MEDTRONIC

UNIVERSITY MAASTRICHT

BUSINESS INTELLIGENCE

MARCEL KROUWEEL BI TEAM – IT SHARED SERVICES EMEA



AGENDABI STRATEGY MEDTRONIC

- 1. Introduction Medtronic
- 2. BI Strategy Medtronic
- 3. Medtronic use case "Go to Market"
- 4. BI Assignment
- 5. Data Clarification

MARCEL KROUWEEL – A SHORT INTRODUCTION

Senior Manager
Business Intelligence
EMEA Region

@Medtronic since July 2016

@Vodafone for 18 years
BI roles for
Customer Services,
Marketing & Finance

University Maastricht Econometrics

Married & 2 kids













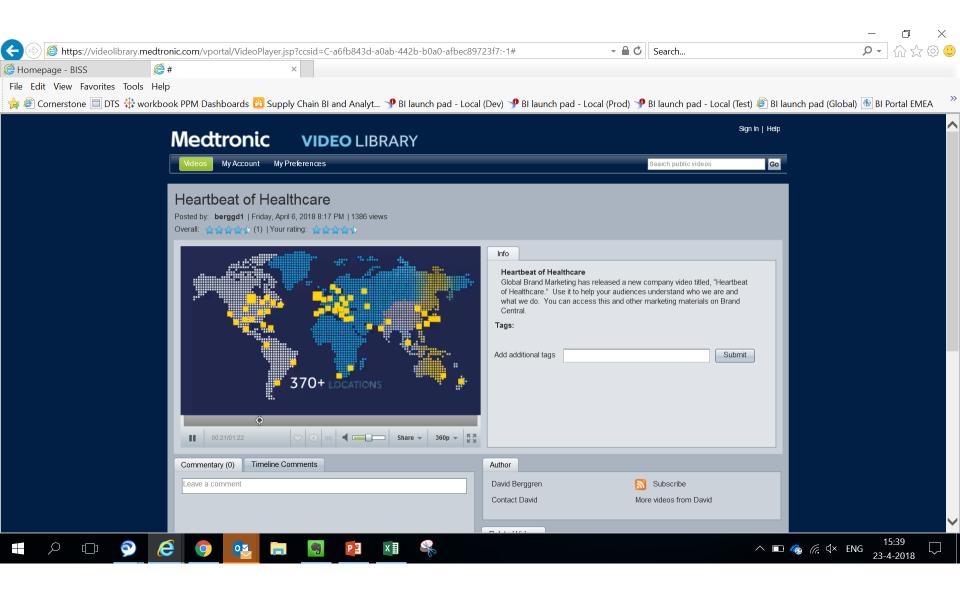








MEDTRONIC INTRO MOVIE



THE FUTURE OF HEALTHCARE REQUIRES WE STRIVE TO ADDRESS UNIVERSAL HEALTHCARE CHALLENGES



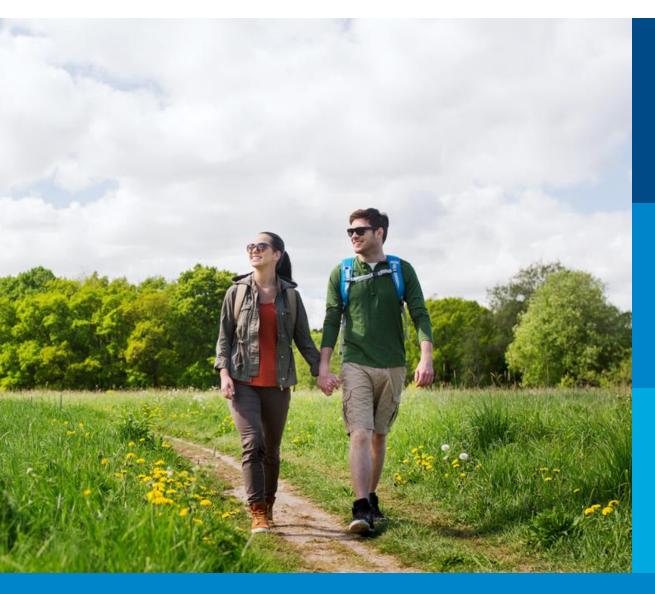
POPULATION IS **AGING**

A RISE IN CHRONIC DISEASES

PAYMENT AND
DELIVERY SYSTEMS
THAT REWARD
VOLUME OVER VALUE

GOVERNMENT
POLICIES AND
REGULATORY
SYSTEMS THAT
IMPACT
INNOVATIONS
+ TIME TO MARKET

TAKING HEALTHCARE FURTHER, TOGETHER THROUGH PROGRESS AND PARTNERSHIP



MEANINGFUL INNOVATION

ALIGNING VALUE

GLOBAL ACCESS

MEDTRONIC FACTS AND STATS



Number of employees:

85,000+



Number of countries operating in:

160+



Number of patents:

53,000+



Research and development spend:

