Process Automation - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 100 pages | Mordor Intelligence

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Report description:

The Process Automation Market size is estimated at USD 109.77 billion in 2024, and is expected to reach USD 145.65 billion by 2029, growing at a CAGR of 5.82% during the forecast period (2024-2029).

The Industrial Internet of Things (IIoT) and the Industrial 4.0 are at the center of new technological approaches for development, production, and management of the entire logistics chain, otherwise known as smart factory automation and are dominating trends in the industrial sector, with machinery and devices being connected via the internet. The number of IoT connected devices rose to 20.35 billion in 2017 from 15.41 billion in 2015 and is expected to reach 51.11 billion by 2023, given the huge push from the investment of the technology providers through continuous research and development.

Key Highlights
-The growing emphasis on energy efficiency and cost reduction drives the market. The rising digital revolution resulted in an increased focus on automation, which is likely to improve quality and flexibility in the manufacturing process. Governments across the world enacted various policies in favor of automation, with an intention to improve energy efficiency while reducing the costs incurred. For instance, in 2019, Malaysian government launched a National Policy on Industry 4.0 (Industry4WRD). A budget of over USD 1.2 billion was allocated to help businesses adopt Industry 4.0.
-Within the allocated budget, a total of USD 720 million was allocated to accelerate the adoption of smart technologies, such as automation, in addition to robotics and artificial intelligence under the name as Industry Digitalization Transformation Fund, and USD 480 million was allocated under the Business Loan Guarantee Scheme (SJPP) for SMEs planning to invest in automation and modernization.
-Further, the demand for safety automation systems drives the market. In the present day, businesses are provided with significant incentives, primarily investments in automated systems, owing to technological advancement. Automation can also

provide solutions to address persistent safety challenges, and, thereby, attracting the industry players to deploy safety automation systems, in addition to achieving higher levels of efficiency and precision.
-For instance, Bosch's plant in Toluca, Mexico, has been using photoelectric light curtains around a machine whose work involves the installation of needle bearings in engine shafts. These light curtains have been responsible to greatly improve the safety and productivity of the machine. Thus, technological advancements will allow manufacturers to incorporate machine learning and other artificial intelligence solutions, mainly to enhance safety.
-Further, theCOVID-19 pandemic created an economic turmoil for small, medium, and large-scale industries across the world. The country-wise lockdown inflicted by the governments around the world, to minimize the spread of the virus, impacted the growth of industries. Due to pandemic, it forced the businesses to adhere to strict requirements in order to ensure the ongoing safety of their employees and customers. As a result, the need for automation witnessed a sudden spike. This is expected to be observed as a notable trend in the foreseeable future, as automation could become the new normal.
-In addition to ensuring that businesses are capable of meeting target production levels in these times, automation can also support the gradual recovery post the control of epidemic, to a larger extent. The situation may also serve to accelerate the investments in automation across process industries, primarily with an intent to bridge the productivity gap, when the global economy eventually rebounds, but gradually.

Process Automation Market Trends

Paper and Pulp Segment is Expected to Register a Significant Growth

- The pulp and paper industry comprises a large and major portion of the global economy. Pulp and paper is a key industry with numerous processes necessary for the final product production, and paper products are among the major export commodities in many countries.
- The numerous processes in the paper and pulp industry require the raw materials pass through a lot of process with close monitoring of temperature and chemical content and the process automation allows to achieve the same from one location through the process automation.
- Moreover, according to FAO, in 2018, the global production capacity of paper and paperboard amounted to around 267.36 million metric tons and is expected to reach 278.24 million by 2023. Such growth in the production capacity is expected to create scope for the market. Today's pulp and paper mills operate under constant pressure to reduce production costs and increase yields. Hence, many operators are moving to DCS for increased production and improved yields.
- The growing adoption of DCS is driving the market's growth positively. For instance, in April 2020, Valmet would supply a complete mill-wide Valmet DNA DCS to JK Paper Limited for their board project at Fort Songadh Mill (India). JK Paper adopted Valmet's automation system based on good references in technology, service support, and low ownership costs.
- Valmet's offering includes the design, engineering, manufacturing, factory acceptance test, and installation of Valmet DNA DCS. The mill-wide DCS system would cover the control of the pulp mill, paper machine, recovery island, and power block sections. JK Paper also placed an additional order for Valmet DNA DCS of Power Block for their Sirpur unit.
- Furthermore, Valmet would supply Valmet DNA automation systems to Shandong Sun Paper Industry Joint Stock Co. Ltd (Sun Paper) in China. The two systems would be installed on the company's paper machine PM 39 and PM 40, enabling the lines to increase availability, production efficiency, and optimize operation.

North America Accounts to have Significant Market Share

- The US manufacturing sector is one of the largest globally, with the contribution to GDP from the manufacturing industry in the

country reaching USD 2190.40 billion in the third quarter of 2019.? The manufacturing production in the country, however, witnessed a significant decrease over a year earlier in April 2020, the biggest decline since May 2009, primarily owing to the outbreak of COVID-19, which led multiple factories to suspend their operations.
- For the manufacturing sector in the country, the emergence of AI and automation solutions is expected to reshape the source of value creation, the formation of new business models, and the delivery of value-added services, such as predictive maintenance and mass customization.
- Multiple provisions in federal law are also expected to support the manufacturing sector in the country. For instance, the Advanced Manufacturing Partnership (AMP) is an initiative undertaken across the country to make the industry, universities, and the federal government to invest in emerging technologies. This has helped the country to substantially gain a competitive edge in the global economy. ?
- Moreover, there are cities in the United States that do not meet health standards. For instance, in September 2019, the EPA reported that California had about 202 water systems that did not meet the health standards 665 times in the recent reporting quarter. That also includes 67 systems that have about 194 instances of falling short of the federal requirements for the levels of arsenic in water. ?
- Furthermore, there are currently 20 major upcoming water treatment construction projects across the country, each of which is worth about USD 5 billion on average. In addition, major companies are interested in building waster water pipeline rehabilitation worldwide.?
- Moreover, Canada is also an active member of various International Energy Agency Technology collaboration programs in renewable energy and end-use, including the International Smart Grid Actions Network. Thus researchers are also collaborating on R&D tasks to advance the deployment of renewable energy and energy efficiency in the built environment and power systems.?
- Further, in June 2019, the Canadian government announced a USD 5 million investment to Hydro Ottawa for Phase 2 of a smart grid project at a community housing complex in Ottawa. This gives users the freedom to establish microgrids, which allows them to generate their own power. ?

Process Automation Industry Overview

The process automation market is fragmented and highly competitive and consists of several major players. Few of the major players currently dominate the market. These major players, with a prominent share in the market, are focusing on expanding their customer base across outside countries. These companies are leveraging strategic collaborative initiatives to increase their market share and increase their profitability. Key players are ABB Ltd, Dassault Systemes SE, etc. Recent developments in the market are -

- April 2020 - Power management company Eaton announced that it completed the acquisition of Power Distribution, Inc. Power distribution is a prominent supplier of mission-critical power distribution, static switching, and power monitoring equipment and services for data centers, industrial and commercial customers.
- February 2020 - Power management company Eaton announced that it completed the acquisition of Power Distribution, Inc. Power distribution is a prominent supplier of mission-critical power distribution, static switching, and power monitoring equipment and services for data centers, industrial and commercial customers.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

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