

Designing Work Organization
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Lecture-42
Models of Organizational Innovation

In this particular session of this designing work organization of these models of organization, we will understand that is what is the innovate and how to innovate and what is the need for the innovation. Then we will be talking about the four approaches to the business model innovations, innovation models, limitations and innovation and how to tackle it. And as usual, we will be discussing the case study, research papers, group recommendations and references are there. In the previous session, we have talked that is whenever we are talking about the organizational effectiveness or the competitive, the advantage is through the organization is to be innovative, but question arises how? So, business leaders read a lot about the innovation in recent years, there is a reason for it. Business leaders understand that they have to create innovation labs in their businesses. So, how to innovate in your company? The following are the essential elements for the innovation of any company, including the small businesses with the limited resources are there.

So, first is the culture starts at the top is there, the idea of everything starting with the leadership gets said the countless times and but that is because it matters. So, leaders have to have a vision, set the tone and create the space for the innovation. Innovation is creativity in action, but for that to fully bloom within your company, it also means everyone got to responsible and accountable is there. So, here when the leader that is a CEO, that position top position, and when they say that is this is a particular vision, and then all people they are supposed to come together working with him and to achieve that particular vision and for that vision there the creativity is required.

And as soon as when this culture of the creativity flows from the top to bottom, then the creativity converts into the innovation. This integrating the digital and the physical spaces for the collaboration. So, business innovation comes from the people brainstorming and sharing ideas. It also comes from them getting a good sense of these challenges and opportunities that exist for a company. For any of this to happen, people have to spend time together.

Now, this drive creativity and this checking is everywhere is possible. So, innovation comes from the creativity, which is a distinctly human trait. To bring these those ideas into your company, you need to hire and retain talent that demonstrates creative and the

critical thinking. Therefore, in your recruitment and management processes, you have to show people that creativity and the strategic risk taking are the essential values of your company. Risk taking has to become the part of the your company's DNA and the only way to take the reasonable risk is to come up with the calculated solutions are there.

Companies hoping to drive the growth through the business model innovation face a number of critical questions. How broad should the scope of the effort be? What is the appropriate level of the risk to take? Is it a one time exercise or does it call for in the ongoing capability? To answer those questions, it is important to realize that not all business model innovation efforts are alike. Now, when we are talking about the different approaches to the business model of innovations, the first one is the reinventor approach is there. The reinventor approach is deployed in the light of the fundamental industry challenge, such as the commoditization or the new regulation in which a business model is deteriorating slowly and the growth prospects are the uncertain. Now, whenever we are talking about this reinventor approach, it is becoming a buzzword for the commoditization.

So, therefore, in this case, the organizations especially the traditional organizations, they are required to develop a business model that will be the existing model because they deteriorating slowly and the growth prospects are uncertain. So naturally, the change is required and they have to come out with the new business model is there. To develop this new business model, it is necessary that is they are doing a proper research and understand that is with the existing manpower because the challenge will be the size of the manpower, whatever the number of the employees those who are already existing. If we are changing the business model, then in that case, you have to develop new knowledge and new skills. And here, this reinventor approach becoming such a challenge where the organization is flexible, then it becomes easy to achieve the innovation or the new business model to be adopted by the organizations are there.

I would like to give you the example of the automobile industries and whenever we are talking about the automobile industries, the automobile industries they are coming with the now artificial intelligence or when you are talking about industry 4.0, then definitely in that case, you are required to develop a new business model and that is to with your existing manpower. Now, if you are having a proper training program and develop there is the potential and performance both then definitely you can create a new business model will be there by this the organization. Second approach is the adopter approach is there. So, adopter approach is used when the current core business even if reinvented is unlikely to combat fundamental of the disruption.

