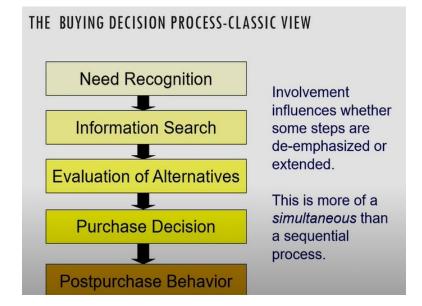
BUSINESS MARKETING - TECHNOLOGY FOCUS Prof. Jayanta Chatterjee Department of Management Indian Institute of Technology, Kanpur

Lecture 05: Organization Buying decsions

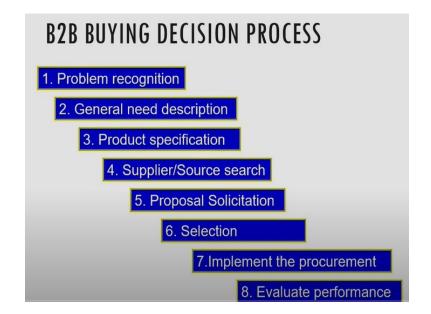
Hello, I'm Jayanta Chatterjee and welcome to our next session on the topic of business to business marketing or business marketing or industrial marketing, some synonymous terminologies that we have been using. So far, we have looked at the broad canvas and the fundamentals of marketing and how those fundamental processes are slightly different, sometimes significantly different in case of business to business marketing. Now we will start going a little deeper into certain areas. For this session's topic, we are looking at the buying decision process.



And we will explore this topic in some depth. So on your screen, you can see a classic view of the buying decision process. This five stage process can be applied to business to consumer, marketing situations as well as B2B marketing situations. So fundamentally it comprises of need recognition and that drives the information search for alternatives for various kinds of solution related information.

Some knowledge transfer takes place at this stage either through virtual means or through direct face-to-face means. Then the buyer goes through the process of evaluation of alternatives. And then there is the purchase decision. And in many high-value purchases or many purchases of like even consumer durables, as well as in case of B2B,

We have post-purchase analysis and post-purchase behavior. The B2B buying decision process can be expanded into eight steps.



So we start with problem recognition as usual. And then there is a stage of creation of specification general need description in a structured manner.

That leads to the detail product specification. And then based on the general need description and the specific product characteristics, the search for suppliers sources will start then there is a process of proposal solicitation from the chosen group of suppliers bids are invited in certain cases the request for bids will be published in the press specifically for public sector or government buying It will be open to all suppliers. But these days, more and more, some pre-qualification stage is there so that you don't get spurious offers.

And to shorten the sixth step, which is the selection process, often bids are invited from pre-qualified bidders. Then after the selection process the implementation of the

procurement happens and then of course there will be the post-purchase stage of evaluation of performance. So the classic five stages will be expanded to these eight stages in case of the B2B decision process.

ORGANIZATIONAL BUYING

Organizational buying involves many inputs from professional specialists within the organization.

. External Specialists-Consultants/Plant suppliers

This requires communication among stakeholders in the buying organization (internal & external).

Now we come to the characteristics of organizational buying which we have been discussing at various points during the last few sessions that a primary characteristic of organizational buying is that it involves inputs from professional specialists within the organization as well as some external entities like certain specialists, domain specialists, consultants there may be a strong influence of the overall plant suppliers and their choices or their standardization of suppliers.

So, for example for in a steel plant if the entire rolling mill is being supplied by large contractor or the continuous casting mill is coming from a proprietary technology-based supplier, they will have these kind of plant suppliers or prime contractors, as they are often called, will have a lot of say for procurement of individual equipment which will go into that plant. So if the end customer is planning to buy a bunch of motors in a in the continuous casting plant they will be heavily influenced by the standards followed by the casting plant supplier.

