an

iPRODUCE

online event

THE

SOCIAL MANUFACTURING PARADIGM

co-creating with manufacturers, makerspaces and consumers

WELCOME !

iproduce-project.eu

@ iproduce_eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement no. 870937.

aidplex

makerspace bonn

iPRODUCE

Manufacturing enterprises

iPRODUCE
Social Manufacturing Practices

Consumers

Maker communities

iPRODUCE | Agenda

09h30 Virtual hello and welcome

09h45 Introduction of iPRODUCE
Manuel Sánchez (AIDIMME) / Samuel Almeida (F6S)

10h00 The social manufacturing paradigm:
the foundations for a social manufacturing platform
Ria Pechlivani (ITI-CERTH) / Dimitris Chapizanis (White Research)

10h30 Keynote – David Cuartielles *Arduino Verkstad / BCMI Labs AB; Malmö University*

11h00 Break

11h15 Keynote – César García *La Hora Maker*

11h45 Presentations from iPRODUCE collaborations
POP-MACHINA project: Jessica Guy & Pablo Muñoz
OPENNEXT project: Robert Mies

12h15 Virtual round table

12h45 Wrap up and end of event

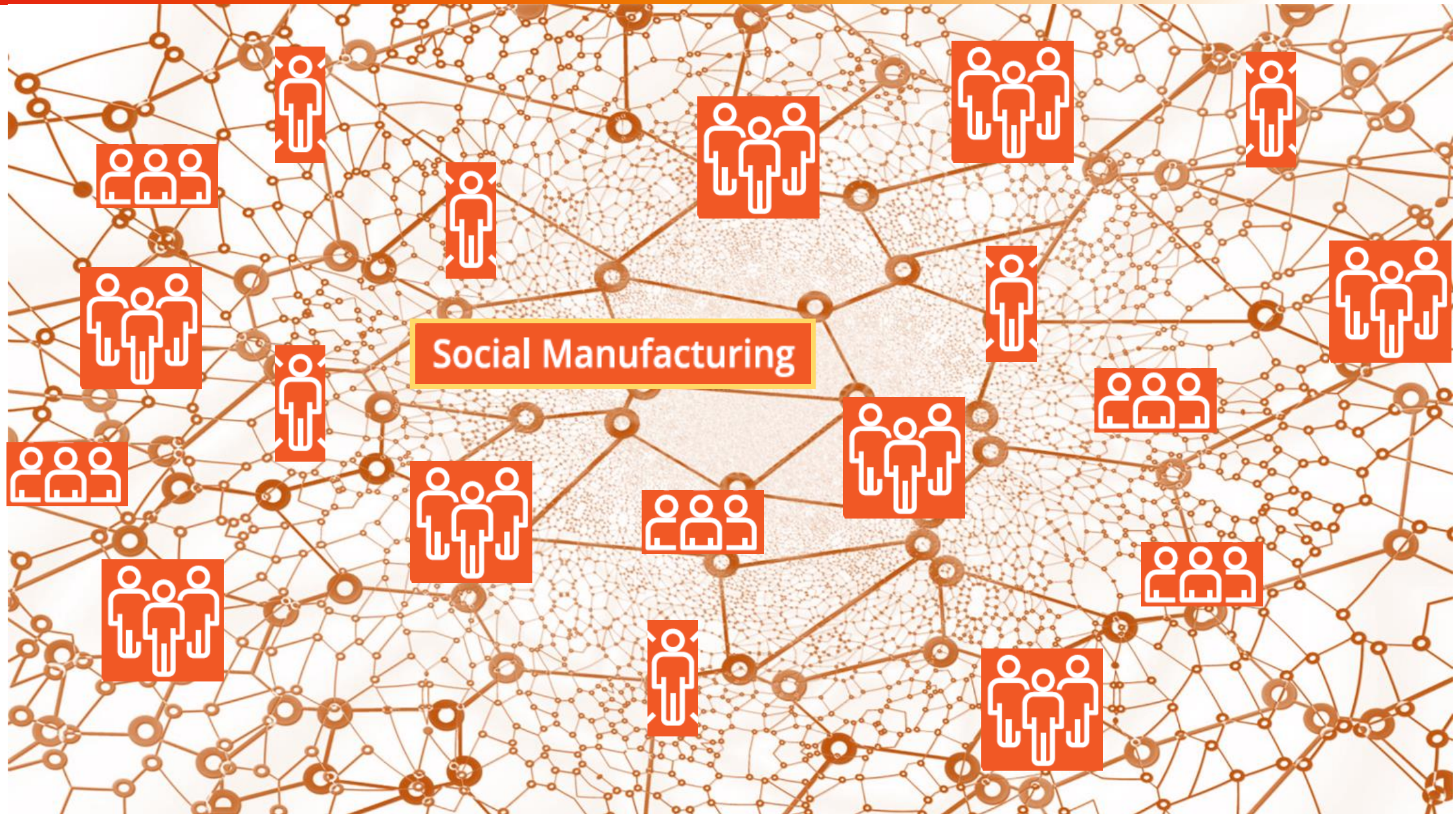
A Social Manufacturing Framework for Streamlined Multi-stakeholder Open Innovation Missions in Consumer Goods Sectors

