Business Finland

EU-rahoituksella potkua Terveysalan yritysten strategiseen kasvuun
Case Bittium

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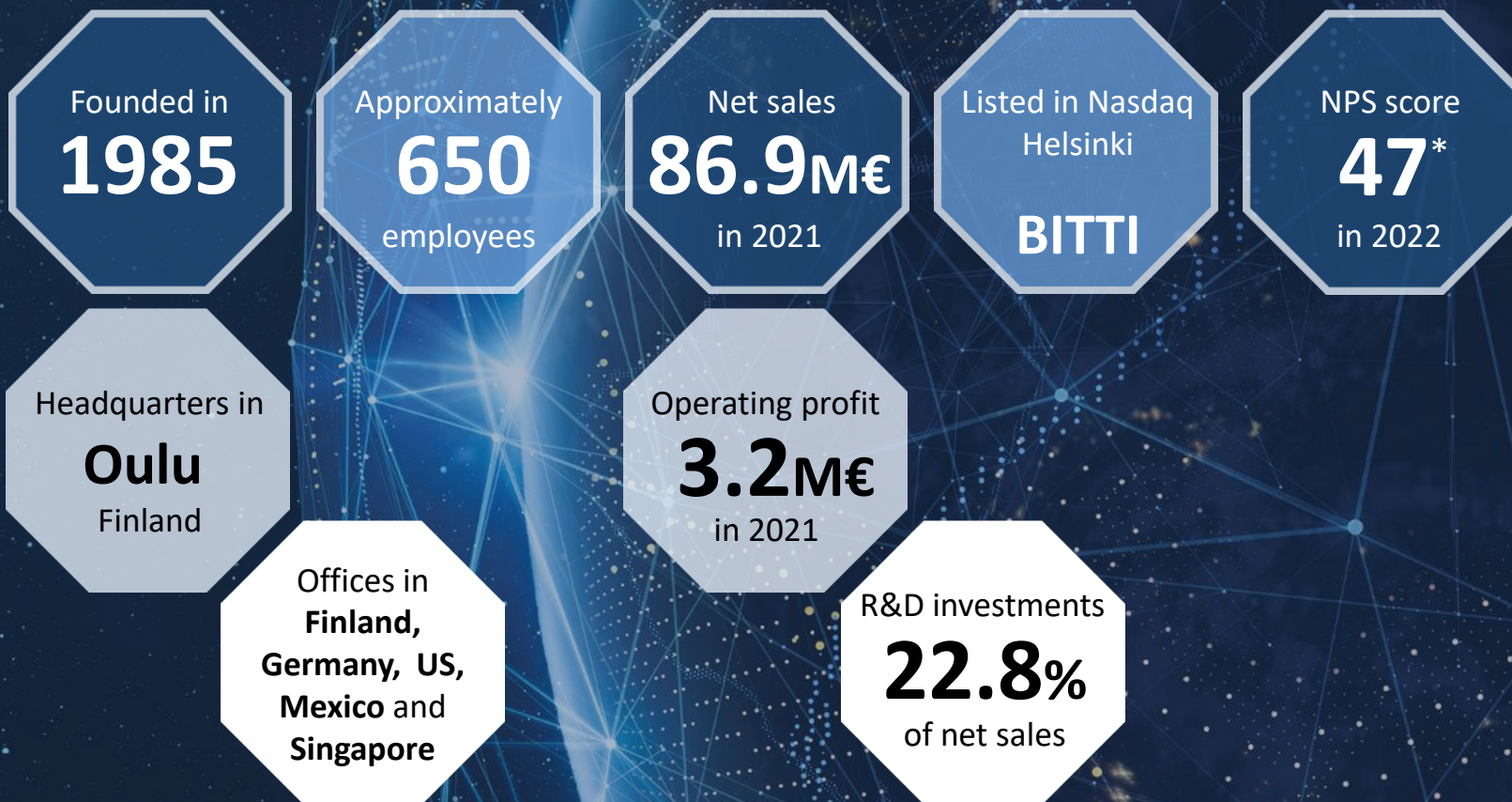
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Bittium

Bittium

About Bittium

Bittium is a high-tech company specializing in Secure Connectivity, R&D Services, Tactical Communications and Medical Technologies.

Key Figures

Founded in
1985

Approximately
650
employees

Net sales
86.9м€
in 2021

Listed in Nasdaq Helsinki
BITTI

NPS score
47*
in 2022

Headquarters in
Oulu
Finland

Operating profit
3.2м€
in 2021

Offices in
Finland, Germany, US, Mexico and **Singapore**

R&D investments
22.8%
of net sales

Bittium

Connectivity Enabled

- Bittium Tough Mobile Product Family
- Special Devices
- Secure Connectivity and Mobile Working

Secure Mobile Communications

Tactical Communications

- Military Radio and Communications Solutions

R&D Services

- R&D Services for Demanding Connected Solutions

Medical Technologies

- Medical Devices
- Platforms for Biosignals' Monitoring Services and Analysis

Bittium Products and Services

Bittium

Biosignals Measuring and Monitoring

QUALITY MANAGEMENT SYSTEM
EU-CERTIFICATE
Regulation (EU) 2017/745

MDSAP
MEDICAL DEVICE SINGLE AUDIT PROGRAM

Cardiology

Reliable precision and flexibility for cardiac monitoring and analyzing.