If they have some vendor preferences that will influence the end customer's buying decision. So, for example, suppose it is a Bhilai steel plant and they are buying a new

continuous casting plant and suppose the supplier is Comcast from Switzerland or from any other place, they will often hand over certain specifications for locally procured components like motors and Bhilai steel plant will often follow the main suppliers choices. Or if there is a overall consultant for the implementation of this project, they will often supply the preferred specifications for the motors.

They may even have preferred vendors who will carry some weightage when the bid selection happens. So you can understand that just as organizational buying involves inputs from many professionals within the organization, from the finance department, from the maintenance department, from the production and operations department, in some cases even from the marketing department, like we were using the example of the Bhilai steel plant. So for the buying of a new plant or even for buying of some items that will go into that plant, finance and purchase or materials management and maintenance and production and operations, they will definitely be involved.

In some cases, there may be involvement of sales and marketing and other departments as well. Or maybe in some cases, they have a quality, overall total quality management group and they will have some say definitely. And as we discussed, there will be inputs coming from consultants, specialists, plant suppliers. So a key point to note is that at this stage of organizational buying, marketing will mean a lot of very objective communication lot of transfer of facts and figures internally and externally. So the major difference between organizational buying and consumer buying are the following points.

MAJOR DIFFERENCES, ORGANIZATION BUYING VS. CONSUMER BUYING

Organizational buying involves more buyers – more decision makers or contributors to portions of the decisions.

Participants (stakeholders) in the buying center are driven by the specific needs of their professional responsibilities.

Different types of decisions are often occurring simultaneously in the process, spread throughout the buying organization.

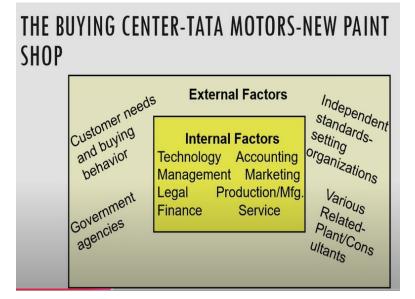
First of all organizational buying as we just discussed involves buyers from many disciplines. So there are more decision makers and that is why often we say the organizational buying is done by a decision making unit or DMU or sometimes called the buying center. The participants in the buying center are driven by objective needs and professional needs of their own discipline. So the maintenance representative will be looking at maintainability of the product offered by prospective vendors. Or the finance department will look at the price, the terms of payment, the warranty and other terms and so on.

So, each department representative will look after the department's interest. But at the sometimes there will be influence of subjective choices also, which will be blended with the objective fact based opinion, because some vendors generate trust based on their past record or based on strong references coming from similar installations and these create certain impressions certain images in the minds of the buying decision makers and often even the brand, the industrial brand of the prospective supplier or the equipment will also play a part which is not exactly objective. I mean there are some subjective elements that are mixed in that particular process of choice making.

The other important thing is here that the buying decision process the eight steps that we discussed in just a little while back is not a sequential step-by-step process. There are many simultaneous back and forth among those stages. For example at the general need

description and product specification between step two and step three, there may be a lot of back and forth. There will be a lot of interaction. So when the supplier search is going on, sometimes based on preliminary feedbacks coming from the prospective bidders, there may be some changes made in the product specification or general need description. The buyer might scale up or scale down some of their initial specifications.

So, these two, three, four go often in a loop and through an interactive process among these three steps, the final bid solicitation may be happening. So the important point to note is that the different types of decisions are often occurring simultaneously in this flow and also a lot of interactions happen among the different members of the buying decision unit and that creates some changes. So, there may be again some interaction across the steps.

