## Business Data Management Professor G Venkatesh Professor M Suresh Babu Department of Humanities and Social Sciences Indian Institute Technology of Madras Lecture 4

## Competitive positioning in an industry - Porter's five forces

Professor M Suresh Babu: Talking about strategies, the basic analysis in terms of industry strategies is the famous Michael Porter analysis. Michael Porter developed a framework, the management Guru developed a framework in terms of how we can analyze an industry's competitive position.

Now, firms would like to devise strategies after knowing an industry's competitive position because only if you look at the market structure, you can make some kind of an inference from that. So, should I have a particular strategy in terms of price reduction or price increase or should I have more of advertising or should I have more in terms of capacity? How do we really make these decisions? And the framework that can be used for all these is Michel Porter's analysis.

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Now, this is called the five forces model. In five forces model, Porter gives us an idea of the strength of these five forces that would determine the level of profit within an industry.

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## Introduction



- This model aimed to provide a new way to use effective strategy to identify, analyze and manage external factors in an organization's environment.
- Porter's five forces model is an analysistool that uses five industry forces to determine the intensity of competition in an industry and its profitability level.
- An attractive market place does not mean that all companies will enjoy similar success levels. Rather, the unique selling propositions, strategies and processes will put one company over the other.
- The Five Forces were Porter's conclusions on the reasons for differing levels of competition, and hence profitability, in differing industries. They are empirically derived, i.e. by observation of real companies in real markets, rather than the result of economic analysis.

This is very important because these give us an idea in terms of what are the selling propositions which one should have, what are the strategies and what are the processes that will put one company over the other.

Professor G Venkatesh: So, unique selling proposition means that you have something unique to sell.

Professor M Suresh Babu: Very unique to sell. Unique Selling Proposition (USP)

Professor G Venkatesh: USP which others are not offering.

Professor M Suresh Babu: Other are not offering and I also have to develop that, I have to develop the correct USP looking at the industry, looking at my rivals...

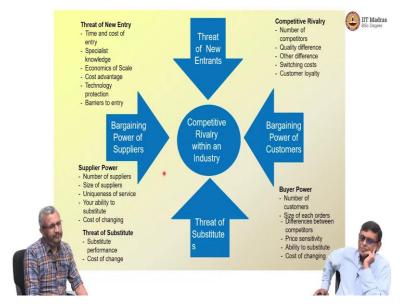
Professor G Venkatesh: And looking at what my customers are looking for.

Professor M Suresh Babu: Yes

Professor G Venkatesh: And I have this insight that what the customers are looking for.

Professor M Suresh Babu: Yeah. I have to know that this is what my customer is looking for. So five forces of this analysis or model gives us this strategy for having the edge for one firm over the other firm.

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No these are the five forces which Porter talks about.

Professor G Venkatesh: Only 4?

Professor M Suresh Babu: The fifth one is...

Professor G Venkatesh: That's rivalry

Professor M Suresh Babu: 1, 2, 3 4, 5...

Professor G Venkatesh: Rivalry is there of course. You have 1 inside within an industry and then 4 from outside.

Professor M Suresh Babu: Yes, 4 from outside.

Professor G Venkatesh: 1 inside and 4 from outside, so 5.

Professor M Suresh Babu: Yeah. And all the 5 exerts the pressure on the floor of the firm.

Professor G Venkatesh: So that is why it is drawn like that.

Professor M Suresh Babu: Yes.

Professor G Venkatesh: They are pressing from outside.

Professor M Suresh Babu: Yes.

Professor G Venkatesh: And then from inside also people are pressing each other.

Professor M Suresh Babu: Yes, and you have to survive that.

Professor G Venkatesh: You have to survive that.

Professor M Suresh Babu: Yeah

Professor G Venkatesh: Some kind of wrestling is going on.

Professor M Suresh Babu: Yeah, that is exactly where data and analytics become very

important. Because analyzing all these involves data.

Professor G Venkatesh: That we have already seen before in the context of market share and

others.

Professor M Suresh Babu: Yeah. So you need to have continuous data on all these things.

Bargaining power, threat of substitutes, threat of new entrant, suppliers bargaining power...

