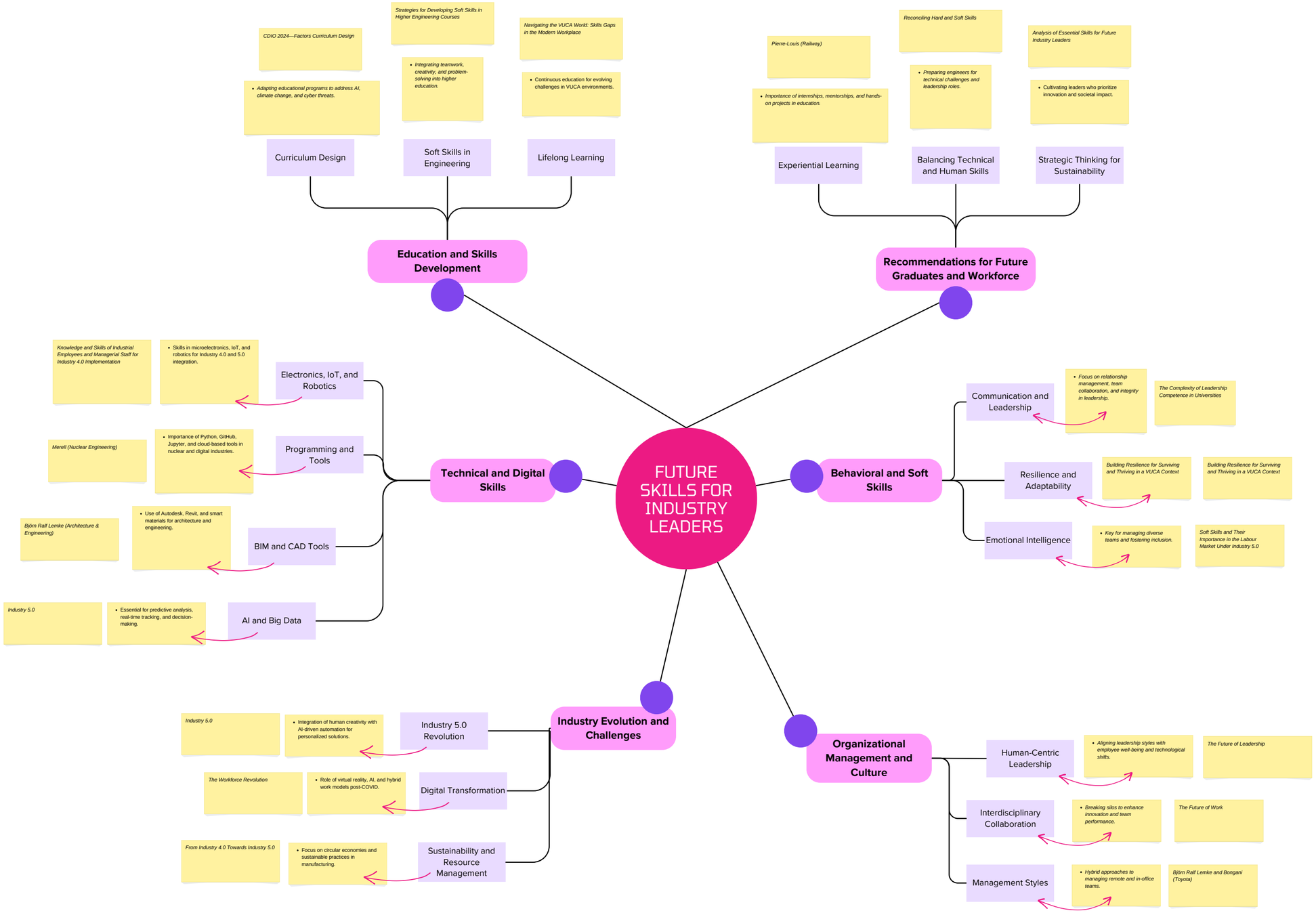
FUTURE SKILLS FOR INDUSTRY LEADERS
Education and Skills Development
Curriculum Design
CDIO 2024—Factors Curriculum Design
Adapting educational programs to address AI, climate change, and cyber threats.
Soft Skills in Engineering
Strategies for Developing Soft Skills in Higher Engineering Courses
Integrating teamwork, creativity, and problem-solving into higher education.
Lifelong Learning
Navigating the VUCA World: Skills Gaps in the Modern Workplace
Continuous education for evolving challenges in VUCA environments.
Recommendations for Future Graduates and Workforce
Experiential Learning
Pierre-Louis (Railway)
Importance of internships, mentorships, and hands-on projects in education.
Balancing Technical and Human Skills
Reconciling Hard and Soft Skills
Preparing engineers for technical challenges and leadership roles.
Strategic Thinking for Sustainability
Analysis of Essential Skills for Future Industry Leaders
Cultivating leaders who prioritize innovation and societal impact.
Technical and Digital Skills
Electronics, IoT, and Robotics
Knowledge and Skills of Industrial Employees and Managerial Staff for Industry 4.0 Implementation
Skills in microelectronics, IoT, and robotics for Industry 4.0 and 5.0 integration.
Programming and Tools
Merell (Nuclear Engineering)
Importance of Python, GitHub, Jupyter, and cloud-based tools in nuclear and digital industries.
BIM and CAD Tools
Björn Ralf Lemke (Architecture & Engineering)
Use of Autodesk, Revit, and smart materials for architecture and engineering.
AI and Big Data
Industry 5.0
Essential for predictive analysis, real-time tracking, and decision-making.
Behavioral and Soft Skills
Communication and Leadership
Focus on relationship management, team collaboration, and integrity in leadership.
The Complexity of Leadership Competence in Universities
Resilience and Adaptability
Building Resilience for Surviving and Thriving in a VUCA Context
Building Resilience for Surviving and Thriving in a VUCA Context
Emotional Intelligence
Key for managing diverse teams and fostering inclusion.
Soft Skills and Their Importance in the Labour Market Under Industry 5.0
Industry Evolution and Challenges
Industry 5.0 Revolution
Industry 5.0
Integration of human creativity with AI-driven automation for personalized solutions.
Digital Transformation
The Workforce Revolution
Role of virtual reality, AI, and hybrid work models post-COVID.
Sustainability and Resource Management
From Industry 4.0 Towards Industry 5.0
Focus on circular economies and sustainable practices in manufacturing.
Organizational Management and Culture
Human-Centric Leadership
Aligning leadership styles with employee well-being and technological shifts.
The Future of Leadership
Interdisciplinary Collaboration
Breaking silos to enhance innovation and team performance.
The Future of Work
Management Styles
Hybrid approaches to managing remote and in-office teams.
Björn Ralf Lemke and Bongani (Toyota)