Checklist for Tracking Changes in the Overall PLM Landscape

Integration with Emerging Technologies:

- ➢ Check for integration with Industry 4.0 technologies like IoT, AI, and additive manufacturing.
- ➢ Assess the utilization of AI-powered PLM initiatives.

Blockchain Integration

- ➢ Verify the incorporation of blockchain technology for enhanced security, traceability, and compliance.
- ➢ Evaluate the benefits gained from blockchain integration, such as supply chain traceability and protection of intellectual property.

IoT Integration

- ➢ Examine how PLM systems use IoT for real-time insights into product performance.
- ➢ Assess the effectiveness of IoT sensors embedded in products for continuous data streams.

Digital Thread Models

- ➢ Check for the adoption of digital thread models for holistic integration of product data and workflows.
- ➢ Evaluate the impact of digital thread models on real-time visibility, traceability, and control over product-related operations.

Digital Twin Technology

- ➢ Assess the implementation of digital twin technology for virtual versions of physical objects.
- ➢ Evaluate the use of digital twins for predictive maintenance, remote monitoring, and simulation-based improvement.

Augmented Reality (AR) Integration

- ➢ Verify the integration of Augmented Reality applications for immersive product design, development, and maintenance experiences.
- ➢ Evaluate how AR enhances visualization, virtual prototyping, and training within PLM systems.

Quality Management

- ➢ Assess the importance given to quality management within PLM systems in 2024.
- ➢ Evaluate the inclusion of quality planning, inspection, testing, and non-conformance management systems.

Data Security and Privacy Measures

- ➢ Verify the implementation of robust data security, encryption, and access controls.
- ➢ Ensure compliance with regulations such as GDPR and CCPA for protecting customer data and intellectual property.

Risk Management Integration

- ➢ Assess the expanding relevance of risk management in PLM processes.
- ➢ Evaluate how PLM systems identify, assess, and mitigate product lifecycle risks, including regulatory compliance and cybersecurity concerns.

E-commerce Platform Integration

- ➢ Check for integration with e-commerce platforms to streamline product information management and order fulfillment.
- ➢ Assess the impact of PLM technologies on centralizing product catalogs, pricing, inventory, and order fulfillment for online and DTC sales.

Sustainable PLM Practices

- ➢ Evaluate how sustainability is being included in PLM techniques in 2024.
- ➢ Assess the measurement and optimization of product environmental footprints throughout their lifecycle.

Cloud-Based PLM Solutions

- ➢ Check for the adoption of cloud-based PLM solutions for scalability, accessibility, and collaboration.
- ➢ Evaluate the benefits, including enhanced security, scalability, and continuous innovation.

End of Life Considerations

- ➢ Verify if PLM systems include considerations for the end of a product's lifecycle.
- ➢ Assess strategies for responsible product disposal and recycling.

Overall Impact on Organizations

- ➢ Evaluate the overall impact of the current PLM landscape on organizational efficiency, collaboration, and product development.

Data Democratization

- ➢ Check for the implementation of data democratization practices, allowing organizations to access, analyze, and exploit PLM data.

GenAI Integration

- ➢ Assess the integration of Generative Artificial Intelligence (GenAI) in reshaping product development within PLM systems.

Continuous Improvement Strategies

- ➢ Evaluate how organizations are navigating challenges and embracing opportunities for continuous improvement within PLM.

User Experience and Accessibility

- ➢ Check for improvements in user experience and accessibility in PLM systems.
- ➢ Assess the ease of use and accessibility features for cross-functional teams.