Professor G Venkatesh: Bargaining power of customer means that customers can negotiate

with your suppliers meaning basically they can come to you and ask you to give discounts.

So if I am selling and if I have only one customer, I am completely dependent on the

customer. That customer also knows this that I am dependent on him. So he can come and

negotiate with me for any price. I to have agree to it, I have no choice. That is what you

mean.

Professor M Suresh Babu: So we will go back to one by one and also we also look at some of

the examples. There is always a threat of new entrants, depending on the industry that we are

talking about, especially in a competitive market. The threat is that the new entrant actually

can take away your economies of scale. Because somebody...

Professor G Venkatesh: The amount of share reduces...

Professor M Suresh Babu: Yeah, somebody else is also eating at your market. It will also take

away some kind of advantage you might have in terms of technology because a new entrant

might come with a new technology

Professor G Venkatesh: Better technology.

Professor M Suresh Babu: And completely dislodge you

Professor G Venkatesh: For example, you are using metal and he is using plastic or

something. So, he got much better price point.

Professor M Suresh Babu: Much better price and competitive. So, this is very important to understand where the threat of entry is or is there a threat of entry at all? Second, we look at the competitive rivalry

Professor G Venkatesh: Which is inside.

Professor M Suresh Babu: Yes. That is number of competitors. We saw market shares have Herfindahl index and things of that sort. We will also want to look at if we can make quality difference and that is where we talk about the USP and product differentiation and uniqueness of our product. Then we will also like to see whether there are switching costs for our consumers.

Professor G Venkatesh: Switching cost means that they cannot dump you and go to somebody else easily, you have a contract with them or something.

Professor M Suresh Babu: Yeah, or my product is so good, that if a consumer dumps me and move to another, then there is a problem for that consumer and he will come back to me again. So it is not easy to switch. My product is so good. So you develop that kind of switching costs over time.

Professor G Venkatesh: So getting into a locking or some kind?

Professor M Suresh Babu: Some kind of a locking, exactly. And then part of that is also consumer loyalty that you create.

Professor G Venkatesh: Brand makes a big difference.

Professor M Suresh Babu: Brand makes a big difference and you cultivate this loyalty over a period of time. I think one of the good examples of that is restaurants.

Professor G Venkatesh: Yeah, you tend to go back to the same restaurant.

Professor M Suresh Babu: Same restaurant again. For example, like the great brands in Chennai. Chennai have a set of restaurants where we would like to go back again and again. And there is also sometimes switching costs because I might try a new restaurant, but ultimately it will not be good for my stomach or anything else. So that is how the whole rivalry we see there.

In terms of bargaining power, number of customers is very important, because if you have very few customers, customers will bargain with you. Then it might become a model that...

Professor G Venkatesh: I cannot go anywhere but agree. But if I have large number of customers and if you say no or bargain, I won't care as I can go somewhere else.

Professor M Suresh Babu: No problem. Yeah. I can look at another person or customer. This is one problem. Second, the ability to substitute is very, very important in terms of the bargaining power of customers.

Professor G Venkatesh: Substitute is another one...

Professor M Suresh Babu: If they find a close substitute to my product, they might bargain more and say that I can get this thing at a cheaper rate, so, why should I pay you more? So, that becomes a very, very important kind of a thing. Of course, cost of changing...

Professor G Venkatesh: So for example, people may be using vegetable oil. Vegetable oil prices may be high, but they can substitute it with imported palm oil. So, substitute.

Professor M Suresh Babu: Yeah, immediately you find a substitute for that.

Professor G Venkatesh: And then immediately the guy starts importing from Indonesia, Malaysia...

Professor M Suresh Babu: Then the vegetable oil prices have to come down. Yeah. So, that also takes us to the threat of substitutes, where we find how the substitute performs, what is the cost of changing to the substitute. This is very important. So, as a firm, I would like to create such a cost for my consumer that if they change, there is a cost for that consumer when switching or substituting. So that they do not change, that is what we talked about in terms of locking in the consumer.

And then the supplier power is very important because bargaining power of suppliers is very important. Because ultimately your production cost advantage is also a function of the bargaining power of suppliers. So, the size of suppliers are very important. I will come out with examples for each of this and uniqueness of the service.

