

BUSINESS MARKETING - TECHNOLOGY FOCUS
Prof. Jayanta Chatterjee
Department of Management
Indian Institute of Technology, Kanpur

Lecture 25 : B2B E-Commerce

Hello, welcome to our next session in the domain of B2B marketing with technology focus.

Concepts, Characteristics, and Models of B2B EC

- Basic B2B concepts

Business-to-business e-commerce (B2B EC):
Transactions between businesses conducted electronically over the Internet, extranets, intranets, or private networks; also known as *eB2B (electronic B2B)* or just *B2B*

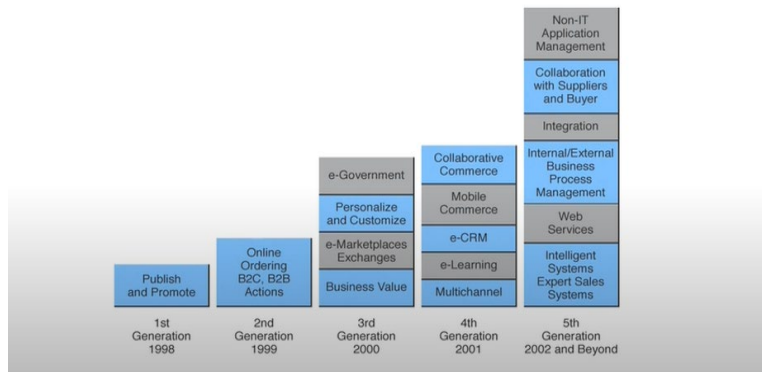
We discussed in the previous sessions about sales promotion, marketing communication in the B2B domain where we had seen the importance, emerging importance or growing importance of electronic media.

From that discussion, we went to the discussion on e-marketing, followed by discussion on e-marketplaces in the B2B context. I am now going to discuss this whole arena of B2B e-commerce in more depth over the next couple of sessions. So, B2B e-commerce signifies transactions between businesses conducted electronically over the internet which is the world wide web, extranets which are internal and external blended networks covering a limited and defined number of players. Intranets, basically networks within an organization, which of course can be a spread out organization, nationally spread out organization. So, both extranets and intranets are private networks.

So, both public networks and private networks utilized for commerce utilized for business transactions will be covered in our discussion, which is B2B e-commerce or more and more it will become simply B2B.

Concepts, Characteristics, and Models of B2B EC (Ref: Vitale)

Exhibit 6.1 Key Drivers for B2B E-Commerce



I have taken number of diagrams from the Robert Vitale's book on B2B marketing. It had an interesting chapter on this whole domain of growing importance of electronic networks in B2B marketing. And you can see on this diagram that the growth that is happening year to year in terms of functionality, in terms of things that you can do through B2B e-commerce and the architecture of the B2B e-commerce platforms are increasingly more and more sophisticated and elaborate and this growth is very rapid. We have ended here at somewhere around 2005, but over the last 20 years or so, there will be many, many things that would have been added to these stacks.

Concepts, Characteristics, and Models of B2B EC (cont.)

- B2B characteristics

- Parties to the transaction

- Online intermediary:* An online third party that brokers a transaction online between a buyer and a seller; can be virtual or click-and-mortar

So, in B2B e-commerce, there are various kinds of parties who are involved. There are, of course, buyers and sellers, but then there are online intermediaries like basically, even this website can be an online third party that brokers a transaction between a buyer and a seller.

So, in a sense, the B2B e-commerce covers the domain of e-marketplaces which we discussed which are like electronic representation of physical marketplaces or a dealer shop or even a full industrial market.

Concepts, Characteristics, and Models of B2B EC (cont.)

- Types of transactions

- *Spot buying:* The purchase of goods and services as they are needed, usually at prevailing market prices
 - *Strategic sourcing:* Purchases involving long-term contracts that are usually based on private negotiations between sellers and buyers

The types of transactions that are now facilitated by B2B e-commerce can be spot buying, that means one single transaction where a buying or selling takes place. The purchase of goods and services as and when they are needed. It can be happening through a catalog.

