ISB- Product Management

Week 2: Product Development Process

Video 1: Module Overview

Hi, Welcome to the module on product development process. In this session, I will first share an overview of the entire product development process. Then, I will discuss customer needs and behaviour, followed by an understanding of the role of marketing in the product development process. The session will end with a discussion on creating value for customers.

Our approach would essentially be based on design thinking starting with customer needs and then design of an offering. For our purpose, we will use the words product, service, solution and offering interchangeably. Whatever we learn would be applicable to any solution developed by a company unless we specifically mention something else.

In this session, you will learn to apply the design thinking approach to build an effective product or solution. You will understand the different types of customer needs and their importance in successful product development. You will understand the role of marketing in the product development process, understand the concept of customer value and the crucial role it plays in developing superior solutions. You will also learn how to create superior value for customers. Let's begin by looking at the overall product development process followed by well managed companies.

Video 2: New Product Development Process: An Overview

The picture of a funnel shown here represents an overview of the new product development process, followed by well-managed companies. As the process moves from left to right, different stages in the process are represented here.

The process starts with the opportunity, identification and idea generation stage, commonly called the Fuzzy Front End and ends with the launch of the new product. At the beginning of the process, at the fuzzy front end, we are not clear regarding what shape or form or new offering will look like? What value it would offer to customers? And what marketingstrategy would be appropriate to launch it? There are a very large number of possibilities at the beginning.

The full process involves elimination of most of the possibilities through concept testing, which we will be looking at in detail in the upcoming module. And development during the design stage until we have a final offering, which needs to be tested, through pre-test marketing systems and, test marketing, during the test stage. The results of these tests lead to the final product and its launch strategy. As we will see later, depending upon the context, a company may or may not follow all the stages in the process. Also, different stages can be implemented in many ways, and judgement is involved when choosing one or the other methods within a stage.

This approach to new product development is essentially a design thinking approach, where we start with customer needs, at the fuzzy front-end of the product development process, and end with the final solution for launch. There are different ways to start the new product development process. As the name suggests, the process can start with an idea or a market opportunity. Commonly, one starts with an idea.

Let us say, you have an idea for a new offering. The idea can come from one or more of many different sources. For example, it may come from the research and development department of your company. You may think about it yourself, or it may come up in a discussion you have with a friend. The next question that confronts you is, what do I do with the idea to develop a successful product or service? Can I commercialise it? How? Alternatively, you may be a large company, such as Procter & Gamble, or Johnson & Johnson. To grow your business, you might look for a new market opportunity to address through new products.

For example, your market research tells you that consumers are increasingly preferring environment-friendly products. In response to this opportunity, you may be considering offering a new environment-friendly product that addresses a specific consumer need. How would you go about doing it? How would you generate ideas for it? As you can see, not much is clear at this stage. Either we have a seemingly attractive opportunity for a new product, or we have an idea for a new product and nothing more. Due to the significant uncertainty at this stage or fuzziness regarding the new product, this stage is commonly called the Fuzzy Front-end of the new product development process. Once you have an idea that you want to develop, you conduct marketing research to understand it better and develop it into a concept. In common language but not technically accurate, an idea that is developed a little is called a Concept. And it remains a concept until the final product design is completed.

The next stage in the development process is called the product design stage. In this stage, we design the product and its marketing strategy. In other words, we design the whole value proposition. This stage uses marketing research to help us decide which concepts to drop and which concepts to develop further and in what way. The process is called concept testing and development. And the marketing research techniques used are called concept testing. Therefore, in the design stage, we essentially design the product and its associated marketing strategy using concept testing and development. This stage is also the heart of the new product development process. When we have a final product and its associated marketing strategy or only a few options, we use pre-test marketing methods to test them and finalise the offering.

As the name suggests, pre-test marketing systems such as Assessor or Basis are systems designed to test the product and its associated marketing strategy before, going to the market to test marketing or a direct launch. These tests are designed to simulate the actual launch. After pre-test marketing, we conduct test marketing as a final test of the product and its marketing strategy before launch. The test stage is used as a final test to reduce the risk of failure before launch.

As mentioned earlier, a company may choose not to follow any or all stages, depending upon a specific situation that we will discuss later. Note that different versions of a new product development process may appear in different textbooks.

However, most of them essentially follow the same basic four-stage process that we have discussed so far. Now, consider the whole process and think, what is your role in this? Fundamentally, you want to have the right solution designed for the right set of people, such that the targeted set of people find your offering better than other alternatives.

