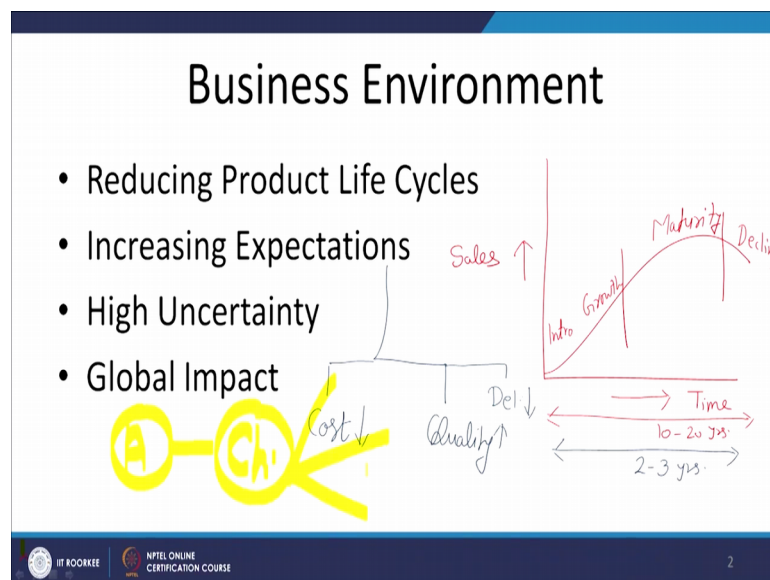


Innovation, Business Models and Entrepreneurship
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Lecture - 01
Analyzing the current business scenario

Welcome friends, we are starting a course on Innovation, Business Model and Entrepreneurship. The course is offered under NPTEL scheme of government of India, ministry of human resource and development.

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Dear friends, the time has come where India needs to fundamentally change its approach towards development and for that purpose, it is very important for us to understand the role of innovation, the new types of business models, and how entrepreneurship can play a important role in the overall growth of the nation.

And nowadays, we all see that there are large number of new business models are coming up. We know in India companies like Ola, Ubar without any taxi these are known as biggest taxi companies. You know companies like Alibaba in China, without any inventory is one of the biggest retail chums.

So, some of the very innovative business models are coming up. We all use Whatsapp; we all use YouTube; we all use Gmail; we all use Face book, but do we pay for that and a still we all know these companies are making big money.

So, something is there which is not visible to us and earlier when you purchase a motor car you pay something for that and it is very clear; it is very evident to you that because you are getting a motor car. Therefore, you are paying something and therefore, the seller is making some amount of profit.

But you use all through the day your Whatsapp and you are paying nothing to Whatsapp. All through the day, you use your Face book account, but you do pay nothing to Face book. So, how these companies are making huge amount of profits.

All through the day, we hear songs from YouTube, but we never pay anything to YouTube; but YouTube is making good amount of profit; One of the largest companies in the world. Google, all through the day, we are continuously logged in to our Gmail accounts; but we never pay any penny to Google for using their Gmail services.

So, nowadays, you may have different arguments. You need to think 2 times 3 times four times that Gmail is providing me a service and I am paying nothing to Gmail. In India, we use to have a very traditional medium of sending our messages and that is post card and we all know that post card is a welfare kind of activity from government of India.

But even for that welfare activity government charges a nominal fee. It is not free, but you are sending huge attachments, photographs, documents in your Gmail account without any payment.

So, it is a question which is worth thinking that how these companies are making money. And therefore, new types of business models are very important to decipher and based on these innovations and business models, we need to think that, what is the opportunity available to make money out of it. How to commercialize your innovation; how to commercialize your business model?

So, that your activities, your thought process, your actions can result in making some kind of money; can help in employment generation, can help in overall growth of economy of a particular country. And with this objective, the various dimensions of these

3 words innovation, business model and entrepreneurship, we are coming with this course. Now, in this first session, we will like to discuss that how the business environment is changing. Traditionally, when we go to the class of management whether it is BBA or MBA or Bcom, Mcom we have a course on business environment and in this business environment course, we know that there is one internal environment of business and another is external environment of business.

