Electronic Business Systems

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(2)

The Evolution

```
      Trade          →        Technology
        ↑                          ↓
   Civilisation         Value Added Activities
        ↑                      Expertise
   Harness                       ↓
    Nature                   Professions
        ↑                         ↓
  Advancement          Quality Improvement
     tools                  Competition
                                  ↓
 Communal Coexistence         WEALTH
        ↑                         ↓
  Communication  Trade         Money
                          Valuable Metal & stones
                                Paper Money
                                 Electronic
```

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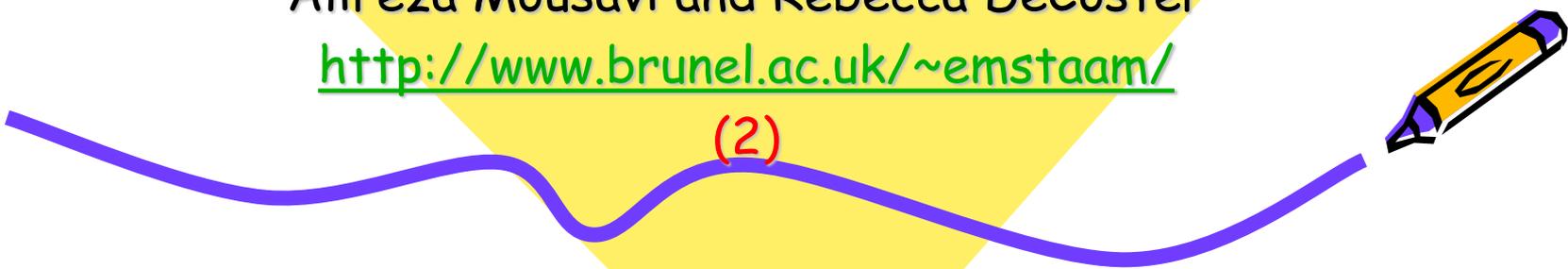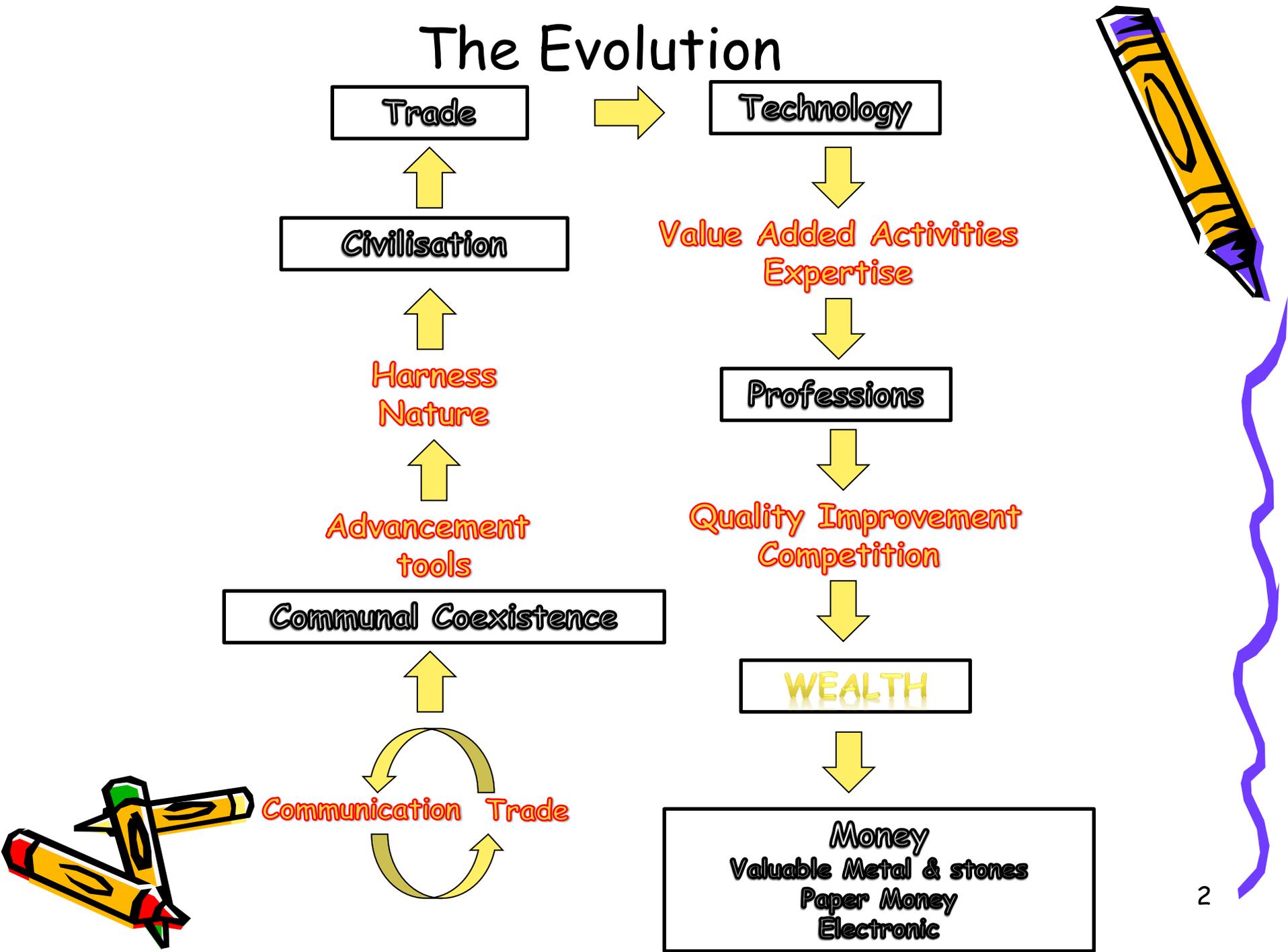
# Evolution in words

