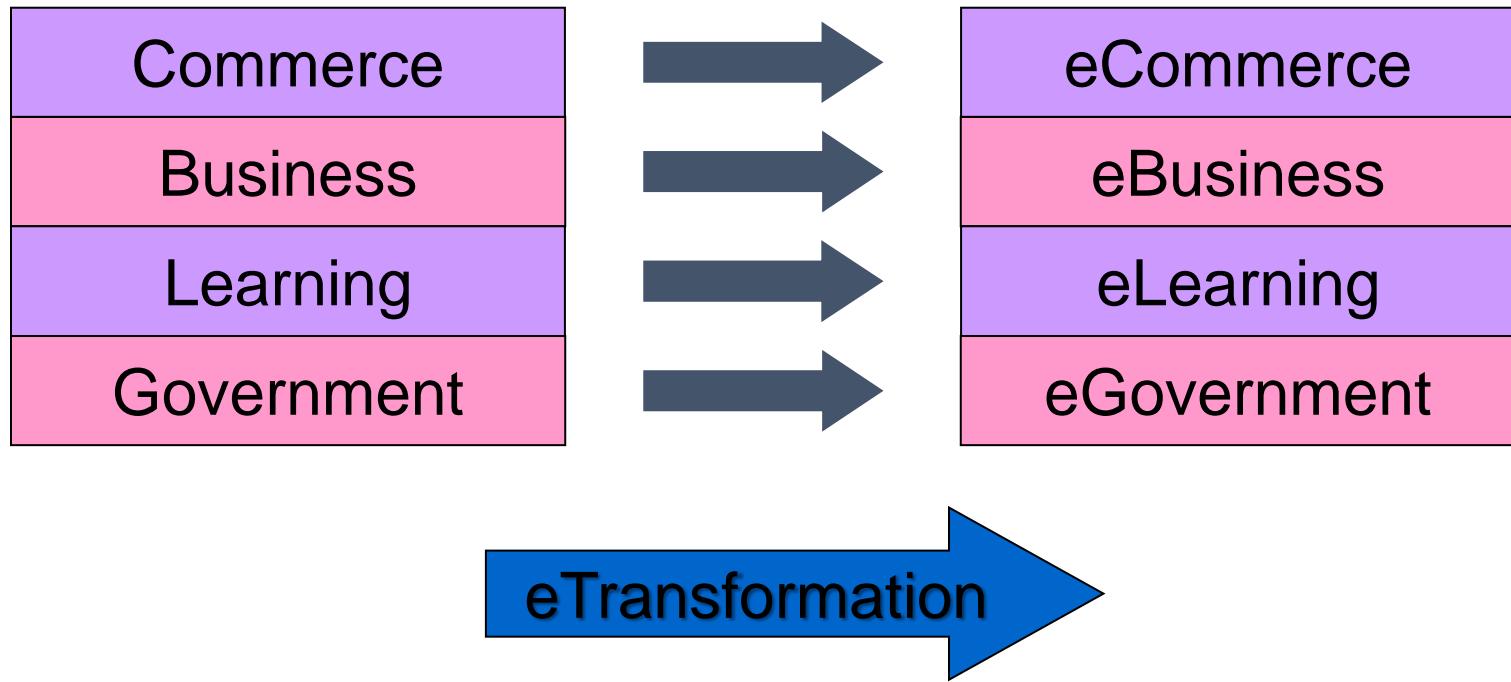
© Athula Ginige, UWS

Plummeting Transaction Cost



Overview

ICT is changing many things!



Intended Learning Outcomes

At the end of this lesson, you will be able to;

Obtain a sound understanding of the applications and technologies in eBusiness and Have the knowledge of

- the concepts used in eBusiness,
- the Business applications,
- marketing on the web,
- new revenue models,
- latest payment mechanisms,
- Business & eBusiness Strategies
- Emerging technological & eBusiness trends
- Technological best practices in eBusiness
- Setting up your own electronic presence or eBusiness
- Technical Infrastructure for E-Business
- Security Privacy and Legal Issues

Overview

This course will Prepare the students with

- the skills needed to work in any eBusiness environment and to decide on strategic business decisions related to eBusiness
- The understanding of ethics and professional issues in a eBusiness environment
- The ability to work in an eBusiness environment in the global market
- the ability to take a company through the eBusiness Transformation process

List of sub topics

1. Introduction to eBusiness and eCommerce

(2 hours) [Ref: Teacher's note]

1.1. Introduction to eBusiness

1.2. Classification of eBusiness (B2C, B2B, C2C, B2G,...)

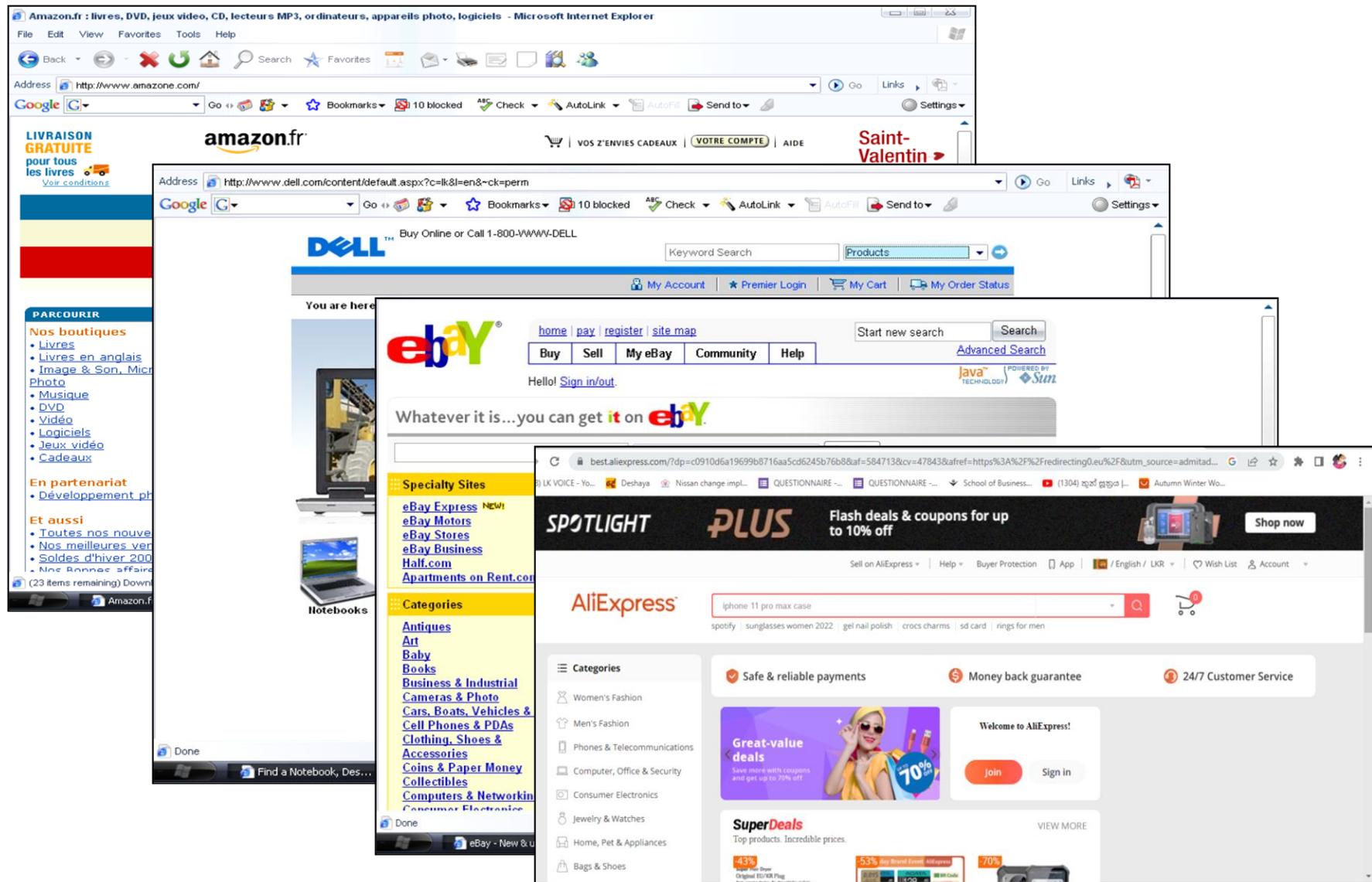
1.3. Advantages and disadvantages of eBusiness

1.4. The eBusiness Environment

1.5. Customer business interaction in eBusiness

1.1 Introduction to eBusiness

Why is learning eBusiness Important to you?



