

Innovation for the Future

Dieter Klinke, Siemens PLM Marketing Director Asia-Pacific, 26 June 2015

Megatrends are Revolutionizing the Business World

Creating challenges for manufacturers



Re-inventing Manufacturing

Renewed focus on making things

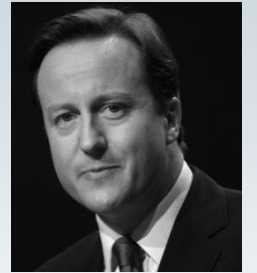


“Industrial production is the backbone of German economic performance.”

Prof. Dr. Wolfgang Wahlster

*CEO and Scientific Director of the German Research Center for AI, DFKI GmbH
Business Meets Research, May 22, 2012*

“If Britain is going to be at the head of the pack, a proper industrial strategy – is absolutely vital.”



Prime Minister David Cameron

Message to the Industrial Strategy Conference 2013

Published 11 September 2013



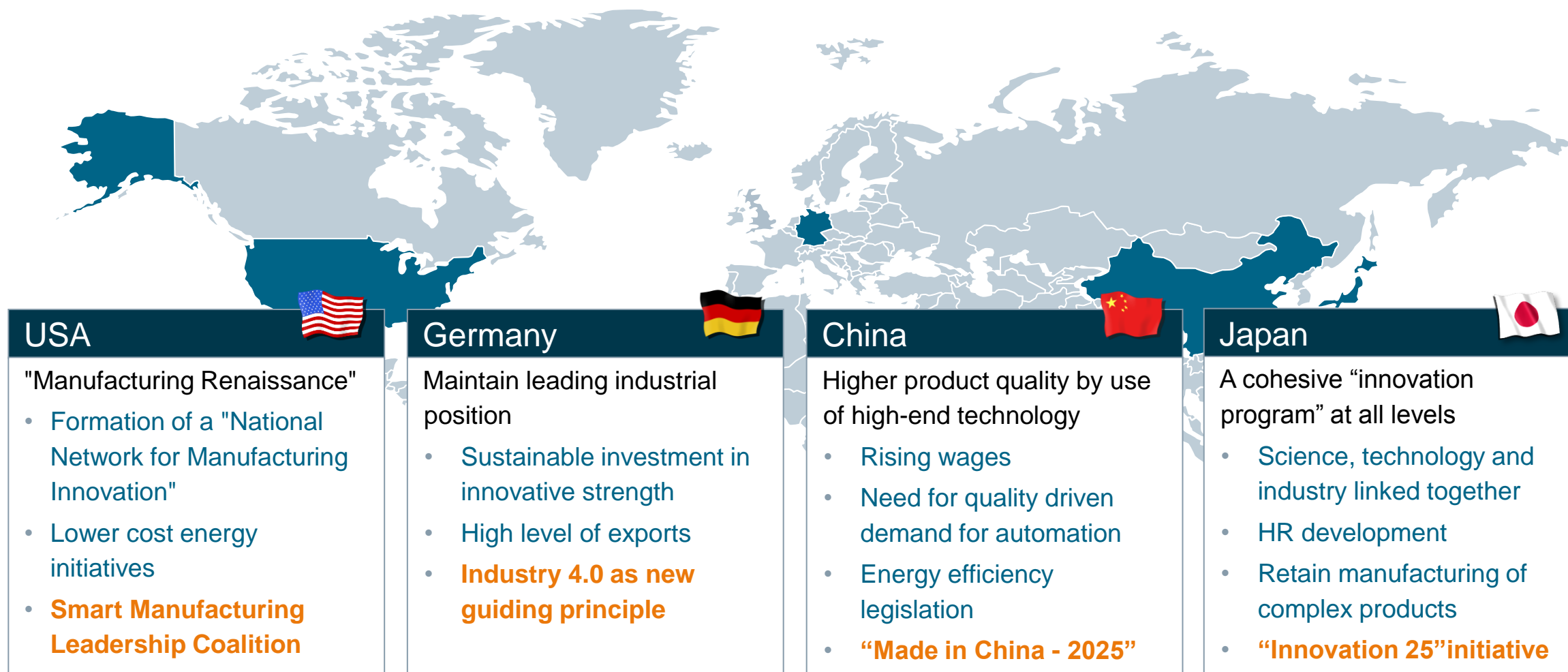
“Having a strong domestic manufacturing base is vital to the United States maintaining its world leadership in innovation.”