- Evolution:
  - Communication and trade → *coexistence*
  - Advancement of tools → *harness nature*
  - Civilisation Formed → *trade*
  - Advancements in trade → *technologies*
  - Technology → *Value added Activities & Expertise*
  - Professions → *improved quality → accumulation wealth*
  - Wealth → *Money (valuable gems and metal → paper →Electronic*
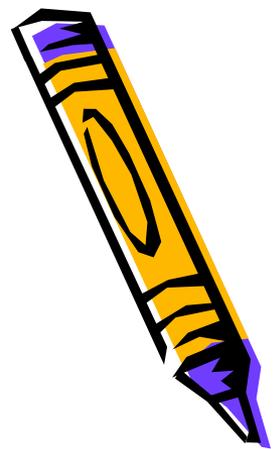
# Commerce

Commerce is the exchange and trade of goods, services or information between individuals and companies.
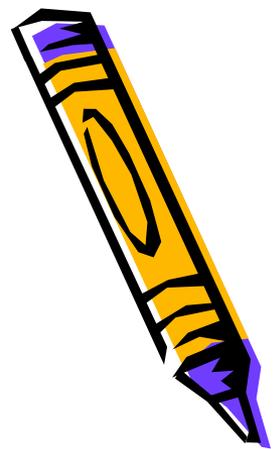
# Commercial Process

1. Bidding

2. Transaction

3. Arrangements

4. Delivery of Products/Services/Information
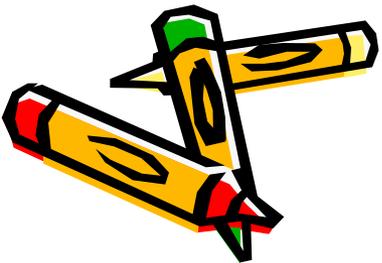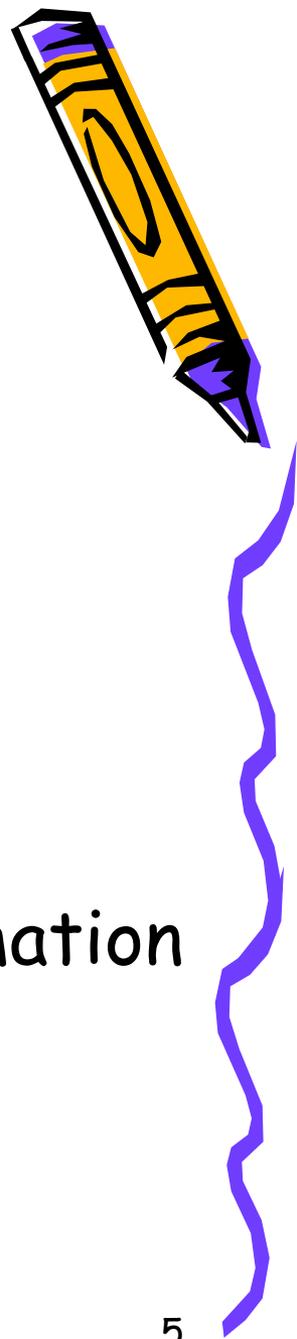
# Commerce is conducted:
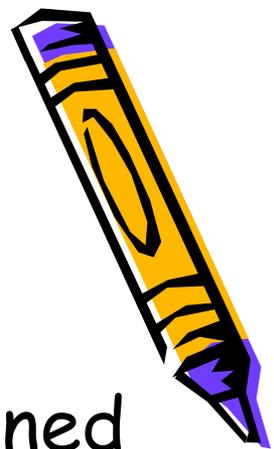
Through a network of *relationships* governed by rules and implemented via *interfaces*.

