

Business Development From Start to Scale
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Week - 06
Business and Market Segments
Lecture - 29
Segmentation Deep Dive

Hi, friends. Welcome to the NPTEL course Business Development From Start to Scale. We are in week 6 with the theme of Business and Market Segments. In this lecture, the 29th in the series, our topic is Segmentation Deep Dive.

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Intense Product Segmentation

Intense segmentation refers to an effort by a firm to supersaturate the market with finely divided specifications.

Samsung Smartphones (Latest Series Models)			Apple Smartphones (Latest Series Models)		
Series Name	Number of Discrete Phones	Number of Memory Combinations in Each	Series Name	Number of Discrete Phones	Number of Memory Combinations in Each
Galaxy S Series	3	3	iPhone 14	4	1 to 3
Galaxy S 20 FE	1	3			
Galaxy Z Flip 4	1	2			
Galaxy Z Fold 4	1	3			
Galaxy A	6	1 to 2			
Galaxy F	4	1 to 2			
Galaxy M	4	1 to 2			

The intense product segmentation approach of Samsung contrasts starkly with the minimalist approach of Apple.



Every company has its own strategy of segmenting markets and segmenting products; however, in that effort companies which have resources try to do intense segmentation, be it

of the product or of the market. Let us take the example of smartphones. We have two leading players in smartphone business. One is Samsung and the other is Apple. They have done segmentation of market as well as product in their own methodologies.

Let us compare and contrast what they have done. Samsung has a series of phones called Galaxy. It comes under several sub classifications. Similarly, Apple has a series which is based on numbers; iPhone 12, 13, 14 etcetera. Today, we have iPhone 14 series running and today we have Galaxy S series in 22 running. But the way Samsung has looked at the phone business is that there is a high-end luxury kind of phone that is required in the smartphone arena, but also there are several budget players who want high end specifications.

So, it has brought in a range of Galaxy phones which are offering certain of the high-end specifications, but at mid budget prices, but in a compromised manner whereas, Apple has stuck to a particular backbone or platform for each series and variations have been minimum. So, when you look at Galaxy S series at the top most end, we have 3 discrete phones and with memory combinations of 3 each.

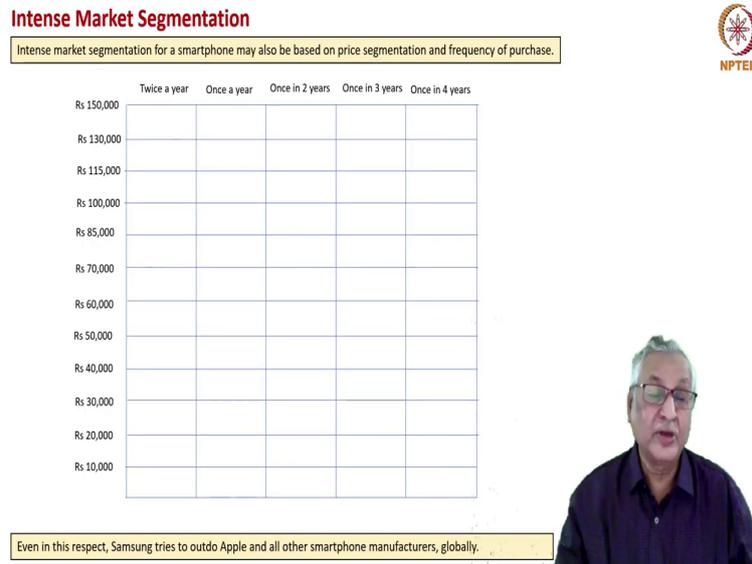
Similarly, the next iteration in terms of S 20 FE, as 1 discrete phone and 3 memory combinations. It has also introduced very convenient flip phone for handy use with larger screen when it is opened up. It has 1 phone model and 2 memory combinations. Z fold is something which is introduced in a novel way as a bridge between the high-end Tablet as well as the high-end smartphone. It has 1 model and 3 memory combinations each.

Galaxy A, F, M similarly have several numbers of phones and also memory combinations in each. As a result, of this variation and the permutations and combinations that are offered by Samsung in terms of specification, the total product count is 45. On the other hand, in respect of iPhone we have only 4 discrete phones in the 14 series and in each number of memory combinations vary between 1 and 3.

As a result, Apple has only 12 models which are offered in the latest series. This intense product segmentation approach of Samsung contrasts starkly with the minimalist approach of

Apple that is the big difference between the Apple's approach as well as the Samsung's approach.

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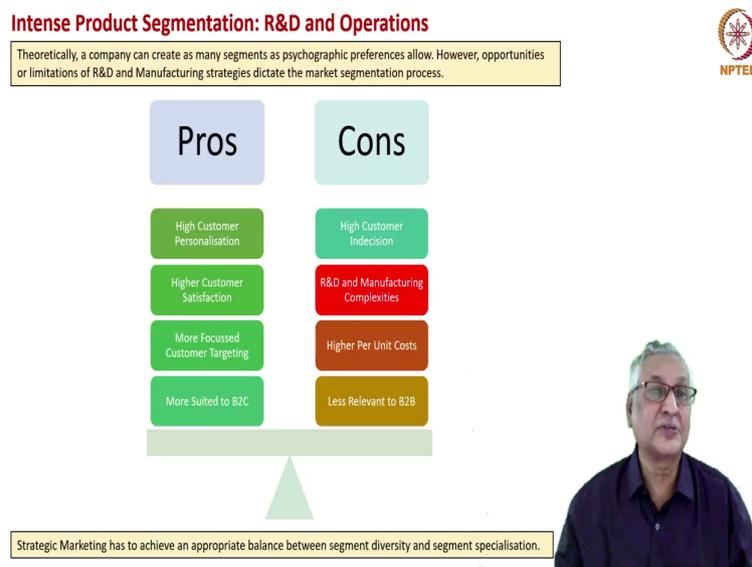


We can do the market segmentation based on the price as well as the frequency of purchase. These days the purchase of smartphones has become more frequent. We can think of people who buy a smartphone or change a smartphone twice a year, once a year, once in 2 years, once in 3 years and once in 4 years, that is one segmentation.

The other segmentation is in terms of the price range. It could vary anywhere between 10,000 rupees to 150,000 rupees. As per Samsung, the millennials change the smartphone every 8 months or so, yet it has decided to be on full canvas as far as the rupee segmentation or the purchase frequency is concerned. Even in this respect therefore, Samsung tries to outdo Apple and all other smartphone manufacturers globally.