1.1 Introduction to eBusiness

Why is learning eBusiness Important to you?

The collage illustrates the scope of eBusiness across different platforms:

- Top Left:** Screenshot of ComBank.lk's website, featuring sections for Personal Banking, Business Banking, Non Resident Banking, and Services.
- Top Middle:** Screenshot of BOC Smart Online Banking login page.
- Top Right:** Screenshot of ODEL's website, showing categories like WOMEN, MEN, SPORTS, FOOTWEAR, BAGS, WATCHES & SUNGLASSES, JEWELLERY, and KIDS.
- Middle Left:** Screenshot of a YouTube channel for "Manike Mage Hithe මැණිකේ මගේ හින්දේ" showing a video thumbnail of a woman singing into a RODE microphone.
- Middle Center:** Screenshot of a YouTube channel for "AYYO SAAMI" showing a video thumbnail of a woman in a purple dress.
- Middle Right:** Screenshot of a YouTube channel for "Little Vidupa Needs Your Help - Actor Sanath Wimalasisiri" showing a video thumbnail of a man and a young boy.

1.1 Introduction to eBusiness

Internet Banking

The image is a composite of three parts illustrating internet banking:

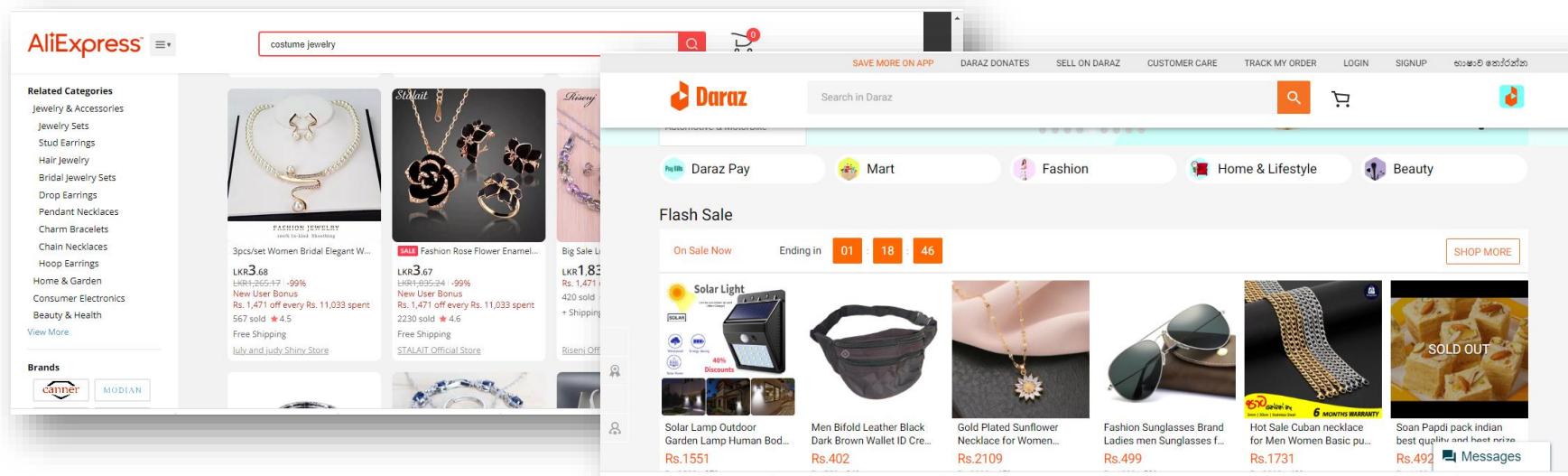
- Top Left:** A woman with long dark hair, wearing a white blouse, is sitting at a desk and looking at a laptop screen. She is in a room with bookshelves and a pink gerbera flower in the background.
- Top Right:** A "Login" form with a yellow header. It has fields for "User ID" and "Password", and buttons for "Sign In" and "Clear".
- Bottom:** The homepage of People's Bank's website. It features the bank's logo and slogan "Bankers to the Nation".
 - Left Sidebar:** A yellow sidebar with "Internet Banking Notice" and contact information: "BOC has upgraded Internet Banking System. If you encounter any issues, please contact +94 11 2204654, +94 11 2204659, +94 11 2204662, +94 11 2204663". It also lists banking services: PERSONAL BANKING, FOREIGN REMITTANCE, CORPORATE BANKING, TREASURY SERVICES, DEVELOPMENT BANKING, COMMERCIAL BANKING, and RATES (Latest Interest Rate: FD 1 year - 9.83%, Latest Exchange Rate).
 - Center:** A large banner for the "YES" Digital Savings Account, featuring a guitar player, a purple dress form, and a woman in a yellow top. The text "FOR YOUTH BUSY BEING YOUNG" and "DIGITAL SAVINGS ACCOUNT" is prominently displayed.
 - Right Sidebar:** Icons for Feedback, Loan calculator, and Exchange rates.
 - Footer:** Links for ABOUT US, PROPERTIES FOR SALE, FIND ATM / BRANCH, AWARDS, NEWS AND EVENTS, CAREERS, TENDER NOTICES, EPF/ETF PAYMENTS, and ONLINE BANKING. There is also a search bar and social media links.
 - Bottom Footer:** Legal links including Last Financial Results, Contact Us, FAQs, Sitemap, Terms & Conditions, Newsletter, Publications, Customer Charter, Bank Holidays, FATCA Forms, Branch Network, Security Tips, Downloads, Android Mobile App, and iOS Mobile App.

1.1 Introduction to eBusiness

- eBusiness, also known as electronic business, is the conduct of business processes and transactions using digital technologies such as the internet, computer networks, and mobile devices. eBusiness encompasses a wide range of activities, including buying and selling goods and services online, conducting financial transactions, exchanging information with partners and customers, and managing supply chain activities.
- The rise of eBusiness has fundamentally changed the way companies do business, enabling them to reach a global audience, reduce costs, increase efficiency, and improve customer service. eBusiness has also created new business models, such as online marketplaces and digital platforms, which have disrupted traditional industries and created new opportunities for entrepreneurs and innovators.

1.1 Introduction to eBusiness

- To succeed in eBusiness, companies must have a strong digital strategy, which includes a robust online presence, a focus on user experience, and a commitment to data-driven decision making. Companies must also be able to adapt quickly to changing market conditions and customer demands, leveraging digital technologies to stay ahead of the competition.