It also requires:

*Identification* and *assigning* of members and responsibilities (**resourcing**) amongst members.
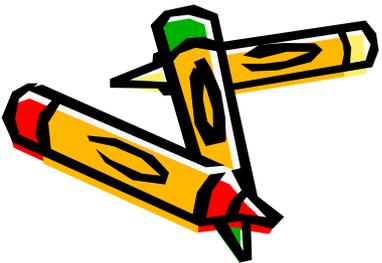
# Role of ICT in Companies
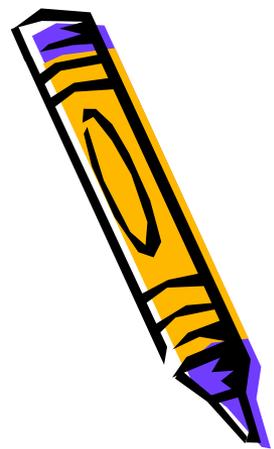
The advances in Information, Computing and Telecommunication (ICT) technologies has revolutionised transactions and business operations.
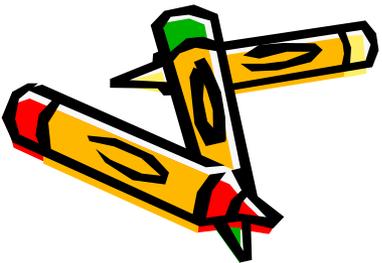
# Transformation of Internal and External relationships
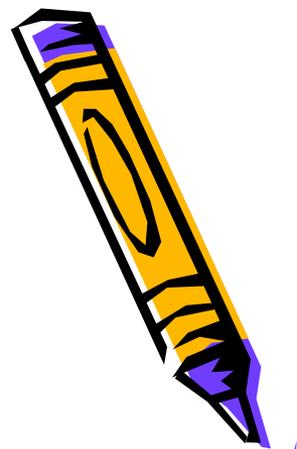
by:

Embedding software and communication technologies to facilitate processes and operations
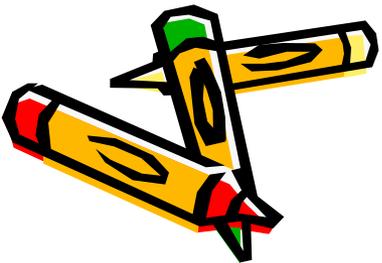
# Electronically Enabled Businesses
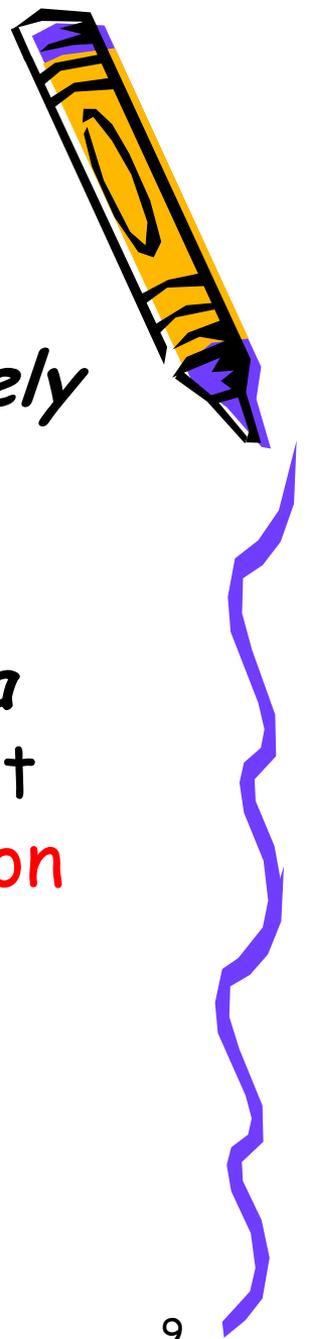
- Are working more **_efficiently_**, **_effectively_** and with **_less human errors._**

