

X2MDIS-Driven Vertical/Horizontal Integration Method for Smart Manufacturing: Business Process Scenarios and Data Models

Jongwon Kwon(kjw79@ktl.re.kr), Seonyoung Park, Yeonjun Choo

Korea Testing Laboratory

Abstract

Korean manufacturing companies usually implement and run various different IT software applications to monitor and control their end-to-end manufacturing processes. The production data should be collected and exchanged within and across the PLM-ERP-MES-SCM-CPPS for measuring KPI. However, most manufacturing companies are practically facing the biggest challenge to data integration because each IT software application has individually implemented by a different solution provider. This paper describes X2MDIS-driven vertical/horizontal integration method for Korean smart manufacturing. X2MDIS(eXtensible to Manufacturing Data Integration Schema) is standards-based data models for exchanging information among many IT software applications in manufacturing environment. They are currently in development based on related international standards such as OAGIS, B2MML, IEC 62264 etc, and Real-World Cases Project.