A COMPARATIVE ANALYSIS OF COMPETENCY REQUIREMENTS IN THE IT AND MANUFACTURING SECTORS

- **Author:** Prof.Saily Talodhikar, *Assistant Professor, JSPM's Jayawant Institute of Management Studies, Pune*
- **Co-author:**Dr.Safia Farooqui, *Director,Dr. D. Y. Patil Vidyapeeth Centre for Online Learning,Pune*

RESEARCH GAPS

- Identifying skills in IT professionals that can be flawlessly applied to the manufacturing context and vice versa.
- Understanding and devising a model to leverage technology for bringing innovation and enhanced efficiency is crucial for the advancement of both sectors.

- **RESEARCH PROBLEM**
- The research problem addressed in this study is to explore and bridge the identified gaps in the collaboration between IT and manufacturing sectors, focusing on the transferability of skills, competencies required for successful collaboration, and the effectiveness of training programs.
- The research problem aims to comprehensively investigate the various complex aspects of skill transferability, collaboration competencies, and leadership qualities within the dynamic Information Technology (IT) and Manufacturing sectors

RESEARCH OBJECTIVES

a) **Determine the specific skills** that are in high demand and those that are lacking in both sectors.

b) Provide insights into the career pathways within each sector, helping individuals understand the skills required for different roles.

c) Assist in creating clear competency-based career progression models.

d) Aid HR professionals and recruiters in understanding the specific competencies required for different positions in both sectors.

HYPOTHESIS

1. The integration of IT and manufacturing sectors can be optimized in collaboration.
2. Identifying and developing skills in IT professionals applicable to the manufacturing context, and vice versa, enhances collaboration.
3. Effective leveraging of technology for innovation and efficiency, guided by a devised model, positively impacts both IT and manufacturing sectors.
4. Successful collaboration requires specific competencies.

RESEARCH METHODOLOGY

- Primary Data:The data is collected through a structured questionnaire
- Secondary Data:The Data collected from referred journals, books, and websites.

VARIABLES

- The Independent Variables include the Skills of IT professionals,Skills of manufacturing professionals,Technology leveraging model for innovation and efficiency enhancement,Competencies for successful collaboration.

- The Dependent Variables are Collaboration between IT and manufacturing sectors,Effectiveness of training programs,Gaps in preparing individuals for roles with IT-manufacturing competencies,Qualities and competencies of effective leaders in the context of IT-manufacturing collaboration.

ANALYSIS

- **Adaptability**

  Recognized as very important by 197 employees involved in the study.
- **Communication**

  Recognized as extremely important by 216 employees involved in the study.
- **Team Work**

  Recognized as very important by 211 employees involved in the study.

RESULTS AND FINDINGS

Distinct Competency Requirements

- The findings reveal distinct competency requirements in IT and Manufacturing. Key skills in IT include AI, Communication, dealing with paradox, teamwork, while Manufacturing emphasizes time management and dependability.

Shared Competencies

- Shared competencies such as adaptability and time management were also identified.

SUGGESTIONS

- Conduct a comprehensive skill mapping exercise to identify the specific technical skills, especially in programming languages, that are in high demand within the IT sector.
- Develop a cross-sector competency framework that highlights the overlap of skills identified in both the IT and manufacturing sectors.
- Promote collaborative learning initiatives that bring together professionals from the IT and manufacturing sectors.

CONCLUSIONS

- This research paper contributes to the understanding of competency dynamics in the IT and Manufacturing sectors, offering practical insights for workforce development, organizational strategies, and educational programs.

THANK YOU!