The new product development process ensures that you achieve this goal in a systematic manner. Markets are generally highly competitive, dynamic and complex. And there is no guarantee of success. Further, new products are very important for companies to grow. They are also very costly to develop, and the failure rate can be as high as 30 to 60%. Therefore, any improvement in the odds of success is quite valuable for companies. It is important to understand that by following the new product development process, all we're doing is improving the odds of success in the marketplace. Research suggests that new product developed using the process outlined here are significantly more likely to succeed as compared to new products developed through other processes.

Video 3: Customer Needs and Behaviour

In this session, we will discuss customer needs to understand what they are, why they're important, and some methods to understand them. Let us start with an exercise. Assume that you are the head of a new division in your company, meant to spearhead the creation of a new toothbrush for small children. And the category of children's toothbrush is new in the market. That is, no such product currently exists. What do you think the toothbrush would look like? Please think about it for a few minutes, without referring to any source for ideas.

Now that you have given some thought to how the toothbrush will look like, let me reflect on those thoughts. You may have thought of the colour of the toothbrush. Soft bristles, popular figures on the handle, such as Superman or Spiderman and some other features. Many of you would have come up with the idea of small size of the handle, since children are involved. The companies that developed toothbrushes for children early on, also thought of the same features. But guess what? They failed. Why do you think that happened? On investigation, they realised that the small-sized handles of the toothbrushes were responsible for the failure. Children have weak grip, and the small handle size made it difficult to hold a toothbrush firmly and brush teeth.

As a result, the products failed. In response, the companies changed their designs of their toothbrushes and made the handles much thicker, even compared to adult toothbrushes. The category succeeded. It is important to understand that customer needs have many layers, and any new product must satisfy the basic core need before it can succeed. Satisfaction of the basic need is a necessary condition for success, but generally not sufficient. In our toothbrush example, the basic need is the ability to brush teeth comfortably and safely. Thicker handles and softer bristles ensure that. The colour, pictures and other features are all important after that. These additional features make a toothbrush competitively attractive, which is also important for success. However, having these additional features without the features that satisfy the core need would not make the product successful. Let us consider another example. Assume that you are the manager responsible for the milkshake product category, in a fast-food company such as McDonald's or Burger King.

The company wants you to come up with a new milkshake product to increase the sales of this category. How would you design this product? Please take a few minutes to think and note your responses. Some of you may have thought of new flavours, new packages, selling the milkshake in combination with other food items and so on. In the real world, the company used traditional marketing research methods and tried such alternatives. However, the sales did not increase. Then they hired a consultant who decided to understand who drinks milkshakes and why. They observed customer behaviour in the fast-food outlets and found that two groups of people primarily drank milkshakes.

One group comprised of people who came early in the morning to buy milkshakes. These were salespeople and others who went to work early and drove long distances. The second group contained young children who came to the outlets with their parents to have a meal after school at around 3:00 or 4:00 PM. The consultant investigated these groups further to find more insights into their needs and behaviour. The consultant found that the first group of customers drank the milkshake while driving. They wanted to buy the milkshake quickly and wanted the milkshake to last longer. However, these customers did not want the milkshake to be too filling since they also wanted to have lunch around 12:30 or 1:00 PM. In response to the multidimensional needs of this first group of customers, the company first changed the design of the milkshake container.

It created a spill-resistant container such that it could be held comfortably in one hand while driving. Further, the container was designed to fit into the most common slots meant for drinks in vehicles. Second, the company made the milkshake thicker with fruit pieces in it. While drinking, if pieces of fruit appeared in a customer's mouth randomly, the customer would likely be pleasantly surprised, resulting in more engagement with the drink. Other factors, such as taste, are also important and were addressed in this case. The resulting product succeeded. If this example was happening today, the company may benefit from offering an app that would allow a customer to order before reaching the outlet and pay using an E-wallet.

Further, since there is typically a line at the drive-through of fast-food outlets in the morning, the company may create a separate window for those who preorder using the app and want to get the drink very quickly. It is important to understand that the solution created by the company did not focus just on the milkshake. It focused on the multidimensional needs of the consumers and offered a solution that had the milkshake as one part. Customers don't buy a product, they buy a solution to their need, and any need has multiple dimensions.

Therefore, the product is just a part of the solution. Let us now look at the other segment of customers, small children. The consultant observed that children found it hard to drink thick milkshakes quickly, leading to unpleasant situations where parents wanted to end the meal quickly and kids taking their own time to finish it. In response, the company made thinner milkshake for quicker consumption for this group of customers. Other factors, like taste and health, were also important and considered as part of the solution. Let us reflect on these examples. It is risky to assume what consumers need. You have to conduct proper marketing research to understand consumer needs and behaviour. In simple language, need is another word for a problem, and what you are developing, and offering is a solution. Unless you understand the problem deeply, how can you offer a good solution? It does seem like common sense. Yet, many new products fail because consumer needs are not well-understood. Starting with what other products or solutions exist in the market to solve the same need is a bad idea. It is possible that the entire set of existing solutions are bad. Competitors may have missed out something important.

