

**Nutan Maharashtra Institute of Engineering & Technology, Talegaon
Dabhade**

Affiliated to Savitribai Phule Pune University

7.2 – Best Practices

Best Practice – 1

Title of the Practice: Visionary Learning Community of India (VLCi)

In order to facilitate the small medium enterprises (SMEs) enhance productivity, the Confederation of Indian Industries (CII) in collaboration with Japan International Cooperative Agency (JICA) by leadership of Anand Group of Industries launched a special programme called Visionary Laghuudyog

MitraMandal (VLMi), which would see the CII and Nutan Maharashtra Institute of Engg Tech (NMIET) collaborating in training sector. The VLMi programme would see the faculty of NMIET being trained, who in turn, would train the batch of SMEs in the area college students.

2. Objectives of the Practice

The principle objective of VLMi is on Make in India for Indian manufacturing industries, so this ambitious drive to succeed, the base of Indian manufacturing viz. MSMEs has to be strengthened. VLMi is looking forward to make this happen in the involvement of educational institutes with manufacturing transformation journey. The NMIET College would be offering the subject as an open elective for its engineering students.

Objectives:

- 1. To introduce the concepts, principles and framework of contents of Toyota Production System (TPS).**
- 2. To acquaint the students with various productivity enhancement techniques.**

- 3. To acquaint the students with different aspects of Production Planning and Control and Standardization.**
- 4. To introduce the concepts of material flow, tier structure as applied in industries.**
- 5. To acquaint the students with different aspects of industries shop floor activities and Industrial Safety rules.**

Principles:

- 1. The industry transformation journey is based on Toyota Production System (TPS) which comprises its management philosophy and practices. The TPS organizes manufacturing and logistics for the manufacturer, including interaction with suppliers and customers.**
- 2. The VLMi transformation is based on Fish Bowl Principle by Prof Shoji Shiba. The fish bowl principle is as follows: The different genus of fish jump into common fish bowl they follow their own intuition to dive. The different fish swim mutually in fish bowl then jump away to see the new region after getting conversant with unknown area by learn practice.**
- 3. The Context VLMi Transformation appearance is self-initiated bustle. It consists of four basic modules like 3S (Safety, Shorter Distance Space), Vmap(Visual Map), Heijunka(Leveling) Standardized Work which is supported by community based learning college faculty involvement to achieve the transformational outcome. In order to have Industry ready students, NMIET Pune GIT Belgaum have started working on curriculum based VLMi tools for Engineering students. There will be an elective course—Modern Manufacturing Concepts starting in 2nd semester. Basic outline of the curriculum has been developed jointly by both the institutes under guidance of Mr. CS Patel. First content of Semester 2 elective—Basic Observation Skills—Safety Cleanliness is also developed. It will help students to get familiar with observation skills using examples from home public places.**

VLMi Focus on following Practices:

- 1. Leadership Development**
- 2. Skill Building**
- 3. Learn Apply Learn Technique**
- 4. Tools Technique (3S, Vmap, Heijunka Standardized Work)**

The VLMi 2016 batch consists of following community members (Industries) which are from different regions of Pune such as:

- 1. COSMOS Constructions.**
- 2. COSMOS Mechanical.**
- 3. Shilpa Machinery.**
- 4. Malhar Industries.**
- 5. Nikhil Industries.**
- 6. Gaurav Enterprises.**
- 7. Mask Polymer**
- 8. Manas Automotive**
- 9. Dran Engineers**
- 10. Abhijeet Engineers**
- 11. Deepesh Pressings**
- 12. NMIET(Academic Partner)**

Best Practice – 2

Title of the Practice:

Innovation Promotion in Micro, Small and Medium sized Enterprises (MSMEs)
Commissioned by: German Federal Ministry for Economic Cooperation and Development (BMZ) Country: India Lead executing agency: Ministry of Micro, Small and Medium Enterprises (MoMSME) Overall term: 2018 to 2020 2.

