



**First Foundation Course
for
Probationers of Military Engineer Services**

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Presentation on

“Innovations in Governance – A Roadmap”

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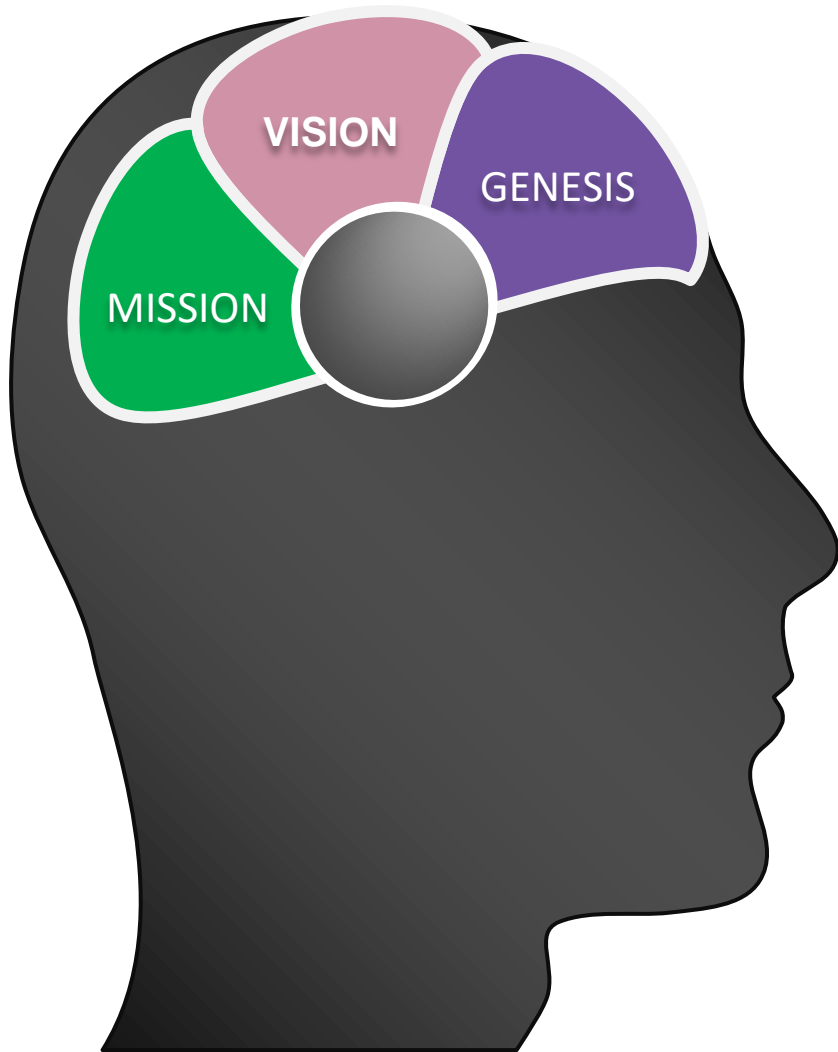
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Centre for Innovations in Public Systems (CIPS)

GENESIS, VISION & MISSION




- Recommended by the 13th Finance Commission
- Established in May 2010, Located at ASCI, Hyderabad
- To be a catalyst for transformation of governance in public systems
- Nurture an eco-system and develop a culture of innovation in public systems



Definition of Innovations in Public Systems


Innovations in public systems can be defined as implementation of new or significantly improved products, services or ways of doing things, either within the structure of the public sector itself or in the way in which public services are provided.





Understanding Innovations in Public Systems

An innovation in public systems can be defined as a process/policy intervention that:

- **Improves** the public service delivery
 - **Enhances** the efficiency of governance structure, i.e. simplifying procedures etc.
 - **Improves** citizen satisfaction
 - **Promotes** transparency and accountability
 - **Reduces** the time taken for service delivery
 - **Leverages** the use of technology
- 

Types of Innovations in Governance

Service Innovations

- Introduction of a new service product or improvement in the quality of an existing service product (Ex. *Bharat Interface for Money Mobile Application*)

Service Delivery Innovations

- New/improved ways of delivering specific public services to the citizens - Improving Accessibility, Targeting user needs more accurately, Bringing in simplification of procedures etc. (Ex. *Common Service Centres*)

Administrative/ Organizational Innovations

- Changes in the vertical and horizontal structures and routines (Ex. *Electronic National Agriculture Market (Ex. e-NAM)*)

Conceptual Innovations

- Development of new views that challenge assumption underlying in existing service products, processes etc. (Ex. *Biodiversity, Bioresources, Access and Benefit Sharing Mechanism*)

Systemic Innovations

- New or improved ways of interacting - Engaging users in service design (Ex. *India Innovation Growth Programme*)


Policy Innovations

- Changes to the thought or behavioural intentions associated with a policy belief system (Ex. *National Policy on Biofuels (2018)*)



INDIAN VERSION OF INNOVATION

Innovation is a western word. In spoken Indian languages, there is no equivalent. The act of innovating is referred to as **Jugaad**, meaning an adaptation or practical solution. Although Jugaad sometimes has mildly pejorative overtones, it is used by crores of Indian entrepreneurs to create effective solutions to pressing socio-economic issues.






AFFORDABLE INNOVATIONS


Innovation is critical for India not only for growth and competitive advantage but also to ensure that our future development is sustainable and inclusive.