Willy C. Shih

*Professor of management practice at Harvard Business School
“Just How Important is Manufacturing”, Harvard Business Review, February 21, 2012*

Industry is Again Seen as an Engine of Growth and Stability

Economies around the world are investing



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The Age of Smart Factory comes...ICT and factory is converged.

Smart Factory with the advanced IT technology is the key to increase the competitiveness of Korean manufacturing.

Gov't to promote smart factories, software companies

Network for I
Innovation"

- Lower cost en
initiatives

- **Smart Manufac**
Leadership Coalition

... Its aim is to increase from 1,000 such factories in 2015 to 4,000 in 2017, and onward to 10,000 by 2020. By 2017, the ministry plans to invest KRW 240 billion into developing core components and in upgrading major industries.

(Korea.net, Jan 15, 2015)

Industry 4.0 as n
guiding principle

서울경제

Korean manufacturers need to innovate their factories with ICT

Korea Government announced to propagate 10,000 smart factories by 2020.. as one of "manufacturing innovation 3.0" the initiatives. They benchmarked 'Industry 4.0' from Germany. (Seoul Economy daily, 3 June, 2015)

Manufacturing of
complex products

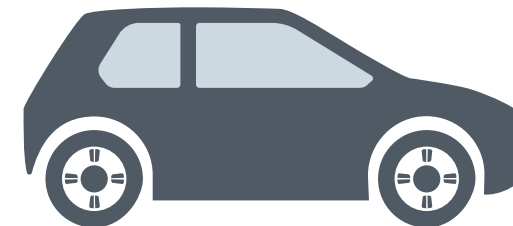
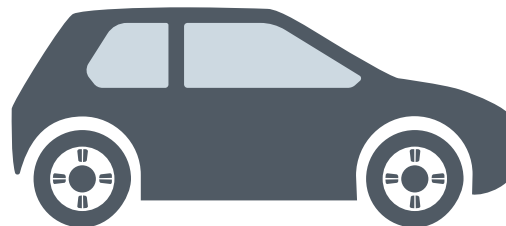
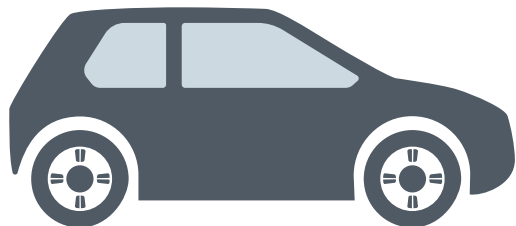
- **"Innovation 25" initiative**

Development Production

In the past:

8 Years

11 Years

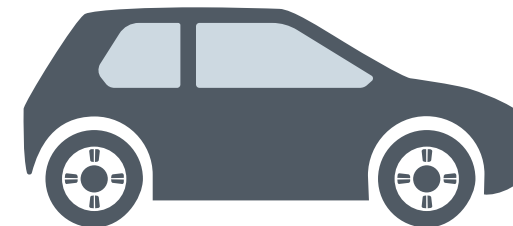
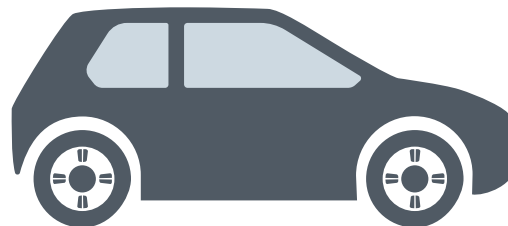
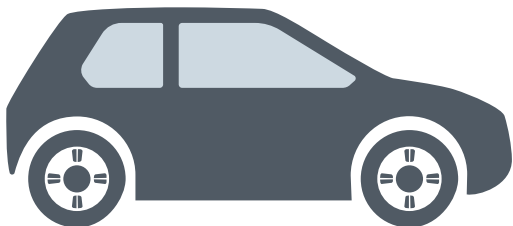


Development Production

In the past:

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11 Years



Development Production

In the past:

