

## Unit 2: Business Model for E-Commerce

### # Business Model

A business model is the methods of doing business by which a company can sustain itself, that is, generate revenue. The business model spells out how a company makes money by specifying where it is positioned in the value chain.

A company's business model is the way in which it conducts business in order to generate revenue. In the new economy, companies are creating new business models and reinventing old models. Reading the literature, we find business models categorized in different ways. Presently, there is no single, comprehensive and cogent taxonomy of Web business models that one can point to. Although there are many different ways to categorize e-business models, they can be broadly classified as follows:

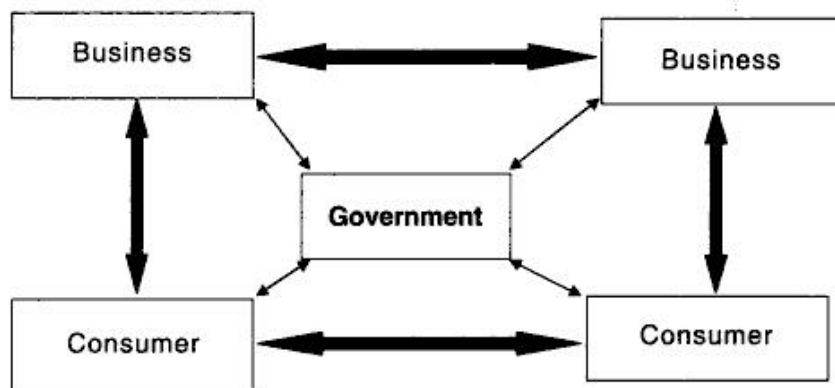
1. E-Business models based on the relationship of Transaction Parties
2. E-Business models based on the relationship of Transaction Types

#### 1. E-Business models based on the relationship of Transaction Parties

A transaction in an electronic market represents a number of interactions between parties. For instance, it could involve several trading steps, such as marketing, ordering, payment, and support for delivery. An electronic business allows the participating sellers and buyers to exchange goods and services with the aid of information technology.

E-commerce can be classified according to the transaction partners such as:

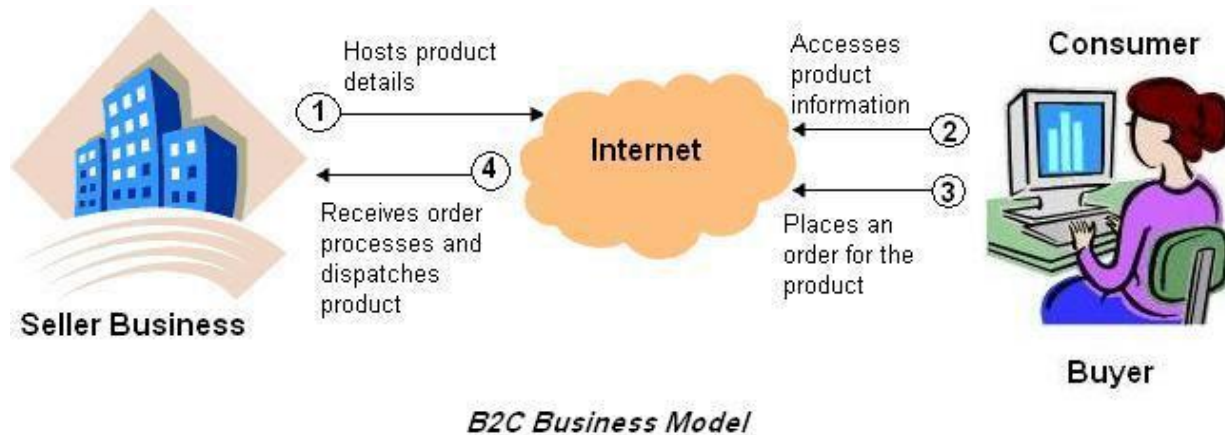
1. Business to consumer (B2C)
2. Business to Business (B2B)
3. Consumer to Consumer (C2C)
4. Consumer to Business (C2B)
5. Business to Government (B2G)
6. Citizen to Government (C2G)
7. Government to Business (G2B)
8. Government to citizen (G2C)
9. Government to Government (G2G)



**Fig. 2.4** E-business transaction model.

## 1. Business-to-Consumer (B2C)

The B2C model involves transactions between business organizations and consumers. It applies to any business organization that sells its products or services to consumers over the Internet. These sites display product information in an online catalog and store it in a database. The B2C model also includes services online banking, travel services, and health information and many more as shown in figure below.



