

Public Organization and Management
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Lecture – 60
Innovation in Public Sector Organization - V

Hello, dear learners. Let me continue the discussion on innovation. In this session, I am going to talk about innovation techniques and I am going to build the content from the text of Cohen and colleagues, the effective public manager achieving success in government organizations. So, the broad innovation techniques that I am going to teach are strategic innovation planning, re-engineering, quality management, benchmarking and team management. Let's look into the details of these innovation techniques and tools. Before going ahead, let me tell you, these are not the new techniques.

These are already existing ways of looking at the various processes in the organization. But these are more generic models available which will help the organization to approach the innovation in different ways. That's what is the idea of these techniques. Perhaps these are not the new innovative ways of actually managing but these are the very basic foundation mechanisms with the help of which organization can look forward to innovations.

The first among these is the strategic planning. In this case, we are actually talking about strategic innovation planning. So, idea here is that the organizations, they make use of tools, concepts and processes for shaping what an organization is, what it does and why it does. So, when you understand this particular aspect, the purpose of your existence, you get more clarity on what you are to offer to the wider group of people outside, in this case citizens. So, you know the contribution that you are making and how you should plan the activities further.

The process of strategic planning, it actually works on scanning, it starts with the scanning of one's environment in terms of looking at the outside boundary of the organization, see what is there applicable or happening outside, you start scanning the environment. Discuss the needs with the stakeholders. All the people who are directly or indirectly impacting your activities, you have to discuss the needs with the stakeholders to better understand what the stakeholders want from your organization and what kind of work they want you to take up. After scanning and discussion with the stakeholders, you have to restructure your missions, objectives and process to achieve desired objective. This is basically the initiation of the change process.

You need to look into how you are to bring in changes. And of course, once you restructure missions, objectives and processes, you also have to then come down in the levels of the organizational hierarchy to identify what kind of tasks are required to be done to meet the goals as per the inputs that you have received in the process of scanning and your discussions with the stakeholders. Let us look at the strategic planning case study in Pennsylvania State Department of Transportation. This particular planning first initiated in 1982 with 24 major objectives. And what they have done is they have formed a strategic management committee to do the strategic planning part of this.

Organizational units they developed four-year business plan to achieve the objective so after making kind of scanning of the environment and understanding what they need to do so they have come up with the tasks to meet their goals and they have developed for your business plan to achieve objectives Now, this planning particularly involved 500 managers and employees to flesh out strategic objectives. This understanding requires the involvement of people because you are scanning, you are trying to restructure your missions, you need to build in that kind of capacity that you want to change that. And also, it requires the enthusiastic champions for each objective. So, they have declared owners and leader to each strategic objective. And, the strategic objective of the idea here, the themes include safety, innovation, connectivity, customer service, communication, talent and modern technology.

So, if you look at this thing, you are trying to see that how you have to change, what part of your processes you need to focus on to provide better experience there. This is about the case study of strategic planning. Then comes the re-engineering. Now, re-engineering, if you look at, it is basically the rethinking and radical redesign of business processes to bring about dramatic improvements in performance as cited in Cohen's text. It's a fundamental rethinking.

So, basically we have a process, we have to rethink of the entire value chain of our process and see that how you need to think of it from a scratch in being radical redesign. This is a fundamental rethinking and radical, you are changing the entire process to bring dramatic improvements in the performance. It is different from bringing in the incremental changes in the organization. So, in case of re-engineering, we are talking about largely changing the entire process, so that there are a lot of improvements, dramatic improvements in the performance. And it requires, because it's going to be change, a drastic change in the processes, you require strong commitment from the top level, the CEOs level people.

And also you have to appoint process owners who will look into the various aspects of the process, what kind of the process stages need to be looked into, why process changes are required, why we need to look into the reengineering process and also establish a steering committee who will stare the entire process and will guide and provide the

direction to the process of reengineering. How you will do the process of re-engineering? First of all, you have to map the current process. You have to see that what is in the current process. What is the lacuna? What is the problem? Or have to identify the weakness or the challenge or the problem in this. Because whenever we have to change, there are some inputs with respect to initiation of that kind of a change.