It is an intense market segmentation strategy which Samsung is adopted. These two strategies that is intense product segmentation or intense market segmentation have their own implications for the company's operations in terms of Research and Development and manufacturing. Let us look at those implications.

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When you have intense product segmentation, theoretically you can create as many segments as possible which are aligned to the psychographic preferences of the persons apart from the essential, geographic, demographic and behavioral preferences. However, the opportunities or limitations of deploying R and D and manufacturing for such an objective also, dictates the segmentation process.

There are pros, there are cons. When you look at intense product segmentation, the pros are we can have very high customer personalization. Even, within what you think is the most

homogeneous customer segmentation; you can offer several varieties of products. You can have higher customer satisfaction; you can have more focused customer targeting and it is more suited to B2C.

When you look at the disadvantages of intense product segmentation, you will feel that while it is catering to more intense market segmentation in a natural fashion because of the intense product segmentation several cons, which are more in respect of certain areas. One is high customer indecision. The customer is undecided to make decisions, given the huge choice that is available in terms of the design segmentation.

Second, the R and D and manufacturing complexities for a company grow exponentially when you look at intense product segmentation. And thirdly therefore, the per unit development cost or manufacturing cost will go up significantly and it is certainly not a approach that is relevant to B2B.

So, intense product segmentation has its merits, but whether you take it to the peak level or stay at a reasonable level which reduces the cons and enhances the pros is something which every marketer and product designer must keep in mind. We have to achieve through strategic marketing an appropriate balance between segment diversity and segment specialization. And product segmentation definitely helps in this process, but what are the pros and cons is something which you need to keep in mind always.

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Intense Market Segmentation: R&D and Operations

Intense market segmentation spreads a vast coverage in the marketplace but unwittingly leads to more competition

Pros	Cons
Covers every price point	Leads to huge SKU complexity
Covers all demographic needs	Switching costs will be low
May lead to higher overall volumes	A firm needs to fight with multiple players
More Suited to only certain products	Could be misguiding for customers

Firms have a responsibility to offer to customers meaningful price and value points for logical purchase decisions.



Let us look at the R and D and operations implications of intense market segmentation that is you are not doing product segmentation as much as you would like to do or you could do, but you have decided to segment the market intensely. Intense market segmentation spreads a vast coverage in the marketplace, but also unwittingly leads to more competition.

The pros of intense market segmentation is that it covers every price point, covers all demographic needs, may lead to higher overall volumes and more suited only to certain products; that is with minor tweaks in the product you might chop the market segment into even more micro segments. Whereas, in terms of the disadvantages; it leads to huge SKU complexity, leads to switching cost which could be low and therefore, customers may jump from one model to the other model.

And, we need to fight with multiple players and could be misleading for customers. We know that in any business you have customers who look at different segments from a price point of view or price product point of view. Industry, again as we have seen comprises players with different kinds of capabilities.

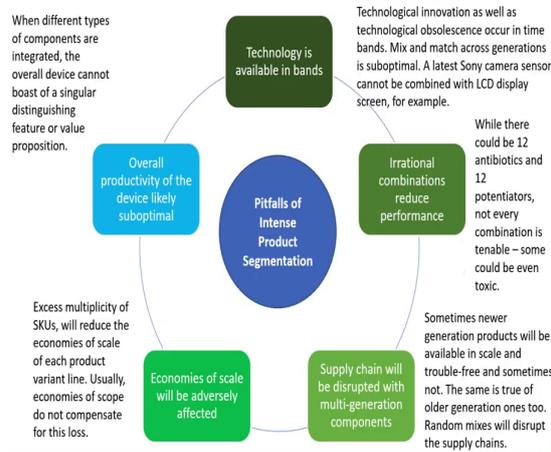
So, when you segment in such a way that you are segmenting according to the capabilities by design or default with those players, you are up against several players who are operating in the industry rather than providing an industry wide brand leadership or an industry wide product leadership.

So, market segmentation is important, but it is important for the customers to understand that the dominant product, dominant player in the market segment is this company. So, firms have a responsibility to offer to customer's meaningful price and value points for logical purchase decisions whether we arrived that through product segmentation or arrived through market segmentation, we have to find the ideal match between these two types of segmentation.

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Restraints for Intense Product Segmentation

There are many valid restraints on intense product marketing which firms, R&D staff and Marketing staff must note.



Many times technological maturity determines the way products are best segmented and positioned.



We also have to recognize that we have many valid restraints on intense product marketing with the current levels of R and D marketing capability which any company would have at any point of time. The first is that technology is available in bands; it is not that a technology that belongs to 2030 is available today. Technology has some relevance to the overall technology ecosystem, technology innovation as well as technological obsolescence occurring time bands.

Mix and match across generations is suboptimal that is you can have the latest display, but you should not try to reduce the cost of the overall product by having a memory capability of the previous generation, that is it makes no sense for a computer to have a 4 GB or 2 GB memory capacity, but have all the other inert at greater level. So, mix and match is suboptimal.

A latest Sony camera sensor cannot be combined with LCD display screen. For example, LCD display screen becoming an old kind of generational display. Second, irrational combinations reduce performance. Everything has to be balanced in a particular manner while there could be a band of performance variation that could be allowed in respect of each of the components and systems.

While there could be 12 antibiotics and there could be 12 potentiators, potentiators are those products when mixed with antibiotic will enhance the therapeutic efficiency of the antibiotic. But, not every combination is a rational combination or a desirable combination, some could be even toxic. Therefore, technologically advanced or backward products can be combined only in certain manners.

Similarly, even technology advanced combinations can happen only with certain level of proven assurance. The third one is that supply chain will be disrupted with multi-generational components, that is supply chain is tuned for volumes and then we will get efficiency. If you have supply chain which is disrupted with multi generation components, the overall cost economics of the development and manufacture will be impacted.

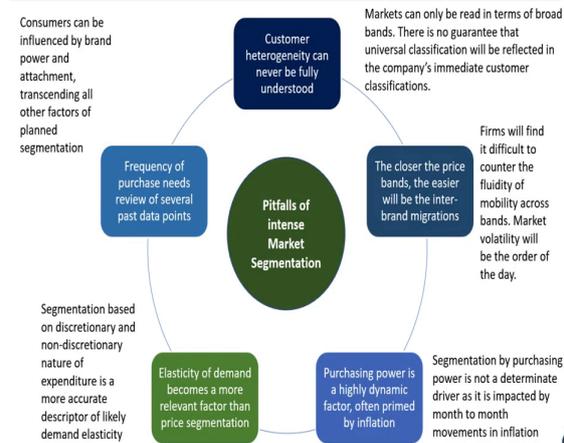
Sometimes, newer generation products will be available in scale and are trouble free and sometimes they are not. The same is true of the older generation products as well. However, if you randomly mix these generational products, you will not be able to get optimal supply chain movement. Then, the other point is that economies of scale will be adversely affected. Excess multiplicity of SKUs will reduce the economics of sale of each product variant line.