Therefore, you must start with consumer need. Now let us discuss different types of needs. Needs are broadly of two types. The first type is called an existing need, and the second type is called latent need. An existing need is present in the minds of consumers and can be expressed easily when they're asked directly. Traditional marketing research methods such as a survey or an interview, can be used to understand existing needs. For example, when someone asks you, do you need a lighter and more powerful laptop? Since you can answer this clearly and there is no reason for you not to answer, this is an example of an existing need. An example of a product that addresses existing need was the launch of New Coke by Coca-Cola. All categories of new products except new-to-the-world products primarily address this need.

On the other hand, consumers have latent need when they do not realise it or are unwilling to express it when asked directly. For example, patients with sexual dysfunction have a need for medicine. However, they are unlikely to share this need when asked directly. Sony Walkman, microwave oven and the first personal digital assistant, the Apple Newton, all addressed latent needs when they were first introduced in the market. New-to-the-world products primarily address latent needs. Note that the categorisation of needs into existing and latent is not just because of the need itself. It is also about the company's ability to get correct answers from consumers in response to direct questions. When the company can get correct answers to direct questions about the need, the need would be categorised as existing. And when the company cannot get correct answers in response to direct questions to consumers, the need would be categorised as latent.

Further, when we talk about latent need among targeted consumers, we must understand that there would be at least some consumers for whom the need would be existing. They would understand it. After all, we as marketers can understand it enough to develop a solution for it. However, for most of the targeted consumers, the need would be latent. If most of targeted consumers have the need as latent, then we call it latent need. Also, a latent need today, would become existing need over time as more consumers become aware of it. The categorisation of need is important because as a company, when you're developing a product, you have to make decisions about how to get information from consumers to develop it. You have to decide whether the needyou are attempting to address is existing or latent need. For existing needs, you can use traditional marketing research methods to get the correct information.

For latent needs, you have to use indirect techniques such as observational methods like ethnographic research methods, to get the required information. Further, you will have to make your own inferences regarding latent needs. Your deep knowledge of consumers and your business context would be very helpful. The opportunity of addressing a latent need involves high risk and high reward. In the examples of children's toothbrush and milkshake discussed earlier, observational techniques were used to understand customer needs.

Video 4: Role of Marketing

In this video, we will look at the overall marketing management process. We will explain different terms commonly encountered as part of the process. We will then discuss the role of marketing in the context of the new product development process. This image depicts the overall marketing management process. Marketing starts and ends with customers.

In this process, a company first uses marketing research methods to understand customer needs. Another way of understanding needs is to think of any problem consumers have. So, any form has to understand customer needs, be it existing or latent. The firm also has to understand consumer behaviour with respect to how they satisfy their needs or solve the problem that the company is focusing upon. It then segments consumers into groups such that consumers within a segment are similar with respect to the need and other factors and different from consumers and other segments. This division of consumers into segments is called segmentation. Of all the segments of consumers known to the firm, the firm may choose to target one or only a few of them due to considerations such as cost to serve or legal constraints, or it simply might not have the ability to satisfy needs of some segments.

The specific segments of customers that the firm chooses to target are called targeted segments, and the process to make this decision is called the targeting decision. So far, the form has analysed consumer needs and their behaviour and segmented them as and targeted one or more segments T. From this point onwards, the marketing process happens separately in each segment. For example, let us say the firm targets two segments named A and B. In both segment A and Segment B, the marketing process is taken forward separately. Consider segment A alone. Now, in this segment, the firm now considers all the other options that consumers in Segment A are using to satisfy the need that the firm is targeting.

These other options are the competitors of the film. At this point, the firm wants to know what consumers in segment A think about these competitors. We refer to this as how each competitor is positioned in the minds of the consumers in segment A. The firm uses marketing research methods to create perceptual map or maps to see and understand how various competitors are positioned. Position of a brand is simply how consumers think about it. It is important to understand that a consumers select a product based on how they think about the product. After all, perception is reality as far as the choice process is concerned. If the brand is positioned poorly, that is, consumers don't think positively about it, or in consumer's perception, it is dominated by other brands on key factors that consumers consider when purchasing the brand would not be chosen by consumers and thus fail in the market.

