

2- Electronic commerce(E- commerce):

With the growth of the internet, **electronic commerce** is playing an important role in linking organizations with their customers and their business partners, and is becoming an essential component of the IT strategy of modern businesses. When e-commerce is done in a wireless environment, such as through the use of cellphones, this is referred to as **mobile commerce** (m-commerce).

Important categories of e-commerce include:

1. Business-to-consumer (B2C).
2. Business-to-business (B2B).
3. Consumer-to-consumer (C2C).

1- Business-to-Consumer (B2C):

Business-to-consumer commerce allows customers to make enquiries about products, place orders, pay accounts, and obtain service support via the Internet. Since customers can enter transactions at any time of the day or night, and from any geographical location, this can be a powerful tool for expanding the customer base of a business.

A successful web site should be attractive to look at and easy to use. In addition, it should offer its customers good performance, efficient service, and security. Insufficient server power and communications capacity may cause customers to become upset when browsing or selecting products.

Many sites record details of their customers' interests, so that they can be guided to the appropriate parts of the site and provide discounts and special offers for regular customers.

2- Business-to-Business (B2B):

Business-to-business e-commerce comprises the common of electronic transactions, involving the supply chain between organizations and their distributors, suppliers and other partners.

Efficient management of the supply chain can cut costs, increase profits, improve relationships with customers and suppliers, and gain good advantage.

To achieve this, companies need to:

- Get the right product to the right place at the least cost;

- Keep inventory as low as possible while meeting customer requirements;
- Reduce cycle times by speeding up the gaining and processing of raw materials.

Information technologies used to support business-to-business e-commerce include email, product catalogues, and order processing systems. These functions may be linked to traditional accounting and business information systems, to ensure that inventory and other databases are automatically updated via web transactions.

Intranets provide a facility for members of an organization to chat, hold meetings and exchange information, while at the same time sensitive information is protected from unauthorized access by means of a firewall.

An **extranet** provides a means of access to the intranet for authorized users such as business consultants.

3- C2C e-Commerce:

Sales are the most popular method of leading business between individuals over the Internet. Other C2C activities include, selling of personal services such as astrology and medical advice, and the exchange of files especially music and computer games.

Electronic funds transfer:

Electronic payment systems can be used to transfer funds between the bank accounts of a business and its suppliers, or from a customer to the business. The most popular payment method used by individual consumers is the credit card, which requires the merchant to pay a commission to the bank on each transaction.

An important issue in electronic commerce is the security of Internet transactions. Data is commonly encrypted to reduce the weakness of credit card transactions.

Secure Sockets Layer (**SSL**) and Secure Electronic Transaction (**SET**) are two of the standards used to secure electronic payments on the Internet. Secure sites usually have URLs that begin with **https** instead of the usual **http**.

Some issues in e-commerce:

For e-commerce to succeed, companies need to make large investments in hardware and telecommunications infrastructures that will be up and running 100% of the time, and software that is easy to use and reliable.

A number of early members in the e-commerce market suffered financial losses because their technology was not able to handle the huge numbers of transactions to be processed. Internet customers are often impatient, and will move to a competing site if the response is too slow.

Gaining the trust of customers can be difficult - the seller is often unwilling to dispatch goods before payment, and the buyer may be unwilling to pay before receiving the goods.

Social problems have also appeared, with children, gamblers and shopping addicts enjoying free access to electronic commerce sites.

Since e-commerce supports global business transactions, it presents the challenge of modifying web sites to suit people of different populations and cultures (and even different languages).