

## Industry Institute Interaction (IIC) and Institution's Innovation Council (IIC)

Date: 30-08-2022

### Report on "Innovation/Prototype Validation - Converting Innovation into a Startup"

by Dr. Ameet Chavan, Director (IIEC) & Professor (SENSE) VITAP University, Amaravati

Nalla Narasimha Reddy Group of Institutions conducted a Guest Lecture as a part of Institution's Innovation Council (IIC) on "Innovation/Prototype Validation - Converting Innovation into a Startup." by Dr. Ameet Chavan. The session is held on 30<sup>th</sup> August 2022 from 3:00 PM to 4:00 PM

The session was conducted Via Zoom platform.

Zoom Link: <https://us06web.zoom.us/j/81575590099>

Meeting ID: 815 7559 0099

Pass code: iic123

The Session started at 3:00 PM by IIC convener Dr. Janardhana Raju Garu. The convener formally introduced the speaker, welcoming the resource person and all the IIC members to the session. The speaker has enlightened the following:

#### OVERVIEW

- Creativity and innovation
- Innovation is the process of turning a new concept into commercial success or widespread use. Invention is the creation of a new idea or concept.
- Creativity is the act of turning new and imaginative ideas into reality

#### How To Boost Creativity And Innovation Among Students

- Inspire the Students and Staff to Learn
- Before they can think of something that's not available in the industry, the students must first know everything about the industry. Truly creative people don't wait for bursts of creativity to hit them out of nowhere. They learn and observe the world around them with all their senses.

#### Focus on Hiring Creative Individuals

- "What have you invented so far?" is not a good question to ask during an interview. Maybe someone still hasn't invented anything special, but they may still have the creative foundation to do so. Instead, you should evaluate their creativity.
- Think of several critical thinking questions, so you can see how this person's mind works under pressure.

Bring The Team Together

- Put several creative minds in a room and see what happens. You just need to give them a trigger, such as an issue you'd like to solve. Let them be flexible enough to express all ideas and inspire them to build on each other's ideas.

The speaker and the resource person Dr. Ameeet Chavan clearly defined the terms idea, POC, Prototype, MVP & Product

- A **business idea** is a concept that can be used for financial gain that is usually centered on a product or service that can be offered for money. An idea is the first milestone in the process of building a successful business. A business idea is often linked to its creator who needs to identify the business' value proposition in order to launch to market and establish competitive advantage. A business idea is the first spark of Entrepreneurship

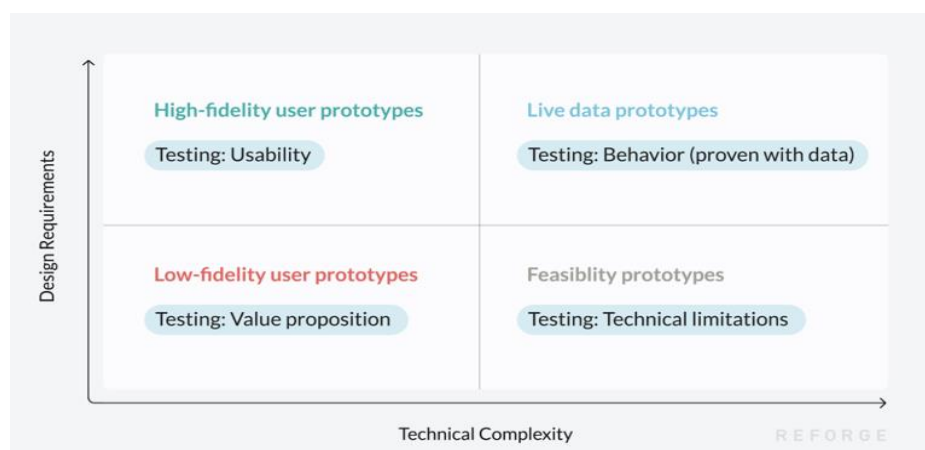
The characteristics of a promising business idea include Innovative; Unique; Problem solving etc.

➤ **Define team members, target audience and goals**

- Establish key team members. .
- Define your target audience Set goals
- *Engineer your idea and create the product*
- *Test it out*
- *Measure your results*

➤ A **prototype** is an early sample, model, or release of a product built to test a concept or process. It is a term used in a variety of contexts, including semantics, design, electronics, and software programming. A prototype is generally used to evaluate a new design to enhance precision by system analysts and users. Prototyping serves to provide specifications for a real, working system rather than a theoretical one. In some design workflow models, creating a prototype (a process sometimes called **materialization**) is the step between the formalization and the evaluation of an idea.

➤ A prototype is a functional, not final version of a product or service that businesses can use for testing, to solicit feedback, and to introduce to investors before officially launching to a wider market



An innovation process is a **set of steps between an idea's conception and its implementation**. It is a streamlined process that is managed in a way that reflects a company's structure and innovation goals. The Four Key Elements of Innovation are **Collaboration, Ideation, Implementation and Value Creation**. Innovation requires collaboration, ideation, implementation and value creation. Community developers actively engaged in innovation illustrated each of these elements during breakout sessions.

