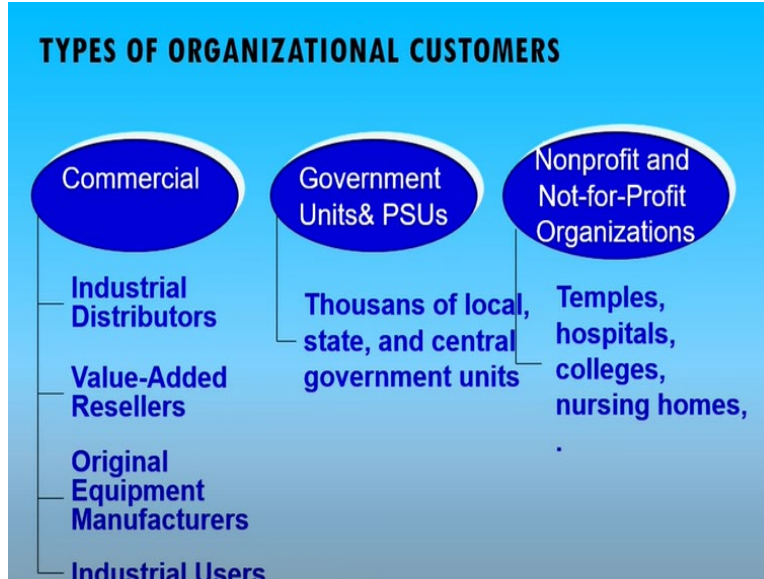


BUSINESS MARKETING - TECHNOLOGY FOCUS
Prof. Jayanta Chatterjee
Department of Management
Indian Institute of Technology, Kanpur

Lecture 04: Organization Markets and Competition

Hello, welcome to our next session on business marketing or business to business marketing or industrial marketing. I am Professor Jayanta Chatterjee. Today, I'm going to discuss the the number of different types of organizations who are involved usually in this domain of B2B marketing, business marketing or industrial marketing. In some ways, you can even call this domain as institutional or organizational customer oriented marketing.

Like in the last session, we were discussing about the technology oriented marketing issues. Today, we will focus on organization oriented marketing issues and the types of organizational players.



So, there are commercial organizations involved in this domain. And by commercial organization, we mean industrial distributors, value-added resellers, sometimes abbreviated as VAR or VAR, and system integrators are a special type of value-added

resellers, particularly important for high-tech or technology-enriched products and systems.

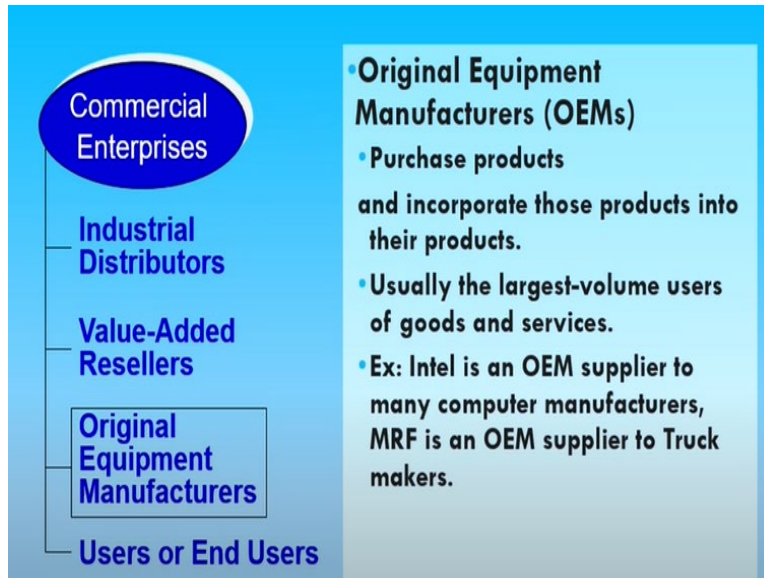
Then we have original equipment manufacturers, and of course, at the end, we have industrial users. So industrial users are the equivalent of end consumers in B2C, business to consumer marketing. Then we have institutions and government and public sector units. So there are thousands of local, state and central government units and many public sector undertakings or public sector units, also abbreviated as PSUs.

They can be industries, they can be certain purpose-oriented organizations in the public sector. Then we have non-profit or not-for-profit organizations. So they are sometimes also called NGOs or non-government organizations involved in the social sector. And the examples could be temples, churches, mosques, hospitals, colleges, universities, nursing homes, and so on.

So when we say Non-profit, that means it's like a charitable organization. In case of not-for-profit, they do earn, their aim is to earn surplus, but that surplus is not for giving dividends to shareholders, but for redeploying resources generated in the maintenance and development of the unit. So in case of temples or colleges and universities, that kind of definition will apply. But in case of a nursing home, it will be sometimes, of course, behaving like an ordinary organization.

But, because it is involved in the social sector, it has some mixed characteristics. But from a marketing perspective, the key thing that we have to understand is in this – as you see, all these different kinds of organizations. When they are marketed to, that means when they are in the buyer role, they are always doing group purchase. That means there are not decision-making individuals, but there are decision-making units comprising of number of individuals. Some of them may be in leading position, some of them may be in dominant position, may be influencing the final decision.

But always there are a number of people involved in these organizations who are responsible for the procurement function, buying function. Let us look at these different types of organizations and their characteristics briefly.