- The ability to **_store and exchange data_** that is accessible close to speed of light allows companies to <span style="color:red">excel in the provision of their services to customers</span> (other businesses or direct consumers)
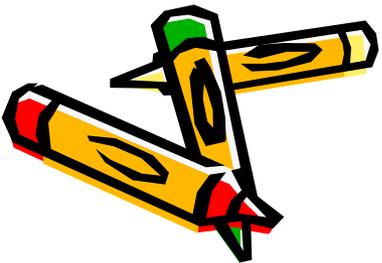
# Seamless Integration of:

- Front-end operations (interactions with customer) with back-end processes (internal operations)
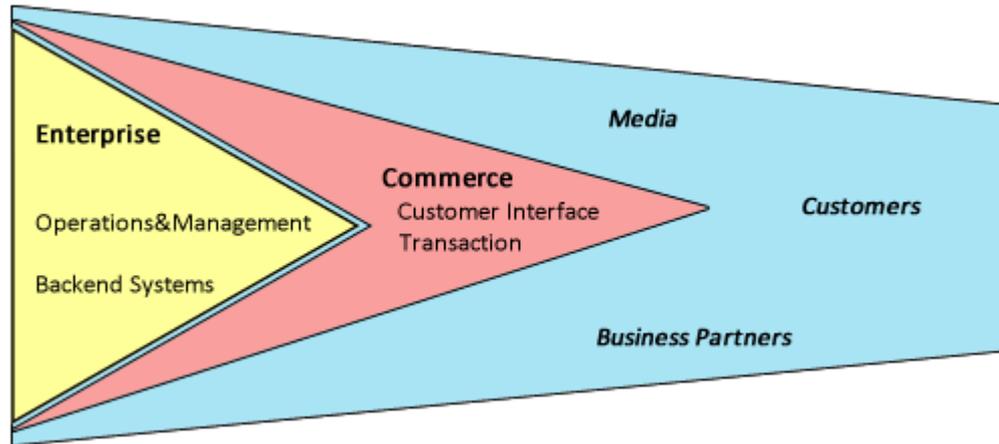


Figure 1-1: Electronic Business

# Electronic & Mobile Business or Commerce
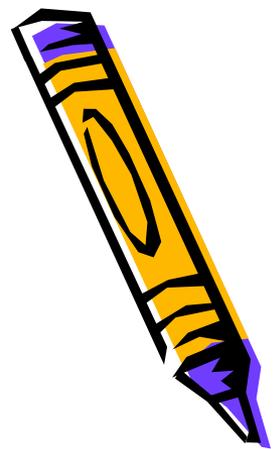
E&M Commerce ≠ E&M Business

But

E&M Commerce is a subset of E&M Business

# Business or Enterprise Systems

Data/Information

Business/Enterprise
*Processes*

Product or Service
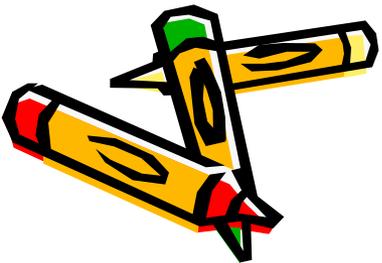
Raw Material
&
Components
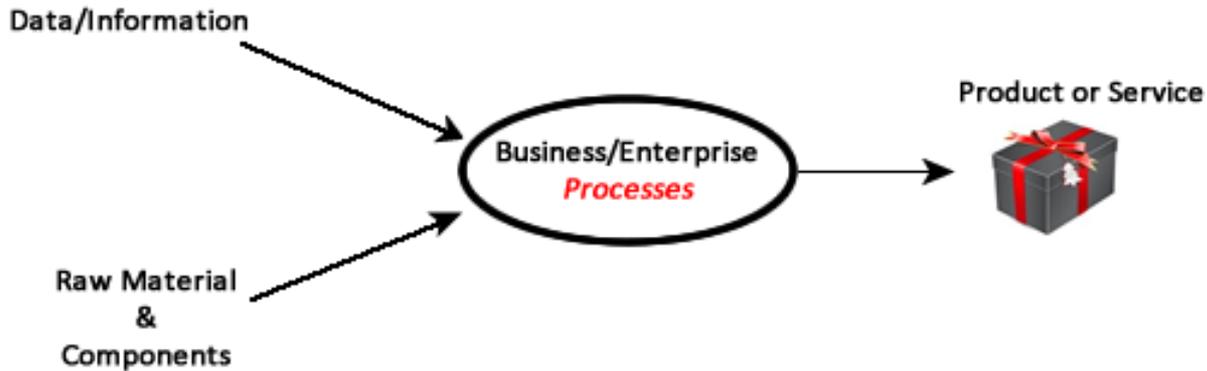
Figure 1-2: Business or Enterprise Systems