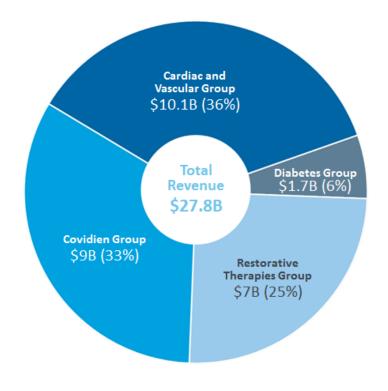
\$2B



Charitable contributions:

\$80M

Information reflects Medtronic fiscal year 2014 data and Covidien fiscal year 2014 data



MEDTRONIC IS FOUNDED CREATED FIRST BATTERY-OPERATED, EXTERNAL PACEMAKER P

WROTE OUR HEART
MISSION VALVE

INTRODUCED PROSTHETIC HEART WEDTRONIC FOUNDATION

EXPANDED INTO NEURO-STIMULATION

EXPANDED INTO SPINAL

CARE

EXPANDED INTO DIABETES CARE

INTRODUCED FIRST REMOTE MONITORING SYSTEM

OTE NG ACQUIRED COVIDIEN THE WORLD'S SMALLEST PACEMAKER

1949

1957

1960

0 1977

1979

1983

1999

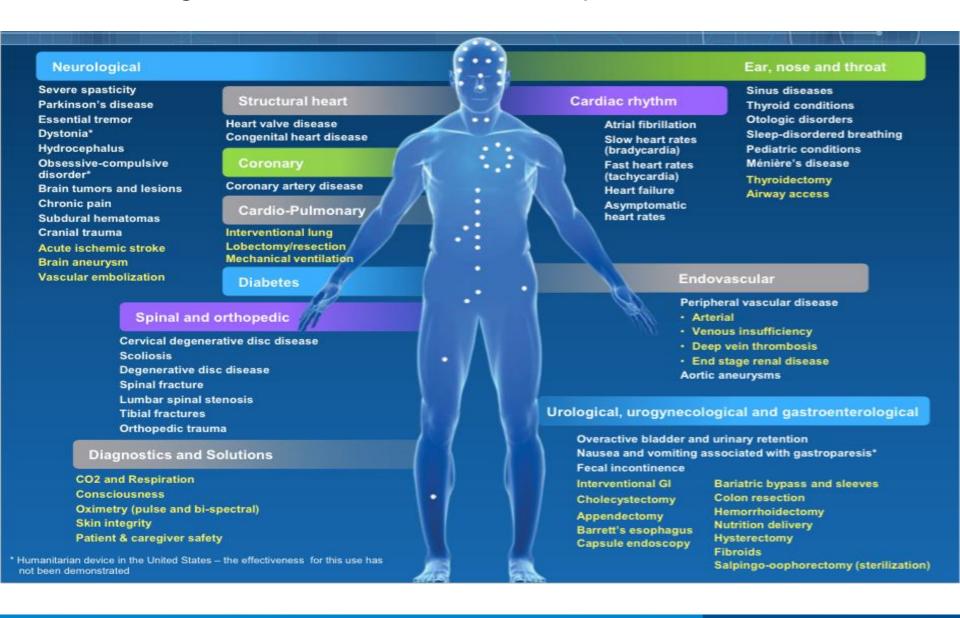
2001

2002

2015

2016

Connecting What We Do with What People Need



HEERLEN – EUROPEAN OPERATIONS CENTER (EOC)

Financial Shared Service Center EMEA Customer Care & Supply Chain



International Information Technology



HR Service Center







Indirect Strategy Sourcing Europe



International Tax



Benelux Diabetes
Customer Care

Medtronic in the Netherlands

340 in Maastricht



1820 Medtronic Employees900 in EOC Heerlen,160 in C-mill Heerlen180 in Kerkrade,240 in Eindhoven,



Additional Staff 1120 (agency workers/contractors)



Average Tenure 8.2 years



Average Age



Gender balance



Illness

MEDTRONIC

BUSINESS INTELLIGENCE STRATEGY



BI STRATEGY – EMEA TEAM

A mature business intelligence capability that delivers relevant data, analytics and visualization services to businesses and enabling functions across EMEA.

 Goal #1: Reposition BI as a business partner focused on delivering data and insights to enable informed decision making and operational efficiencies



Putting the Business First

People

 Goal #2: Establish an agile team with a balance of business and technical skills that can scale based on demand and deliver iteratively



