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Smart Manufacturing brings together digitalized processes, connected machines and competitive products leveraging a virtual platform across design, manufacturing and services leading to mass customization, speed, quality, productivity and efficiency.

### **Perspectives**



Dr. Jan Michael Mrosik **CEO Digital Factory Division** Siemens AG



Digitalization changes everything. It changes the way we stay informed, the way we travel, the way we buy things. We're living in a world which is increasingly impacted by data. Today, about eight billion devices, from smartphones to trains to wind turbines, are already connected to the internet – a number that will grow to one trillion by 2030. It is estimated that in only three years the volume of globally generated data will reach 40 zettabytes, and half of them will be machine-generated data... <u>Read more</u>



Dr. Chandan Chowdhury, Associate Dean and Professor (Operations Management & Information System)



In an increasingly global and competitive environment it has become imperative to transform the way we look at our value chain. Customers today expect increasingly personalized products and services; frequently through varied modes of service delivery (e.g. online, brick-and-mortar stores, hybrid). Companies, in response, are having to adapt their business processes to these changing consumer trends and demands.

## Read more



Dr. Purnendu Sinha Technology leader - IoT analytics group, Technology office, Tata Services Ltd.



Chandershekhar Bharthi Managing Director Ace Micromatic

#### **Smart In Action**

#### a. 7 key benefits of a smart factory

The smart factory Trumpf built in this Chicago suburb, in the works since early 2014 and open to the public since September, is just a few months away from running full steam ahead: Smart Manufacturing recently asked its director, Tobias Reuther, to identify the seven key benefits of a smart factory. Three of the benefits involve technology that the German machine tool and laser systems manufacturer is set to bring to market next year. The other four emanate...

b. New technologies give us new business models

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The new business models enabled by

packaging, processing and supply chain operations.... **Read more** 

#### e. Hyundai Wia to set up smart manufacturing system in its factory

South Korea's second biggest auto parts maker Hyundai Wia Corp. under Hyundai Motor Group will transform its car engine manufacturing factory into a smart one controlled by Internet of Things (IoT) technology to improve its production efficiency. According to automobile industry on Sunday, Hyundai Wia plans to apply IoT and big data technologies... **Read more** 

f. Huawei Joins Hands with PCITC to **Embrace Smart Factory 2.0** 

## **Featured publication**



In an increasingly global and competitive environment it has become imperative to transform the way we look at our value chain. Customers today expect increasingly personalized products and services; frequently through varied modes of service delivery

**Featured Paper** 

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**Swapnil Dol** Director,

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**Useful Links** 

**DOL Group of Companies** 

With the world moving towards the

era of Artificial Intelligence (AI) and

Internet of Things (IoT), there is a

need for technologies that align with

the customer expectation of making

their plants more intelligent and

communicative in a wireless manner.

## **Smart Manufacturing: Fundamentals**



**Industry 4.0 Concept Cell** 



IO Link - the First step to the smart factory

new technologies, including IoT, block chain and machine learning, are targeted to optimize plants vertically within a company and horizontally from suppliers through to customers. The following are IoT applications..... Read more

c. Lenovo Launches China Industrial Big **Data Application Alliance To Boost Smart Manufacturing** 

Lenovo Group Ltd. has teamed up with China Electronics Standardization Institution to launch an Industrial Big Data Application Alliance to support the utilization of industrial big data. The alliance will aim to standardize industrial big data, push digital data modelling of the industrial chain, develop professional algorithm to meet corporate demand for high accuracy... **Read more** 

d. Brewer Scales Smart Manufacturing **Platforms for Next Decade** 

Namibia Breweries adds a historian, SCADA platform and OPC networking to increase energy efficiencies for its China Petrochemical Corporation (Sinopec Group) is China's largest integrated energy and chemical enterprise. It ranked No. 3 on the 2017 Global Fortune 500 list. In 2013, Sinopec Group started its smart plant initiatives and selected its Yanshan, Maoming, Zhenhai, and Jiujiang companies as pilot smart factories... **Read more** 

# g. Stanley Black & Decker To Open

Stanley Black & Decker (NYSE: SWK)

### Advanced Manufacturing Center of **Excellence in Downtown Hartford**

today announced plans to open an Advanced Manufacturing Center of Excellence in downtown Hartford to accelerate its global Industry 4.0 "smart factory" initiative. Called "Manufactory 4.0," named after the original Stanley Bolt Manufactory founded in 1843, the 23,000-squarefoot Center will be located at One Constitution Plaza and will employ approximately 50 Industry 4.0..

## **Sponsor**



**Dare to Commit** 

Creating Champions of the New

**Join the Smart** 

MANUFACTURING

**Sponsorship Opportunities** 

Manufacturing Community

## **Start-up in focus: Altizon**

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Altizon was founded in April 2013 by Vinay Nathan, Yogesh Kulkarni and Ranjit Nair and is funded by Wipro Ventures, Lumis Partners, The Hive, Infuse Ventures and Persistent Venture Fund. Altizon is headquartered in Pune, India and has a presence in Palo Alto, CA.

Altizon is the world's first Industrial Internet Platform company focussed on making Enterprises Internet of Things(IoT) ready. Their flagship product, the Datonis IoT Platform, helps you build your IoT product in weeks by providing device connectivity kits, a device management layer, a highly-scalable, real-time, big-data analytics engine and alerting and monitoring services..

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## **Case Study in focus: ACE Micromatic**



Ace Micromatic, the largest machine tools conglomerate in the country and has been growing at a steady pace over three decades. The company employs 3000+ professionals and produces a third of all machine tools in the country, and has a loyal customer base. As a b2b supplier to manufacturing industries with a presence across all sectors & segments, almost 60% of its business arises directly and indirectly from clients, which are usually small and medium-sized enterprises (Tier II and Tier III companies largely).

The group is well structured, with each company dedicated towards pursuing excellence in its chosen area. Some companies are product companies while others are service based. ACE Designers is dedicated towards Turning, AMS for Milling, MGTL for Grinding, Micromatic Machine Tools for sales and service, Pragati Automation for Turrets and ATCs, and AmiT for Industry 4.0 and IoT solutions. By creating separate entities, the group has made sure that every aspect of its business gets due attention and a healthy synergy amongst them, facilitating cross-learning and rapid growth, making the group a leading machine tool builder in India... Read more