So the problem, weakness, challenge, or improvement have to be made. So in that case, you need to first of all map what is your current process. Identify the steps that add value Eliminate the steps that do not add value because you really want to increase the efficiency of the entire system. So, you have to see that what values addition you have to done, have to do and of course, eliminate the step doesn't make any change. Using a triage mentality, look for the inputs from various systems.

Angles re-engineer first and then bring in automation and new tech look at the process from start to beginning uh you know how you will re-engineer first and then bring in the automation and new technology to revive uh you know to to re-engineer the entire process right so look at the uh you know the re-engineering as a from step to step uh how it will look like and then bring in the automation Let's look at a case study, Integrated Taxpayer Data Management System . So, this system generates 360-degree transaction profile of an individual. Now, this data source, data from the sources like permanent account number, which is PAN, tax deducted as source GDS, annual information returns, etc. Now, this integration of these data sources, it has helped in the identification of the text evaders. Now, you see what they have done is they have tried to re-engineer the process by integrating, by generating the transaction profile of an individual, by integrating and re-engineering the entire process of things and also this integration helped in identifying the text evaders who are not filing the text and maybe having the income.

It also improves government income because you have now put in mechanism in place, you have re-engineered the process. Citizens can consent for sharing their data for credit ratings, loan approvals, etc. So, this has re-engineered because from beginning to scratch, you have changed the process, the way the taxpayer data management is done. Another case study is the India government's e-marketplace, which is called as GEM. It has been re-engineered to improve the transparency and reduce malpractices in the public procurement.

Now, we have also talked about this, that public organizations are embedded in the larger government structures. So, in order to There are rules and regulations and the public organization in order to secure funding, they have to abide by the rules and regulations so that they continue to get that kind of support from the government. So, they have re-engineered the process of procurement for public organization to bring in more transparency and reduce malpractices. Directorate Journal of Supplies and Disposals was converted into e-marketplace, GEM, end-to-end online marketplace for public

procurement. All the public organizations are required to procure through GEM, government e-marketplace over 9.8 lakh crores worth orders placed on government e-marketplace it this portal lists more than 11000 product categories and 3000 service categories so this is the way of bringing in more transparency uh reduce the malpractices and corruption related aspect has actually resulted into more effectiveness and efficiencies of the business operations right then comes the quality management and our quality management is different from the re-engineering when we look at the concept of re-engineering we are actually trying to look at the process from beginning to end and we are changing it you know it's a fundamental rethinking and radical redesign we are changing the entire process on the other hand the quality management aspect is basically coming from the aspect of TQM which is you know total quality management It aims to identify better ways of structuring organizational operations. So, in this what we do is you also do small incremental changes to see that how you can actually increase the effectiveness of the organizational operation. maybe in in case of public sector it promoted the idea of treating citizens as customer if you look at we have also discussed about the doctrine of NPM and we have seen that more managerialization of the activities treating your citizens and customers to enhance their experience and so and so forth. what is the process you have to understand the work processes that you are following in order to get outcomes Involve workers and analyze and suggest improvements to work. Communicate with customers and suppliers to get that input that how they want to get more from the organization in terms of how the organization can improve the functioning.

Continuous improvement, continuous modification you have to do. communication with various stakeholders. It can be your internal employees, outside people and quality management must be the way of life because it is to do with the continuous improvement that you need to do in your organization. You cannot do it for time and then can forget about it. It has to go on an ongoing basis. It's a never-ending process. Let's look at the case study, New York City 311 customer service platform, which consolidated more than 40 separate city call center number into one. So what we have done is you have tried to look at the process and can streamline it under the quality management thing. So multiple separate call center lines were mapped into one. The introduction of the state of art interactive voice response system using natural language understanding technology.

Earlier, citizens were having limited number of options based on touch tone. Customer can now speak to IVR and it determines the intent based on the intent the system either provides information or transfer the call. So, if your problems get solved there, otherwise it can be solved by transferring the call to the executive. It focused on top 200 call types to capture majority of customer intents. leverage analytics to anticipate situational spikes in incoming calls. So, there is a lot of data which they are using to make decisions or making use of analytics to anticipate what is happening there. The instance here is like

for example, there are certain kind of emergencies which need immediate response from the organizations, public sector organizations or there are the issues which do not need immediate requirement. For example, if it's a medical emergency, of course, it's the emergency that you have to take care of. But if it is a case of the other things, for example, the state of the roads or some problem with the post service delivery. So these are the solutions, problems which can actually, you can provide solution in some time.

