

Manufacturing Strategy
Professor. Rajat Agrawal
Department of Management Studies
Indian Institute of Technology, Roorkee

Module No. #03
Lecture No. #12
Understanding Markets

Welcome, friends. In our last session, we discuss the process of, developing the manufacturing strategy. And, in developing the Manufacturing Strategy, we discussed, that the Manufacturing Strategy, or any functional strategy, should be market-driven strategy. And, at that particular time, we emphasised again and again, that market and marketing, are two different things. So, every functional strategy, whether it is a marketing, or manufacturing, or supply chain, any kind of functional strategy, has to be market-driven strategy.

And, we discussed, a 5 stage process, of developing the Manufacturing Strategy. And, the first stage, in that is, to understand the market. Where are we now? Who are our customers? And, this particular session, is going to focus, on that very aspect, that how do we understand our customers? Who are our customers? And, that is a very, very important thing. Many organisations, because of lack of clarity, they do not know, that who are my customers.

And, they try to serve, almost the whole spectrum of customers. And, when you try to serve, whole spectrum of customers, you cannot make your products suitable to a particular group of customers. And, that becomes, a major challenge, for most of the organisations. Now, you take the example of, some of the most successful organisations, depending upon Fortune 500 list. Walmart, which is continuously since last 20 years, is either at position number 1, or at position number 2, in the list of Fortune 500.

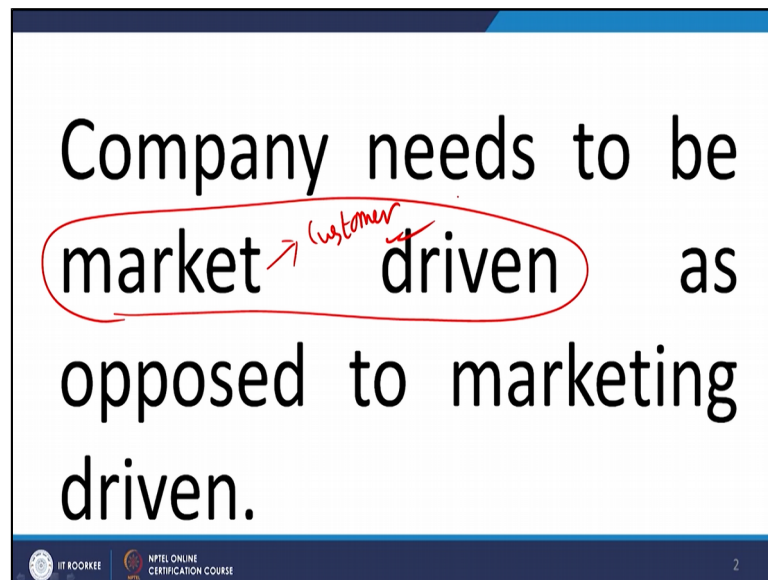
Now, they are very clearly defined their market, they have very clearly understood their market, that we are going to serve, the market, which is looking for, low priced products. So, they have designed their entire functional activities, to meet the requirement of low pricing. How to reduce the cost, of their operational activities? Why they have IT implementation? How do they do stocking of the material? How do they place the orders? Everything is surrounded, with the idea of, getting the low-cost.

On the other hand, you have the most profitable company, of the world, that is the Apple. And, the Apple company, is also not serving, the all customers looking for mobile phones, or all customers looking for, different types of electronic gadgets. They have also identified, that we are going to serve, only those customers, who look for innovations. So, they know, that my market, is only for those customers, who are looking for innovative products.

And, as a result of that, these customers are also ready, to give some extra margins, to these organisations. And, as a result of that, even if you are not serving, all types of customers in the mobile market, your profitability is number 1. You are, within top 10, of the Fortune 500 companies. And, within that, your profitability is, more than Walmart, so, what I am trying to say, that if you understand your market, and there is no need to serve, the customers ranging from one end of the spectrum, to another end of the spectrum.

