Digitized Operational Processes: The Foundation for Manufacturing DX

The ability to simplify and optimize processes through digitization can become invaluable over time to manufacturing digital transformation (DX) initiatives.

Top 3 Digital Transformation Challenges in Manufacturing:

- Developing digital capabilities and tools: 50.7%
- Creating a road map for digital investment: 46.7%
- Lack of infrastructure to support digital enterprise: 25.9%

Source: IDC’s Global Digital Transformation Executive Sentiment Survey, May 2018
The Operational Demands

Considering the role that real-time visibility plays in improved performance, it is alarming to see a large number of manufacturers still utilizing manual/paper-based systems across their operations. Manual systems are far too inefficient and outdated to meet the demands of a modern manufacturer. In addition, homegrown or legacy proprietary systems in many cases are built in-house and siloed. These systems don’t scale with modern technology such as APIs and thus create more manual work and constant swivel chairing. Drawbacks from manual/legacy systems include the following:

- Increased costs
- Wasted time
- Data inaccuracies and latency
- Limited traceability
- Poor communication
- Lack of process standardization

The speed and complexity of manufacturing operations are increasing faster than ever before. The ability to simplify and optimize processes through digitization can become invaluable over time to DX initiatives. All employees, no matter where they are located around the world, need access to standard information to improve communication and collaboration across the enterprise. As a result, successful manufacturers focus on digitization efforts, eliminating paper-based/manual systems across operations.

Modernizing with a Digital Platform

However, digitization comes with its own challenges. In IDC’s recent Global Digital Transformation Executive Sentiment Survey, manufacturers indicated that the development of digital tools and creating a road map for digital investment are their top concerns.

While developing digital tools and creating a road map for digital investment are top challenges, there are more ways than ever before to address these concerns. Technology solutions have continued to mature, and there is no need for a manufacturer to continue to rely on legacy systems. System modernization brings a company’s existing application portfolio to a point where those applications can maintain the pace of digital operations.

This focus on modernizing the IT landscape has led many companies to turn to a digital platform approach for operational improvements. A platform approach not only allows a manufacturer to become more agile and better manage/act upon information across the enterprise but also allows for the incorporation of innovation accelerators such as artificial intelligence and machine learning. As the manufacturing industry continues to evolve faster than ever, companies that break down silos and embrace modern technology will thrive in this environment.