



Smart Building am Beispiel von Smart Heating

Enabled by Data Driven Transformation

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Remeha / BDR Thermea (Monitoring)



Herausforderung

- Stagnierende Märkte
- B2B Business ohne Kontakt zum Endkunden
- Wandel vom Geräteverkauf zum Serviceanbieter für warmes Wasser = Komfort

Lösung

- Remeha benutzt die Azure Plattform zur Datenakquisition und -speicherung von den Geräten
- Konnektivität liefert Remeha die Möglichkeit optimale Hilfestellung für den Gebrauch von Geräte anzubieten

Vorteile

- Remeha hat nun eine zuverlässige B2B2C Plattform
- Remote Diagnose
- Genauerer Blick in die Benutzung der Geräte. Darauf aufbauende Services wie Predictive Maintenance

ICT Group

Business Transformation

Digital Transformation

Industrial IoT & BI

Smarter Buildings

Smarter Cities

Smarter Industries

Smarter Healthcare

ICT Group companies

BMA
Specialist in Oostbever

faviio
Partner

CIS SOLUTIONS
EXPERT IN IT-SYSTEM INTEGRATION

RASTER
INDUSTRIAL AUTOMATION

Strypes
TECHNOLOGY TOGETHER

Experience almost 40 years

Quoted at AEX

1000+ Professionals

13 Offices

Netherlands

Germany

United States

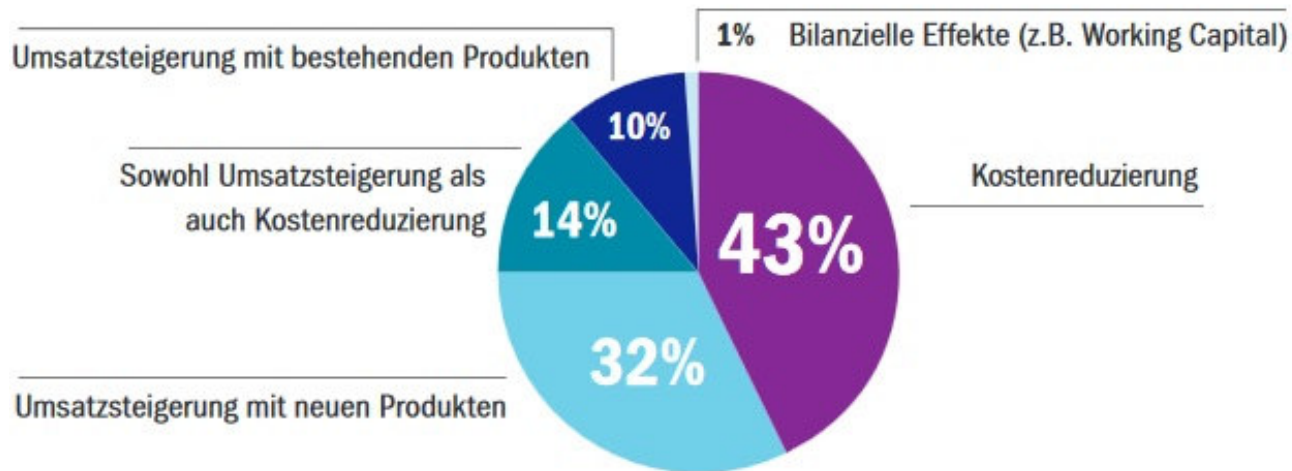
Bulgaria

Asset Management

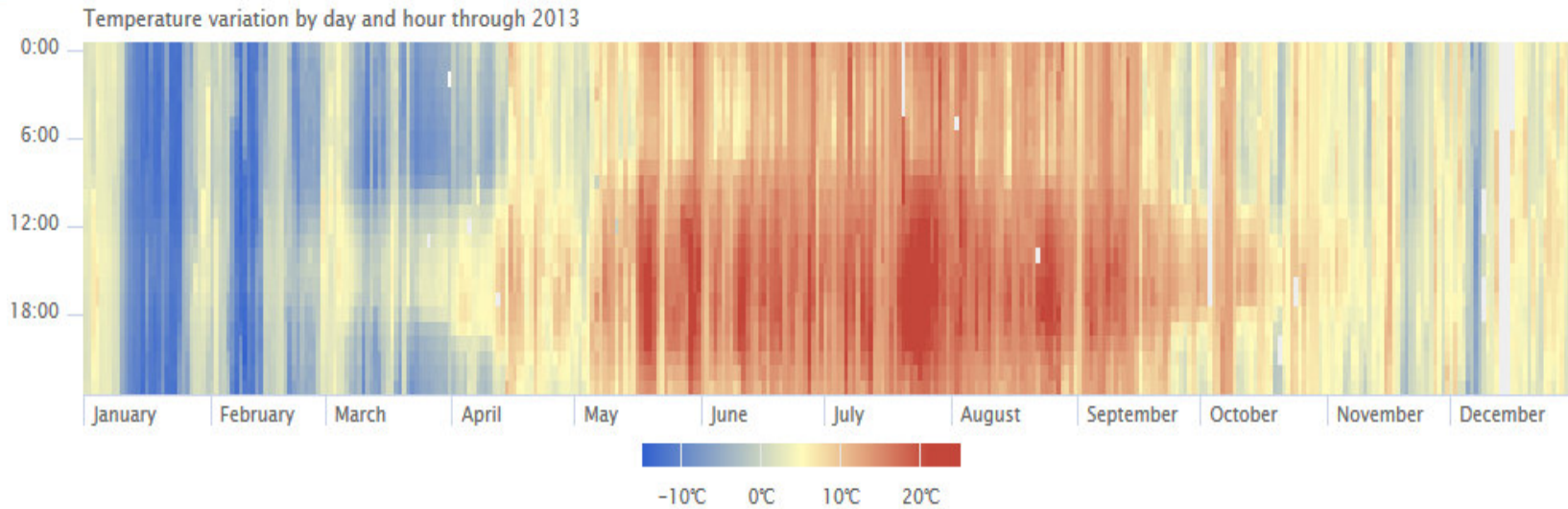
Solutions

Smart Energy

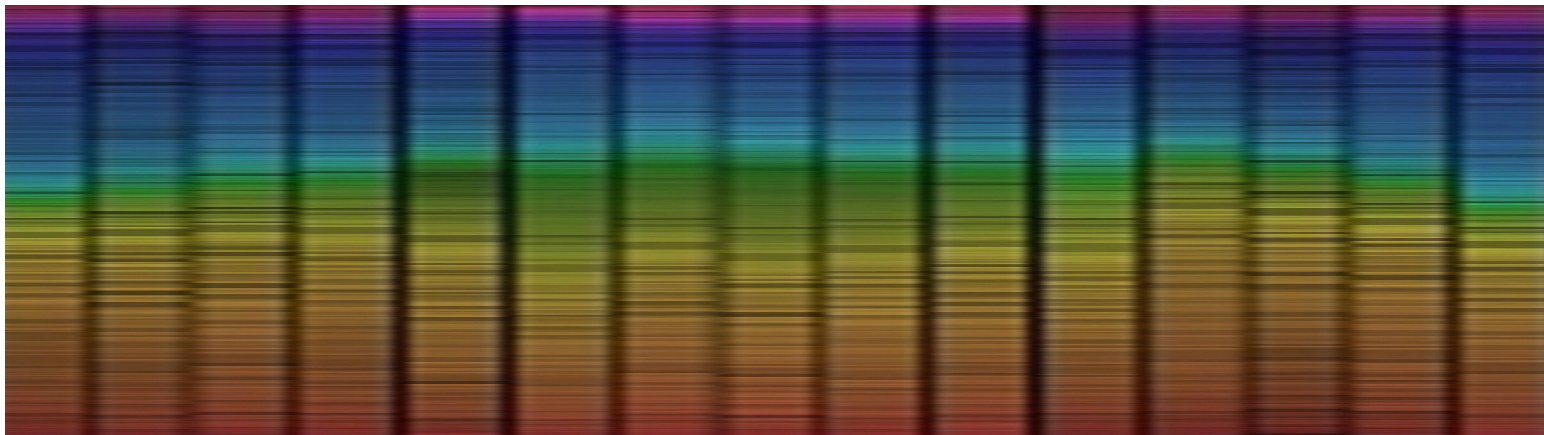