# Definition of Business/Enterprise Systems
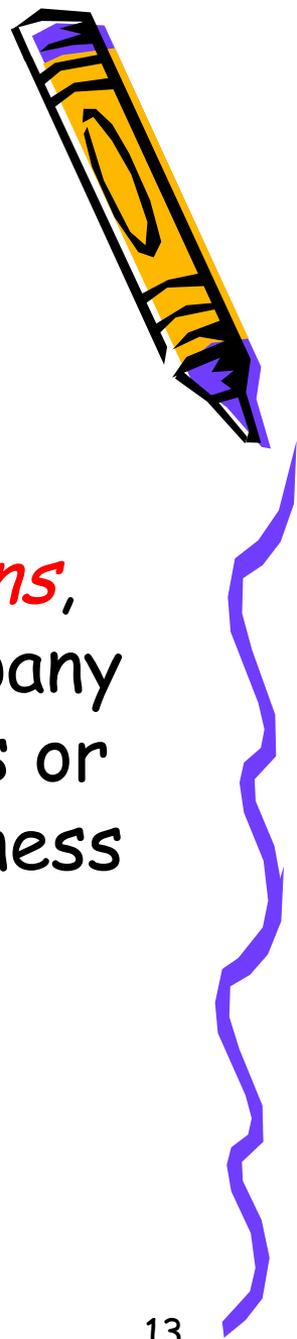
We define business systems as:

The combination of *processes*, *operations*, and *interrelationships* that enable a company or group of companies to deliver services or products to their customers and/or business partners.
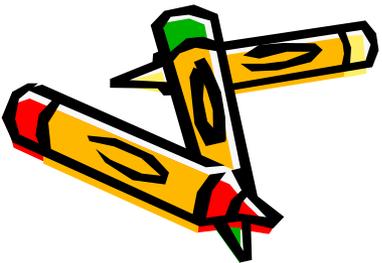
# Business Systems Enablers
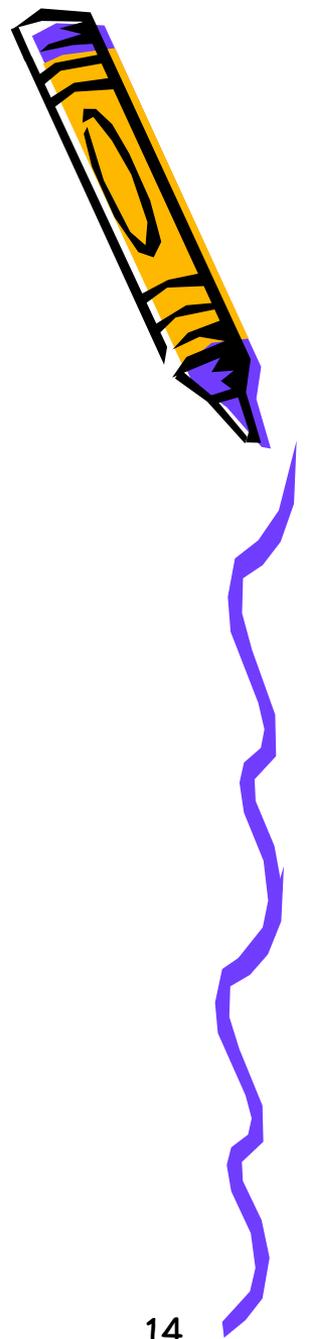
A combination of:

- ***Resources*** i.e. people, machines, tools, equipment, computers, communication infrastructure, …

- ***Processes*** that transform <u>raw material</u> into <u>final products and services.</u>

