

SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution) Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai Accredited by NAAC-UGC with 'A++' Grade (Cycle III) & Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT) COIMBATORE-641 035, TAMIL NADU



<u>19MEE404 - Product Life Cycle Management (PLM)</u> UNIT 1: INTRODUCTION TO PRODUCT LIFE CYCLE MANAGEMENT

Product Development Problems to be Resolved:

- **Example:** Consumer electronics companies using PLM to enhance innovation.
- **Innovation Barriers:** PLM removes barriers to innovation by providing a collaborative platform. Electronics companies can use PLM to coordinate between design and manufacturing teams, speeding up the innovation process.
- **Quality Issues:** Enhances product quality by integrating feedback and continuous improvement mechanisms. PLM allows electronics companies to track and address quality issues throughout the product lifecycle.
- **Time Delays:** Reduces delays by optimizing processes and improving communication. By using PLM, electronics companies can reduce time delays in product development and launch.

8. Customer Involvement

- **Example:** Nike's use of PLM to involve customers in product development.
- Voice of the Customer (VoC): PLM integrates customer feedback into the product development process, ensuring products meet customer needs. Nike uses PLM to collect customer feedback and incorporate it into new designs.
- **Customization:** Allows for greater product customization based on customer preferences. Nike's "Nike By You" program allows customers to customize their shoes, with PLM managing the process from design to delivery.
- **Post-Market Feedback:** Incorporates post-market feedback to drive continuous improvement. Nike uses PLM



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SUMMARY TABLE

Stage	Key Characteristics
Introduction	Low sales, high promotion costs, building awareness
Growth	Rapid sales increase, market penetration, economies of scale
Maturity	Peak sales, market saturation, competitive pressure
Decline	Decreased demand, market contraction, cost reduction
PLM Definition	Strategic approach to managing the product lifecycle
Corporate	Complexity, global competition, regulatory compliance, cost management,
Challenges	sustainability
Need for PLM	Enhanced collaboration, innovation acceleration, reduced time-to-market, improved quality, reduced lifecycle costs
Components of PLM	Data management, process management, project management, change management, collaboration tools, compliance management, analytics
Emergence of PLM	Evolution of tools, technological advances, market demands, regulatory pressure
Significance of PLM	Resolving lifecycle inefficiencies, improving innovation, quality, and time management
Customer Involvement	VoC integration, customization, post-market feedback