1.1 Introduction to eBusiness

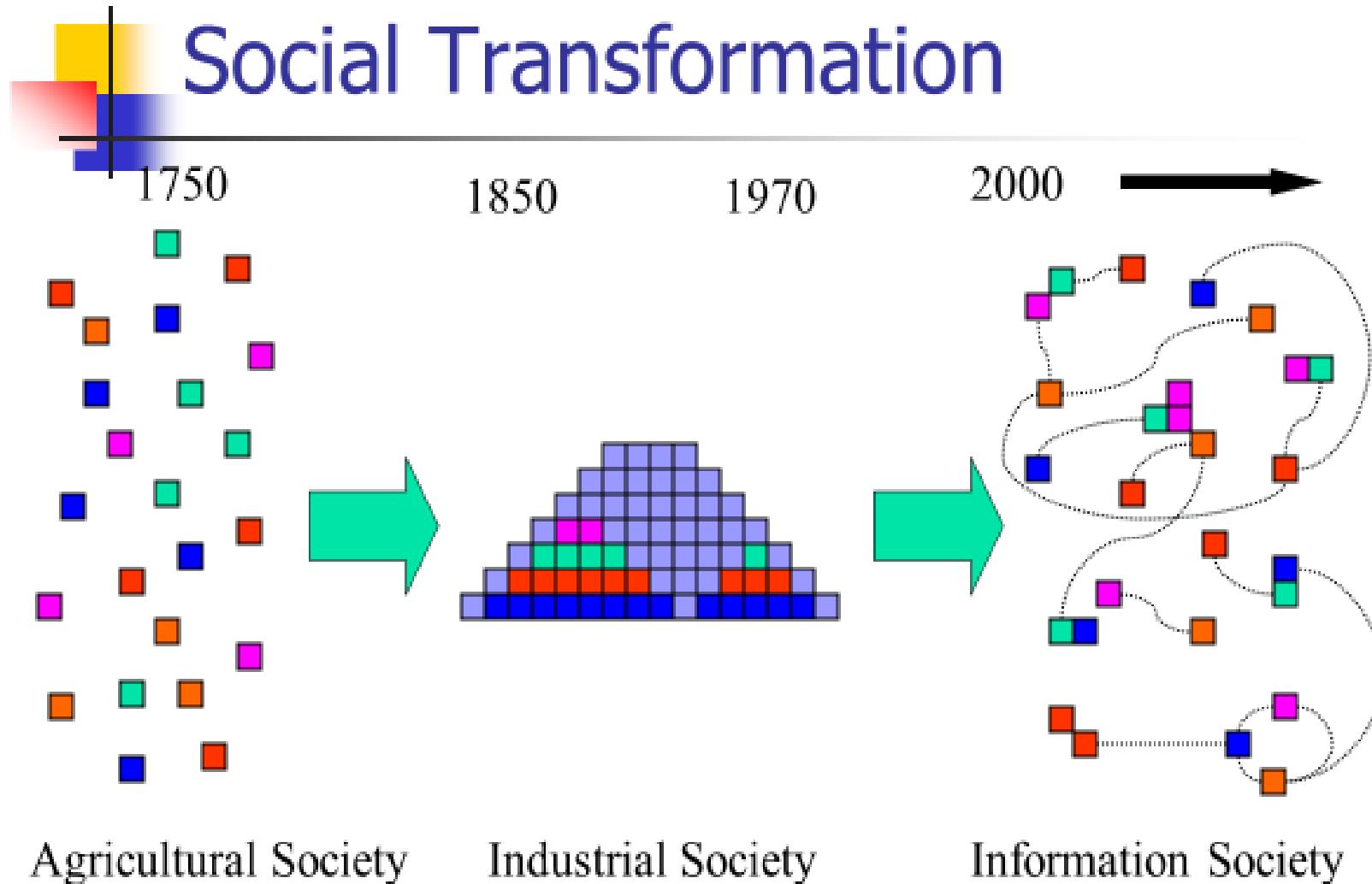
Here are some reasons why eBusiness is important:

- i. **Global Reach:** With eBusiness, companies can expand their customer base globally, as they are not limited by geographical boundaries. This allows them to tap into new markets and reach a wider audience.
- ii. **Cost-Effective:** eBusiness eliminates the need for physical storefronts, which can significantly reduce overhead costs. This makes it a cost-effective option for businesses of all sizes, especially for small and medium-sized enterprises.
- iii. **Increased Efficiency:** eBusiness allows companies to automate various processes such as inventory management, order processing, and payment collection. This leads to increased efficiency, as these processes can be completed quickly and accurately, without the need for human intervention.

1.1 Introduction to eBusiness

- iv. Improved Customer Service:** eBusiness enables companies to provide faster and more convenient customer service, such as online chat, email, or social media. This can lead to higher levels of customer satisfaction and loyalty.
- v. Data Analytics:** eBusiness allows companies to collect vast amounts of data about their customers and their buying behaviour. This data can be used to improve marketing strategies and product offerings, leading to better customer engagement and increased sales.
- vi. Competitive Advantage:** eBusiness provides companies with a competitive advantage over traditional businesses that have not yet adopted digital technologies. This allows them to stay ahead of the competition and remain relevant in an increasingly digital world.

1.1 Introduction to eBusiness



Agricultural Society

Industrial Society

Information Society

1.1 Introduction to eBusiness

Features of Agricultural Era

***"Six pillars"* Of Agriculture**

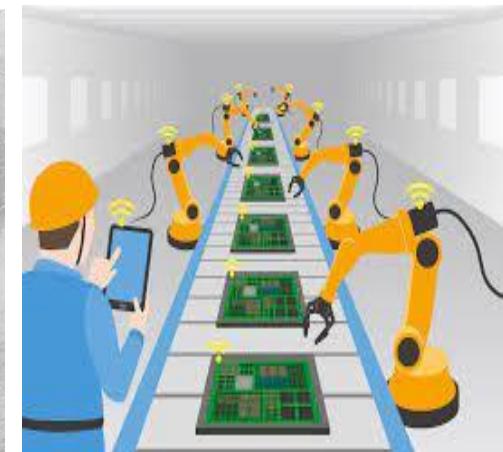
- 1. Soil**
- 2. Water**
- 3. Climate**
- 4. Seed**
- 5. Tools**
- 6. Peasants**



1.1 Introduction to eBusiness

Transition from Agricultural Era to the Industrial Era Augmenting Muscle Power

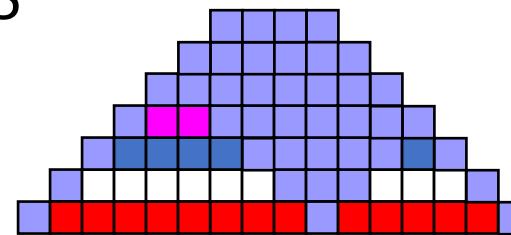
- Invention of the Steam engine
- Discovery of Electricity and invention of the electric motor
- Internal Combustion Engine
- Assembly Lines
- Automation



1.1 Introduction to eBusiness

Essential characteristics of the industrial society

- Standardisation --> Mass production
- Specialisation --> Compartmentalised structures
- Synchronisation --> 9 to 5
- Concentration
- Maximisation
- Centralisation



1.1 Introduction to eBusiness

Organizational and Management Structure of Industrial age Organizations

Adam Smith

Concept of Division of Labour

Ref. Wealth of Nations - 1766

Henry Ford

Assembly Lines

Brought work to worker -1890

Alfred Sloan

Management Structures

Apply division of Labour to Management

Large Scale Strategic Planning

Monitoring divisional performance and

Intervening to adjust plans and activities

The specialization and concentration of the workers on their single subtasks - greater skill and greater productivity on their particular subtasks



1.1 Introduction to eBusiness

Advantages of Division of Labour

- Learning Curve efficiencies
 - More repetitions - learning faster ways to perform task
 - More efficient in time, Increases productivity
 - Concentration on one repetitive task - more skilled
 - Steepening of the Learning Curve
 - Reduces the time needed for training - task is simplified
- Little time spent moving between tasks - Reduce idle time
- The overall quality of the product will increase
- Possible to influence how production takes place

1.1 Introduction to eBusiness

Disadvantages of Division of Labour

- The worker does not feel responsible for the end result
- Lack of motivation: the quality of labour decreases while
- Absenteeism may rise
- Repetitive Motion disorder
- Growing dependency: a break in production may cause problems to the entire process.
- Loss of flexibility: workers have limited knowledge while not many jobs opportunities are available.
- Higher start-up costs: high initial cost to buy special machinery