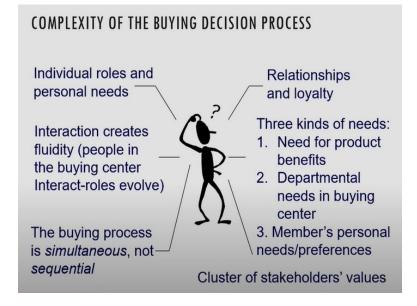


This diagram sort of represents to you, we are taking as an example, a new paint shop being set up by, say, Tata Motors. So there will be a lot of internal factors, as we discussed, like technology issues, finance and accounting issues, legal issues, finance overall, corporate finance, as well as plant project finance groups will be involved.

So these are all internal interactions that we just now discussed that happens in the decision-making unit. But there are other external factors that play a part, for example, for safety, health and environment issues. There may be a lot of government regulations

and agencies who will be involved. And these days, these environmental concerns or social concerns play a lot of important parts. So if there are some issues that affect the local citizens, there may be protracted discussions happening among the plant procurer like Bhilai Steel Plant and the local administration and Central Pollution Board and other entities who contributed external agencies in the final decision making.

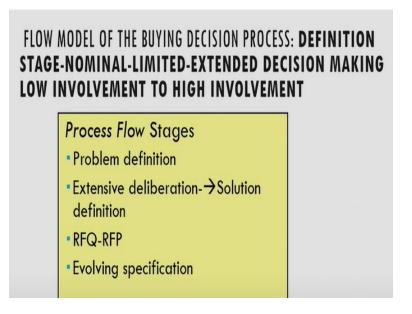
There will be standards organizations who may be sort of virtually present through their global practices as standard practice, standard operating practices and there will be inputs coming from similar plants so Bhilai steel plant while selecting their continuous casting plant supplier or Tata motors while selecting their new paint shop may look at similar installations not only in India but in other places across the world and almost all the vendors will be citing their reference installations, their past experience in the supply of similar plants and all these inputs as external inputs will be getting going into the decision making.



So that creates complexity in the buying decision process. So this particular slide in front of you summarizes the elements of complexity. So there are issues emerging from individual roles and personal needs of those role players. So as I mentioned earlier, the finance department, the maintenance department, the production department. Each representative will bring in the departmental views and concern as well as they will add their personal views and concerns. And those personal views and concerns will be often driven by past experiences, relationship and loyalty issues and the needs that each player or each decision maker will bring to the play will be of three kinds. They will be seeking objective benefits from the product service value bundle represented by a plant like the paint shop or the continuous casting plant, departmental needs that means maintainability will be a key concern of the maintenance department. Availability of spares over a long term will be their key concern.

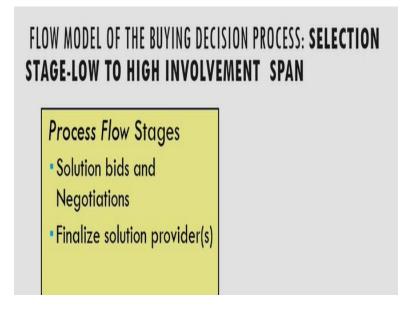
The finance department will look at financing terms, terms of payment and so on. But at the same time, their individual subjective opinion with respect to the sort of image projected by the prospective bidder will also play an important part. So the buying process is complex, simultaneous, lot of back and forth among the stages. There are different clusters of stakeholder values which interact and in creating the final decision.

So that's why we say that buying decision process in B2B marketing usually is a multistage interactive complex process compared to that in case of business to consumer buying process.



We can look at these stages, those eight stages, some of those stages we can discuss in a little bit more detail here. Like for example, the deliberation of the specification, the general need versus the product specification or product service system specification will

have a lot of interactive transactions. The creation of we will just now discuss the meaning of RFQ and RFP etc., their request for quotation or request for proposal the flow that is where bids are invited and finalized solutions happen.

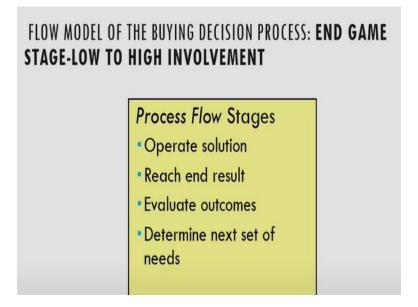


There again may be some interactive back and forth at that stage because there may be some discussions and negotiations and some modifications may even happen at that stage in the original purchase specification.