Professor G Venkatesh: So if I am making computer or PCs, only Intel is the only company

Professor M Suresh Babu: Only kind of...

Professor G Venkatesh: Of course, now you have AMD, you have some others, but Intel is the gorilla, people want to buy Intel. Then, whatever price he gives me, I have to take, if he increases the price, he increases the prices. So I have no bargaining power.

Professor M Suresh Babu: But in auto we have very interesting examples, where manufacturers, they have many alternatives and there...

Professor G Venkatesh: They control the supplier.

Professor M Suresh Babu: Yeah. So, these are five forces in terms of the competitive rivalry, bargaining power of customers, threat of substitutes, threat of new entrants, and bargaining power of suppliers. And this is what shapes the competitive position of a firm in an industry according to Porter's five forces model.

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Now, I think we do not need to go elaborately on each of this because we have already discussed that. But I would like to to highlight a couple of things here. An example of

competitive rivalry within an industry is McDonald's. McDonald's actually faces tough competition because fast food restaurant market is already grown and it is growing in many.

But then you have to differentiate your product to maintain your market share. This they do by introducing the Big Mc or Double Cheese kind of thing. And that element is very important for McDonald's to survive. So, McDonald's then has to position themselves in a market, which should attract its customers again and again, either through the size or through the extras that we get like if you buy a Big Mc, you will also get finger chips free or Coke or something free with that.

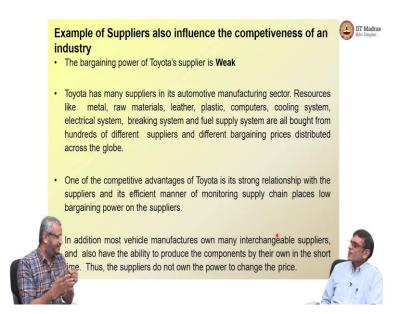
So, there are a high number of firms. Yeah, and there is high aggressiveness of firms. And there is also a low switching cost because people might actually instead of eating a Big Mc, they might switch to something else. I am not so particular that I should only eat this. They can actually substitute that with other. ...

Professor G Venkatesh: Especially in India you can get so many alternatives

Professor M Suresh Babu: Yeah. I think I mentioned that. In Indian case, there is also the local Vada Pav. So people might substitute Mc with Vada Pav. So, the competitive advantage which McDonald's have to create should be after taking into consideration this intense kind of a competitive rivalry within the industry.

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Now, when we look at bargaining power of suppliers, we discussed the kind of possible switching costs of raw materials and things of that sort. Toyota's example is very, very interesting. Now, the bargaining power of Toyota's supplier is weak, Toyota has more bargaining power there, because Toyota has plenty of suppliers. And they will set the standards. They would probably maintain this to the supplier that if you cannot deliver it by this time with quality; sorry, we will not take. So, in one way, in auto where there is.......

Professor G Venkatesh: But on the other side, the supplier can also see that Toyota has got a brand established and Toyota is selling a lot. So, an assured amount of quantity of demand is already there when I sign up with Toyota. So, I get a large quantity of orders without too much headache. I mean selling is a huge problem for most of companies. So, here I do not have to work on selling part that much, as long as I can meet quality and timeline, as you previously mentioned about Toyota's criteria. So as long as I meet the standards, I have the order.

Professor M Suresh Babu: I have a captive market.

Professor G Venkatesh: So that way it is good for supply but he has no bargaining power.

Professor M Suresh Babu: He has no bargaining power. Yeah, I have to deliver according to whatever price Toyota says, otherwise Toyota will say they have many suppliers

Professor G Venkatesh: I will end up being cost plus eventually.

Professor M Suresh Babu: Yeah. minor plus very, very small plus. So, we find that a lot of Toyota's raw materials come from different suppliers. Toyota what really does is that it

maintain strong relationship with suppliers. Also they ensure very efficient manner of

monitoring the supply chain. They does it in such a way that they will constantly keep the

bargaining power of the suppliers at low level. Because every time when they find that the

bargaining power of supplier is increasing, they will increase the quality standards.

Professor G Venkatesh: I see.

Professor M Suresh Babu: So, the supplier then will also have to upgrade. So constantly this

check on the suppliers bargaining power is done by forcing quality standards.

