



DIGITbrain

Digital Twins for Manufacturing

Andreas Ocklenburg

CEO cloudSME U.G. & Work Package Leader

"Communication & Outreach" in DIGITbrain



andreas.ocklenburg@cloudsme.eu



+49 203 363 999 55



www.digitbrain.eu



www.linkedin.com/groups/12439191



www.twitter.com/digitbrain_eu



www.facebook.com/DIGITbrainProject

DIGITbrain has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952071



The DIGITbrain consortium



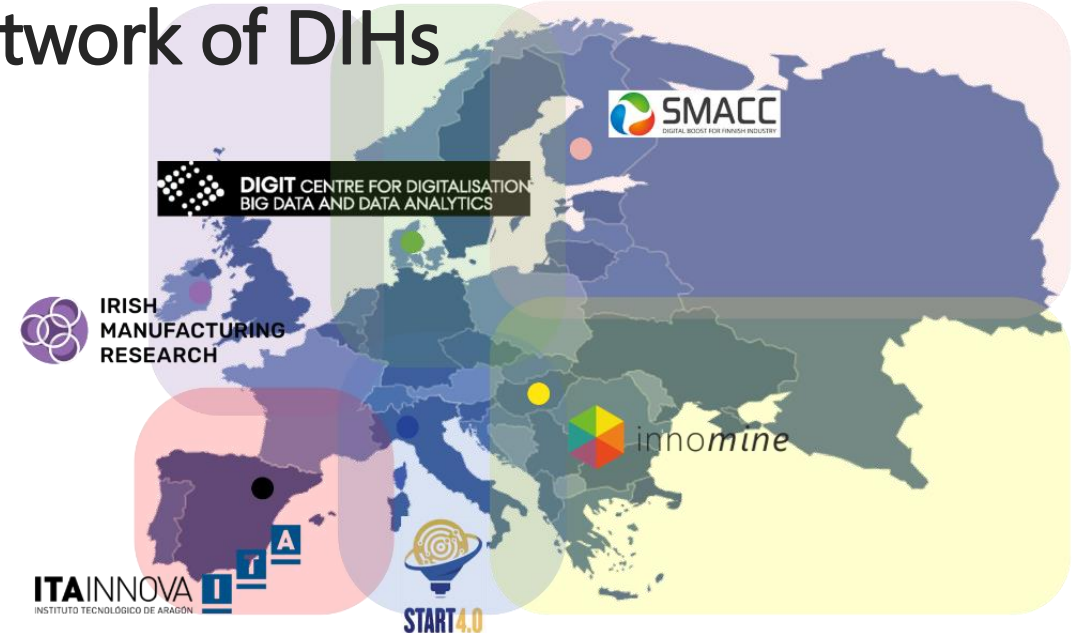
Core technical and administrative partners



Experiment partners



Network of DIHs



Challenge

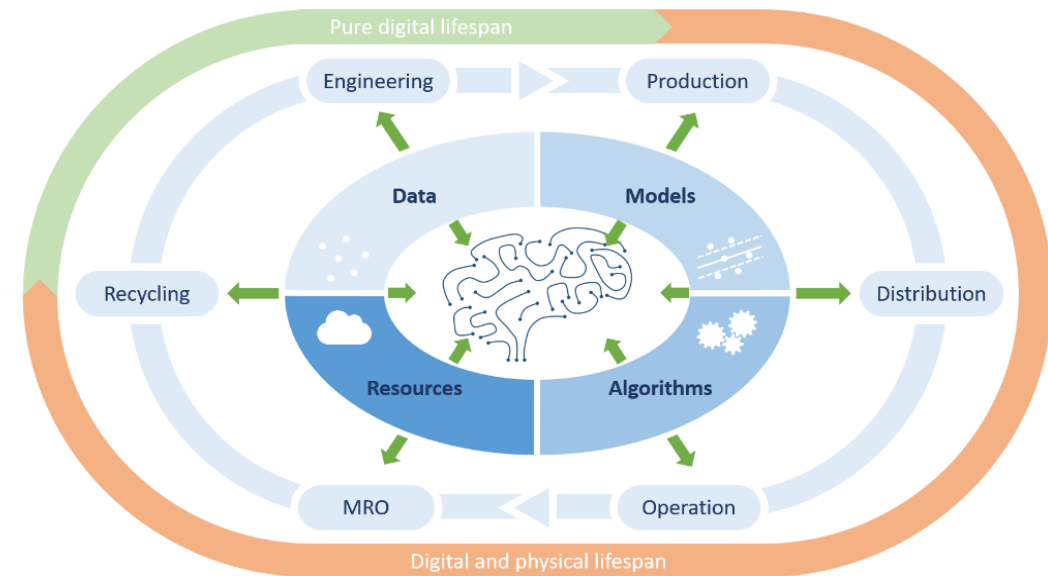


- DIGITbrain main challenge

- "...to enable customised industrial products and to facilitate cost-effective distributed and localised production for manufacturing SMEs..."

- How?

- "...by means of modelling, simulation, optimisation, analytics, and machine learning tools to augment the concept of digital twin with a memorising capacity..."