Digitale Transformation: Motivation



Wetter: Temperaturverlauf



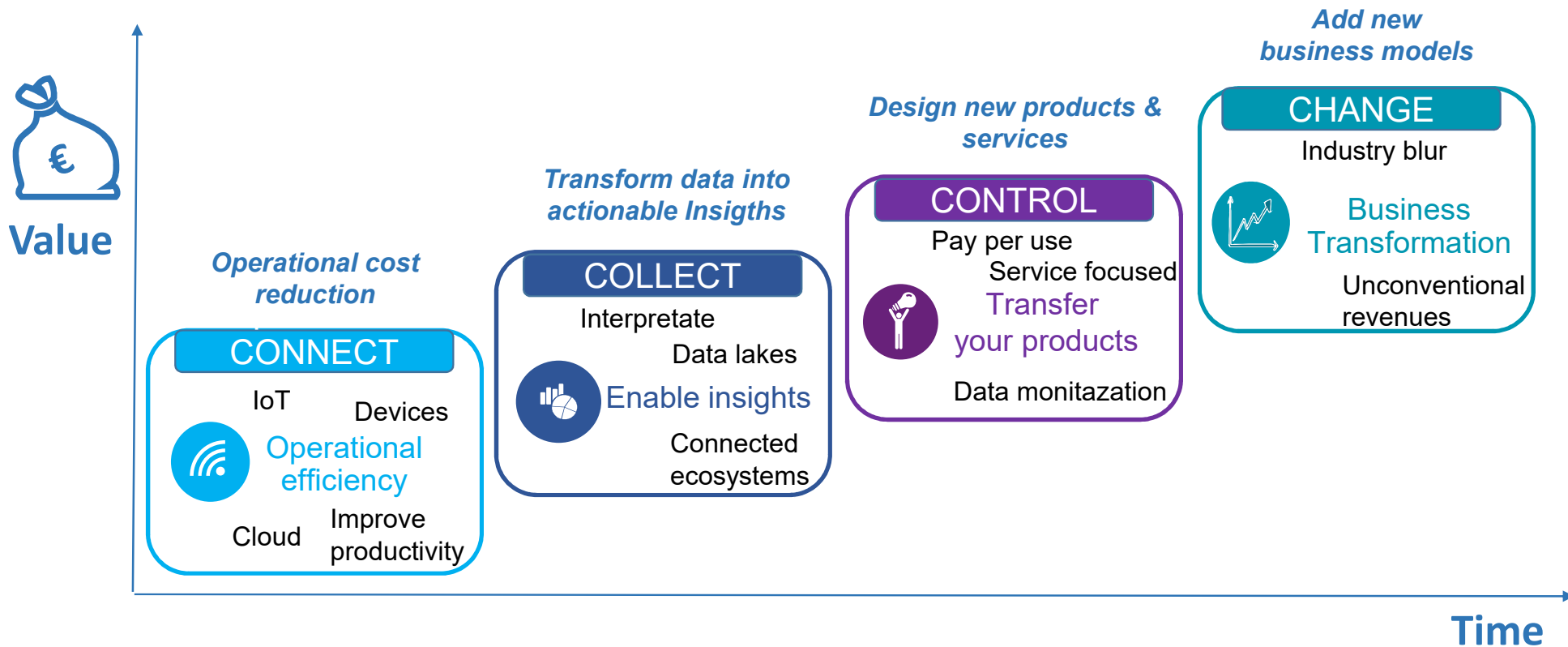
Temperatursensor



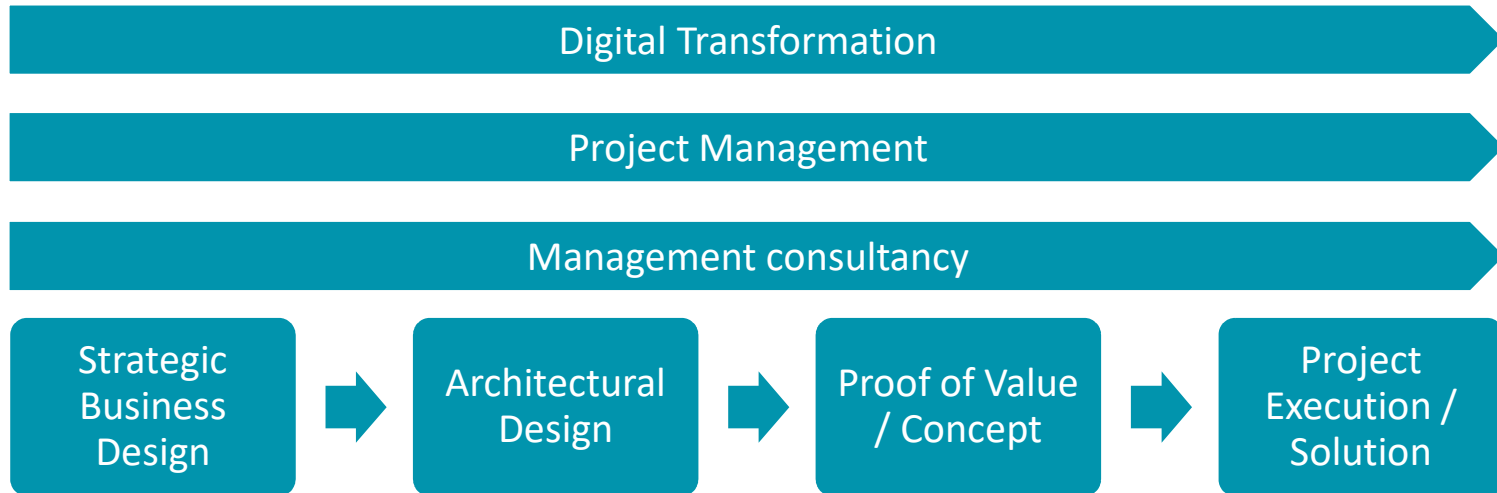
Flickr-Seasons

2.500 zufällig ausgewählte
Bilder pro Monat. Es gibt
jeweils das Farbspektrum der
Bilder aus diesem Zeitraum
wieder.

Digital Transformation Model



4 Steps to your Success



- Management consultancy
- Digital Strategy
- Digital Transformation
- New Business Models