Therefore, position of a brand and consequently the positioning strategy of the firm is extremely important for the firm. In the next step, the firm plans how it wants its product or service or offering to be positioned in consumer's mind. In other words, how should consumers think about the product to choose it during the purchase process over all the other competitors? Once the position is planned, the strategic marketing process is complete. Strategic marketing, as shown at the bottom of the figure, comprises of understanding, consumer needs and behaviour segmentation S, targeting T and positioning P that is STP. After a strategic marketing is complete, the firm will again focus on each segment separately to achieve the plan position in each segment. Let us take segment A. To achieve the desired position. The company uses elements of the marketing mix. These elements of the marketing mix are commonly categorised into four categories as four P's, product, price place or distribution channel and promotion or communication.

Essentially, the company uses these four Ps to create and deliver value to consumers. Note that all this is done by the company using its own judgement and marketing research. Consumers don't really care about these aspects. A consumer has a need, he or she considers the options available to satisfy the need and simply select the option most valuable to him or her. Therefore, the company must create a value proposition using the elements of the marketing mix such that when consumers know about the proposed value, they perceive it to be superior to other options and make the purchase equally important, this value proposition should be such that in going through the purchase process and consuming the product, the overall experience of the customer should make the customer think about the product in a way that the firm wants them to think. in other words, the position achieved by the product in the mind of consumers matches the planned position. If this match happens, the marketing management process has succeeded.

The final decisions of the firm regarding the elements of the marketing mix that is the four Ps constitute the marketing strategy of the firm. The process of creating and delivering value using elements of the marketing mix is called implementing the marketing strategy, as shown in the figure. Let me share an example, consider Swatch , the company wanted to position the brand as a fashion accessory. It wanted a consumer to own several Swatch watches to match different occasions, clothes or moods. When Swatch was first launched, this position of watch as a fashion accessory was not taken by any brand, and Swatch wanted to take it for their own growth.

Once the plan position was decided, the company made decisions regarding the elements of the marketing mix to create and deliver the right value to customers, and subsequently achieved the desired position in the customers' minds. It designed its products in various colours and forms, such that they would be perceived as fashion accessory. It prizes the watches at a reasonable price of around US $100, suchthat they would not be perceived as cheap or very expensive. After all, the company wanted a consumer to own several watches. The retail outlets were chosen to convey the image of fashion.

The company owned outlets were made colourful and inviting. The promotion was done to consistently convey the image of a fashion accessory. As you can see, all the four P's or elements of the marketing mix were designed to convey a value that would lead to the desired position of the product. The creation of value using the elements of the marketing mix can be understood well by using the example of a piano. Imagine that each key in the piano represents one element of the marketing mix, one P. Each time we play the keys in a given sequence, we create a specific type of music. The music is like a value proposition. In the targeted segment A, if we play the keys in a particular sequence, the customers may love the music or the value proposition.

However, if you press any key arbitrarily, then they may not like the music. Therefore, designing the value proposition is like designing in what sequence the keys have to be played to create the desired value proposition that would be superior to other solutions out there; so, that the consumers would select the company's value proposition. Therefore, there are two key learnings here. First, all the elements of the marketing mix must convey the same position. That is, they must be consistent to reach the same positioning goal. Swatch could have chosen a cheaper price, but then the position achieved eventually might be that of a cheap watch. It correctly chose not to do so. Second, while a company can control what value it offers to consumers, that is the value proposition.

The new technological developments in the digital domains, such as social media, have made positioning in the desired manner very difficult for companies. We will now discuss the relationship between the marketing management process and the new product development process. In fact, critical parts of the two processes map to each other. Consider the first stage of the new product development process. At this stage, called the fuzzy front end. We try to get clarity on the need we want to address and its dimensions. We identify customers who have it and then try to understand customer behavior. This is the same as the strategic marketing where we analyse customer needs, divide them into groups called segments and then choose to target specific segments. Each of the targeted segments represent an opportunity for offering a new product or solution.

The value proposition we design using elements of the marketing mix to achieve the planned position in the segment discussed in the marketing management process is that design stage in the new product development process. In the design stage, we design the product and its associated marketing strategy. In a sense, we designed the full value proposition or solution. Note that product is one element of the marketing mix that is one P. The value is created jointly by all the elements of the marketing mix, since commonly people refer to the product as the final offering, we are using it here for simplicity of understanding. However, when we refer to a product anywhere, it means the whole solution or the whole value proposition. We would explicitly mention it if we are talking about only the product itself.

Video 5: Value for Customers

Hi, in this session, we will discuss the meaning of value for customer. We will present the dimensions of value and discuss how you can create superior value for customers through your offering.

