Manufacturing Strategy
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Module No. #03
Lecture No. #14
Basic Characteristics and Specific Dimensions of Order Winner and Qualifiers

Welcome, friends. Now, we are moving into the, fourteenth session of this course on Manufacturing Strategy. In our last few sessions, we started the concept of, developing the Manufacturing Strategy. We discussed, the role of understanding the problem. And, we also discussed, that this is probably, one of the difficult area, in the entire strategy development process.

And, if you can identify, the problem correctly, then rest of the process becomes, much easier. In the concept of, identification of the problem, and particularly, when we are talking of, operations strategy, understanding your market, is the key phenomena. If you can understand your market properly, then you can design, then you can pre-empt, your operations role, to fulfil the requirement of that market.

Now, in that very list, we introduce the concept of Order Winners and Qualifiers. And, in our last session, we discussed, that Order Winners and Qualifiers, are very, very important thing, for an organisation, to win the markets, to win the orders, for their products. Now, in this particular session, we are going to focus, on some of the generic aspects, of these Order Winners and Qualifiers.

And, we will also start discussing, some of the specific dimensions, of some of the Order Winners and Qualifiers. So, now let us see, what are some of the basic characteristics, of these Order Winners and Qualifiers. We discussed this aspect, in our previous session also. So, just a quick recap of the same.

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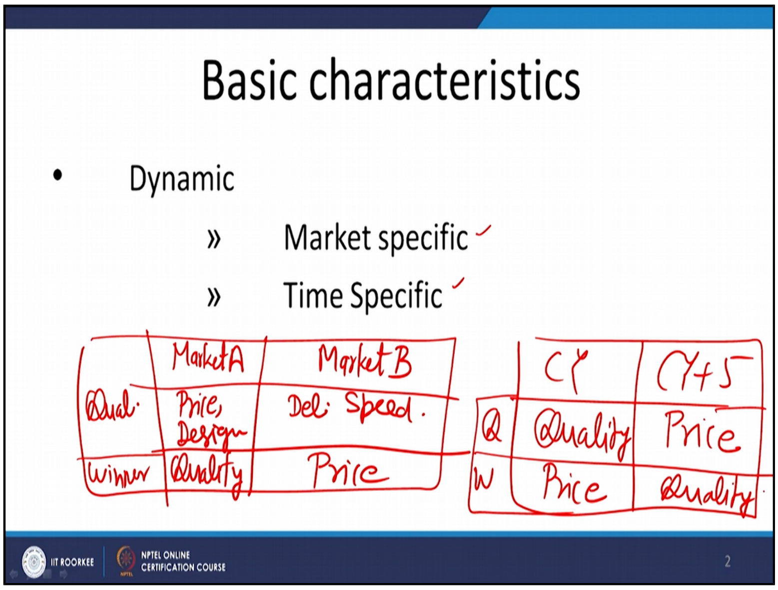

That, Order Winners and Qualifiers, are highly dynamic. Dynamic, with respect to markets, and with respect to time. The same product, in two different market, may have, a different type of list of qualifiers, a list of winners. So, these are the two markets, Market A and B. And, now in Market A, the qualifiers may be, price, and design. While, in Market B, the qualifier may be, delivery speed. The product, which reaches you fast, that product is going to qualify.

And then, winner, in the Market A maybe, the quality conformance, and winner in Market B may be the, lowest price. So, almost all the products, are reaching, within let us say, a particular time frame. So therefore, for Market B, the qualifier is the delivery speed. But now, within that timeframe, which company, which product, is offered you, at the lowest possible price, that is going to win the order.

So, for the same product, in two different markets, we have, a different distribution of qualifiers and winners. And, same thing, applies for the, time specific discussion. That, when we are having, the current year, and current year +5 years. So, same Product A, you have, different qualifiers and winners. Presently, your quality conformance, is the qualifier, and winner is the price. And, it may totally reverse, in coming 5 years, that qualifier may become the price, and winner may become the quality.