It can be happening through an electronic database of approved parties for a particular time for what we call MRO type of purchases, maintenance, repair, operational, spares needed. And so there can be catalogs which are formed out of rate contracts through which spot buying can take place just two packets of printer paper, for example. From that kind of simple one-off transaction, the B2B e-commerce can cover strategic sourcing, purchases involving long-term contracts that are usually based on negotiations offline, long term negotiations and then decided particulars.

So, all of these types are feasible and regularly occurring instances in B2B e-commerce.

B2B Characteristics (cont.)

- Types of materials
 - ***Direct materials:*** Materials used in the production of a product (e.g., steel in a car or paper in a book)
 - ***Indirect materials:*** Materials used to support production (e.g., office supplies or light bulbs)
 - ***MROs (maintenance, repairs, and operations):*** Indirect materials used in activities that support production

The types of materials that are covered by B2B e-commerce today are direct materials or which we are often calling incoming materials or entering goods. So, these are materials used in the production of a product. For example, special steel that will be used in making a car.

So, that is the kind of entering product. It can be like printing paper getting into the book production facility. So this is procurement of direct material covered by b2b e-commerce today. It can be indirect material that means materials that are used to support production we have called them facilitating goods for example lighting fixtures for a factory or industrial chairs or furniture for a factory or for an office. So these are indirect materials facilitating goods.

And then there are of course MROs, the maintenance, repair and operations equipment or products or components. So, these are indirect materials again used in the activities that support production, may not actually get into the end product but these are part of the keeping the machines going, keeping the systems operational. So, MROs are also often components or materials but they are different from the first category which is the entering goods because the entering goods actually participate in the production and are part of the end product. So steel will be part of the car that will be produced but a machine spare that is used to fix a malfunctioning machine in the production line of a car will not be there in the car itself, but it is a facilitating goods or MRO.

Concepts, Characteristics, and Models of B2B EC (cont.)

– Direction of trade

- *Vertical marketplaces*: Markets that deal with one industry or industry segment (e.g., steel, chemicals)
- *Horizontal marketplaces*: Markets that concentrate on a service, material, or a product that is used in all types of industries (e.g., office supplies, PCs)

There are two kinds of marketplaces that are covered by B2B e-commerce. This is we are expanding upon the e-marketplace concept. So, one is vertical marketplace. That means markets that deal with one industry.

So, it could be steel, it could be copper, other metals, chemicals and so on. So these are vertical marketplaces. Markets that deal with one industry or industry segment. Or it could be horizontal marketplaces. That means markets that concentrate on a service material or product used in all types of industries. So, horizontal marketplaces will cover office supplies, computers or other IT accessories and so on.

Concepts, Characteristics, and Models of B2B EC (cont.)

- **Basic B2B transaction types**
 - **Sell-side**
One seller to many buyers
 - **Buy-side**
One buyer from many sellers
 - **Exchanges**
Many sellers to many buyers
 - **Collaborative commerce**
Communication and sharing of information, design, and planning among business partners

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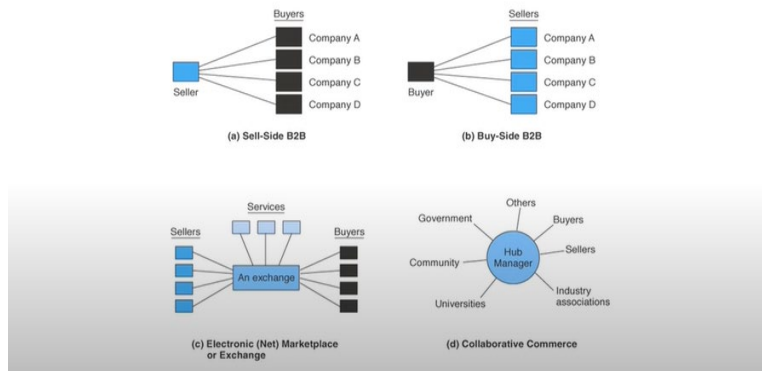
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Obviously, that tells us that the B2B transactions are also of various types. So, one is sell side that means one seller to many buyers. So, when Tata Steel is selling to many buyers, then in that respect the Tata Steel website is a sell side website.