You need to identify, that only this small group of customers, I am going to serve. And, that is possible. The kind of results, which I just mention, either about Walmart, or about Apple, are only possible, when you understand your market, properly. So, in this session, we are going to focus, on that very aspect, that how to understand your markets, properly. Now, as I mentioned, that company needs to be, market-driven.

(Refer Slide Time: 05:17)



This is the important thing, that we want our organisations, to be market-driven, and not the marketing driven. Market-driven means, that I know, who are my customer. And, according to those requirements of the customer, I am able to develop my functional strengths. My

functional strengths, are meeting the needs of my market. That is the idea of, market-driven functional activities.

So, if one functional activity is guiding another functional activity, then it will not be able to directly serving your customer. So, this is the first important point, in understanding the market. And therefore, understanding market is also very important. Now, when we are going for this understanding of markets, there are few things, which are very important to understand.

(Refer Slide Time: 06:22)

The slide is titled "Growing Characteristics of Market" and lists four key characteristics with handwritten annotations:

- ① Empowered Customer — Knowledge, Per capita income.
- ② Heterogeneity — 130 different R.E. types of vehicles in Delhi.
- ③ Lack of patience — Responsiveness, FMS.
- ④ Smaller Product Life Cycles — A graph showing a product life cycle curve with stages: Int, Growth, Maturity, Decline. Time intervals are marked as 20 yr, 2 yr, and 1 yr.

The slide footer includes the logos for IIT ROORKEE and NPTEL ONLINE CERTIFICATION COURSE, and the number 3.

And, these things are, one important thing which is happening nowadays, the empowered customers. Our customers have become, too much empowered. Empowered in the sense, of their knowledge. Empowered in the sense, of their per capita income, which is continuously increasing. Empowered in the sense of, their ability to interact, with the other customers. So, they are having, the customer communities, brand communities.

And, organisations like Royal Enfield, they are selling their products, only using the concept of brand communities. So, customers are becoming, very much empowered. The customers of past, was not that empowered. The present customer is, highly empowered. So, customer has become, more demanding. Customer is putting, more pressure on the organisation. As a result of that, it is more important for organisations of the present day, to understand those increasing demands of your customers.

So, that is the important characteristic of your market, that you cannot take your customer, for granted. You need to thoroughly understand, the needs of your customers. So, this is point number 1. The point number 2, is heterogeneity. The heterogeneity of the market, is continuously on rise. Earlier, most of the customers used to have, same type of products. Very limited varieties were there, in the market. But nowadays, you will see that, each customer wants to have, a different type of product.

On the streets of Delhi itself, you will be surprised, that more than 130 different types of vehicles, are running. Now, when you have, this high level of heterogeneity, it is putting another kind of pressure, on the functional activities. You cannot standardise, your manufacturing operations. And therefore, the development of concepts like, FMS, Flexible Manufacturing System, is highly appreciated. Because, our manufacturing systems, were very bulky.

They were not easily changeable. But, thanks to concepts like FMS, because of which, you can provide, different types of variety, with very low volume. So, heterogeneity, among the customers. Within a family, different persons require, different types of product attributes. So, this concept of heterogeneity is continuously increasing, in the modern market. And, everywhere you see, each one of us has, different types of mobiles. Each one of us wear, different types of sunglasses.

Each one of us wear, different types of watches. Each one of us wear, different types of shoes. So, there is, we all want to be unique. So, this urge of being unique, is creating this heterogeneity, in our society. And, that heterogeneity is putting, a lot of pressure, on the functional activities also. So, this becomes, the second important characteristic, of our current markets. The third important characteristic is, lack of patience.

To fulfil this, criteria of lack of patience, now marketers, the functional roles, are trying to become, more and more responsive. More and more responsiveness is required, to support the idea of, lack of patience. But, there is a limit, for lack of patience. We want everything, within the fraction of seconds. If I just speak, immediately I want solutions. I am not ready to wait. And, this condition, is also continuously increasing.

And, our functional roles, manufacturing, operations, need to adjust, need to be flexible enough, to fulfil the requirement of this, high degree of responsiveness. But, there are always, some kind of physical limits. You cannot increase, the responsiveness to the level of infinity. So, what is that maximum level of responsiveness, which you can provide, to your customer. And obviously, any additional degree of responsiveness, will only come, with additional cost.