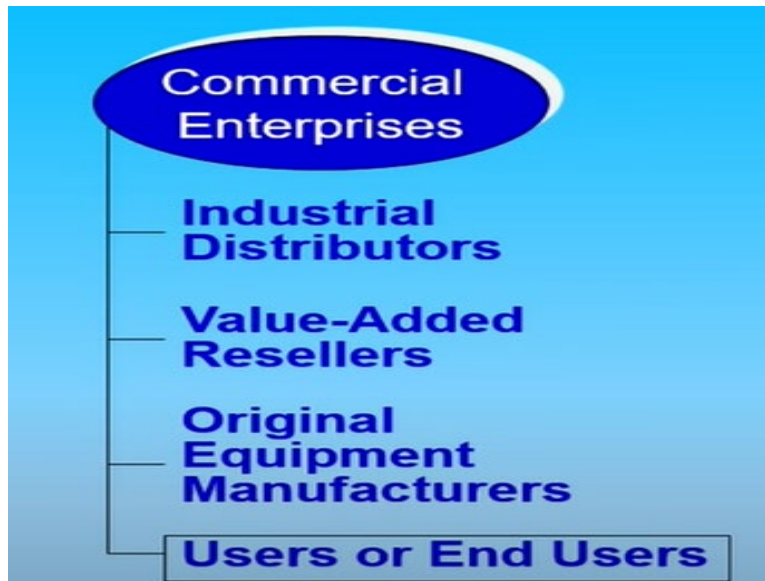


So we have for example a relatively new term OEM or original equipment manufacturers. So they purchase product to incorporate into a machine or a final product which will then again will be again resold to end users or user industries.

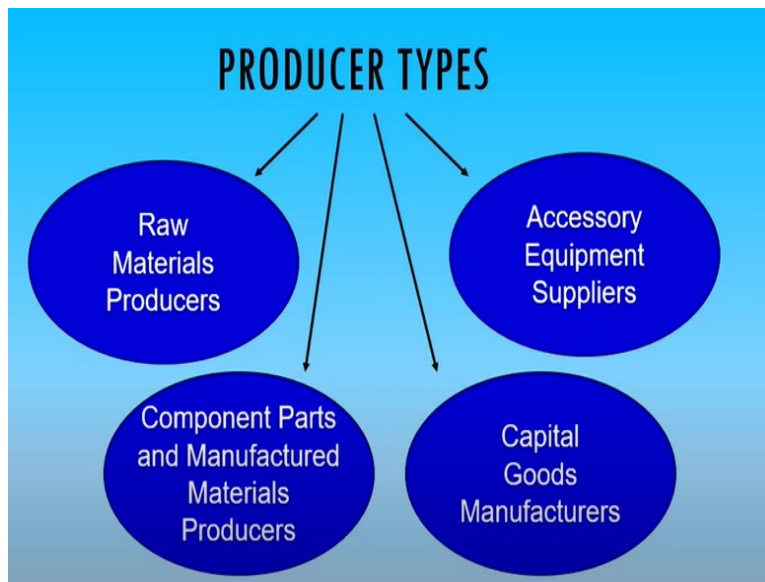
In many cases, in many instances, The OEMs represent the most significant part of a market. So, for example, if you are manufacturing valves or industrial valves or you are in manufacturing micromotors or stepper motors or special function motors, then in most cases, your motors will be sold to this kind of customers, the OEMs, and they may be incorporating it in their machine or system and ultimately it will be sold, installed or at a customer's premise a good easy example is Intel or AMD micro device manufacturers microprocessors micro chip makers they supply to computer manufacturers or other types of information appliances or MRF is, for example, an OEM supplier to truck makers. So OEM, in this case, the truck makers are the original equipment manufacturer and MRF is supplying tires to these OEMs.

So, as you can see, therefore, OEMs are organizations who, at the end, either sell to commercial users, industrial users, or like a truck may be sold to another kind of organization. But tires can also be sold to cars, passenger cars, which will be sold to individual buyers.

So the end users could be for OEMs could be sometimes consumers or buying for personal use, but in most cases they sell to organizations for commercial or industrial use.

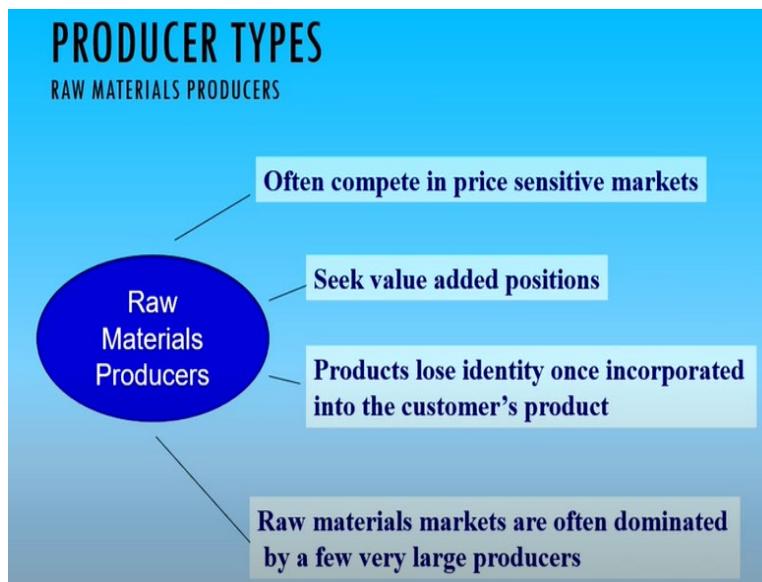


The producer types who supply to this users or end users can also be people who make raw materials. Raw materials means these are, we will discuss it shortly.