Objective

With support from the programme, selected MSMEs have enhanced their capacity for developing inclusive and sustainable innovations. Context Sustainable economic development is at the top of the political agenda in India. By 2017, the aim is for growth to be ‘faster, sustainable and more inclusive’. Every year, around 12 to 13 million young people enter the labor market. In order to absorb this influx of job seekers, between 120 and 130 million new jobs will need to be created by 2025. The private sector, particularly micro, small and medium sized enterprises (MSMEs), is expected to be a key driver here. The MSME sector, with roughly 44 million micro companies and thousands of small and medium sized businesses, has an enormous economic, social and environmental impact. However, the sector faces several challenges, including strong international competition, pressure to use key resources like energy, water and raw materials more efficiently and to implement more environmentally sustainable production processes. By modernizing and adopting green and inclusive innovations, India’s MSME sector can create new economic opportunities and strengthen its long-term competitiveness. In contrast to Germany, enterprises in India with innovative ideas often work in isolation. Cooperation with research and technology institutions or with academic establishments is virtually nonexistent. Furthermore, support for MSMEs in key areas such as technology transfer, resource efficiency and sustainability management has been either poor or inadequate. Although the Indian Government has launched a number of initiatives aimed at strengthening MSMEs, the initiatives of the government have not yet led to a significant

improvement of the framework conditions. Cooperation between industry, the academic community and government bodies remains weak, thus hampering the innovative capacity and sustainability of MSMEs (including social enterprises and startups). The climate is not conducive to cooperation, with supporting institutions lacking effective methods, support programmes and the incentive structures needed to boost cooperation.

Approach based on the assumption that innovation occurs when businesses and other stakeholders work together, the programme aims to strengthen cooperation between the private sector, government and the academic and research community. The goal is to initiate, introduce and disseminate new technologies, products, processes and business models. To this end, the programme supports institutions that promote economic development – such as business chambers and associations – in developing a range of Innovation enabling services for MSMEs. In addition, GIZ provides advice on methods and instruments that can be used to identify opportunities for improving business operations and the supply chains of large companies. Here, the programme draws on the knowledge of international and national experts in the field of innovation. GIZ is also helping to produce training materials on innovation management and establish new mechanisms to support startups. The project will have a strong demand focus, both in terms of closing the gap between MSMEs and academia, and between MSMEs and the demands of international (German) manufacturers. At national level, the programme advises the Ministry of Micro, Small and Medium Enterprises on developing new support instruments that foster innovation and modernization in the MSME sector. Experiences of promoting innovation will be incorporated into policy dialogue and provide new impetus for improving policies and instruments to support MSMEs. In short, drawing on these experiences will become an integral part of economic development in India.

The Practice GIZ Projects Program for modernization and innovation promotion in micro, small and medium enterprises is one of the projects being implemented by GIZ in partnership with Ministry of MSME, Government of India. The project aim is to improve local innovation ecosystem through fostering cooperation between different stakeholders and strengthening the innovation management capacity and sustainability of MSMEs in

India. The MSME INNO has collaborated with Industries associations, Academics and research institutions and other government agencies in the region.

Nutan Maharashtra Institute of Engineering and Technology, Pune is one such college which partnering with MSME INNO Projects to identify the SMEs issues/ challenges and develop innovative solution to address those issues. So far 5 SMEs identified and students from Mechanical and ETC from Second year to final participating in giving solution to the SMEs Problem. Under which total 12 projects identified from 5 SMEs and 6 Mentors and 12 project groups of project (each group contains 4 students) working on it. So far 4 projects solution is implemented by SMEs, 6 project solutions are submitted for approval of SMEs and project groups working on 2 projects. 6. Evidence of Success To know the status of projects and review them session is organized at NMIET, Talegaon. Mr. Niranjana (Coordinator GIZ Pune Region) was invited to for review the status of project. Following faculties were present during meeting held on 09/09/2019 in Principal cabin at 11.30am.

- Dr. Pranav Charkha (Aca. Coordinator)**
- Prof. Shridhar Limaye(HOD, ME)**
- Prof. Prashant Maske(Staff Mentor)**
- Prof. Spandan Waghmare(Staff Mentor)**
- Prof. Shekhar Babar(Staff Mentor)**
- Prof. Vishal Rajput(Staff Mentor)**
- Prof. Balika Tawde(Staff Mentor)**
- Prof. Rahul Patil (Staff Mentor)**
- 40 Students Projectees**

Issues Discussed

- 1) Mr. Niranjana Upadhye Sir conveyed importance of GIZ Projects to student's mentors by citing various real life examples. He stressed on achieving the quality in projects.**
- 2) Project progress status are reviewed by Mr. Niranjana Updhye Sir.**
- 3) Deliberation on Event "MSME Innovation Summit 2019" to be held at Aurangabad on 30 September 2019 by Mr. Niranjana Upadhye Sir**

- 4) He also informed about the forthcoming workshop on “Welding Technologies” will be arranged by GIZ Pune team. Details for the same will be informed soon.
- 5) He asked college coordinator to setup Industry Innovation.