## <u>Week-2</u> <u>Challenges</u> Of <u>Innovation</u>

Challenges at two different levels:

- 1. Individual
- 2. Systemic

#### Individual Level

1. Lack of motivation: People do only repetitive work

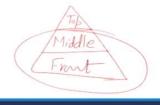
Needs of people are classified in pyramid, Only few people reach the higher level needs.



- 2. Lack of role clarity: People perform different role, sometimes they are service-man, other times a father etc, there is improper work life balance. Even in organisations the roles or teams are not defined, they keep switching teams and roles.
- 3. Fear of Failure: Failures are integral part of innovation.
- 4. CHALTA HAI approach:

### At organization level:

1. Employees are not empowered to innovate: Any organisation is divided into three levels in form of a pyramid -> top level, middle level, bottom level. The organisation believes that only people on top level can make good decisions.



Organisations should empower employees for innovation.

- 2. No innovation strategy: Reward system is absent
- 3. Innovation is centralised to a functional group: Innovation is limited to specific departments only like product development etc, not to departments like service ,etc.
- 4. Lack of collaboration: Lack of interconnection between different departments
- 5. Lack of diversity: Eg Six hat theory
- 6. Lack of recognition for efforts:
- 7. Lack of Internal Heroes:
- 8. Current offerings are successful:
- 9. Missed connection with customers: Taking feedback and understanding requirements

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- 8. Current offerings are successful:
- 9. Missed connection with customers: Taking feedback and understanding requirements
- 10. Wrong measurement of innovation: We measure innovation in terms of revenue or profit or no of patents, ignoring the efforts and other attributes. This need to change.

## STEPS OF INNOVATION MANAGEMENT

Design thinking is key area now-a-days.

Organization's long term success depends on developing new ideas.

Long Term- Sustainable

Sustainability has 3 dimensions

- 1. Profit
- 2. People (Social Sustainability)
- 3. Planet (Environmental Sustainability)

CSR: Proactive effort to improve social sustainability, new idea that companies need to invest some of their profit for the welfare of the society. This new idea is innovation program.

Steps: how to execute innovation

In too many organizations, innovation occurs by serendipity rather than by deliberate management.

Sometimes innovation occur by accident or by chance but not always. STEPS:

- 1. Collection of ideas: innovation starts with curiosity, we want to have all type of ideas be it good or bad. Initially quantity is more important than quality, soon quality will improve.
- 2. Selection of ideas: Evaluation of idea-bank (collection of all type of ideas). How many stages of evaluation are evolved , who will evaluate the idea, criterion should be fixed properly.
- 3. Experimentation with idea: Develop prototype,
- 4. Developing business model:
- 5. Iterative Business Model- Diffusion and creating Impact:

### **IDEA MANAGEMENT SYSTEM:**

- 1. Mainly collection of ideas.
- 2. Ideas are starting steps for process of innovation.

We are not receptive to new ideas

We donot know the source of new ideas

3. Objectives of ideas management system:

Overcoming resistance to change:

Overcoming prediction disability:

Apply Elephant-Rider analogy: Rider is able to give new ideas and Elephant follows them sincerely

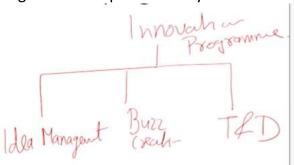
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Idea management system:

Buzz creation: Rewards/Campaigns / Publicity/ Awareness

Training and Development: Analyse tools used



5. Idea Management

Who submits? :Employees / customers Who selects? : Internal/External experts

Who funds?: Internal (Mostly in commercial firms) / External (Eg. Govt, mostly in educational firms) sources

6. Idea of challenge book:

This concept will help in developing idea bank Identify right problem to solve

Challenge book is a type of diary where u write all the problems Having curiosity is important to make entries in diary.

We need to have challenging problems to solve.

- According to Ratan tata
  - "If there are challenges and those challenges are difficult, then some interesting, innovative solutions will come."