Innovating frugal, homespun and simple solutions to the myriad problems that beset everyday life in India – is a challenge. There are unmet needs in critical areas like health, education, agriculture, energy, environment and skills.





KEY WORDS/CONCEPTS

- Governance
 - Innovations
 - Change – a constant in society
- 



The most terrifying words in the English language are --
I am from the Government and I am here to help

- *Ronald Reagan*





DEFINITION OF GOVERNANCE

-- There is no single definition of governance --

Definition of Governance by World Bank - Traditions and the institutions by which authority in a country is exercised, including:

- The process by which governments are selected, monitored and replaced.
- The capacity of the government to effectively formulate and implement sound policies.
- The respect of citizens and the state for the institutions that govern economic and social interactions among them.

Source: K. Daniel, K. Aart et al. (2010), "The Worldwide Governance Indicators: Methodological and Analytical Issues", World Bank Group





WORLDWIDE GOVERNANCE INDICATORS (WGI)

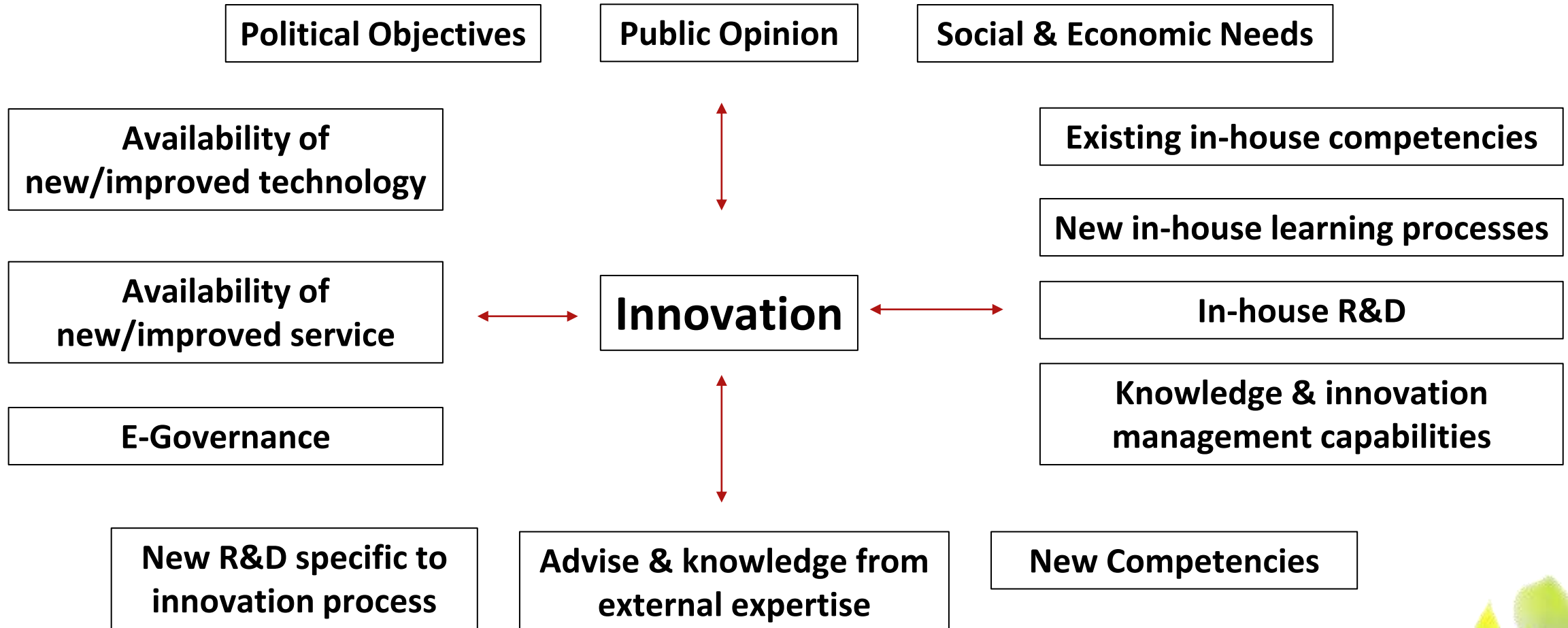
The WGI measures governance in six dimensions:

1. Voice and Accountability
2. Political stability and absence of violence/terrorism
3. Government Effectiveness
4. Regulatory Quality
5. Rule of Law
6. Control of Corruption