Professor G Venkatesh: That is a method.

Professor M Suresh Babu: That is a strategy which they have developed.

Professor G Venkatesh: Oh, I see. Interesting.

Professor M Suresh Babu: Yeah. So yeah, this is another example.

Professor G Venkatesh: It means that if the guy i.e. the supplier says that I am good, hence I

need an increase in price. He, meaning the person from the firm, here Toyota based person,

will say I will give you a price increase, but you give me a much higher quality material. The

quality bar is increased this much.

Professor M Suresh Babu: Yeah. And they will look at the kind of a very simple measure that

is rejection rates and then they will source from different suppliers. They will see whose

rejection rates are the lowest and they will only stick to that person. They will follow the

strategy that if you have a higher rejection rate, sorry, your quality is not up to my mark. That

is a strategy which Toyota has developed over a period of time.

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Now bargaining power of the buyer we discussed. For example, if switching costs to other suppliers are low and there are many substitutes for your product, then the buyer will have a higher bargaining power.

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Now, example; the marketing channel used for Coca-Cola. Supermarkets, convenience stores, soda shop, vending machine are outlets. Now, bargaining power of buyer is high for fountain supermarkets in U.S. typically and mass merchandising, because of the low profitability and very strong negotiation power of retail channels.

But for vending machine, bargaining power is not existing. So what Coca-Cola did was that just scale up the sheer number of vending machines. You just cannot bargain. So now we find

another strategy here and in Toyota's case, we found another strategy and McDonald's case we found other strategy

Professor G Venkatesh: So what you are saying basically is every company has to invent new methods and innovate in trying to find market mechanisms by which they can keep bargaining to some hold. So they can bargain with their customers on one side and the suppliers on the other side. Toyota is doing with suppliers. Coca-Cola is doing with customers.

Professor M Suresh Babu: Final customers...

Professor G Venkatesh: Because if you do not have this lever, the guy will just push your price down.

Professor M Suresh Babu: Correct. And that becomes your competitive advantage. And that drives your competitive position in an industry. Now...

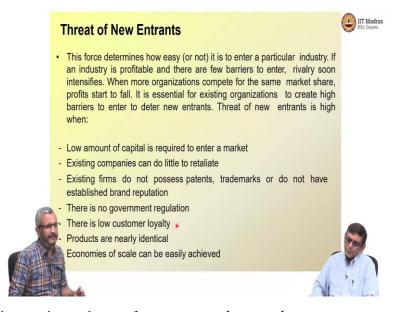
Professor G Venkatesh: This model is good, because it tells you how to look at this.

Professor M Suresh Babu: It is appealing

Professor G Venkatesh: Yeah, very easy to practice here.

Professor M Suresh Babu: And we can collect data and can analyze data. And we can actually draw inferences using some of this data. So that is why it is very, very appealing.

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Now we are talking again on threat of new entrants because here...

Professor G Venkatesh: It is occasional only, not every day somebody...

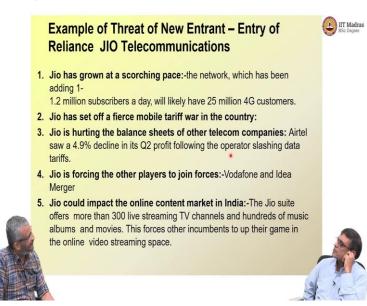
Professor M Suresh Babu: It depends on industry...

Professor G Venkatesh: So if you have a Kirana store, somebody else might come and set up a shop on the other side of the road.

Professor M Suresh Babu: Yeah. And you can have seasonal kind of entrance. At particular seasons, you find that large number of people enters and then they exit from industry. So it depends on the industry. It depends on the fixed costs. It depends on the sunk costs, it also depends on the ease of exit.

If you enter and then you are locked in, then people might get entrapped. So number of it depends on a lot of industry characteristics there. Yeah, as we rightly discussed, low amount of capital is required to enter a market means a large number of people will be there

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Now, here we want...

Professor G Venkatesh: IT industry in India is fragmented because no need for capital.

Professor M Suresh Babu: The human capital...

Professor G Venkatesh: You have 20 guys; you can start an IT company. So everybody is starting IT...