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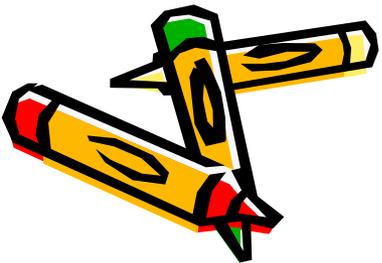
# The Purpose of Business Systems
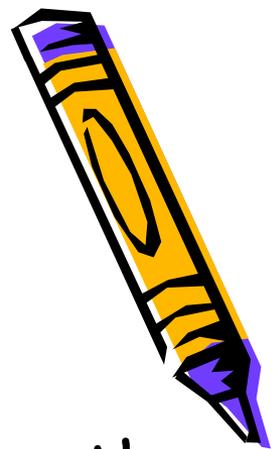
Enrich the society and generate wealth for the stake holders.

Hence:

## *"Enterprise"*

In this course: **Business System = Enterprise**
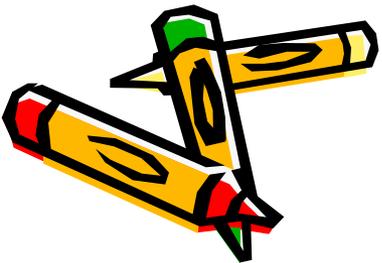
# Electronic and Mobile Commerce
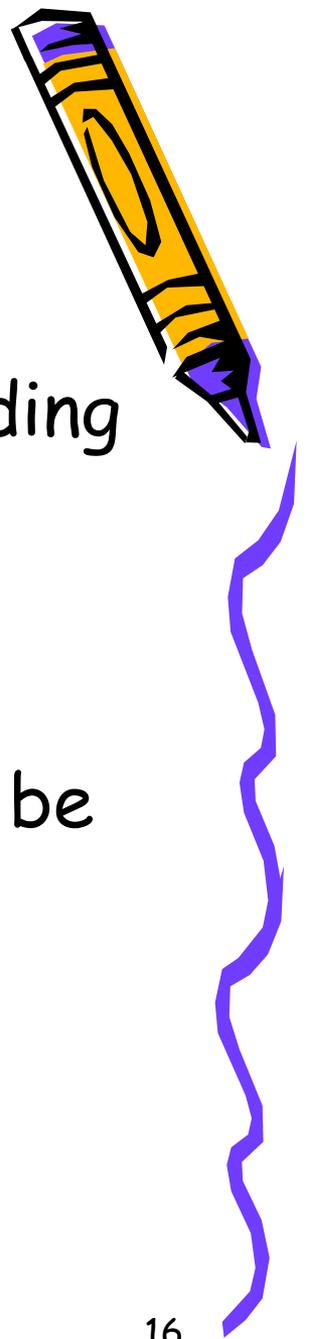
Electronic & Mobile Commerce is the trading of goods and services over computer mediated networks (e.g. internet).

The payment or delivery may or may not be made over such network.
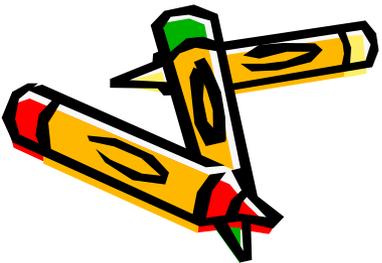
# In other words…

1. Software applications,
2. DBMS,
3. Telecommunications,
4. Network protocols,
5. Wireless technologies,
6. Enterprise resource planning,
7. Security systems, and
8. Server technologies

