Digital Industries

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Siemens Capital Market Day | Munich, May 8, 2019
Notes and forward-looking statements

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Due to rounding, numbers presented throughout this and other documents may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.
Customer needs drive our business – We support them in leveraging unique growth and profit opportunities.

Flexibility

Our comprehensive end-to-end portfolio meets core customer demands.

Example Chemicals
Individualized color batches of 100 liters instead of 5,000+ liters

Example Aerospace
2.5 instead of six years development time for airplanes

Example Machine Building
Up to 25 percent shorter machine commissioning times

Time to market

Productivity

SIEMENS
Ingenuity for life
Market-leading Business Units focus on customer needs – with software, automation and services

**Software (industrial)**
#1 market position
- Integrated portfolio of industrial software
- Cloud-based, open IoT operating system
- Rapid application development platforms

**Factory Automation**
#1 market position
- Automation products
- Engineering software
- SCADA software
- Systems for production machines
- Industrial Edge

**Motion Control**
#1 market position
- Drives
- Motors
- Machine Tool Systems
- Additive Manufacturing
- Digitalization and Edge Computing for machine tools and drive technology

**Process Automation**
#3 market position
- Automation systems & software for process industries
- Process instrumentation & analytics
- Industrial communication & identification
- Power supply systems

**Customer Services**
- Lifecycle services
- Digital services
- Digital Enterprise consulting and integration

Solutions for focus Industry Verticals
Digital Enterprise offering integrates virtual and real worlds – leading to unique competitive advantage of our customers

Digital Enterprise
Digital end-to-end solutions for industry

MindSphere

Automation and industrial software for process and discrete industries

Performance data
Virtual world
Real world

Realize and optimize

Industrial communication
Industrial security
Industrial services
Digital Industries is uniquely positioned – with automation and software driving digital transformation

<table>
<thead>
<tr>
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<th>Loyal and constantly growing customer base</th>
<th>180,000+ customers</th>
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<tbody>
<tr>
<td></td>
<td>7,500 partners</td>
<td></td>
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<tr>
<td>2</td>
<td>Strong market position of our businesses</td>
<td>#1 in industrial</td>
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<tr>
<td></td>
<td></td>
<td>software, factory</td>
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<tr>
<td></td>
<td></td>
<td>automation &amp; motion control</td>
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<tr>
<td>3</td>
<td>Ever-expanding global installed base</td>
<td>&gt;10,000 PLCs</td>
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<tr>
<td></td>
<td></td>
<td>shipped per day</td>
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<tr>
<td>4</td>
<td>Growing industrial software business</td>
<td>&gt;60% recurring share</td>
</tr>
<tr>
<td></td>
<td></td>
<td>in software revenue</td>
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<tr>
<td>5</td>
<td>Unique end-to-end portfolio in software and automation</td>
<td>&gt;10bn M&amp;A executed</td>
</tr>
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<td>&gt;10% R&amp;D investment</td>
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<td>6</td>
<td>Global network of domain experts</td>
<td>&gt;12,000 industrial software engineers</td>
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<tr>
<td></td>
<td></td>
<td>&gt;20,000 automation engineers</td>
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Dedicated sales channel approach has widened customer reach from small and medium enterprises to global corporations.
Close to customers around the globe

Revenue: €15.6bn  
Employees: ~75,000

### Americas
- 2.4 Revenue (in €bn)
- 16% of total employees
- 20% of total R&D headcount
- 5 Key production facilities
- 25,000+ Customers served

### Europe, C.I.S., Africa, Middle East
- 8.7 Revenue (in €bn)
- 60% of total employees
- 35% of total R&D headcount
- 16 Key production facilities
- 105,000+ Customers served

### Asia, Australia
- 4.5 Revenue (in €bn)
- 24% of total employees
- 45% of total R&D headcount
- 7 Key production facilities
- 50,000+ Customers served
Focused on fast-growing end-markets

Market potential
DI market size 2018 in €bn
CAGR over the cycle

Europe, CIS, MEA
121
+4.5%
+4%
+5%
+4%

Asia, Australia
44

Americas
45

Growth:

Market potential
DI market size 2018 in €bn
CAGR over the cycle

Automation Process Industries
#3

Industrial Software
#1

Automation Discrete Industries
#1

61
28
121
32

Growth:

+4.5%
+4%
+3%
+7%

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Munich, May 8, 2019
Achieve growth across businesses and regions to further increase resilience

**Geography**
- Asia, Australia: 29%
- Americas: 15%
- Europe, CIS, MEA: 56%

**Revenue FY 2018**

**Business mix**
- Automation Products: 65%
- Software: 23%
- Solution: 5%
- Service: 7%
DI Q2 results show continued proven financial performance

**Orders**

- **H1 FY 2018**: 8.3 €bn
- **H1 FY 2019**: 8.2 €bn (−1.9%)

**Revenue**

- **H1 FY 2018**: 7.5 €bn
- **H1 FY 2019**: 7.9 €bn (+3.7%)

**Adj. EBITA**

- **H1 FY 2018**: 1,451 €m
- **H1 FY 2019**: 1,532 €m (+5.6%)