B2C e-business models include virtual malls, which are websites that host many online merchants. Virtual malls typically charge setup, listing, or transaction fees to online merchants, and may include transaction handling services and marketing options.

Some B2C e-businesses provide high-value content to consumers for a subscription fee. Examples of e-business following this subscription model include the Wall Street Journal (financial news and articles), Consumer Reports (product reviews and evaluations), and [ediels.com](http://ediels.com) (nutritional counseling).

B2C model includes services includes retail sales often called e-retail or e-tail.

Examples of B2C retail sales are:

[www.daraz.com.np](http://www.daraz.com.np)

[www.amazon.com](http://www.amazon.com)

[www.ebay.com](http://www.ebay.com)

The B2C process is explained as:

**1) Visiting the virtual mall.** The customer visits the mall by browsing the online catalogue a very organized manner of displaying products and their related information such as price, description, and availability. Finding the right product becomes easy by using a keyword search engine. Virtual malls may include a basic to an advanced search engine, product rating system, content management, customer support systems, bulletin boards, newsletters and other components which make shopping convenient for shoppers.

**2) Customer registers.** The customer has to register to become part of the site's shopper registry. This allows the customer to avail of the shop's complete services. The customer becomes a part of the company's growing database and can use the same for knowledge management and data mining.

**3) Customer buys products.** Through a shopping cart system, order details, shipping charges, taxes, additional charges and price totals are presented in an organized manner. The customer can even change

the quantity of a certain product. Virtual malls have a very comprehensive shopping system, complete with check-out forms.

**4) Merchant processes the order.** The merchant then processes the order that is received from the previous stage and fills up the necessary forms.

**5) Payment is processed.** The credit card of the customer is authenticated through a payment gateway or a bank. Other payment methods can be used as well, such as debit cards, prepaid cards, or bank-to-bank transfers.

**6) Operations management.** When the order is passed on to the logistics people, the traditional business operations will still be used. Things like inventory management. Total quality management, warehousing, optimization and project management should still be incorporated even though it is an e-business. Getting the product to the customer is still the most important aspect of e-commerce.

**7) Shipment and delivery.** The product is then shipped to the customer. The customer can track the order/delivery as virtual malls have a delivery tracking module on the website which allows a customer to check the status of a particular order.

**8) Customer receives.** The product is received by the customer, and is verified. The system should then tell the firm that the order has been fulfilled.

**9) After-sales service.** After the sale has been made, the firm has to make sure that it maintains a good relationship with its customers. This is done through customer relationship management or CRM.

#### **# Characteristics of B2C e-commerce model:**

1) **Shorter decision-making process.**

The decision-making process is relatively shorter compared to B2B. Because of this, it is important to capture the attention of potential customers. You have to generate the need, and the desire for your products, and customers might instantly decide to purchase them. You target a large number of potential buyers, knowing or hoping that you will hit certain percentage of them with the right offer.

2) **Smaller number of stakeholders.**

In B2C, it is all about establishing an emotional connection between you as a seller, and your buyer, who is in most cases a single person, or at maximum two persons.

3) **Shorter relationship.**

Even though you want your B2C buyers to become loyal customers of your online store, fact is that most of these purchases are one time transactions, as the buyer usually doesn't return to your shop to purchase more goods.

#### **# Advantage of B2C e-commerce Model:**

1. **Inexpensive costs, big opportunities:**

Once on the Internet, opportunities are immense as companies can market their products to the whole world without much additional cost.

2. **Globalization:**

Even being in a small company, the Web can make you appear to be a big player which simply means that the playing field has been levelled by e- business. The Internet is accessed by: millions of people around the world, and definitely, they are all potential customers.

3. **Reduced operational costs:**

Selling through the Web means cutting down on paper costs, customer support costs, advertising costs, and order processing costs.