Usually, economies of scope which may happen because you have the larger variety will not compensate for the loss of economies of scale and sale. Overall productivity of the device is likely to be suboptimal. When different types of components are integrated, the overall device cannot boast of a singular distinguishing feature or value proposition. Many times, therefore, technological maturity determines the way products are best segmented and positioned based on matching technological trends and capabilities of the components and systems which are internal to the product.

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Restraints for Intense Market Segmentation

Like intense product segmentation, intense market segmentation can also have its pitfalls for firms seeking slots.



The question arises if companies should spend more time and effort on brand development than on segmenting.



What are the restraints for intense market segmentation? Because, intense market segmentation like intense product segmentation also has its own pitfalls. First, customer heterogeneity can never be fully understood. Markets can only be read in terms of broad bands of needs and wants. There is no guarantee that universal classification will be reflected in the company's immediate customer classifications.

You may think that is instead of having 10 customer segments, by having 100 customer segments, we have understood the universality of the customer better, but it will not happen that way. Second, the closer the price bands, the easier will be the inter brand migrations. Firms will find it difficult to counter the fluidity of mobility across brands, sorry I will repeat this.

Firms will find it difficult to counter the fluidity of mobility across price bands, market volatility will be order of the day. When you have a product which is priced at 10,000 rupees and you have a product which is again priced at 12,000 rupees, the mobility between one price brand to another price brand is very easy to accomplish. Purchasing power is a highly dynamic factor, often primed by inflation.

Segmentation is based on what you can buy in terms of the price point as well as the frequency of price. But inflation is something which you do not know and it could influence very badly purchasing power. Similarly, if you have excess liquidity, it may spike the demand without really noticing that. So, month to month movements in inflation could have an impact on purchasing power and it may make certain market segments irrelevant or more relevant.

Again, when you look at the price frequency syndrome, elasticity of demand becomes a more relevant factor than price segmentation that is segmentation based on discretionary and non-discretionary nature of expenditure is a more accurate descriptor of likely demand elasticity. During, the COVID times there was higher liquidity, but that liquidity went into certain product classes rather than all product classes.

Nobody bought a bus in the institutional segment, nobody bought to that extent a luxury car in that segment. But people always bought daily staples, they also bought food items, they also stocked up essential groceries with demand spiked for those kinds of products. Frequency of purchase needs review of several past data points. Whenever you have a festival, there is a higher demand spike. When you have seasonality of rains, summers, winters etcetera, you have certain demand spikes.

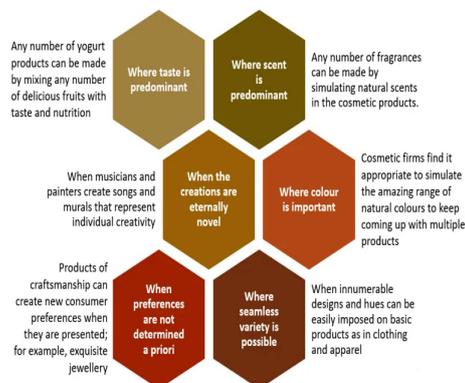
So, we need to understand what is a staple demand and what is the sedge demand. Overlapping all of that is the brand power and attachment which the company's products and brands have. Therefore, you need to understand really these several past data points before you decide how intense your market segmentation can be.

We have to always keep in mind that consumers can be influenced and will be influenced by brand power and attachment and it transcends all other factors of plant segmentation. So, the question for marketing specialists as also business specialist as also development specialist is if companies should spend more time and effort on brand development than on segmenting, that is very important point to review and discuss.

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Intense Product Segmentation Works Well in Certain Cases – 1

There do exist some product categories where intense product segmentation would pay good dividends.



As products begin mimicking nature's infinite creativity, intense product segmentation occurs naturally.



But intense product segmentation does work well in certain cases. There do exist some product categories where intense product segmentation would pay good dividends. Any number of yogurt products can be made by mixing any number of delicious fruits with taste and nutrition. Here, the taste is predominant. Some people like a particular taste and a particular combination of taste and a particular combination of look and feel and that is what value added yogurt products achieved.

Then, the second category is where scent is predominant. Any number of fragrances can be made by simulating natural scents in the cosmetic products. And, each person's sensory desire and sensory acknowledgement varies. Some like it strong, hitting immediately and some like it mild, hitting after some elapse of time. Similarly, the fragrances each likes is completely different from what other likes. Therefore, when scent is predominant, you can have a huge variety of products.

So, intense product segmentation become important. When the creations are eternally novel, music is a place where creation can be eternally novel. Painting is something where the creation can be eternally novel. So, when musicians and painters create songs and murals respectively that represent individual creativity, there could be intense product segmentation; where colour is important.

Cosmetic firm firms find it appropriate to simulate the amazing range of natural colours to keep coming up with multiple products, that is where intense product segmentation works very well. When preferences are not determined a priority, many a times when you buy a product and that happens through your visiting a site or going into a supermarket; the mind somehow is made up of already, that you would like to have this kind of product brand.

Could be due to the prior experience or could be due to the brand attachment or could be due to the advertisement, which you have seen today. But, when such preferences are not determined a priori and you tend to go in an open mind, then you have a different case. Products of craftsmanship can create new consumer preferences when they are presented. For example, exquisite jewellery, you have jewellery which is out of the world that has been created.

Even though you may have certain preferences when you go into your jewellery shop, you may be just taken in by the new kind of activity that has been presented and new kind of product that has been presented there. The other place where intense product segmentation works is where seamless variety is possible, that is there is no batching of your thinking process, there is no batching of your taste.

When innumerable designs and hues can be easily imposed on basic products as in clothing and apparel, then also intense product segmentation works well. You may have the basic need of a shirt, but then it can come in multiple cues and multiple designs and therefore, that is some way of intensive product segmentation that has been happening in the apparel industry. As products begin mimicking nature's infinite creativity, intense product segmentation occurs naturally. This is an important example set.