Let us understand customer value with an example. Imagine that you want to purchase a T-shirt for yourself. What would you do? You will select a store that you like. You will visit it and check out different types of T-shirts. If you like a specific option in the store, you will touch and feel the material, you will check the design of the T-shirt, collar, pocket, buttons, and so on. If you still like it, you will try it on for size and also compare it with other T-shirts and then buy if you feel it, is an overall best deal. In other words, you're trying to estimate the value of the T-shirts available to you. Finally, purchase the one that in your perception offers you the most superior value.

The concept of value is extremely important in the new product development process. The design stage in the process is aimed at designing a solution to offer superior value to the targeted customers. When making a choice, customers always choose the option that gives them highest value in their perception. Obviously, the objective of the company is to create an offering that customers perceive as giving them the highest value when comparing with other alternatives.

Value is defined as the perceived monetary worth of the benefits received by customers in exchange for the price paid for a product offering, taking into consideration the available competitive offerings and prices. The equation in your slide summarises the concept of value. Value can be seen as perception of benefits minus costs given competitive offerings. Given this context and natural question arises, how can a company increase the value of its product? As the question of value shows, value can be increased by either increasing the perception of benefits, or decreasing the perception of costs, or doing both to increase the difference between benefits and costs that customer perceive.

In addition, since this differential is compared across all alternatives by customers before making a choice, efforts must be made to make this differential superior compared to that offered by competitive products. For example, this can be done by offering customer loyalty programmes and other customer retention programmes that increase perception of value for the product and make competitive offerings look more expensive, even though the costs and benefits offered by the alternatives may be the same.Overall, the company must design its products carefully to create a perception of superior value for customers. Benefits that a product offers can be created along three dimensions, as shown in the figure. The economic dimension involves the economic benefits that the product offers to customers. It includes perceived quality versus price.

The functional dimension includes the set of features of the product and their applications. The psychological dimension includes all the intangibles such as service, brand, name, trust, relationship, and reputation. It considers total satisfaction. To increase the perception of benefits that its product provides to customers, a company can simply provide more benefits along one or more dimensions in the figure. In addition, it can focus more on the key benefits of the product in its communications strategy to create perception of higher benefits. Providing more benefits to customers to increase value seems obvious. However, how can costs be reduced to increase value is not so obvious. And a lot of developments have happened in this area during the last two decades.

Let us consider the example of automobile sales, to understand how a company can reduce costs for its customers to create superior value. Cars are sold through dealers. Decades ago, a person in India had to collect full purchase price of a car and go to a dealership to pay for the car to purchase it. Sometimes one had to wait for months to get a car. At that time, the entire value proposition was based on benefits of the car and the price. Purchase event was a transaction. Fast forward to now. What happens when the need for a car arises in your mind, what do you do? You ask your friends around, you check the Internet for information about cars, and then narrow down to some options. You then do more research on each option to select one. What would happen to the cost of information search if a company did not have web presence? It will increase, and the car brand not having web presence would be perceived as offering less value. Its sales would suffer. Having identified the car brand, you find information about the nearest dealership and call them to set up a test drive. In India, the dealer sends the car home for a test drive.

Again, dealerships realised that going to the dealership and trying the car is costly for consumers. By sending the car home for trial at the consumer's convenience, the dealership is reducing the perception of cost of purchase and thereby increasing perceived value of the product. If you like the car after the test drive, you go to the dealership for purchasing it. The dealership even offers financing then and there. And not only that, typically, there is even a person to fill out the forms for you.

Dealerships realised that some customers find filling forms difficult, so the dealership gets that done to reduce the perception of cost of purchase. Then you get the car home, and the dealership reminds you of servicing as and when it is due. The dealer keeps records of your car and its servicing and offers upgrades after a few years. All this is done to reduce the overall cost of information search, purchase, use, disposal, and upgrade. Instead of focusing on transaction alone, companies now focus on the entire life cycle of consumption. If you analyse the whole process carefully, car companies and the dealerships have looked at consumer needs and behaviour very carefully to design the product and set up the services such that the overall cost of ownership is lowered, and consumers perceive higher value of the offering.

In this process of value creation, digital technologies are fully integrated with the traditional ways of doing things. The focus is on providing superior solution to consumers using available technologies. Typically, consumers consider several key attributes associated with the product when making a choice. In designing a product to offer superior value, it is helpful to visually inspect how alternative solutions compare on these key attributes or drivers of purchase.

