

CHANGE2TWIN: Digital Twin for every manufacturing SME!

AUTHORS DATE





Digital Twin for every manufacturing SME!

Change2Twin is a European project which supports manufacturing SMEs in their digitalization process by providing Digital Twin solutions. The concept of Digital Twin is one of the big game-changers in manufacturing and allows companies to significantly increase their global competitiveness.



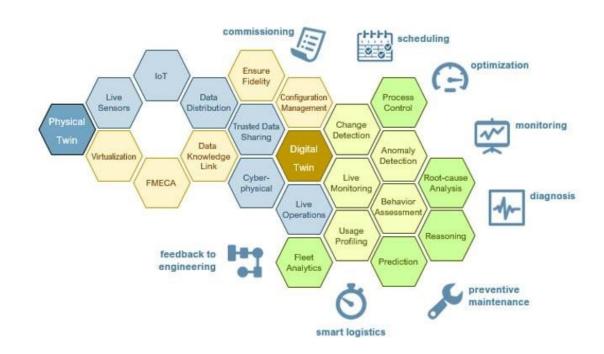




What is a Digital Twin?

A digital twin is a digital replica of an artefact (product, machine...), process or service, which is so accurate that it can be used as basis for taking decisions.

The digital replica and the physical world are often connected by streams of data.







CHANGE2TWIN in a nutshell

- The goal of the project is to ensure that manufacturing SMEs have easy access to technologies needed to deploy a digital twin
- The project has received funding from EU's Horizon 2020 Research and Innovation Programme, Grant Agreement nr. 951956
- The consortium consists of 18 partners
- To achieve this goal, Change2Twin offers an end-to-end funding scheme
- Main target groups: manufacturing SMEs, technology providers, Digital Innovation Hubs
- Duration of the project: 2020 2024
- Part of I4MS: the EU initiative to digitalise the manufacturing industry





Innovation made by CHANGE2TWIN

- ✓ easy access to digital twin funding, guidance, testing, deployment
- √ 4x open calls Assessment and Deployment Vouchers for manufacturing SMEs
- ✓ Change2Twin MARKETPLACE one stop shop for digital twinning solutions
- ✓ 4x experiments with diverse manufacturers upfront
- ✓ Change2Twin COMMUNITY virtual space for digital twinning enthusiasts







CHANGE2TWIN funding scheme

- **►€10.000 Assessment Voucher:** get a ready to use twinning recipe
- **▶€90.000 Deployment Voucher:** get the digital twin based on the recipe and test it
- >2x2 Open Calls for SMEs: 2021 and 2022
- multistakeholder principle: manufacturing SMEs, technology providers, Digital Innovation Hubs







CHANGE2TWIN 4 manufacturing SMEs:

- 1. Assessment and twinning recipe by a Digital Innovation Hub
- 2. Deployment of digital twin with technology provider
- 3. Experiments and optimisation of the digital twin
- 4. Funding to make the digital twin accessible
- 5. No prior knowledge required







CHANGE2TWIN 4 technology providers:

- 1. Publish your technology in Change2Twin marketplace free of charge
- 2. Digital Innovation Hubs will create twinning recipe for SMEs using your technology
- 3. Work with SMEs and turn their twinning recipe into reality
- 4. Create a test the digital twin
- Acquire new customers and discover new markets







CHANGE2TWIN 4 Digital Innovation Hubs:

- 1. Change2Twin training and certification for digital twinning
- 2. Assessment of SME potential to deploy a digital twin
- 3. Creation of ready-to-use twinning recipes for local SMEs
- 4. Free use of Change2Twin marketplace containing twinning technologies
- 5. Broker between SME and technology provider







CHANGE2TWIN experiments

- Proof of concept
- 4 diverse manufacturers
- Winter 2020/Spring 2021
- Documentation available online















- Reduce new product time-tomarket and lead time
- Reduce operational costs
- Improve overall quality
- Improve efficiency of service

Social Impact

- Create high-skilled jobs
- Improve working conditions
- Create novel resource management strategies

Environmental Impact

- Reduce waste
- Lower energy consumption
- Reduce material consumption





Meet the CHANGE2TWIN consortium:

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#	Organisation name	Short Name	Country
1	SINTEF AS (Coordinator)	SINTEF	Norway
2	TTTECH INDUSTRIAL AUTOMATION AG	TTTECH	Austria
3	JOTNE EPM TECHNOLOGY AS	JOTNE	Norway
4	FUNDINGBOX ACCELERATOR SP ZOO	<u>FB</u>	Poland
5	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO	TNO	Netherlands
6	BOC ASSET MANAGEMENT GMBH	BOC	Austria
7	ALMA MATER STUDIORUM – UNIVERSITA DI BOLOGNA	<u>UNIBO</u>	Italy
8	CLOUDBROKER GMBH	CLOUDB	Switzerland
9	ASSOCIATION IMAGES & RESEAUX	<u>IR</u>	France
10	INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK	<u>HPCPSN</u>	Poland
11	SPACE STRUCTURES GMBH	SPS	Germany
12	Cordis Automation BV	CORDIS	Netherlands
13	Unit040 Ontwerp B.V.	UNIT040	Netherlands
14	Author-e B.V.	AUTHOR-E	Netherlands
15	Additive Industries B.V.	<u>ADDITIVE</u>	Netherlands
16	INDUSTRIA ESPAÑOLA PARA LA INVESTIGACION Y EL DESARROLLO 2100 S.A.	GRAPHENSTONE	Spain
17	CT INGENIEROS AERONAUTICOS DE AUTOMOCION E INDUSTRIALES SL	CT-Ingenieros	Spain
18	AETNA GROUP SPA	<u>AETNA</u>	Italy





Any questions? Comments?

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Thank you for your attention!