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Intense Market Segmentation Works Well in Certain Cases – 2

The same product category or similar products in the same category can segment the market intensively.

For preventing hair loss

For enabling hair growth

For preventing dandruff and keeping scalp healthy

For keeping hair healthy and strong

For keeping scalp cool

For making hair supple and shiny

While all ayurvedic hair oils may have the same constituents, by and large, it is possible to seek different customer segments to the hair oils.



Similarly, intense market segmentation works well in certain cases. A classic case is that of hair oils. Once upon a time there was no hair oil other than coconut hair oil. But today the same product category are similar products in the same category, all segmenting the market intensively. So, we have these kinds of users classified into significant market segments based on the end purpose of the hair oil.

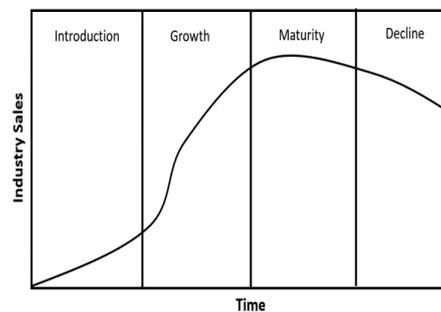
One for keeping hair healthy and strong, you have an example of Kesh King Ayurvedic oil. Then, the other for keeping scalp cool which is the Navratna hair oil. For making head supple and shiny, you got Dabur Vatika and for enabling hair growth, you have Induleka. For preventing hair loss, you have Patanjali Kesh Kanti Amla hair oil and for preventing dandruff and keeping scalp healthy you have Parachute Ayurvedic coconut oil.

And, all this is superimposed on the basic coconut oil that has always been there in the market. While, all Ayurvedic hair oils may have the same constituents by and large, it is possible to seek different customer segments to the hair oils by having a different mix of the constituents and also by positioning the products differently. So, there is an intense market segmentation that can be happening in several categories.

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Product Lifecycle and Market Segmentation

There will be a correlation between the stage of a product lifecycle and the extent of market segmentation.



Market segmentation and industry sales are positively correlated in the growth phase of a product lifecycle.



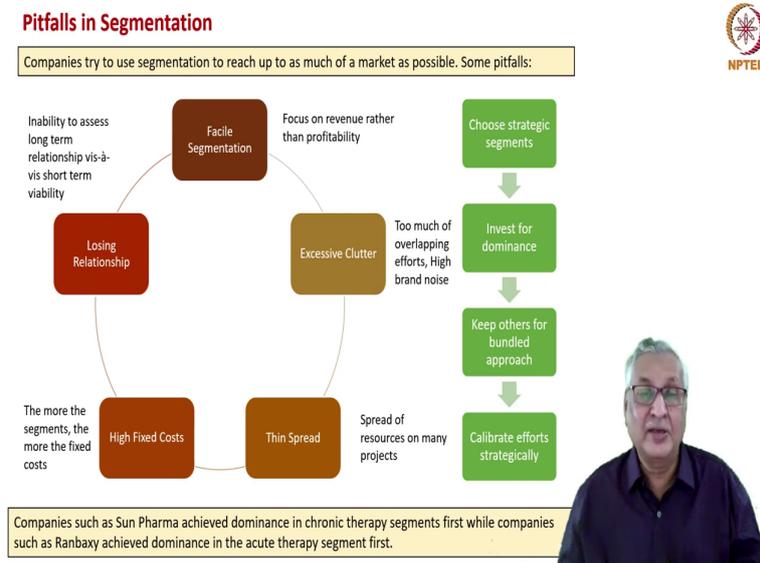
So, there is a relationship the between product life cycle as a concept and market segmentation as a concept. Product life cycle is something which you always have known that is the S shaped curve. You have a mild growth in an introduction phase, then you have rapid growth in the real growth phase. There is then a longish maturity phase, although it is here not shown in scale and then you have a declining scale.

Typically, the introduction phase could be 6 months to 1 year, a growth phase could be 1 to 2 years, a maturity phase could be 3 to 6 years and then there could be a declining phase of several years thereafter. So, and this is plotted against time dimension and industry sales dimension. In the introduction phase, you have one or two core segments and not more than that.

But, when you get to the growth phase, many viable segments get added or actually many viable segments get added to power the growth. Then, you have maturity phase where segment viability stagnates. Although, you have reached the peak scale by the fact of several segments having consolidated, the scale and scope economics kind of stagnate. Then, in the decline phase segments become unviable progressively.

Market segmentation and industry sales are positively correlated in the growth phase of product life cycle. Growth phase is a wonderful phase where you can intensely segment a product and intensely segment a market. But what you do there has an implication when you come to the maturity phase that is why I suppose Apple follows a minimalist strategy to power growth as opposed to Samsung. So, the cost of production of an Apple phone and a Samsung phone; leaving aside the country of manufacturing, economics would be always in favor of an Apple phone.

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What are the pitfalls in segmentation therefore? We have understood that segmentation is essential for marketing and business development. But what could be the pitfalls in that? The pitfall primarily is that companies try to use segmentation as a quick fix to reach as much of market as possible. In that process, we get on to some lop sided developments or lop-sided strategies. The first is facile segmentation that is we focus on revenue rather than profitability.

The assumption made is that when you look at the market as a large container, many customers are sieved out of that large band because we have not looked at them very seriously, very intensely and very directly. So, the idea is that you slice the market into several segments and keep watching them through an area manager or a regions manager then you probably would get more revenue.

But it is not always necessarily so. Because, there are other factors of economics, logics and distribution which we have discussed earlier. Then, there could be excessive clutter, too much of overlapping efforts, high brand noise; let us say you have in a particular soap several variations to meet the pre-designed design.

To meet the pre-designed product and market segmentation framework, the clutter will be too much. And, too much of overlapping efforts and high brand noise more particularly and thin spread. Every firm has only a limited level of resources to spend on market and on product development as well as manufacturing capability or flexibility. So, it becomes a spread of resources on many projects.

The other thing is the high fixed cost. The more the segments, the more the fixed cost. What is this? The more the segments, the more the fixed cost. The variability gets reduced other like what is assumed in the past that we have a base therefore; every other product is an incremental product gaining us incremental revenue. But there are associated fixed cost, which are never noticed. Then, losing relationship inability to assess the long-term relationship vis-a-vis the short-term viability.

