Management of New Products and Services (MNPS) Prof. Jayanta Chatterjee Department of Industrial & Management Engineering Indian Institute of Technology, Kanpur

Lecture – 02 Theoretical Foundations I Competitive Strategy

Another class that we have a to look at is in B2C is this 3 classifications convenience shopping and specialty, now convenience means we often also call them staple products. Staple products are products that you consume every day these are actually most sneaker products that go towards our subsistence. So, food products beverages are good examples of convenience products and obviously as you can see here because we are consuming it almost every day, these products have a high frequency purchase process because you are consuming it every day.

Usually per unit value is low just as like a packet of biscuit or a kg of wheat a cup like this, these are the cup baby in the next category which is a shopping. So, shopping products like this cup you do not actually buy it every day. You will buy it will be used for some time, but these are fragile this may break after some time then you have to buy again; now the you can see the distinction that when you buy a cup versus, when you buy say sugar.

The sugar you are buying for everyday consumption you will not spend that much of time what we call involvement in making that purchase decision. So, which means that from left to right on this convenient shopping specialty, the consumer's involvement in decision making flows from a lower level to a higher level; which means that decisions taken for shopping products like this cup may entail more such for information, may mean some discussion.

Because you may actually try to buy a cup which is if this has broken, then the next one you want to buy you can you want to see that crockeries have the similar kind of designs. So, there are some flow and compatibility and such issues. So, which means you will be spending more time in making that decision. So, this would be a higher level of involvement, higher level of knowledge exchange information seeking and finally we have. So, clothes this kind of a household stuff these are shopping products.

So, these are again relatively lower priced but purchased less frequently, but even then it reasonably frequently. So, like your shoes for example, you will buy it maybe you will not buy a shoe every day, but you will buy it may be every year or every 2 years and you will may apply little bit more decision making in buying wit, what kind of shoe for what purpose for what design for what style and then finally we come specialty products, where actually we spend like a car will be a specialty product.

Where the decision making even at a consumer level may involve consultation, you will seek more information when you are buying a car as opposed to when you buy you are buying a crockery, and so this is higher level of involvement higher level of knowledge exchange higher level of information seeking, higher ticket value, meaning the price that you pay and bought if you buy this every year you will buy a car may be every 5 years or 7 years or 10 years.

So, you can see therefore, as you move from left to right the level of involvement changes, the level of complexity or information seeking or knowledge exchange en enhances and also the price per unit goes from lower to higher and frequency of buying goes up from higher to lower and so on.

So, as you apply your mind to these 3 classes you can see how different they are, but in terms of their elements that customer that satisfies customers those remain the same; that means you need to make good products, you need to be you need to associate them with good services. So, that they can perform the customers jobs more efficiently more effectively, all those aspects remain the same across the spectrum.

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Prof. Jayanta Chatterjee: Dept. Industrial and Management Engineering: IIT Kanpur DEVELOPMENT OF PRODUCT LINES Product line - Series of related products Prof. Jayanta Chatterjee: Dept. Industrial and Management Engineering: IIT Kanpur (13)

We then come to some aspects of product management; we will discuss some of these in more detail in later sessions like a product line. So, for example, biscuits from a particular company again I will use that example or tea from a particular company, they may have a different types of tea you know you may have earl grey, you may have breakfast tea, you may have green tea, you may have herbal tea, you may have a tea from Assam, which is considered to be sort of strong liquor less flavor or it may be from Darjeeling which is high in flavor, but less in liquor.

So, there will be different properties and all put together will be the product line, the tea range from say Lipton or broke bond or Tata Tetley and so on. So, these are brands under the brands there are therefore, a line or variants of product. So, product line may also mean product variants and this is needed because the growth potential for a single product will be more limited than a range of products. So, you are still fulfilling the same purpose as tea as a casual beverage.

But you are you are responding to different tastes, you are responding to different sections of customers, you are responding to different profile of customers and that allows you a different avenues for growth, so this is the product line concept.

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THE PRODUCT MIX > Assortment of product lines and individual product offerings > Product mix width • Number of product lines a firm offers > Product mix length • Number of different products a firm sells > Product mix depth • Variations in each product that the firm markets

Then product mix product mix are you know there will be like a mix width, as we discussed say for example, some of these beverage companies have, so many different types of a product. So, that is the width and within the same product there may be different sizes packages and there may be different types of Assam tea from the same company some may be in the form of granules, some may be in the form of leaves.

So, this is actually what we call width and length and then all put together it gives us the dimensionality of the product mix coming from a particular company; making this product mix decision again this is an important part of what we call the marketing mix and that means, how we take our strategic decisions with respect to resource allocation in marketing.

When we discuss that we will discuss more about how we make product mix decisions, but fundamentally we make a judicious mix of depth length width and so on. So, that we can respond to all kinds of market opportunities and when a particular say a biscuit company introduces a variants. So, you have normal biscuit then you introduce say for digestive, which is a high fiber biscuit used usually in the morning and to give you the necessary food balance of higher fiber products.

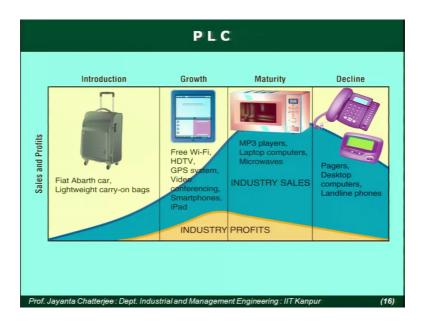
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PRODUCT MIX DECISIONS To evaluate a firm's product mix, marketers look at the effectiveness of its depth, length, and width Firms may decide to add to their mixes by purchasing product lines from other companies Line extension - Development of individual offerings that appeal to different market segments while remaining closely related to the existing product line

So, that will be line extension we are extending the line, but if along with biscuits a particular company, now start offering some may be condiments like a jam or a cheese, then that will not be line extension, but that will be expansion that will be a different series.