So, now, whenever the most of the operations especially in the case of the service

industry, when you are most of the operations, when you are reinventing, then definitely it is becoming more the technology oriented in the current time is there, but that the basic combat fundamental disruption that becomes a very, very important is there because the adopters they explore the adjacent businesses or markets. So, in some cases existing their core business entirely is there. Now, first step will be the reinvention, but then you find that is the still your business model is not working in organization is not getting the good ROI, then in that case, you can go for these the adjacent businesses or the markets are there. And I would like to give the example especially the FMCG companies are there. In FMCG companies you will find that is this type of these the adjacent business markets that has been taken, we can take the another example of the telecom industries are there.

So, telecom industry is the approach is that is the adopter approach is there and therefore, existing their core business entirely, they are communicating and continuing with their telecom industry by adoption of the whatever has been the reinvented is there. The third approach is the maverick approach is there. So, when we talk about the maverick approach that implies the business model innovation to scale up a potentially more successful core business and the mavericks which can be the either startups or the insurgent established companies are there. So, here we will find that is the those are organizations which are having the high potential, but there is core successful core business is there. So, here it is the better to adopt the new practices that is a maverick which can be the either startups or the insurgent established companies.

They imply their core advantage to the revolutionize their industry and set the new standards are there. I would like to give the example of the number of startups which have been started in India by the initiative of the Prime Minister, Mr. Narendra Modi and therefore, in that case this core advantage to the re-revolutionize has been started. Now, when you are having the because there are the number of services are required, maybe into the food, maybe into the energy and maybe into the water sources are there especially these are the areas where the more startups and more practices and more new business models are required in India. So, therefore, these revolutionize their industry and the set new standards that will be required.

The adventure approach aggressively expands the footprints of the business by exploring or venturing the into the new or adjacent territories are there. This approach requires an understanding of the company's competitive advantage and placing the careful bets on the novel applications of their advantage in order to succeed in the new markets are there. So, either you go by this maverick approach is there where the core business is already successful and there is a high potential is there, but what you do you go for the either the startups are there and through with the help of the startups you start to get this idea that is whether this particular core business that will continue or not. And

these revolutionize their industry and set the new standards are there. For example, whenever we are talking about these clusters, so the clusters they start with these small startups cluster and then they are becoming successful.

When we are talking about these adventures placing the careful, they aggressively expands the footprint of a business by exploring or venturing into new or adjacent territories are there. Now, we see that is the country like India where the north, south, east, west there are the different cultures are there, there are the different practices are there and then in that case the business will starts, starts with the within the homogeneous culture and when then it expands, then it goes to the business by venturing into new or adjacent territories are there. So, here we can we from Kashmir to Karnakumari we find that is that business models that will be making these new practices according to the adjusting with the that local culture is there. So, it is a new or adjacent territories which we approaches requires an understanding of the company's competitive advantage is there. So, it may start from the for example, many industries and they are starting from the metro cities, but then they are expanding into the rural areas, rural marketing and in India now, the rural marketing has become very popular.

So, companies competitive advantage and placing the careful bets on the novel applications of the advantage in order to succeed into the new markets are there. Whenever we are talking about the innovation models, the technology research and development in the market trends have the contributed in the evolution of the models over time are there. So, we will look at the six models to see the processes that the models proposed and innovation process should take is there. So, therefore, in that case, whenever we look at these different models are there, then these innovation models with the help of the technology research and development that they are contributing towards developing these innovative practices innovation process is initiated. For example, the first generation model is there, there is a technology push is there, second generation model is the market pool is there, third generation model is the coupling method, fourth generation is the interactive model, fifth generation model is the network model and the sixth generation model is the open innovative model is there.

Now, we will talk these all these six models one by one. The first generation model developing by the NASA in 1960 as a management tool. So, NASA referred to the process of these phase review processes of the technology and technology push. The process was broken down to the help in the systematizing the work and for the controlling contractors and the suppliers who were working on these projects. As progress to the next stage relied on the completion of the previous stage and the management held a meeting when a stage was completed.

Their role was to determine whether the set objectives for this stage had been met. They also met to decide on the progress of the project and the processes were linear in a nature and relied on the engineering that is there. So, therefore, in this case the technology push whenever we are talking. So, we find that R&D is becoming the first step is there. So, whenever we are talking about the research and development, we have to explore more and as per these the new technology developments, I will give a simple example of the textile industry.