Then there are people who make component parts and they make subsystems. They make sometimes system assemblies which go into an end device or end equipment. For example a manufacturer of like Sona Koyo who makes steering assemblies that say like a

system assembly and it goes into a car or a truck. Then there are capital goods manufacturers. So a manufacturer of a grinding plant for cement plants or a manufacturer making crushers for the mining industry are examples of capital good manufacturers. And then there are people who make accessories which go into, and so a manufacturer of a, for example, a drive, a digital drive, a solid state drive, for use in computers and other information appliances for memory storage will be an example of accessory or equipment suppliers to end equipment makers.



The raw material producers are kind of almost at the lowest end of the value chain and they are therefore competing in a market which is similar to convenience product in the B2C.

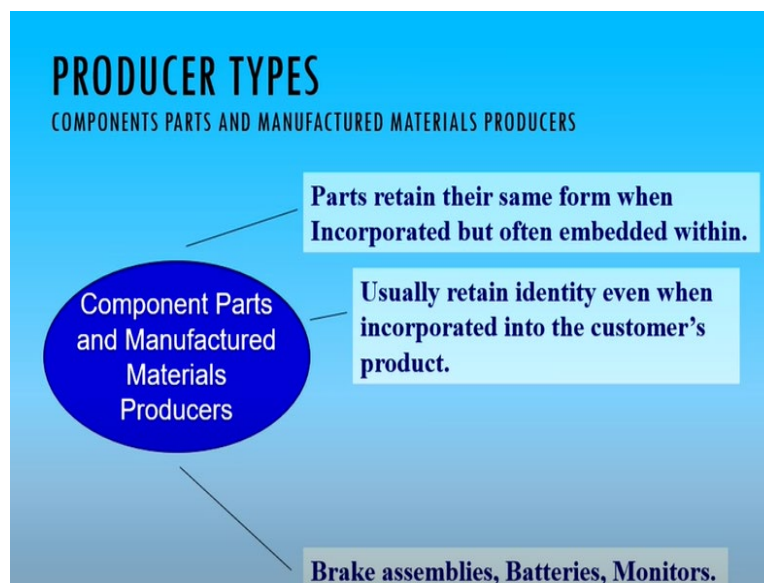
So, they may have large number of competitors and they often compete in a very price sensitive market. And that's why most raw material producers seek a value-added position. That means they would sell rather some kind of a purpose-oriented package. So some chemical manufacturers, instead of selling the raw chemical, may be making a package used for, say, cleaning swimming pools. So it's a very particular purpose and the chemical may be used in many other areas because it will be some kind of cleaning agent.

But they will package it, that means add value to it so that it becomes their customer position gets more defined and they are able to reduce their number of competitors.

Important point here is that a raw material loses its identity once it is incorporated in the customer's product. So it gets blended. So somebody may be supplying chemicals for manufacturing of soap.

So it gets all blended and through chemical processes, it loses its identity. And at the end, we see the soap or the detergent. And because it is a very price sensitive market, and it's also prone to fluctuation due to global market conditions, because many of the raw material producers are, they are, they are participating in a global value chain because many of their inputs.

So many raw material suppliers in India, they get their raw materials, inputs from say China, and therefore, in this market over time, and we will see why it happens in a later discussion, gradually few players come to dominate the market. So, the raw material producers often become very large organizations if they are successful. And many raw material producers are also global players because raw materials often achieve global standard economy position. And that's why they have to become a volume manufacturer. So, they usually address a very large market.

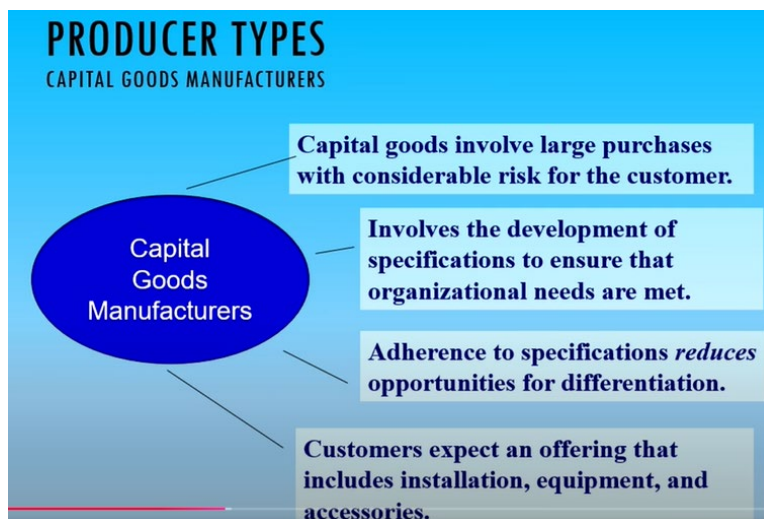


Then there are component and manufactured material producers. That means they are adding value to raw material. They are combining and recombining different elements to produce parts, the parts retain their form when incorporated in a product.

