



MEDICAL DEVICE INNOVATION IN GERMANY

Richard Schill
TOKYO, 1 December 2016

Personal Introduction

Richard Schill

German

married, 3 children



Education

- University of Würzburg, Germany: Diploma in Business Administration
- University of Bradford, UK : Doctorate in International Business Strategy

History with B. Braun

- 1998 Product Manager Orthopedics & Computer Assisted Surgery (Germany)
- 2002 Marketing Director Orthopedics (US)
- 2004 Sales and Marketing Director Implant Systems (France)
- 2010 Vice President Global Key Account Management (Germany)
- 2015 Corporate Officer Aesculap (Japan)

Agenda

Introduction B. Braun

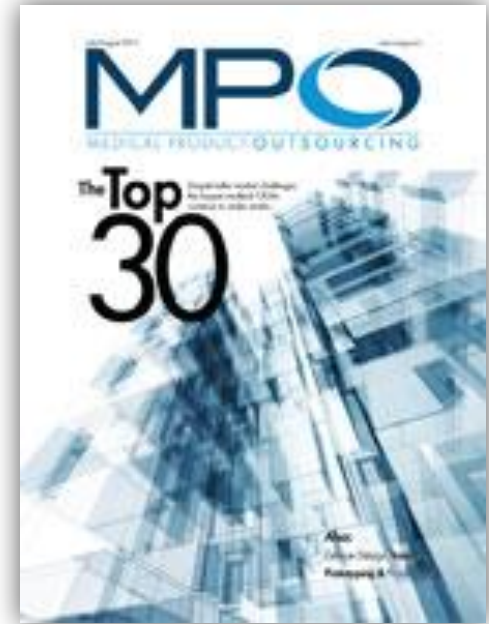
Innovation Driver:
The Digital Transformation

Investing in Germany:
Our new manufacturing site in Wilsdruff

Introduction B. Braun

TOP MEDICAL DEVICE COMPANIES

1	Johnson & Johnson	\$25.8B
2	GE Healthcare	\$18.1B
3	Siemens Healthcare	\$17.0B
4	Medtronic	\$15.9B
5	Baxter International	\$13.9B
6	Philips Healthcare	\$11.4B
7	Abbott Laboratories	\$9.9B
8	Covidien	\$9.6B
9	Cardinal Health	\$8.9B
10	Stryker	\$8.3B
11	Becton Dickinson	\$7.8B
12	Boston Scientific	\$7.6B
13	Danaher	\$6.6B
14	B. Braun	\$6.0B
15	St. Jude Medical	\$5.6B





SALES

6,129.8

EUR MILLION

55,719

EMPLOYEES



INVESTMENTS

787

EUR MILLION

B. BRAUN AT A GLANCE



177

CORPORATE
SOCIAL
RESPONSIBILITY
PROJECTS



Through its subsidiaries and holdings,
B. Braun operates in

64 countries.



RESEARCH
EXPENSES

262.4

EUR MILLION

We have competence in 18 therapy fields.



