

Introduction

The current pace of technological advancements has the most profound impact on enabling how chemical manufacturers transform themselves to respond to market trends and deliver an entirely new customer experience. Intelligent technologies promise to bring great benefits such as productivity and efficiency gains, enabling innovative new business models and generating new revenue streams.

The following intelligent technologies are instrumental in helping chemical companies respond to market trends.

The Internet of Things and Industry 4.0

Advances in ubiquitous connectivity and edge computing are driving a change in business productivity. This connectivity, coupled with artificial intelligence and machine learning, can analyze petabytes of data and affect business outcomes. Although manufacturers have been using the Internet of Things for some time, now with [Industry 4.0](#), the entire value chain can be connected from development to production to supply chain, enabling faster, more flexible, and more efficient processes to produce higher-quality individualized goods at a reduced cost. Data-driven insights can drive customer-centric innovation, lower material costs, and reduce risks. This transformation will improve resource productivity and efficiency, drive agility and responsiveness, speed time to market, and enable customization to meet customer needs. Additionally, remote condition monitoring of assets will provide real-time data from machines to predict maintenance needs and identify potential quality problems in manufacturing processes before they occur. Assets can be jointly managed as digital twins by manufacturers, customers, and partners, thereby improving asset data and modelling.

To Read full article click

<https://www.linkedin.com/pulse/mega-trends-driving-chemical-industry-underlying-technologies/?trackingId=ZF5XEwboRtmaKe%2FaHMJQSg%3D%3D>