So, like for example, a microprocessor will retain its form when incorporated in a computer. But, you will usually not see the microprocessor because it will be embedded in a printed circuit board which is housed inside the computer or the television or the other information appliance. And even though they may be inside and often invisible, but they will retain their identity and therefore, when you replace it, you will have to replace, in most cases, with the same make. And therefore, there is a position that is often very strong, as we see in the case of Intel.

They have very few competitors. So they operate in a kind of market which we will discuss shortly, which is called the oligopolistic market. So they have few competitors. They retain their identity even inside the end manufacturer's device or equipment. And as a result, they often try to create a ingredient marketing position, like as we can see Intel, their famous campaign called Intel Inside.

So, even though the end customer, the public, will not be buying a microprocessor by itself. But to create their strong position, they created the market recognition and they created the individual buyer's preference through their campaign of Intel Inside. So, other examples of component or parts, manufactured parts are brake assemblies or batteries or monitors for information products. So these are all, and as you can see, for example, monitors, the basic screen monitors which is a component, the plasma screen or the LED screen. But most of the suppliers are global suppliers for this product and they are very large companies by themselves.



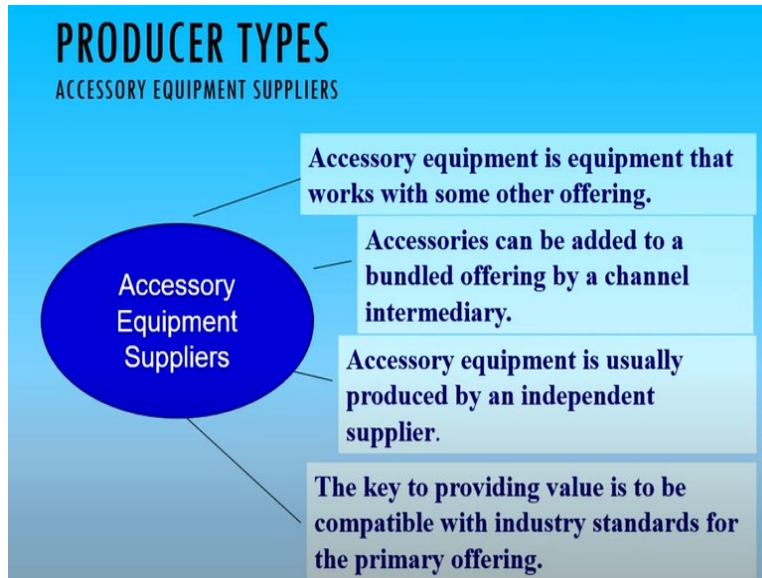
Then we have capital goods manufacturer that means these are usually chains of various sizes and various capabilities they are purchased infrequently and they are usually large ticket items, large value items And they are always bought through detailed examination of technical features and performance characteristics called purchase specifications. And usually the capital goods will be meeting number of different types of end customer needs.

So there are different departments who will get involved in the purchase process of capital goods. So there will be operations people who will be interested. There will be maintenance people who will be interested. There will be even in some cases marketing people who will be interested because certain capital goods create intrinsic preferred value position for the end product which the marketing department is interested in.

So, for example, in a cement plant, the marketing department may be interested in the kind of kiln or precalcination equipment because that will add certain value to the cement which will make their marketing job easier.

And other interesting thing is you remember in the very first discussion we said that a key feature in the B2B market is that the customer is looking for a total offering that not only a bare product, but many other layers added to it, which constitute the total offering or total solution. And so that applies very strongly to capital goods because here customers definitely expect different kinds of services and add-ons to the basic equipment like products, services or auxiliary layers like installation very defined warranty where it can be parts warranty, service warranty, warranty at customer's location, warranty at manufacturer's location, and so on.

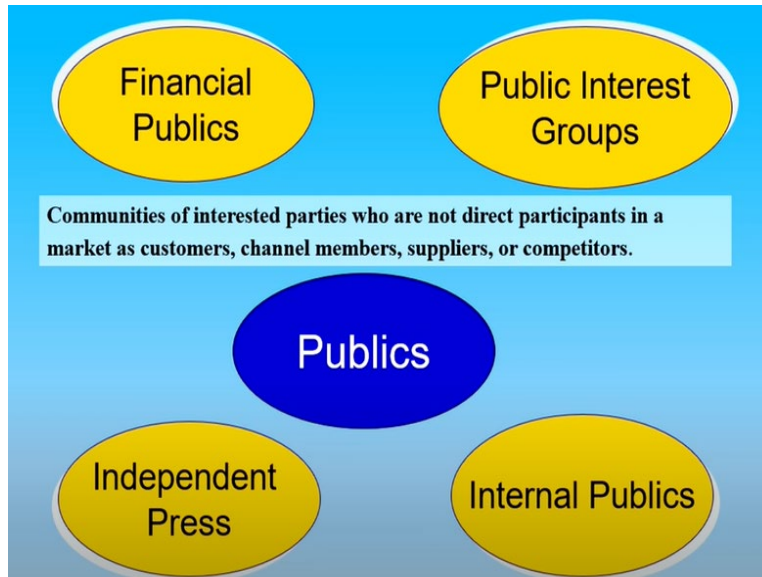
And so the customers will also often, the end customers will expect the grinding unit, as an example, along with different accessories which are the feeder equipment or which are the exit delivery equipment and so on. So the supplier of a capital goods often will have to source from other capital goods manufacturers to create a complete solution or a system.