4. **Customer convenience:**

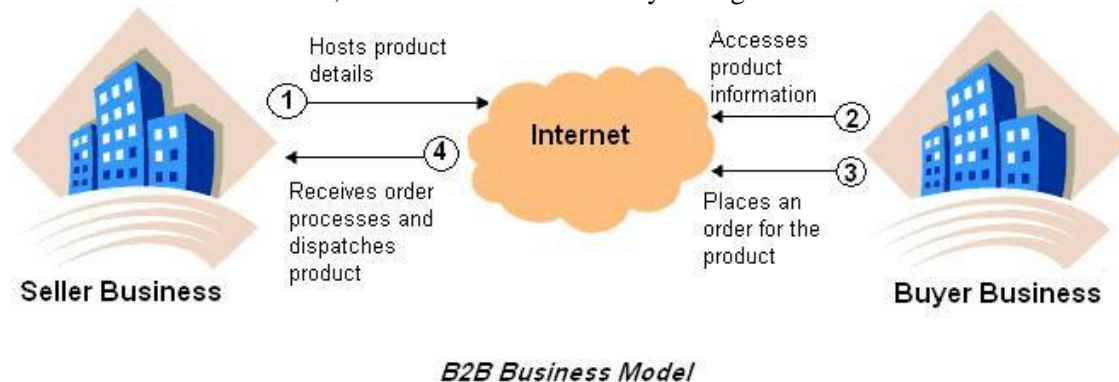
Searchable content, shopping carts. promotions, and interactive and user-friendly interfaces facilitate customer convenience. Thus, generating more business. Customers can also see order status, delivery status, and get their receipts online.

## 5. Knowledge management.

Through database systems and information management, you can find out who visited your site, and how to create, better value for customers.

## 2. Business to Business (B2B)

The B2B model involves electronic transactions for ordering, purchasing, as well as other administrative tasks between business houses. It includes trading goods, such as business subscriptions, professional services, manufacturing, and wholesale dealings. Sometimes in the B2B model, business may exist between virtual companies, neither of which may have any physical existence. In such cases, business is conducted only through the Internet.



### # Processes for Business-to-Business Transactions and Models:

B2B interactions involve much more complexity than B2C. For instance, typical B2B transactions include, among others, the following steps:

- i. Review catalogues,
- ii. Identify specifications.
- iii. Define requirements,
- iv. Post request for proposals (REP).
- v. Review vendor reputation.
- vi. Select vendor.
- vii. Fill out purchase orders (PO).
- viii. Send PO to vendor,
- ix. Prepare invoice,
- x. Make payment,
- xi. Arrange shipment, and
- xii. Organize product inspection and reception.

### # Characteristics of B2C e-commerce model:

#### 1. Longer decision making process:

This means that, in order to sell B2B, and become a reliable supplier you have to invest time in developing a relationship with your potential buyers. Initially, you have to establish a contact, which sometimes may require several telephone calls, and talking to different people from that company. After finding the responsible person, you need to send a proposal to offer your products, with prices and other terms of cooperation.

#### 2. Greater number of stakeholders/decision makers:

The toughest task here is to identify the key decision-makers at your potential buyer's company, and to make sure they receive your proposal. You need to convince them to accept your offer for

cooperation, and if you are refused, to keep trying over and over again, by refining your offer, or finding an easier negotiator on the other side.

3. **Relationships that last longer:**

It is easy to understand why companies tend to establish long lasting relationships, than consumers. Changing suppliers can be expensive and time-consuming in most cases. Especially for large corporations. And, here you have to be prepared for negotiations, so create a plan with your ideal terms, and also a backup plan if the first one doesn't succeed.

4. **A smaller number of leads/prospects:**

In B2B, you will generally work with much lower number of prospects compared to B2C. Amazon, or some other great retailer addresses millions of customers worldwide. But, a B2B company, on the other hand, for example a manufacturer of components for a specific industry, might have only a few companies as potential customers. In this case your customers are well known to you, and your competition also knows them all.

5. **Different type of product knowledge:**

Manager of the buying company deeply understands the products to purchase, and has strong technical knowledge to help him make decisions about selecting ideal products, and also ideal suppliers. This is why he needs higher level of support from the B2B seller, detailed technical specifications, revisions, ongoing support etc.

### **# Advantage of B2C e-commerce Model:**

1. **Scalability:**

An effective e-commerce solution will enable your organization to grow and scale easily to meet market demand and customer needs by opening new sales channels and continuously reaching new market segments.

2. **Improved Efficiency:**

Through integration to the enterprise resource planning (ERP) and other back-end business systems, e-commerce provides marked efficiencies for B2B organizations. Customers are able to order online at their convenience, customer service can focus on actual customer service functions rather than simply being order takers, and the need to rekey data in independent systems is eliminated, thereby eliminating the possibility of errors and improving shipping processes and increasing order throughput.