AIDIMME/ Manuel Sánchez

Nov. 2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement no. 870037.

Context



Social Manufacturing Framework

SOCIAL MANUFACTURING FRAMEWORK

iPRODUCE aims to introduce and define a **social manufacturing framework (SMF)** to support **open innovation** and **co-creation activities** for the design, engineering and production of **consumer goods**.

LOCAL & EUROPEAN ENGAGEMENT

The SMF aims to **engage** at the local and European level manufacturing **enterprises** (SMEs and/or mid-caps); **makers** communities (fab labs, makerspaces and start-up communities); and **consumers**.

INCREASED COLLABORATION

The SMF proposes **increased collaboration** between manufacturing companies and makers so that new ideas and perspectives are leveraged to meet **consumers' needs** and existing ideas, designs and prototypes can be better explored for commercialisation and mass production.

COLLABORATIVE MANUFACTURING DEMONSTRATION FACILITIES

The SMF aims to **connect** micro-manufacturing and other existing **facilities** at the local level, organising them into co**llaborative Manufacturing Demonstration Facilities (cMDFs)**

iPRODUCE cMDFs

France

cMDF France will accelerate, through co-design, co-creation and open-innovation methods and tools, the time to market and will develop new production process adapted to rapid demand and technology evolutions.

Denmark

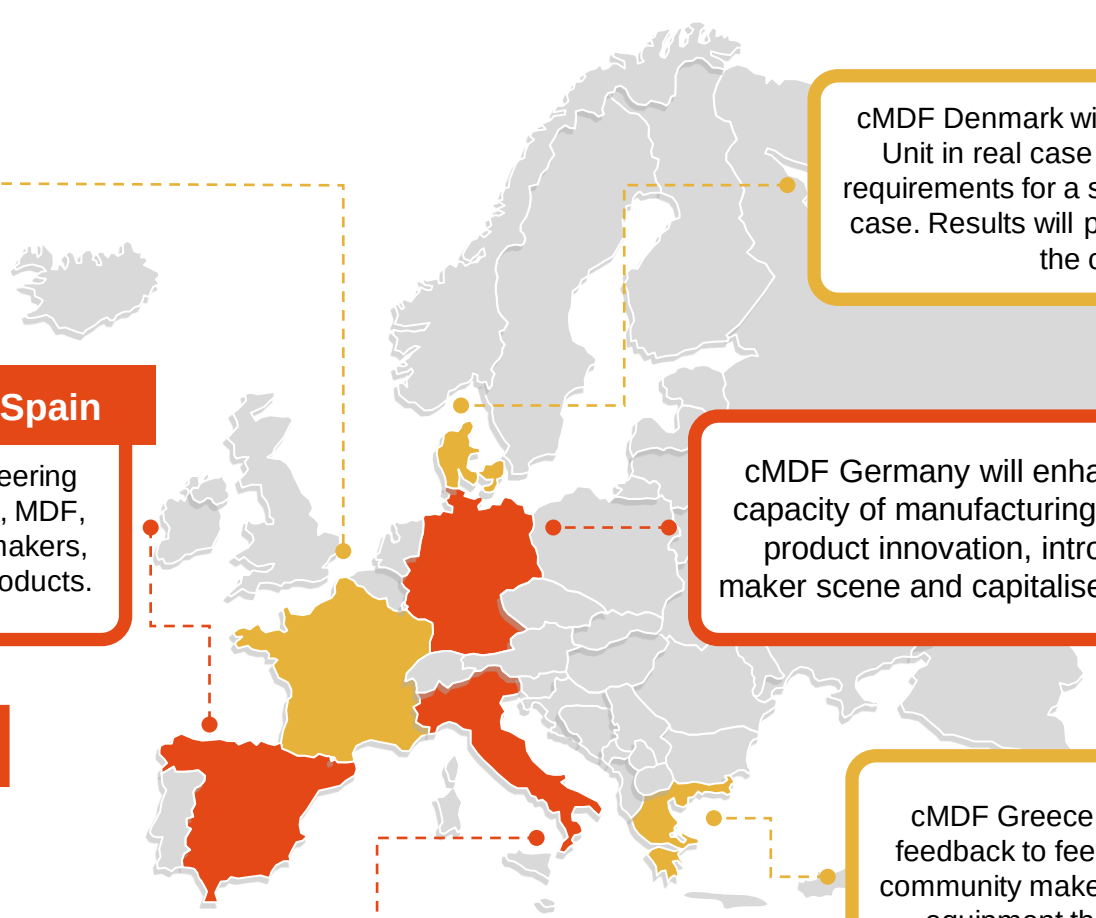
cMDF Denmark will deploy the Mobile Betafactory Unit in real case use scenarios to evaluate the requirements for a sustainable long-lasting business case. Results will provide a better understanding of the consumer market.