So they buy usually, these capital goods manufacturers usually buy from other manufacturers who are called accessory equipment supplier or accessory equipment manufacturer. And so they become, these accessory products are, they become part of a bundle offering. And in many cases, the manufacturer of the crushing unit may not be buying all the accessories themselves, but their channel partners who are these value added resellers or the system integrators, they may be buying these accessory products and combine it for supply of a complete crushing solution to a mining industry for example.

The accessory manufacturers have to pay a lot of attention to not only standards or dominant designs in their own industry, but they also have to continuously track the technology developments and specification and standards emerging in the OEM industry which they serve. So you can see, therefore, a manufacturer of a gear who will be supplying to, say, a cement kiln or a mineral crusher will not only track the different material developments, process developments, standards development in the gear industry, but they will also keep track of the technology development and standards and specification development in the crushing equipment industry, or they may be tracking even other products like conveyor belts, etc., and the standards and technologies that are emerging in those sub-parts or sub-assemblies.

So, accessory equipment suppliers often have to be therefore very agile as marketers and they have to be usually the marketers here are they have to be very strong in their technical competence.



Then we have group of entities or group of people we call them publics. So, these are communities of interested parties. who are not direct participant in the market as customers or channel partner or suppliers or competitors, but they exert a strong influence in the marketplace. So they are like financial publics like banks or different kinds of financial lending institutions.

And then there are public interest groups like environment protection-oriented groups or alternative energy promotion groups and so on. And then there is independent press. And, of course, there are internal publics, mainly people who are inside the organizations or around the organization, who directly participate as human resources in the business-to-business transaction-performing entity. So the main characteristic of the public, publics is that they are not direct participant in the value chain, but they are strong influencers of the value chain. So, for example, an environmental protection group, which is a kind of a public interest group will strongly influence the kind of pollution control systems that must be procured by a cement plant or a mineral beneficiation plant to protect the society at large, people around those plants or even downstream people.

FORMS OF COMPETITION IN B2B MARKETS

Pure Competition

- No single entity dominates the market or has much of an influence on price.
- Most common in commodity industries.
- Little product differentiation – price is a major component of the marketing mix.

I was just talking about a little while back about this number of few competitors, very large competitors, and that is part of a discussion which is the different types of competition we see in the B2B market. So, of course, one is pure competition. That means there is no single entity that dominates the market or influences the price just by themselves. So in this kind of pure competition, which is the desired state for many buyers, we want many players who are intensely competing with each other to create the most beneficial value proposition for the end customer.

So in commodity industries or component industries, we see this kind of competition so they are quite the competition in this market is comparable to the competition in staple products or convenience products market in B2C here. There will not be much of differentiation so competition is not based on features or competition is based on price, therefore you have to be a cost warrior. But of course, even in this industry, there are a lot of efforts to create brands so that you have a recognition instead of being one of thousands. So just like we see in the convenience product or staple product market salt manufacturers try to create a brand so that they enjoy some customer preference or recognition in the shop.

In the same way, the people who manufacture these components or chemicals, they also try to create some brand position. Sometimes, of course, they are very intensely engaged in research and development so that they can come up with some kind of a feature which

gives them some distinctive position. Certain purification value or certain level of technical clearances they also try to create standards by which they will be judged so that they can try to eliminate spurious competition.

So intrinsically in this market the products are not differentiated but the players try to create differentiated position.



Just the opposite of this is monopolistic competition it hardly exists today in most markets because the world is now a small place in a way because of huge improvements in communication and transportation many large players have to play in a global market. And therefore, they are open to competition coming from different corners of the globe. And so monopolies hardly exist unless, of course, they are created through legal frameworks. For example, electricity supply companies in many cases will have a monopolistic position.

So, for example, in Calcutta, the electric supply is controlled by Calcutta Electric Supply Corporation or CESC. So they have a monopolistic competition. But so therefore, in their marketing, they have to always make an attempt to be fair or to be above board in terms of ethics or in terms of their pricing. But even in this domain, there are many instances where the cities adopt a number of players, number of electricity suppliers and allow them to compete with each other so an end user can exert a preference and procure

electricity from supplier A instead of distribution company B. But except this kind of normally they are offered some kind of legal licensed position for this monopolistic position or at least semi-monopolistic position. Because the government wants these industries to have reasonable profit to be able to survive and grow, because if they are open to open predatory competition, then sometimes they may be local suppliers may be vanquished by foreign suppliers with deep pockets. So there are some legal protections which are available. And otherwise, in most industries today, these monopolistic positions are not available. But of course, if you are a very R&D intensive person,

You are in an industry where technology plays a big significant part and in creating differentiated values, then you may have a near monopolistic competition. So, for example, DuPont, they have been able to create monopolistic competition at least at the introductory stage of many of their innovative products where nobody could come close to them for a number of years. But, of course, an endless competitive position is almost a dream today. So most markets or many markets are oligopolistic. So for example, say mobile telephony service in India, there are maybe three players.