And therefore, it is very, very important, that how these qualifiers and winners are changing, over a period of time. You need to keep a close watch, you need to closely monitor, that how qualifiers and winners are changing, over a period of time. So, that is, one of the basic characteristic, irrespective of product, irrespective of market, irrespective of time, these things are, you can say, universal truth, that winners and qualifiers are dynamic phenomena, these are changing with respect to market, these are changing with respect to time zones.

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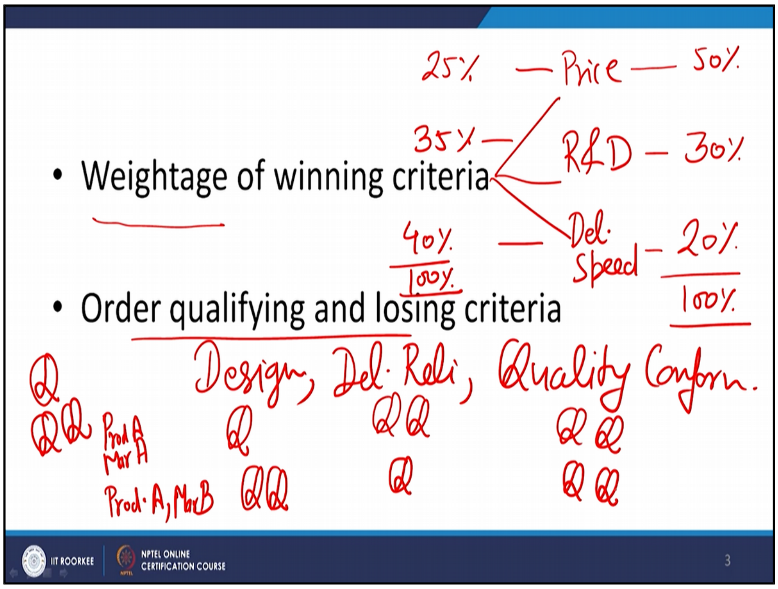

Then, another important thing is, we discussed Generic Winners, Generic Qualifiers, in our initial discussions. But actually, there are a group of criteria, which are qualifying criteria, there are a group of criteria, which are winning criteria. So, you need to see, that if there are 3 phenomena, 3 criteria, which are the winning criteria. Let us say, Price, R&D, and Delivery Speed, these are the 3 criteria. Which are winning criteria, for my product, in a Market A.

And, then I need to see, that how much weightage, each of them is requiring, in a particular market. Maybe, 50% weightage is required, for the price, 30% weightage for the research and development, and 20% weightage for delivery speed, making it 100%. This may change, when I move from this market, to some other market. In some other market, it is possible that, price is only 25% important.

The R&D activities are, 35% important. And, delivery speed, is 40% important. So, again it will be 100%. But, the relative weightage, may change from one market to another market. So, we need to know, that what is the relative weightage, of different winning criteria, in a particular Market, at a particular time. So, that is another important thing. Because, all these winning criteria may not have, equal weightage.

If I say that, Price, R&D, and Delivery Speed, are the winning criteria, for Product X, in Market A, in year 2020, it is incomplete statement. Because, these three, Price, R&D, and Delivery Speed, will have different weightage, may be, some is 50%, some is 30%, some is 20%. And therefore, if I want to be very specific, I need to be very, very particular about, how much weightage, a particular winning criteria is given, in a particular market, in a particular time.

The second important thing is related to, qualifying criteria. The qualifying criteria, like you can have, design specification, delivery reliability, and quality conformance. These are my three qualifying criteria. Now, in the qualifying criteria, I will not have the concept of weightage, as I had for the winning criteria. But, in this case of qualifying criteria, we divide them into, qualifying and losing criteria.

So, if you remember, the discussion of our previous session, in that we represented, qualifying criteria as Q, and losing criteria as QQ. So, out of these, may be design is Q, qualifying criteria, and delivery reliability, and quality conformance, may be QQ criteria, or the order losing criteria. This is for a Product A, in Market A. Product A, Market A. But, for the same Product A, but Market B, it is quite possible, that design is, order losing criteria.

Delivery reliability, is a qualifying criteria. And, quality conformance, is an order losing criteria. It is quite possible. So, as we see, that weightage may also change, from market to market. Similarly, the order qualifying and losing criteria, may also change, from market to market. So, you need to have, a thorough understanding that, how these criteria are changing, from one market to another market. It is very, very important.