The process provides insights into opportunities for creating superior value. The figure shows a hypothetical plot of a value curve. Such curves, one for each alternative, depict how competitors are aligned across various attributes that govern consumer choice. In this plot, key attributes determining consumer choice are marked on the x-axis, and alternative solutions are plotted as curves using suitable metrics on the y-axis. For example, say cost of procurement, quality of product, ease of use, availability, level of technical support and disposal cost are the key drivers of purchase in a hypothetical category. These drivers are marked on the x-axis. Suitable metrics for each driver will be used on the y-axis. And then each alternative solution would be plotted based on its value for these drivers. The result is a visual depiction of competitors and the attributes they focus upon to create value for customers. Such a figure can provide insights that are useful to create superior value proposition to dominate competitors on key drivers of purchase.

Video 6: Examples of Creating Value for Customers

Let us consider a few examples of value creation in business to consumer context. Consider eggs. Decades ago, the poultry industry was extremely competitive, with hardly any differentiation between eggs sold by different companies. The result was very low margin on the sale of an egg. Look at what has happened now. Go to your local supermarket and check.

You may find regular eggs selling at low prices, and then there are many other varieties of eggs such as cage-free hen eggs, grain-fed hen eggs, vitamin and calcium fortified eggs, and so on. All selling at much higher prices. In fact, the difference in prices across different types of eggs may be more than a few 100%. Can you differentiate each type when eating them? Although the price differences have some basis in product quality, they have more to do with consumer perceptions. Companies have created differentiated value propositions by carefully understanding consumer needs and behavior, and then offering solutions for segments of consumers based on their needs, even in such a hyper-competitive category, where consumers are generally unable to experience differences across products.

In a business to consumer context, such as the sale of eggs, the consumer decides what to buy. Therefore, the company has to create the perception of superior value only in the minds of the targeted consumers. In other business to consumer context, such as the example of kids' toothbrush discussed earlier, the company has to convince not only the child, but also the mother of the child. And both may have different motivations of purchase.

For example, the mother may be concerned about the softness of the brush, the safety aspects of the toothbrush, and price. On the other hand, the child may consider the color of the toothbrush, the cartoon characters on it, and such other aspects which are more important. And both have to choose the product for sale to happen. As a result, the company has to create value for both the mother and the child. It has to convince the mother of the superiority of its product in a language that she can relate to, and it has to convince the child that the toothbrush is the best option for him or her, based on the criteria that the child prefers. In any situation, you have to carefully analyze the context and find out how purchases are made in that category and who influences the purchase decision. Then you have to design the products such that it creates value for all the influencers. In marketing a new product, you will have to communicate the value of the product to each influencer based on the factors each care about to create superior value for each.

This process can be better understood using a business to business or B2B example. Let me share two examples of creating value from personal experiences in business-to-business context. During the early days of my work with Ethicon in India, I was made in charge of sales of surgical products in UP, among other regions. Ethicon is a flagship company of Johnson and Johnson, and is a market leader, with a share of 60% - 80% in many markets. When I took charge, the UP business was in chaos.

There was only one major account for us in UP, that was functioning professionally. It was a Sanjay Gandhi Postgraduate Institute of Medical Sciences, commonly called SGPGI. It's a well-respected research and referral hospital. You can't go to SGPGI directly to show yourself to a doctor. A doctor has to refer you to the hospital. Therefore, only serious cases go there. Ethicon had an annual contract with SGPGI. When the time for renewal of the annual contract came, the purchasing manager at SGPGI, came up with a new idea to reduce their cost of procurement. He invited all the sellers to the same place and conducted a reverse auction for the products they anticipated to buy during the coming year. He had all the vendors sit in the same room and asked each of them the price for each product that the hospital wanted to buy. Ethicon's products were of the highest quality and therefore significantly more expensive.

As a result, we lost one product, then another and so on. Now, my area manager who reported to me was present at the auction and he was getting very nervous. He called me and said, "What should I do now?" When he told me the details, I was disappointed because we had been servicing as SGPGI sincerely. We had been selling to them for a long time, and I felt they were not appreciating all that we did for them. I told my manager to stop participating in the process and get out of the room. I said, "Let them buy it from somebody else." My manager was surprised but did as I had asked. In one instance, I lost my largest account in UP, the only major account I had in the state.

However, within a few months, the purchasing manager at SGPGI came to us and invites us back for a contract. Why do you think this happened? Let me explain what happened. In the case of Business-to-Business context, we typically have a Decision-Making Unit or the DMU that makes purchase decisions. The DMU may have five or six or even 10 people as members, who collectively decide, and the purchase process tends to be complex. Just like you have to convince all the influencers in a Business to Consumer context, you have to convince all the influencers who are typically members of the DMU in a Business-to-Business context. Since each influencer may have different motivations for purchase, you have to convince each decision-making unit member in his or her language, that your product meets his or her requirements in the best way.