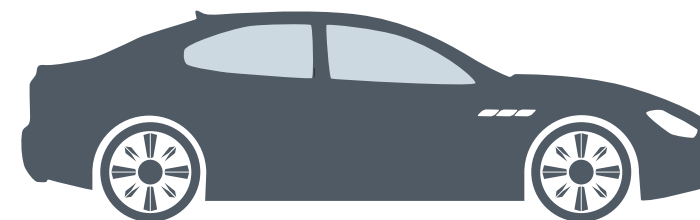
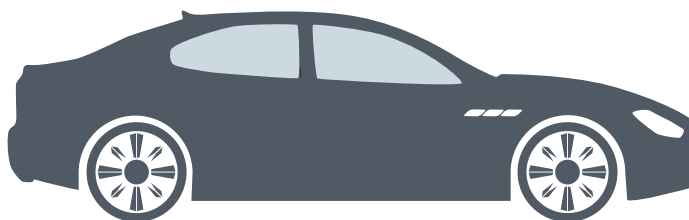
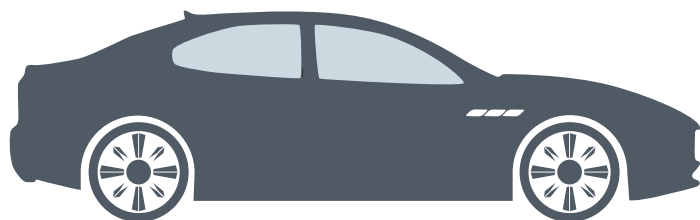
8 Years

11 Years

Now:

3 Years

6-8 Years



Faster Development and Production & shorter Innovation cycles

Development Production

In the past:

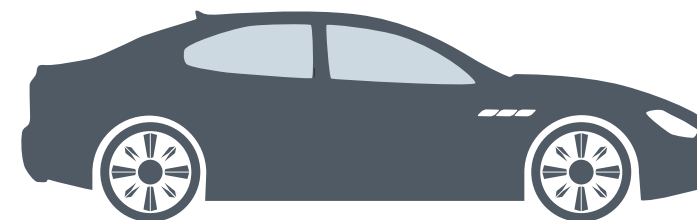
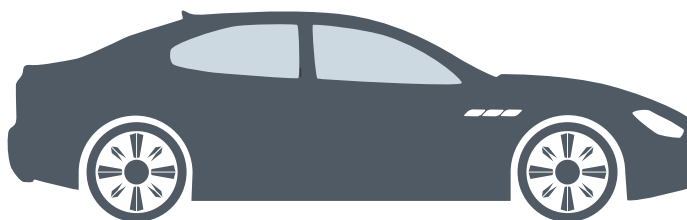
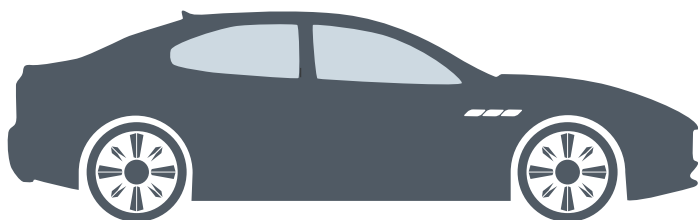
8 Years

11 Years

Now:

3 Years

6-8 Years



How Prepared Are You to Change Your Business?