- Technical Specifications
- Cloud Solutions
- IT / IoT Solutions
- SoW

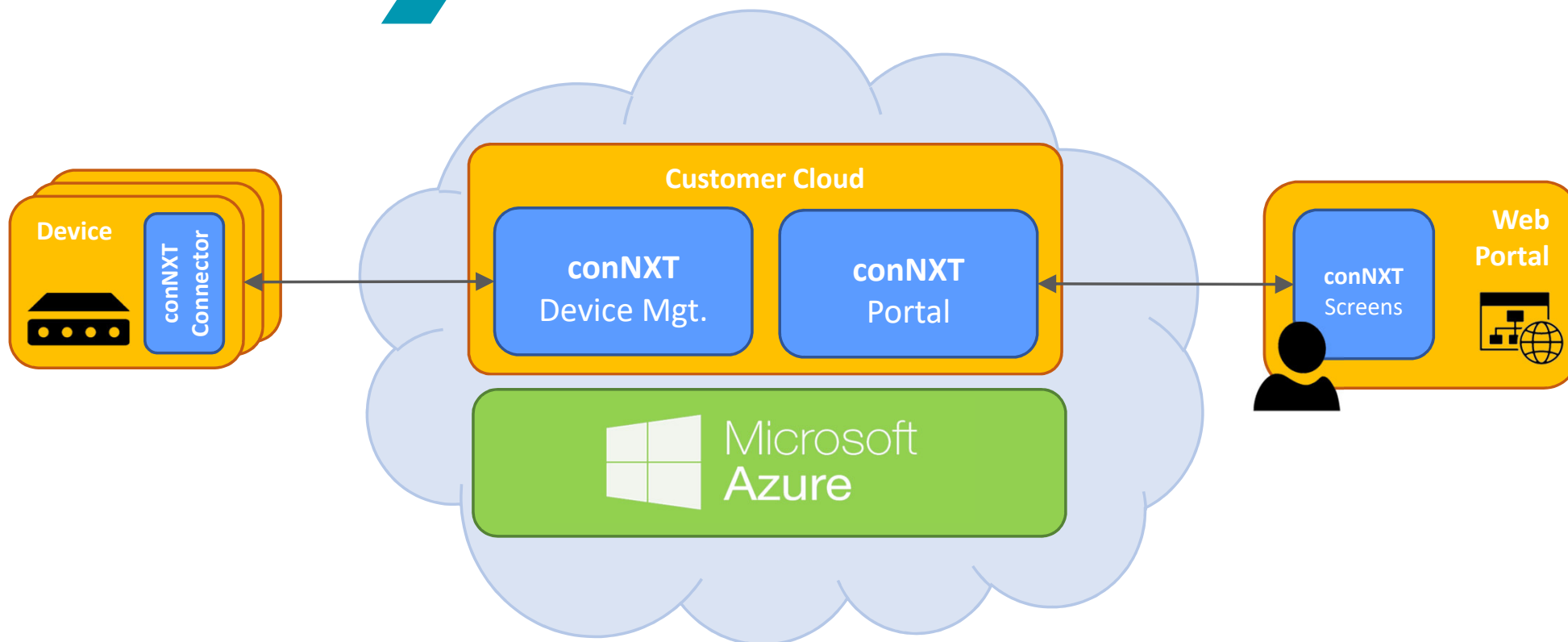
- Pilot Project
- Demonstrator
- Proof of Value