FORMS OF COMPETITION IN B2B MARKETS

Oligopolistic Competition

- Market consists of a few sellers that are sensitive of each others' strategy.
- Barriers limit entry of new competitors.
- Prices are aimed at maintaining market stability.
- Key is building relationships with large volume customers.

Two are very dominant and the third one is kind of a distant follower. So in this market, therefore, there are few players, and so they are all sensitive to each other's strategy. So if today Reliance declares a new pricing structure, in most cases Airtel or VI will follow suit. So the dominant players kind of they may be the leaders, but there will be close

followers. And so there is always a very, it is dynamic, but in equilibrium because of this intense competition among few players.

The government watches that they don't collude. Behind the scenes, they don't form cartels to fleece the end users. But the government also may provide because of the huge investment necessary in such industries through licensing mechanism, they may provide some barriers to limit the number of entrants in certain types of oligopolistic markets. So oligopolistic players have to always be in close touch with policy makers and government regulators.

And usually these market, the regulators are organizations who are part of the public which we were discussing. So they are concerned, interested, but separate entities who do not participate in the production in the value chain, but they are the people who regulate the value chain. So these regulatory bodies and they go almost hand in hand with oligopolistic competition because these markets need stable prices at least for reasonable time period and so the oligopolistic competition by its nature and the regulators together create that kind of convenience for the end consumer by providing the stability or clarity.

So in this kind of market, there is high emphasis on relationship marketing. So, for example, a telephony communication, mobile telephony service player depend on their survival on the number of customers. And they are very, very concerned about churn of customers. That means their customers leaving them and going to the competition. And so they keenly watch three elements.

That means their average revenue per user, their churn percentage, and their new customer acquisition record. So these are features of oligopolistic competition. And when we discuss later on pricing, promotion, etc., we will see other attributes or other features of this market.

FORMS OF COMPETITION IN B2B MARKETS

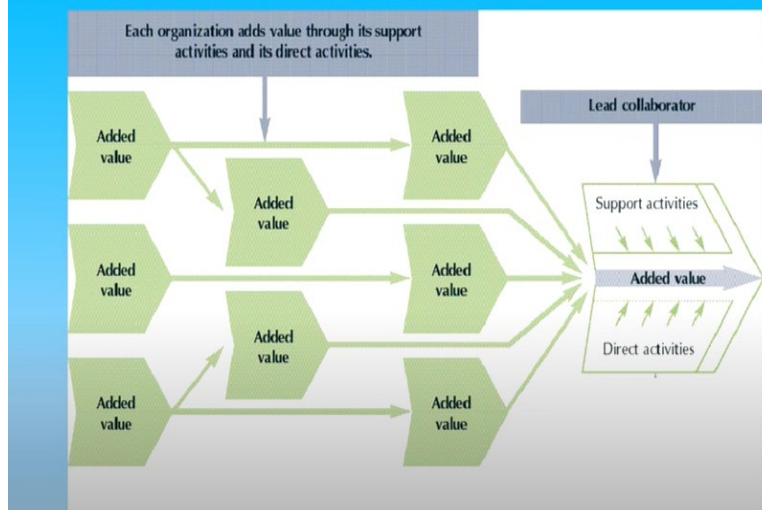
Pure Monopoly

- Only one primary seller.
- Competitors that do exist are small niche players.

So pure monopoly is, as I mentioned, is today almost a non-existent structure. And of course, there are some markets there may be near monopolistic positions because of intense investment in technology.

So, for example, Cisco may have a near monopolistic position in large network equipment and systems, particularly in global organizations. But they also will be subject to some competition coming from local niche players. Let's kind of now come towards concluding part of our today's session.

MULTINATIONAL VALUE NETWORK



I present to you what is known as a multinational value network. So you can see here, there are a number of blocks on the left-hand side. These are players who are adding value to the network. And this value addition can be through goods, associated goods, can be through services, can be through technical or commercial service. And they all kind of connect with each other. So it's a network that at the end come to the right-hand side where the last stage of value addition is done.

And there are a number of support activities even at that stage and comes to leading to the end system. So you can understand this diagram very well if you take the example of the automotive industry. So the finished car, if you remember in the very first session, I showed the diagram of a car assembly, photograph of a car assembly plant. So a car assembly plant will be kind of the right-hand block in the diagram that you see in front of you now. So that is where the final value is added at the car assembly on the conveyor belt.

And even that assembly activity or the final value addition will have number of support activities by way of welding, fitting, and various types of equipment will be involved there, various types of subcontractors will be involved there. But on the left, We see people who are supplying to the car manufacturing unit different kinds of products like, say, the paint. The paint participates in the painting process in the paint shop. It loses its form or it gets applied to the whole surface.

It definitely plays a very significant part in the marketability of the car at the end. So the metallic paints, for example, create some customer preference or different kinds of new shades, which is maybe created by the paint supplier at the input end, influences the marketability of the car at the output end. But there may be players who are supplier of, say, brakes or steering assemblies Or even the bodies, there may be manufacturers like Jai Bharat Maruti who make the body structure or at least some significant parts of the body structure.