Akute Dialysis



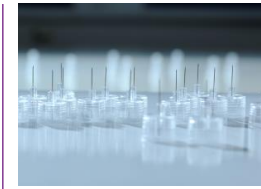
Apheresis



Cardio-Thoracic Surgery



Degenerative Spine Surgery



Diabetes



General Open Surgery



Hemodialysis



Incontinence



Infection Prevention



Infusion Therapy



Interventional Vascular Diagnostics and Treatment



Laparoscopy



Neurosurgery



Nutrition Therapy



Orthopedic Joint Replacement



Pain Therapy



Stoma

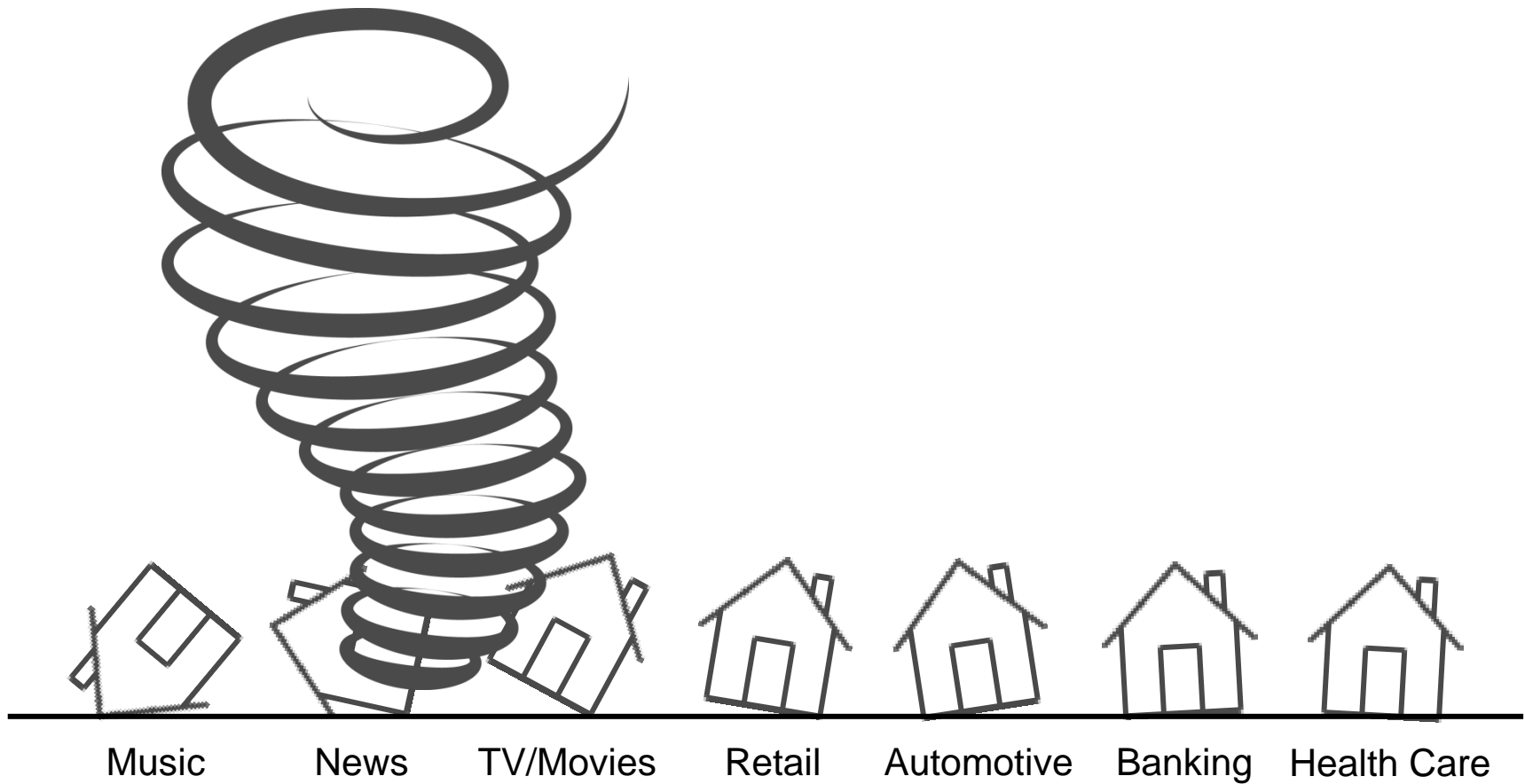


Wound Management

Innovation Driver: The Digital Transformation

The Digital Transformation in HealthCare

The wind velocity will increase significantly



“We define **Digital Transformation**

as the use of

new digital technologies (...)

to enable

major business improvements

*(such as enhancing customer experience,
streamlining operations or creating new business models).”*