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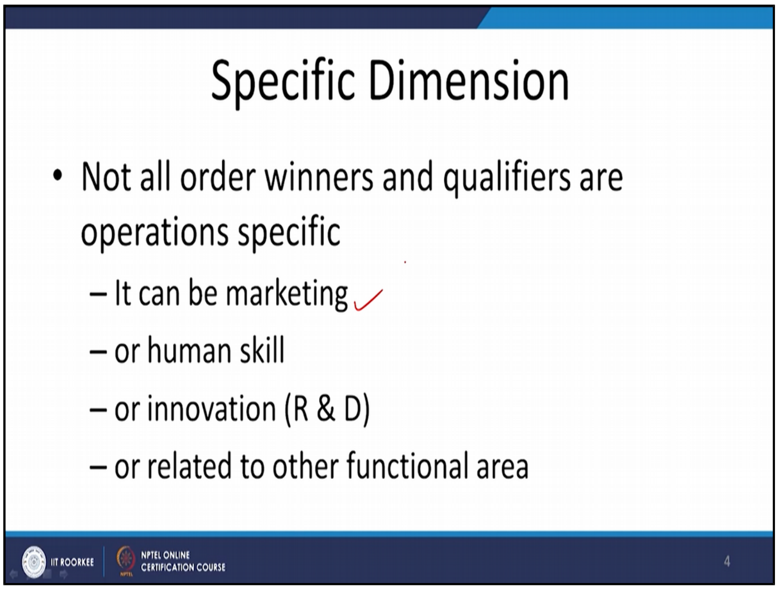

Now, these are the basic characteristics, of the Order Winners and Qualifiers. Now, when we go for the specific dimensions, of Order Winners and Qualifiers, we need to see, that these dimensions are to be discussed, with respect to, a particular order winner or qualifier. But, before that, I want to make, some of the points very clear, that not all Order Winners and Qualifiers, are operation specific. We are discussing, this under the heading of, Operations Strategy, or Manufacturing Strategy.

So, our focus, is more on those criteria, which are coming from the operations profile. But, there are large number of order winning and qualifying criteria, where operation may not play, important or significant role. That, some of the criteria may be, marketing driven criteria, like branding. We purchased some of the products, because of superior branding, or the promotional activities. We are so much influenced, that we purchased these products, because of their heavy promotional activities.

And, these are, marketing related, order winning and qualifying criteria. So, you have, that particular thing. Then, or you purchase, some of the products, because of skills of employees. The skills of employees, play very important role, in service organisations. So, because of a particular doctor, he is highly skilled doctor, the system of that hospital or nursing home, may not be very appropriate, the branding, the hygiene, may also be compromised. But, you are visiting that nursing home, because the doctor is very skilled, doctor is very knowledgeable.

So, that is another winning criterion, because of the knowledge of a particular person. You are going to that particular hospital, or you are going to that particular lawyer, you are going to that particular architect, even if other activities are not up to the mark. Or, in some cases, innovation, very superior research and development, may be the winning criteria, may be the qualifying criteria, which may not be specifically coming from, the operations profile.

Or, some other functional areas, may be the finance, may be the IT, may give you, some specific order winning and qualifying criteria. So, different functional roles, different functional activity, may also give, may also contribute, into the list of Order Winners and Qualifiers. So, this is one very specific issue, which we need to understand, that everything, because of which, a product is sold into the market, is not coming from the operations only.