3. **Additional Customer:**

A B2B e-commerce site with public-facing catalog pages is a powerful way to reach new B2B customers. Your future buyers not only prefer to shop online but *will demand it*. As B2B buyers head online to find the best prices, manufacturers and distributors can leverage the power of the search—and therefore, ready to index—pages of their site to locate new visitors and convert them into customers.

4. **Analytics:**

B2B e-commerce provides the perfect platform for an organization to launch a comprehensive analytics campaign. Through ecommerce, organizations can more easily measure and evaluate marketing campaigns, sales effectiveness, product mix, inventory turns, customer sales effectiveness, and customer engagement. Google Analytics offers e-commerce tracking, but integrating analytics with your ERP as well gives you much more valuable data with actionable insights.

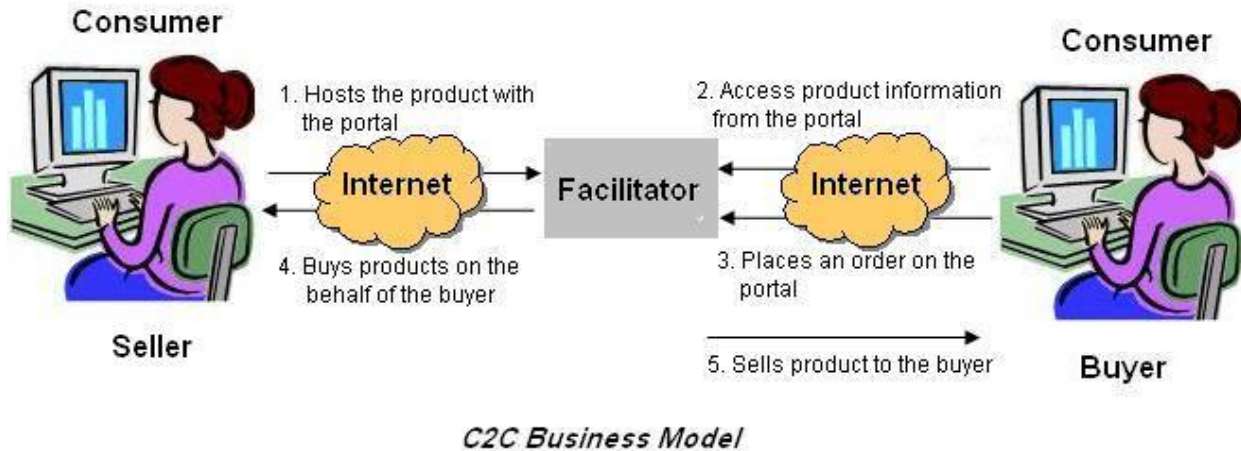
5. **Improved Sales engagement:**

Your physical sales team will also benefit from the launch of a comprehensive e-commerce effort. A B2B e-commerce site or portal will improve your sales teams' visibility into customer orders, pricing, and history while on the road or working remotely.



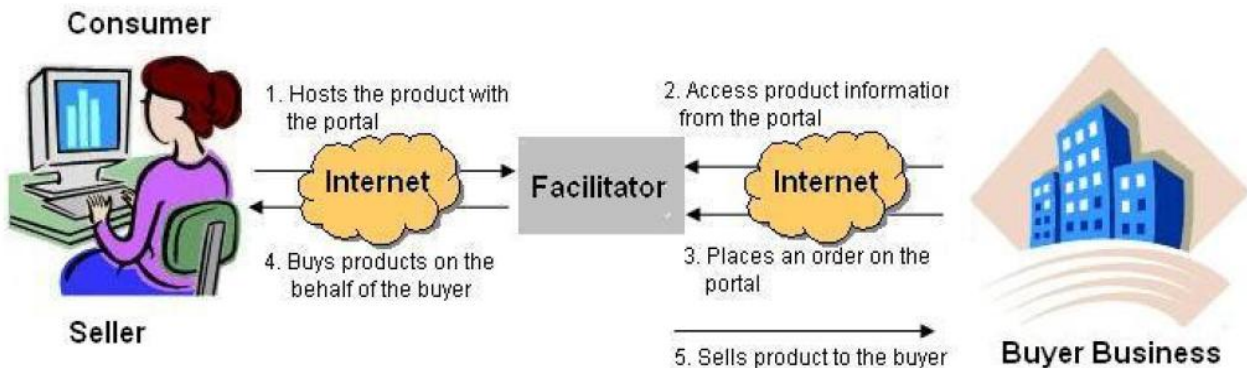
### 3. Consumer to Consumer (C2C)