DIGITbrain in a nutshell

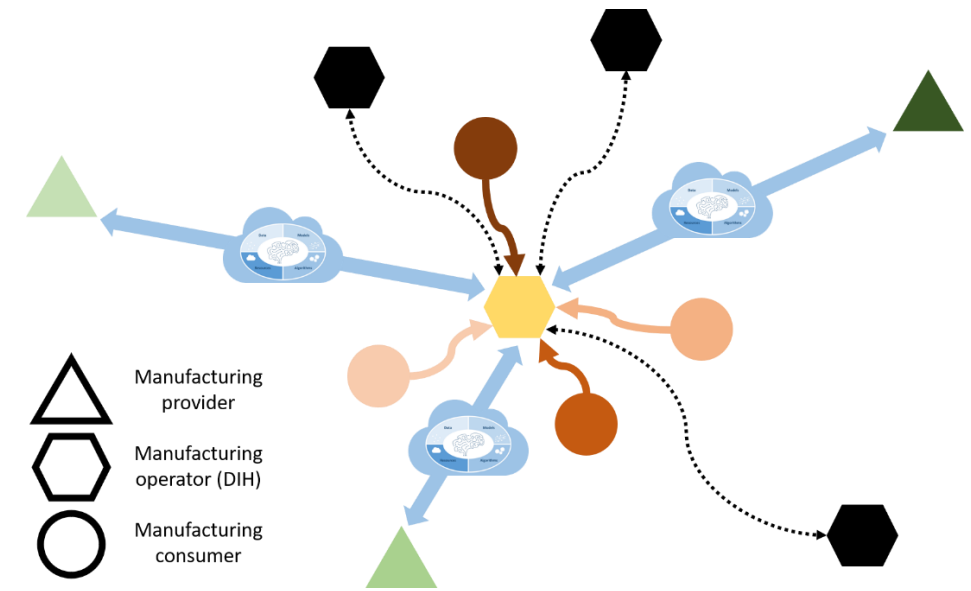
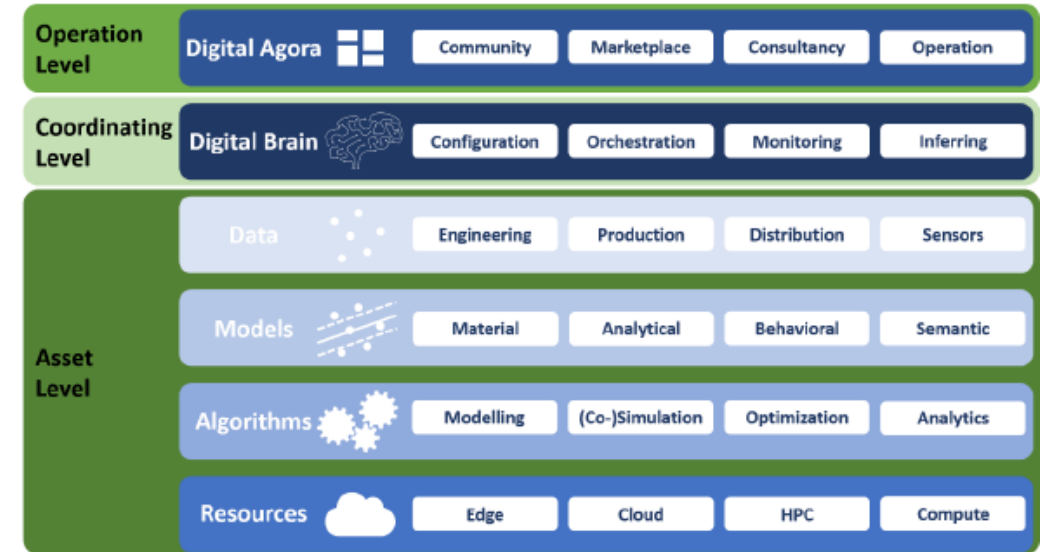


- Extend the Digital Twin concept with memorizing capacity to cover the whole product lifetime
 - Accelerate adaptation of manufacturing and products to changing conditions
 - Facilitate flexible manufacturing to strengthen competitiveness
 - Enable personalized manufacturing in an affordable way
- Democratize technology access for manufacturing SMEs