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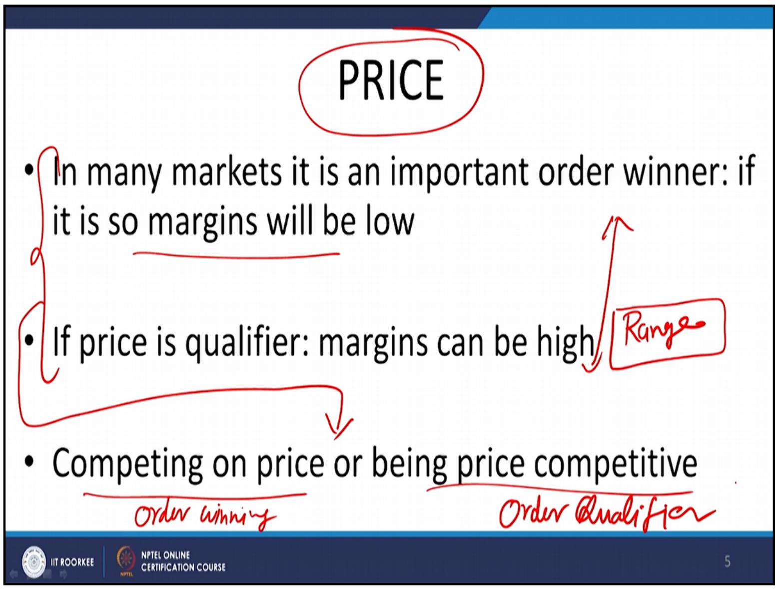

Now, let us start discussing, specific dimension, for a particular, very important Order Winner and Qualifier. And, the name of that order winner qualifier is, price. Price is the most important, or rather you can say, one of the most important, Order Winner and Qualifier. Now, in many markets, particularly in the developing economies, like India, Bangladesh, or many other SAARC countries, in these cases, where we have the, developing economies, it is a very, very important order winner.

And, since it is a very important order winner, the success of China, in these countries, is because of that only. Because, you see, when it is a very important order winner, the margins are very, very thin. And, Chinese organisations are able to operate, on that thin margins. But, if price is a qualifier, margins can be high also. Now, it is very important debate, it is very important point, to understand, that if price is order winner, at that point, your margins are low, and when price is a qualifier, then your margins can be high.

The reason is very simple. That, when price is a qualifier, the customer feels, that you are keeping price, within a particular range. So, you are expected to meet, that range. If your price is within that range, you come into the choice set, you are shortlisted, for the consideration purpose. And, if the competition is happening, if the the final selection of a particular product is happening, because of low price, then you have to actually, reduce your profit margin, so that, you can win competition, over your competitors.

When a range is available, you can achieve, higher price margins. But, when range is not available, when you are competing only on the basis of price, then at that time, your price margins, or your profit margins, are low. So, now on the basis of these two discussions, whether price is a winner, or whether price is a qualifier, you can see, this particular aspect, that whether you are competing on price, or being price competitive.

When you are competing on price, it means, price is an order winner for you. And, when you are price competitive, you are offering, almost the similar price, as your competitors are offering, it means, price is a qualifier, in your case. So, if you are price competitive, if in that industry, everybody is offering, the similar kind of price, you will also offer the same kind of price. You will only lose order, when your prices are enormously high.

If your prices are within a bracket, within a range, you will qualify for the order list. But, you will only be out of that order list, if you are charging very heavy price. So, that is the meaning of being, price competitive. That, almost, what your competitors are offering, you are also offering, the similar kind of price. Competing on the price means, you are offering, the lowest possible price, as compared to your competitors.

So, as I say that, competing on price, is as good as, order winning. And therefore, your margins are low. And, when you are price competitive, you are offering the prices, within the limits of your competitors. For a luxury car in India, if your competitors are charging 20 Lakh, 25 Lakh, you are also fine, may be around 26 Lakhs, it is okay. But, for the same segment of customers, if you start charging 30 Lakhs, maybe, you will go out of the choice list.

So, that is the problem, if you are price competitive. Otherwise, you can generate, enough margins, if you are a price competitive organisation. Because, here, your price is considered, as order qualifier. So, that is the primary characteristics of price, that how it can help you, as order winner, or order qualifier.