The C2C model involves transaction between consumers. Here, a consumer sells directly to another consumer. eBay and www.bazee.com are common examples of online auction Web sites that provide a consumer to advertise and sell their products online to another consumer. However, it is essential that both the seller and the buyer must register with the auction site. While the seller needs to pay a fixed fee to the online auction house to sell their products, the buyer can bid without paying any fee. The site brings the buyer and seller together to conduct deals as shown in figure below.



### 4. Consumer to Business (C2B)

The C2B model involves a transaction that is conducted between a consumer and a business organization. It is similar to the B2C model, however, the difference is that in this case the consumer is the seller and the business organization is the buyer. In this kind of a transaction, the consumers decide the price of a particular product rather than the supplier. This category includes individuals who sell products and services to organizations. For example, www.monster.com is a Web site on which a consumer can post his bio-data for the services he can offer. Any business organization that is interested in deploying the



services of the consumer can contact him and then employ him, if suitable as shown in figure.

### 5. **Business-to-Government (B2G) model:**

In this model, the business houses transact with the government over the Internet. For example, similar to an individual consumer, business houses can also pay their taxes on the Internet.

**6. Citizen-to-Government (C2G) model:**

In this model, an individual consumer interacts with the government. For example, a consumer can pay his income tax or house tax online. The transactions involved in this case are C2G transactions.

**7. Government-to-Business (G2B) model:**

This model involves transactions between a government and business organizations. For example, the government plans to build a fly over. For this, the government requests for tenders from various contractors. Government can do this over the Internet by using the G2B model.

**8. Government-to-Citizen (G2C) model:**

In this model, the government transacts with an individual consumer. For example, a government can enforce laws pertaining to tax payments on individual consumers over the Internet by using the G2C model.

**9. Government-to-Government (G2G) model:**

This model involves transactions between 2 governments. For example, if the Nepal government wants to buy oil from the Indian government, the transaction involved are categorized in the G2G model. G2G, also involves transaction between two different departments of different ministries. E.g. transaction between Ministry of Finance and Ministry of Information and Communication.

## **2. E-Business models based on the relationship of Transaction Types**

Based on transaction type, different types of transactions can be identified as listed below:

1. Brokerage Model
2. Aggregator Model
3. Advertising Model
4. Infomediary Model
5. Community Model
6. Value Chain Model
7. Subscription Model
8. Manufacture Model
9. Affiliate Model

These transaction types take place in a variety of ways. Moreover, any given firm may combine one or two of these as part of its web business strategy.

### **1. Brokerage Model**

Brokers are market-makers: they bring buyers and sellers together and facilitate transactions. There are several forms of brokerage models and they are operated across all e-business markets. In a simple buy/sell fulfillment model, revenue is gained by the brokerage through charging a fee for each transaction completed. The formula for fees can vary depending on context. Brokers play a frequent role in business-to-business (B2B), business-to-consumer (B2C), or consumer-to-consumer (C2C) markets.

Brokerage models include:

- **Marketplace Exchange**

- offers a full range of services covering the transaction process, from market assessment to negotiation and fulfillment. Some examples are [[Orbitz](#), [ChemConnect](#)]
- **Buy/Sell Fulfillment**
  - Takes customer orders to buy or sell a product or service, including terms like price and delivery. Some examples are [[CarsDirect](#), [Respond.com](#)]
- **Auction Broker**
  - Conducts auctions for sellers (individuals or merchants). Broker charges the seller a listing fee and commission scaled with the value of the transaction. Auctions vary widely in terms of the offering and bidding rules. Some examples are [[eBay](#)]
- **Transaction Broker**
  - Provides a third-party payment mechanism for buyers and sellers to settle a transaction. Some examples are [[PayPal](#), [Escrow.com](#)]
- **Search Agent**
  - A software agent or "robot" used to search-out the price and availability for a good or service specified by the buyer, or to locate hard to find information.
- **Virtual Marketplace (Virtual Mall)**
  - Hosting service for online merchants that charges setup, monthly listing, and/or transaction fees. It may also provide automated transaction and relationship marketing services. Some examples are [zShops and Merchant Services at [Amazon.com](#)]

#### # **The characteristics of Brokerage Model**

The characteristics of the brokerage model are as follows:

- i. The price-discovery mechanism is its key-principle.
- ii. It is a meeting point for sellers and buyers.
- iii. Auctions and exchanges are the modes of transaction.
- iv. It is a 'Free Market'.
- v. It consists of Global Network of Buyers and Sellers.
- vi. It is a Virtual Market space enabled by the internet.
- vii. It encompasses all types of organizations now.