Professor M Suresh Babu: So that is why we find there are lot of startups are in IT space, not in other manufacturing space. Here we want to look at the interesting thing of the threat of a

new entrant by JIO. When JIO came, they actually set the price very low. And they had subscribers at a very fast pace

Professor G Venkatesh: Yeah, such access to capital, nobody else had it. All industries running in cash, he did not know what to do with cash.

Professor M Suresh Babu: What it actually resulted was in a tariff war. Because of the tariff war, other company's balance sheet started to slowly shake.

Professor G Venkatesh: Yeah. They could not invest actually.

Professor M Suresh Babu: What it also led was basically it forced to some kind of a consolidation among the existing players, for example, Vodafone and Idea merged

Professor G Venkatesh: He did that with Rayon actually first, with Rayon and all that is what he did. Rayon his father.

Professor M Suresh Babu: Yeah. So here, we find that a new entrant came and threatened the product space and because of that the existing entrants had to somehow react, respond to it. Generally, it is the other way around. When a new entrant is coming, existing entrant will block and push this new entrant outside...

Professor G Venkatesh: Because it is too small, in some sense. Income bond is very big. But this guy is a heavyweight because he went to some other industries, so from there he comes.

Professor M Suresh Babu: Yeah and very interestingly, we find that online content market is also now slowly getting dominated by JIO's.

Professor G Venkatesh: He gave it free, he was giving movies free, everything free. So that becomes tough, that is a tough model to break.

Professor M Suresh Babu: More than 300 live streaming TV channels. So here is a very interesting case where a new entrant is coming and then that is actually creating a rupture in the market. It is completely disrupting. And a lot of technology startups intend or they plan to do that. But some are successful and some are not successful.

Because the kind of an issue with technology, the technology also keeps changing, so continuously, you need to keep investing in newer technologies.

Professor G Venkatesh: So Amazon will come in and try to distort Flipkart in India, will try to disrupt the retail market. Paytm or FinTech will come and try to disrupt the bank or something

Professor M Suresh Babu: Yeah. So unless the existing players also upgrade their technology, they will not be able to face the competition of this. So, this is one example of a threat of an entrant that how it actually disrupts the existing.

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Now threat of substitutes is a straightforward thing. Yeah. Because the consumer switching costs being low means there is always a threat of substitutes. And very importantly, if the substitute product is cheaper than the industry's product, then you are actually gone. An example, we found that in CFL bulbs industry, there are branded ones and the unbranded ones from China. Then the branded ones were really having a tough time, even though they claimed more life span and things of that sort.

Professor G Venkatesh: How do you figure out? You cannot. Only after some time you can figure lifetime...

Professor M Suresh Babu: Upfront you do not know.

Professor G Venkatesh: You do not know upfront.

Professor M Suresh Babu: So people think that well I will take a risk and buy the cheaper one even if it goes after 3 months or 4 months

Professor G Venkatesh: It is true for chargers, mobile phone chargers and all these chargers. You buy these cheap chargers; they may actually damage your equipment. But nobody knows till your equipment is blown.

Professor M Suresh Babu: Yeah, because the information is not available up front.

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Now, this is a very interesting case of a threat of substitutes. In airline industries we find very interesting case here. In airline you have two segments the domestic and the International. In domestic there is always a threat of substitutes, I can go to Bangalore from Chennai by

Professor G Venkatesh: By train I can go.

Professor M Suresh Babu: By Shatabdi I might think that is better. So if the airline prices are very high...

Professor G Venkatesh: So in this case of airline, the competition for airline is not another airline, it is train actually. How about bus?

Professor M Suresh Babu: It is a substitute product.

Professor G Venkatesh: It is a substitute product.

Professor M Suresh Babu: Yeah. It is not another player within the same product space. I can take the car or I can go by train or I can drive. So in the domestic it's possible, but in international, it is not possible. So there my threat will be from another airline. Perhaps providing better service, sometimes better food, the comfort and things of that sort.

So here what we wanted to highlight is that the threat of substitute could be from a player in the same product space or from another product which could substitute your product.

Professor G Venkatesh: Even beverages. If you look Coca-Cola used to think Pepsi is their competition. Till suddenly one day they figured out actually the competition is water because you drink Coca-Cola because you are thirsty. You can drink water, that is more healthy.

