Creating an e-commerce solution mainly involves creating and deploying an e-commerce site. The first step in the development of an e-commerce site is to identify the e-commerce model. Depending on the parties involved in the transaction, e-commerce can be classified into 4 models. These are:

- Business – to – Business (B2B) model
- Business – to – Consumer (B2C) model
- Consumer – to- Consumer (C2C) model
- Consumer – to – Business (C2B) model

Let us look at each of them in detail.

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

The B2B model involves electronic transactions for ordering, purchasing, as well as other administrative tasks between 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.

Let us look at the same example of [www.amazon.com](http://www.amazon.com). As you know, [www.amazon.com](http://www.amazon.com) is an online bookstore that sells books form various publishers including Wrox, O'Reilly, Premier Press, and so on. In this case, the publishers have the option of either developing their own site or displaying their books on the Amazon site ([www.amazon.com](http://www.amazon.com)), or both. The publishers mainly choose to display their books on [www.amazon.com](http://www.amazon.com) at it gives them a larger audience. Now, to do this, the publishers need to transact with Amazon, involving business houses on both the ends, is the B2B model.

Consider a hypothetical example. ABC company sells automobile parts and XYZ company assembles these parts and then sells the automobile to customers. XYZ company comes across the Web site of ABC and finds it suitable. XYZ therefore, requests for more information about ABC and finally, decides to purchase automobile parts automobile from ABC. To do this, XYZ places an order on the Web site of ABC. After ABC receives the order details, it validates the information. As soon as the order is confirmed, the payment procedures are settled. Finally, ABC sends an acknowledgement of payment to XYZ and delivers the goods as per the shipment details decided between the two organizations.

The advantages of the B2B model are:

- It can efficiently maintain the movement of the supply chain and the manufacturing and procuring processes.
- It can automate corporate processes to deliver the right products and services quickly and cost-effectively.

The B2B model is predicted to become the largest value sector of the industry within a few years. This is said to be the fastest growing sector of e-commerce.
Business-to-Consumer (B2C) Model

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 like online banking, travel services, and health information.

Consider a hypothetical example in which a transaction is conducted between a business organization and a consumer. A business house, LMN Department Store, displays and sells a range of products on their Web site, www.lmn.com. The details information of all their products is contained in the huge catalogs maintained by LMN Department Stores. Now, a consumer, William Ward, wants to buy a gift for his wife. He therefore, logs on to the site of LMN Department Stores and selects a gift from the catalog. He also gets the detailed information about the gift such as, the price, availability, discounts, and so on from their catalog. Finally, when he decides to buy the gift, he places an order for the gift on their Web site. To place an order, he needs to specify his personal and credit card information on www.lmn.com. This information is then validated by LMN Department Store and stored in their database. On verification of the information the order is processed. Therefore, as you can see, the B2C model involves transactions between a consumer an done or more business organizations.
The example of the www.amazon.com site also involves the B2C model in which the consumer searches for a book on their site and places an order, if required. This implies that a complete business solution might be an integration solution of more than one business model. For example, www.amazon.com includes the B2B model in which the publishers transact with Amazon and the B2C model in which an individual consumer transact with the business organization. The B2C model of e-commerce is more prone to the security threats because individual consumers provide their credit card and personal information n the site of a business organization. In addition, the consumer might doubt that his information is secured and used effectively by the business organization. This is the main reason why the B2C model is not very widely accepted. Therefore, it becomes very essential for the business organizations to provide robust security mechanisms that can guarantee a consumer for securing his information.

**Consumer-to-Consumer (C2C) Model**

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.

Let us now look at the previous figure with respect to eBay. When a customer plans to sell his products to other customers on the Web site of eBay, he first needs to interact with an eBay site, which in this case acts as a facilitator of the overall transaction. Then, the seller can host his product on www.ebay.com, which in turn charges him for this. Any buyer can now browse the site of eBay to search for the product he interested in. If the buyer comes across such a product, he places an order for the same on the Web site of eBay. eBay now purchase the product from the seller and then, sells it to the buyer. In this way, though the transaction is between two customers, an organization acts as an interface between the two organizations.
Consumer-to-Business (C2B) Model

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.

Let us look at another example of the C2B model.

William Ward needs to buy an airline ticket for his journey from New York to New Jersey. William needs to travel immediately. Therefore, he searches a Web site for a ticket. The Web site offers bidding facility to people who want to buy tickets immediately. On the Web site, William quotes the highest price and gets the ticket.

In addition to the models discussed so far, five new models are being worked on that involves transactions between the government and other entities, such as consumer, business organizations, and other governments. All these transactions that involve government as one entity are called e-governance. The various models in the e-governance scenario are:

- **Government-to-Government (G2G) model**: This model involves transactions between 2 governments. For example, if the American government wants to by oil from the Arabian government, the transaction involved are categorized in the G2G model.

- **Government-to-Consumer (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.

- **Consumer-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.
• **Government-to-Business (G2B) model**: This model involves transactions between a government and business organizations. For example, the government plans to build a flyover. For this, the government requests for tenders from various contractors. Government can do this over the Internet by using the G2B model.

• **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.