Overcoming Interoperability and Communications Challenges in the Digital Mine

Much of the industrial world has been unable to capitalize on the promise of digital industrial transformation because one of the key drivers for change—data—is trapped in disconnected machines and with little-to-no communication between various computer networks. This not only make data difficult to access, it makes the process of extracting value from data more costly and less effective.

The Industrial Internet was created to change all of that through hyper-connected equipment and advanced data analytics.

But to take full advantage of this, mining companies will need to reevaluate their current tools, systems and processes. For example, the computer productivity tools currently used in the mining industry are highly focused on their specific tasks but are largely out-of-date and have been underserving operators' needs for quite some time. This will only worsen during digital transformation, because legacy systems simply aren't designed to handle a massive influx of new data, from a variety of sources, on their own.

Wabtec's Digital Mine solves this challenge with Asset Performance Management, the only application -as-a-service designed specifically for the Industrial Internet and digital industrial transformation. APM is fine-tuned to industry's exact transformation requirements, with the power and functionality to consolidate and process a wide variety

of industrial data across multiple locations and over varying time schedules. This data can then be used to improve outcomes and streamline operations—from increasing operational safety and efficiency to predicting equipment failure and optimizing logistics.

APM also offers the flexibility you need for back-end integration with legacy systems, so that the data you've already collected can still be used to drive meaningful change that can lead to meaningful outcomes across the organization. APM accomplishes this by using a custom-built cloud as an interoperability layer to combine data from many sources and then normalize it for analysis. Even though your data may be stored across a variety of machines and legacy systems, APM will help you put it to good use in your transformation journey.

Communication and interoperability challenges are not unique to the mining industry, but many of the challenges that stand in the way of complete digital industrial transformation are. That's why we developed Wabtec's Digital Mine solutions, a suite of products and services designed specifically to address the transformation pain points of the mining industry. Together, GE Digital Mine will help you solve the interoperability and communications challenges created by a variety of siloed data, far-flung assets, and remote mining locations to ultimately reshape operational strategies, unlock new productivity resources, improve safety and sustainability, and streamline operations.