In the textile industry earlier the looms were there where the one worker was handling the four looms were there and now we are talking about the jet looms is there. So, therefore, this production process with this particular new technology and that has become much faster and much more accurate is there and you get the fresh material output is more as compared to the second. So, therefore, in that case, this production is becoming the more technological push is there. Now, the question arises of the marketing that is whether there is a need and a scope or not. If there is a need of this particular technology and the production, then definitely in that case you will find that is the technology push model that is becoming successful.

Now, the second model is the market pull is there. In the previous model, the limitation was about the marketing. So, you are developing the technology, you are increasing the production, but does there is a need for that particular product or not. It means that you have to focus on market pull. The second generation models are similar to their predecessors except that the model draws the innovation idea from the marketplace is there.

So, here we will find that the focus is on the customer demand. What is the customer demand is there and the first generation model draws the idea from the research and development and the science which are different from the second model is there. Now, here I will explain that in the first model, when we are talking about these these is the first model is there which is talking about the technology push, but when we are combining this with the market pull is there. So therefore, once we identify that there is a need. Now these are in the production marketing.

So, they express the market need is there and according to the market need, the customer needs then they develop this research and development as you see that it goes from here to again here and therefore, in that case, this particular journey which is created is going again to the R and D that is a research. So, once you understand the marketing need, once you understand what are the express the market demand is there by the customers market demands are there, again you go by the R and D may be the slim products are required, may be the different designing products are required. We can take

the example of these washing machines also. So, therefore, the simple washing machines then the front load washing machine, then the top load washing machine is there, then the refrigerators we are talking about there is a derefrigeration, then the auto derefrigeration is there and then the size is there. Therefore, actually from where these ideas are coming, these ideas are coming from the market and the market in need when you explore and then they convert into the R and D then you get the results are there.

The third generation model that is a coupling method is there. The second and fourth generation models had a number of limitations which the third generation model tries to overcome. So, Cooper is credited to have come up with the third generation model is there which I would like to explain. Now here, it is a new idea. So, new idea generation is there and this new idea generation comes from where when the needs of the society and markets are there.

So, whenever there is a need for the society and markets, then the new idea is there is generated. Now, this new idea which you are supposed to develop whatever the product idea coming from the demand from the customers are there. So developing prototype or the demand developing is there, then the whatever the idea or business model you develop, you develop the prototype or the demonstration is there and then you get the feedback. So, on basis of this feedback production of process is done and it goes to the market and market and selling is done of that particular product. Now here, this market which is the having the need and demand and then whatever the supply is there on the basis of this idea development, now question arises whether it will be acceptable or not.

So, current technology know how and knowledge which you are using that you go for the new techniques are there and with the new techniques available experts and technology you are going for these developing the prototype at the production processes and the marketing and selling are there. Now the stage acknowledge that customer satisfaction, market trends and the technology are all important in the innovation process. Cooper developed a standardized approach for development of the projects are there. So, the model uses the stage gate approaches in developing and innovation every stage has a purpose which must be completed before moving to the next stage is there. If one stage is reviewed negatively, then the team does not move on to the next stage is there.

So, as a result they continue working on the present stage until it is positively reviewed is there. And according to the third generation model and idea originates from the creativity customer feedback or the basic research is there. So, whenever with the technology push and the market pull and when the customer is getting satisfaction and so that will develop a market trend is there and all important is this that is the this may be coming through the process. Now for every development there is a people process and

the technologies are important are there and the Cooper developed is here that is about a particular process is there. And in this model when the developing these innovations are concerned, now right from these production R&D then production and in the marketing in the every stage that has to be the purposefully done with the achieving to that particular the product.

So, if one stage is reviewed negatively, then the team does not move to the next stage is there. Suppose in the case of the production, if the production has a review that is the no this is not possible this type of the production is not possible what market demands, then in that case it will be very difficult to come out with the innovative idea or innovative product is there. So, until and unless there is a positively review is not there then acceptance is not there then definitely you cannot convert that idea into the product. So, according to the third generation model an idea organization which has been developed by these industries and they did from creativity, customer feedback or the basic research is there. So, your third generation that coupling method and that should lead from the technology push to the market pull to the creativity and the customer satisfaction.