But there are emergency response which require immediate response. So, for immediate medical emergency or things like that, of course, 911 is there. But for other these kind of problem, a separate line was set up to take care of the issues like that so that the burden is reduced in terms of segregating the calls in terms of emergency and not so emergency events and requirements. Other is benchmarking. Benchmarking as a strategy of the innovation or tool for innovation is about finding, adapting and implementing best practices to improve services, operation and reduce the overall cost.

So when you benchmark, what you have to see is what function you want to benchmark. Identify key cost, quality and efficiency measure that on what basis you will get it. Conduct an expert opinion survey and literature review to find best in class organization for that particular process that you want to change or the function that you want to change. So, for example, you want to look at the procurement function or let's say you want to look at the assembly line in the automotive sector. So, you look at this is the function that you want to revive or to change and you are looking at the best possible models available in the best in the class organizations.

And you also measure best in class performance of organization in the key areas which you have identified. Compare your organization performance against that of the best in class and quantify the gap. If you really see that following that benchmark is going to be very good for your organization, you adapt that particular benchmark and apply in your organization. Specify action to close the gap and if possible, leapfrog the industry leader. Learn from the others who have done that in way of the better processes. Implement actions and monitor the performance. Now, look at the case study of benchmarking. This is the case study of best value by government of UK. The earlier method of procurement is competitive compulsory tendering, CCT. This particular best value was introduced by Labour government.

It actually improved the local governance in terms of cost and quality. Its emphasis is on continuous improvement. So you look at one process you want to change and then you have focused on this best value as a benchmark practice that you are following. The idea is how you can secure more economic, efficient and effective services through the way of best value. Focus on these four C's on challenge, consult, compare and compete.

Audit commission carries out regular inspection of the council. Each council is given a star rating based on the performance. So, this is how you are trying to look at the benchmarking practices and try to implement it in order to increase the both efficient and effectiveness of the services. Then is the team management as the innovation tool. We have also talked about it in case of the creation of the ecosystem within the organization where you are trying to create a culture for people in the organizations coming together from diverse experience and fields and start thinking about the solutions.

So what are teams? Teams are the small number of people with complementary skills. You can always leverage the strength of each other and they are coming with the complementary skills because they have commitment towards the common purpose. There are performance goals and approach for which they hold themselves mutually accountable. So in teams there is no individual accountability when teams are working there always accountability is mutual right. Please look at this very wonderful you know the book on the wisdom of teams creating the high performance organization by Katzenbach and Smith it has given lot of interesting case studies to understand the concept of teams in the organization.

What kind of teams can there be? Standing teams that deals with the issue that resurface seasonally, it's not everyday basis. Project teams deal with specific project for a shorter duration. Crisis team deals with the organizational crisis. Teams perform well because of complementary skill that exceed capacity of single individual. So, basically what we are doing is we are trying to leverage the strengths of each other in order to produce better outcomes. Your skills are complementing each other. So one's strength is used by another and it adds to lot of synergy. So teams always have lot of synergy. So the outcomes of the group are always more than the individual outcomes. Management should be serious about teamwork. So, if you really want people to take teamwork seriously, you have to put in place the systems of performance evaluation and compensation system in such a way that the teamwork is rewarded and valued.

There is a clear communication and coordination in the team and is utmost necessary. Revise and revisit the job descriptions, promotions, career ladders and evaluation systems if you really want the teams to be much more effective. Conduct training and provide ongoing access to resources. Because when teams come together, they will have to provide resources so that they can actually function, their functions and activities become smooth and they don't have any hurdles and they are not trapped into unnecessary delays in decision making and so on and so forth. Make teamwork a critical component of organizational objectives.