Now, there are traditionally told certain elements of internal environment and certain elements of external environment. And we also know that as an organization, we can control the internal elements of the business environment. You have sub degree of control over internal elements. But, you do not have much control you means any single firm does not have enough control on elements of external environment. And therefore, for being successful; it is very very important that how do you handle elements of your external environment things which are not in your control.

For example, political environment which is external environment and it is almost impossible for any single company to handle the uncertainty of your political environment. Today, x party is ruling the country; tomorrow y party is ruling the country; yesterday some z party was ruling the country and different policies, different regulatory frame works, different objectives may be there. And as a business, you need to survive in those changing regimes of different political arena.

So, the point is it is very very difficult for any single organization to handle the elements of external environment and particularly, it is very important in the first session of this course to understand some of the challenging elements of our external environment.

The first is reducing Product Life Cycles. We all know that any product if we go to the class of marketing, we know that any product passes through different phases in its life. And nowadays, you see the product life cycles, the total duration for which a product is there in the market that total duration is shrinking continuously.

Earlier, we use to have Black and White TV's and those Black and White TV's where there for more than 20 - 30 years then, came the period of color televisions. And once the color television came to market, after that you are continuously seen that how fast there are new types of color televisions coming. You have Flat screen, you have high definition

color television, you have Plasma color televisions, you have LED color televisions, you have LCD screens.

So, technology is changing very fast. And therefore, I am saying that product life cycles are continuously reducing. We have mobile phones. In India, mobile phone came in 1996 and at that time, we use to have a very heavy type of may be around the size of a brick that type of mobile phones we use to have. But over a period of time, the size and the quality, the specification of mobile phones increase tremendously. As Indians, we have seen a visible change in the communication technology in life span of just 2 decades. And nowadays, if you talk to a child he says that life of a mobile phone is not more than 2 years.

So, that is the case with respect to variety of products, whatever product you talk the life of product is excusing. Life means new types of product are keep coming if some of you are not familiar with the type of product life cycles. So, let me show you that normally you have these four phases which are intro, you are launching a product. Then, growth, product takes up the market and you have a very fast rate of selling the product into the market. Then you have this maturity period and finally, a new product comes to the market and this product goes for its declining.

On this x axis, you have the time period and on this y axis, you have sales volume. So, you see that product is passing through these four stages. Earlier for a consumer durable type of product, this four stages use to take somewhere around 10 to 20 years. Nowadays, it is happening that way this period is a reduced to 2 to 3 years and all this time you are completing within 2 to 3 years.

So, earlier when you use to have 10 to 20 years of time for taking a complete PLC, now that PLC is completed within 2 to 3 years. So, that is a bigger challenge coming to all the organizations. Earlier you use to have enough time for developing new products. So, your new product development was very much in your control; but nowadays, because of this reducing time of product life cycle, your time is not much for new product development.

And probably that is one very important reason for discussing innovation as a formal class room environment. It is becoming one very essential tool for new product development without innovation; you cannot survive in this competitive market where

your product lives have reduced from 10 20 years to 2 to 3 years. The second important thing which is there that is increasing expectations because of very fast development in the field of information technology and WWW, the World-Wide Web because of these 2 things the expectations of customers are continuously increasing.

Now, there is a important challenge in front of any marketer, but you need to fulfill 2 important things simultaneously; one is cost should be low, quality should be high and third important thing the delivery, you should be able to deliver the product in minimum possible time. So, 3 important things are happening simultaneously and as a customer, we want all these 3 things simultaneously. You cannot trade off.

Earlier there was a system of trade off that either you have a good quality and in that cost will also be high; if you want to get products faster you need to pay more. Now, what is happening because I am a global customer; I am always connected through internet and I know that which seller is selling this same product at lower price and can deliver faster.