So, because the customer feedback are the basic research that becomes very, very important is there. Fourth generation interactive model is there and that we will talk from the 1990s onwards and here latest science and technology is there. Now, I will also like to remind here that is the why there was a boost in this particular interactive model because it was a time in India where the LPG was there, liberalization, privatization and globalization are there and they are making these technology pushes there. So, these idea converted into the commercial product and then the commercial products that is the needs in society and the marketplace is there which is giving you these advances in the society. So, these ideas giving the R and D manufacturing marketing and commercial product is there.

Once your commercial product is available and then that is fulfilling the need in the society then definitely you are successfully develop an interactive model right from the R and D to the customer satisfaction is there or the market satisfaction is there. So, the fourth generation model are uses and the interactive approach which is different from the linear approach which the previous models use. So, furthermore, the model looks at the innovation process as a set of the parallel activity across the organizational functions are there. Now this fifth generation model, the network model is there. So, these marketing and sales accumulation because ultimately you are developing a product, but the question arises that product should catch the market.

So, marketing and sales are becoming a very, very important aspect. So, these are the actually now why we have changed this new model because the develop the new model

because the societal needs and the competitors are there and to meet the competition it becomes very necessary to satisfy the customer we should come out with the strategic alliances or the strategic new model is there. So, here this accumulation of knowledge is there. Now the external inputs will be that is the competitors, suppliers, distributors and customers. These are the stakeholders which are putting the pressure and therefore, you have to invest the finances there.

Research and development which is the core of function that is creating scientific and the technological developments, suppliers, customers, university and departments. While in the engineering and manufacturing that is the competitor, suppliers, distributor, customers and university departments are there. These fifth generation model, network model is there also known as a network model or a close innovation model is there. The model was developed in the 1990s close innovation models explain the intricacy of the innovation process. Its main focus is the involvement of these external environment besides the model also focuses on effective communication with the external environment.

This innovation relies on both external and internal networks, the model emphasize on the need for establishing the links between the two networks are there. So, when we are talking about the open innovation models, so that is a close innovation and then here we find that is a corporate these limit is there. Now, these internal ideas will be developed and these open innovations, corporate limit and this will becoming a very, very important aspect because whenever we are talking about this market satisfaction and the other side when we are talking about the external collaborators are there and open innovation will start and the external collaborators they will make the alternative market and when there is an alternative market is there. So, all these the open innovation that is becoming the more successful nowadays because you are taking into the consideration the internal ideas, external ideas both while in the case of the close innovation you are taking only the internal idea. And therefore, you are not focusing on the external idea as a result of which the close innovations they are not becoming very successful because many times they are getting the rejected by the external collaborations.

So, here it is important that is the open innovation model that is known as a sixth generation model. The model is a network model focuses on the internal and external ideas are there, external and internal paths to the markets are there. So, open innovation model looks at how a combination of the two concepts that can lead to the technological advancements are there. So, Chesbrough came up with the team open innovation is there. Besides the model presents less risk when innovation companies who use the model enjoy a large pool of ideas to start with then they narrow down to the most ideal idea is there.

So, here whenever we are talking about the open innovation models, because you are considering the combination of the two concepts of the internal and external. So, naturally what you get, you get the technological advancements are there and according to the advancement, you are coming up with the team open innovation is there. So, all people, all employees, they are working together towards to the internal and then the external these ideas are there. And therefore, in that case, when your internal strength matching with the external market, then the model presents less risk when the innovation companies who use this model and therefore, they enjoy a large pool of ideas because the chances of the success is more with them and with the narrow down to the most ideal ideas are there. However, we find that is many ideas they fail and therefore, in that case, the many organizations are not ready to change their old or existing business model because they find it a very risk, high risk is there and whenever there is a high risk, so considering the external ideas.