Segmentation drives short term viability and that may or may not lead to long term relationship. The driving of relationship through segmentation should lead to strong relationship building; it should not be only for revenue. Therefore, you got to choose strategic segments optimally, invest for dominance in those strategic segments, keep others for bundled approach and calibrate efforts strategically.

Companies such as Sun Pharma achieve dominance in chronic therapy segments first, while companies such as Ranbaxy achieved dominance in the acute therapy segment first. So, there is a way to segment a market and then consolidate yourself in that segment instead of trying to segment it far too much and then get into the pitfalls as I have discussed so far.

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Customer Groups and Market Segments

Customer groups may have certain common factors but may not have the same customer needs.

Customer Groups are individuals who have some commonality independent of their individual needs

Market segments have a common approach to specific needs and wants and clarity on the kind of products they require to satisfy their needs

As an example, all residents of a gated community constitute one large customer group with a similar income and lifestyle approach. However, the group gets split into many market segments.

Within the gated community, a specific market segment may appreciate Yoga training, another take to home gardening while yet another may believe in social service

Having a large customer group in a geographic segment is a great advantage for starting a segmentation process



Now, market segments are what? They are nothing but customer groups. Customer groups may have certain common factors, but may not have the same customer needs that is if you and I are individuals having certain educational background and certain work profile, it does not automatically mean that your need and my need are the same. So, looking at this customer groups are individuals who have some commonality independent of their individual needs.

As I said the demographic profile, the geographic profile etcetera. As an example, all residents of a gated community constitute one large customer group with a similar income and lifestyle approach. Why so? Because, the gated community has similar types of apartments therefore, people with similar income capability, similar work profile enter that kind of gated community.

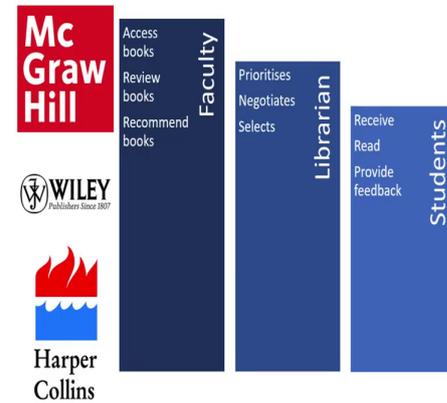
However, the group itself gets split into many market segments. In comparison, market segments have a common approach to specific needs and wants and clarity on the kind of products they are required to satisfy their needs. Within the gated community, a specific market segment may appreciate yoga training, another may take to home gardening and another way believe in social service. This is just an example.

Similarly, a resident of a gated community may have a need and one profile which is similar to the need and want profile of someone living in an independent bungalow or a small apartment in the neighborhood. So, you got to reach up to all those so, the market segment need not necessarily be derived based on one common factor, many common factors are required and it could be across geographies as well. So, having a large customer group in a geographic segment is a fundamental first advantage for starting the segmentation process, but it is not the end of segmentation as such.

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Collateral Impact of Segments

It is not that customers in one segment impact the structure of that segment only. In fact, customers cross-impact across segments. To supply books for students, the target segments need not be students.



There are three segments as above which are stakeholders in the book purchasing decision with different levels of influence and decision making.



Let us look at how the segments have collateral effect. The user need not always be the purchaser. It is certainly not that customers in one segment impact the structure of that segment only. In fact, customers cross impact across segments. To supply books for students, the target segments need not necessarily be students.

So, we have got firms such as McGraw Hill, Wiley, Harper Collins who may have lots of educational books, academic books which they would like to sell. So, when you want to look at this book purchase ecosystem, we have three important constituents. The first faculty who teach, who recommend. Second, we have librarian whose stocks enables the purchasing process for the department for the students to read and then you have students who actually read.

It is possible for the booksellers to directly look at students and believe that they are going to have the wherewithal to buy. But, even if you display all your books in the academic campus, people were not really buy because they do not have a recommendation from the faculty. And, they also do not have a mandated choice that you should buy only from the display and there could always be the alternative option of the library storing those books.

So, what do you do as a student? You will wait for faculty and faculty's responsibility is to access the books first, review the books and then recommend the books. And, the recommendation may go to the students as part of the coursework and the recommendation may also go to the librarian as part of the build-up of the library resource. The librarian gets lots of such recommendations. The librarian also looks at discussions with the concerned publishers; prioritizes, negotiates and finally, selects.

Finally, then the students receive the books, they read the books and provide feedback. And, that could lead to another iteration the next year, when the book purchase cycle takes off. The alternatives are looking at the students as one segment and publishers directly pitching for that segment. A similar example could be that, when you look at purchase of a truck, the operator that is the actual driver could have his experience and then provide the recommendations.

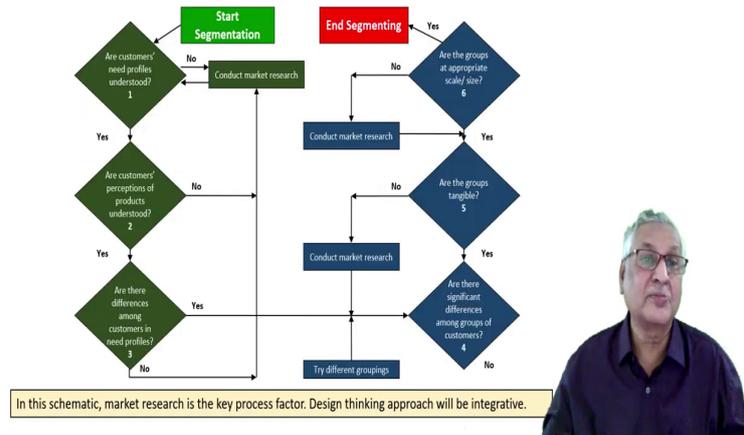
The owner would have certain implications arising from the operational economics and the ownership structure of the truck. But then there could be other people in the business that is service representatives, the dealers, the trade journals providing all kinds of inputs. So, who is the actual segment which is buying?

We may think that it is the owner, but the owner has only limited segmentation potential available, others need to be looked at as segments. Even collateral segments which do not purchase the product are imported for a company. So, this is the collateral segment approach that we need to consider whenever you look at market segmentation.

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Methodological Approaches to Forming Segments

Given below is a process flow chart to understand how a segment can be formed and targeted.



So, what are the methodological approaches to forming segments? This is a very systematic information technology or software coding or architecture frame of approach. Let us say as a company, we start the segmentation process. The first question to ask is are customers need profiles understood? No, then you conduct market research. Yes, you proceed to the next question choice.