#### # **The advantage of Brokerage Model**

Following are the advantages of the brokerage model:

- i. C2C trading
  - allows buyers and sellers to trade directly bypassing intermediaries, and
  - reduces cost for both the parties.
- ii. Global reach
- iii. Trading convenience. which
  - allows trading at all hours, and
  - Provides continually updated information.
- iv. Sense of community through direct buyer and seller communication
- v. Efficient access to information
- vi. Alleviation of the risks of anonymous trading.

#### # **Price Discovery Mechanism of Brokerage Model**

There are three kinds of Price Discovery Mechanism of Brokerage Model.

- I. Auction
- II. Reverse Auction



### III. Market Place

#### I. Auction

The first auction was occurred in Babylon in about 500 B.C. In this period auction were held annually and women were sold on the condition of marriage. Since, then various types of auction method have evolved. The major four types of auction model are:

- i. English Auction
- ii. Dutch Auction
- iii. First Price Seal Bit Auction
- iv. Vickery Auction

i. **English Auction:**

This type of auction were commonly used by English Auction houses. Participants bid openly and auction ends when no participants is willing to bid further in ascending price fashion. The highest bidder pays the price and get the possession of the Item/Goods.

The auction may also end when a pre-determined “buy-out” price is reached.

ii. **Dutch Auction:**

In this traditional dutch auction method, the auctioneer begins with a high asking price, which is lowered until some participant is willing to accept the auctioneer’s price or a pre-determined minimum price is reached. It is descending price auction. It is named after Dutch tulip auction used for auction of flower or other product with limited life.

iii. **First Price Seal Bit Auction:**

Also known as sealed high bid auction or First Price Sealed Bid Auction (FPSB). All bidders submit bids so that no bidder knows the bid of any other participant. The highest bidder pays the price they submit for the Items/Goods.

Unlike English and Dutch auction this is hidden auction. It is also called the discriminatory sealed bid auction since not all the bidders pay the same price.

iv. **Vickery Auction:**

Also known as Sealed Bid Second Price Auction.

Identical to first bid first price auction expect the winning bidder pays the second highest bid rather than their own.

Bidder will adjust their bids as he increases the price upwards since he knows that he needs to pay the second highest bid.

#### II. **Reverse Auction**

In this Auction method buyers make the final bid for the product.

Consumer demand for the particular product or service is collected at a price set by the consumer and communicates that demand directly to the participating seller. Consumer hold their offer opens for a specified period of time.

This enables incremental revenue to the seller without impacting their normal business flow.

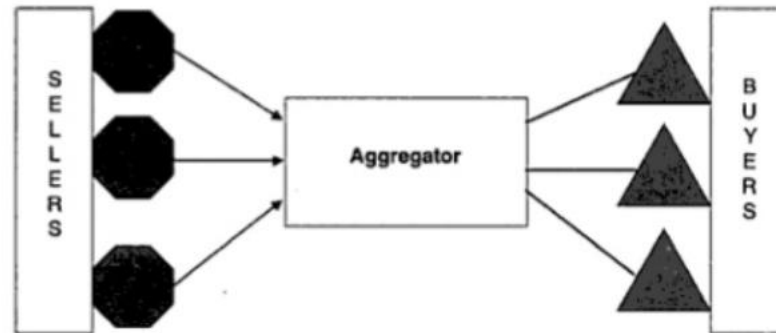
#### III. **Market Place**

Price of an asset is determined in the marketplace through the interaction of buyers and sellers. This is considered as the most automated in among all three types. If no buyer and seller are able to meet in terms of price no trade executes.