Neurology

Cutting edge neuro monitoring with unique ease of use.

Sleep Apnea

Home Sleep Apnea Testing empowered with AI.

Bittium

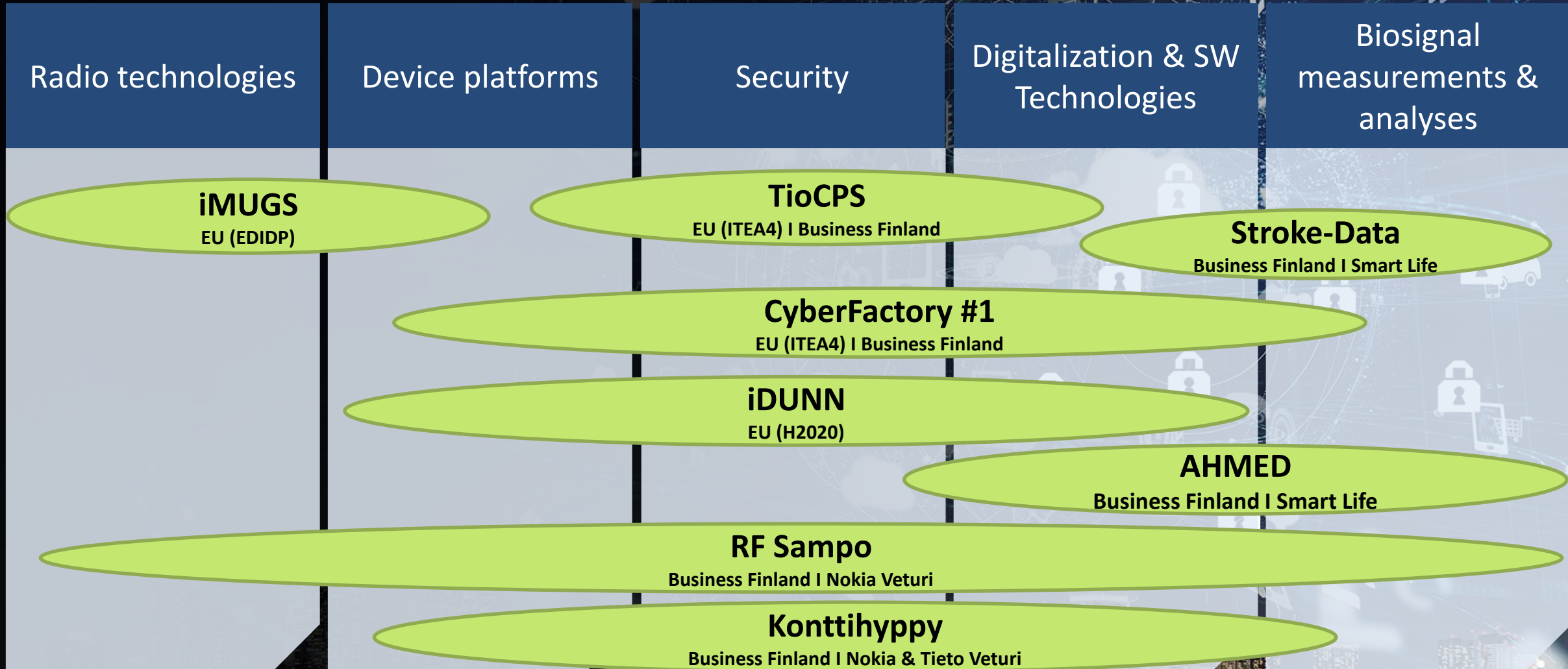# Bittium´s Internal Guidance for the R&D Collaboration

- When considering the importance and justifying a certain R&D collaboration, the following aspects should be highlighted

  1. The importance of the project for Bittium's businesses and growth, e.g. expanding to a new business area

  2. The importance of the topic and Bittium's role in a specific project consortium

Participation into finnish and EU research project schemes
Bittium perspective

- Bittium has participated over the years into various research project collaboration and funding schemes within EU e.g.