Are customers perception of products understood? That, is have we understood what really the customers need? No, then you go to market research. Why this dilemma occurs? Because, no market research in the beginning is completely comprehensive. So, we got to conduct market research also in layers at times sequentially as well. Are there differences among customers in need profiles? Do we understand completely? Then you go to the fourth stage. If you do not, you have to again look at the market research.

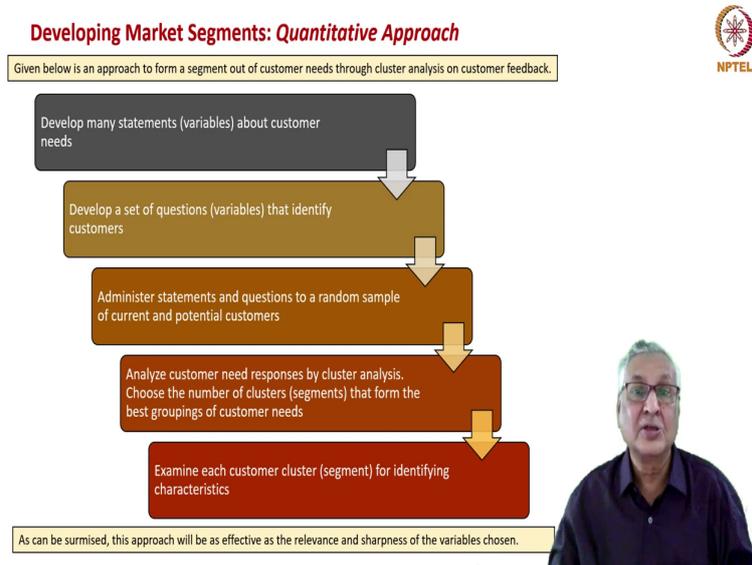
Then, when you go to the fourth stage, you look at different groupings. Then, are there significant differences among groups of customers, that is an independent income earning housewife versus a pure homemaker. Someone who lives in a particular type of ecosystem versus somebody who lives in another type of ecosystem. If there are no then that is fine, but if there are yes then you have to have your question; as the tangibility of these different kinds of questions and conduct again market research.

Then finally, you arrive at the question; are the cruse at appropriate scale and size? Again, that is the difference of scale which comes through market research. We have seen in the earlier example how from 100 percentage user population, we will be going to aware population occasional, trial users, occasional buyers to frequent buyers and finally, the loyal buyers.

All of this happens within the framework of market research and when you know all of these things in terms of certain answers, then you go to the end segment. This process by no means is perfect, but certainly it is a guide for you to understand the market and the segmentation process better and this could be continuously evolved.

Every segment which has been decided upon and catered to by products has to be researched from time to time, that is because competition also comes up with its own product offerings with its own segmenting possibility. So, you got to recalibrate yourself in terms of product and market segmentation from time to time. In this market research certainly is the key process factor. Design thinking approach will be integrative to the market research.

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So, what is the quantitative approach that we can adopt in developing market segments? Here is an approach to form a segment out of customer needs through cluster analysis on customer feedback. Develop many statements or variables about customer needs. Then, develop a set of questions variables that identify customers. Administer those statements and questions to a random sample of current and potential customers.

Analyze customer need responses by cluster analysis. Choose the number of clusters segments that form the best groupings of customer needs. Examine each customer cluster or segment for identifying characteristics. So, I buy groceries every month or I buy groceries every 2 weeks, I buy my groceries every week. I buy my groceries digitally 100 percent of the time, 50 percent of the time etcetera.

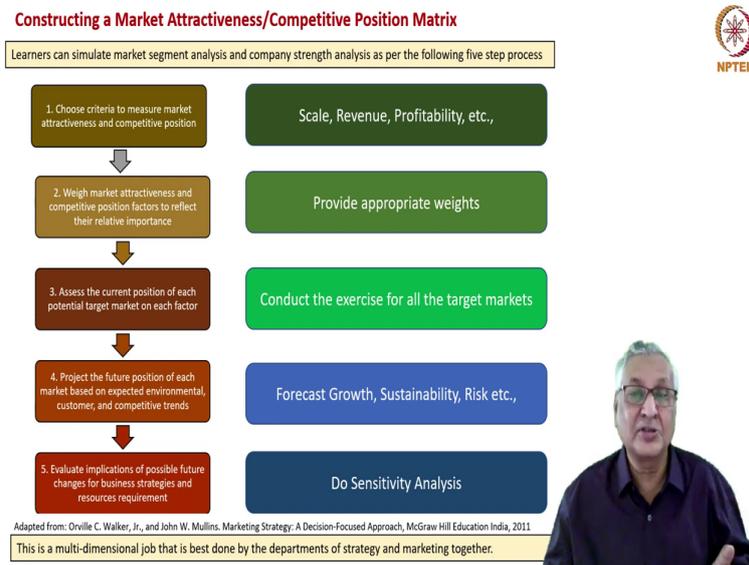
So, these are the statements which elicit a customer response based on which you can make a fundamental basic grouping. Then, when you relate this to the economic profile of the customer, the demographic profile, geographic profile of the customer; then you have two frameworks which you can join together.

So, that customers are identified by the variables. Then, for different segment you would like to administer different states. Do you like an organic grocery or an chemically produced grocery? If so, at what price you would be accepting either? Do you like this brand or the other brand? Based on that, you will have an understanding of who the current and who the potential customers are.

Why are you saying the current potential? Because you have the manufacturing and development structure that will meet the current customers. And, if somebody wants organic product and you are not in the organic business is a potential customer, not necessarily your customer. Then, you cluster all the responses that you have got, if you administer 100 questions you may have 1000 kind of clusters, then all those clusters have to be meaningfully analyzed.

And, then you decide on the meaningful grouping of all customer needs and then identify the customer characteristics from each group again and then you arrive at the product requirement. This approach will be as effective as the relevance and sharpness of the variables chosen, the kind of questions you ask and the kind of alternatives you post to the customer before you get the requirement.

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Once you do that, you have to construct a market attractiveness competitive position matrix. So, we can simulate this process again. Choose the criteria to measure market attractiveness and competitive position. In any market whether you are a start-up or a grown up, you have a market attractiveness to see and your own competitiveness to offer in that position. So, market attractiveness is in terms of scale, revenue, profitability etcetera.