STAGES IN THE PROCESS FLOW MODEL OF THE BUYING DECISION PROCESS: SOLUTION STAGE-LOW TO HIGH INVOLVEMENT

Process Flow Stages • Customize as needed • Install/Test/Train

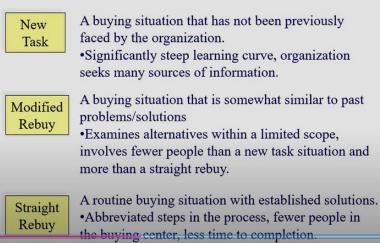
Then when the supplies are made and customers are trained, installation happens, testing happens. At that stage also, there are some intense interactions. So this is again what we call a high involvement stage that emanates from some low involvement steps.



Installation stage or post-purchase stage, which sometimes is called the end-game stage, is also a transition from low involvement to high involvement because there will be many things that will be happening when the plant is being installed and getting tested.

Faults will often emerge, faults will be rectified, certain changes may be made even at that stage through mutual negotiations. Sometimes next set of needs are created from the post-purchase experience or post-installation.

STAGE 1: PROBLEM RECOGNITION



These steps also change some of the eight step process that we saw sometimes may get compressed into five or six stages because in the B2B domain, not all products and systems that are bought are the same.

So, there are three types of problems that are usually on the anvil for seeking solutions. So, there are occasions where the buying process is a straight rebuy. Straight rebuy means it is a routine buying decision from established vendors. Like for example, spares, operation spares. during the lifetime of the equipment will be purchased several times, maybe annually.

And it is coming from the solution provider, the main plant supplier or the main equipment supplier. So in this case, there will not be much of competitive bidding, etc. It will be coming from the same supplier who supplied the original equipment. There may be some negotiation. So it is an abbreviated process in this case.

There will be fewer people. Maybe the decisions will be taken mainly by the materials management department and the finance department. Sometimes maybe production people will be involved. So, a straight rebuy is a much more as the name signifies a straight forward process happens often or more frequently takes less time to complete. It is a less complex process because you are following often predetermined paths seeking solutions from defined vendors and competitive situations often don't arise in the straight rebuy process.

Then we have modified rebuy. For example, a plant will have all kinds of motors but Time to time the types of motors which are being sought for purchase may get upgraded, may be redefined, modified. Because of technology changes or because of dissatisfaction with the existing vendor, end customer may want to test the latest price level.

So, in these cases, the process is often called modified rebuy. So that means it is a buying situation which is somewhat similar to past process, but there will be some reexamination of alternatives with some limited scope. It is a more onerous process. There may be more steps involved, more information search, knowledge transfer, more discussions, more negotiations compared to straight rebuy, but yet it will be simpler than the third stage, which we call the new task or new equipment purchase situation. Here, it is a buying situation which has not been previously faced by the organization.

Like we were discussing the example of a paint shop being procured by Tata Motors. Suppose Tata Motors is looking at a completely automated robotic paint shop, the kind of paint shop which they haven't purchased before. So it's a new situation and a new set of vendors and new technology issues. And therefore, here the entire, those eight steps will come into play. All the different issues with respect to multiple transactions internally and externally, all that will happen.

And there will be a lot of unlearning and relearning involved and there will be lot of information search and knowledge based consultation. So you can see that the even though there is a that eight stages process but depending on what is being purchased those stages may be shortened or the full number of steps may be at play. So, there will be simple to complex transition from straight rewrite to the new task buying.

STAGE 2: VENDOR SELECTION

RFQ = Request for Quotation

Usually associated with that which can be thoroughly and quantitatively defined

RFP = Request for Proposal

• Usually defined by a set of specifications that have more flexibility regarding the final form of the offering

For government purchases, RFP/RFQ are often published in a specified outlet.