are put together to emulate business and commercial operations.
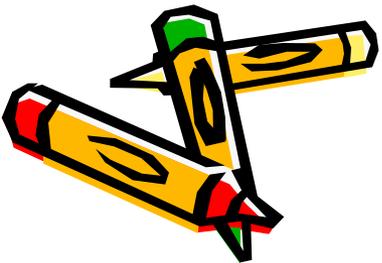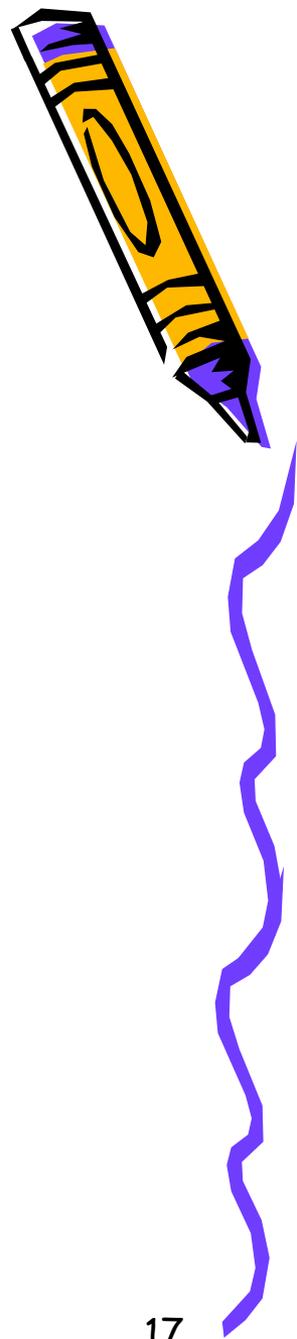
# Origins of e&m Commerce
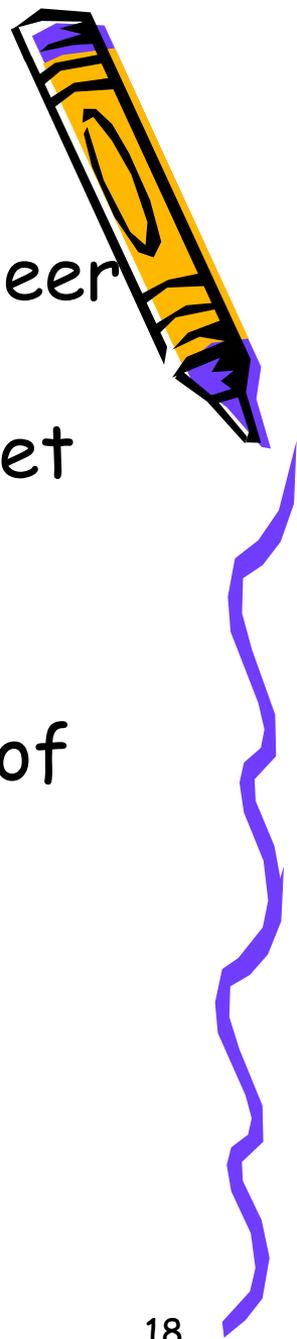
- Electronic Data Interchange: peer-to-peer network of that integrated critical business operations (e.g. old airline ticket system, BOM, Banking, Military)

- Advent of WWW created an explosion of commercial applications

# The Competitive Edge

E&M Commerce provides a perfect platform for completion because:

1. **Barriers** to entry are lowered
2. **Transaction costs** are reduced
3. Customers have **improved access** to information
4. Marginal or **customer-oriented pricing** becomes possible
5. **Convenience** for buyers and sellers
6. **Direct access** to customers
7. Power of **social networks** can be utilised
8. **Efficient and Effective** business processes through electronically enabled operations with lesser errors.
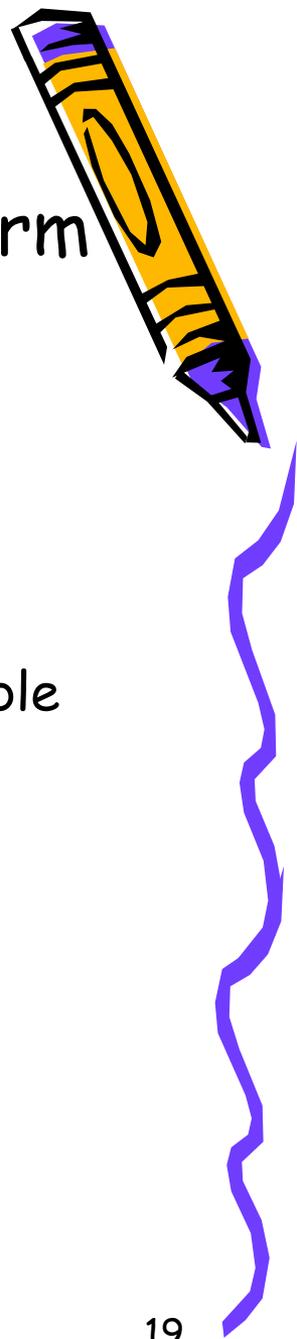
# To be a Successful M&E Commerce
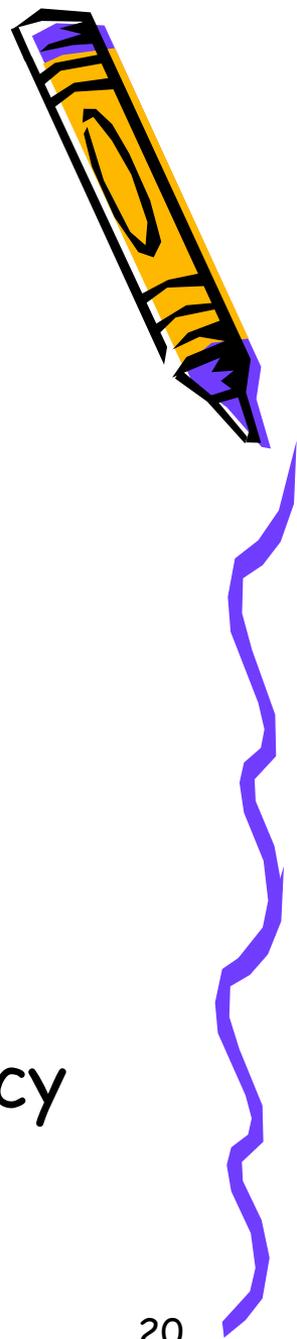
- Build **community** around your product (branding)