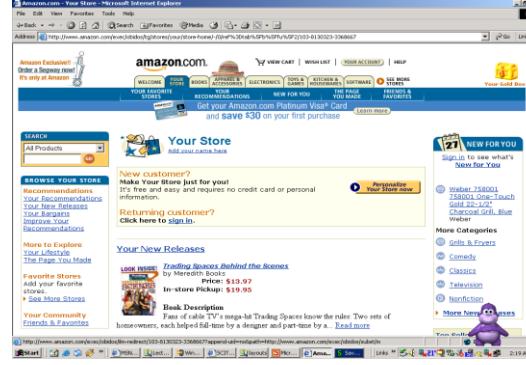
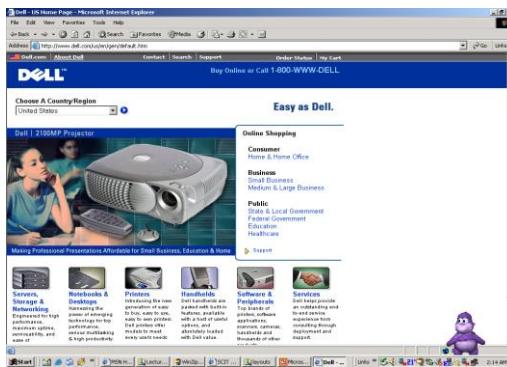
1.1 Introduction to eBusiness

Draw backs of Industrialisation

- **Environmental degradation:** Industrialization has led to air and water pollution, deforestation, soil degradation, and other forms of environmental degradation that can have long-lasting effects on the planet and human health.
- **Social problems:** Industrialization can cause social problems such as urbanization, overcrowding, income inequality, and social dislocation, as people move from rural areas to cities in search of work and better life.
- **Exploitation of workers:** Industrialization has also led to the exploitation of workers, who are often paid low wages and work in unsafe and unhealthy conditions.
- **Dependence on non-renewable resources:** Industrialization relies heavily on non-renewable resources such as oil, coal, and natural gas, which are finite and contribute to climate change.
- **Globalization:** Industrialization has contributed to globalization, which can have negative impacts on local economies & cultures.
- **Economic instability:** Industrialization can lead to economic instability as industries and jobs can become obsolete due to technological advancements or global competition.

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

- B2C –Business to Consumer
- B2B – Business to Business
- B2G – Business to Government
- C2C – Consumer to Consumer
- C2B – Consumer to Business
- G2G – Government to Government
- G2C, G2B, C2G, etc



1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

- **Business-to-Consumer (B2C):** B2C eBusiness involves companies selling products or services directly to individual customers over the internet. Examples of B2C eBusiness include online retailers such as Amazon.
- **Business-to-Business (B2B):** B2B eBusiness involves companies selling products or services to other businesses over the internet. Examples of B2B eBusiness include suppliers selling raw materials to manufacturers or software companies providing services to other businesses.
- **Consumer-to-Consumer (C2C):** C2C eBusiness involves individual customers selling products or services to other individual customers over the internet. Examples of C2C eBusiness include online marketplaces such as eBay.

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

- **Business-to-Government (B2G):** B2G eBusiness involves companies selling products or services to government entities over the internet. Examples of B2G eBusiness include government procurement portals and software companies providing services to government agencies.
- **Consumer-to-Business (C2B):** C2B eBusiness involves individual customers selling products or services to businesses over the internet. Examples of C2B eBusiness include freelance marketplaces such as Fiverr.
- **Government-to-Business (G2B):** G2B eBusiness involves government entities selling products or services to businesses over the internet. Examples of G2B eBusiness include government procurement portals and tax portals.

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

B2C

Dell - US Home Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://www.dell.com/us/en/gen/default.htm

Dell.com About Dell Contact Search Support Order Status My Cart

DELL™ Buy Online or Call 1-800-WWW-DELL

Choose A Country/Region
United States ▾

Easy as Dell.

Online Shopping

Consumer
Home & Home Office

Business
Small Business
Medium & Large Business

Public
State & Local Government
Federal Government
Education
Healthcare

Support

Dell | 2100MP Projector

Making Professional Presentations Affordable for Small Business, Education & Home

Servers, Storage & Networking
Engineered for high performance, maximum uptime, serviceability, and ease of

Notebooks & Desktops
Harnessing the power of emerging technology for top performance, serious multitasking & high productivity.

Printers
Introducing the new generation of easy to buy, easy to use, easy to own printers. Dell printers offer models to meet every user's needs.

Handhelds
Dell handhelds are packed with built-in features, available with a host of useful options, and absolutely loaded with Dell value.

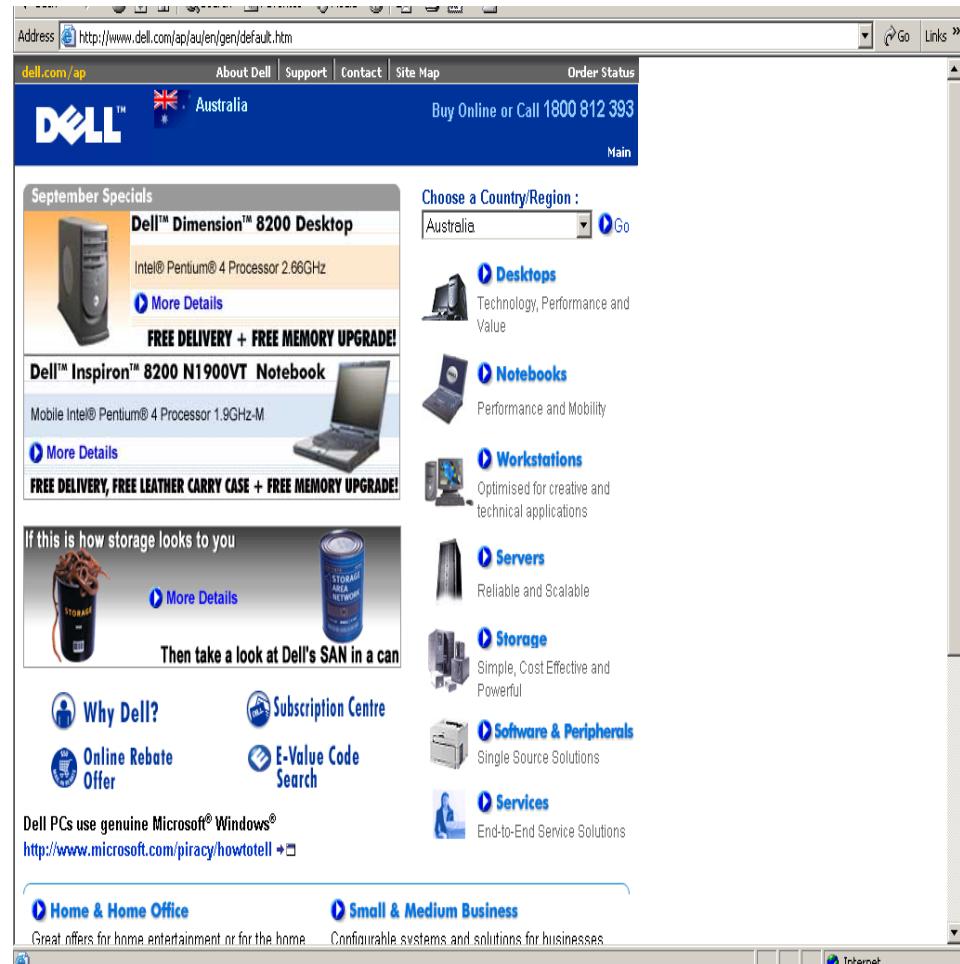
Software & Peripherals
Top brands of printers, software applications, scanners, cameras, handhelds and thousands of other

Services
Dell helps provide an outstanding end-to-end service experience from consulting through deployment and support.