You have to create a culture in which you have to ensure that the people understand that without working in teams, there is no survival and their outcomes are going to be dependent upon the functioning in the teams. Let's look at some of the modern tools for

innovation. For example, data analytics, early intervention and prevention of use in public health, roads, buildings, etc. This data can help you in actually prevention, a proactive decision that you can take. Faster and better decision making by using dashboards because that information is readily available.

Resource targeting and personalization of services because you understand the people's need with the help of the data that you are collecting right for example uh how the policies are implemented we have talked about this thing right data.gov.in ndap.neti.gov.in india stack digital public infrastructure so a lot of data is being collected so data analytics can also help you to providing more personalized service to citizens then prototyping, I've talked about the example of collaboration between academia, industry and the public organizations to coming up with the better solutions, products and services and then can be going for prototyping and testing. Experimentation with the smaller group as a part of trial and before you scale up for the innovation 100 days challenges with cross-organizational teams involving frontline professionals. So, you do this kind of work in the organizations to create the ecosystem so that the innovation prevails. Another testbeds, for example, Government of India 5G testbed is now available to industry, academia, research institution and government bodies for various R&D, product development and capacity building activities. Look into these various models like these to get your own understanding of the processes much more better.

Innovation labs, for example, under Atal Innovation Mission, many innovation labs are started at various levels which are experimenting with the new ways of working and the experimentation with the new products, taking into consideration the problems faced by immediate problem faced by the public organizations, government, society. You have to also look into the funding systems, explore alternative fund like stage-gated funds, impact bonds, golden shares, etc. Also, collaboration is the key. Impact partnership with private sector, civil society and social innovators are going to be the key features as we go ahead with the discussions on innovation and focus on the implementation of innovation in the organization. There is also requirement of integrating and using techniques for public management innovation.

Setting this strategy right is the first and foremost thing to do. See thing is, which particular tool the public organization is going to use in terms of managing innovation. So, sometime you need to have the kind of integration. For example, re-engineering works well only with strong leadership and extensive resources. Integrating quality management into routine operations will make organization better prepared for re-engineering.

So, we say that we do these gradual incremental changes in terms of quality management, so the organization become better prepared for doing the re-engineering as the innovation tools for the public organizations. Quality management must involve employees from all

the levels because everybody has to come forward with their ideas, what process they want to change, what kind of things they want to bring in, in order to streamline the processes further. Benchmarks should be part of any innovation in the organizations. You learn from the best, the models and how they have worked really well. team management breeds shared thinking and achieved shared objectives this is what we have seen in terms of complementary skills and you know leveraging strengths for creation of synergy In terms of integrating and using techniques in public management innovation, contracting and public partnership models works only if strategy is clear.

Core functions should ideally rest with the organization and you contract out the services there. For example, Indian Railways established IRCTC as PSU for ticketing and catering purposes. Most security and housekeeping staff are run by the third party agency. So you look at some of the public partnership model again here.

You negotiate a long-term contract to run a public service. Contract for subset of services, for example, waste disposal, one part of contracting out. You look into the public-private partnership. So, look at some of the examples. Hyderabad Metro Rail as public-private partnership with L&T on design, build, finance, operate, transfer model. Passport Seva Kinders as public-private partnership between TCS on building, operate on the transport framework and others.

Successful adoption of innovation strategies. Implementing innovation in public sector is not easy because there are a lot of stakeholders involved. As soon as there are going to be changes in the public sector organization, there will be resistance from the various stakeholders. So when you want to push the organization innovation in public sector organizations, you have to be better prepared for the rational justification because see public money is to be used. The resources are scarce and more public scrutiny is there. So for that you need much more support from the government in order to do that.

Leaders need key team members who act as change agents or we can also talk about them in terms of change champions. Vision should be clearly communicated about the innovation. People should have that common thread there that how their contributions are going to be linked to the better outcomes. Innovation should appear feasible and has clear organizational benefits and also roadmap for sustaining innovation is essential. People should clearly see that what is they are contributing to, how they are going to go ahead with this innovation strategy.

Let us look at some of the case studies of India in terms of the successful case studies for public innovation. First is Electronic National Agriculture Markets – The Way Forward. The background, this particular case I have taken from the article mentioned here, Electronic National Agriculture Markets – The Way Forward published in Current Science by author Reddy. Agriculture markets in India are traditionally operated under

APMC which regulate trade and aim to prevent exploitation of farmers. However, they became inefficient and led to cartelization among the traders.

