

MedTechs:

# From **Hardware** To **Digital Solution Providers**

**Discussion Paper**

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# To successfully transform into digital economy players, healthcare companies need to overcome a variety of challenges and gain new skill-sets.

## Management Summary



### Digitalization of Product Portfolios

The potential of **improved care through digital products** and integrated services, **transforms the healthcare sector**. Current **players need to adapt**, or else risk losing patient access to tech start-ups from outside the industry.



### New Challenges for Market Leaders

Market leaders encounter various **challenges in the transformation** towards a digital-innovation driven economy, that are **not native to the healthcare industry**.



### Customer-Centricity as Key Requirement

On top of medical excellence, the **market potential** of digital healthcare solutions is **determined by the attention paid to the needs of patients and points-of-care** during product development and beyond.



### Success Factors at Hand

A **clear strategy, learning from digital economy benchmarks** and consistent **product and customer lifecycle management** are the keys to success in becoming digital healthcare leaders.

# The MedTech sector strives for digital product improvements, e.g. CGM assisted insulin pumps for connected diabetes care.

## Increasing Level of Product Digitalization

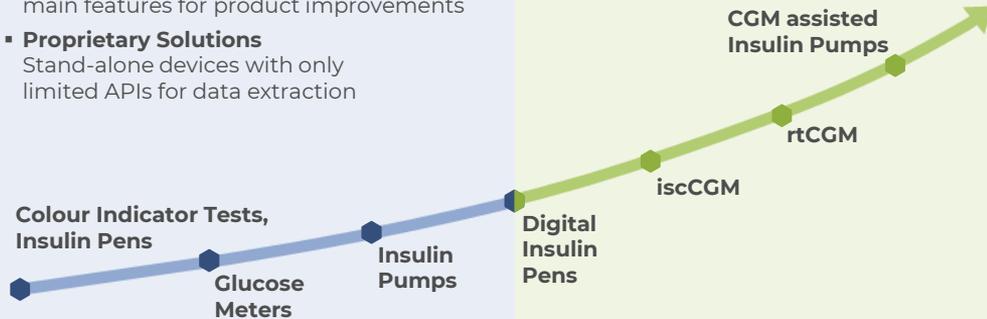
### Exemplary Development of Diabetes Care Products

#### Hardware Providers

- **Easy to handle Devices**  
Simple application based on manuals
- **Development Focus on Hardware**  
Function, size, weight and form factor as main features for product improvements
- **Proprietary Solutions**  
Stand-alone devices with only limited APIs for data extraction

#### Digital Solution Providers

- **Additional digital Interfaces and Services**  
Traditional hardware enhanced by software, e.g. apps and cloud-connectivity
- **Platforms and Cross-linking**  
Standardized APIs for data processing also by 3rd parties
- **Improved Base for Treatment**  
Added value of data analysis in therapy



Source: Digital Oxygen

- 1. Digitalization in MedTech Prevalent**  
Shift of supplier's focus towards digital product portfolios in diabetes care and through-out MedTech
- 2. Holistic View on State of Health Feasible**  
Introduction of 360° software solutions enabling holistic analysis of patient well-being and individualized therapy
- 3. System Compatibility is Future**  
Linking of devices within diabetes care ecosystem; inclusion of data from further devices desirable (e.g. fitness trackers)

# Digital healthcare products still fail to address crucial pain points for professionals and patients.

## Selected Pain Points in Application

### Pain Points

## Health Care Professionals

### Pain Points

## Patients



### “Don’t touch **my** therapy process.”

New digital features need to smoothly integrate into existing treatment processes.



### “This is way too **complicated.**”

User interfaces and experience must measure up to digital economy benchmarks.



### “That’s too **digital** for me.”

Patients with low digital affinity are suspicious against solutions and show high need for explanation.



### “The service is **down** once a week.”

Digital services must run stable 24/7 for daily operations and to be trusted by professionals.



### “The hotline is **never** available.”

Increasingly complex products and cloud interaction require 24/7 user service via multiple channels.



### “My health data is **private.**”

Patients are generally concerned about data protection, but suppliers profit from MDs’ trustworthiness.



### “My hardware is **not** supported. “

Digital products and services must support a wide range of hard- and software products at the point-of-care.



### “I need some **explanations.**”

Autonomous onboarding of end-users is complicated by increased complexity of product and service.



### “Not sure how this will **help** me.”

Changes in treatment need to overcome patient reservations against negative impacts on well-being.

# Successful MedTechs address the challenges of digital transformation by setting a clear strategy and embracing customer centricity.

## Challenges and Success Factors in Digital Transformation

### Overall Challenges



**Customer experience**  
and user journey design as new principles



**Shorter innovation cycles**  
required in digital economy environment



**Changed skill-sets**  
to be established and in-sourced for development



**Lifecycle management**  
for continuous customer satisfaction



**IT backend resilience**  
security and scalability as base for growth

### Hardware

Providers

**Market equilibrium**  
as stable starting point for innovation

**Leading players**  
in respective markets or niches

**Incoming cash-flow**  
enabling digital transformation projects

## Digital Transformation

### Success Factors



**Clarity on Strategic Targets**

- Assessing current level of software integration
- Determination of target positioning and action plan to realize a digitalization strategy



**Addressing new Point-of-Care Needs**

- Determination of root-causes behind missed satisfaction goals at point-of-care
- Lifecycle-management creation for addressing point-of-care service needs



**Digital Economy Learnings**

- Analysis of exemplary go-to-market strategies
- Improvement of own market access approach accordingly



**Addressing new Patient Needs**

- Innovative user journey development including relevant patient behaviour
- User testing and continuous improvement of customer interaction and service

### Digital Solution

Providers

**New field of players**  
setting pace in competition

**Active innovators**  
providing integrated software solutions

**Customer-centric**  
addressing of customers' needs

Digital Oxygen supports international clients in entering new markets as well as developing, improving and realigning their products and services.

Digital Oxygen – Selected Projects

## Selected Projects



### Customer Insights

#### Diabetes Management in Non-Acute Care

- ✓ Analysis of the care market and derivation of the potential for digital diabetes measurement systems in inpatient and outpatient care
- ✓ Verification of hypotheses via interviews with key stakeholders



### Market Insights

#### Mystery Shopping

- ✓ Execution of test purchases and shadowing in the sales and consulting process
- ✓ Comprehensive documentation of user experience and consumer requirements across all customer touchpoints



### Customer Insights

#### Workflows at the Point-of-Care

- ✓ Conducting of interviews and shadowing of employees and patients in selected medical offices
- ✓ Documentation of processes, pain points and observed benchmarks in the use of diabetes management systems



### Value Proposition Development

#### Mobile Consumer IoT Proposition

- ✓ Market research and evaluation of IoT/M2M products
- ✓ Survey of success factors for the development and for the introduction of consumer IoT products



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