



Centre for New Methods in Computational Diagnostics and Personalised Therapy

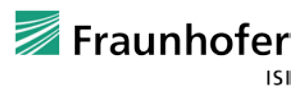
on behalf of the CECM Project

Marian Bubak

Academic Computer Centre Cyfronet, Department of Computer Science,
AGH University of Science and Technology, Krakow, PL
Informatics Institute, University of Amsterdam, NL
<http://dice.cyfronet.pl/>; bubak@agh.edu.pl



The University
Of
Sheffield.



Mission of CECM Project



CECM EU H2020 „Teaming for Excellence” project develops a Business Plan to establish in Krakow a European Centre of Excellence for computational medicine.

The CECM Consortium is going to build a world-class centre of excellence, attractive to foreign partners, with a significant impact at both regional and national scales, providing benefits for the pan-European society.

- It is a consortium of leading European science and innovation institutions in all domains of the new CoE.
- ACC Cyfronet AGH has a long record of efficient support for scientists in the computational life science EU and PL research projects.
- Małopolska and Kraków are well positioned for a key role in the computational medicine.



CECM Partners



Leading European science and innovation institutions:

- **University of Sheffield** and **Insigneo Institute** – experts in translation of *in silico* modelling and simulations to clinics
- **Forschungszentrum Jülich** – experts in modern HPC and data techniques, applied for science and industry
- **Fraunhofer ISI** – experts in systemic multi-domain solutions and innovation in healthcare

They will work together with Partners from Poland:

- **ACC Cyfronet AGH** – experts in simulation and provisioning computing infrastructure for science
- **Klaster LifeScience Kraków** – Poland's top cluster of industry, academia and hospitals for the life science domain
- **NCBiR** - the Polish National Centre for Research and Development (project coordinator)

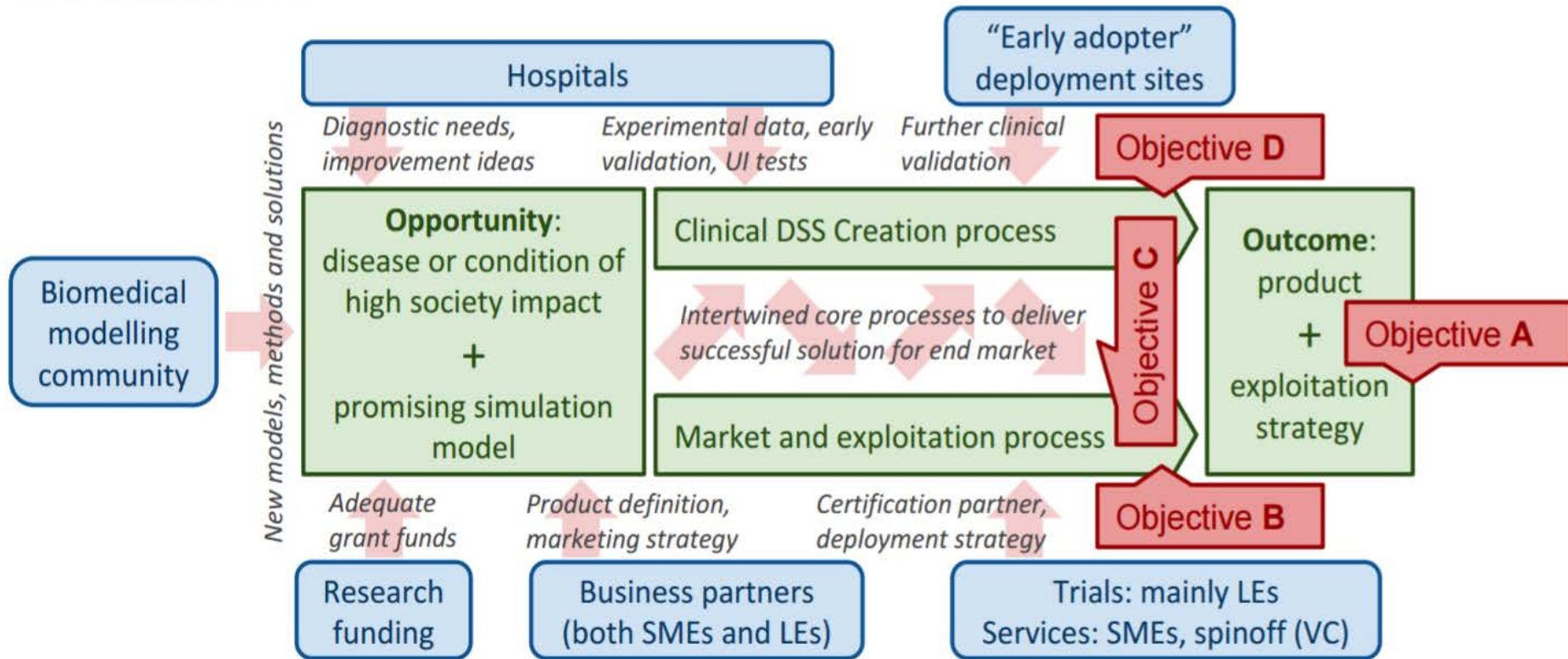
A: Development of **new computation-based solutions for diagnostics and therapy in daily healthcare.**

B: Systematic **involvement of regional biomed businesses, specialising in technologies and services for personalised medicine**, in high-profile research projects and clinical adoption of their outcome.