When the Tata Steel website is actually one buyer buying products from various kinds of office or factory consumable suppliers, then it is one buyer for many sellers, so it is a buy side. B2B EC. It can be exchanged like many sellers to many buyers which is a marketplace and it can be collaborative commerce that is communication and sharing of information, design, planning among various kinds of business partners. So, collaborative commerce is often set up electronically in a large project or when a large factory is coming up or an infrastructure creation project we will see the advent of collaborative commerce.

Concepts, Characteristics, and Models of B2B EC (Ref: Vitale)

Exhibit 6.2 Types of B2B E-Commerce



So, diagrammatically they can be represented again borrowing from Vitale's book they can be represented like this like the first diagram. Sell side B2B, you have one seller and many buyers. The buy side B2B, which is in the diagram B, you have one buyer with many sellers. And then there are exchanges or marketplaces where there are many sellers, many buyers all connected.

So, the business Amazon is an example of this or OLX is an example of this or eBay is an example of this. And then there are collaborative commerce where there will be a facilitated hub created for a large project where there will be government departments connected, buyers, sellers, industry associations, local communities, even universities all may be connected. So, that is another collaborative commerce, which is a kind of exchange, but there may be people involved connected in a collaborative commerce who are not really directly participating in the buying selling transaction as is the case of an e-marketplace but here there are policy makers, influencers, regulators, government bodies, communities and so on.

Concepts, Characteristics, and Models of B2B EC (cont.)

– One-to-many and many-to-one: company-centric transactions

- *Company-centric EC*: E-commerce that focuses on a single company's buying needs (many-to-one, or buy-side) or selling needs (one-to-many, or sell-side)
- *Private e-marketplaces*: Markets in which the individual sell-side or buy side company has complete control over participation in the selling or buying transaction

So, one to many and many to one company centric transactions are there in B2B EC. So, company centric e-commerce that focuses on a single company's buying needs. It can be many to one or buy side or selling that is one to many or sell side or it can be private e-marketplaces as will be created for a large factory, large project where there will be combinations of buy side and sell side and there may be other influencer or regulators involved.

Concepts, Characteristics, and Models of B2B EC (cont.)

– Many-to-many: exchanges

- *Exchanges (trading communities or trading exchanges)*: Many-to-many e-marketplaces, usually owned and run by a third party or a consortium, in which many buyers and many sellers meet electronically to trade with each other; also called *trading communities* or *trading exchanges*
- *Public e-marketplaces*: *Third-party exchanges that are open to all interested parties (sellers and buyers)*

Then there are many to many as we discussed just now, the exchanges, trading communities and there are private exchanges or limited to members exchanges or there are public e-marketplaces like eBay.

So, these are actually exchanges that are open to all interested parties, sellers and buyers. So, there will be some form of qualification to establish your identity and genuineness that you are not actually a robot or something like that. But otherwise these are pretty much open.

Concepts, Characteristics, and Models of B2B EC (cont.)

- Supply chain relationships in B2B
 - Supply chain process consists of a number of interrelated subprocesses and roles
 - acquisition of materials from suppliers
 - processing of a product or service
 - packaging it and moving it to distributors and retailers
 - purchase of a product by the end consumer

And as we discussed the collaborative commerce is more limited to a particular project or a large factory where interrelated sub-processes and roles. Some of them are transactional roles, some of their influence roles, all that are combined.

Concepts, Characteristics, and Models of B2B EC (cont.)