- Project Execution
- Solution implementation



CONNEXT

ICT⁺





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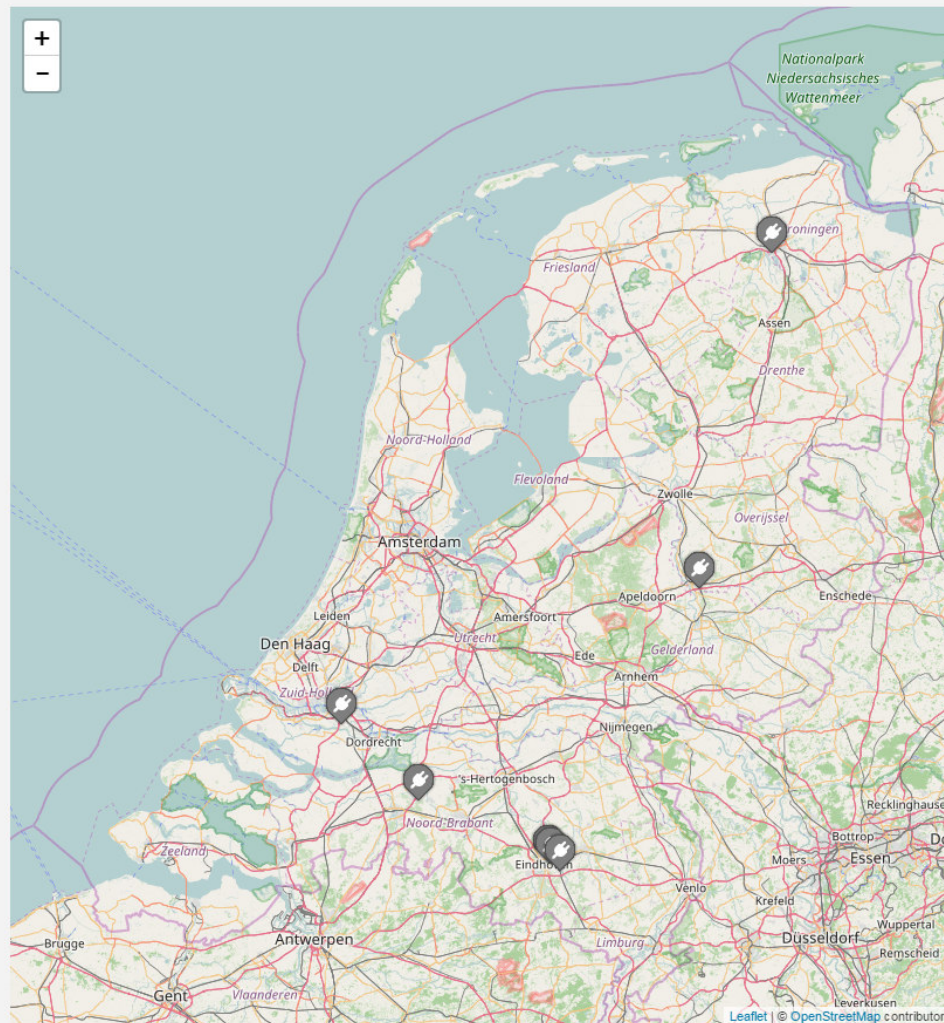
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Terminals met storing

Zoek:

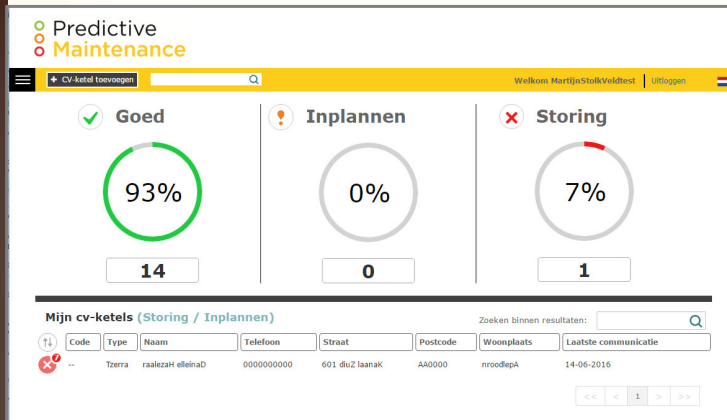
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	12-04-2017 14:30:48	ICT Group	Terminal 100005	Rozenburglaan 1	Groningen	Terminal status
	12-05-2017 11:49:17	ICT Group	Marco0007	Grasland 12	Genoehuis	Terminal status
	12-05-2017 11:51:71	ICT Group	Terminal 100002	Kopenhagen 9	Barendrecht	Terminal status
	12-05-2017 12:14:40	ICT Group	Terminal 100003	Voltastraat 4	Bergen op Zoom	Terminal status
	16-05-2017 14:02:48	ICT Group	Terminal 100001	Prof. Dr. Dorgelolaan 30	Eindhoven	Terminal status
	16-05-2017 14:11:94	ICT Group	Terminal 100004	Munsterstraat 7	Deventer	Terminal status
	16-05-2017 16:36:66	ICT Group	Harrie-00030	Rachelsmolen 1	Eindhoven	Terminal status
	19-05-2017 08:15:14	ICT Group	Marco0008			Terminal status
	19-05-2017 08:17:58	ICT Group	Marco0009			Terminal status
	19-05-2017 08:18:94	ICT Group	Marco0010			Terminal status
	07-06-2017 10:57:53	Eindhoven	Laptop Samuel	Professor doctor Dorgelolaan 30	Eindhoven	Terminal status