  - TEKES and Business Finland projects, Co-innovation and Veturi projects

  - H2020 and Horizon Europe projects and calls

  - EIT – European Institute of Technology

  - ITEA frameworks (Currently ITEA4)

  - Celtic

  - ECSEL JU and Key Digital Technologies (KDT)

  - Defense consortium projects including e.g. EDA, EDIDP, EDF

- Key themes have been; RF technology evolutions, biosignals measurement, security and lately topics like digitalization from end-to-end perspective (from device up to cloud)

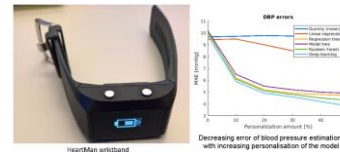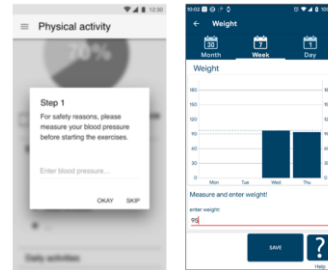# Examples of research areas and projects within various R&D research networks

Radio technologies	Device platforms	Security	Digitalization & SW Technologies	Biosignal measurements & analyses

iMUGS
EU (EDIDP)

TioCPS
EU (ITEA4) I Business Finland

Stroke-Data
Business Finland I Smart Life

CyberFactory #1
EU (ITEA4) I Business Finland

iDUNN
EU (H2020)

AHMED
Business Finland I Smart Life

RF Sampo
Business Finland I Nokia Veturi

Konttihyppy
Business Finland I Nokia & Tieto Veturi

Example cases from Medical Horizon 2020 projects

http://www.women-up.eu/ **(Cost Effective Self-Management of Urinary Incontinence) (Horizon 2020)**

- Duration: 2015 – 2018

- Objective of the project was to develop and clinically validate a solution with which to improve the quality of life of UI patients.

- The system allowed self-management of the disease, pelvic floor muscle training at home as well as lifestyle recommendations and remote supervision by health care professionals.
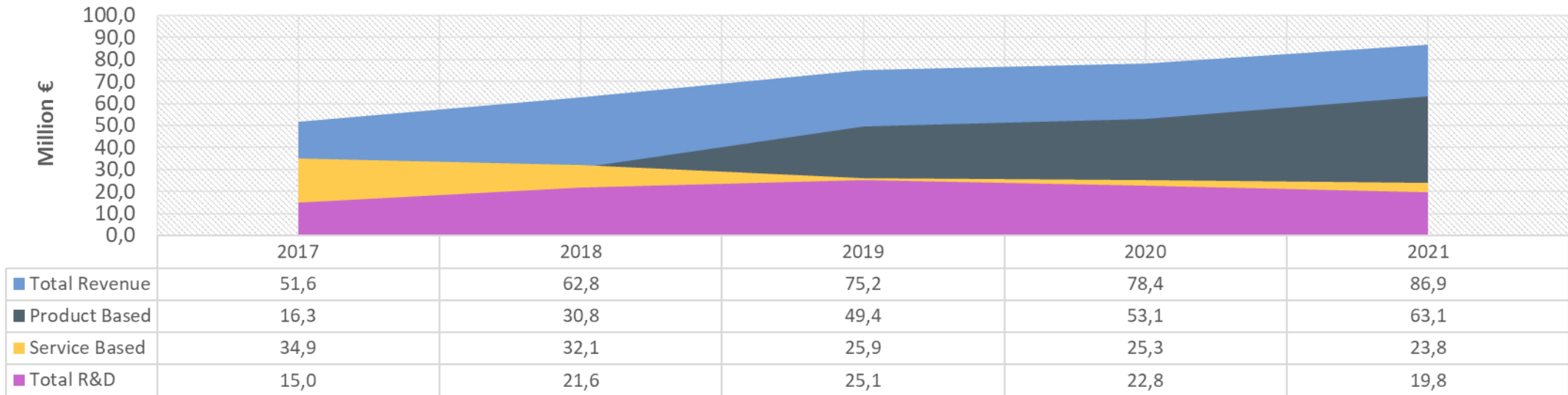
http://heartman-project.eu/ **(Personal Decision Support System for Heart Failure Management) (Horizon 2020)**

- Duration: 2016 – 2018

- The project developed a personal health system to help CHF patients manage their disease.

- It provided personalized advice to the patients utilizing evidence-based predictive models that can improve the predicted outcomes of patients.

- The system featured advanced health devices and monitoring methods to understand the physical and psychological state of patients.

R&D and Research impact to Company Growth

Trend 2017 – 2021

Million €	2017	2018	2019	2020	2021
Total Revenue	51,6	62,8	75,2	78,4	86,9
Product Based	16,3	30,8	49,4	53,1	63,1
Service Based	34,9	32,1	25,9	25,3	23,8
Total R&D	15,0	21,6	25,1	22,8	19,8

- *Product-based sales has grown four fold (4x) during 2017-2021*
- *Bittium´s ranking # 494 in EU level R&D investments 2021, # 21 in Finland*
- *#2 in R&D intensity in Finland and #121 in EU (Source EU R&D Scorecard)*

Summary

✓ The technology and business linkage creates possibility to determine emphasis for potential research projects.

✓ Networking in research projects creates possibility to research to validate the ideas and concepts with academia and industry

✓ In Medical special case is the involvement of various Hospital and Health actors with the research

✓ Networking with universities and VTT within domestic projects creates possibilities for participation into international research projects with top companies and universities

✓ Participation into research projects enables potential for revenue and export growth in the long term – notifying the path to products in Medical incl. certifications and requirements like MDR

✓ In EU projects typical project acquistion success is 5-10% but highly dependant on the consortiums involved – patience for preparation is required!!!