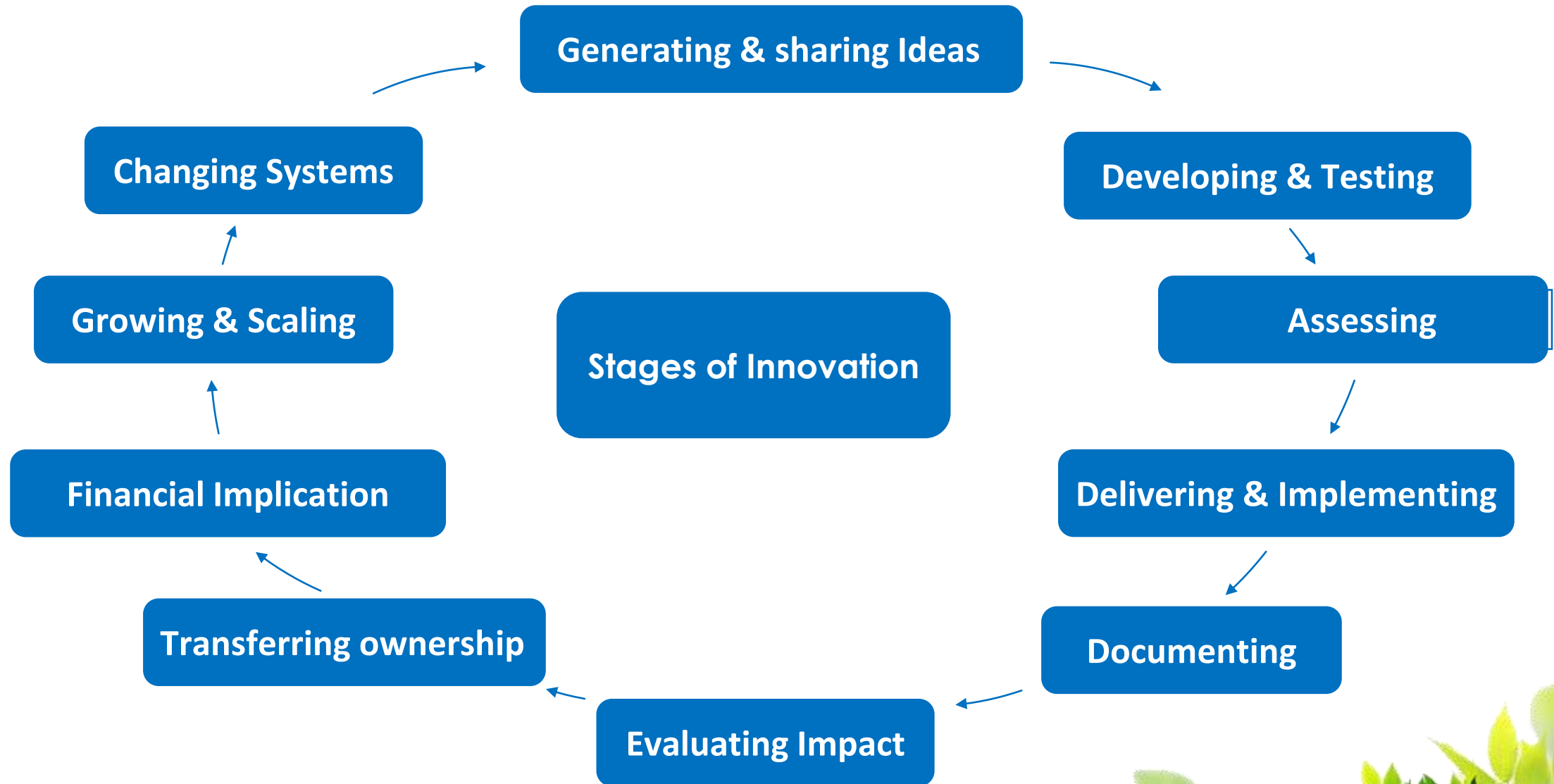
The perceptions are captured on the above six dimensions of governance.



FACTORS LEADING TO INNOVATION & GOOD GOVERNANCE




STAGES OF INNOVATIONS IN GOVERNANCE





TRANSFORMATION OF GOVERNANCE

Nowadays academics, scholars are unanimous in the notion that a good governance plays a paramount role in the transformation of predatory state to developmental state.





ROLE OF INNOVATIONS IN GOVERNANCE

**Encourages
open &
participatory
culture**

**Creates an
opportunity
for a series of
innovations**

**Responds
constantly to
the needs of
citizens**

**Promotes
transparency
in decision
making**

**Promotes
professionalism
&
accountability**

**Reduces the
cost &
enhances the
speed of
service
delivery**





PROMOTING INNOVATIONS – A CHALLENGE


We do not see things as they are –

We see things as we are -





UNDERSTANDING OPPORTUNITIES & PROBLEMS

- Innovation often begins with a prompt or trigger which makes it either possible or necessary
 - Innovations can be prompted by many things – including problems, failures and complaints
 - The best way to prompt ourselves - is by tuning to new trends, customer demands, data, technologies & the innovations that are happening elsewhere
 - Emphasizing on better understanding how people live their lives, and how services are really delivered and used, to help improve them
 - Find new insights into what people really need, so as to end up with a clearly defined problem
- 

IDENTIFYING PARAMETERS – EXTENSIVE DESK RESEARCH



Joint/Collaborative Activities



Public-Private Interactions



Co-patents & Co-publications




Technology Diffusion



Mobility of Human Resources



ASSESSING THE EFFICACY OF INNOVATION – CIPS WAY

- Summary of the Project
 - Objective(s)
 - Name of the implementing Agencies
 - Year of Implementation
 - Place/Area of Operation
 - Methodology
 - Beneficiaries/Target Group
 - Status Before Implementation
 - Status After Implementation (Cost Reduction, Corruption Reduction, Service Improvement)
 - Resource Requirements (Physical Infrastructure, Human Resource, Technology/IT, Approximate Cost of Implementation)
 - Performance Indicators
 - Project Champions
 - Awards/Nominations
 - Reasons for Replication
 - Sources/Reference Links
- 

DOCUMENTING INNOVATIONS



**Concepts of
Innovation**



**Skills & Tools
Involved**



**Learning
based
Monitoring &
Evaluation
System**



**Processes &
Linkages for
scaling up**



**Change in
Practices**



**Use of new
knowledge/
new use of
existing
knowledge**



LIMITATIONS & OPPORTUNITIES



- Stakeholders and their interests and views may evolve over time
- Issues and/or actors may change over time
- Transfer of ownership may come to a halt after a certain point of time
- Suggest strategies for overcoming present challenges
- Address conflicting interests
- Bring in a flexible, context-specific paradigm that helps focus attention on specific problems, actors and opportunities for change