Professor M Suresh Babu: Yeah. So, their punchline was that coke, nimbu pani, pani. That is a kind of way it is.

Professor G Venkatesh: As a progression.

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Professor M Suresh Babu: So, what is the importance of this Porter's five model? Well, ultimately the question for a firm is what strategy to use? Now that is where we need a lot of data analytics. And that is what we expect our students to really look at data and then come out with strategies which are useful for firms.

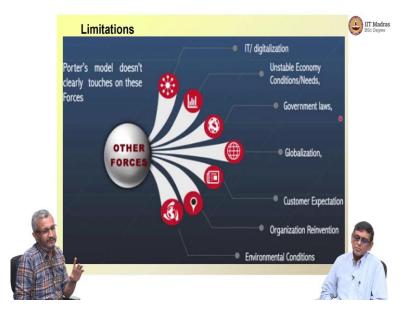
But what do we need for that? We need basic knowledge of business and the kinds of strategies that are used in business and the influence of these strategies in decision making. Is it at all relevant or is it at all practical to have such a strategy? And that is again, where data becomes very important. Then we should look at industry analysis.

Industry players, industry structure, what are the future changes? Then we come up with competitive strategies. Basically, how we can have competitive advantage, can we have cost advantages? Can we have market dominance like JIO's case? Can we have new product

development? Diversification or contraction? Sometimes contraction is better, I am too diversified. I am spread too sometimes and not focused on certain activities.

Price leadership, re-engineering, what we call as downsizing or rightsizing, restructuring all these then becomes very important strategies. But ultimately, we need again data. Where we need data? We need data to measure and monitor the strategy effectiveness. So, what we want to highlight here is that starting point of all this is availability of data to develop the strategy, but throughout even when we implement the strategy also, we need data in terms of the correct matrices to measure and monitor the effectiveness of strategy. Then perhaps, we can have effective strategies and implementation of effective strategies using Porter's five forces.

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But there are also some limitations. Limitations are basically...

Professor G Venkatesh: Like Porter's, there are other methods also?

Professor M Suresh Babu: There are other methods, yeah. So-what analysis, strengths, weaknesses, opportunities and threats; it is also a similar kind of a thing.

But the limitations, well, it does not touch some important thing, for example, IT and digitization is disrupting everything now...

Professor G Venkatesh: Everything is becoming software.

Professor M Suresh Babu: Everything is becoming software. How do we incorporate that? There are instabilities in the macro economy which could affect your business and that you are not accounting. Government can be a disruptor sometimes; they can put spanners in all...

Professor G Venkatesh: Oh yes, they can

Professor M Suresh Babu: Globalization is emerged as a major kind of factor.

Professor G Venkatesh: We are impacted by China...

Professor M Suresh Babu: We talked about that, CFL bulbs

Professor G Venkatesh: or even textiles from Bangladesh.

Professor M Suresh Babu: Bangladesh. Yes. Customers' expectations keep changing and how do we really assess that? It is again highly data intensive. And then of course, the environmental conditions, when we talk of environmental conditions, the environment within which the industry operates as well as the larger environment which actually are linked to regulations and other government kind of thing are important.

Professor G Venkatesh: These infrastructures also. Presumably there is infrastructure because the Chennai for example, its ports are there. So, good roads are there, good power.

Professor M Suresh Babu: Yeah, that got added to this analysis highlighting the importance of the geography and that became an important component in terms of location strategies. But now, what has happened is that with the cost of transportation coming down with the rapid technological change in transportation, mainly the container, the location strategy has become less important.

Professor G Venkatesh: But still I mean in Chennai...

Professor M Suresh Babu: Very important, but...

Professor G Venkatesh: Also because of cluster. Because when many firms come to one place, then the suppliers also come there and...

Professor M Suresh Babu: And you reap economies of scales...

Professor G Venkatesh: You reap economies of scales through the cluster.

Professor M Suresh Babu: Yeah. So this is one important example where data is used throughout, in terms of...

Professor G Venkatesh: So we should start using this now and we can start to look at some specific examples and that is a good thing to do

Professor M Suresh Babu: Yeah.