



AT MDEG  
**WE DO**  
MEDTECH

**Discover the added value of digitally connected devices for you and your customers!**

*mdeg* – we connect your devices to the digital world

**mcleon** 

# Digital participation becomes a prerequisite for future success. We support you to manage digital transformation successfully!

## *mdeg* Services

With our competencies, our resources and our network, we support you in solving your individual challenges including:



R&D Strategy &  
Management



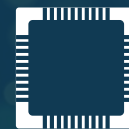
Product  
Development



Soft- and Firmware  
Development

## *mdeg* Solutions

You ask yourself: Make or Buy?  
We offer secure and device independent solutions to connect your devices to the digital world:



*mdeg*  
InterfaceBoard



*mdeg*  
Medical Device  
Cloud

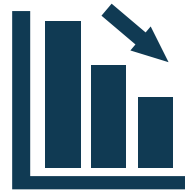


*mdeg*  
Video-Assisted-  
Service/Training

If implemented in the right way, digital transformation enables your company to create new added value through:



**PERSONALIZATION**



**COST SAVINGS**



**DIFFERENTIATION**



**QUALITY ENHANCEMENT**

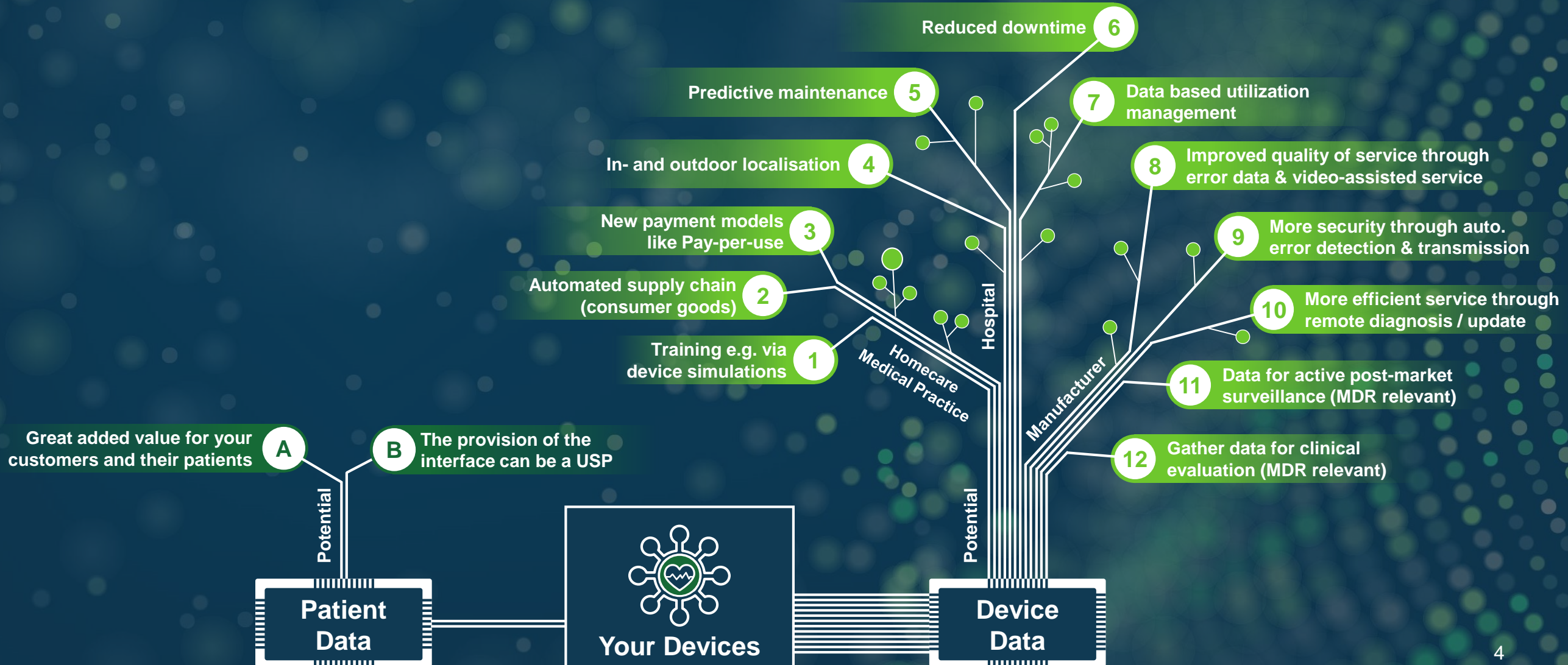


**CUSTOMER PROXIMITY**



**SYNERGY EFFECTS**

# The key to success is to focus on the right data: 12 reasons why you should rely on device data instead of patient data!