PROPOSED ACTION PLAN

Sl. No	Actions	Outcome
1.	Awareness campaigns	They would serve as forums for citizens to bring to the table issues of contemporary interest and current concern, thereby promoting need- based innovation
2.	Innovation Officers	The Cadre could identify innovations at the departmental level, promote and help their peers in experimentation and in developing prototypes of products and systems.
3.	Innovation Weekend	This could be organized through quarterly meet at district level to discover, explore, discuss, learn and pitch innovative ideas
4.	Every Department could dedicate space in their respective websites to document and disseminate innovations undertaken by its officials and employees.	This space could be updated on a regular basis, reflecting dynamic data.
5.	A suite of Massive Open Online Courses (MOOCs) on the virtuous cycle of Ideation to Innovation (covering the subject in all its dimensions)	Inclusion of MOOCs in the training curricula of the ATIs could address the knowledge needs of the officers and other aspirants at different levels




REPLICATION OF INNOVATIONS - KEY FACTORS

- Identifying critical factors in making an innovation sustainable
 - Identifying end-users, stakeholders and parties directly or indirectly affected by the introduction of innovation
 - Performing a stakeholder analysis
 - Tools used to make an innovation accepted by end-users and stakeholders
 - Involving different stakeholders in the innovation process
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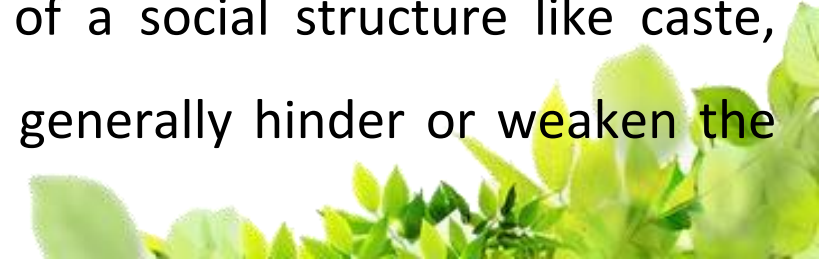


BARRIERS TO CHANGE – CULTURAL

- **Values and Attitudes:** Values and attitudes comprise six major types of barriers, - Tradition, Fatalism, Ethnocentrism, Pride and dignity, Norms of modesty and Relative values.
 - **Culture Structure:** Logical incompatibility between systems like Autocracy and Democracy or Monotheism and Polytheism that may affect the fate of innovation adversely.
 - **Motor Patterns:** Motor patterns and customary body positioning are culture-specific. This aspect makes it difficult for innovation to diffuse.
 - **Superstitions:** Superstitions are a huge blockade on the path of innovation. Due to the absence of education, following blind beliefs, etc., innovation is strongly opposed which needs corrective measures.
- 




BARRIERS TO CHANGE - SOCIAL

- **Group Solidarity:** Group solidarity is an essential characteristic of peasant and folk societies. This solidarity is attached with reciprocity and shared values and customs. When innovation is introduced into such a society, there is a general tendency of opposition at least in the initial stage.
 - **Conflict:** There exists some tension along with group solidarity in peasant and folk societies. There is some element of suspicion among groups, and this may act as a barrier to the adoption of an innovation.
 - **Locus of Authority:** Locus of authority does not always lie with the same person in all societies which is culture-specific and sometimes family-specific. This makes the diffusion of innovation much more difficult to occur.
 - **Characteristics of Social Structure:** Certain aspects that are part of a social structure like caste, gender, etc. make the diffusion of new ideas more complex. They generally hinder or weaken the diffusion of innovation.
- 



BARRIERS TO CHANGE - ECONOMIC

- **Lack of Economic Strength:** Rural innovators generally lack financial resources to publicise or exhibit their innovations, and they often lie suppressed and forgotten.
 - **Risk in Replication:** There is generally a risk in replication of innovations in a new place. It is found that risk management is a skilled job which innovators at the grassroots level are not suitably equipped with.
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LINKAGES

Administrative Training Institutes

NGOs /Not For Profit Organisations

Research Institutions

Autonomous Organisations (PSUs etc.)

Incubation Centres

FICCI/CII etc.

Corporates

Centre for Innovations/Entrepreneurship in IITs/IIMs/Universities/Central Institutes

WORKSHOPS AND FIELD VISITS

Capacity Building Training of the relevant stakeholders

Sensitization of the implementation team

Strong network of innovators, govt. training institutions and govt. departments

FIXING TIMELINES



- List key past events with dates in the evolution of an innovation
- Ask Key Questions – which actor made key important decisions at what time in the past
 - Who?
 - What decision?
 - When?
 - Where?
- Establish causal-effect relationship
- Figure with a sequenced bar chart of actions over time



Good ideas are the backbone of Good Governance


- Brian Schweitzer





CHALLENGES FACED IN GOVERNANCE

There are a few challenges that every society, especially developing economies like India face towards accomplishing good governance:

- **Weak Institutions** – institutions governing property rights, formal contracts, guarantees and enforcement rules are weak
 - **Lack of Participation and Democratisation** – the efficacy of community in terms of utilization of local resources
 - **Lack of Social Capital** – Social capital is viewed as emerging from the collection of norms, belief, attitudes and practices that govern relationship between individuals and groups in a society.
 - **Corruption** – Corruption and favoritism surround bureaucratic allocations of investment licenses, import licences and the award of government contracts.
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FIRST INDUSTRIAL REVOLUTION (1750 – 1840)