C: Development of education initiatives to **train knowledge workers with the skills in data analytics, simulation, and HPC/Big Data**, to respond to the growing demand for skilled workforce in medical devices and bio-engineering.

D: Strong **advancement of algorithms, models and technologies involved in personalised medicine, including design of holistic, replicable, generic framework for simulation-based Decision Support Systems (DSS) creation.**

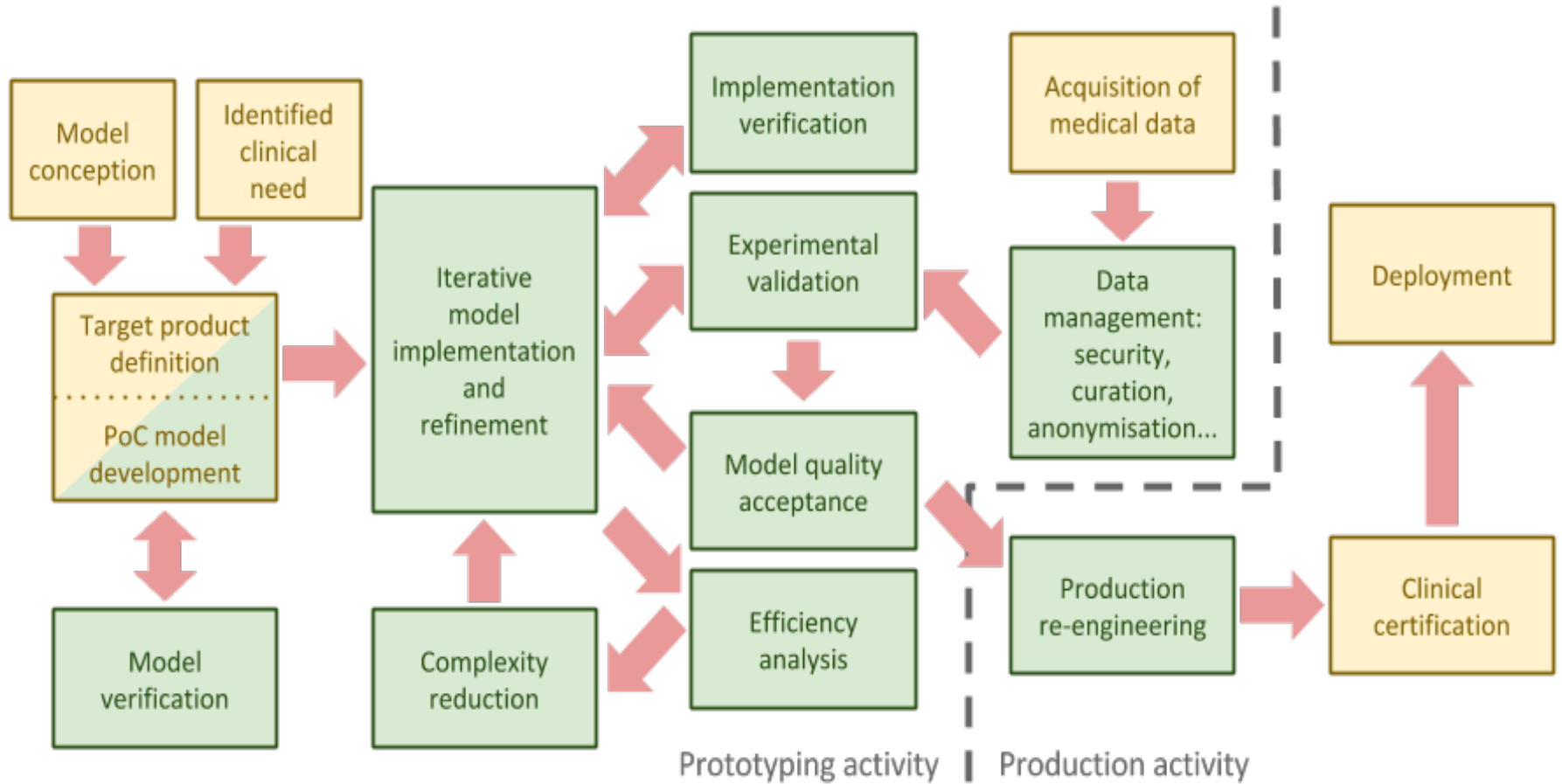
CoE Value Chain



Centre’s Customers come from **two distant sides of the value chain**

- The aim is a **replicable, refined workflow**, rather than a single system
- **Bridging the gap** will locate the Centre as a **crucial actor of the process**
- **Re-iteration** as an inherent **excellence-building mechanism**

CoE Methodology



- **Industrial**

- large & small enterprises present in the clinical DSS value chain
- in all stages, from product conception to certification and deployment

- **Clinical**

- pilot studies with retrospective and prospective patient data
- common projects on the most demanding clinical cases

- **Scientific**

- simulation aiming at assisting personalised therapy
- computation- and data-based diagnostic tool



More and contact



<http://dice.cyfronet.pl/projects/details/CECM>

bubak@agh.edu.pl



The
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Of
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INSIGNEO
Institute for *in silico* Medicine



CGW'17, Krakow, Poland; 23-25 October 2017