

# Leading The Digital Revolution

A digital revolution is transforming today's factories. By merging cloud computing with real-time data and advanced analytics, manufacturing is making a historic leap forward through digitalization.

**44**  
ZETTABYTES:

The amount of data that will exist by 2020 — nearly as many digital bits as there are stars in the universe.<sup>1</sup>

**25**  
BILLION:

The number of things that will be interconnected through the Internet of Things by 2020.<sup>2</sup>

**25**  
PERCENT:

The percentage of the world's economy that experts predict will be digital — from big data to new technologies and systems — by 2020.<sup>3</sup>

Similar to past innovations of steam, electricity and computing, digitalization is a game-changer for manufacturing.

**90%**

Industrial companies that believe the ability to analyze data will be decisive to their business model in five years.<sup>4</sup>

**85%**

Percentage of industrial companies that will have implemented digitalization solutions in all important business divisions by 2019.<sup>5</sup>

## Digitalization

creates substantial productivity increases for manufacturers across the entire value chain, from design and engineering to sales, production and service.

**18%**

The increase in efficiency that industrial companies anticipate over the next five years due to digitalization.<sup>6</sup>

**2-3%**

The additional revenue per year that industrial companies expect due to digitalization and interconnection of products and services.<sup>7</sup>

Like past industrial revolutions, factories of the future will look and work differently from today's manufacturing plants.

**40-50%**

Percentage of today's machines that manufacturing executives say will need upgrading or replacement due to digitalization.<sup>8</sup>

**48%**

Despite the inevitable evolution, less than half of manufacturing leaders consider themselves ready for digitalization.<sup>9</sup>

To make digitalization practical for manufacturers, Siemens developed the

## Digital Enterprise Software Suite –

a comprehensive portfolio of software-based systems.

**15 years**

Siemens has been developing the Digital Enterprise Software Suite for 15 years to address digitalization for manufacturing.



**17,500 engineers**

Siemens has over 17,500 software engineers dedicated to digitalization.



**280,000 devices**

From skyscrapers and gas turbines to the traffic control centers of 255 cities, Siemens already has more than 280,000 devices linked to the Internet of Things via secure connections.



**30% reduction**

Totally Integrated Automation Portal, part of the Digital Enterprise Software Suite, reduces engineering costs by up to 30%.



**50% reduction**

Product Lifecycle Management software and automation, also part of the Digital Enterprise Software Suite, reduce time to market by up to 50%.



**0.0012% defect rate**

At Siemens' Digital Factory in Amberg, Germany, digitalization has already led to the lowest possible defect rate — 0.0012% — and is still declining.



To find out what digitalization solutions from Siemens can do for your company, learn more about the Digital Enterprise Software Suite.