

**Siemens Digital Industries Software** 

# Design faster and smarter with a digital twin by **Siemens Advanced Machinery Engineering**

# Benefit from Machine Engineering Trends with Multi-Disciplinary Design



As machine engineering company, you want to thrive in a very complex and dynamic market, driven by a series of trends that require enormous flexibility and speed of adaption. In this infographic, we have put together the most important trends, together with insights and tips for your success.

One of these tips is to implement a comprehensive Digital Twin and Digital Thread approach to integrate all the engineering disciplines in the development process of your machinery, allowing you to virtually design, produce and commission it in harmony with all the technical, customer and regulatory requirements.

Trends



**Consumer driven** 

customization

requires highly

flexible machines

Smart machines are intelligently connected machines via the Internet of Things (IoT)



Hyperautomation, a combination of multiple machine learning, packaged software and automation tools

Global competitive pressures from new, low cost providers has never been higher

# Consumer driven customization requires highly flexible machines.



Consumers increasingly demand a packaged system of integrated products and services customized to meet their individual needs. *Source: Joint Research Council Foresight Study* 



Machine users increasingly demand customizable, flexible machines, able to cope with shrinking lot sizes and higher number of product variants.



#### Regulatory pressures

Increasing industry regulations add complexity to the machine engineering market.

#### Smart machines are intelligently connected machines via the Internet of Things.



The global megatrend towards "Smart Manufacturing" is creating the need for intelligently connected machines via the Internet of Things (IoT).

YEAR 2025 +24 BILLIO



The #1 and #2 business strategies of machinery companies are dedicated to developing smarter machines through innovation and customization.

Source: Tech Clarity – Best Practices for Developing Industrial Equipment

Machines are being re-engineered starting with software and services as the primary design goals to support new business models. The resulting IIoT revenue growth will be driven by platforms as well as software and application development and is expected to be in the range of 20 to 35%.

Source: Mckinsey

# Collaborate with any Supplier no matter the CAD system and version



# Siemens Advanced Machinery Engineering



# Build tomorrow's machines today

Efficiency starts even before building any machine.

Design faster and smarter with a digital twin

Create harmony in

Multi-disciplinary design.

Turn the machine on before it physically exists

Take advantage of Virtual Commissioning.

Respond faster and smarter to customer demands

Control and manage your Bill of Materials.

### Become an advanced machine engineering company to satisfy increasing market requirements, grow revenues and gain market share

50% faster time to production



For more information, visit:

> siemens.com/plm/ advancedmachinery/

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