Spain

cMDF Spain will enable collaborative engineering between furniture manufacturing companies, MDF, the Fab Lab and the community of experts/makers, allowing them to develop customer-driven products.

Germany

cMDF Germany will enhance the co-creation capacity of manufacturing SMEs for consumer product innovation, introduce SMEs to the maker scene and capitalise the fab lab mentality.



Italy

cMDF Italy will enable collaborative engineering between the microelectronics manufacturing companies, the MDF and the fab labs, involving the wider community to address new developments/ enhancements.

Greece

cMDF Greece will leverage expert opinions and feedback to feed the design process supported by community makers to develop an innovative medical equipment that outperforms current solutions.

Outputs: Technologies and Tools

Generative Design Platform

Digital toolkit to explore a solution space which adheres to a provided ruleset of constraints and enables the engineer / designer and user to “breed” the fina, personalized solution together

Matchmaking

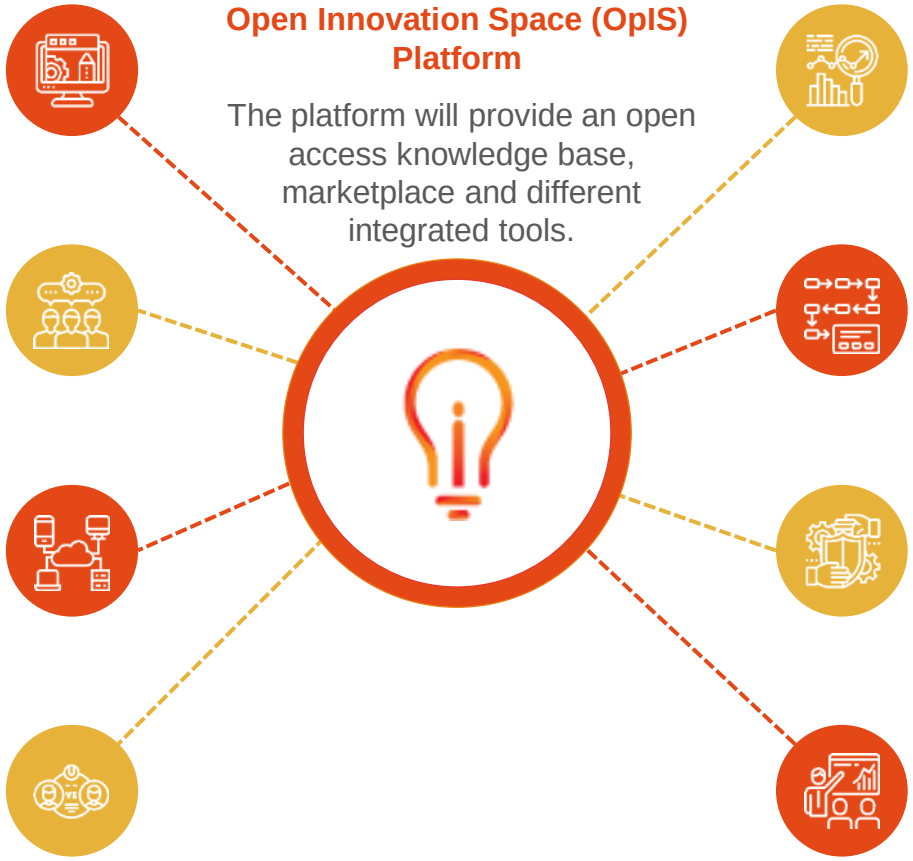
The matchmaking will allow the platform users to find suitable partners, products and services to enable the development of agile collaboration networks.