**Technology Readiness Levels (TRLs)** are a method for estimating the maturity of technologies during the acquisition phase of a program. TRLs enable consistent and uniform discussions of technical maturity across different types of technology. TRL is determined during a **Technology Readiness Assessment (TRA)** that examines program concepts, technology requirements, and demonstrated technology capabilities. TRLs are based on a scale from 1 to 9 with 9 being the most mature technology.

The **manufacturing readiness level (MRL)** is a measure to assess the maturity of manufacturing readiness, similar to how **technology readiness levels (TRL)** are used for technology readiness. They can be used in general industry assessments, or for more specific application in assessing capabilities of possible suppliers.



The term **Investment Readiness Level (IRL)**, which can be translated as the Level of Maturity of a business idea with respect to the expectations of Investors, indicates a methodology for assessing the degree of maturity of an idea or a startup with the which you want to attract investments of a different nature

The Session concluded by the Convener of IIC, obliging the members to ask queries related to the webinar and thanked *Dr. Ameet Chavan* in his efforts to shape and sculpture the faculty and students to become moral oriented, capable and qualified skilled entrepreneurs.

The session was attended by 40 students and 5 faculty members.

The IIC Convener proposed vote of thanks, and thanked the speaker and IIC members. and also expressed his regards to the Management Sri Nalla Narasimha Reddy Garu and Director Sir Dr. C.V.Krishna Reddy Garu. The session concluded at 4:30 PM.

**NALLA NARASIMHA REDDY**  
Education Society's Group of Institutions - Integrated Campus  
(Approved by AICTE & PCI, New Delhi & Affiliated to JNTUH, Accredited by NAAC with A+ Grade)  
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(UGC AUTONOMOUS INSTITUTION)

**Session on**  
**Innovation/Prototype Validation -  
Converting Innovation into a Startup**

**Organized by**  
Institution's Innovation Council (IIC),  
NNRG

**30<sup>th</sup> August 2022** **Time: 03:00 PM**

**Registration:** <https://forms.gle/tGdZ2U6fsgYaMaE8>  
**Zoom Link:** <https://us06web.zoom.us/j/4923535055>  
**Meeting ID:** 492 353 5055  
**Passcode:** iic123

**Dr. Ameet Chavan**  
Director (IIEC) & Professor (SENSE)  
VITAP University, Amaravati.

**Chief Patron** Shri Nalla Narasimha Reddy  
Chairman  
NNRG

**Patron** Dr. C.V. Krishna Reddy  
Director  
NNRG

**Convener** Dr. G. Janardhana Raju  
Dean - School of Engineering &  
Convener - IIC, NNRG

**Co-Convener** Dr. S. Ravi Chand  
Professor, ECE Dept. &  
Convener R&D, NNRG

**Co-ordinator** Dr. S. Sreehari Raju  
Asso. Prof. CSE Dept.  
NNRG

**Dr. S. SREE HARI RAJU**  
**NNRG IIC**  
**Dr. Ameet Chavan**  
**GSRAO**  
**Sravankumar Vi...**  
Connecting to audio...

**Dr. G. Janardhana Raju introducing speaker Dr. Ameet Chavan**

**Innovation and Creativity**  
Creativity is related to 'imagination', but innovation is related to 'implementation'.

**Be an observant and sharp learner**

**Fall in love with a PROBLEM.**  
Don't get infatuated with a solution.  
(Allows you to try new solutions if one does not work)

| BASIS FOR COMPARISON | CREATIVITY  | INNOVATION   |
|----------------------|---|--|
| Meaning              | Creativity is an act of creating new ideas, imaginations and possibilities. | Innovation is the introduction of something new and effective into the market. |
| Process              | Imaginative   | Productive   |
| Quantifiable         | No  | Yes  |
| Related to           | Thinking something new  | Introducing something new  |
| Money/Consumption    | No  | Yes  |
| Risk                 | No  | Yes  |

**Dr. Ameet Chavan**

**Dr. Ameet Chavan discussing about Innovation and Creativity**

Zoom Meeting

Recording...

### Manufacturing Readiness Level (MRL)

|   |           |  |
|---|-----------|--|
| Material Solutions Analysis               | <b>1</b>  | Basic manufacturing implications identified.   |
|   | <b>2</b>  | Manufacturing concepts identified  |
|   | <b>3</b>  | Manufacturing proof-of-concept developed   |
|   | <b>4</b>  | Capability to produce the technology in a laboratory environment                                   |
| Technology Development                    | <b>5</b>  | Capability to produce prototype components in a production relevant environment                    |
|   | <b>6</b>  | Capability to produce a prototype system or subsystem in a production relevant environment         |
| Engineering and Manufacturing Development | <b>7</b>  | Capability to produce systems, subsystems or components in a production representative environment |
|   | <b>8</b>  | Pilot line capability demonstrated. Ready to begin low rate production.                            |
| Production and Deployment                 | <b>9</b>  | Low rate production demonstrated. Capability in place to begin full rate production.               |
| Operation and Support                     | <b>10</b> | Full rate production demonstrated and lean production practices in place.                          |

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**Dr. Ameet Chavan discussing about Manufacturing Readiness Level (MRL)**

Zoom Meeting

Recording... Dr. Ameet Chavan is talking...

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**Speaker Clarifying the doubts of participants**

**Dr G JANARDHANA RAJU**  
 IIC-CONVENER & DEAN-SoE