CELTIC-NEXT

**Pitch of
the Project Proposal**

17th of March 2023, Paris

5G for distributed Manufacturing beyond borders

eureka
innovation beyond borders

The University Of Sheffield. /AMRC Advanced Manufacturing Research Centre

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Teaser

Explore: How the a **phase change** in telecommunication will trigger
a **phadigm shift** in manufactring ?

Experiment: the integration of cutting edge telecom technology in manufacturing

Show case: Manufacturing as a service (servitization) + Distributed Manufacturing

Measure: commercial benifits realisation and new business models

Collaborate: Build a cross border, multi national testbed to setup demonstrators

AMRC
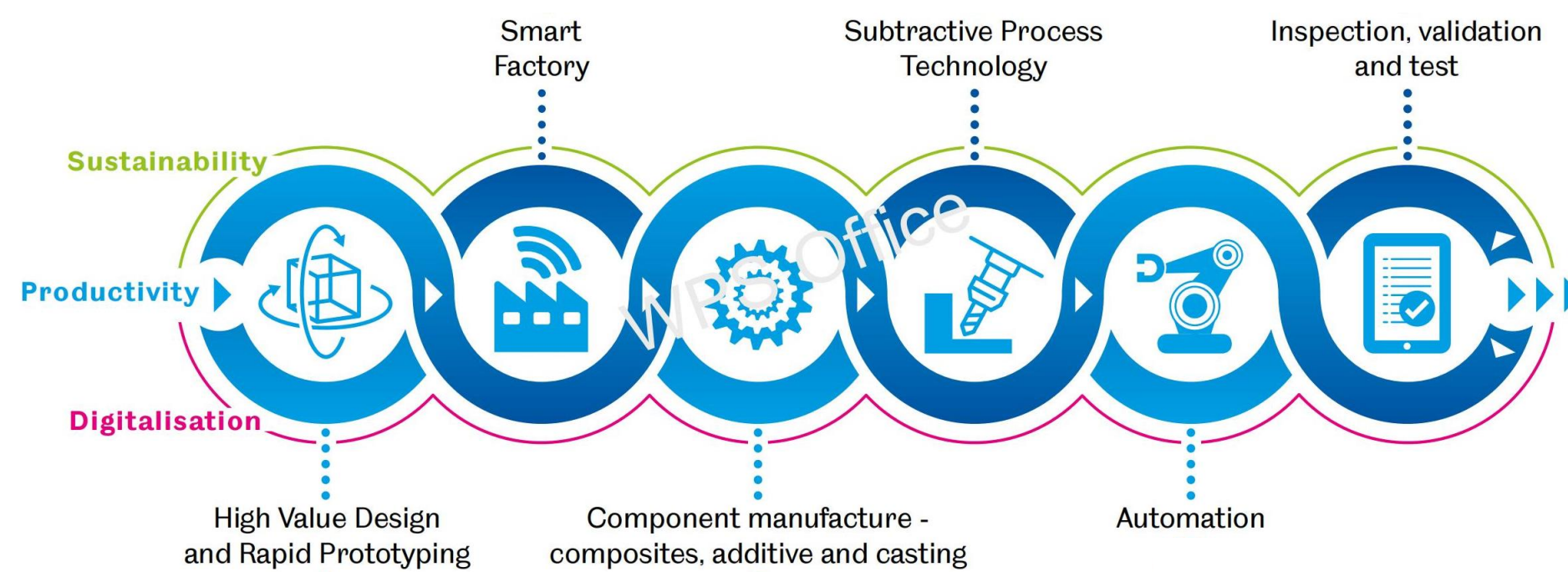

125+ members
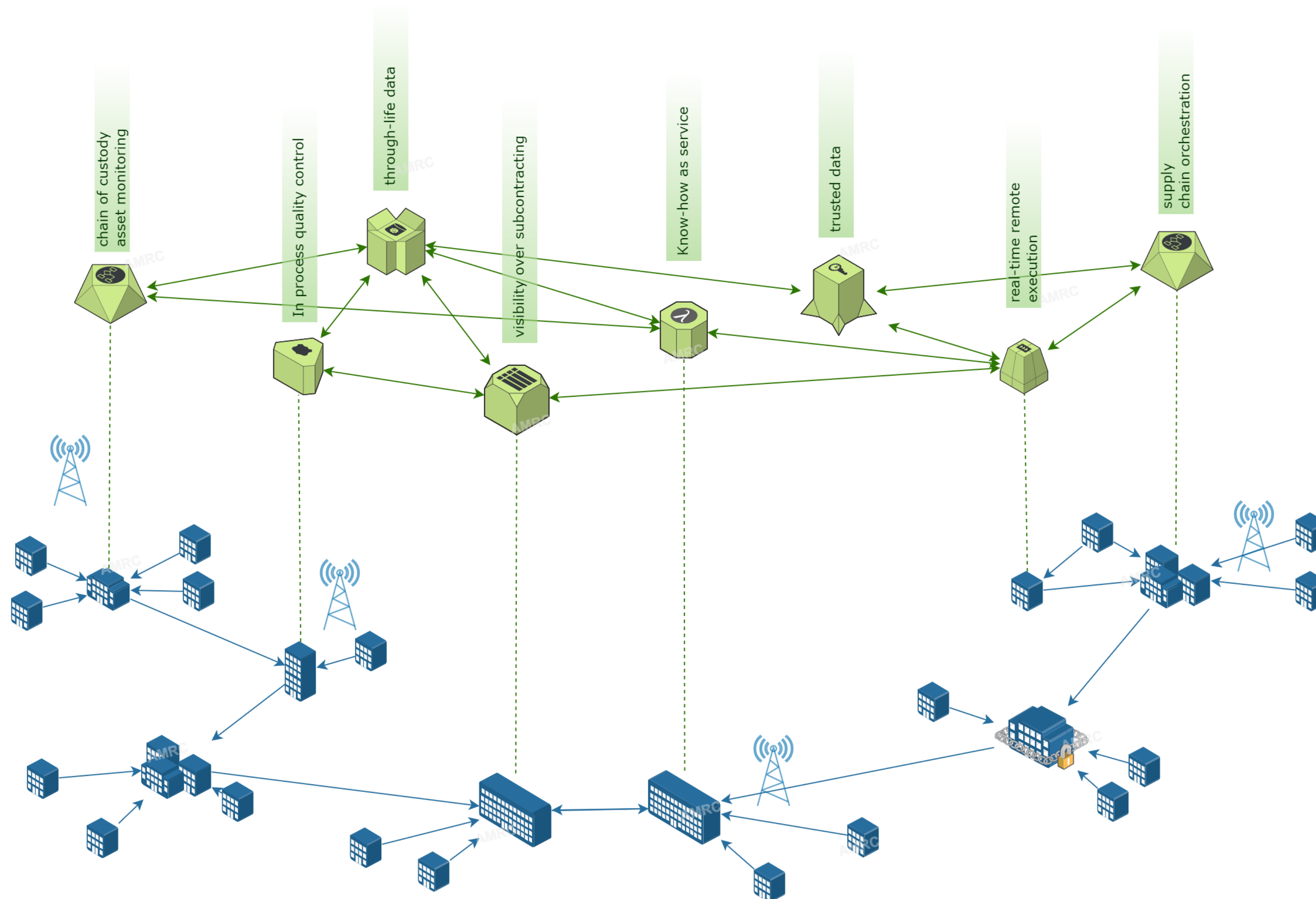

Digital Manufacturing

Proposal Introduction

Establish a testbed by

1. interconnect existing *private* and link *public* 5G deployments

2. Set up *cloud based* platforms

3. Develop and *demonstrate* technology and use cases

4. To be used by *future projects* and wider *community*

5. Open source / *open standards*

6. Sustainable business model beyond the funded period

7. Assess *cyber security* impacts