The Industrial Revolution was the transition to new manufacturing processes in the period from about 1750 to sometime between 1820 and 1840

This transition included:

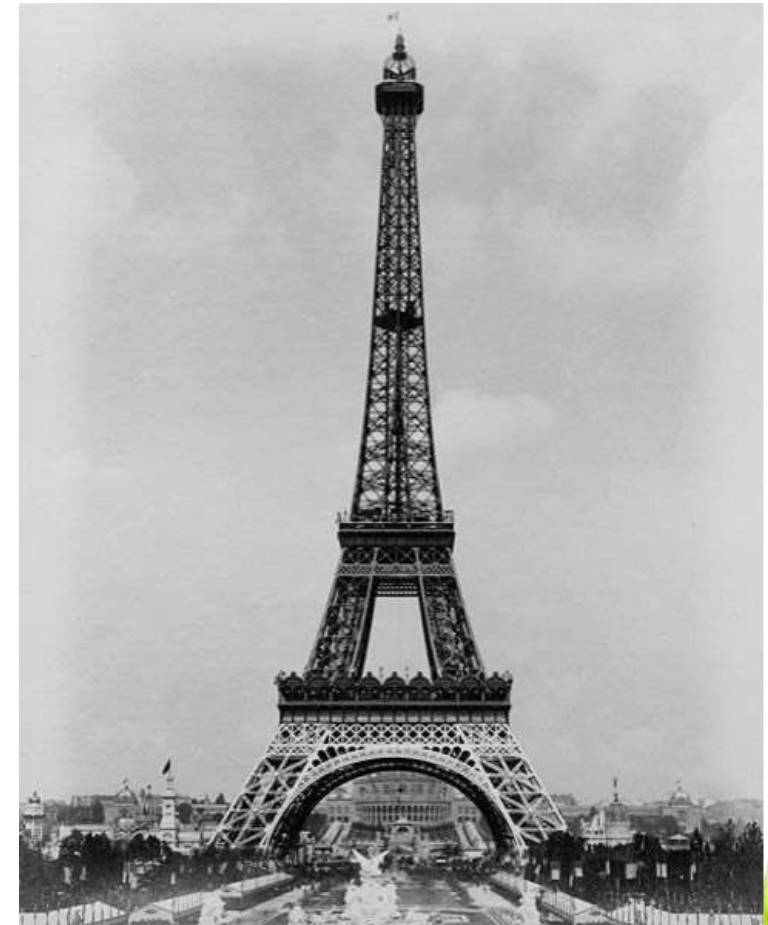
- going from hand production methods to machines,
- improved efficiency of water power.
- new industrial manufacturing and iron production processes.



SECOND INDUSTRIAL REVOLUTION (1850 – 1914)

Changes and new technologies:

- If the energy in the first industrial revolution was coal in the second industrial revolution it was **petrol and then electricity**.
- The years of the second industrial revolution are characterized by a mix of science and industry.
- The symbol of the second industrial revolution is **steel**.



THE ASSEMBLY LINE

- They would hire many people to each do one part of a job in a line, this way made making cars much easier than usual. In the assembly line, one person would do a specific task, while others did a different one.
- Using this method **Henry Ford** produced the first car with the assembly line, The Model T



The Ford Model T



Model T assembly line

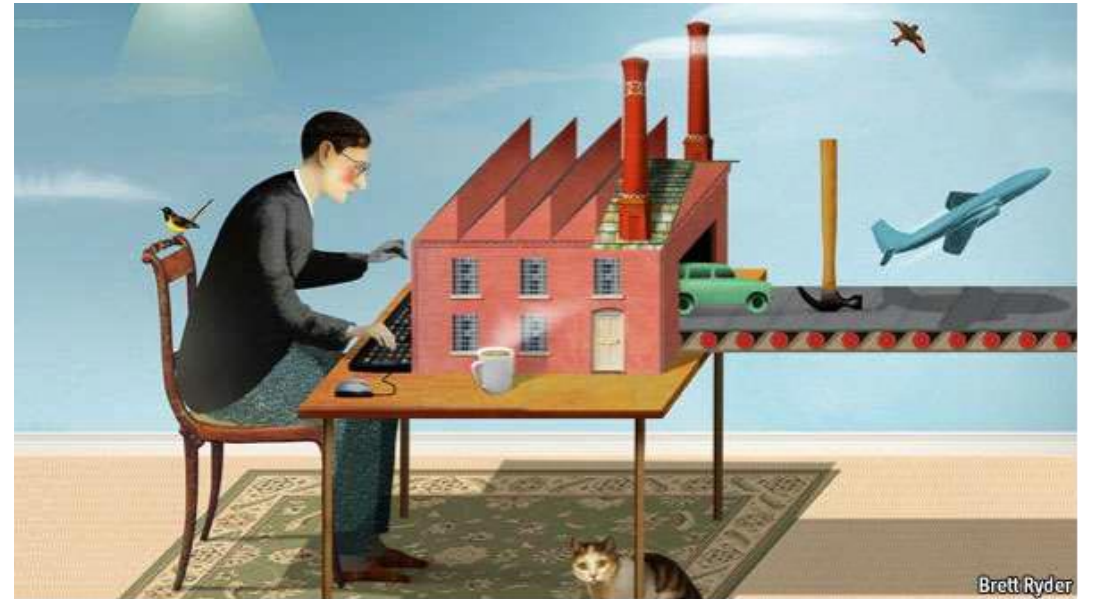
SOCIAL IMPACT

The industrial revolution in the long run, however, allowed to raise the welfare conditions of an increasingly large percentage of the population, leading by the end of the nineteenth century to a general improvement in health conditions.