Mobile App

A mobile application will obtain Voice of Customer feedback through which iPRODUCE can actively solicit input about new ideas, test existing ideas, etc.

AR/VR Toolkit

Real time space for co-creation process under Augmented and Virtual environments. Services product design, providing assistance, decision support and risk management features.



Open Innovation Space (OpIS) Platform

The platform will provide an open access knowledge base, marketplace and different integrated tools.

Advanced data analytics

An integrated agile analytics and visualisation suite will provide product, process, market and consumer insight.

Engineering workflow

Verification tool that will be supported by a knowledgebase and continuous feedback mechanism;

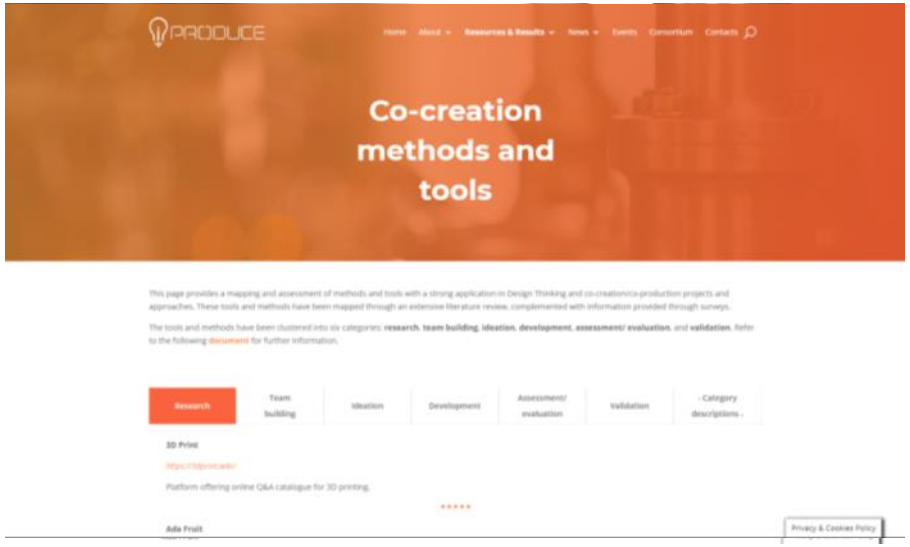
IPR and transaction management

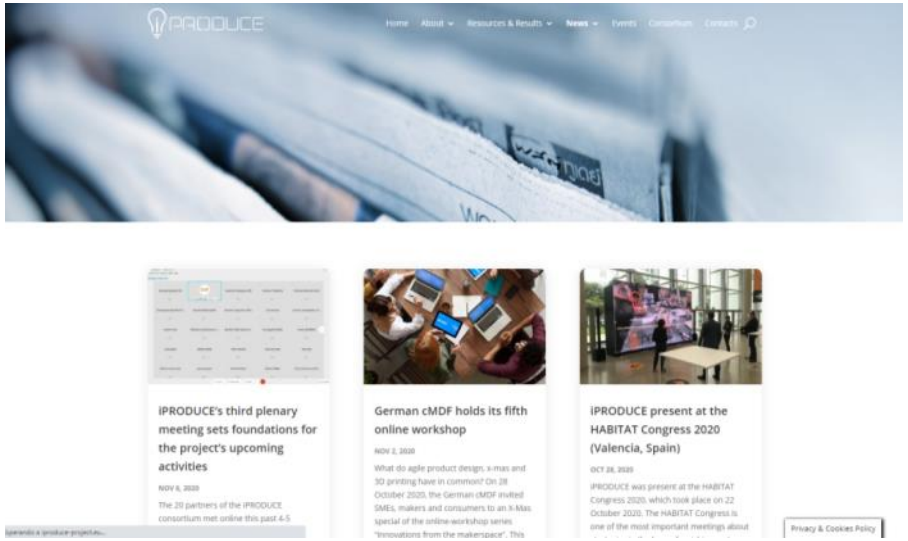
A blockchain toolkit will be used for developing smart contracts (Software documents contractually lawful and securely linked to accounting).