**Adj. EBITA margin**

- **H1 FY 2018**: 19.2%
- **H1 FY 2019**: 19.4%

- **Profit margin excl. severance**
  - **H1 FY 2018**: 19.5%
  - **H1 FY 2019**: 19.5%
  - Range: 17 – 23%

**Free cash flow**

- **H1 FY 2018**: 1,212 €m
- **H1 FY 2019**: 1,013 €m (−16.5%)

**Cash conversion rate**

- **H1 FY 2018**: 0.84 x.x%
- **H1 FY 2019**: 0.66 x.x%

- **Profit margin excl. severance**
  - **H1 FY 2018**: −0.18
Vision2020+ fosters entrepreneurial focus to maximize customer value and profitable growth for DI

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<th>Closer alignment and integration of regional organization</th>
<th>Volume growth</th>
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<tbody>
<tr>
<td>2</td>
<td>Integrate lean and business-focused setup in regions, headquarters, and corporate functions</td>
<td>Cost efficiency and adaptability</td>
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<td>3</td>
<td>Shared platforms for discrete, process, and hybrid industries</td>
<td>Focus on innovation</td>
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<td>4</td>
<td>Global responsibility of Business Units</td>
<td>Accountability and speed</td>
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Consumer demands and technological development increase challenges for industries
Example automotive

Variety of powertrain concepts

Autonomous driving

Battery development

Platform sharing

Customization

Battery production

Connectivity

Safety

Regulatory pressures

Modularity
Powerful automation platforms and industrial software already provide first-level benefits

Product design
CAD and simulation

Production planning
CAM and simulation

Production
MOM / MES, automation, and Edge/IoT

Product IoT
Maximum benefit of Digital Enterprise is leveraged only through integration of the entire value chain.
Digital Enterprise provides unique competitive advantage to customers by integrating virtual and real worlds.
Systematic expansion of our portfolio:
>€10bn invested in M&A since 2007

Examples of acquisitions

Virtual world

Real world

Leading software portfolio

Leading automation portfolio

1 Cooperation
Innovations through integration of software and automation, based on deep domain know-how
The Digital Twin of the product reduces time to market
Mechanics and multi-physics
Electrical systems
Display Information

Overview

Properties

ID: 002052
Revision: A
Revision Name: DISPLAY UNIT DI007v1 Requirements
Description:
Occurrence Name:
Type: Requirement Specification Revision
Sequence:
Release Status:
Date Released:
Effectivity:
Owner: Kevin Smith (kevin)
Group ID: Organization
Last Modifying User: Kevin Smith (kevin)
Parent:
Number Of Children: 1

Ratings

Your Rating: 
Average Rating: 0.0

Classification Properties

Preview

DISPLAY UNIT DI007v1 Requirements
Display Information - DI007v1

- Display unit shall show all the information needed for safe driving conditions to the customer. This shall include but not limited to the following information to the customer:
  - Trip Data - Miles, laps, Time lapse
  - Fuel gauge
  - Speedometer. MPH or KPH
  - Tachometer
  - Odometer
  - Warnings: Engine, Oil, Seatbelt reminder, Tire pressure, Lane Keeping
  - Information: current information.
The Digital Twin of the production accelerates planning, setup, and optimization.
Production process
Entire factory
Real Commissioning
Holistic automation portfolio increases productivity on the shop floor
Real production
The Digital Twin of the performance enables continuous analysis of both product and production
Internet of Things
Feeding back insights enables continuous optimization of product and production.
Mentor, a pioneer in Electronic Design Automation and a natural expansion for Siemens Digital Industries Software

Critical design software is used to create the world’s electronic systems.

Comprehensive product portfolios address all levels – from integrated circuit to electronic systems.

- One of top 3 Electronic Design Automation companies
- Global footprint as part of Siemens organization
- 6,500 employees worldwide
Mentor integration brings synergies to existing customers and opens opportunities to create value for new customers.

**Integrated Systems Design**
Best-in-class interoperability for integrating electrical assemblies into mechanical environments.

**Electronic Systems Design**
Product integration of Mentor Xpedition and Siemens NX and Teamcenter executed in active sales campaign.

**Integrated Circuit Design**
Cypress Semiconductor demonstrates value of using Mentor verification & Siemens ALM software together.
Mentor’s expertise in integrated circuit design and verification adds significant value to Siemens’ software offering.
Siemens follows through on initial investment commitments, and our customers react positively

1. Increase in top 10 contract renewals as per Q2 FY19  
   - Double digit growth

2. Revenue growth YoY in FY18  
   - Double-digit growth

3. Continuing with further acquisitions  
   - +5 companies

4. Continuing innovation  
   - +17 product launches

Growing employee base and high retention of key people
50% productivity gain designing 10M gate video decoder

Source: NVIDIA white paper (go.mentor.com/4N9cP)
Fewer re-spins and improved quality through automated system synchronization
We achieve a totally new level of output, quality, and performance. None of this would be possible without a digitalized and digitally controlled workflow in the factory.

