Mine Operations Management – The path to Digital Connected Mining Operations.

**Sagar Rahangdale ¹, Kriti Chhabra ²**

1. Industry Consultant, Dassault Systèmes, Singapore, Email: sagar.rahangdale@3ds.com
2. Industry Consultant Manager, Dassault Systèmes, Perth, Australia Email: kriti.chhabra@3ds.com

Keywords: Mine Operations Management, Mine Execution, Apriso, Material Tracking & Reconciliations, Asset Maintenance and Performance

# ABSTRACT

Mining companies must use every possible strategy to manage the pressure to produce more. Yet many mine companies are missing out on significant opportunities to boost the productivity of their mines and processing plant operations.

Many industries have achieved a level of execution discipline well beyond what the mining industry is experiencing today. For example, some mines still capture operations data manually, often writing information down on paper before transferring it to an Excel spreadsheet that they then send out by email. It builds organizational and technological silos, where important information may be held in one area when it could be of great use to someone in another department, but they don’t even know it exists.

This paper defines the path for connected, digital mine operations using Mine Operations Management.

**Executing digital transformation through mine operations management**

Digital transformation requires the real world to be reflected in a digital world – reproducing products, plans and processes in digital form.

The domain where digital and physical process converge can be managed by MOM solution– Mine Operations Management. While many mining companies have elements of MOM, only a few are just starting to adopt the ISA-95 architecture found in manufacturing. It serves middle domain to bridge the gap between business systems and physical operations.

MOM solution provides a unified data platform and allows users to connect directly into equipment’s & real time controls as well as ERP, geology, planning & engineering applications to automate data collection & display it all within one platform.

MOM enables superior work management through increased visibility by managing Material Tracking & Reconciliation from pit to port, managing the work & workforce either in mine or processing plants. It also provides control over performance with comprehensive monitoring of operations KPI, Asset or Equipment Performance monitoring with Maintenance capabilities.