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

B2C - Dell Web Site

- Gives customers the ability to custom order & price various sizes & configurations of PCs online
- Receives money before product is shipped
- All customer service is done via the web helping to cut costs
- Customers can track shipments



1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

B2C

The screenshot shows the Amazon homepage with a dark header. On the left, there's a 'Deliver to Sri Lanka' button, a search bar with a magnifying glass icon, and account options like 'Hello, sign in' and '>Returns & Orders'. A shopping cart icon shows 0 items. Below the header, a navigation bar includes 'All', 'Today's Deals', 'Customer Service', 'Registry', 'Gift Cards', 'Sell', and 'Shop deals in Electronics'. The main banner features the text 'Shop Computers & Accessories' next to an image of a laptop, keyboard, mouse, and a dual-band router. Below the banner are four categories: 'Gaming accessories' (Headsets, Keyboards), 'Health & Personal Care' (various personal care products), 'Shop by Category' (Computers & Accessories, Video Games), and 'Sign in for the best experience' (with a yellow 'Sign in securely' button). At the bottom, a blue bar says 'We ship over 45 million' and a file navigation bar shows 'Presentation Tem....pptx', '3 eBusiness Appli....pptx', 'IT6506- e-Business....pdf', 'BIT content develo....pdf', '8F1A0484.jpg', and 'Show all'.

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

B2B

B2B: BUSINESS TO BUSINESS ECOMMERCE



1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

B2B

The screenshot shows a web page from Cisco Systems' Partners & Resellers site. At the top, there's a navigation bar with the Cisco logo and a search bar labeled "Partners & Resellers". Below the navigation, a sidebar on the left lists various strategic alliances, including BearingPoint, Callisma, Cap Gemini Ernst & Young, EDS, HP, IBM, Italtel, Microsoft (with sub-links for Summary, Solutions, News, Motorola, Sun, and ThruPoint), and others. The main content area features a yellow header bar with the text "Introduction". Below this, there are two portraits: Bill Gates on the left and John Chambers on the right. Bill Gates is identified as the Chief Software Architect and Chairman of the Board of Microsoft Corporation. John Chambers is identified as the President & CEO of Cisco Systems. Both portraits have their names and titles displayed below them. At the bottom of the page, there are two quotes. The quote on the left is from Bill Gates: "Microsoft and Cisco share a common vision of the impact of the Internet and networked applications. We believe our collaboration will have a profound impact on the future of information technology." The quote on the right is from John Chambers: "Closer linkages between applications and networks will allow organizations and individuals to customize their Internet usage and experience. Our collaboration with Microsoft will deliver measurable improvement in business processes to our mutual customers." To the right of the main content area, there's a dark blue sidebar with the heading "The goals:" followed by three bullet points: "to increase worker productivity," "improve customer service," and "and create a competitive business advantage for customers". Below this, there's a "Related Tools" section with links to "Partner Locator", "Channel Partner Application", "Partner E-Learning Connection", and "Partner eSupport".

The goals:

- to increase worker productivity,
- improve customer service,
- and create a competitive business advantage for customers

Related Tools

[Partner Locator](#)
[Channel Partner Application](#)
[Partner E-Learning Connection](#)
[Partner eSupport](#)

Mission

Microsoft and Cisco share a vision of the Internet and networked applications as the primary information technology platforms around which organizations will create sustainable competitive advantage in the future. For this vision to be fully realized, the desktop and the network must become better integrated.

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

B2G

The screenshot shows a Microsoft Internet Explorer window displaying the Victorian Government Tenders System. The title bar reads "Victorian Government Tenders - Microsoft Internet Explorer". The address bar shows the URL http://www.tenders.vic.gov.au/domino/web_notes/etenders/etdrpublishing.nsf?Open. The main content area features a large "eTenders" logo with "Victoria The Place To Be" branding. On the left, there's a sidebar with links for VGPB Policies, Procurement Process Guide, Templates & Tools, Whole of Government Contracts, Tenders web site, Contracts Publishing System, Electronic Procurement (EC4P), Procurement Training, About the VGPB, and What's New. A message at the top of the sidebar says "Achieving Excellence in Government Procurement". Below the sidebar, a message reads "Welcome to the Victorian Government Purchasing Board". The main content area displays a table of tenders:

Tender Type	Tender No.	Tender Title	Opening Date	Closing Date
Austin & Repatriation Medical Centre				
Department Tenders				
RFT	030	Mobile X-Ray Units	11/03/2003	28/03/2003
Department of Education and Training (DE&T)				
Department Tenders				
RFT	0203-62	Middle Years Pedagogy Research and Development Project	08/03/2003	28/03/2003
RFT	0203-65	Intellectual Disability and Severe Language Disorder Assessment Service	15/03/2003	01/04/2003
RFT	0203-37	Provision of Information & Communication Technology Products and Services	01/03/2003	03/04/2003

1.2 Classification of eBusiness (B2C, B2B, C2C, B2G,...)

C2C

eBay [home](#) | [my eBay](#) | [site map](#) | [sign in](#)

[Browse](#) [Sell](#) [Services](#) [Search](#) [Help](#) [Community](#)

[categories](#) [regions](#) [themes](#) [stores](#)

[Paintings](#) [Rugs](#)
[Sothebys.com](#) powered by eBay

Dolls & Bears 

New to eBay? [start here](#)

Search within **Dolls & Bears** Search in titles and descriptions

[► Dolls & Bears Stores](#) [► Toys & Hobbies Stores](#)

Categories



Barbie Books, Magazines Contemporary (1973-Now) Barbie Clothing & Accessories Friends & Family Other Contemporary Vintage (Pre-1973) Barbie Clothing & Accessories Friends & Family Other Vintage Reproduction Bears Accessories Antique Artist	Doll Clothes, Furniture <i>cont'd</i> Antique, Vintage Modern Furniture Modern (1970-Now) Vintage (Pre-1970) Doll Making, Patterns, Repair Molds Parts Patterns Clothing Patterns Doll Patterns Other Patterns Dolls Supplies Other	Dolls cont'd Tonner Uneeda Vogue Zapf Other Brands By Material Bisque Cloth Composition Hard Plastic Plastic Polymer Porcelain Resin Rubber Vinyl Wood
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Hooray for Barbie!

Favorites

Collector Editions Clothing & Accessories Coca Cola Barbie Classic TV Barbies Vintage Barbie (pre-1973)	Pink Box Harley Barbie Ballerina Barbie Princess Barbie
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Friends & Family

Kelly Ken Skipper Tommy Midge Francie	Clothes, Accessories & More
--	--

[Furniture](#)
[Contemporary](#)
[Vintage](#)
[Books & Magazines](#)
[Houses](#)
[Planes, Cars, Boats](#)



1.3. Advantages and disadvantages of eBusiness

Advantages of eBusiness

- **Increased reach and accessibility:** eBusiness allows companies to reach a global audience, breaking down geographical barriers and making it easier to connect with customers and partners around the world.
- **Cost savings:** eBusiness can reduce many of the costs associated with traditional business models, such as rent, utilities, and staffing. By automating many processes, businesses can also save on labor costs and increase efficiency.
- **Improved customer experience:** eBusiness allows companies to offer a range of customer-centric services such as online ordering, delivery tracking, and online support. This can lead to higher levels of customer satisfaction and loyalty.

1.3. Advantages and disadvantages of eBusiness

Advantages of eBusiness

- **Greater flexibility:** eBusiness provides companies with greater flexibility to adapt to changing market conditions and customer demands. Companies can quickly add or remove products and services, adjust prices, and respond to customer feedback.
- **Increased competitiveness:** eBusiness enables smaller companies to compete with larger organizations on a more level playing field. By leveraging digital technologies, small businesses can often deliver products and services at lower costs and with greater agility.
- **Improved supply chain management:** eBusiness helps companies streamline their supply chain processes, reduce lead times, and improve inventory management, leading to improved operational efficiency and reduced costs.