If you increase the responsiveness, to a very high level, the cost will also increase. And, customer is not ready to pay, that additional cost. So, that is another challenge. That, if it is only responsiveness, you can provide, a full factory, for a particular family. That, only for this family, the products will be made, in this factory. But, we can very well understand, that this is never possible. Because, then the cost of production will become, so high, that even the most affluent family, will not be able to afford it.

So, we want, high degree of responsiveness, but we also do not want, very high level of costing, for that purpose. So, you need to have a trade-off, in this case. So, that is another challenge, for the manufacturing, that how to fulfil this idea of lack of patience, how to provide that high degree of responsiveness, following other trade-off's also. Then, another challenge, which is coming, on not only on manufacturers, but on all functional areas, in our organisations, that is the smaller product life cycles.

Product life-cycle, we all know, has 4 different stages. The introduction, the growth, the maturity, and finally decline. So, these are the 4 different stages, in life of a product. Earlier, product life cycles, may span up to 20 years, for an example. But nowadays, these product life cycles, are becoming, as small as, 2 years, or in some cases, even for 1 year also. So, product life cycles are also, squeezing day by day. And, when product life cycles are squeezing, these are additional pressure, on our functional activities.

You have to design new products, at a much faster rate. So, your new product development function, has to be more activated, than in the previous years. Your manufacturing facilities, should be flexible enough, to regularly change, the dyes, the fixtures, the tooling's, so that you can make, new type of designs. Your supply chains need to align quickly, for the new products. So, all the functional activities require, new or very high level of, you can say, agility, so that, you can fulfil the requirement of, smaller product life-cycle.

And, as a result of that, we are talking of agile manufacturing, we are talking of agile supply chains, so that, if agility is high, you can fulfil the requirement of, a smaller product life cycles. So, we discussed, some of the challenges, which are emerging, in our current markets. And, by understanding these characteristics of the market, you will be able to develop, or this is the first step, in the development of your Manufacturing Strategy.

(Refer Slide Time: 15:30)

Currently

- ① Market descriptions are limited to the views of marketing.
- ② This limits insights of market.
- The words and phrases used to describe markets are not sufficiently precise to provide the clarity needed to yield essential insights.

Now, as we discussed, these challenges, which are very generic in nature, which can be applied, for the discussion of, any functional area of the business. But, if I particularly talk, in terms of operations strategy, and the Manufacturing Strategy, what is happening here. Now, in this particular field, the description of market, which is the first important thing. We are discussing about, understanding the markets. Now, most of the description of markets, are given in vocabulary of, marketing function.

We are not able to give, the descriptions of the market, in terms of, or in the views of, other functional activities. So, that is the current practice. That, market descriptions are limited, to the views of marketing, but not to the views of hr, not to the views of supply chain, not to the views of operations activities, not to the views of IT activities. So, we need, market descriptions, in terms of, other functional activities also. Now, because you are only providing market inputs, for the marketing department, so you do not get, the complete insight of the market.

You get only limited insight of market, which is relevant to the marketing activities. So, that is also a challenge, which is, for other functional areas, that how to understand your market.

Since, the market description is coming, only for the marketing department, and therefore, all other functional areas, whether it is manufacturing, supply chain, IT, hr, etcetera, they are dependent, on marketing department, or marketing functional area, to know the customer.

So, what is happening right now, actually we want, that if this is market, so different functional areas, like operation, like hr, like marketing, they are able to understand the customer properly, and then they come together, to develop a cohesive functional level strategy. But since, the market descriptions are limited, to the views of marketing, so what is happening. This is market. Market is giving inputs to the, marketing function. And then, marketing function is providing inputs, to hr, and operation, etcetera.

And therefore, these hr, operations, IT, innovation, all are reactive to the requirements of market. Whatever marketing will say, they will follow, accordingly. So, the challenge is that, marketing is also a functional level area, so we want to make, this entire process, as follows. That, this is the current practice. And, we want, this is the desired one. Where, market studies, or functional levels, can directly study, the market.