MIT Center for Digital Business

Outlook

During their expansion new players tackle established players

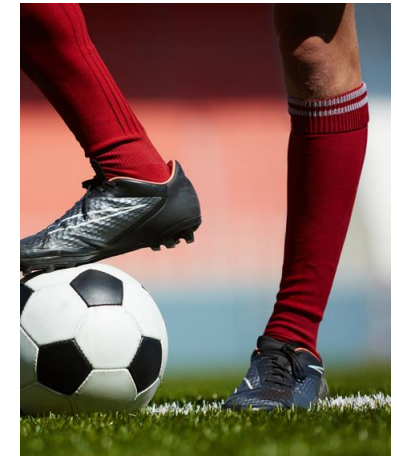
New Players



„Common
playground“



Established
players

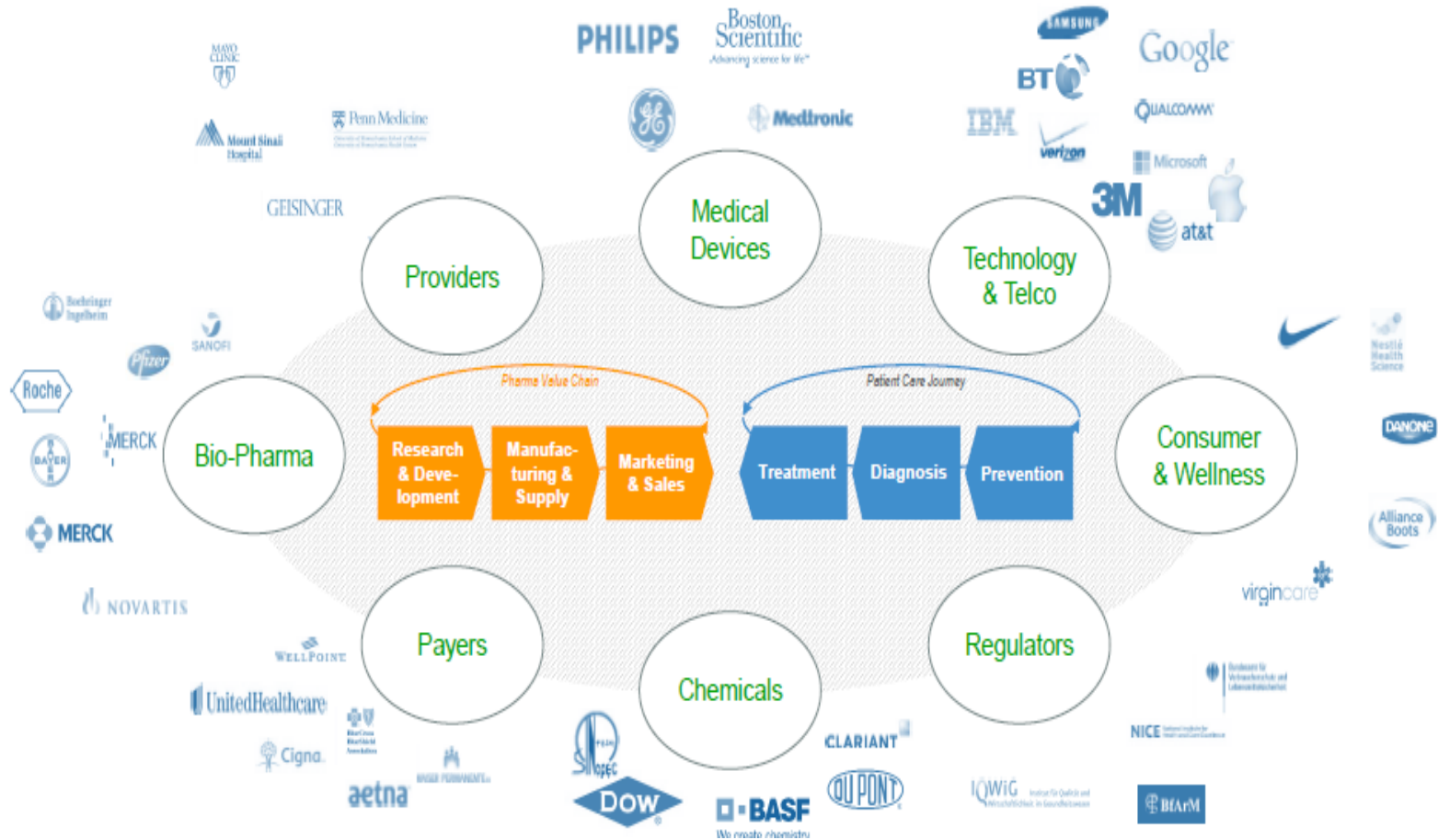


low

high

Regulatory requirements

Patient centric eco-sytem combines players from Pharma, Med-Tech, Technology and other markets



Source: Accenture

B. BRAUN OMNITEST



EXAMPLE PATIENT DRIVEN INNOVATION:
DIABETES CARE

Omnitest[®] – Telemonitoring via Omnitest[®] Center



Nick
13 years old
Type 1
Diabetic

... is managing his therapy independently with Omnitest[®]



- Glucose meter with GSM real time data transmission
- All glucose measurements are automatically transferred to Omnitest[®] Center (OTC)
- Accurate time and date set via OTC server

Omnitest[®] Center – Online Diabetes Diary

- Access anytime from any device connected to the internet
- Blood glucose measurement data can be uploaded via USB cable from Omnitest[®] blood glucose meters
- Access for third party (family member, physician) could be granted



B. BRAUN SPACE



EXAMPLE HOSPITAL DRIVEN INNOVATION:
INFUSION THERAPY

Space OnlineSuite

Digitalization of workflows and management within Infusion Therapy



Digital Solution

- Digital wirelessly (WLAN) communicating infusion pumps (devices)
- Centralized Management of therapy relevant data (drug library, device configuration and device management) via Space OnlineSuite
- Integration into the clinical network and data exchange with other clinical IT systems via standardized data protocols (HL7 / IHE)

Investing in Germany:

Our new Manufacturing Plant in Wilsdruff

Global Supply Chain
Real Time Data / Information
Prototyping
3-D-Printing
Big Data
Elektronic Documentation
Material Flow Control
Logistic Processes
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**Efficiency increase in
existing structures**