1.3. Advantages and disadvantages of eBusiness

Disadvantages of eBusiness

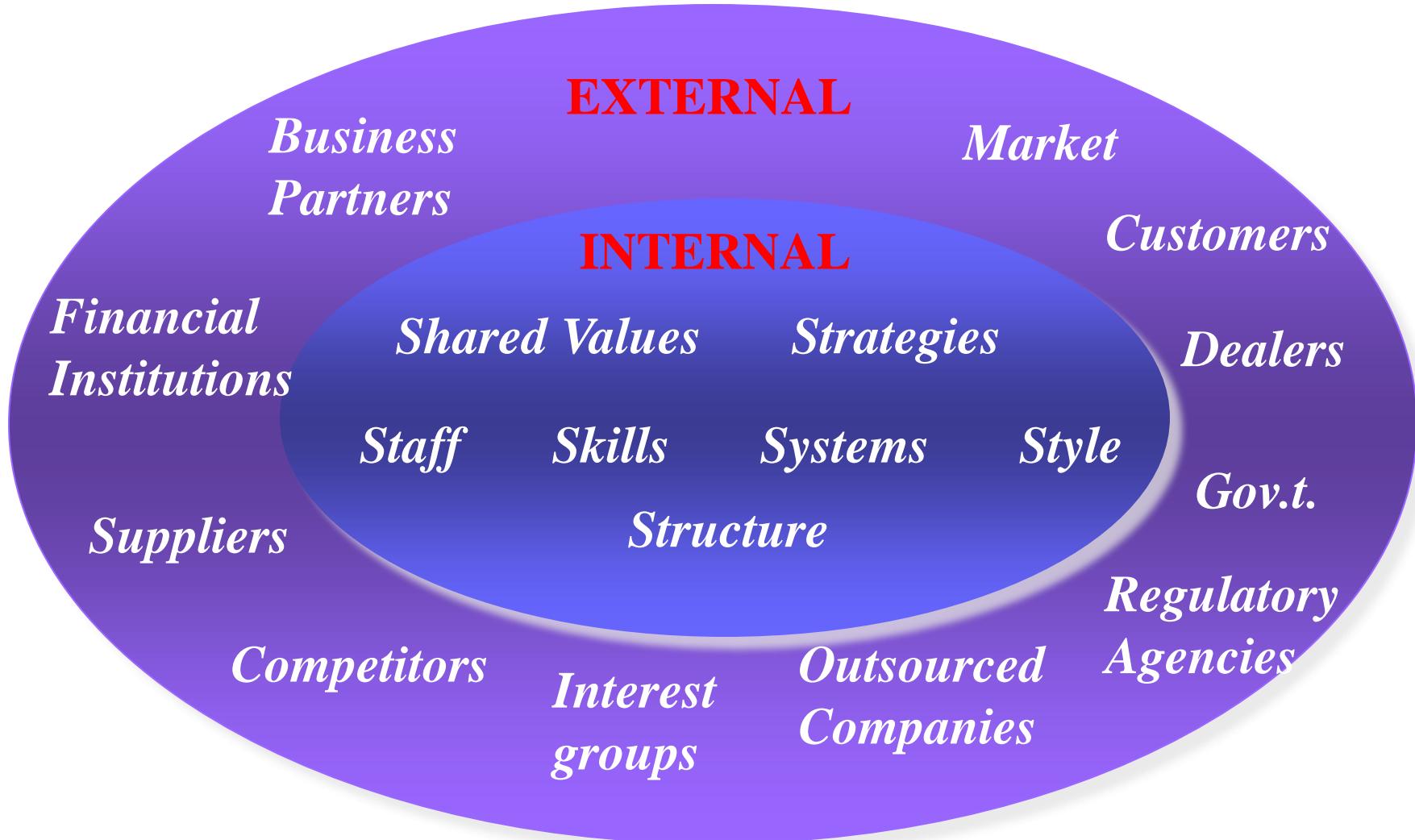
- **Security risks:** eBusiness can pose significant security risks, such as data breaches, hacking, and identity theft. Companies must invest in robust security measures to protect their data and the data of their customers.
- **Infrastructure requirements:** eBusiness requires a reliable and fast internet connection, as well as the hardware and software to support it. Companies must invest in the necessary infrastructure to support their eBusiness operations.
- **Technical issues:** eBusiness systems can experience technical issues, such as website downtime, server outages, and software bugs. These issues can impact customer experience and lead to lost revenue.

1.3. Advantages and disadvantages of eBusiness

Disadvantages of eBusiness

- **Dependence on technology:** eBusiness requires a high degree of dependence on technology, and companies must have a solid understanding of digital technologies and systems to operate successfully. Technical problems can result in significant downtime and lost revenue.
- **Lack of personal interaction:** eBusiness can lack the personal interaction and relationship building that is possible with traditional business models. This can make it more challenging to build trust with customers /partners.
- **Competition:** eBusiness has lowered the barrier to entry for many industries, making it easier for competitors to enter the market. This can lead to increased competition and price pressure.

1.4. The eBusiness Environment



1.4. The eBusiness Environment

Forces working on The eBusiness Environment



1.4. The eBusiness Environment

Internal Environment

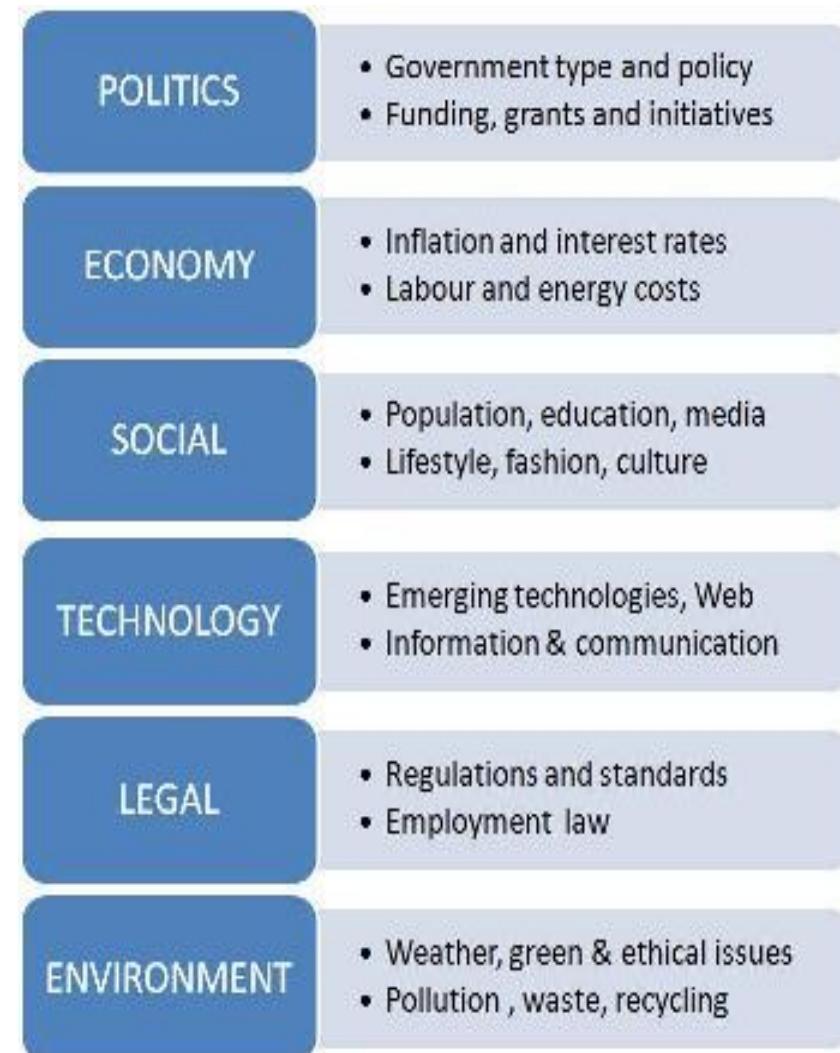
- Employees
- Board of Directors
- Shareholders
- Systems
- Structure
- Strategies
- Shared values
- Staff
- Skills