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And last concept for this session that I want to introduce is this concept of product lifecycle; that means, just like us like every almost everything on in this world.

We have evolution we have initial production it is like birth of a product line and then that product becomes popular, more people buy that product more products are produced.

So, we have growth and then after some time that product may not be fashionable, that product may not be that useful something else might have come and therefore, that product then kind of matures and declines. So, exactly not similar because it is not that the matured people or older people are no longer required, but here in products what happens is as you can see say.

For example say this lightweight carryon bags and often these introduction of new products this introduction stage happens due to a changes in regulations, like for example all airlines change their baggage allowance from 20 kilograms to 15 kilograms in many places; in some countries you have to actually pay extra for the check in luggage even up at 15 kg you are only allowed a carry on handbag which may be allowed up to 7 kilograms or 9 kilograms.

So, as you can see earlier at twenty kilograms you did not bother. So, much about the weight of the bag itself or the bag earlier used to you know you had porters who will carry your deveb they were professional carriers, but today in most cases we do not have porters in. So, many countries it is almost impossible to have people, because it is very expensive as service and so we need very lightweight bags which can be handled by even children or people more you know lesser capable people.

So, we have now these introduction of 4 wheel 360 degree turn very lightweight bags and as you can you will see a lot of new evolution happy happening there. So, for example, we can have the same structure you can sometimes carry it like a backpack, you can sometimes wheel it, you can sometimes sling it and all these introductions are coming due to changes in regulations changing in travelling style changing in consumer taste and so on.

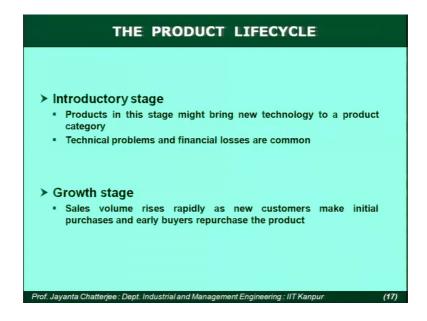
There will be growth phases like say free wifi or HD TV or LED TV, these are all growth products at the moment; but after some time they may become mature like the microwave oven or for example, the MP3 player used to be. So, popular just you know even when Apple introduced IPod, it was actually a evolved form of the mp 3 player it distinguished itself because, it did very good integration of the hardware and software the product itself with the software I through I tune or the customer interface that is where the design aspect comes.

But today MP 3 players; however well designed are you know no longer in vogue say iPod is actually now and obsolete product because all those features have already been absorbed by the I phone; similarly a product may get absorbed in another product a 2 products classes may get merged; for example, earlier people had cameras and people had phones now they have got merged and the even the digital camera which came later the normal film camera, the digital camera sales are also declining because the phone cameras are becoming more and more capable.

So, this is this is that makes products evolved technologies changing tastes, changing pattern of demands, can actually now make tablets of new types far more growth oriented than even laptops, which at one time actually replaced desktops are actually complemented desktops for different type of functions and of course, you can have products in decline like wired phones or pagers; you know some of you might not have even seen a pager or a very big size bulky desktop computer; now a days you know desktop computers do not have a separate tower and the screen they are all in one everything has been compacted. So, you take less space the work stations can be better designed and so on.

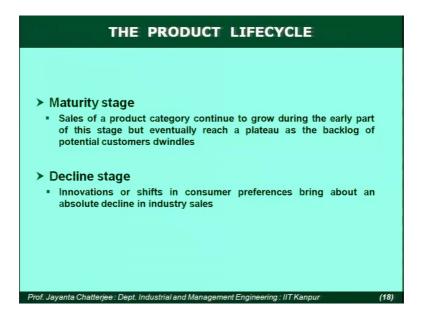
So, products evolve services evolve together the way customers purposes are fulfilled evolve, but remember always that all these are driven primarily by the choices made by customers. So, understanding customers is extremely important they are changing requirements are extremely important, if we have to manage the product life cycle wealth; I have a couple of slides here to explain in a little bit more detail.

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What is the introductory stage what is the growth stage and we will later on see how our strategies of managing this growth will have to be well understood, so that we can be relevant even at the decline stage.

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So, it is not that our even actually the normally when we draw you see on the x axis, we have time this shows the cumulative sales and profits but at an individual level even at the maturity stage as we will see later on, because of the change in market structure

because of the shake outs that happen even at the decline stage, there are companies who with clever planning and strategy can make money.

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Increasing frequency of use
 Convincing current customers to buy a product more frequently boosts total sales even if no new buyers enter the market

Increasing the number of users
 Attracting new customers who have not previously used the product

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The lifecycle can; however be extended for example, the purpose for which we need something like a camera and the purpose for which we need something like a phone, those purposes will remain the same, but will evolve they may come together to create a different class of products and we are seeing these days these boundary overlaps continuously, because you know like t v and computers are now getting integrated.

So, we have these smart TV which can also be used as a computer. So, we have this what we call a battle going on for the screen at your home, which screen your tablet your phone your t v your computer there is a battle going on and the products are evolving in response to those changes in the customers demand profile.

So, we will discuss challenges coming out of these evolutions, challenges coming out of these integration in different ways between tangible and intangible aspect between hardware and software and we will see how we manage today this high velocity of change; which is as people say that the number of products variants, completely new products, services introduced in the last 10 years will be far more than introduced over the last 100 years.

So, that is why today's world is a high velocity world and understanding the challenges in the goods and services challenges coming in the product market and how to respond to them will be the key note of the different discussions that we will be having over the next 4 weeks.

Thank you.