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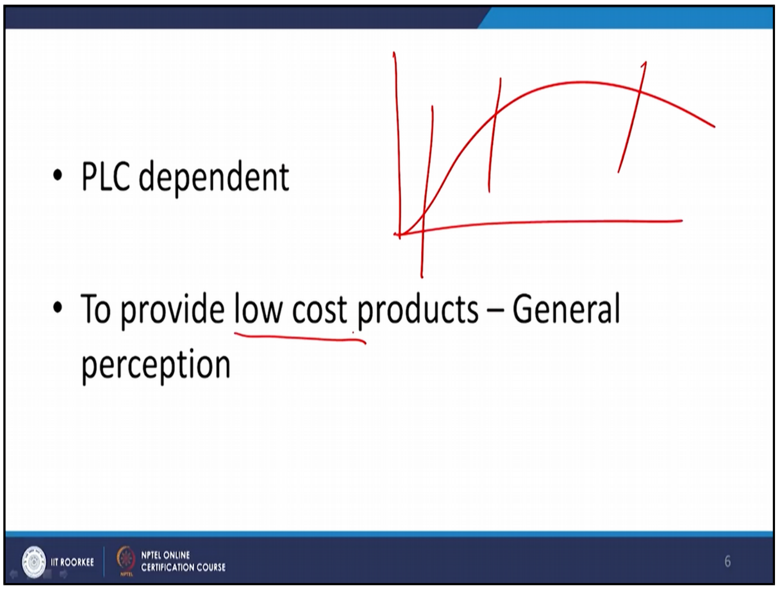

Another important thing, about price, to know is that, price is product life cycle dependent. That, when you are having, a product life cycle, so at different stages of product life-cycle, price may change from winner to qualifier. Many a times, when you see, during the introduction stage, you try, that your price should give you, the winning performance. And, the best example, is the Jio, in India's case.

That, when they are introduced, the Jio product, they kept the price of the Jio, very, very low, with very minimum margins. And, that is exactly, what we discuss, that price became a very important, order winner for, Reliance Jio. And, the margins were, very, very low. As, it becomes, more into the qualifying range, because now other companies are also following the similar kind of pricing strategy, so it is more like a qualifying criteria.

And, during the life of the Jio, now it has also moved into the, growth stage, and now going into the, maturity stage. So, during the different phases of product life-cycle, your price may act, initially as order winning, but later as order qualifying also. Or, in some time, it can start initially as, order qualifying. If you are launching, a new type of automobiles, if you are launching a new type of mobile, then you will target, a particular segment of customer.

And, according to purchasing power of that segment of customer, you will try to keep price of that product, so that it qualifies, into their choice set. So, sometime, in some category of products, introduction stage, will ask you, to keep price, as a winning criterion, or in some cases, it will ask you, to keep price, as the qualifying criteria. So, PLC, understanding of product life-cycle. And, at what stage of product life-cycle, which type of expectations, you have from price, is also very, very important.

Most of the time, there is a general perception, whenever we say, that price is one important factor, without adding the word, qualifier or winner, the general perception is that, price means, we need to provide, low cost product. That is a very general perception. But, it is not so. Many a times, you just need to follow, the bracket. You need to be, as competitive as, your competitors are.

So, that is, many a times, when price is a qualifier, you need not to provide low cost products. You just need to follow, what your competitors are doing. So, this general perception is not good. It is a myth. And, we need to see that, we need to overcome this myth, with the factual realities. That, if it is a qualifying criteria, you have to be at par, with your competitors.

And, if it is a winning criterion, then you need to see, that how you provide the, low cost to your products. So, it is not generic thing, that if price is important, every time you need to be low cost. You need to see, whether you have to be, price competitive, or competing on price. And, accordingly, this phenomena, need to be adjusted.

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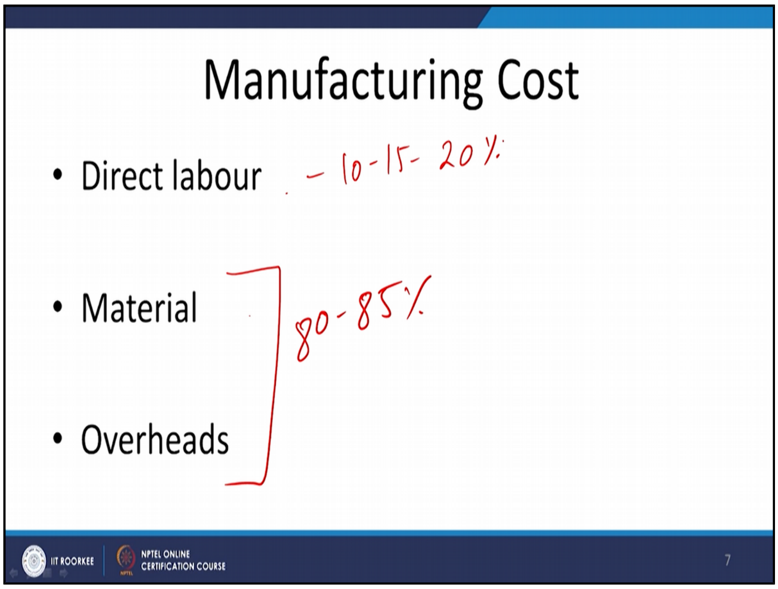