E.g. Stock market

#### 2. **Aggregator Model**

The Aggregator are the connector to buyer and seller. This model bypasses the distributors so that the buyer and seller come together. They involve overall process of selection, organization, matching the buyer's requirement with the particulars of the available goods, fulfillment the orders and enabling the customers to create a value about the seller.



There are four types of aggregator:

- a) Content aggregator
 

This business model the business house prefers a website that should be attractive and make the website viable with sufficient information about goods and services.  
e.g. pathfinder.com, espnricinfo.com
- b) Mainstream aggregator

This aggregator have many features available on the web that provides web directory and search engine along with bunch of tools like email, homepage, reminders etc. The most attractive feature of these sites is that they have an easy to remember url.  
e.g. yahoo.com, msn.com
- c) Event aggregator

This aggregator provides in-depth content and tools perfected to the need of the particular group. E.g. homeshark.com, indiaautomart.com, Microsoft home advisor, these sites provide rate, advice and ability to purchase.
- d) Shopping aggregator

These aggregator roams through hundreds of sites and catalogues and find the best price in second for the customer. They allow consumer to compare the product and price.  
e.g. bizrate.com, travago.com

### 3. Advertising Model

The web-advertising model is an extension of the traditional media broadcast model. The broadcaster, in this case, a web site, provides content (usually, but not necessarily, for free) and services (like e-mail, chat, forums) mixed with advertising messages in the form of banner ads. The banner ads may be the major or sole source of revenue for the broadcaster. The broadcaster

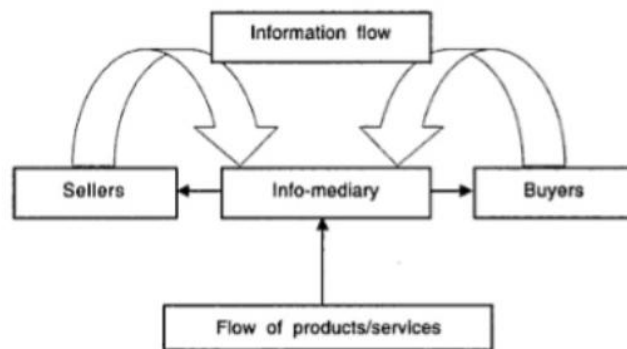
may be a content creator or a distributor of content created elsewhere. The advertising model only works when the volume of viewer traffic is large or highly specialized.

#### 4. **Infomediary Model**

Data about consumers and their consumption habits are valuable, especially when that information is carefully analyzed and used to target marketing campaigns. Independently collected data about producers and their products are useful to consumers when considering a purchase. Some firms function as infomediaries (information intermediaries) assisting buyers and/or sellers understand a given market.

These models include:

- a) Advertising Network
- b) Audience measurement service
- c) Incentive marketing
- d) Metamediary



#### # **Classification of Infomediaries:**

Infomediary can be classified in terms of relationship with seller and buyers into four types.

- a) Specialized agent
  - Manage specialized market
  - Business performance depends on their ability to deliver value to:
    - Large number of buyer and seller
    - Well defined and profitable place
    - Platform for transaction
  - They charge to buyer/seller as form of fee or membership profile.
  - They maintain a closed relationship with the buyer/seller.
- b) Generic agent:
  - These infomediaries uphold open relationship with buyer and seller e.g. google.com (search capability)
  - Revenue is generated from the advertisement
  - They provide value through complete and unbiased service

- c) Supplier agent:
  - These infomediaries are sponsored by specific companies. With the interest of selling their product or collaborating company products.
  - They provide biased information.
- d) Buyer agent:
  - They represent buyer usually under a formal contract.
  - They negotiate the best sell price for the property/service.
  - Building trust is the key for success of this model

## 5. **Community Model**

The viability of the community model is based on user loyalty. Users have a high investment in both time and emotion in the site. In some cases, users are regular contributors of content and/or money. With users who visit continually offers advertising, infomediary or specialized portal opportunities. The community model may also run on a subscription fee for premium services.