And, your manufacturing capacity, your cost competitiveness, your sales and marketing infrastructure are all your competitive positional factors. Second, you weigh market attractiveness and competitive position factors to reflect their relative importance. Should I take higher share in higher revenue market or take a lower share in a higher revenue market along with a higher share in a lower revenue market? All of these things are combinations and you ensure that you have appropriate weights for each such combination.

Assess the current position of each potential target market on each factor that is for each target market what is the capability in terms of the market attractiveness and what is your capability in terms of the factor positioning of competitive advantage. Then, predict estimate the future position of each market based on expected environmental customer and competitive trends which means that you got to forecast, growth, sustainability, risk etcetera.

That is you start with the base level and then you keep expecting the kind of market attractiveness that would come by. Then, you evaluate implications of possible future changes for business strategies and resources requirement. Then, you have to do sensitive analysis. Last year in Deepavali season, you had a sale of 10,000 cars, the next year last year you had only 8,000 cars sold because the festival impact is gone.

But you got to do the sensitive analysis before you decide that this year also a similar dip would be possible, because there could be other factors that could be coming in this year. So, it is a multi-dimensional job. Understanding the market attractiveness and competitive position is a multi-dimensional job. We have to have the departments of strategy and marketing working together to understand this matrix completely.

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Two Stage Process

The study can be undertaken in a very simplified manner as below, to reduce segments from a long list to a short list.

	Weight	Rating (0-10 Scale)	Total
Market-attractiveness factors			
What are the unmet needs of the customer?	.5	9	4.5
Segment size and growth rate	.2	7	1.4
Macroeconomic trends	.3	9	2.7
Total: Market attractiveness	1.0		8.6
Competitive-position factors			
Opportunity for competitive advantage	.4	6	2.4
Capabilities and resources	.2	5	1.0
Industry attractiveness	.4	5	2.0
Total: Competitive position	1.0		5.0

Adapted from: Orville C. Walker, Jr., and John W. Mullins. Marketing Strategy: A Decision-Focused Approach, McGraw Hill Education India, 2011

Once the short list is made, a more granulated approach as discussed earlier would be appropriate.



So, what are the factors which drive market attractiveness and what are the factors which we have done earlier throughout the course to understand the competitiveness of the product or the company? So, just a simple table, but the actual table will be multi factorial really. What are the unmet needs of the customers? What is the segment size and growth rate? What is the macroeconomic trends?

If you simulate this to the electric vehicle situation, what are the unmet needs of the customer? The need for a 0 emission vehicle or the need for a clean energy vehicle. What is the segment size and growth? It is x, but it will grow at this particular rate. Macroeconomic trends they are definitely favouring electric vehicles, in this case the weightage could be 0.5 for the macroeconomic trends, 0.3 for the segment size and growth rate and only 0.2 for the unmet needs. So, an FMCG matrix is not necessarily a consumer durable matrix.

Then, the rating could also be varying between an FMCG product like soap and an FMCD product like electric car. Then, you arrive at a particular score of market attractiveness. What are the competitive position factors? Opportunity for competitive advantage, capabilities for resources and industry attractiveness. Is the industry attractive? Yes, in terms of the future potential.

If you have let us say 20 million two wheelers, that are being produced and if electrification is the way to go, some company which is getting into this electric scooters business has got the entire market has the potential. So, industry attractiveness in such a case could be 0.6, capabilities and resources could be again 0.3 and opportunities for competitive advantage is derived out of these two and could be 0.1. So, total competitive position still is 1.

So, depending upon the product market characteristics, this weightage process for competitive positioning and market attractiveness varies. Again, brains have to be together to discuss and arrive at the right kind of factors, the right kind of weights and the right kind of rating to arrive at the more reasonable and more optimal total weights scores. Once the shortlist is made, we need to do a further granulated approach as we have done earlier to make this happen in a more realistic way.

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Multifactor Matrix: Scoring the Firm's Business Strengths

The following is the 5-step process to score the firm's business strengths. The focus is on drawing out strengths related to the specific market strength being chosen.



So, if you want to score the firm's business strengths, you got to have a 5 step process. We talked about the SWOT analysis. But, from a market point of view, we are also looking at this whole paradigm in a different way; drawing out the strengths that are related to the specific market strength that is being chosen. So, we have to identify the factors for each market segment, identify the capabilities that any player must possess.

So, if I want to play in a market segment which is increasingly looking at a fold kind of product, then you got to have the capability in the foldable display screen technology. If you have that capability, you are on a winning stream. The second is weighing of the factors that is weigh each factor by allocating 100 points based on importance of that factor for being successful in this segment.

That is having electric battery technology is the most important factor, again you provide the weightage. In the case of smart devices, foldable phone; give the weightage to that compared to other things. Then, you rate the firm according to the position of the strengths; one is port, another is excellent as an example. Then, develop the factor scores, then you look at the total score for the factor by multiplying weighting into rating.

Then, they develop the business strength score, some of the individual factors scores. This is a very simple tabular formation which you can develop by your own. But, again here the choice of the factors and the weightages given and the rating, they become very important. And, understanding of the factors which are critical to the competitiveness is crucial to operate this multi-factor matrix in a proper manner.

It is also not just a kind of review mechanism or a status education mechanism, it tells us where to get our strengths from as we move forward. So, the firm would like to increase its total competitive strength from let us say a score of 70 to a score of 90 based on the manipulation or improvement of certain factors and that could again lead to several business strategies and business development strategies.

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Multifactor Matrix: Assessing Business Strengths

For each market segment, certain business strengths will be required. They must be listed, rated, weighted, and a composite score developed. In this case, the maximum weighted score is 1000.



Factor	Segment Weighting	Firm Rating (1 to 10 scale)	Factor Score (weighting x rating)
Cash Generation	10	9	90
Response Time	5	3	15
Proactive R&D	25	7	175
High-quality service	15	6	90
Timely Distribution	20	5	100
Cost-competitiveness	10	4	40
Salesforce relationship	15	9	135
Total	100		645

Adapted from: Orville C. Walker, Jr., and John W. Mullins. Marketing Strategy: A Decision-Focused Approach, McGraw Hill Education India, 2011

The hypothetical firm under consideration has a score of 645 out of 1000 possible – an above average business strength score.



So, this is an example of how we can do this multifactor matrix for assessing our business strengths. For each market segment we need certain business strengths and they must be listed, rated, weighted and a composite score developed. And, in this case of illustration of a company which is there in let us say FMCD business is 1000. So, what are the important factors for you to run a consumer durables business?