And, since the entire description of market, is coming for the marketing department, or marketing functional area, so the complete words, phrases, etcetera, are also in terms of marketing only. And therefore, the other functional area feels, that they are not properly served, by the market. They do not have, enough information about the market. And, that is also a challenge. So, this is the current practice. And therefore, we need to see, that how marketing also comes, in alignment with other functional areas. Now, what approach to follow, to understand the market.

(Refer Slide Time: 19:54)

The slide is titled "Approach to follow" and contains a bulleted list. The list item is "Avoid general words and phrases". To the left of the list, the word "Examples" is written in red cursive. A red bracket groups the three items: "Customer service", "Quality", and "Delivery". Below the list, the word "Generic" is written in red cursive. A red arrow points from the "Generic" text towards the word "Specific", which is also written in red cursive. At the bottom of the slide, there are logos for IIT Roorkee and NPTEL Online Certification Course, and the number 5.

Approach to follow

- Avoid general words and phrases

Examples

- Customer service
- Quality
- Delivery

Generic → *Specific*

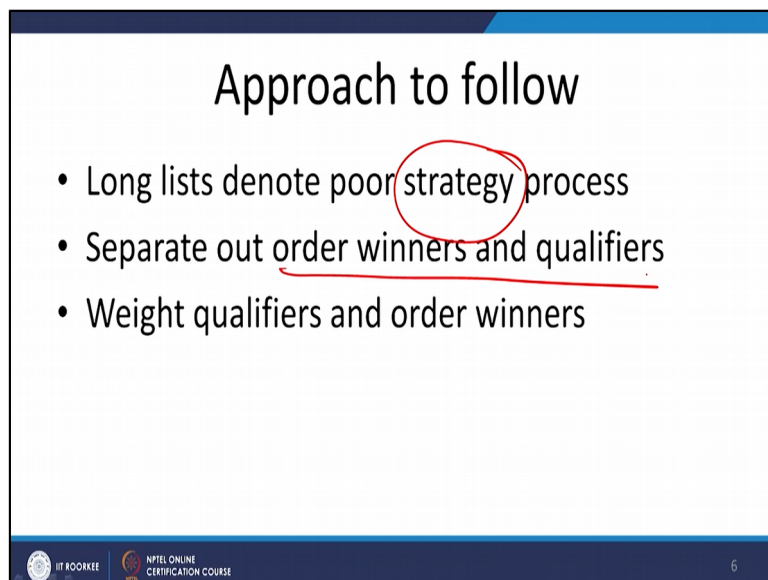
IIT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 5

We understood, the challenges. We understood, what is the current situation. Now, how we can improve upon it, when we want to know our markets. The first important thing is, avoid some kind of generic terminologies. Some of the examples of generic terminologies are, these are the examples. That, we want to be a, highly customer service-oriented organisation. So, this is a very generic word, generic phrase, that customer service-oriented organisation.

If, I am talking of functional level involvement, we need to avoid these generic terms. We need to be very specific, that what I mean by, customer service-oriented organisation. What are the things? What are the strategic task? If you remember, our previous session, where we discussed that, we need to convert these values into the strategic task. So, if I want to be a customer service-oriented organisation, what do I mean by that.

I want an organisation, which is providing superior quality products. Now, what do I mean by, superior quality products. All organisations want to be of, good quality products. So, what is my definition, of quality. Similarly, I want to have, a very reliable system of delivery. What is the meaning of reliable system of delivery? So, these are the generic words. And, we need to convert these generic words, into specific words and phrases, so that, something actionable is possible.

(Refer Slide Time: 21:51)



Approach to follow

- Long lists denote poor strategy process
- Separate out order winners and qualifiers
- Weight qualifiers and order winners

IT ROORKEE NPTEL ONLINE CERTIFICATION COURSE 6

Then, another thing is, which is applicable, across the functional activities. That is, the long list. Because, if you are having so many things to do in your list, then it is a poor strategic process. You need to have, some very specific agenda, you need to have, some very specific

goals, that you want to do. If you want to do, everything, that means, this word strategy is missing, out of your activities. Strategy means, that you have identified, some very specific issues, capabilities, on the basis of which, you want to leverage.