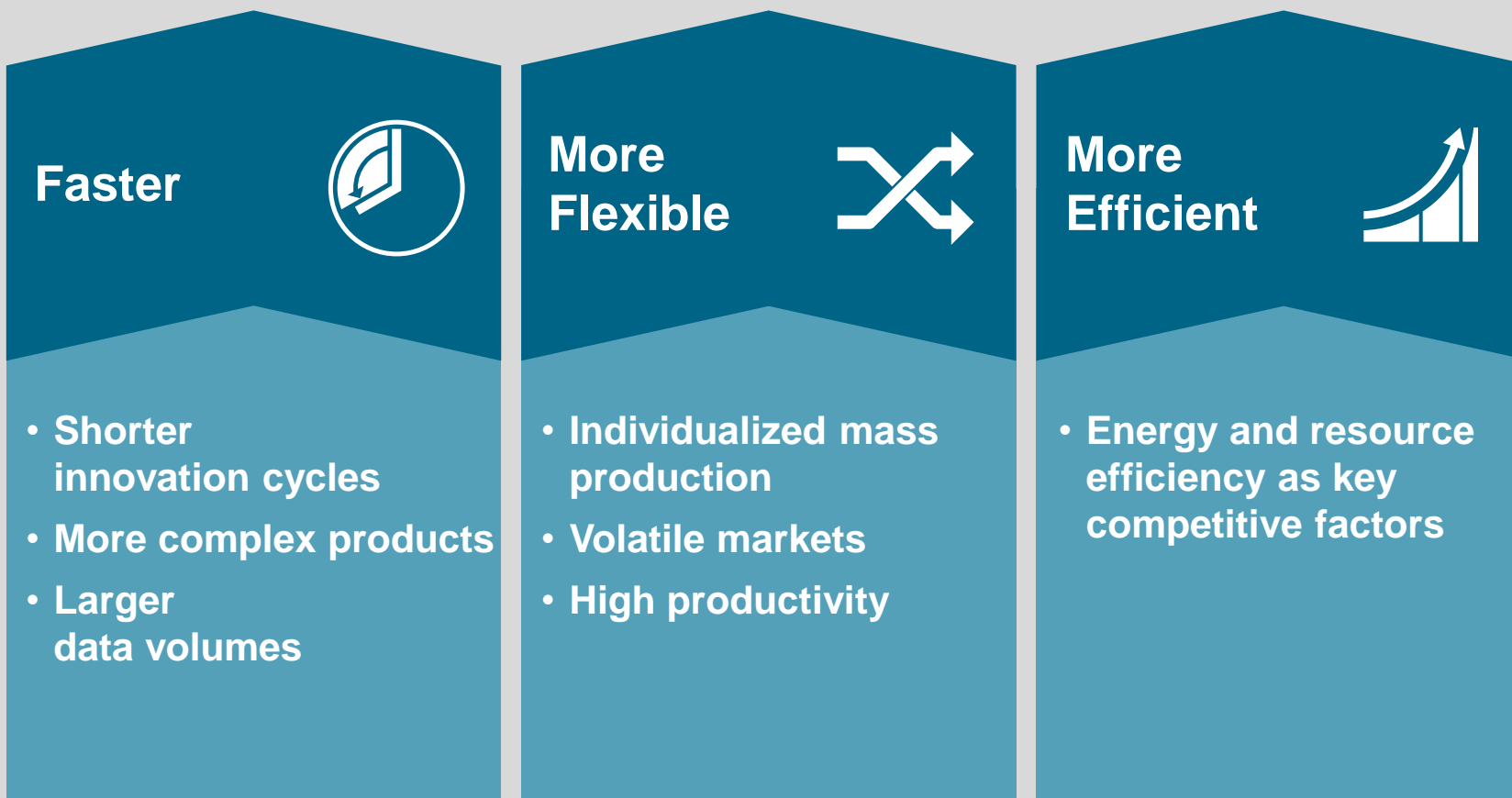
**The products, business models
and legacy positions that once
gave companies their competitive
edge are no longer secure.**

Competing in a World of Constant Transformation



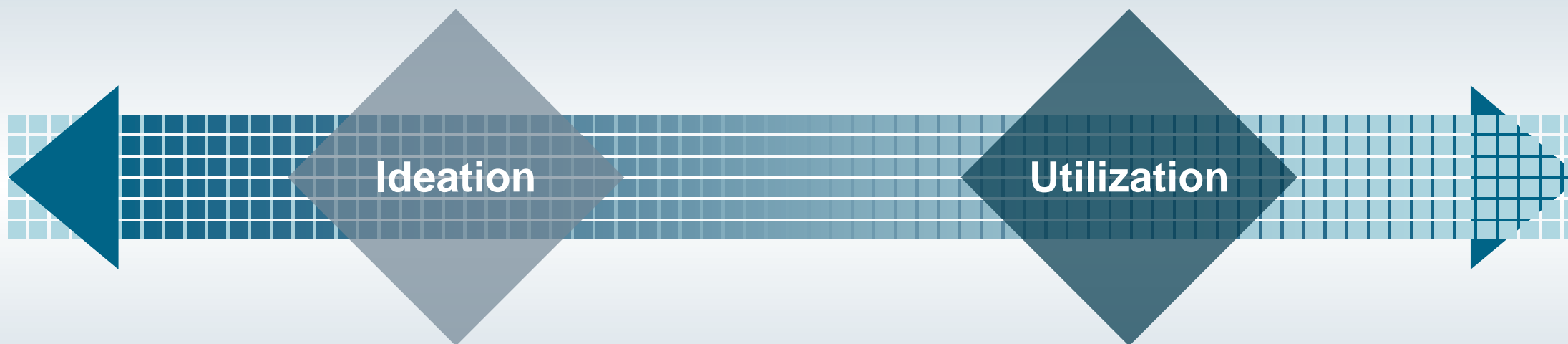
**How can these
transformational forces
improve your ability
to innovate?**