THIRD INDUSTRIAL REVOLUTION (1915 ONWARDS)

- New technologies, such as the Internet, and the renewable energies changed the history.
- In the 20th century began the Third Industrial Revolution. Products are produced in a new way, using **computers and new machines.**



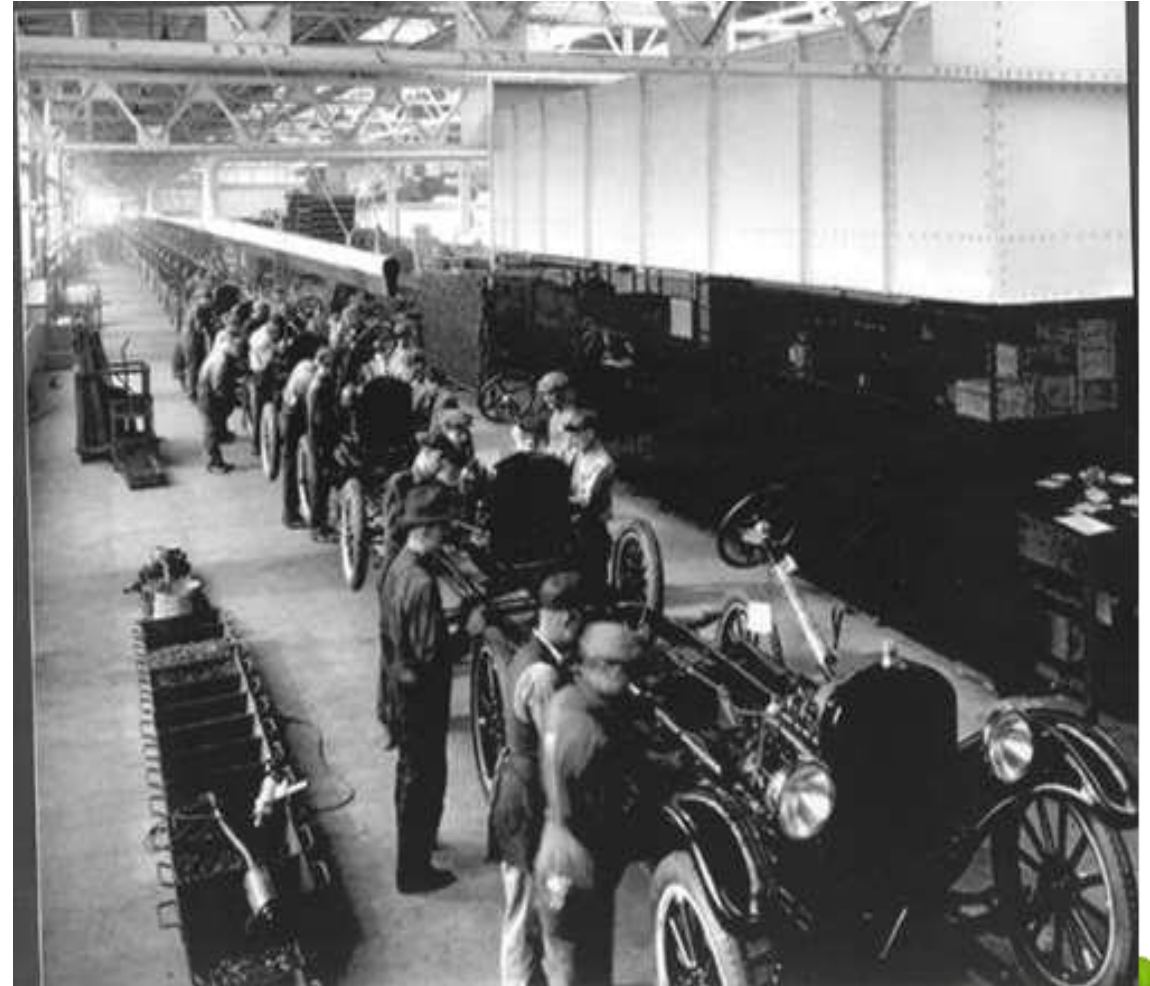
OUTSOURCING

- Trade began to be easier with new innovations, companies started to produce in foreign countries
- A new process started in this century, which is now called "globalisation"