Now, if I see that, when price is important factor, and from the manufacturing point of view, there are three very important components, of manufacturing cost. One is direct labour. The second is cost of material, which includes, raw material, component, subassemblies, etcetera. And, third is overhead. Now, around 80 to 85% of total manufacturing cost, comes from material and overheads.

And only, 10 to 15%, or in some cases, which are more labour intensive, up to 20% of the cost, comes from the direct labour. But, whenever we talk of, reducing the cost, our first target is the direct labour cost. It is very important, or you can say, it is very simple to understand, that you will get maximum benefit, where you have the maximum share. So, maximum share, is in the case of materials.

So, if you can reduce the cost, in material component, you will directly get, or your impact of reducing the cost, will be much higher. So, material cost, should be the first target, whenever we talk of, reducing the manufacturing cost. Now, when we talk of reducing the manufacturing cost, there are few important points, which come to our mind. And, let us discuss, those few points briefly. The first point is, about the cost reduction.

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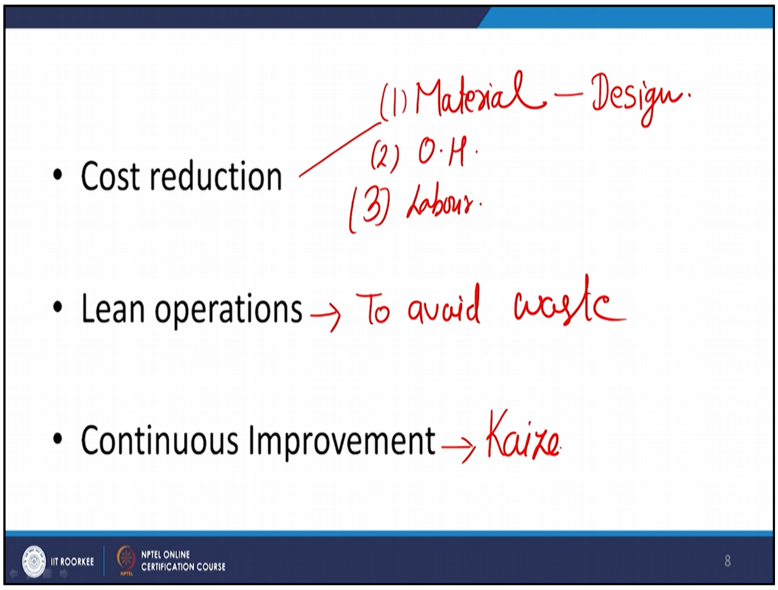

So, you need to be, very, very specific, that where to target for the cost reduction. So, for cost reduction, as I said, the most important target should be the, material cost. If you can reduce the material cost, then you can achieve, significant reduction in your overall manufacturing cost. And, as I discussed, the second important cost is, the overhead. And, third cost, is the labour cost. So, nowadays, your target number one should be the, material cost.

Target number two should be the, overhead cost. And, target number three should be the, labour cost. When we are talking of material cost, we need to focus, on design aspects. That, how to have a better design, where we can minimise the wastage of raw material. And, that will save us, lot of costs related to material. Then, another important aspect, in case of reduced cost is, lean operations, to avoid waste. The idea of lean is, how to minimise the waste generation, in your organisation.

So, if you can minimise the waste generation in your organisation, you are able to reduce the manufacturing cost. So, identifying the value-added activities, and non-value-added activities, through value stream mapping, and then, we can reduce the waste, by eliminating those non-value adding activities, from our manufacturing processes. Then, another important, you can say, tool, is the continuous improvement, Kaizen.