What Characteristics should a Production Facility Have To Participate in the Digital Enterprise?



What Does it Take to Compete?

Some companies focus on customer utilization, feeding data back to ideation



INNOVATION

The Same Forces Transforming What You Innovate will Transform How You Innovate



Digitalization: The Strategy for Realizing Smart Innovation

A blue-tinted photograph of an industrial facility, possibly a power plant or refinery, featuring large pipes and machinery. Overlaid on the left side is a semi-transparent digital interface with binary code (0s and 1s) and a grid pattern. Centered over the image is the text:

Digitalization makes the digital thread a proactive agent to drive new business opportunity.

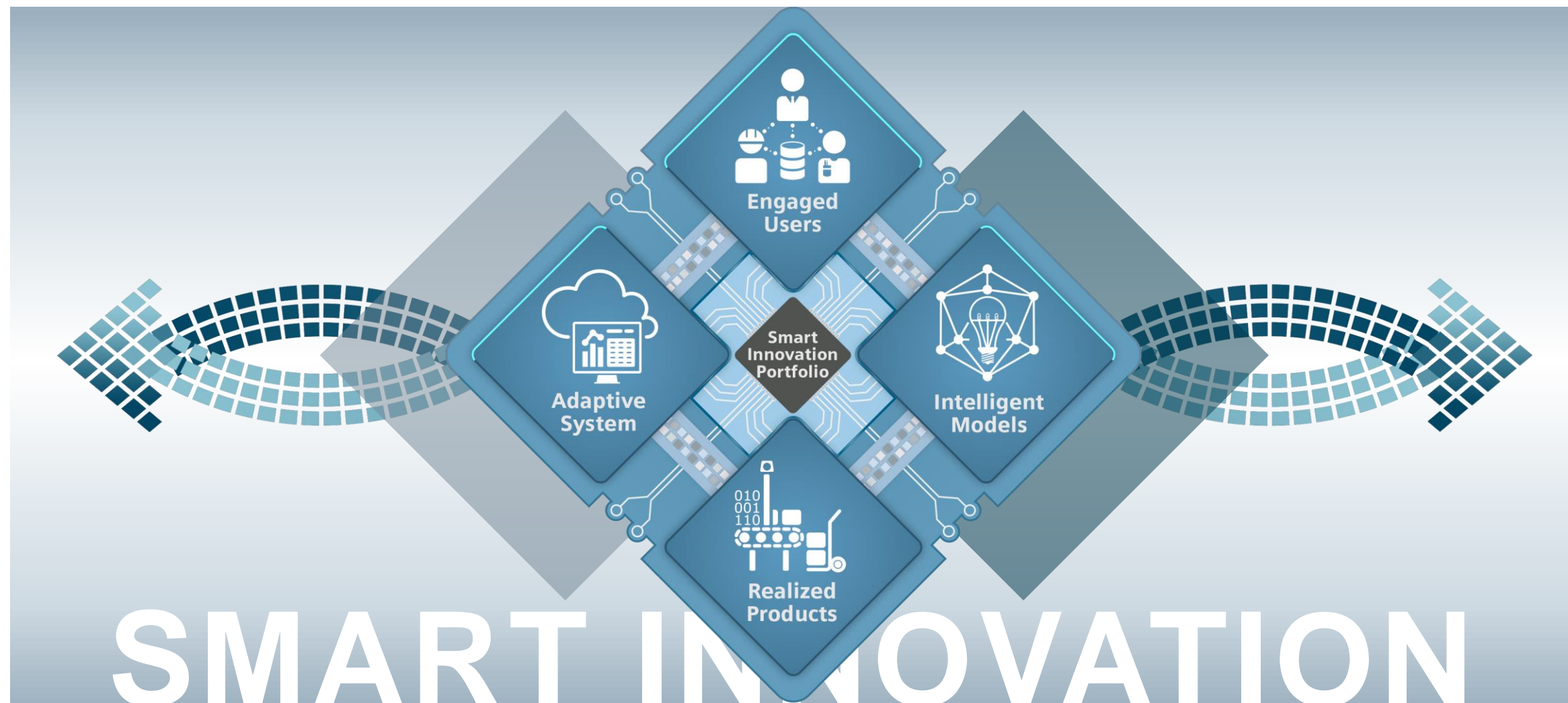
What Does it Take to Compete?