For example, at SGPGI, while a surgeon may want the best quality product irrespective of price, the purchase manager would want acceptable quality products at the lowest possible cost of procurement. In a business-to-business setting, internal dynamics and complexities of a business customer play a critical role. And understanding customer needs and behavior means understanding these issues very well. Now, let us see what happened in SGPGI's case. In a hospital like SGPGI, there are many influencers such as doctors, hospital administrators, nurses, purchasing manager, and inventory manager, then there are government rules and regulations. In SGPGI, the purchasing department made purchase decisions due to hospital rules, and reducing the overall cost of procurement was the department's mandate. From their point of view, they did well.

However, you have to be aware of the role of each influencer in the purchase process, and their motivations for doing so. In a hospital, influencers vary in their level of influence. For example, cardiothoracic vascular surgeons, or CTVA surgeons are typically the most powerful people, because the stakes in their success are very high. The patients are typically high profile. If you are a CTVA surgeon, what happens if the product you use inside the body of a patient is not of good quality and fails? The patient will likely die. It is a very serious issue.

Therefore, CTVA surgeons are not interested in low prices of products used in surgery, they want the best. And neither are the patients price sensitive. If you need a heart surgery, would you tell the doctor to use cheaper products in your heart? Most likely not. Therefore, both the doctors and the patients are not price-sensitive, and product quality matters the most.

Similarly, in most surgical applications, even in other areas such as eyes, nose and throat, or ENT, there are at least some products that doctors would not like to compromise with. Now consider the big picture. When a surgeon insists on using a specific high-quality product in their area of application, the purchasing manager has no choice but to comply. Given that SGPGI did not have a contract with Ethicon, and Ethicon typically had most of the best quality products in the market, the purchasing manager ended up procuring these expensive products from the market. Earlier, due to uncertain supply of some products, Ethicon salespersons would carry these products in the trunk of their cars to supply when needed urgently, to ensure surgeons got what they needed. When there was no contract, going the extra mile did not happen. As a result, doctors became increasingly unhappy with.

The purchasing manager had to buy 20% to 30% of the items urgently at market prices. In addition, he felt immense pressure inside the hospital due to lack of supplies of these required products. Further, Ethicon stop much needed value-added services, such as sponsoring surgeons to attend conferences to improve their skills and training nurses to upskill them. Each of these influencers became unhappy due to loss of the services that each valued. Over time, even the purchasing manager realised that if he gives the annual contract to Ethicon to purchase at some discount over market prices, he would not only make the surgeons, nurses and other influencers happy, he will also reduce his overall cost of procurement since he would get almost all the high quality products at lower than market prices.

The purchasing manager realised that in trying to save costs of procurement through reverse auction, overall, he ended up paying more for procurement. In addition, supply of many important products became uncertain. He also made other stakeholders unhappy in the process. As a result, he came back to us. Ultimately, it's all about value. He realised that keeping us under contract was actually cheaper for him. And it was also better, valuable for him in many other ways. Had we understood the concept of value well at that time, we would have gone to each influencer in the hospital and inform them about the contract renewal process in advance. We would have explained how we were creating value for them based on issues they cared about.

We would have explained what all we were doing that the competitors were not doing. And we may have stopped the reverse auction from happening in the first place. I'll give you another example. Again, from Ethicon. I was under training in their Global Leadership Program and working in California. I was responsible for many small to medium-sized hospitals in my area and observed how Johnson & Johnson, or J&J, created significant and superior value for these hospitals. J&J, through its salespeople, realised that the management of inventory of surgical products is a very challenging job inside a hospital. Each doctor has her own requirements.

The purchasing manager typically doesn't understand how fast or slow a particular product will be used in surgery. Also, doctors may leave the hospital and new doctors may join. Over time, the unused inventory accumulates in the store. And losses due to expiry and wear and tear increase, creating a big headache for the inventory manager. To solve this problem for the inventory manager and create superior value for the hospital, J&J developed a software to account for the products in the inventory of a hospital. J&J salespersons met inventory managers and assured solution to the problem for free.

Towards that end, J&J salesperson installed the software on the inventory manager's PC in a hospital. Each salesperson was provided with a scanner to scan the product codes in the hospital inventory and upload it on the inventory manager's PC on a weekly basis. After such uploads for a few weeks, the salesperson would sit with the inventory manager in a hospital and do consultative selling. For example, the salesperson would suggest replacing product codes with a new J&J product code to streamline inventory and reduce the number of products in it. Although the new J&J product may be more expensive overall, the hospital would save money and J&J would be able to sell more new products. Both J&J and the hospital would win through improved inventory management.