- B2B private e-marketplace provides a company with high supply chain power and high capabilities for online interactions
- Joining a public e-marketplace provides a business with high buying and selling capabilities, but will result in low supply chain power
- Companies that choose an intermediary to do their buying and selling will be low on both supply chain power and buying/selling capabilities

B2B private marketplaces are providing companies with high supply chain power and high capabilities for online transactions. So, they are slightly different from public e-marketplaces where there will be many to many transactions. There will be less degree of authentication or verification of credentials. Companies that choose an intermediary to their buying and selling will be low on both supply chain power and buying selling capabilities.

So, both of these characteristics can be displayed through the private e-marketplace and the public e-marketplace.

Concepts, Characteristics, and Models of B2B EC (cont.)

- Virtual services industries in B2B
 - Travel services
 - Real estate
 - Financial services
 - Online stock trading
 - Online financing
 - Other online services

And there are service hubs or service marketplaces that often go hand in hand with B2B industrial commercial exchanges and those are like travel services, real estate, financial services, online stock trading, online financing and other online services. So, these are associated services in the domain of B2B EC.

Concepts, Characteristics, and Models of B2B EC (cont.)

- **Benefits of B2B**
 - Eliminates paper and reduces administrative costs.
 - Expedites cycle time
 - Lowers search costs and time for buyers
 - Increases productivity of employees dealing with buying and/or selling
 - Reduces errors and improves quality of services.
 - Reduces inventory levels and costs
 - Increases production flexibility, permitting just-in-time delivery
 - Facilitates mass customization
 - Increases opportunities for collaboration

Benefits of B2B EC are quite obvious, eliminates paper and reduce administrative costs, expedite the cycle time. You know, if you remember in the previous era, you actually, once a particular requirement was determined, then the tenders had to be published physically, the tenders had to be circulated, the tenders were actually often published in newspapers and journals and then there were physical responses. The physical responses had to be received and then secrecy maintained, tenders opened, public opening, then evaluation process. So a lot of time went into these physical communication activities. All that are made almost instantaneous in electronic domain.

So, it lowers the search cost and time taken increases productivity of employees dealing with the buying selling situation reduces errors. So, on the whole quality of services go up, flexibility goes up, just in time delivery JIT as we call it becomes much more feasible using the electronic platforms even degree of customization is feasible in the b2b e-commerce by way of producing modular options which customers can pick and choose and that way a machine can be to an extent customized for a particular application for a

particular sale. And these electronic platforms provide a much higher degree of collaboration.

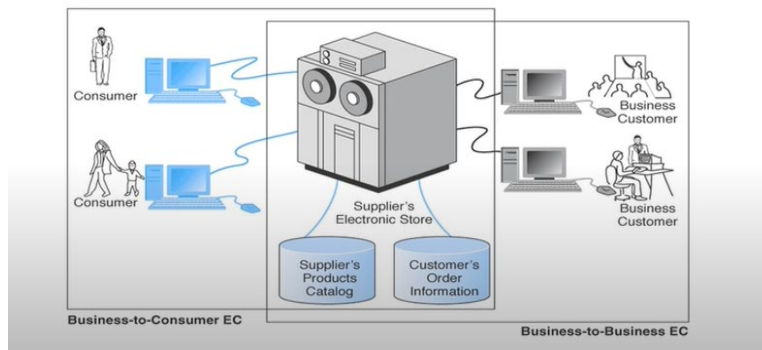
One-to-Many: Sell-Side Marketplaces

- *Sell-side e-marketplace*: A Web-based marketplace in which one company sells to many business buyers from e-catalogs or auctions, frequently over an extranet
- Three major direct sales methods:
 1. selling from *electronic catalogs*
 2. selling via *forward auctions*
 3. *one-to-one* selling

This sell-side marketplaces that we talked about just now, I mentioned a little while back, it can happen by way of electronic catalogs, it can happen by way of forward auctions, the whole tendering, quotation process and so on. It can even be used for one to one selling either by participation of human beings or by participation of artificial bots.

One-to-Many: Sell-Side Marketplaces (cont.)