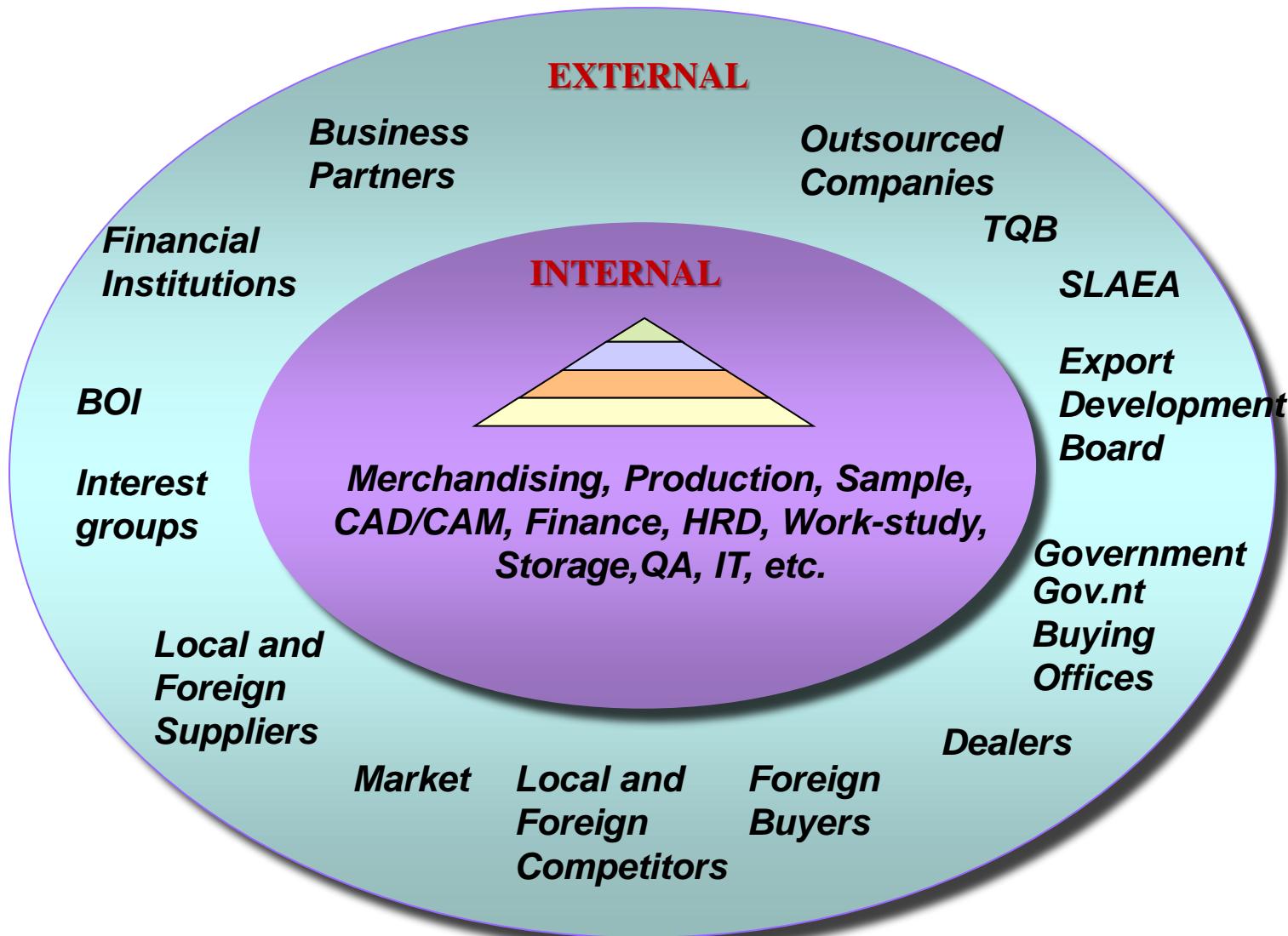
1.4. The eBusiness Environment

External Environment

- Customers
- Markets
- Government
- Suppliers
- Special Interest Groups
- Media
- Labour Unions
- Competitors
- Financial Institutions
- Etc...