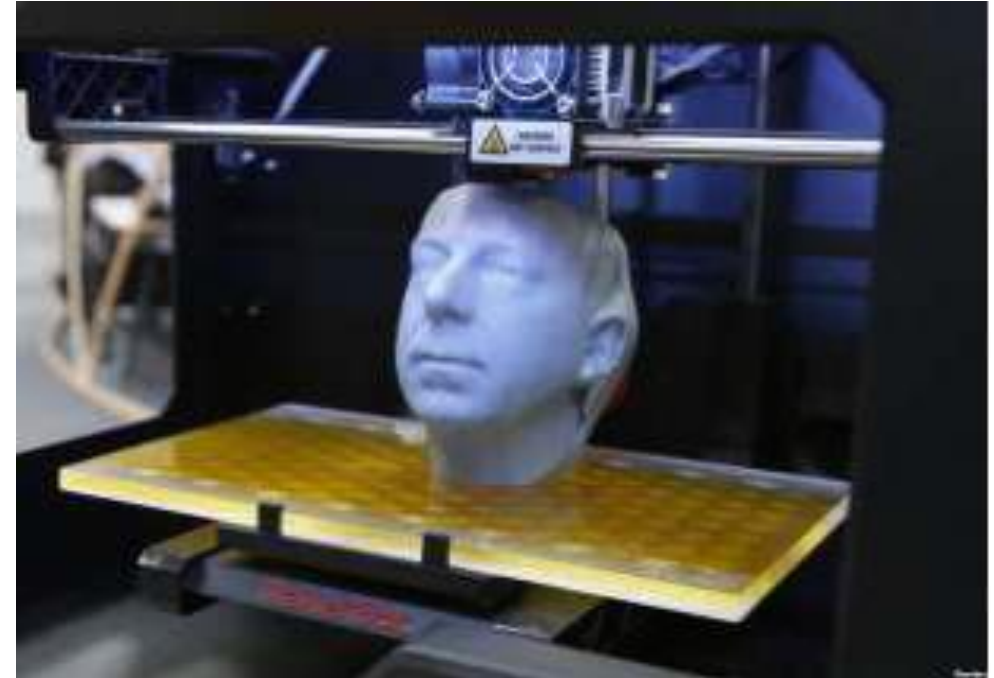
GLOBALISATION & MULTINATIONAL COMPANIES

By this process the world is becoming interconnected as a result of increased trade and cultural exchange. It has increased the production of goods and services and the biggest companies now are called multinational corporations.



FOURTH INDUSTRIAL REVOLUTION (CURRENTLY)

- The industry of today and tomorrow aim to connect all production means to enable their interaction in real time.
- **Factories 4.0** make communication among the different players and connected objects in a production line possible thanks to technology such as **Cloud, Big Data Analytics, Industrial Internet of Things & Artificial Intelligence.**



3D Printing



Good Governance?

Three articles of civil service – as perceived by public -

1. It takes longer to do things quickly
2. It is more expensive to do them cheaply
3. It is more democratic to do them in secret

- Sir Humphrey Appleby





ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT – WHY?

The single most exciting thing that one encounters in government is competence, because – it is so rare


([Daniel Patrick Moynihan](#), an American politician, sociologist, diplomat and United States Ambassador to India in 1973)





ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT


Take responsibility for your growth

- Responsibility for your professional development lies squarely on your shoulders.
 - Keep meeting with your co-workers to know where your organization is heading
 - Have learning experiences continuously – meeting professionals attending workshops etc.
 - Give yourself a performance review – reflect on your growth and performance and be honest to yourself about your strengths and weaknesses and what you should focus on in coming months and years
- 



ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT


Increase your desire to learn

- Don't let your ego get in the way of your desire to learn
 - Successful leaders keep their minds open to new things because they know that no matter how high their level of mastery there is always more to discover.
 - When facing challenges, adopt a learners approach - ask questions or find new ways to solve the problem.
- 



ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT


Work on your back-hand

- It is common that we use our strengths more often for example: you'll use forehand stroke if you're strong at it
 - Turning weaknesses into strengths will give you a competitive edge and make you a more effective leader.
 - There is no better way to impress than to reveal a killer back-hand stroke when everyone is expecting your forehand
- 



ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT


Be open to criticism

- Constructive criticism is essential for creativity, innovation and problem solving.
 - Since, leadership requires all above three traits leaders need to be sure not only that they are open to criticism, but they actively seek it out.
 - Critique can be useful approach to test ideas and keep people and teams accountable.
- 



ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT


Listen Better

- Good listening is not just about making the speaker feel respected and heard, it is also about making sure that you understand what is truly said.
 - Three tips for better listening:
 - **Think** – engage in the conversation by thinking ahead and anticipating what the speaker is going to say. Don't just hear the words but try to anticipate the conclusions.
 - **Review** – Pause briefly and mentally summarize the points
 - **Listen** – Watch non-verbal cues that could indicate what the speaker is not saying. What is not said is often as important as what is said.
- 



ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT


Trusting your decision making skills

- Your knowledge is power but too much knowledge can take away your power.
 - Sometimes gathering huge information and conducting in-depth analysis to find perfect answers may lead to analysis-paralysis.
 - Use your educated guesses to find answers based on the new information collected and your past experiences and insight.
- 



ENHANCING THE SKILLS FOR EFFECTIVE MANAGEMENT

Become an inspirational leader

- Leaders should develop vision, acquire energy, exercise authority and possess a natural strategic ability.
 - Besides, one needs to have the following four qualities to capture the hearts, minds and spirits of people working with you -
 - **Humanness** – build collaboration and solidarity by humane approach
 - **Intuition** – to be most effective you need to know what's going on without others spelling it out for you.
 - **Empathy** – care deeply about your employees but accept nothing less than their very best.
 - **Uniqueness** – demonstrate - you're a singular leader by showing your unique qualities to those around you.
- 

ADOPTING INNOVATIONS

Sun roasted

HINDU: 12 March 2019.




Reach of technology: A solar panel being used to run a fan to roast corn over charcoal in front of the Vidhan Soudha in Bengaluru on Monday. #SAMPATH KUMAR G.P.