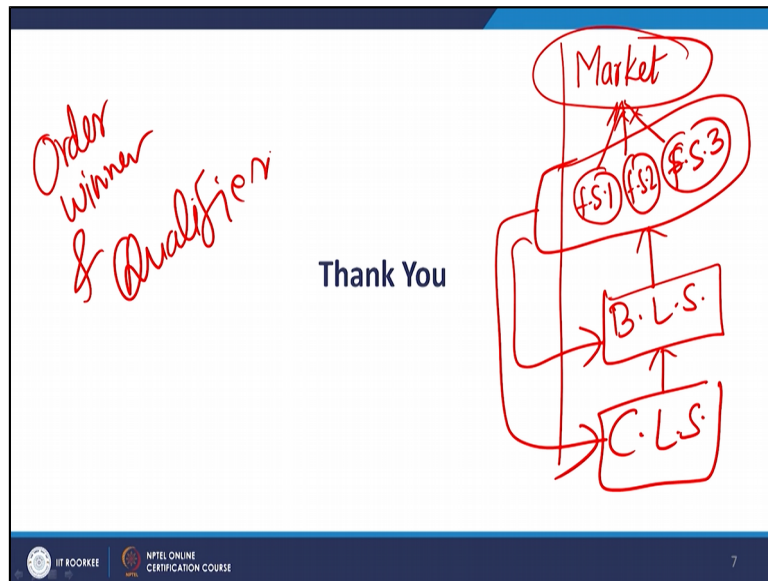
But, if you have a very long list, in that list, you have operations, you have inventory, you have supply chain, you have IT, you have IOT, it means, it is not a good strategic choice. So, you have to be very, very specific, in making your wish list, that what I am going to do. Then, the second important thing is, separate out order winners and qualifiers. The concept of order winner and qualifier, is the central theme of Manufacturing Strategy.

And, we are going to have, some 3, 4 specific sessions, only on understanding the characteristics of order winners and qualifiers. And, we will also study, some of the important order winners and qualifiers, separately. So, at this point, it is important to understand, that few attributes of your product, which will help you, to qualify to a particular market. If you have a particular level of performance, so you qualify to be in the market.

But, only that performance is not sufficient, but if you have low pricing, with that performance, then you can go for, selling of your product. So, you need to separate out, that in a particular market, what are the attributes, which are qualifiers, what are the attributes, which are winners. So, that is the second important thing, to follow. And then, all qualifiers and winners, may not of equal importance. So, you may assign, some weights, to different order winners and qualifiers.

Some are very sensitive qualifiers; some may not be that sensitive qualifiers. Some may be very important winners; some may not be that important winners. So, you need to assign, different weightage, to qualifiers and order winners. And, according to those weightages, you will decide, that how to manage your order winners and qualifiers. And, with this, you will see that, we will come to end of the session, where, we have discussed that, market is the starting point, of developing the Manufacturing Strategy.

(Refer Slide Time: 25:05)



And, we need to develop, a direct contact, from the market, for all the functional level strategy, whether it is manufacturing, whether it is marketing, whether it is hr, or whether it is IT. So, all these functional level strategies, then can come, into an overlapping loop, and then it will provide, inputs to business level strategy, and then it will go to the corporate level strategy.

So, you can have, a two-way process, where you can follow, the corporate level strategy is coming down to functional level strategy, and from the functional level strategy you are providing inputs, to your business level strategy, and corporate level strategy. And, all these things are, market-driven. Since, functional people are in touch with the market, therefore the role of functional people, or functional strategies, are very, very important, in providing inputs, to your business level and corporate level strategy.

So, we discussed, in this session, another very important concept, that is the concept of order winner and qualifier. This is going to be the basis of, our discussions, in the future classes. Because, we need to develop, those order winners and qualifiers, in our products, which can help us, in winning the orders, in the market, at a proactive rate. So, that is, for the session. Thank you, very much.