Now, I was discussing a little while back these two terms RFQ and RFP. RFQ stands for Request for Quotation. These two terms come into play at the vendor selection stage. That means after the specification has been finalized and we are seeking bids, at that stage we have this RFQ, request for quotation. So this is usually associated where the item of purchase can be very thoroughly and quantitatively defined. But if there are exploratory issues involved, that particularly happens when a new equipment or a new plant is being purchased, then there will be a specification that will be presented, but there will be more flexibility regarding the final form and all the features that will be looked at.

So at that stage we call the process as request for proposal. So a proposal as opposed to a quotation has more leeway, has a more exploratory nature and has therefore very often stages of negotiation and interactions in the post-bid stage. In case of government purchase, as we said, often this RFP and RFQ will be published in the public press because it will have to be open to all vendors at large. But these days, very often, some pre-qualification stage happens before the final RFPs are invited. So, some pre-qualification stage, but even before the pre-qualification stage, it will be open to the entire market.

STAGE 3: SOLUTION DELIVERY

Often takes longer than definition and selection combined.

Stage ends when delivery is complete and approved by the buyer.

Involves merging the logistics of the buyer with the logistics of the customer.

The solution delivery stage, so far we have been discussing about pre-order stage. But after the order, it's not a one step process because after the order, There may be some interactions between the vendor and the buyer. There may be some changes and some renegotiations involved, particularly for a large complex plant. And when a lot of technologies are involved, some of which may be rapidly evolving.

So, particularly these days electronic control automation are getting are evolving quite rapidly because of rapid developments in the area of artificial intelligence and deep learning and distributed computing and so on. And also deployment of new communication standards at the shop floor level. So, at the solution delivery level also, some, it's not a very rigid process. There are some flexibilities that are often required.

But this stage ends when the delivery is completed and tested and approved by the buyer. So when it is actually, it may be a complex subsystem like say a steering assembly which will be going into a truck, but it will be supplied regularly. So often in such cases, there will be strong coupling between the logistic system of the buyer and the logistic system of the vendor. And there will be often IT systems coupled to each other so that it can be coordinated machine to machine even without involving human operators at every stage.

So one computer system today is capable of transacting directly with another computer system to exchange production schedules and therefore delivery schedules demanded.

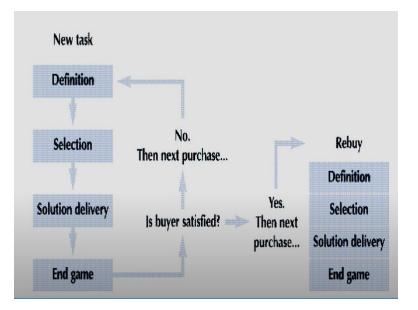
ORGANIZATION AND INDIVIDUALS NEEDS IN THE BUYING DECISION PROCESS

Steps in Flow	Organizational Needs	Individual Needs
Define problem	Clear, concise, tractable	Information & time
Define solution	Appropriate, affordable	Design assistance
Acquire provider	Choice, speed,	Information, assurance
Develop solution	Speed, easy use	Execution help
Install, test, train	Ease of integration, speed	Knowledge, comfort
Operate solution	User friendly	Easy to maintain
End result	Effective, low cost	Recognition
Evaluation outcomes	Information	Communication, reward

As we were discussing we can look at therefore three sets of needs or rather two groups of or two types of needs, organizational needs and individual needs. So organizational needs at every stage will be clear, concise, traceable when the problem is getting defined. Whereas the individual may be quite concerned about the information that he or she needs for performance of the department task. And there may be some personal time issues, department time issues, which will be coming as individual needs.

