





## 2.1 What is Information-Way?

Information Super highway is the full form of I-Way.

The I-Way is the interconnected data highways of available many forms such as telephone wires, cable TV wires, radio-based wireless-cellular as well as satellite.

The Information Superhighway (I-Way) is also forms of many Computers, communications networks and communication software in e-commerce.

The I-Way is small and fast information super highway systems which is used to provide the transportation infrastructure for transfer the information (text, audio, video and so on) from the one place to another place.

For any effective e-commerce application will require the I-Way infrastructure in the same way that regular or physical commerce needs the interstate highway network to transport products from one place to another places.

I-Way is a global one (I-Way used world-wide). I-Way is popular with different name, it also called the National Information Infrastructure (NII) in the United States, Data-Dori in japan and Maliya in Malesiya.

The I-Way technologies will be key features in the business revolution now a day.

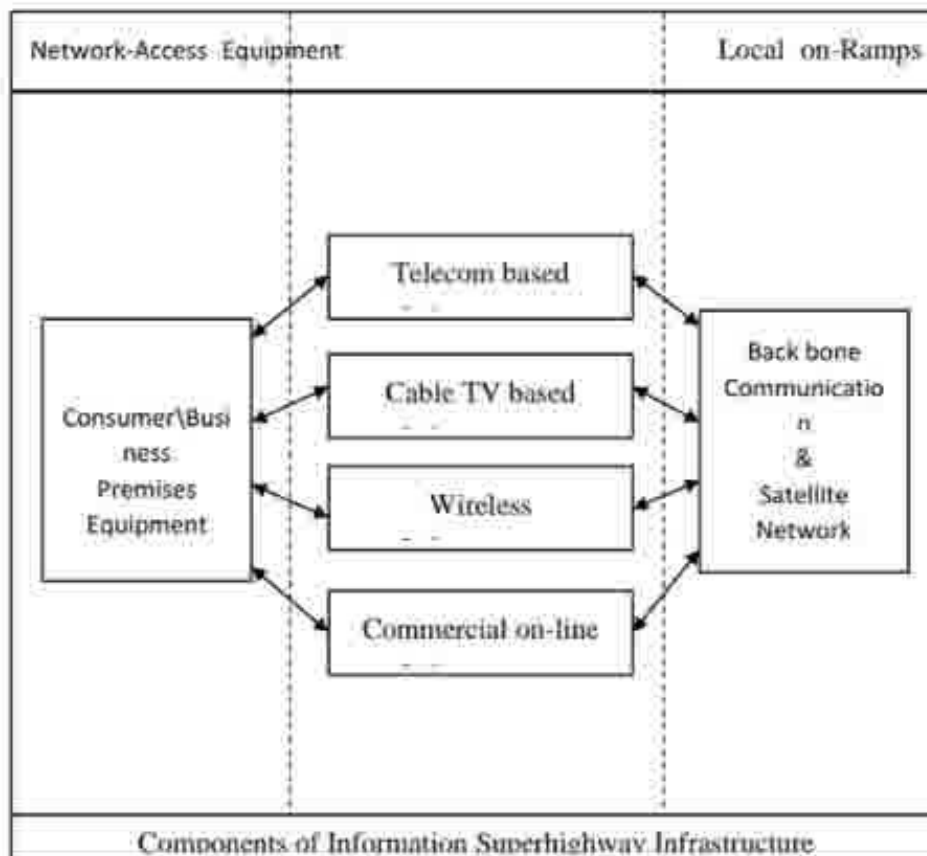
## 2.2 Components I-Way

Information Super Highway technology has main three Components.

2.2.1 Network-Access (Consumer Access) Equipment

2.2.2 Local on-Ramps

2.2.3 Global Information Distribution Network





**2.2.1 Network-Access (Consumer Access) equipment:**

This is the First Component of Information Superhighway technology. Network-Access (Consumer Access) equipment component of the I-Way includes software and hardware vendors, who provides physical devices such as router and switches, access device such as computer and setup boxes as well as software platforms such as browser and operating systems.

**2.2.2 Local on-Ramps or Access Road:**

This is the Second Component of Information Superhighway technology. Local on-Ramps or Access Road component of the I-Way is the interface between consumer or business premises equipment and communication backbone or satellite network. The providers of access on ramp can be distributed into four categories.

- 1) Telecom based infrastructure
- 2) Cable TV based infrastructure
- 3) Wireless infrastructure
- 4) Commercial on-line infrastructure

**1) Telecom based infrastructure:**

Telecom based infrastructure is the basic foundation of I-way. Telecom based infrastructure provide the very high speed infrastructure to transfer the information such as text, audio, video and all other information from the one place to another place.