Once the inventory manager agreed, the salesperson would promote the new product to surgeons and to the purchasing manager and other influencers. It is unlikely that the inventory manager would do something similar with other companies once he is doing this with Johnson & Johnson. Also, the data obtained by J&J in this process was very valuable for the company to understand the usage of different products in a hospital. It could be used for creating even more value for hospitals through new solutions.

Note that then the inventory manager was neither the main influencer nor the end-user of the product. However, a deep understanding of the purchase process and issues faced by each stakeholder in the process allowed J&J to create superior value for the hospital and sustained competitive advantage for itself. While planning a superior value proposition is one issue, making sure it is delivered to the customers as planned is another issue that must be carefully considered. Let us look at the example of an online retailer, yebhi.com. It sells products like shoes in India. Years ago, Yebhi realised that online vendors can offer better prices and variety. However, consumers prefer to touch and try the product before buying in some categories. And brick and mortar stores have an advantage in that area.

Therefore, they came up with the strategy of try-before-you-buy it to create superior value as compared to traditional stores. A customer could purchase multiple sizes of a product she liked and then try each at home and return the ones that were not suitable. I went to yebhi.com to buy a pair of sneakers and try to put two different sizes of the same model in the shopping cart. The website would not allow me to do so. After a few tries, I called customer service and was informed that I cannot do so, and that I will have to give two orders. I gave two separate orders. I got one size after two days, and the delivery person asked me to try. It was almost a fit but I wasn't sure.

I asked him to give me the other shoe to try. He said they were in a separate order. I returned the pair of shoes, and the next day, the same thing happened. I tried the other pair in other size and found that I was not sure. I returned that as well and bought from a traditional store. It is important to understand that value perceived by a customer must be delivered to the customer properly. In theory, the try-before-you-buy strategy of yebhi.com was good and dominated competition. However, its implementation was poor and did not create value at the consumer level. This was because the company failed to understand consumer behaviour with respect to purchasing shoes. People try several sizes to compare at the same time before deciding.

The company might have changed for the better, I don't know, but I didn't try it again. In the digital world, even little inconveniences that might seem irrational become important. Enough companies have observed that adding one more click to the online tasks leads to significant customer defections. How rational is that? How many seconds does it take for you to click a button on a website? A very small fraction of a second. Yet even one additional click leads to higher defections. Therefore, user experience becomes critical in the digital domain. And superior value creation, therefore, has become more challenging. Consider the competition between Flipkart and Amazon. I was a long-standing Amazon customer in the US when I returned to India in 2011. At that time, I wanted to purchase a book that was being sold at Flipkart, 400 rupees less than the price at Amazon.

However, for some reason, Flipkart would not disclose the shipping charges until one had completed a significant part of the purchase process. It wanted to displace shipping charges towards the end. Amazon, on the other hand, displayed shipping charges upfront. I was so frustrated by the process at Flipkart that I bought the book from Amazon even though I wanted to purchase from Flipkart. Those few extra clicks required by Flipkart to give me full information to make an informed choice frustrated me enough to buy from a competitor. Similar behaviour was demonstrated by Flipkart years ago when it tried to force consumers to buy using only its app. That proved to be a disaster.

As large number of consumers defected, and Flipkart had to change. The important issue in these examples is that when creating value for consumers, don't think from the point of view about what is rational and what is not, what is costly and what is not. Think from the point of view of the consumers. When consumers can switch to a competitor in one click in the digital domain, each click matters.

In summary, to create superior value for consumers, reduce their costs and efforts aggressively. This includes the time involved in searching, acquiring and using the product. Simplify the purchasing process and provide an overall convenient, pleasant and entertaining experience. In addition, increase the cost of customers switching to competition through use of customer loyalty programs and other customer retention initiatives. The key here is deep understanding of customer needs and behaviour.

Please do the following exercise to test your learning in this session. Think of a product category that you are familiar with and select a product that you know. If you could modify the value proposition offered by your selected product to make it better, what would you do differently? Think what benefits you would provide more and how you would cut costs for consumers. Is there a way you could make the competition look less valuable given the costs and benefits you have planned?

Video 7: Summary

In this module, we started with an overview of the new product development process. The process is based on the design thinking approach, we discussed the different stages in the process, starting with the first stage of opportunity identification and idea generation, then design stage, then the test stage, and finally the launch stage. Then we focus on the first stage, also called the Fuzzy Front End. In this, we discussed the different types of consumer needs, the process of marketing management, and the role of marketing in the product development process.

Finally, we learned about customer value, and why it is important. We learned how companies can create superior value. We discussed several examples from business to consumer and business to business context. Hope you enjoyed your journey through this module. Next week, we'll focus on market structure and its analysis and opportunity identification. See you then.