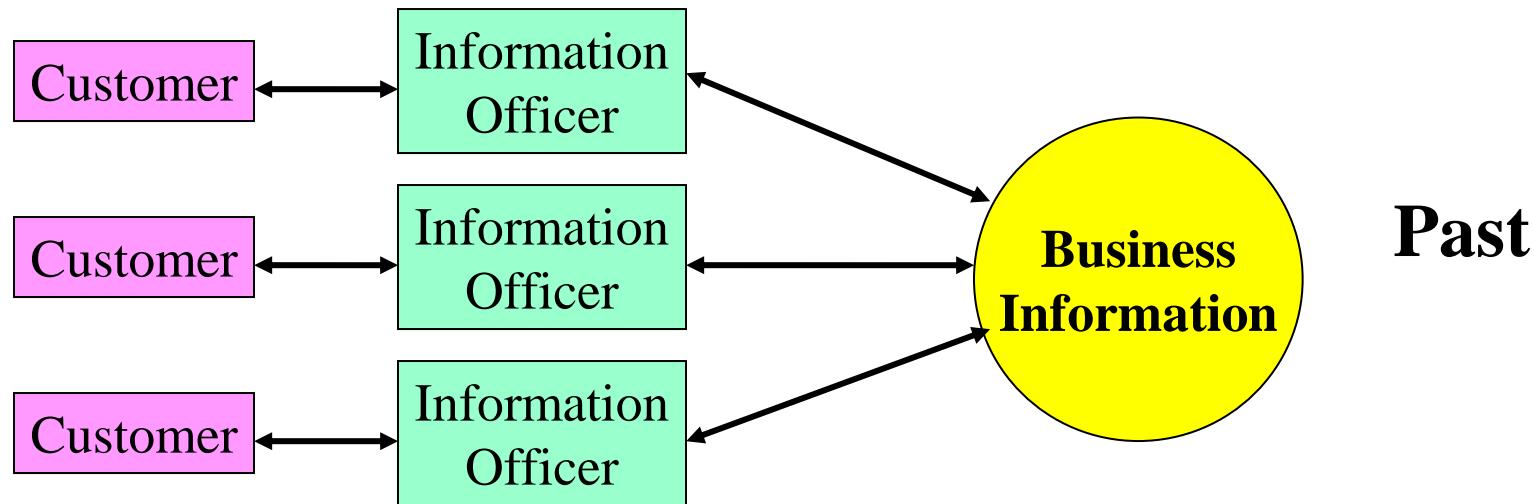


The Internal/External Business Environment - Garment Sector

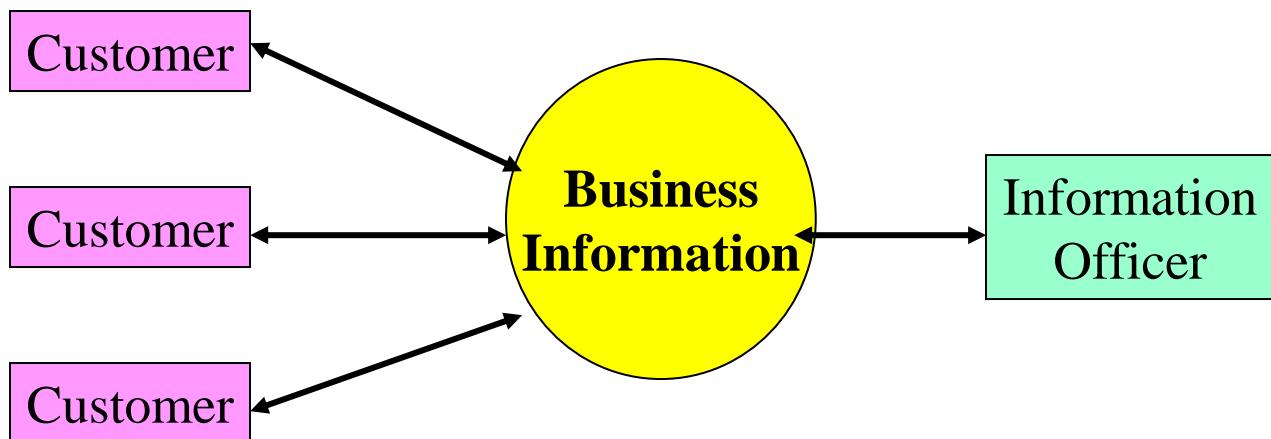


1.5. Customer business interactions in eBusiness

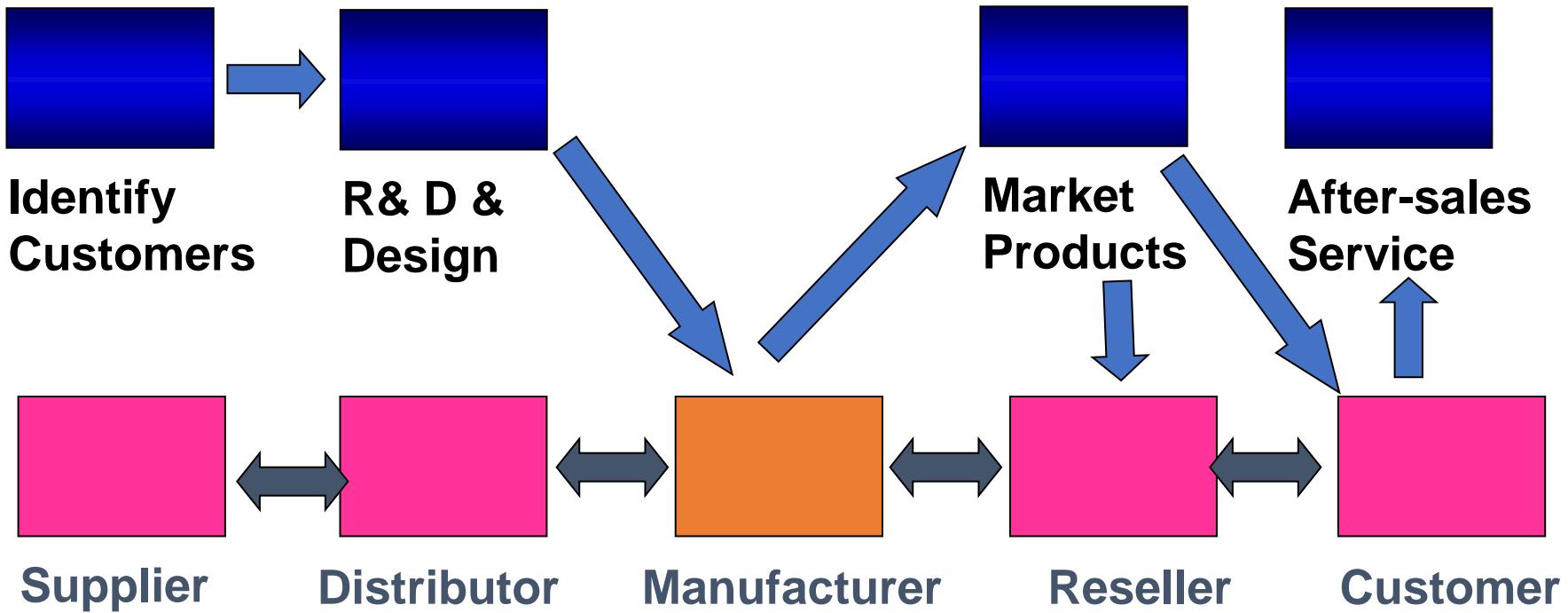
Customer - Business Interaction



Present

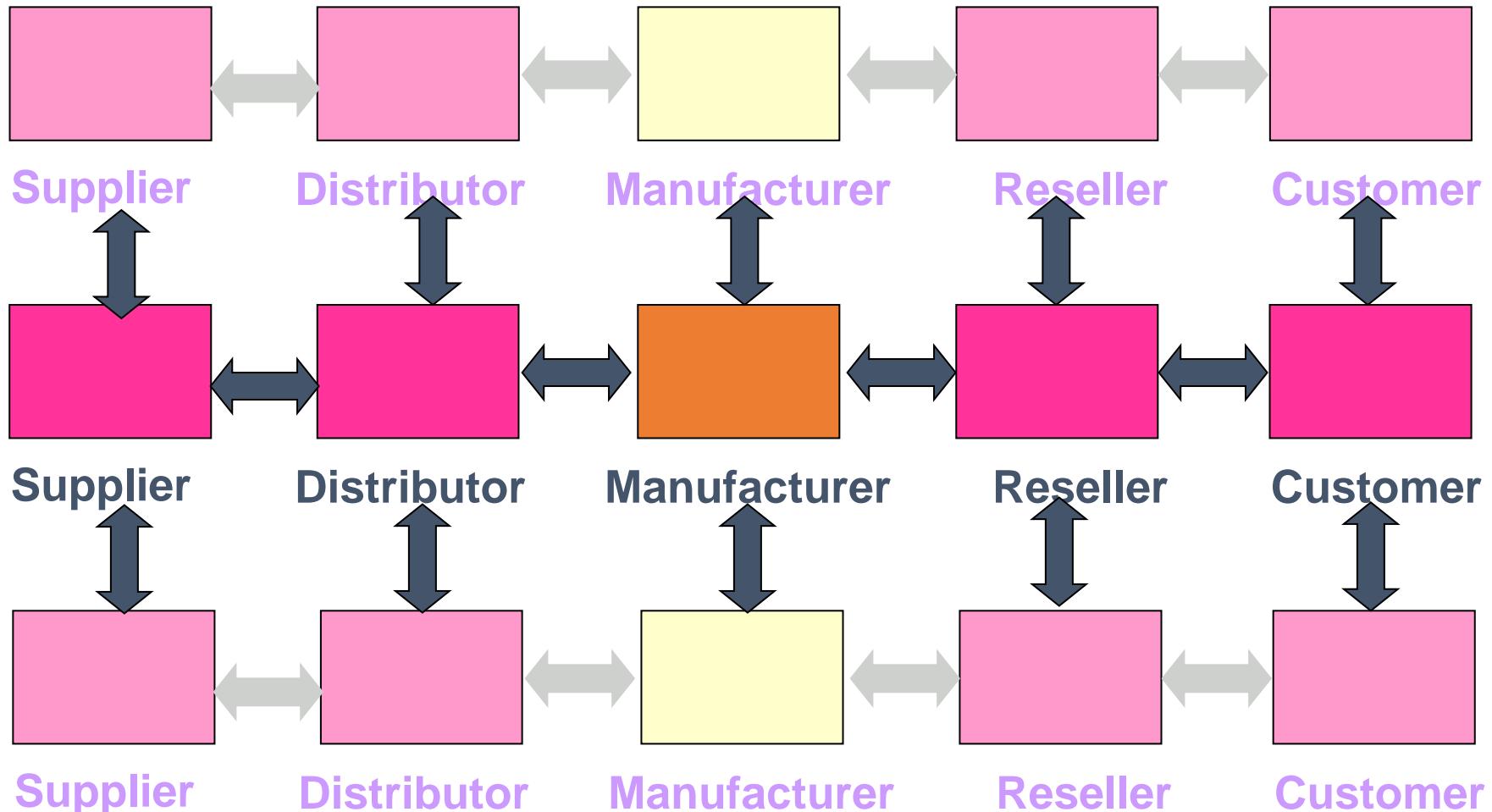


1.5. Customer business interactions in eBusiness



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Business Value Chain Collaborations



1.5 Customer business interactions in eBusiness



Online Marketplaces

Third-party business-to-customer (B2C) or customer-to-customer (C2C)



Retail Sales
Directly to customers



**Business-to-Business
(B2B)**