That, we need to continuously implement, in our organisations, so that, regularly, we achieve incremental improvement. So, that is also a key point. Because, stepwise improvement, may not happen regularly. But, continuous improvement may have, regularly. So we need to see, that how we implement, how we develop this culture in our organisation, where people go for regular improvement.

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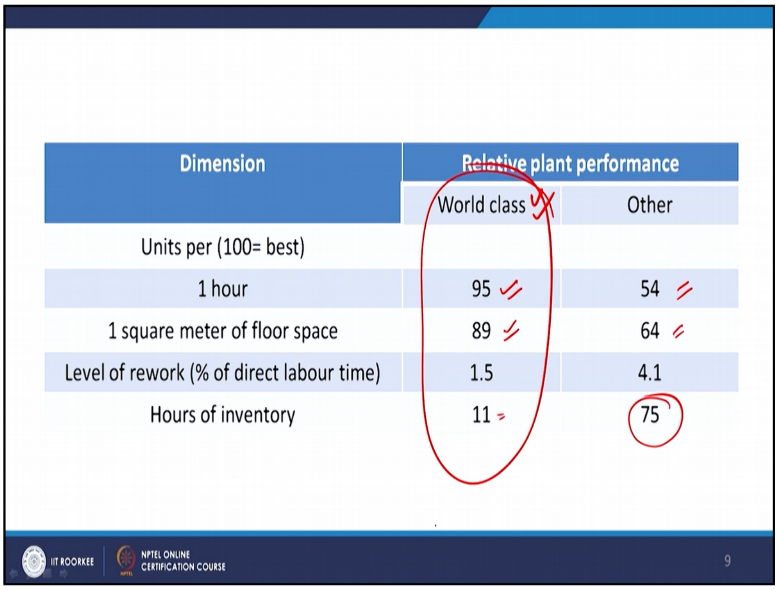

Dimension	Relative plant performance	
	World class	Other
Units per (100= best)		
1 hour	95	54
1 square meter of floor space	89	64
Level of rework (% of direct labour time)	1.5	4.1
Hours of inventory	11	75

Then, if you see, the comparison of the organisations, which have achieved, the world-class status, with respect to these, cost reduction programs, and the other organisations, so as per some available data. Now, if I say that, there is a world-class organisation, so that world-class organisation can produce, up to 95 units, in 1 hour, while other organisations, which are not world-class organisations, are producing 54 units, in the same time.

So, you can see that, where is 54, and where is 95. So, your manufacturing cost, is automatically going to, reduce significantly, if you are on this column of the table, world class column of the table. You are producing 95 products, in the same time, while other companies are producing, just 54 products in the same time. So, that is, tremendous amount of efficiency, as you go, by improving continuously, by following the principles of, other improvement techniques.

And therefore, your space utilisation, the floor utilisation, is also tremendously high. 1 square metre of floor space, will give you, 89 products, in case of a world-class organisation. And, during the same time, the other organisations get only, 64 products. So, your space utilisation is also very, very high, that again helps you, in going for the lower cost of your production. Level of rework. How much rework is required?

So, that is related to the, quality output from the organisation. So, only, 1.5% of direct time labour, is involved in the rework, in a world-class organisation. While, in other organisations, this is more than 4%, that is the percentage of rework. And, in case of world-class organisations, you are keeping inventory of, just 11 hours. While, in other organisations, you are maintaining inventory of, 75 hours.

So, when we are keeping such a low inventory, so you see, how much less capital is blocked, in keeping the inventory. And, how much more capital is involved, or blocked, in keeping this inventory for 75 hours. So, this will make your organisations, if you are a world-class organisation, richer. Because, you have more liquid assets available with you. And therefore, if you are in this world-class column, your all parameters are, much, much superior, then other normal organisations.

And, this will increase your competitiveness, tremendously. And, it will be, whether you are competing on price, or you are price competitive, you are able to take advantage of this phenomena, in both the cases. So, with this, we stop in the session here. We will like to discuss, few more important thing, few more specific agenda, with respect to price, as our important Order Winner and Qualifier. So, with this, we come to end of the session. Thank you, very much.