There may be people who specialize and manufacture the fuel tanks or now we are seeing more and more electric vehicles. So there are, if this is the electric vehicle coming out of the Tata Motors factory, then the body will still be painted and therefore will be

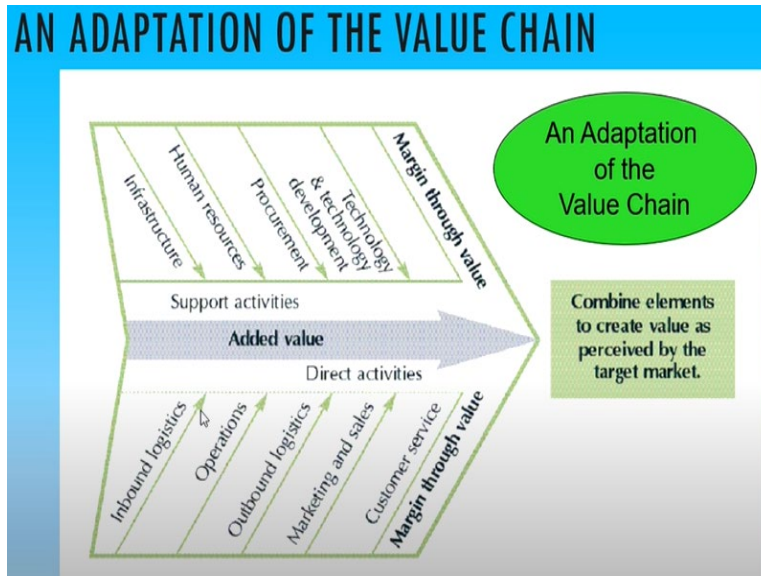
influenced by the paint supplier. But there are other now very large subsystem suppliers, like, for example, the battery. Now, it becomes a very, very important and significant part of the marketability of the end customer, marketability to the end customer, because how long the car can run between two charges will depend on the type of battery, the technology of the battery, the capacity of the battery, the weight of the battery, and so on.

So the battery as a subsystem, or sub-assembly is like one of these blocks. But all these blocks, as you can now see, they should not be of equal size. In this diagram, we are showing all of them in equal size. But in terms of importance, the battery supplier as an organization plays a far more important part in the marketing of the end product.

So similarly there are manufacturer of the motors which go inside the electric vehicle and they also play very important part. And you can see therefore taking the example of the electric vehicle that the value that is delivered at the end in the form of the finished electric vehicle is the result of intense collaboration, cooperative and collaborative technology development of number of players. They have to be very highly coordinated with each other so that the motor matches the battery so that the steering matches the new technology.

And in the process, of course, many sub-assemblies may be obsoleted. So an electric vehicle will not have the spark plug and other associated equipment where we had earlier, or even today we have strong players in the internal combustion engine driven cars, but they are no longer players in the electric vehicle market. So these are these high value, high technology oriented complex value chain based products. See, a lot of collaboration, lot of coordinated technology development, and, therefore, lot of coordinated marketing.

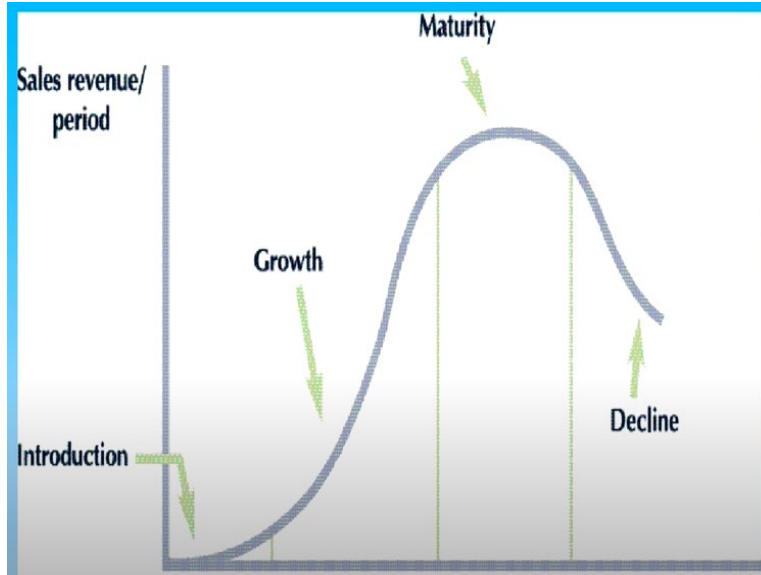
So, the marketing of, the battery manufacturer, will be strongly coordinated with the, with the marketing of the electric vehicle.



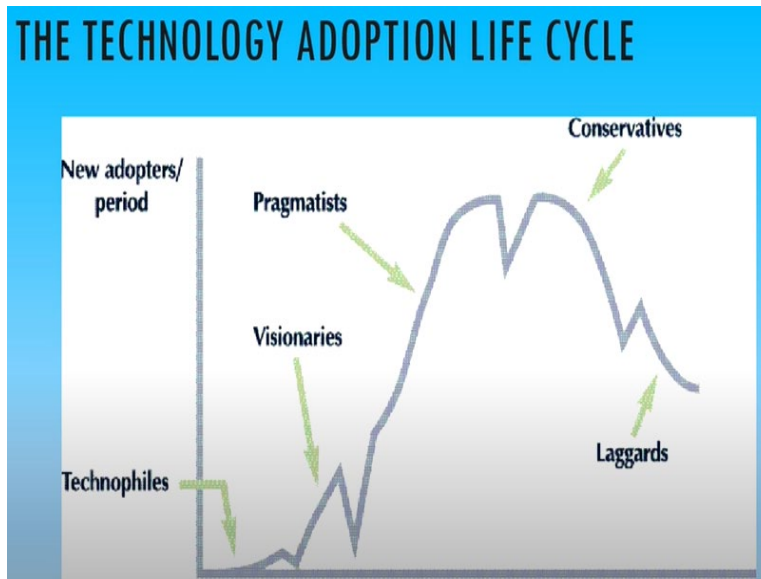
And, so that the final offering is appealing to the public at large. So we can look at this value chain in a little different way. We can see that there are players who will be inbound logistics providers. So these are supply chain contractors who are responsible for just-in-time delivery in a car manufacturing plant.