# How to get remote access to your devices and their data?

## Houston, we have a Solution:



1

Your devices are equipped with the **mdeg InterfaceBoard** - a secure, robust interface that provides access and data exchange.

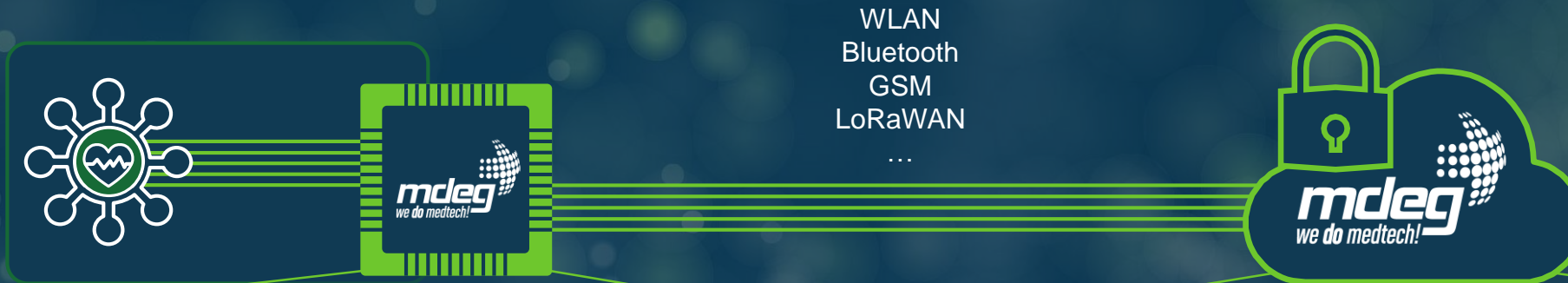
2

Thanks to the Interface Board, your devices can be connected to the **mdeg Medical Device Cloud**.

3

All your devices in the field and their data are now remotely accessible to you.

# Let's have a look at the technical details of our end-to-end solution:



## Specification: mdeg Interface Board

- 32-bit Dual Core based with up to 32MB flash
  - Utilizes freeRTOS with one application core and one security core to meet advanced security requirements
- It supports:
- BLE
  - Ethernet
  - SD-Card
  - USB
  - +30 IO pins
  - ADCs
  - DACs
  - Lower Power Scenarios
- It supports various HW interfaces:
- UART
  - SPI
  - I2C
  - CAN
  - PWM
  - High Current Driver
  - Touch Input

## Specification: mdeg Medical Device Cloud

- Hosted in Germany in a KRITIS certified data centre with three redundant fiber connections to the backbone, we found a trustworthy home. Convince yourself: [www.darz.de](http://www.darz.de)
- Two multi-tenant clouds up & running
- Test & research cloud to realize showcases & prototypes
- mdeg Medical Device Cloud hosting fully integrated medical devices
- Onboarding process compliant with IEC 60601, IEC 62304.
- We also offer, design, deployment & maintenance of a private cloud in your own infrastructure.

We use trusted encryption algorithms, authentication mechanisms, and protocols. Our cyber security concept scales along with the criticality of your data.

# We gladly support you in the following areas when realizing your connectivity solution:



**Product  
Development**



**Data Based Business  
Modelling**



**Project  
Management**



**Quality/Compliance/  
Documentation**



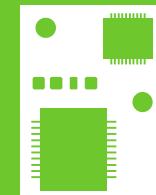
**mdeg Medical  
Device Cloud Solution**



**mdeg  
Interface Board**



**Soft- & Firmware  
Development**



**Hardware  
Development**

# Your advantages if you decide to work with *mdeg*:



## **SPEED**

Gain a head start from leveraging our existing solutions and our efficient and agile processes.