And many of you may be seen all these as a comparative parameters when you switch over from Amazon to Flipkart; Flipkart to eBay; eBay to Jabong. So, many sites are there, always open on your window that gives you the idea the same product which site is giving me more discount, which site is delivering me in less amount of time.

So, the expectations of the customers are increasing continuously; customer is becoming more and more knowledgeable, customer knows which product is offering what attributes at what cost and how much time it is going to take and with respect to all attributes our expectations are continuously increasing.

So, this is also a very important challenge for the market years that how to fulfill these varied expectations of the customers in one single go then, another important thing which is happening in the business environment right now that is high level of uncertainty. You all will be angry that the present time is that where we do not know what is going to happen after few movements.

The uncertainty is continuously rising and as a result of that increased uncertainty; business has more challenges. You because of more and more urbanization, more and more constructions at the vulnerable sites, many times earlier earth quacks used to come; but there were not much loses because there were no construction on those critical sites.

But nowadays, you know that we saw Kedaranath tragedy; the tragedy was mainly because of more and more construction in that valley. You see everywhere similar kind of things are happening and we are highly unpredictable about our future.

We have developed so much; but a still, we are not able to find out the solution of problems like a smog in Delhi and you are even not very sure that what is the prime reason for those types of problems. So, uncertainty is continuously increasing; complexity is certainly always increasing. So, because of high level of uncertainty, again there is a challenge that how do you respond as a business; how do you respond; what is your strategy to handle that amount of uncertainty?

You cannot reduce uncertainty, but you can prepare yourself to handle to mitigate those uncertainties. So, that is another important feature of present day business environment. Heterogeneity is increasing; lot of heterogeneity, you see the kind of heterogeneity I just give you few examples that what type of changes are happening in the society and all these changes which are happening in the society impact business also.

When earlier, you were writing genders on any application form, there were only 2 options one was male; another was female. Now, you have 4 different options to write your gender; male, female, trans-gender or do not want to disclose. So, these types of uncertainties, these types of changes are coming all most in every field of your life and these things are impacting your business also. And another important feature of present day business environment is the global impact. Nowadays, the whole world is connected Apple is a very popular name and in this course we will take this name again and again because we all consider Apple to be one of the most innovative company of present era.

Now, you see the company is based in America, but it is manufacturing product in China and distributing products across the globe. So, if something happens in China, the entire supply chain of Apple will be disrupted. If something happens in America or if something wrong happens in the relations of America and China that will disrupt the entire supply chain of Apple.

Companies are having their headquarter in different part of the world; procuring raw material from different parts of the world; manufacturing that product in a different low cost country and distributing that product to some other more profitable areas.

So that means, the whole world is connected off and therefore, whether it is a problem of ICS ISI's in gulf area or in Turkey, but the impact of that problem is global. If there is some crisis in North Korea, the impact of that crisis is going to be global and everything whether it is India; whether it is United Kingdom; whether it is America; whether it is South America.

Now because of some country has some kind of advantage, some other country has some other advantage; we all are inert connected. So, the global impact is another very important thing which is a kind of prerequisite to understand the importance of innovation in presence circumstances. So, these are some of the important point which I wanted to discuss, to make you sensitize about the current business environment that what are the important challenges; what are the important conditions, which are happening in front of us. Now, to understand the context of our discussion, let us see some of the important events in the history of development.

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Series of Development

- Some Macro Events
 - Industrialization in Europe
 - North America becoming a Major Economic power
 - Industrialization in Japan based on Quality principles
 - Low cost manufacturing from China

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And I am particularly discussing this point from the economic development; from the point of view of industrialization. So, we all know that industrial revolution took place in Europe. Manufacturing is activities is started from Europe. So, the first important point is the industrialization in Europe.

And since, the global market many countries of Europe were having at that time their colonies in different parts of the world; like India was also a colony of Britishers; part of India was a colony of Dutch people.

So, similarly the different parts of the world were colonies of mainly European countries and at that time the major focus was to manufacture more and more products so that you can fulfill the requirement of their colonies.