- Provide **rich trading content** such as catalogues and manuals.

- **Continuous update and upgrade** of technology to ensure maximum efficiency

# WWW Value Network

Customers
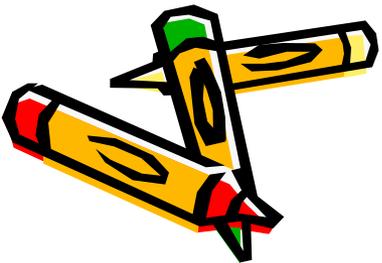
Enterprise

Suppliers
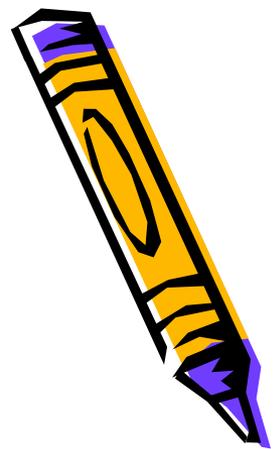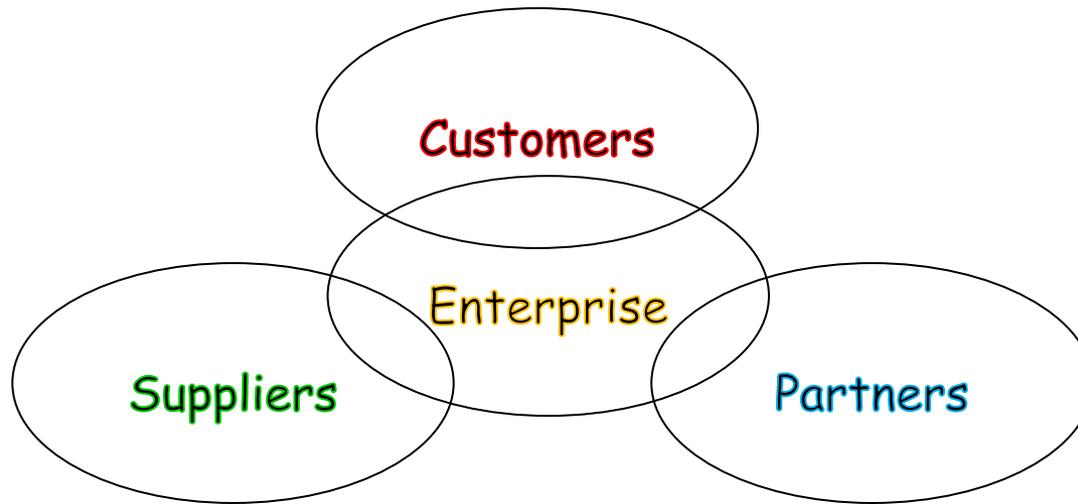
Partners

Enterprise: Heart of the network all activities are masterminded
Customer: Source of revenue
Suppliers: Provide the raw material (physical/information)
Partners: Companies and individuals that provide support and share in
 adding value

# Sustainability of E&M Commerce

Three reasons:

1. Affordability, User Friendliness and Accessibility of enabling Devices.

2. Increase in flexibility, reduced response time and accelerated operations – thanks to Wireless technologies.

3. Automation of engineering and business process – thanks to advancement in computational and communication technologies.

Go to Page 15 of the course book and answer the questions!