REPLICATION OF INNOVATIONS - EXAMPLES

Use of Plastic Waste in Road Construction

Disposal of plastic waste is a serious concern in India and one technological approach developed by Prof. Rajagopalan Vasudevan found to be very useful in utilising plastic waste on a large scale. The salient feature of the whole process of constructing plastic roads is simple, easy, does not require any new machinery and industrial involvement. The utilisation of plastic waste to improve the properties of the bituminous mix offers a very promising alternative with its bulk and eco-friendly usage. The plastic roads ensure enhanced load carrying strength, water resistance, less maintenance cost and reduction of bitumen consumption.



FLOW CHART OF PLASTIC TAR ROAD MAKING PROCESS



**Cleaning of
plastic
waste**



**Shredding
of Plastics**



**Mini Hot
Mix Plant**



**Transfer of
agg to
Puddler**



**Road
Laying**



**Aggregate
Plastic
Bitumen mix**



**Addition of
Bitumen**



**Addition of
Plastics**






REPLICATION OF INNOVATIONS - EXAMPLES

Clay Fridge

The Clay Fridge developed by Mr. Prajapathi called “**Mitti Cool**” has become a hit specially in rural areas. A technology which has rural origins based on traditional knowledge and now been scaled up (Example of frugal innovation).

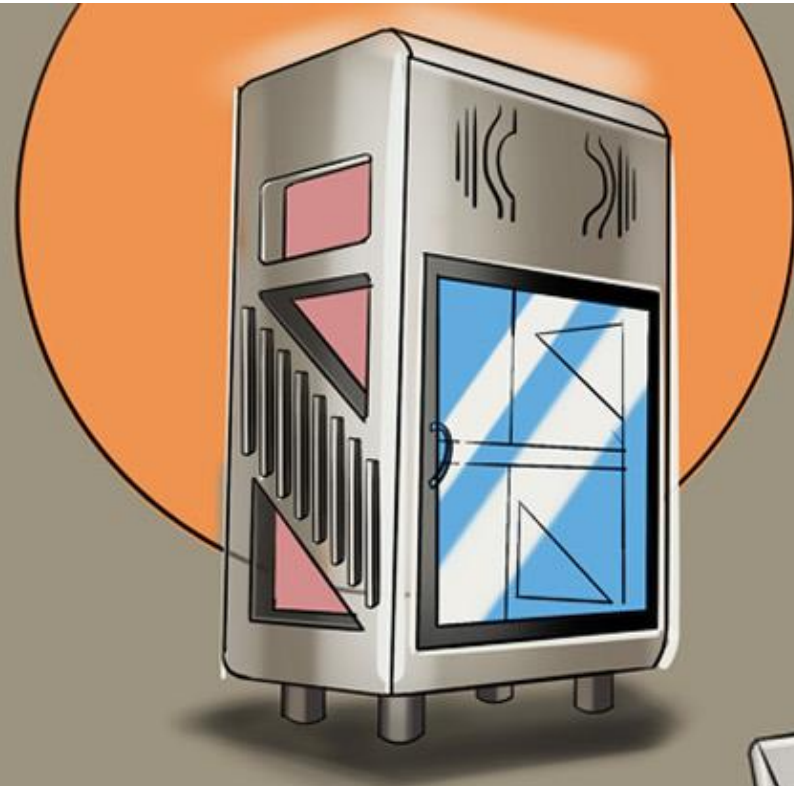
World first Mitti Cool clay Refrigerator has offered an alternative that fulfils these basic requirements at an affordable cost. Mitti Cool Refrigerator is made of clay, which utilizes the age old principle of ‘cooling through evaporation’. This refrigerator can maintain vegetables fresh for 2-4 days and it can also keep milk and buttermilk fresh for 24 hours.





CROSS-SECTION







PROTOTYPE 3



PROTOTYPE 1



PROTOTYPE 2








REPLICATION OF INNOVATIONS - EXAMPLES

Ecological Sanitation (ECOSAN)

The initiative was started by Mr. Subburaman from the Society for Community Organisation and People's Education (SCOPE), Trichy, Tamil Nadu. It offers economical and simple-to-use option in contrast to the conventional waste transfer methods. ECOSAN Toilets are much more helpful both in flood and drought prone areas. The first ECOSAN Toilet was constructed in early 2011 in Regullanka Village of Krishna District, Andhra Pradesh.





REPLICATION OF INNOVATIONS - EXAMPLES

Simple Design – A low-cost baby warmer which dramatically reduces the rates of newborn mortality in India.

- Administration is about the art of possible: How to do more with less and get the most out of other people.
- Dr. Satya Jagannadhan's incubator with simple design and lesser cost. Chengalpattu Government Medical College a rural hospital – infant mortality rate 39/1000.
- Designed her own incubator with the help of Neo Natal Nurses and local electricians – simple, inexpensive, easy to use: cost Rs. 5000 – 7000/- whereas the imported one costing about Rs. 5.00 lakhs – 10.00 lakhs.

Please see the Video





REPLICATION OF INNOVATIONS - EXAMPLES

Cot-cum-Toilet Bed

Saravana Muthu of Nagercoil in Tamilnadu (Welder by Profession) has invented remote Operated toilet Bed and gave demonstration about his new invention to the authorities of "National Innovation Foundation" (NIF) and got 2nd Prize of Rs 2,00000/- (Two Lakhs) from them. This inventor, already started getting the Orders from the Hospitals for his Toilet Bed.

Please see the Video





One cannot alter a condition with the same
mind-set that created it in the first place.

- Albert Einstein

Thank You!