Toont 1 tot 12 van 12 items



Case Study

From OEM manufacturer to Heating-as-a-Service provider



Challenge

- Heating has become commodity, comfort is the challenge
- No direct relation with the consumer (B2B2C)
- Low volume of service contracts

Solution

- Remote monitoring and predictive services
- Predictive Maintenance module for installers
- New services platform
- Azure Cloud & Analytics

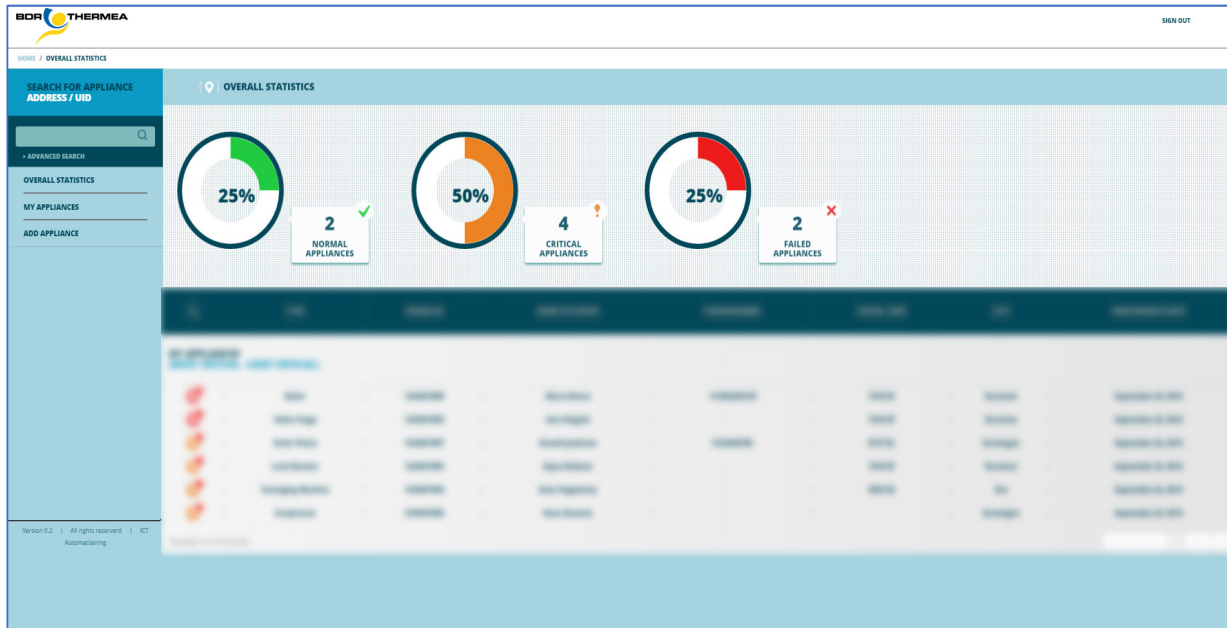
Benefits

- **Connected Operations:**
 - Improved service level
- **Connected Products:**
 - Product improvement
 - Insight in use of equipment
- **Connected Customer:**
 - Intensified relation with installers & consumers

“The Internet of Things changed Remeha to a proactive and innovative organization. They changed from a OEM to a Big Data driven heat supplier.”