So, therefore, whether it will be workable or it will not be workable, whenever you are talking about the technology push, then definitely the technology will work or it will not work when you are talking about the market pool. So, it is not that easy to have a market pool. So, therefore, then there are the they feel there is a combination model is there, which is in combining the both technology push and the market pool and come out with the new research and development, but still there are the limitations with this particular innovation is there. So, one is the desirability is there that is the first identify the innovation should not be done for the just for innovation rather than it should be desirable, is it desirable, is it time consuming or the chances of the losing money is there. So, therefore, in that case, if it is the time consuming then definitely we have to see that is what chances of these losing money we are working on with.

So, risk of reputation is there then the wastage of resources and the feasibility is there. So, here we find that they are ready to overcome the limitations of desirability, time consuming because the every innovation that will take time and then in the market whenever you are having that competition, are you reaching at the right time for that particular competition or there is investment of money. So, whenever you are making certain innovations and your product by the time it gets into this acceptance, then you find that is becoming the more and more difficult. So, therefore, you are losing your money then the quality whether you are this particular risk of reputation is challenge and the wastage resources and feasibility is there. So, how to overcome? So, I come finally, with the art of innovation and there is a 10 things to learn from the Guy Kawasaki is there make meaning not money.

So, therefore, innovation is about offering value and changing the world. If you

innovate to bring a difference in people's lives, the money will follow eventually, because you are serving them and then you are into the demand. So, whenever you are making this money in that day there should not be your first agenda. So, therefore, money is the byproduct dear friends. Whenever you are doing the research, whenever you are doing the innovation, when you are coming with the new ideas and that itself is into the demand and then when there is a demand of your research, then definitely people like that particular research and money follows for this research.

So, make a mantra and not the mission. So, check your 50 word mission statement, stick to a 2 to 3 word mantra that represents your aim of the innovation is there, jump to the next curve is there. So, create something new instead of the continuously working on the existing product. So, here we will find that is the whenever we are talking about next curve, then in that case, whether we are continuously working on these existing product or not. So therefore, you have to create something new, roll the dicey. So, great innovation is a deep, intelligent, complete, empowering and the elegant dicey is there.

So, do not worry, be crappy. So, do not wait for the perfection when you innovate. So, you should come out with your product, new product and testing it and finding out and with the period of time you will be reached to the excellence. Then the late 100 flowers blossom, the positioning of your innovation ultimately comes down to the what the consumers decide. So, polarize the people, so who says a great innovation does not have critics. So, do not worry if your innovation does negative attention, worry if people are indifferent about it.

The churn and churn innovation is not an event, but rather that is getting the demotivated and we continue to note down the points why they did not resonate with the clients and they continue to make changes. Niche thyself, even if your product is serving one purpose, it should be unique and valuable, do not let the posers grind you down. So, they are still stuck in their curves and do not appreciate the next curve you are standing it. Now, this is the case study dear friends which you can refer for your further reading a campus of the creativity and in this case of the Philips you will find that is how Philips has utilized the knowledge and then how they have made the different challenges and then as a result of which they have come out with the utilize their the open innovation model and in the campus and as a result of which they could have become the successful and there are the many challenges and but how to overcome those challenges that you can understand with the help of this particular case study. This is a research paper understanding the drivers of the innovation in an organization literature review.

Now you can get an idea from this research paper, but ultimately the drivers of innovation that will be having the internal also and external ideas also. So, please be

careful that is the you are getting the list of these ideas or the names of the number of the factors or drivers which are affecting your innovation, but be careful that is what will be applicable in your organization that you have to decide by yourself. This is another paper developing an entrepreneurial lead three phase model of innovation and here we will find that is the it is becoming a very very successful with the help of these innovations are there you can refer this research paper also. Now, I would also like to recommend this book business model innovation, the organizational dimensions and this book will be giving you the idea that is the how different structures and models that can be developed by the organization to become the successful innovative is there. So, these are the references which you can refer for your further studies and I am sure that you will get it is mantra that is how to be innovative, what are the challenges and how to overcome those challenges. Thank you.