Fully digitalized businesses deliver both product and process innovation

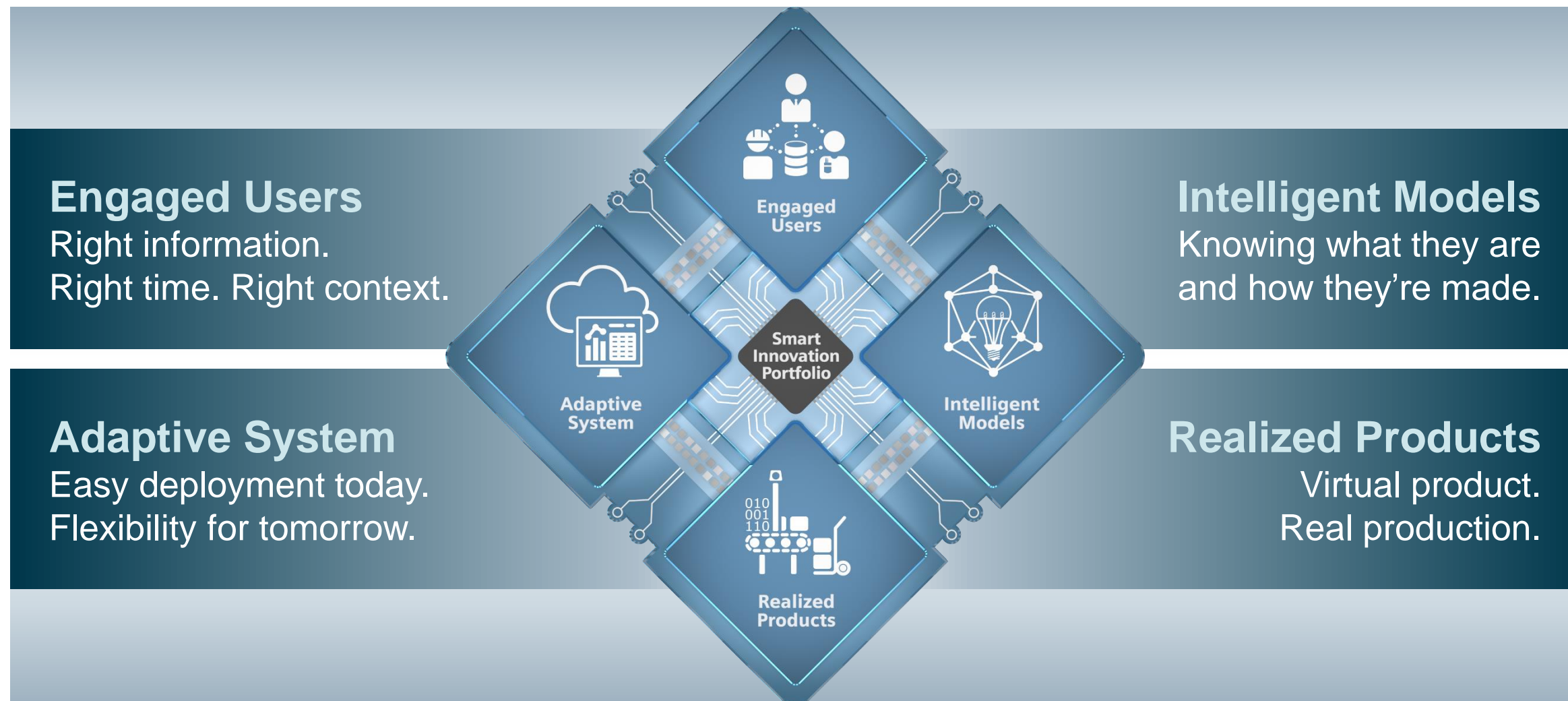


SMART INNOVATION

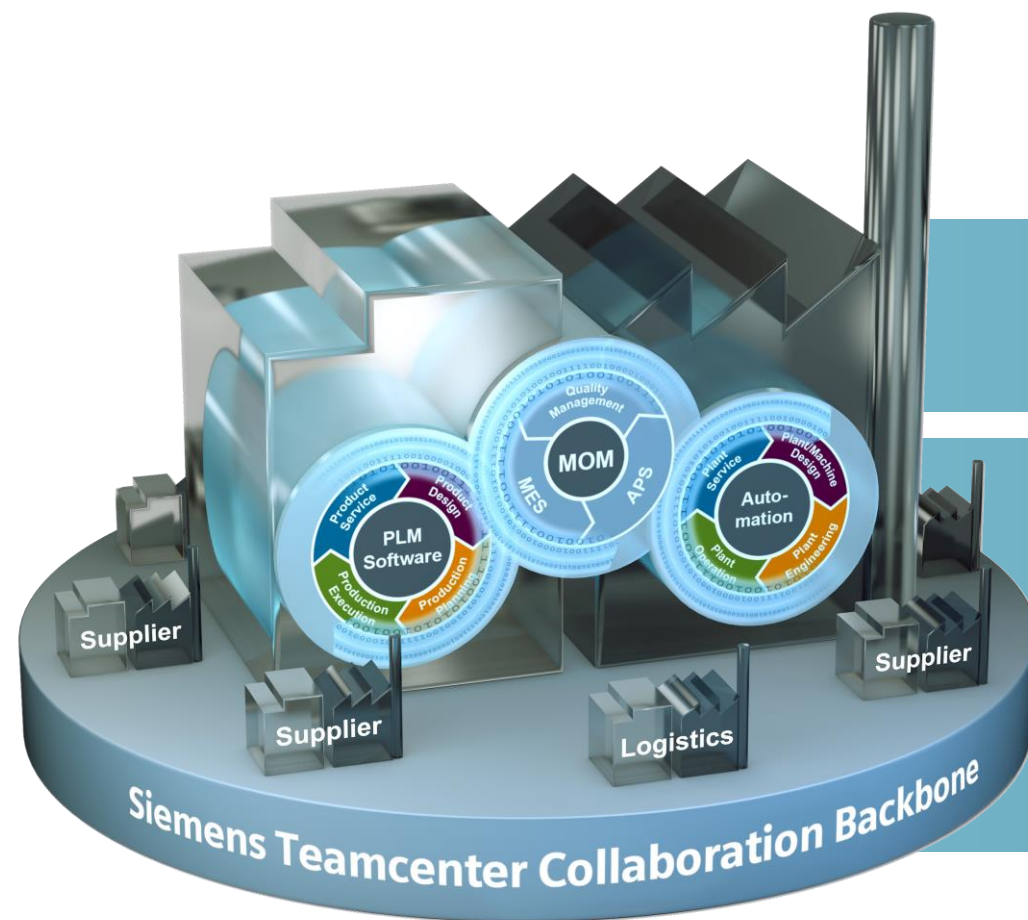
The Role of Siemens PLM Software: Delivering the Smart Innovation Portfolio



The Role of Siemens PLM Software: Delivering the Smart Innovation Portfolio



Siemens is the Only Company Focused on Optimizing Innovation Within Your Digital Enterprise



Product Lifecycle Management

Manufacturing Operations Management

Integrated Production Automation

Siemens: Realizing Our Own Digital Enterprise—Today

Manufacturer experiments with “smart factory”

“At a Siemens factory in Amberg, **machines have begun to self-replicate**. Regulating the ultra-efficient production lines are the very same automation devices...that are spat out at the end. One line, which operates 24 hours a day, requires no human intervention at all....”