There are operations. Many parts of the operations are nowadays subcontracted or outsourced. Then there are outbound logistics people who manage the delivery chain at the output end. Then there are, so you can see here, we are looking at direct activities and players who can be subcontractors or channel partners or operation partners or they may be internal departments who all act hand in hand with the support activities, with the infrastructure, part of which may be outsourced, part of which may be internally managed, and technology and development, the research and development, design, all that can be partly internal and partly outsourced.

So, there are design specialists who give input to the design department of the car manufacturer and so that they influence the final form and user interface of the final product. So, the value chain, as you can see in this diagram, in the business-to-business market, is very multi-layered, a lot of players, but collaboration, cooperation, long-term relations are very important constituents very important requirements in managing a good, functional, efficient and effective B2B value chain.



I will later on discuss these few graphs in much more detail when we come to our session on the so-called chasm and chasm marketing.



But at this stage, I would like you to, as a part of this few sessions on background discussion, be familiar with this technology adoption lifecycle.

PLC AND TALC

Product Life Cycle (PLC)

- Introduction
- Growth
- Maturity
- Decline

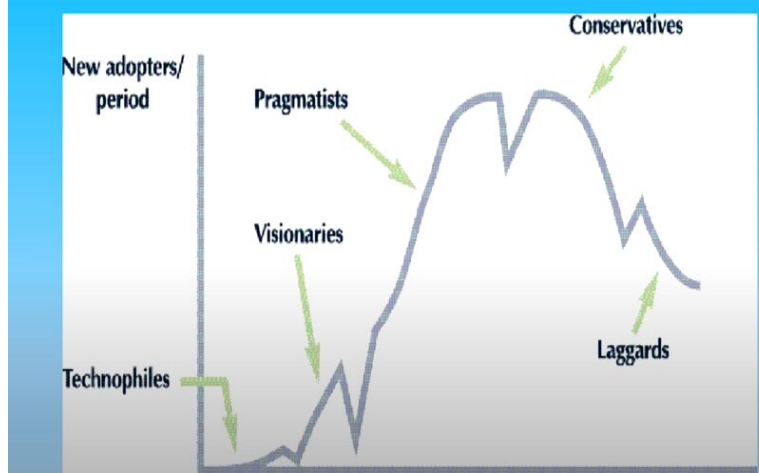
Technology Adoption Life Cycle (TALC)

- Technophiles
- Visionaries (aim for “quantum leaps”)
- Pragmatists (want proven solutions)
- Conservatives
- Laggards

Technology adoption lifecycle, as I mentioned in a previous session, it is very similar to the product lifecycle concept with which you are familiar. In the product lifecycle, we have the stages of introduction, growth, maturity, decline. But in the technology adoption lifecycle, we have similarly different players at the early stage.

They are called often technophiles and visionaries. They are people who will be interested to buy the latest feature. They are the key customers on whom you'll have to focus if you are an innovation-oriented B2B company.

THE TECHNOLOGY ADOPTION LIFE CYCLE



And then, of course your final success will depend on your ability to succeed in the pragmatist mainstream market. And of course, how you manage your decline stage conservative buyers or conservative purchasers and laggards are also important part of B2B marketing.

But you can also see, which we will discuss in detail later on, that this graph is not a continuous graph. There are dips between the technophile and the visionary. That's a small dip. That means you may fail. These are often called the valleys of death.

That means if you are not careful with your product development strategy. In B2B markets, you can actually go bust in crossing this stage from the visionary stage to catching the pragmatists. So you may be very successful with the technophiles and the visionaries at the introductory stage because you are a feature-based competitor and you have winning features. But the winning features will not make you necessarily successful in the pragmatist market because there you will have to be paying attention to many elements which are generated by operational excellence.

So we will discuss this in much more detail but I just wanted to introduce at the end of this session this technology adoption life cycle which goes hand in hand with the PLC or product life cycle.

USING THE TECHNOLOGY ADOPTION LIFE CYCLE

- The vendor of an innovation passes through *technophiles* and *visionaries* before establishing a foothold among *pragmatists*.
- Crossing the chasm (called the “market development gap”) between *visionaries* and *pragmatists* is related to a change in the entire marketing mix.
- **There are changes in type of customer and what the customers perceives as being of value.**

So as I mentioned, we have a separate session on the market development strategy, gap crossing strategy or crossing the chasm strategy. Then we will see how technology adoption life cycle plays a very significant part in B2B marketing. So that's where we end today's session. And we will continue with this kind of background, canvas-oriented discussion and your familiarization with key concepts over the next couple of sessions.

And then we will dig deeper into each one of those concepts and those activities as we progress. Thank you.