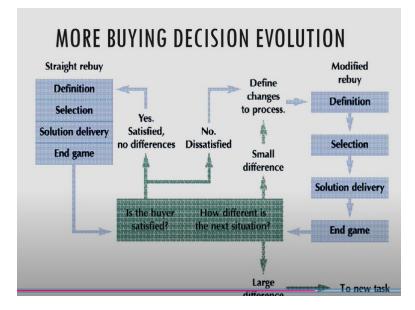
Similarly, on this slide you can see that for every stage in the purchase flow, problem definition, solution definition, vendor selection, solution development, at every stage there will be certain types of organizational needs which are more quantitative, more objective and there will be at the personal level more concerns, more assurances, more responsiveness issues that will be explicitly communicated or sometimes they may be implicit in the behavior, purchase behavior of the representative in the decision-making unit. So personal comfort, assurance, ease and cluster of experience-based opinions or opinion of peers, these are all drivers of individual needs.

Whereas organizational needs are driven by more objective sets of issues, standards, factual need definitions, quantitative requirements and so on and so forth.



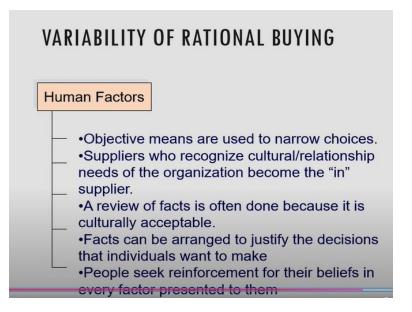
So, this next slide is representing interaction points and how the flow happens between the re-buy process and the new task process. So for example, if there is a requirement is defined, there are different search for alternative solutions, a selection is made. And if the buyer is satisfied at the end of, in the post-purchase stage, then that kind of purchase in the next instance will be a re-buy process. So if a type of motor, which is a specialized motor, say for example, maybe flame-proof motor, all the processes will happen as a new task but once a particular vendor has been selected and the flame proof motors have been procured and put in use if the end customer is satisfied if suppose it's a steel plant if the steel plant is satisfied with the performance of the flame proof motors procured for the rolling mill.

Then the next requirement for replacement motors or for spares will be a rebuy process. It will no longer be a new task process. So basically new tasks become rebuy processes when the end user is satisfied with the original purchase.



But within the rebuy process, whether it will be a straight rebuy or it will be a modified rebuy will also depend on the level of satisfaction. If the buyer is entirely satisfied, maybe it will be a straight rebuy every time. But if there are some dissatisfaction or some external inputs with respect to technology changes or new suppliers emerging on the horizon, so a new situation may happen which may have some not major but small new inputs and that can lead to a modified rebuy. But if the set of new facts coming into picture, if the technology change is very significant, then actually it may be a new task coming out of the usual rebuy.

So, it often happens in case of regularly purchased items like electrical items. Not so much for the mechanical items because usually they are part of the main machine or the main plant but various auxiliary equipment used in a plant often go from this straight rebuy to modified rebuy and in some cases where there are significant new technologies coming into play or major new vendors emerging in the market, a modified rebuy can go into a new task purchase process.



I will conclude our discussion by pointing out again that even though the buying process in the B2B domain is supposed to be entirely rational, factual based on concrete data, performance data, yet there are human factors at play which influence the ultimate buying decisions.

And the reason is that while these objective facts and figures will definitely play a part in narrowing the choices, but when the final selection is to be made among three vendors who are almost same in stature, in past performance, in global reputation. So, for example, if you are looking at the purchase situation for motors and you have prospective suppliers as Crompton and ABB and Siemens. They are all reputed suppliers.

They all have top credential and they all have their objective facts almost aligned with respect to their credibility. At that stage, the final choice may have a lot of human factors influencing the final choice of one from those three shortlisted vendors. Because, at that stage, individuals will be or a group of individuals will be looking at sort of intangible issues or subjective issues like reputation or cultural fix or trust generated by the vendor's personnel, strategic selling done by the vendor which creates certain ways of arranging the facts in their favour.