Adopting an Agile & Competency Focused Operating Model

Process

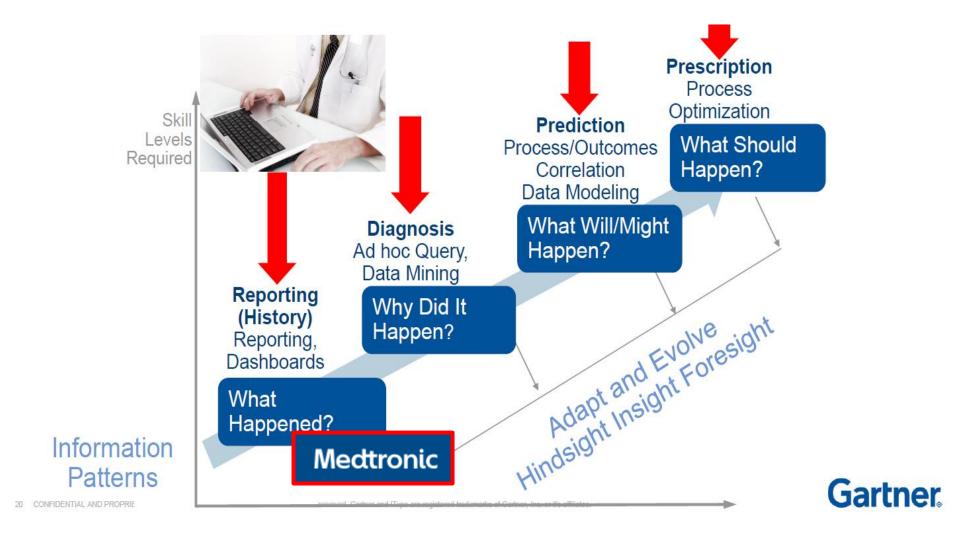
 Goal #3: Mature and expand the current BI service portfolio to include data management, delivery, analytics and visualization services



Building a
Enhanced Service
Catalogue

Technology

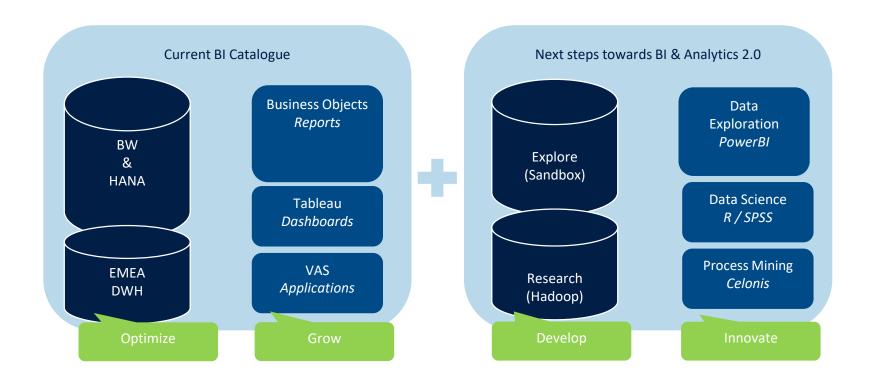
BI EVOLUTION TO ANALYTICS



EMEA BI & ANALYTICS STRATEGY 2.0

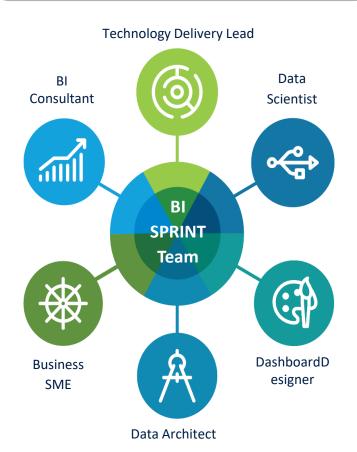
Key principles are established and will continue to further grow the BI Catalogue for the EMEA region.

Next steps are on establishing the Analytics foundation; supporting Self-Service data exploration and driving Data Science use cases



SPRINT APPROACH – BI & ANALYTICS PROJECTS

SPRINT TEAM



Sprint Work Stream Staffing & Activities

Technology Delivery Lead

Overall Lead – Deliverable tracking, daily stand-up chair

Team Engagement – Secure engaged resources

BI Consultant

Business Analysis – Process expertise

Training – User training & roll-out plan

Dashboard Designer

Clarify Requirements – understand business requirements

Dashboard Design – Design Dashboards & Reports

Data Architect

Solution Architecture – Data preparation

Data Governance - Data Quality & Avalilability

Business SME

Business Requirements – Functional documentation

Acceptance – User testing & acceptance

Data Scientist

Data Modelling – Define requirements, build data model

Statistics – Development algorithm, Test use case

MEDTRONIC USE CASE: BE THE BEST SUPPLIER TO WORK WITH...



... BY TRANSFORMING THE WAY WE OPERATE



CHALLENGES & ASSIGNMENT

- What are overall challenges for Medtronic?
 - Aligning Value
 - Many customers to be managed across many countries (3800 sales people in EMEA)
 - Sales teams organized by product sub-group by country
 - Customers see on average >10 different sales people of Medtronic per year

Assignment

- Drive new use cases to show where Medtronic can improve to align value
 - Customer Segmentation
 - Cross & Upselling opportunities
 - Customer Churn prevention
 - Predictive Analytics

Be creative!

- Enrich this data to your own insights (e.g. how to add potential data, customer experience)
- The use cases are more important than the quality of the outcome

DATA CLARIFICATION

- Data of 24 months period
- Sales quantity on monthly level
- Split by
 - Period
 - Customer
 - Product
 - Business Group
 - Geography
- Data has been anonymized and randomized
- Data has been stored in 4 separate txt files with same structure