## **RESOURCES**

We have the resources (human, know-how, technical & cloud) needed to successfully realize your connectivity solution.



## **EXPERTISE**

Together mdeg combines more than 60 years of work experience. We spent the last two years in building up expertise to offer you a connectivity solution that is more cost-effective than developing your own.



## **ALL-IN-ONE**

We offer an all-in-one connectivity solution and all from one source. This means one partner for all connectivity related challenges and tasks you are facing.



# mdeg's team for mutual success



**Dr. Christoph Beck, CEO**

- Strategic Leadership of R&D Departments & Projects
- R&D Roadmap & Portfolio Design
- Project Management, Lead & Execution
- Medical device regulations
- Cloud & System Architectures



**Daniel Ziegelmayr, Senior Consultant**

- Design of Product Concepts
- Classic & Data Based Business Modelling
- Market Analysis
- User & Stakeholder Analysis
- Dissemination & Exploitation Strategies



**Paul Gardner, Software Architect**

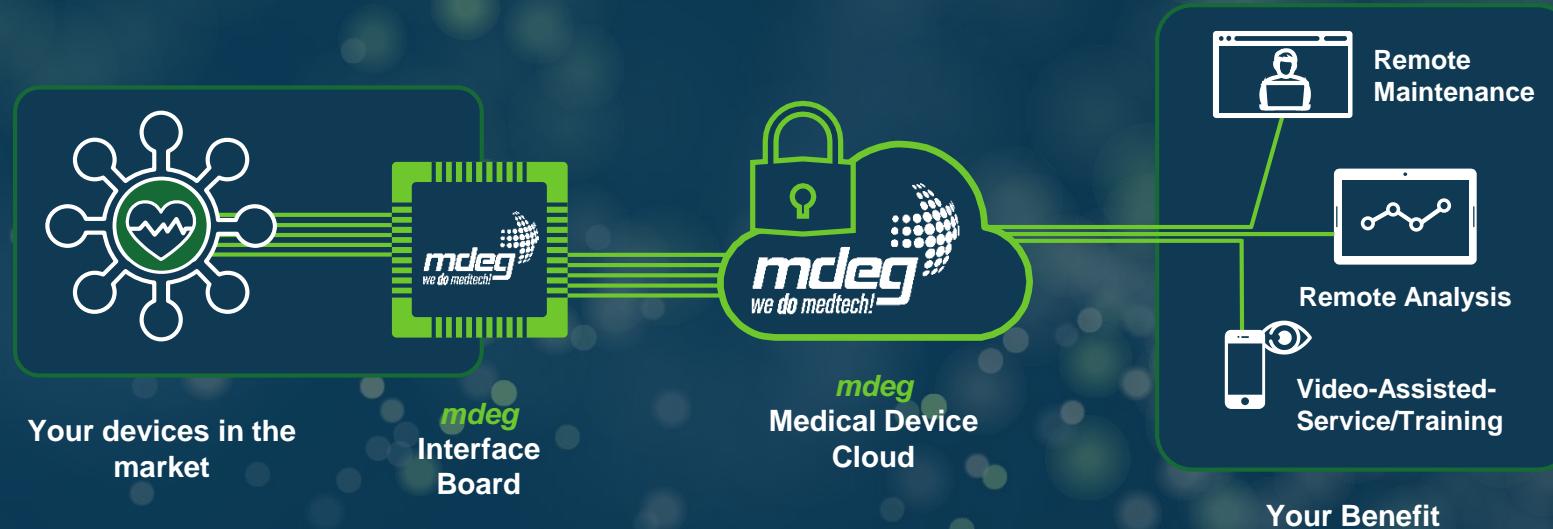
- Product Development – Full Lifecycle Phases, Full Mechatronic Set, Regulatory Compliance
- IT Architecture, Security, Data Protection
- IOT Device Development, Interfacing
- Comms, Clouds & Sensors

# A selection of our happy customers:



# Thank you for your attention and let's stay in touch!

## Do you copy?



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