**2) Cable TV based Infrastructure:**

Cable TV based infrastructure is the very fast foundation of I-way. Cable TV based infrastructure is mostly used to transfer the a popular broad casting to home.

**3) Wireless infrastructure:**

Wireless based is one another popular infrastructure now a day, It is radio or cellular based infrastructure which is used to transfer the data using wireless technologies.

**4) Commercial on-line infrastructure (Internet):**

Commercial on-line infrastructure is becomes the global information distribution network in current era. Currently, it is most popular and used infrastructure for all kind of e-transaction (online shopping, online payment, video on demand, social media, searching, surfing and so on.) in the world of internet.

Before selecting provider, customer should decide which services they want to access in electronic market- place and then research which option best suitable for their requirement or need.





### 2.2.3 Global Information Distribution Network:

This is the Second Component of Information Superhighway technology. Most of the infrastructure for the I-way that is already exist in large network of fiber optic standards, satellites and copper wires. This Component include such a networks as long-distance telephone lines, satellite network and internet.

## 2.3 Transaction Models

Commercial or sales transaction that takes place between the two different entities online or over the internet it is known as e-commerce transaction models.

E-commerce transaction models or business models or categories of e-commerce transaction can commonly be classified as follows.

<b>B2B</b>	<b>B2C</b>
<b>C2B</b>	<b>C2C</b>
<b>B2G</b>	<b>G2B</b>
<b>G2G</b>	

Categories of E-Commerce Transaction

- 1) Business to Business (B2B)
- 2) Business to Consumer (B2C)
- 3) Consumer to Business (C2B)
- 4) Consumer to Consumer (C2C)
- 5) Business to Government (B2G)
- 6) Government to Business (G2B)
- 7) Government to Government (G2G)

### 1) Business to Business (B2B)

In business to business e-commerce transaction, one business organization sales its products to another business organization online are known as Business to Business transaction model.

Business to business transaction model describes online buying and selling transactions between businesses, such as in between a manufacturer or products maker and a wholesaler, in between a wholesaler or dealers and a retailer or merchant.

In B2B e-commerce transactions both the buyers and sellers are business entities, for examples manufacturers, wholesalers, distributors, traders, retailers, suppliers.





Benefits of B2B model:

- ⇒ Encourage businesses online.
- ⇒ To increases import and export of Products.
- ⇒ Define buyers as well as suppliers.

## 2) Business to Consumer (B2C)

In business to consumer e-commerce transaction, one business organization sales its products to consumer online are known as Business to consumer transaction model.

Business to consumer transaction model describes online buying and selling transactions between business organization and consumer, such as in between a manufacturer to consumer, wholesaler to consumer, retailer to consumer.

In B2C e-commerce transactions buyers are the consumer entity and sellers are business entity, for examples manufacturers, wholesalers, distributors, traders, retailers, suppliers are business entity and customers or end user are the consumer entity.



Benefits of B2C model:

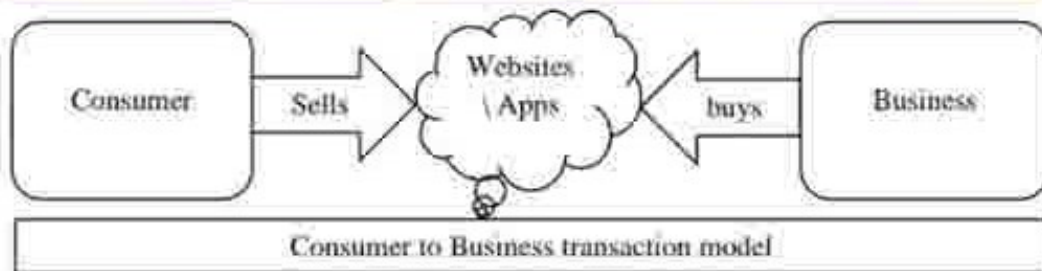
- ⇒ Encourage businesses online.
- ⇒ To increases Direct interaction with the customers.
- ⇒ Define suppliers(businesses) as well as customer.

## 3) Consumer to Business (C2B)

In consumer to business e-commerce transaction, consumer sales its products to business organization online are known as consumer to business transaction model.

Consumer to business transaction model describes online buying and selling transactions between consumer and business organization, such as in between a consumer to manufacturer, consumer to wholesaler, consumer to retailer.