—FT, April 10, 2014

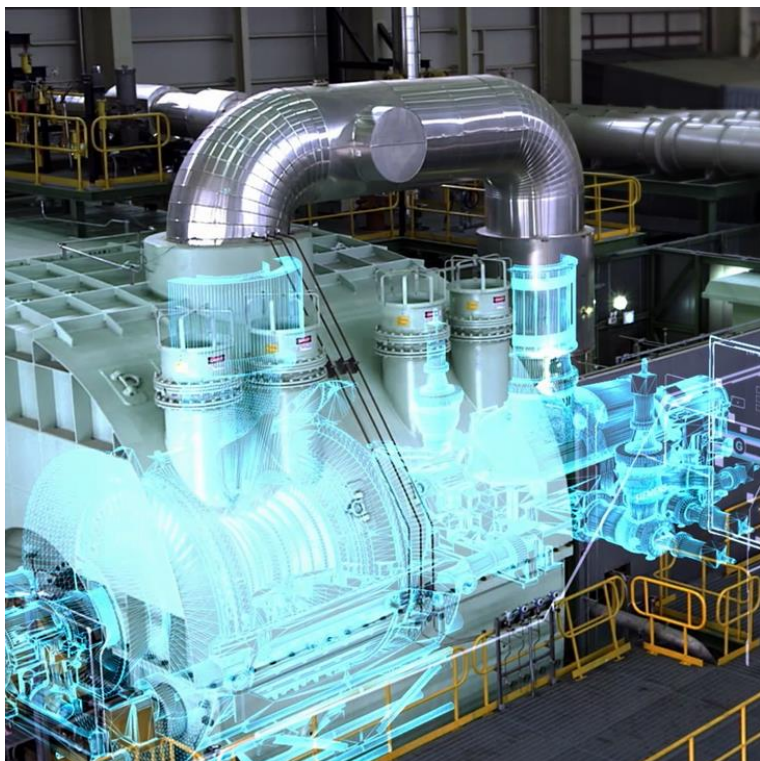
KEY METRICS

75% automation level

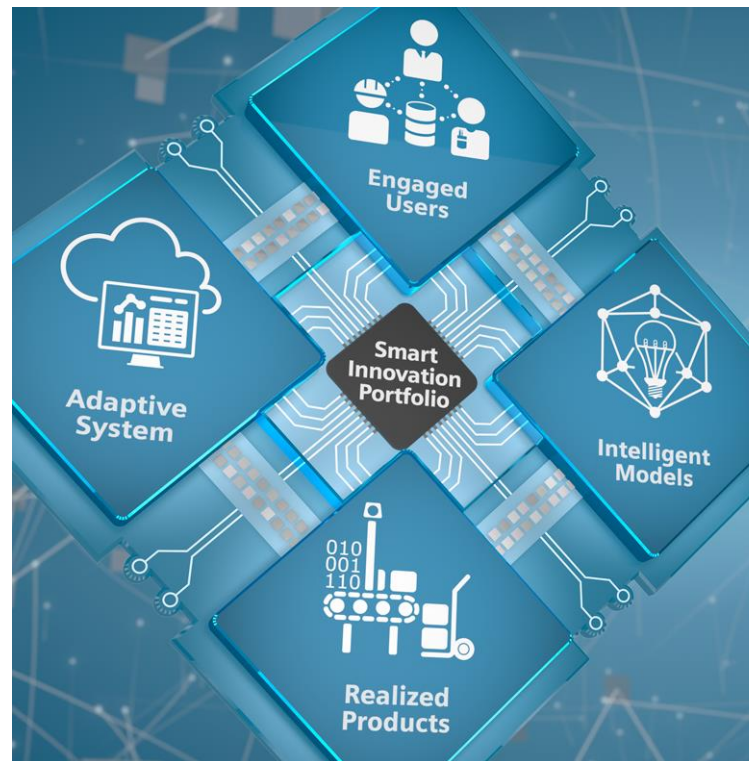
12 dpm 99.9988% quality rate

1 product leaves plant every second

Realize Innovation



Digitalization helps you respond quicker to changing technology.



The Smart Innovation Portfolio is key to realizing innovation.



Siemens is focused on transforming innovation in your Digital Enterprise.

SIEMENS

Thanks