Remeha / BDR Thermea: Connect – Collect - Control



Solution

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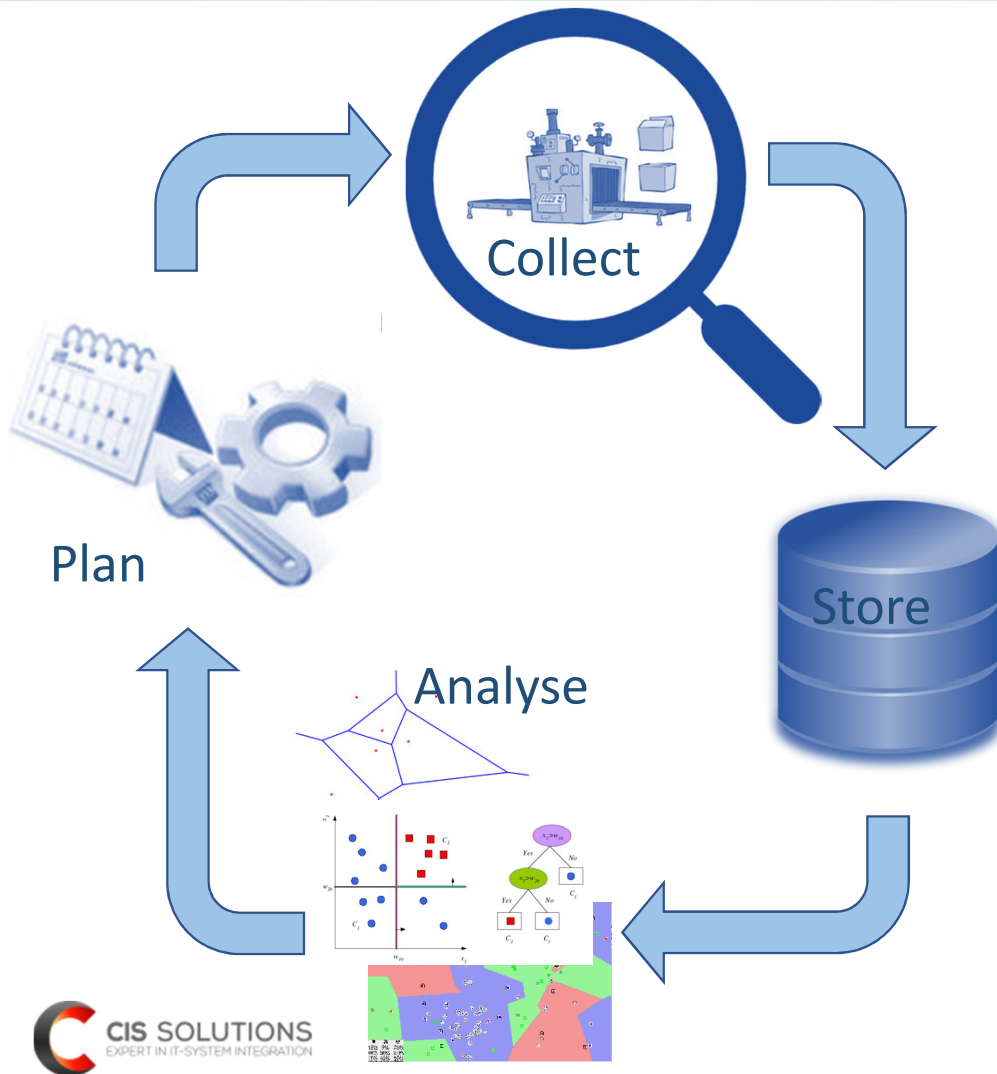
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- Product improvement
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remeha

Predictive Analytics cycle in a nutshell



Predictive maintenance

Durch das Nutzen und Analysieren von Daten können potentielle Probleme / Ausfälle rechtzeitig identifiziert werden, um somit die notwendige Wartung vorherzusagen, bevor es zu einem Ausfall kommt.

Erfolgsfaktoren

- Geeignete Sensorik
- Sammlung von Maschinendaten (in Echtzeit)
- Verarbeitung von großen Datenmengen
- Statistische Algorithmen und Software
- Mustererkennung
- Entwicklung geeigneter Prognosemodelle
- Kenntnis und richtige Kombination der Verfahren z.B. Regressionsanalysen, Klassifikationsanalysen, Faktorenanalyse, Clusteranalyse, Anomalieerkennung
- Iterative Vorgehensweise

Vielen Dank

Besuchen Sie uns am Stand im Foyer

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