

Invited Talk

Cognitive Enterprise - Reinventing your fabs with AI



Ryuhichiroh Hattori

Partner, IBM GBS Global CoC (Center of Competence) Electronics; Member of IBM Industry Academy

About the Speaker

Mr. Hattori is a global SME leading Cognitive Manufacturing solution asset & business development worldwide and also leading semiconductor industry segment as Industry SME. In his 34 years experiences at IBM, he has worked on CIM solution for Semiconductor, LCD, printed circuit board and solar manufacturing including experience of scheduling projects at various kinds of manufacturing. Recently, his work has focused on Cognitive Manufacturing and various topics related to IoT, Industry 4.0 and Smart Factory in Electronics Industry. Mr. Hattori joined IBM's Global Electronics Industry team in 2008. He is based in Kyoto, Japan.

Abstract

- Semiconductor 300mm wafer fab has implemented Smart Factory since 2000s by full automation with online integration of analytics applications in addition to equipment and material handling system.
- The level of automation has become higher by continuous addition of event driven automation scenario on workflow engine.
- Leverage of AI and big data analytics has been started at most of 300mm wafer fabs, but it's still limited.
- Cognitive Enterprise transformation with AI at 300mm wafer fabs is necessary to get more benefit and it requires new IT platform with DigitalTwin & AI analytics environment on hybrid multi cloud. It will enable autonomic production based on predictive decision making with assistance of AI.
- IBM Garage is recommended start of Cognitive Enterprise transformation with AI.