

# The Evolution of **Learning and Development** in Manufacturing

The rapid evolution of manufacturing, from automotive to technology and sustainable materials, requires constant skill updates. This dedication to learning and development ultimately distinguishes successful manufacturing enterprises.

# **Pre-Industrial Revolution**

Learning by Doing

#### **On-the-Job Training (OJT)**

The primary method of skill acquisition.

## **Hands-on Learning**

Emphasis on practical experience and observation.

## **Apprenticeships**

Skills and knowledge passed down through generations via direct mentorship.

## **Informal & Experience-Based**

Learning was largely unstructured and relied on tacit knowledge transfer.

# 2

## **The Industrial Revolution**

Rise of Formal Training

#### **Formalized Training Programs**

Emergence of vocational institutes and corporate training.

#### **Technical Skills Focus**

Training concentrated on operating new machinery and production processes.

## **Structured Learning**

Introduction of organized methods to teach specific technical skills.

## **Meeting Industry Demands**

Training initiatives driven by the need for a skilled workforce to support industrial growth.

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## 20th Century

Expanding Scope and Strategy

#### **eLearning & Digital Platforms** Dominance of online learning,

Learning Management Systems (LMS), and digital tools.

# **Automation & AI in L&D**

Use of simulations, Al-powered learning, and data analytics to personalize training.

# **Continuous Upskilling & Reskilling**

Focus on adapting to rapid technological advancements and closing the skills gap.

#### **Emerging Skills** Training for digital literacy,

cybersecurity, data analysis, and sustainable practices.

**Data-Driven** 

**L&D Strategies** 

optimize training

effectiveness and ROI.

**Focus on Innovation** 

evolving industry demands.

& Future Skills

Utilizing learner analytics to

# Combining online and offline

**Blended & Flexible Learning** 

methods to cater to diverse learning styles and needs.

# 4

## The Future of L&D in the **Manufacturing Industry** Personalized and Agile Learning

# **Learning Journeys**

**Personalized** 

paths tailored to individual needs and skills gaps.

# Al-driven adaptive learning

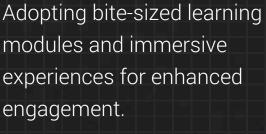
#### **Agile and Continuous Learning Culture**

proactive upskilling, and readily adapting to change.

# Emphasis on lifelong learning,

#### Preparing the workforce for emerging technologies and

**Microlearning & Immersive** Technologies (VR/AR)



experiences for enhanced engagement.

Explore advanced learning and development strategies to empower your manufacturing team for the challenges of tomorrow.

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