Emphasises on higher or tougher challenges: Tougher challenges will lead to better solution

7. Sources of challenge book are:

Feel the pain:

Customers (Current): High quality, low cost products

Customers (Future)

Employees: 15% hike per year / Safe drinking water/ restrooms

**Partners** 

Sense the wave:

Technology:

IT

Industry 4.0

ΑI

Smart gadgets

Demographics

**Population** 

Regulatory

**Environment** 

Fashion

See the waste:

**Human Efforts:** 

CA doing accounting
Programmer doing data entry
Natural resources
Technology resources

8. At this point do not evaluate the idea, just write it down: Even write down Employees want to go to moon in the diary, selecting it or not may be a secondary issue, but writing all possible challenges is important.

## **DIVERGENT v/s CONVERGENT THINKING**

- 1. Thinking: Assimilation of thoughts
- 2. Daniel Kahneman: Thinking is fast or slow, how system 1 and 2 works, how can we utilise their benefits
- 3. Problem identification is most important, If you think appropriately, analyse and focus upon central problem, create a scenario around it, identify it's cause and effects, all these are important.
- 4. Eg. Product is not selling, Problems are: marketing/distribution/ design. Identifying the problem is the first and most important step. Product not selling is not a problem, why it is not selling due to fallacy in a particular department is a problem.
- 5. Divergence: Finding multiple ways to address a problem
- 6. Convergence: Analysing one solution
- 7. Macro v/s Micro: Breaking bigger problems to smaller ones and taking into account all the micro scenarios while imagining the entire macro environment.
- 8. This or that situation
- 9. Pendulum and accordion: We need to manage the transitions from one state to another.
- 10. Thinking and Innovation:
  - Marketing: new ways to connect with customers, innovating ADs Innovating with product/distribution/Awareness
- 11. How divergence/convergence is related: when u launch a new product, you think about the possible problems to customers, etc.
- 12. Post problem: Find solutions and correct it.
- 13. Eg making mobile/ computers personalised
- 14. Eg. Energy: There is energy crisis, but we need more and more energy, innovation: solar energy
- 15. Waste management

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- 16. Health Sector: innovating new medicines
  - THINKING and INNOVATION
  - INNOVATION whether incremental or radically oriented is effected by
  - Divergence and Convergence
  - Lets see Computers, Food
  - Analyze some of the important sectors
  - Energy
  - Waste Management
  - Health
  - Education
  - Information Technology
  - Consumer Goods
  - Transportation
  - BETWEEN DIVERGENCE to CONVERGENCE
  - TRANSITIONS are INTERESTING
  - TESTING
  - DIFFICULT
  - BRING HOPE
  - INCUR COST
  - CHANGE MANAGEMENT COMES IN

 CHANGE MANAGEMENT COMES IN BUT

WHETHER CHANGE is MANAGED

or

PASSED THROUGH

or

THE CHANGE MANAGES is the QUESTION?

# DESIGN THINKING AND ENTREPRENEURSHIP

- 1. Design thinking and entrepreneurship are interlinked: When you are looking at a larger picture, when you are trying to generate a harmony between the elements we are trying to put together, sort of self propelled system.
- 2. Eg. Jamshedji Tata went to several places and noticed that workers were not treated well, so, he setup a cotton mill in Maharashtra, not only to maximise profit but also infusing better resources, better human resources etc. Like taking care of children of working women.
- 3. Next he setup various fields, interlined with each other and taking care of needs of workers, customers and partners. Eg. Steel, chemical etc.
  - INTENT and REALIZATION of THE INTENT
  - ORGANIZING for that INTENT with INTENT
- CONNECT
  - REFLEXIVITY
- 5. Reflexivity: is central to all things humans do, it is associated with intensity. It is how people think and how we merge our thoughts with them.
  - SOMEONE makes PENCILS
  - SOMEONE makes ROBOTS
  - COMEONE dovolong INICTITUTIONS

- SOMEONE makes ROBOTS
- SOMEONE develops INSTITUTIONS
- SOMEONE develops HOSPITALS
  - SOMEONE builds SHIPS and SOMEONE SHIPYARDS/SHOPS OR SHOPPING MALLS
- 7. No-One knows how to manufacture Pencils

6.

8. Basic elements of design thinking are Empathy: Eg in case of forest fires, talking with locals generate empathy and ideas influx such that creating energy with that fire