In C2B e-commerce transactions buyers are business entity and sellers are the consumer entity, for examples customers or end user are the consumer entity and manufacturers, wholesalers, distributors, traders, retailers, suppliers are business or organization entity.



Benefits of C2B model:

- ⇒ Encourage consumer to sell its product online.
- ⇒ To increase online business for customers to companies.
- ⇒ Define suppliers (as a customer) as well as buyers (businesses).

#### 4) Consumer to Consumer (C2C)

In consumer to consumer e-commerce transaction, consumer sales its products to consumer online are known as consumer to consumer transaction model.

consumer to consumer transaction model describes online buying and selling transactions between consumer to consumer.

In C2C e-commerce transactions buyers are consumer entity and sellers are also the consumer entity, for examples both the buyers and sellers are customers or end user entities.



Benefits of C2C model:

- ⇒ Encourage consumer to sell its product online to consumer.
- ⇒ To increase online business for customers to customers.
- ⇒ Define suppliers (as a customer) as well as buyers (as a customer).

#### 5) Business to Government (B2G)

In business to government e-commerce transaction, one business organization sales its products or provides different services to government online are known as business to government transaction model.

business to government transaction model describes online buying and selling transactions between business to government.





## E-Commerce & Cyber Security    The Network Infrastructure of e-Commerce

In B2G e-commerce transactions buyers are the government entity and sellers are business entity.



Benefits of B2G model:

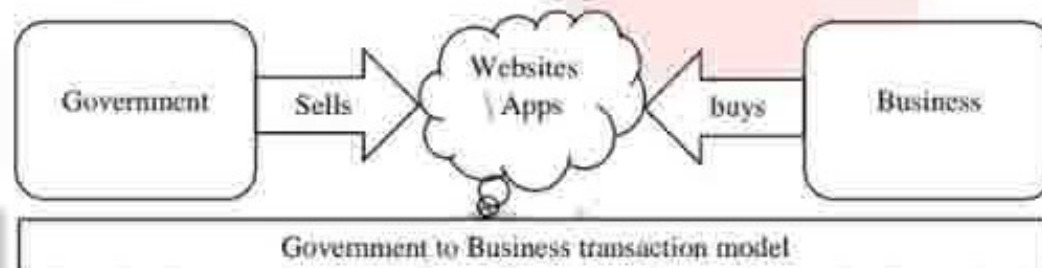
- ⇒ Encourage online businesses with government.
- ⇒ To increases Direct interaction of business with the government.
- ⇒ Define suppliers(businesses) as well as buyers (as a government).

### **6) Government to Business (G2B)**

In government to business e-commerce transaction, government sales its products or provides different services to business online are known as government to business transaction model.

Government to business transaction model describes online buying and selling transactions between government and business.

In G2B e-commerce transactions buyers are the business entity and sellers are government entity.



Benefits of G2B model:

- ⇒ Encourage online businesses with government.
- ⇒ To increases direct interaction of business with the government.
- ⇒ Define suppliers(government) as well as buyers (as a business)

### **7) Government to Government (G2G)**

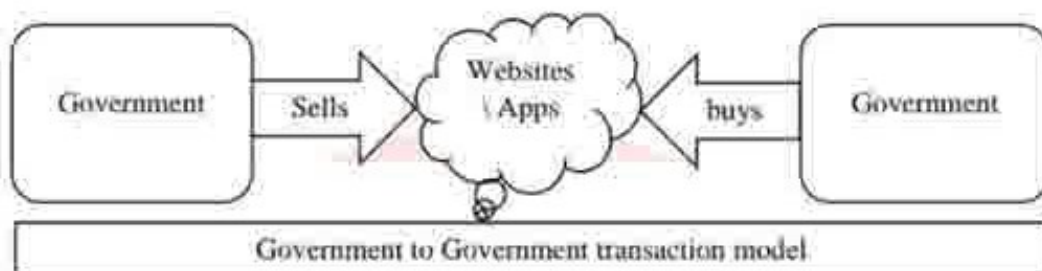
In government to government e-commerce transaction, government sales its products or provides different services to government online are known as government to government transaction model.



## E-Commerce & Cyber Security    The Network Infrastructure of e-Commerce

Government to government transaction model describes online buying and selling transactions between government and government.

In G2G e-commerce transactions buyers are the government entity and sellers are government entity, for example central government selling product or services to state government.



Benefits of G2G model:

- ⇒ Encourage online businesses or services in between governments.
- ⇒ To increases direct interaction of government to government.
- ⇒ Define suppliers (government) as well as buyers (as a government).

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