



"Digitalization and automation are the game changers to meet the challenges of today's fast-paced manufacturing sector."

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Siemens launched the AMTC 2.0 in 2021. Could you elaborate on this milestone?

Siemens launched our expanded Advance Manufacturing Transformation Center (AMTC) in November 2021. More than just showcasing our product and service portfolio, the AMTC offers a hands-on experience, facilitating co-creation with customers and partners by allowing them to visualize and engage with various industry-specific solutions. In addition, the AMTC incorporates a training center to support the Singaporean workforce to gain expertise in Industry 4.0 curricula. We have added a dedicated area catering for our customers and partners in process industries where chemical players can explore and exchange ideas to put their ambitions into practice. The overall scope of the AMTC is to help customers embarking on their digital transformation journey with tailor-made solutions that serve both MNCs as well as SMEs.

Siemens markets its digital solutions under the “digital enterprise” umbrella. Could you explain what this entails?

“Digital Enterprise” is the Siemens headline for our comprehensive Industry 4.0 offering.

It comprises many elements, from the field level to the operating and control level, the engineering and management level, and finally, at the cloud level, all converged into a single solution. This is what we call our vertical integration approach.

We are also addressing the horizontal dimension – looking at the lifecycle of a plant, including design and planning, engineering, construction and operations – once again, all stages are integrated into a seamless data thread. Our COMOS Engineering and Asset Lifecycle Solution provides the underlying data integration platform, enabling customers to design, maintain and operate their plant assets more efficiently.

Digitalization and automation are the game changers to meet the challenges of today’s fast-paced manufacturing sector.

Our comprehensive Digital Twin approach enables the integration of the entire plant lifecycle, along with performance data. The result is a continuous loop of optimization, both for the product and the production. By combining multi-physical simulations with data analytics in a fully virtual environment, the Digital Twin creates new insights for our customers.

With advanced modeling, data obtained from digital twins can be used in predictive analysis to run forecasting or simulations. A digital twin is less about building a static digital copy and more about enabling up-to-date data flows and constant optimization.

What are the key demand trends for your digital and automation solutions?

Technologies like digital twins are pushed by strong market forces and business drivers, most notably safety, sustainability and efficiency. Demand for simulation and advanced modeling capabilities has been particularly potent. Sophisticated simulation models are powerful tools to help organizations optimize the original design of a plant as well as continuously enhance it throughout the operational stage. With our Siemens PSE software suite, we provide advanced modeling solutions deployed at the early design stage before putting the chemical plant into operation; once the plant is up and running, the customer can then monitor different operations KPIs and further optimize the performance.

Automation is becoming increasingly software-based and software-driven, and the software technology is the biggest differentiator. At Siemens, besides our leading automation product for process industries, SIMATIC PCS 7, we are now introducing to our customers the fully web-based SIMATIC PCS neo. It offers companies new possibilities for global collaboration in engineering and operations, especially when deploying module type package (MTP) production standards.

How do you assess Singapore’s workforce preparedness for the digital transformation?

Concentrated efforts from the public sector to bring labor markets closer to digital technologies are evident and are paying dividends. On the corporate side, most businesses are making sure their staff are upskilling. Besides running internal training programs for our teams, Siemens has

been actively involved with public institutions and universities to prepare future generations. Undoubtedly, people represent a key success factor for digital transformation, and the speed and success of this transformation depends on the country's human resources.

What are Siemens' key priorities for 2022-2023 and do you have a final message?

We are investing to deepen our footprint in Singapore and the ASEAN markets. There is an immense potential for chemical companies in Southeast Asia to innovate and transform in a way that is both commercially sound and sustainable. At Siemens we look forward to enabling our chemical customers and partners to fully leverage the power of automation and digitalization.