So there are, therefore, you can look at a lot of books that are available in the market on strategic selling. And in the same way, there are books and tutorials available on strategic

buying. The buyer often subjectively creates situations which puts dominant suppliers in a challenged situation. The challenge coming from new entrants or new vendors.

Sometimes the buyers will encourage that kind of competition from new entrants because they want to put the existing dominant suppliers on their toes. So strategic selling and strategic buying, both processes introduce in B2B buying situations human factors which often creates complexities in objective decision making. And this variability of rational buying is an area for a lot of research where psychology, relationship building all come into play. And therefore, the most important part for a marketer, B2B marketer, is to remain focused on mutual dependence and loyalty creation.

Because that's the only way to create a long-term commitment in our evolving technology situation. And this sharing of risk and reward, that process often gets reinforced when there are shared financial interests and that favour cooperation. So, in case of very large industries like the automotive industry or certain chemical and petrochemical industries, there is this concept of tier one supplier where a group of suppliers are chosen because of the relationship and royalty and therefore often the final buying decision will be a contest between two vendors whereas in the market there may be 15 vendors available.

Often large customers particularly automotive plants follow this practice that they will among their two top preferred vendors, they will allocate certain portions of the supply. So they will say okay. Supplier A is currently our dominant supplier. So, 80% of the need will be met by them. But 20% will be given to vendor B because we want to keep the competition going. We want to keep A under pressure of performance.

So, this kind of splitting the total order between two suppliers is often a practice that encourages the vendors to focus on mutual dependence and loyalty or sometimes particularly the Japanese follow this process and therefore the Japanese joint ventures are influenced or they are predominantly owned companies in India are often practicing a very tightly coupled relationship.

So, almost all the steerings for all cars produced by Maruti might be coming from a particular vendor or all the micro motors may be coming from just two vendors. So, like

that certain Financial interest sharing based like Maruti has a number of vendors who are Maruti's joint ventures. That means Maruti has financial stake in companies like Jai Bharat Maruti or Sona Koyo or some others. And they therefore have some stake in and they also have good insights in the vendor companies processes to keep them on tight tracks to ensure the quality process, cost control in the vendor companies. And so they have so much of insight into those companies. They prefer and they give access to these joint venture companies.



And therefore they have a long term buying process based on this kind of relationship based. We will later on discuss this whole issue of industrial brands and the role played by industrial brands in the buying decision process.

VALUE IMAGE

Value Image

- It is the total of all impressions that a customer has of the firm (whether relevant to the buying situation).
- * Value image is similar to product positioning that occurs with consumer goods.
- Need to maximize the value image of the offering in the "mind" of the buyer.

At this stage, let me introduce this concept of value image. The value image is the total of all impressions that a customer has of the firm, whether relevant to the buying situation or not. So, value image is often similar to product positioning that happens in consumer goods. So, every company in the B2B domain, they must have and they usually have a definite program for continuous enhancement of their value image.

It's quite similar to the continuous process of brand creation and brand enhancement, brand image enhancement followed by consumer product companies. So there will be publications, websites describing installations, successful installations, critical evaluations of performance of equipment. All these will be happening on a continuous basis so that a vendor of a major player in the B2B market will be sharing a lot of information that enhances their image with the prospective buyers, even when there is no particular buying situation involved. A lot of these image creation or creation or the positioning happens through training on new technology provided to the buyer company's representatives.

This training often plays, therefore, important part in relationship formation among the specialists of the buyer company and the specialists of the vendor company. So, to conclude, the buying process has those eight steps, but the buying process in today's market for many B2B products and services, particularly the technology-laden, technology-endowed products and services. The buying process is a continuous process

and even when there is no particular RFP or RFQ, the buying process in many ways goes on and transaction knowledge exchanges happen on a continuous basis between the vendors and buyers in different industrial domains.

Thank you.