Siegfried Altmann
CEO Rosendahl Nextrom GmbH
50% shorter development time

25% higher production output
Reduced engineering time by >1/3

Reduced commissioning times by >50%
>50% less time from testing to paint production

8x faster production process

Reduced batch size from 5,000 l to 100 l
Examples from Siemens factories – automation and digitalization lead to greater flexibility and productivity

More flexible automation (Erlangen)

- Fully automated electronics production line with handling robots
- Reduction of manual efforts by 80%

Artificial intelligence (Karlsruhe)

- Intelligent planning: asset optimization and greater delivery reliability
- >50% more accurate demand forecasting

Edge Computing (Amberg)

- Quality control via algorithm: higher output
- 30% reduction in x-ray inspection for PCBs
Our IoT operating system MindSphere – enhanced by Edge and Mendix low code app development

Applications
Powerful industry solutions with advanced analytics

Open PaaS
Develop robust industrial IoT solutions faster with global scalability

Connectivity
Connect products, plants, systems, machines and enterprise applications

Edge Management
Edge Device Management, Edge App Management, and Edge App Store

Edge Apps
Applications for intelligent data use

Edge Devices
Secure, future-proof basis for running edge applications
Using our track record to expand end-to-end domain reach

Process Industries  Hybrid Industries  Discrete Industries

Chemicals  Marine  Glass  Food and Beverage  Electronics  Aerospace  Automotive

Water and Wastewater  Minerals  Pharmaceuticals  Batteries  Wind  Machine Building  Intralogistics

Oil and Gas  Power and Utilities  Fiber  Tire  Additive Manufacturing  Cranes  Robotics
Profitable growth sustained by cost optimization program of €320m in addition to base productivity

Main levers

Integration synergies from Vision 2020+
- Two Divisions merged into one Operating Company
- Corporate functions shifted to Digital Industries
- BU software synergies from integration

DI internal process improvements
- Optimization of internal regional structure
- Optimization of order management, logistics and controlling processes
- Structural optimization across Digital Industries

Internal digitalization
- Leveraging industrial software and automation methodologies to drive additional efficiency by utilizing Digital Enterprise
- Increased and optimized degree of automation in factories
- Comprehensively digitalized end-to-end PLM processes
- Comprehensive and optimized use of MindSphere

Gross headcount addition of ~12,000 until FY23 to support volume growth over the cycle

Total restructuring cost: €300m until FY23
Cash Management initiative ensures cash conversion rate of 1 – growth rate over the cycle

Total supply chain (inventory reduction 2% to 5% p.a)

Drop Shipment piloted in the US, creating leaner supply chain and resulting in reduction of local inventories by 20%; further rollout planned

Digital Inventory Management improves inventory efficiency in Source and Deliver through data analytics

Order to Cash

Continued focus on Overdue Receivables to remain at a very low level (> 90 days < 4%)

Implementing digital twin of order management process will further optimize days sales outstanding (DSO)

Purchase to pay (improve turn rate 5% p.a)

Extending payment terms of suppliers, e.g. using external Financing solutions without recourse to Siemens

Key measures

• 33% of DI senior management bonus linked to DI CCR
• Measures in execution to address central and region-specific optimization
• Continuous improvement of turns up to 0.2 in operating working capital planned
Driving a high-performance culture ensures profitable growth

Passion for industry and high performance culture

- 7,500 people successfully integrated over last three years
- 98% talent retention after acquisitions

New competencies and new way of thinking through Mergers & Acquisitions

- DI targets cascaded to all senior managers
- Frequent employee engagement pulse checks
- 50% of employees with company for 10+ years

Systematic succession planning for key functions with focus on diversity

- 7,500 people successfully integrated over last three years
- 98% talent retention after acquisitions

- Continuous pipelining for level 1+2 leadership
- Pool of >1,000 participants from selective leadership excellence and development programs
We deliver flexibility and productivity, resulting in customer wins and awards

Recent customer wins*

- verizon
- Volkswagen
- HUSKY
- 中泰化学 ZHONGTAI CHEMICAL

Awards

- **COMPANY OF THE YEAR AWARD 2018**
- **DAIMLER SUPPLIER AWARD 2018** Quality
- **WACKER SUPPLIER AWARD 2018** in the category "Best Global Partnership"
- **GEELY OUTSTANDING IT VENDOR AWARD 2016**
- **GAME CHANGER AWARD 2017** Product & Service Innovation
- **Computable VENDOR OF THE YEAR 2018**
- **INDUSTRIE 4.0 INNOVATION AWARD 2017**
- **SUPPLIER INNOVATION AWARD 2016** in the category "Best Global Partnership"
- **SUPPLIER AWARD 2018**

Hannover Messe 2019

- Biggest single booth at 4,000 m²
- 100,000+ visitors
- ~100 delegations
- 8,400+ leads

* Exemplary selection

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Commitment of global leadership team

1. Our target is to grow 25% faster than the market.

2. We commit to sustain Adj. EBITA margin of 17-23% over the cycle.

3. We deliver a CCR of 1 – growth rate over the cycle.