Exhibit 6.3 Sell-Side B2B Marketplace Architecture



So, I will end with the one to many sell side marketplace or maybe I will go a little bit forward. In this diagram, we have figurative representation of consumers on the left-hand side, intermediated by the supplier's electronic store, which is basically a computer and a database. So, supplier's products catalog, customers order information, all that will be mediated by the computer system in the middle and it will connect to business customers. So the left-hand side connected to the right-hand side through the intermediation of information technology platform.

One-to-Many: Sell-Side Marketplaces (cont.)

- B2B sellers
 - click-and-mortar manufacturers or intermediaries, usually distributors or wholesalers
- Customer service
 - online sellers can provide sophisticated customer services

Actually, today if you look at the websites of Tata Steel or JCB, you will understand that these electronic mediations make a lot more powerful contribution to the earlier physical interaction spaces and a lot more sophisticated customer service, prompt customer service, prompt response to queries can become possible.

Example: BigBoxx

- **Direct sales from catalogs**
 - **Bigboxx.com (*bigboxx.com*), based in Hong Kong, is a B2B retailer of office supplies**
 - no physical stores and sells products through its online catalog
 - three types of customers:
 - large corporate clients
 - medium-sized corporate clients
 - small office/home offices (SOHO)
 - offers more than 10,000 items from 300 suppliers

For example, you can look at the website of this BigBoxx with double X, bigboxx.com, it is based in Hong Kong. It's a B2B retailer of office supplies. I highly encourage you to visit that website. They have no physical stores, entirely sells through online catalogs. So, large corporate clients, medium-sized corporate clients, small and offices, home offices, they all access thousands of items from hundreds of suppliers using this platform.

Excellent example of a blending of B2B, B2C which I was alluding to in my previous session. So, in some sense it is serving all those hundreds of suppliers trying to market thousands of their items and it is also connecting those hundreds of suppliers with thousands of buyers. So, a large scale operation which in the past would have been maybe a several multi-storied buildings spread out covering all kinds of shops and all kinds of transactions all become possible at the click of a button in the BigBoxx type of example.

Example: BigBoxx (cont.)

- The company's portal is attractive and easy to use
- Has a tutorial that instructs users on how to use the Web site
- Once registered, the user can start shopping using the online shopping cart
- Users can look for items by browsing through the online catalog or by searching the site with a search engine

It is very attractive and easy to use. It gives tutorial to new users how to use the website and once you have to register of course because in a way that registration ensures that real vendors and real buyers are interacting with each other. And once you are registered, then you can just pick up a shopping cart which is again electronic and you can shop through the website. You can browse using online catalog. You can search by using the on-site search engine and so on.

Example: BigBoxx (cont.)

- Using its own trucks and warehouses, Bigboxx.com makes deliveries within 24 hours or even on the same day
- Delivery is scheduled online



They use their own trucks and warehouses from where delivery can be made within 24 hours or even earlier. And everything is scheduled online. You can check the status. You can expedite delivery. Everything is possible electronically.

Example: BigBoxx (cont.)

– Value-added services for customers

- check item availability in real time
- track the status of each item in an order
- promotions and suggested items based on customers' user profiles
- customized prices
- control and central-approval features
- automatic activation at desired time intervals of standing orders for repeat purchasing

So, you see, this provides at the almost at fingertips, at the click of a button, it provides so much of value-added service to the customer. So the e-marketplaces, therefore, check people help availability in real time, track the status of orders. They can, sellers can create promotions. You can actually evaluate alternatives as a buyer.

All kinds of approved or certified comparisons can be made available. And very interestingly a lot of time can be saved by creating time triggered repeat orders or standing orders as we call them for repeat consumable purchasing for example in an office scenario. So, you can be regularly delivered printer papers based on the time period that you decide. So that's it, our first session on B2B e-commerce, B2B e-marketplaces, the various formats, the sell side, buy side, platforms, all that we discussed and we will continue on this track in the following session. Thank you.