Digital Fablab Kit

Toolset for digitizing existing knowledge and common practices in makerspaces. With this, the iPRODUCE platform will provide digital space for online training sessions/ workshops

iproduce-project.eu





Where are we now?

PHASE 1

Framework design and preparation

Identification of end-user requirements; definition of system requirements according to project domains; refinement and extension of the application scenarios and use cases; definition of modelling and design needs for deployment of iPRODUCE technologies.

PHASE 2

Technical development and innovation

Identification of technology specifications and tools based on end-user requirements (Phase 1) and improving the offer of existing technologies; design and implement a maintenance and production management solution.

PHASE 3

Integration and validation

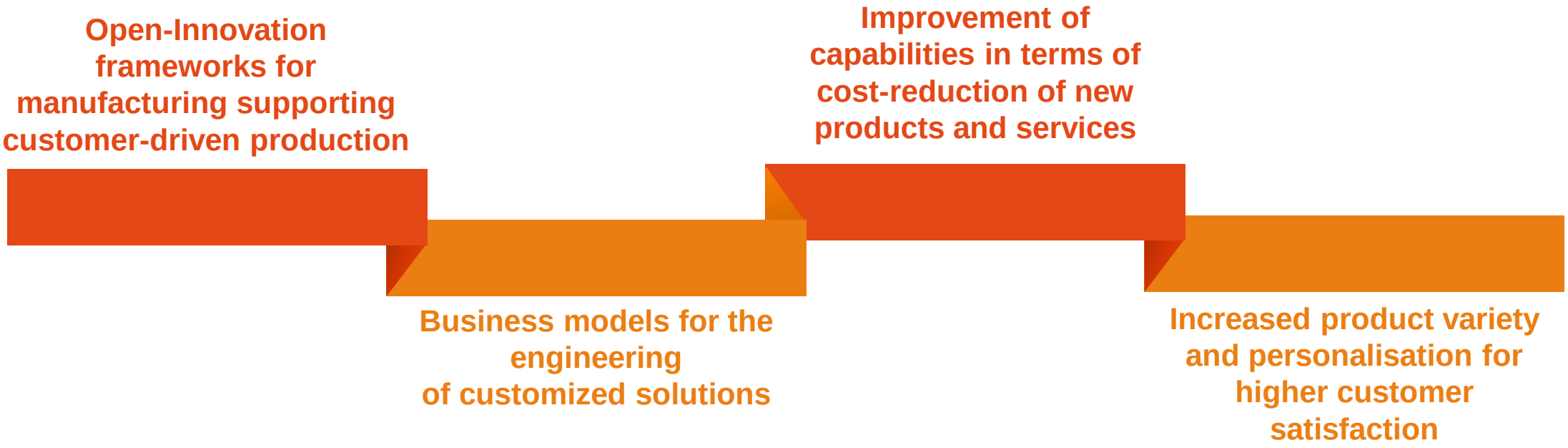
Configuration and adaptation of individual components/ modules of the iPRODUCE prototypes, including experimental; iterative testing and integration of prototypes followed by system integration.

PHASE 4

Demonstration and evaluation

Fine-tuning and validation of the iPRODUCE framework and full assessment of the project's demonstrations; iterative deployment of the framework to business scenarios; establishment of foundations for sustainability.

Impact


Open-Innovation frameworks for manufacturing supporting customer-driven production
Business models for the engineering of customized solutions
Improvement of capabilities in terms of cost-reduction of new products and services
Increased product variety and personalisation for higher customer satisfaction

PRODUCE

Acknoweldgements

 geotatah

 turkkub

 Eucalyp

 Nikita Golubev

 Becris

 Smashicons

 Pause08

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement no. 870037.