Now, eNAM was launched in 2006 by Government of India. It integrate physical APMC market into unified electronic platform for trading. So, by 2024, so this is again the kind of process change in the way of functioning of the organization. In 2024, eNAM connected 1,389 Mandis across 27 states and Union territories. Currently, it is benefiting 1.77 crore registered farmers and 2.5 lakh traders. The features are, it facilitates online trading, eliminates collusion among the traders, and ensures fair prices for farmers by enabling transparent e-auctions. It also provides single-point levies and interstate-trade licenses and encourage the use of warehouse receipts to reduce logistic cost, ensuring efficiency and inclusivity. Also employs electronic auctions, real-time payment systems and quality verification via third-party assaying. See, idea here is, you know, apart from I am dictating to you what they have done, it is good that you go to this particular paper and try to see how these changes were put in place and for the better outcomes.

So, this particular E-NAM, Electronic National Agriculture Market, is an innovative public sector initiative which has been designed to integrate fragmented agriculture market across India to a unified digital trading platform. Now, how this technological transformation has happened? It employs IT-based solutions to automate processes like price, payments and quality insurance. So, you see that use of technology in automation in terms of you can say also quality management or re-engineering the entire process. Farmers can access real-time market prices and participate in national marketplace. What is the policy impact? This particular has an impact in terms of modernizing agriculture marketing, reduce inefficiency and empowering farmers economically, encourage private investment in agri-infrastructure by enabling fair and open competition.

So, this is the case study we have talked about in terms of India as far as process change is concerned in terms of re-engineering. Let us look at another case study, Electricity Demand Projections to Minimize Procurement Costs. This particularly is the case study which is about Andhra Pradesh State Load Dispatch Center. What is the background of this particular case? I have taken it from the Capacity Building Commission, Innovation in Public Administration and the report retreat from here. If you want to have access to this, please download this paper and get more understanding.

Numerous factor influence the demand for electricity making manual forecasting methods ineffective in anticipating demand shift in the demand. So, what happen is in this case you see that what function or process needs further refinement. You see that this method become ineffective. So, there is an input in terms of looking at for a change in the process right. So, an artificial intelligence-based algorithm was developed by APCLDC to precisely predict the demand of power. Now, instead of needing to buy power at higher

prices in real-time market, they can plan for demand spikes by buying it at lower prices in the day-ahead market. So, there is a process being followed in terms of understanding, depending upon the demand spike, how they can buy it at a lower price in the day ahead of the market. Now, solution framework, the Andhra Pradesh State Development Planning Society, real-time governance state center and other sources provide weather data, which is then fed into the model to predict daily electricity consumption. So, this AI model is developed using neural networks and machine learning techniques. So, you see how technology is trying to help reviving or having a re-look at, re-engineering the processes, how it is being taken care of traditionally.

Now, what is the impact? The impact is the accuracy of this model is around 97% to 98% in terms of the prediction. Because of this energy forecasting methodology, moreover 3 crore DISCOM customers in Andhra Pradesh now have access to consistent dependable electricity. Since the need for electricity is predicted daily, any surplus or deficiency is computed appropriately and the necessary electricity is brought at day ahead at prices from IEX/PXIL power exchanges. Over the past two years, more than 985 crores have been saved by buying power at DEM rates as opposed to RTM rates. So, you see that these are the examples of the case studies where the tools like re-engineering, having a re-look at the processes, building in quality management, looking at the various ways in which you can increase the efficiency of the processes is going to give you a lot of insights on understanding the processes in the public sector organization.

So with this, I'm going to close this course because this is the final module in this course. I believe and I hope that you have learned immensely from this particular course, especially the kind of readings that I have shared with all of you. During the entire course with different modules, different kind of texts and journal papers have been shared with all of you. I have hoped that you all learners have gained advantage of the system and have enhanced understanding of the various concepts in the public organization and management.

I wish you all the best wishes. Good luck with your future endeavors and take care. and be happy, keep learning and keep shining. Thank you.