Supply Chain

Welcome & Introductions



M. van Bilsen
Sr. Advisor
Semi, Supply Chain Initiative, Berkel-Enschot, The Netherlands

Abstract
Hosting session;
- welcoming the audience & guest speakers
- introducing guest speakers
- Q&A and Closing

Biography
Matthieu van Bilsen is Senior Advisor to the SEMI Supply Chain Initiative.
Previously, he was Global Executive Partner at IBM Consulting, bringing over 40 years of international leadership experience in the High-Tech and Manufacturing industries. He bridges technology innovation and business transformation, with hands-on expertise in supply chain, logistics and manufacturing, helping executive teams navigate complex change, globalization and digital disruption.

References

Analytics in an Increasingly Complex Semiconductor Industry

T. Altenmüller
Vice President Manufacturing Analytics
Infineon Technologies, Berlin, Germany

Abstract
Artificial intelligence in semiconductors is much more than generative AI. It already supports defect classification, predictive operations and shop-floor knowledge retrieval. The next development is AI moving up the decision stack, from sensing and understanding toward recommendations, decisions and controlled action. This presentation explores human-directed autonomy, in which people define goals and guardrails, AI coordinates knowledge and decisions, and connected systems execute safely. The key question is no longer only what AI can do, but where AI should advise and where it may act.

Biography
Dr. Thomas Altenmüller is Vice President Manufacturing Analytics at Infineon Technologies. With almost three decades of experience in the semiconductor industry, his work spans strategic analysis of the global semiconductor landscape, manufacturing strategy and Manufacturing Excellence. He focuses on data-driven manufacturing, advanced analytics, KPI-based performance management and AI in manufacturing. Thomas holds a Ph.D. in Physics from Ludwig-Maximilians-Universität München.

References

Analysis of Industry Responses

F. Kaesen
Director Value Chain Integration
Intel Germany, Feldkirchen, Germany

Abstract

The semiconductor industry's cyclicality and stakeholder behavior represent classic supply chain challenges. In today's landscape of persistent manufacturing and material capacity constraints, analysing and forecasting customer and supplier behavior is increasingly complex. Historically, the industry responded to shortages by inflating demand at each node of the supply chain to secure allocation—a practice that often exacerbated instability.

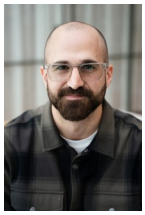
This presentation explores alternative, data-driven strategies to optimize output from both supplier networks and internal manufacturing operations. Utilizing real-world data and real world experiences, we will analyze the potential benefits and practical limitations of these strategies, identify opportunities for future improvements for a pathways toward more resilient value chain integration.

Biography

Physicist by education and a supply chain professional by passion, Florian leads at team of supply chain experts at Intel Corporation, spearheading digital modernization across complex global supply chain ecosystems. He focuses on integrating internal and external manufacturing, enterprise architecture alignment, the practical adoption of artificial intelligence and operational excellence.

References

Personal Agents, Collective Resilience: Building Supply Chain Agility with AI.



T. Onyeka
Co-CEO
Beebolt, London, United Kingdom

T. Abuissa
Co-CEO
Beebolt, London, United Kingdom

Abstract
Every so often a supply chain team catches a signal early (a shift in export policy on gallium, or a lead time quietly stretching at a key supplier) and turns it into a decision while there is still room to plan. That is not luck. It is years of industry judgment, and a team that knows how to move together.

Across conversations with foundries, IDMs, and equipment makers, Beebolt's team has found that what the industry wants most is trust, accuracy, and execution. In this session, you'll learn how Beebolt is bringing those to life with personal AI agents inside Conductor, Beebolt's intelligence command center for the semiconductor supply chain, built with SEMI. Each agent follows the dependencies one person cares about, raises a flag when a threshold they set is crossed, and helps share it with colleagues in the way each of them prefers to work. Behind every agent sits a multi-agent system, with industry experts reviewing the signals it flags as most important.

Personal agents start with one person. Resilience, in our experience, is something an industry builds together. The strongest teams already work this way. What they need are tools that work this way too.

We would love to hear how your teams are approaching resilience, so bring your questions to the Q&A that closes the session.

Biography
Talal Abu-Issa is Co-Founder and Co-CEO of Beebolt, the AI supply chain technology company behind the intelligence layer for critical industries. Beebolt built Conductor™, the intelligence layer for the semiconductor supply chain, with SEMI and its Industry Advisory Council, and it is shaped by the companies who use it. Multi-agent AI reads the signals. Beebolt's analysts and its Fellowship Network of industry experts then add the context and judgment behind them, so leaders get intelligence they can trust, verify, and act on.
Talal co-founded Beebolt in 2021 after a career in trading and investment analysis. That background shapes his conviction that the advantage does not go to whoever holds the most data. It goes to whoever connects the right signals early. He is a growing voice on co-intelligence, supply chain resilience, and why AI alone cannot run a semiconductor ecosystem. Talal sits on the advisory board of Akama Fund, a UK-registered charity that makes it easier for organizations to fund higher education scholarships. He holds a degree in Business Administration from Northeastern University and splits his time between the UK and Dubai.

References