Types of community model:

- i. Open source community model
- ii. Open content community model
- iii. Public broadcasting community model
- iv. Social networking service community model

## # **Community Structures:**

The internet communities can be structured as:

- i. Newsletters:
  - One way communication
  - Uses list server to send the same message to the entire list.
  - Handles new subscribers and those who wish to unsubscribe.
- ii. Discussion list:
  - One of best ways to build a sense of community by sending email to discussion list.
  - List server allows to send message from a member to all the list members.
  - There are three types of discussion list
    - a. Email discussion list
      - All messages from one member is forwarded to other members
      - Moderator approves a message before it is sent.
    - b. Email discussion list digest
      - Collects all the message in the discussion list and email to the subscriber.
      - The message is sent daily basis or if the accumulation reaches certain size.
    - c. Moderated discussion list digest
      - Discussion list message are sorted according to the quality of message.
      - Only limited quality moderated message are emailed.
- iii. Bulletin boards
  - Generally in email based Messages are not sorted by topic which look disjoint, Bulletin boards provide solution for such cases.
  - The bulletin board
    - Keep thread separate

- Post can be read, searched and researched.
- iv. Chat room
  - Need to register as a group member to use the chat room
  - Useful source of knowledge and information
  - Meaningful discussion and give fruitful result.

#### # **Necessary elements of community Model**

1. A clear focus to the community
2. Necessary technical capability
3. Proper structures, guidelines and parameter.
4. Responsible Moderator.
5. Clear strategy on how community will benefit the business.

#### 6. **Value Chain Model**

Value chain moves business from discrete streams of data to one unified pool of information-one that extends outside the company to suppliers and customers. The goal is to develop seamless interaction among all members of the chain, resulting lower inventories, higher customer satisfaction and shorter time to the market.

#### 7. **Subscription Model**

Users are charged a periodic -- daily, monthly or annual -- fee to subscribe to a service. It is not uncommon for sites to combine free content with "premium" (i.e., subscriber- or member-only) content. Subscription fees are incurred irrespective of actual usage rates. Subscription and advertising models are frequently combined.

#### 8. **Manufacture Model**

A model predicated on the power of the web to allow a manufacturer (i.e., a company that creates a product or service) to reach buyers directly and thereby compress the distribution channel. The manufacturer model can be based on efficiency, improved customer service, or a better understanding of customer preferences.

#### 9. **Affiliate Model**

In contrast to the generalized portal, which seeks to drive a high volume of traffic to one site, the affiliate model, provides purchase opportunities wherever people may be surfing. It does this by offering financial incentives (in the form of a percentage of revenue) to affiliated partner sites. The affiliates provide purchase-point click-through to the merchant. It is a pay-for-performance model -- if an affiliate does not generate sales, it represents no cost to the merchant. The affiliate model is inherently well suited to the web, which explains its popularity. Variations include banner exchange, pay-per-click, and revenue sharing programs.

### **Auction Process:**

There are many components to e-Auction success, including good strategies, best practices, and inscrutable ethics. However, following process make sure the auction runs smoothly, efficiently, and delivers on its expected benefits.

1. **Define Requirements and Goals** As with every other step of the sourcing process, good requirements, along with clear goals, are key. Be sure to understand what the strategy is for lowering or controlling costs, for optimizing the supply base, and for process improvements.
2. **Invite all Potential Suppliers to an Open RFI** (Request for Information) Do not limit the organization's supply base to current suppliers as sometimes the best process and cost savings can come from new suppliers with streamlined processes, innovative production technologies, and lower production costs.
3. **Pre-Qualify Capable Suppliers** It is critical not to invite suppliers to an auction that are not capable of meeting the organization's needs. This will only garner resentment from other suppliers and possibly cause significant production delays if it is only discovered after the award that the supplier cannot deliver.
4. **Clearly Document All Requirements** Good documentation is the key to a successful sourcing project in general. With a global supply base, staffed by individuals of distinct cultures, each with their own internal understanding of what a (foreign) term or requirement could mean, there are really no common terms or definitions – but detailed documentation can avoid this problem and avert potentially costly misunderstandings.
5. **Hold a Q&A Training Session** Don't assume the auction tool is easy or natural for your supplier. Whereas your buyers have probably been trained on it, used it, and are accustomed to using it as part of the process, it might be a new tool, concept, or even business paradigm for one or more of your suppliers.
6. **Monitor the Auction** It's important to make sure that things run smoothly. If one or more suppliers fail to bid relatively promptly or the refresh rate is sluggish or non-existent, either the buying organization or one or more supplying organizations might be experiencing problems. A buyer should be ready to step in and offer help or remedy the situation at an instant.
7. **Follow Through and Award Promptly** It's important to be prepared to allocate awards and follow through on negotiations promptly and within the promised timeframe.