Slowly and slowly North American countries and particularly America became one of the major economic power of the world and in that case, there were a started distributing their products all through the globe and their idea was very simple that have anything of big scale and if you want have a good quality product, the cost will also be higher.

After that second world war took place and during their rebuilding phase Japan became a very important economic power, particularly manufacturing economic power and the development of Japan we mainly attribute to the quality principles; Japanese quality principles. These were the main pillars of the success of Japan and in that they change the philosophy of North American companies; where, cost and quality were inversely related. In this case of Japanese revolution, they said that cost and quality can go hand in hand.

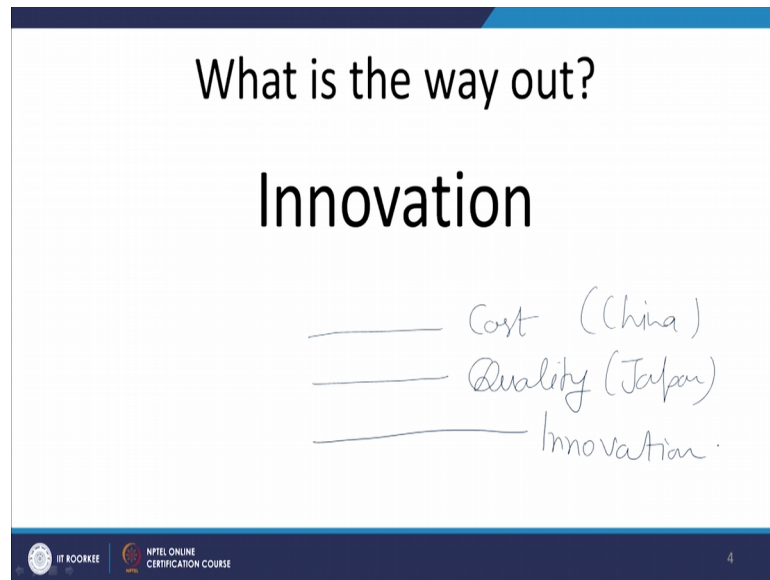
Here, they said that we need to understand quality in a much bigger perspective and that bigger perspective is you need to go for waste minimization; if you can minimize the waste the quality of the products will be better and the cost will also go down. So, the success of Japan was primarily on their quality principles and because of success of Japanese quality principles, slowly and slowly rest of the world also a started adopting these quality principles of Japanese manufacturing organizations.

After that very recently, we all are seen the development of China on it is low cost manufacturing principles. We just discuss the example of Apple that how American countries are getting their products manufactured in China. The reason is very simple that is low cost manufacturing and you go to any part of the globe, you will find all products made in China because it gives you the advantage of low cost.

Now, when we have this series of development, now it is very very important for us to understand that Japanese have achieved a bench mark in the quality. The Chinese

organizations have gone to a threshold level of cost of production. So, now what is the solution in front of any new company, any new economy which wants to compete at the global level; which wants to compete at the world map? Therefore, it is important for us to understand and to focus on innovation.

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The way out is innovation; the only way out is innovation because as I just mentioned that achieving that threshold level of cost, achieving those bench mark of quality; so, once you achieve those bench marks.

Those companies will move further ahead. So, it is very very difficult that if you have a particular line of cost; you have another line of quality. This cost line comes from China; this quality line comes from Japan. So, for you if you want to compete with these 2 lines, you need to draw a bigger line which is of innovation and then you can compete with cost quality of Chinese and Japanese organizations.

Otherwise if you keep following the cost of Chinese organizations; quality of Japanese organizations, you will never be able to go at a proactive level of a competition. Therefore, the message is very simple that seeing the current business environment, seeing the current trend of development; you need to think of a new dimension of development and that new dimension of development can be provided by innovation.

And that innovation, we need to see that, it should be pervasive in its nature. It should not be limited to only one area of the organization; it has to be organization wide.

So, in our coming sessions, we will see that what are the different types of innovation and how can you take advantage of those innovations for getting the competitive advantage in this current business environment.

Thank you very much.