Vertical Integration /
Deintegration
Modified Value Creation
Processes

**Value Integration with
Supplier**

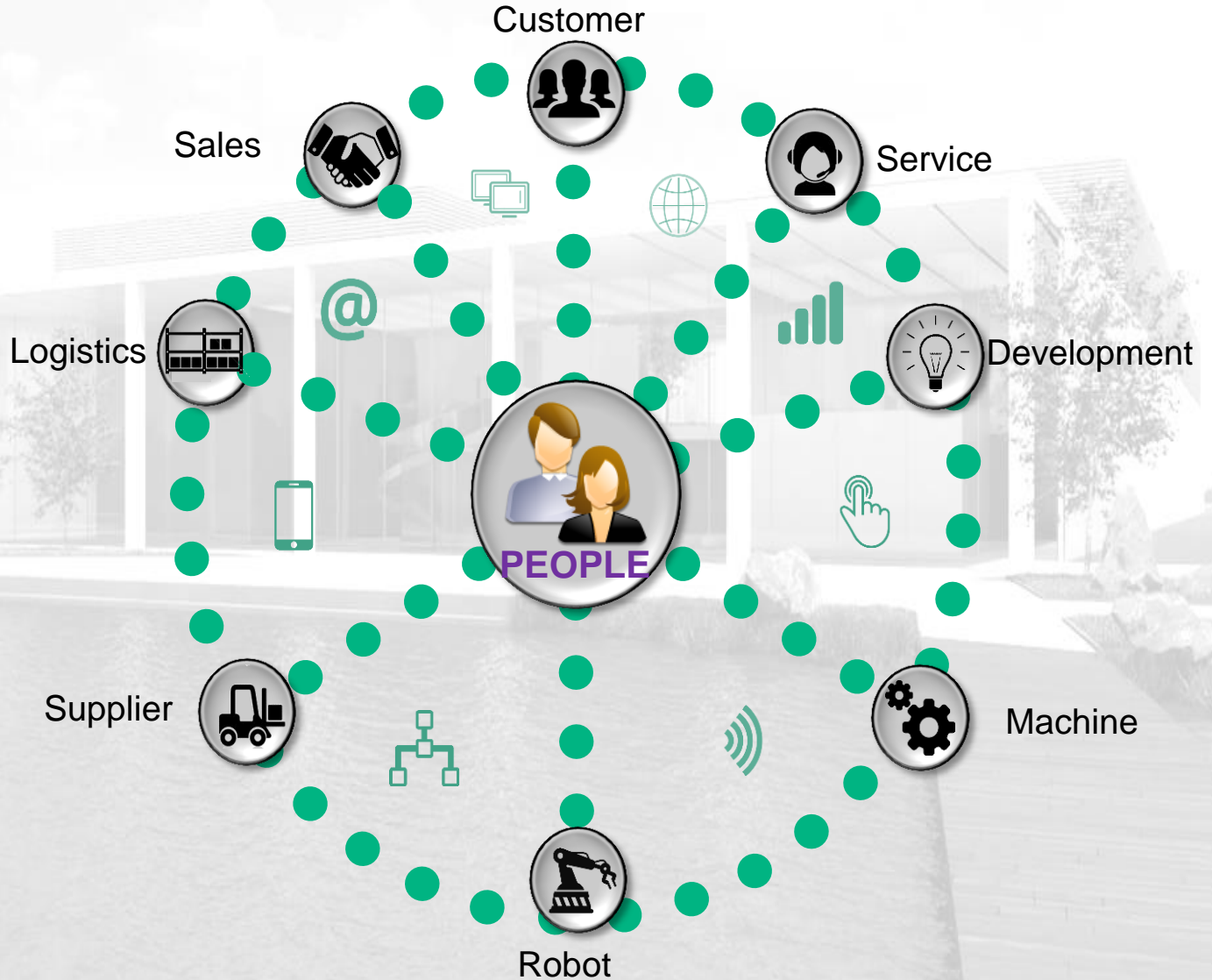

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**Added value with new
business models**

Dialyzers

DIACAP PRO
STAY BETTER

MAYBE IT'S NOT
A MATTER OF
SURFACE AREA...



B. Braun Avitum System Provider in Extracorporeal Blood Treatment

System supplier in
extracorporeal
blood treatment: a
leader in research,
manufacturing
and therapy.

More than 27.000
patients are
treated in 300
dialysis centers
in 30 countries.



CoE Dialyzers & Filters. Greater Dresden.

CoE Dialyzers and Filters in Dresden. The last decade.

2004/2005



B. Braun acquires two sites in greater Dresden - Berggießhübel, Radeberg

2012



Market Introduction of xevonta

2015



Release of Diacap PRO

2016



Start of construction for third plant in greater Dresden - Wilsdruff



NEW Factory
Wilsdruff



Location in Germany – WHY?

Research landscapes

Excellence initiatives for Production 4.0 etc. at Universities



MAX-PLANCK-GESELLSCHAFT



HELMHOLTZ
GEMEINSCHAFT



Fraunhofer

Machinery Suppliers

All kind of suppliers for every production segment and their services are within a travel distance < 4h

Production 4.0

Big global players and also SME companies which provide customized solutions for our factory approach



Leisure time



Culture



High Qualification of Employees

Location Dresden – WHY?

Research landscapes



Supplier

MANY

Administration



Leisure time



Culture



Employees



THANK YOU
FOR YOUR ATTENTION

Richard Schill
TOKYO, 1 December 2016