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Proposal Introduction

Demonstrations
- Cloud based manufacturing
- Digital Rights & Intellecutal property protection
- Pop-up factories
- Clould CNC – real-time, time critical control loops
- End to end visibility down to the tool-tip
- Global virtualised enterpise ecosystems

Technologies
- 5G / Beyond 5G / 6G
- Public/Private networks, roaming
- Time critical networking
- Network Slicing
- mmWave
- Smart network fabric
- Edge cloud
- Open RAN

Impacts
- Supply chain resilience
- Reduced Carbon footprint/Net-Zero
- Reduced wastage
- Improved quality
- Faster market response
- Utilize global skillset

duration: 36 months

Partners

Existing consortium: **AMRC***, BAE Systems*

Looking for European partners

- *Manufacturers: Aerospace, Automobile, Process industries*

- *Mobile network operators*

- *Blockchain / Cloud Service / Solution vendors*

- *Global Enterprises and SMEs – All Tiers 1,2,3*

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Contact Info

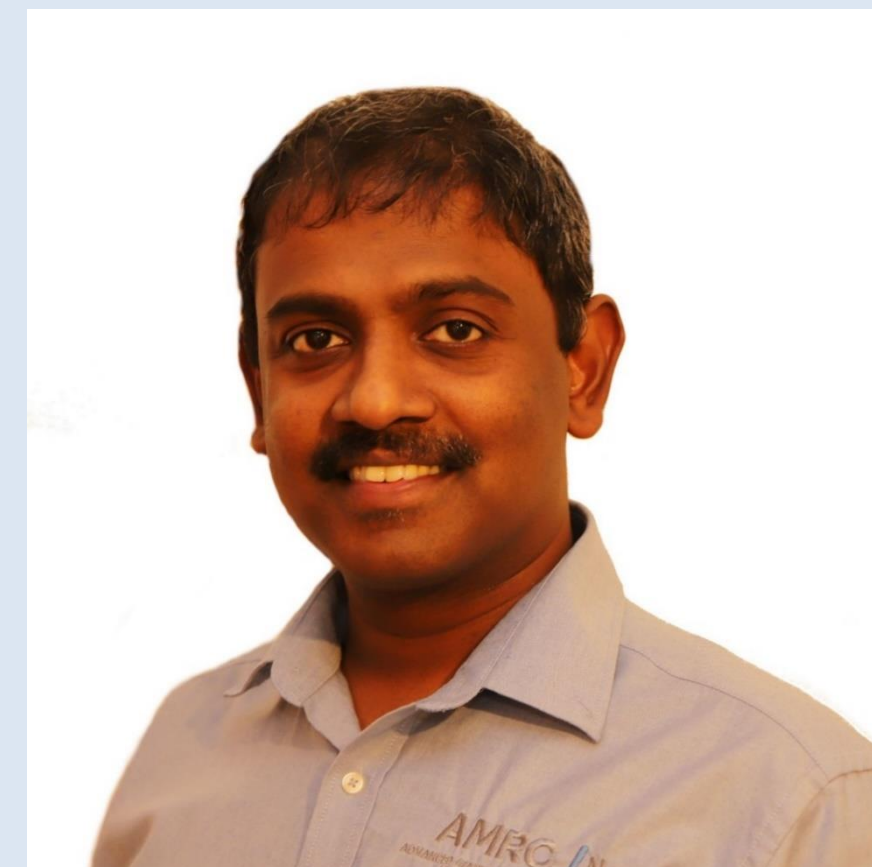**For more information and for interest to participate please contact:**

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Presentation available via:

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