First you should it is a cash intensive business; it is also a technology and manufacturing intensive business. So, you got to have good level of cash generation in the company to be able to invest and run the working capital cycle. The second response time, that is competitors keep entering and keep positioning. So, you got to respond adequately to those moves. Third, a proactive R and D; in a consumer durable you set the trend, technology trend is not set by the consumer.

So, by bringing in let us say detergent requirement detectors in a washing machine, the company is setting the trend and that is proactive R and D. Then, you also need high quality service. No consumer durable is brought or bought to the marketplace or in the marketplace respectively without the backing of high-quality service.

So, that is a important factor. Then, you need to have timely distribution. How long it takes for the product to come to your house? So, if you have a system by which the consumer order triggers a manufacturing cycle, then it is too late for the consumer.

So, ability to stock at different points of the distribution chain at the CFA, at the distributor level and finally, at the retailer level or the warehouse level is extremely important, the weight will be high. Cost competitiveness, again how competitive you are in the cost structure. Although, that may not be the only factor that is influencing the purchase decision; the brand, the overall look and feel all of those things impact.

Then, the sales force relationship; you have bought a product once in a company and then you go to the dealership again. And, the connectivity and recall that you bought this product therefore, I am pleased to give you this product that kind of relationship building becomes important and the total is 100.

So, when you look at the segment weighting, proactive R and D has the highest weightage for this kind of product group. Next, comes the timely distribution. So, it is an important understanding for us that each product group has its own segment weights and a firm of course, will have different kinds of rating based on this scale. So, if you look at one firm, it may have a score of 645.

But, in the same segment another firm may have a different level of weightage. It may not be so great in cash generation, but it may be even better in proactive R and D, it may be even better in terms of the timely distribution. Then, definitely it will score better on those parameters and therefore, on the overall matrix. So, we need to look at multi factor matrix not

merely for comparison of one company with another company, but for understanding what one company can do in future better too.

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Assessing Market Segments



When a customer has multiple needs, different segments have different scores. Rather than aggregate scores, the ones that are important to a particular dimension must be given higher weightage.

Skin Care Cream	Age-Based Market Segments					
	14-18	19-29	30-39	40-49	50-64	65 and over
Beauty	5	4	4	3	2	2
Confidence	2	2	3	3	5	6
Economy	4	5	3	4	6	7
Health	5	5	4	4	6	7
Allure	6	5	4	4	2	2
Status	1	5	6	6	5	5
Youthfulness	7	7	5	3	1	1
Total	30	33	29	27	27	30

In the above example, having different weightages for parameters may help in targeting each segment appropriately.



Similarly, when you look at the market segments, because the customer has multiple needs; we have to understand that different segments have different scores rather than look at the aggregate score we have to choose the ones which are important to a particular dimension and they must be having higher weightage. Let us look at the skincare cream as a product and in skincare cream, we have different market segments that are age based.

The skincare needs of someone who is 65 years and over is much different from the skincare needs of a 19 to 29 individual. So, when you look at the factors that determine the skincare creams constitution beauty, confidence, economy, health, allure, status, youthfulness; all

reflect what the skincare cream could deliver to an individual in different age groups in different levels.

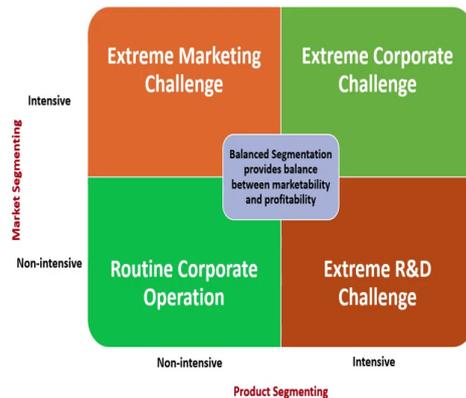
But the importance given to each of the factors will vary. For an elderly person, beauty ranks low in terms of 2 rank 2 weightage whereas, for young person the weightage is 5. Similarly, the health weightage is 7 in terms of 65 and over and the score is just 5 in respect of the age-based things. So, it is not the same cream, let us say let us look at a Venusia moisturizer cream; it will have higher weightage in terms of its health position that is keeping the skin less itchy and well moisturized in the age group of 65 and over.

Whereas, it has only a score of 5 in the 14 to 18 group because the skin is supple and capable of touching itself. Similarly on allure, a good moisturizing cream may improve the allure of the individual whereas, 65 and over person may not care at all from that point of view. So, one person buys a product for different reasons than what the other person chooses to in purchasing of the product. This will help targeting of different segments in an appropriate manner.

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Product and Market Segmenting

The levels of product and market segmentation are dependent upon the R&D and Marketing efforts that are required



The right balance in product and market segmentations leads to equitable pursuit of marketability and profitability



So, when you look at this product segmenting, market segmenting; we have covered every aspect of this segmenting process. We said that segmenting could be intensive or non-intensive. Similarly, market segmenting could be intensive or non-intensive. So, when you have non-intensive product segmenting and non-intensive market segmenting, we are into routine corporate operation. We operate in few products; operate in few market segments it goes on.

But, let us say you have an intensive product segmenting and you do not have intensive market segmenting, but your market segmenting is very routine run of the. You are putting lot of pressure on the R and D to cater to the market segments, where you are already operating, but no with no greater visibility. You are going to have a whole lot of products competing with each other, touching upon each other stores and things like that. So, that is not good.

So, you get into a situation of extreme R and D challenge. Let us look at a product segmentation process that is non-intensive. But, a market segmentation process that is intensive that is you have few products, but you have seen and discovered or even made several micro market segments, then the marketing person is under great challenge to use the same kind of products in different kinds of market segments and position them appropriately. So, extreme marketing challenge, but on the other hand you have the capability to do intensive product segmenting, you have the capability to do intensive market segmenting.

Then, you are in a zonal of extreme corporate challenge that requires great leadership skills, great managerial skills and great individual competencies, collaborative capabilities to achieve this. So, we got to have a balance segmentation which requires the marketability to be good and profitability to good, then only you will get an optimized segmentation approach.

The right balance in product and market segmentation leads to equitable pursuit of marketability and profitability for any company and that is the reason why we have focused so much on product segmenting and later intensive product segmenting, on market segmenting and later intensive market segmenting and the methodologies to assess the market segmentation process and the methodologies to assess the individual products for different segments.

So, it is a complex science, artful, but complex science. With this we come to the end of this lecture and.

Thank you for your kind attention. We will meet in the next lecture.