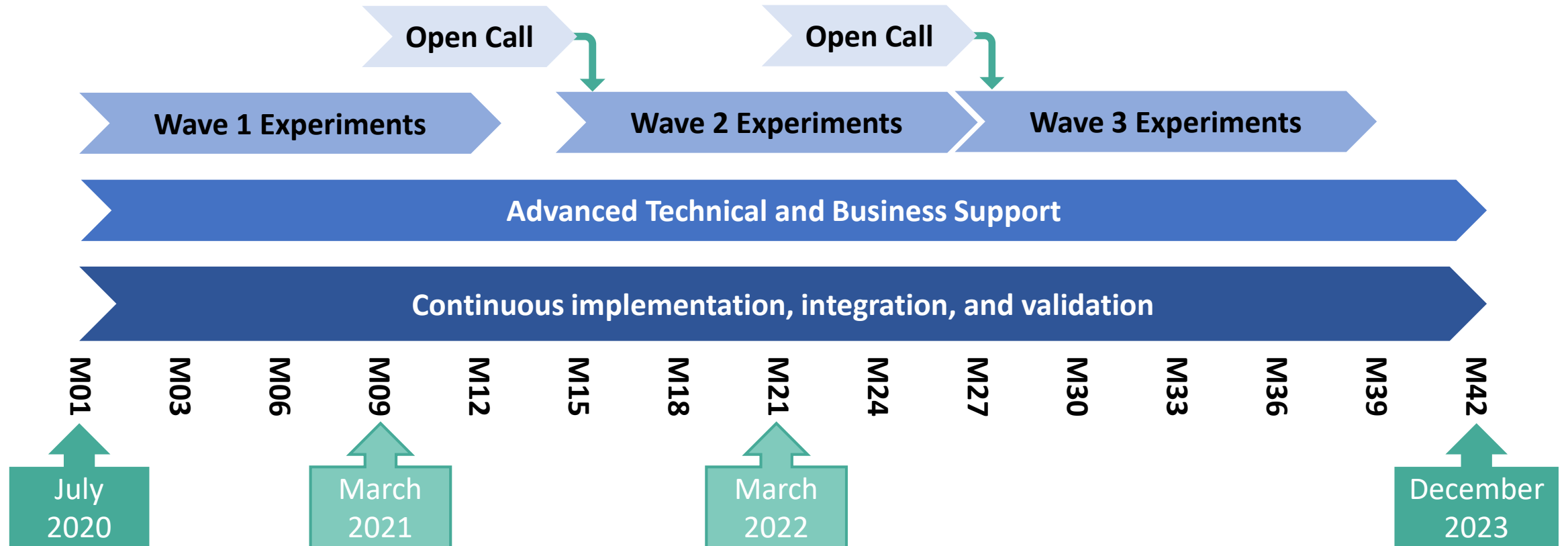


DIGITbrain objectives

1. To implement the Digital Brain concept
 - ☐ To configure and orchestrate data, models, algorithms, and resources
2. To develop MaaS business model
 - ☐ To be implemented by the DIHs
3. To augment the capabilities of the  Marketplace
 - ☐ Integrating Digital Brain concept and MaaS business model
4. To conduct three waves of experiments
 - ☐ To validate the project results: 1 internal, and 2 Open Calls
5. To evangelise the manufacturing community
 - ☐ On the benefits and impact of MaaS – DIHs involvement



DIGITbrain timeline



DIGITbrain Open Calls



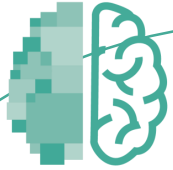
- ☐ 2 Open Calls
- ☐ Number of experiments: 14 (7 per Open Call)
- ☐ Budget: 1 400 000 € (\approx 100K€ per experiment)
- ☐ Who can participate?
 - ☐ End users (manufacturing companies – SMEs and mid-caps)
 - ☐ Independent Software Vendors (ISV) – SMEs and mid-caps
 - ☐ Engineering consultants – SMEs and mid-caps
 - ☐ Research organisations
 - ☐ High-Performance Computing (HPCs)
 - ☐ Digital Innovation Hubs

☐ Open Calls timeline

Open Call (OC)	Launch	Execution
OC1	March 2021	September 2021 – August 2022
OC2	March 2022	September 2022 – August 2023



DIGITbrain vs Change2Twin



DIGITBRAIN

- Support SMEs in the uptake of **Digital Twin Technology**
- Development of **Digital Brain**, covering **whole product lifecycle**
- focusing on DIH network to provide local support
- **2 Open Calls**, up to **100K€** for each of **14 cross-border experiments** (1 end user SME & 1 Technology Provider / DIH)
- Providing opportunity for further integration into a **Pan-European Marketplace & Community** for digital Engineering and Manufacturing (Simulation / ML / AI / DT)

CHANGE2TWIN

- Support SMEs in the uptake of **Digital Twin Technology** in Manufacturing
- **DIH activation** to provide support to local SME
- **4 cross-border** pilot experiments
- **2 open calls** for 10K€ assessment vouchers for SMEs (49 in total)
- **2 Open Calls** for 90 K€ deployment vouchers for experiments combining manufacturing and technology provider SMEs (21 in total)
- **online Marketplace** as meta-platform & eco-system for technology providers

Cloudi
Facturing

emGORA
digital workspace for online engineering





DIGITBRAIN

Thank you for your attention!

Andreas Ocklenburg

CEO cloudSME U.G. & Work Package Leader

"Communication & Outreach" in DIGITbrain



andreas.ocklenburg@cloudsme.eu



+49 203 363 999 55



www.digitbrain.eu



www.linkedin.com/groups/12439191



www.twitter.com/digitbrain_eu



www.facebook.com/DIGITbrainProject

DIGITbrain has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952071



DIGITbrain - details



- Topic: H2020 – ICT-03
- Type of action: Innovation Action
- Number of partners: 36
- Estimated project cost: €9,392,812.09
- EU contribution: €8,340,511.48
- Start date: 1st July 2020
- Duration: July 2020 – December 2023 (42 months)
- Grant Agreement No. 952071

