DIGITbrain- Public evaluation report of the first Open Call

By WP8 - Communication and Outreach

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Document history and quality check

Document History

Version	Date (DD/MM/YYYY)	Created/Amended by	Changes
01	13/10/2021	CSME	First draft of the deliverable
02	25/10/2021	CSME	Final revised version after quality check

Table 1: Document history

Quality check review

Reviewer (s)	Main changes
Rocío de la Rosa, Business Development Consultant at Technological Corporation of Andalusia (CTA)	Template format check, providing suggestions about some contents of the document

Table 2: Quality check review

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Executive summary

Shortly after the evaluation of submitted proposals in the Open Call a public summary report of the evaluation results should be published on the DIGITbrain project's website within 30 days of the end of evaluation after the feedback process given to the participants.

This report comprise an account of the call, its evaluation and its results, including dates of call, how it was published, dates of evaluation, number of proposals received, number of proposals funded, as well as a list of all selected proposers and their funding amounts.

Statement for open documents & Copyrights

Evaluation Report

Results of open call (call ID ref DIGITbrain - OC1) for recipients of financial support.

Project acronym: DIGITbrain
Project grant agreement number: 952071
Project full name: Digital twins bringing agility and innovation to manufacturing SMEs, by empowering a network of DIHs with an integrated digital platform that enables manufacturing as a Service (MaaS)

Project DIGITbrain, co-funded from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952071, launched an open call (call ID ref DIGITbrain - OC1) for recipients of financial support.

The call was opened on 31th March 2021, 10:00h (CEST Time) and closed on 30th June 2021, 17:00h (CEST Time).

Total EC funding available for third parties in DIGITbrain-OC1: up to 700.000 EUR financial support for Third Parties.

Maximum amount of financial support for each Third Party: 60,000 EUR

A total of 27 proposals were received for this call. 7 experiment proposals will receive funding for a total amount of 693.370,85 EUR.

The evaluation and selection was completed in due time from 15th July to 15th August, 2021 by 15 Independent Experts and internal technical partners from the DIGITbrain consortium. All participants were informed about the evaluation results for their experiment proposal for financial support.

Call information

Complying with EC standards, DIGITbrain 1st Open Call has been published via the corresponding distribution channels, including:

- DIGITbrain project Portal, link here.
- H2020 Participant Portal, link here.
- EFRA portal, link here.
- I4MS framework, link here.
- EGI portal, link here.

Besides, DIGITbrain 1st Open Call has been promoted by others organizations close to the project, like:

- Innovation Place Portal: This portal is being the internal communication platform for DIGITbrain partners, amongst other European projects, link here.
- Funding Box dissemination channels: Funding Box as the SW platform provider in DIGITbrain open call, will help to promote and disseminate the open calls through their newsletter, their Community Platform and their Social Media, in the upcoming weeks, link here.
- CloudiFacturing portal: DIGITbrain is being built over the results of CloudiFacturing, that's why this portal is promoting also DIGITbrain, link here.
- CloudSME website: As the partner leading the DIGITbrain strategy dissemination, has been promoting also the open calls, link here.

Furthermore, CloudSME as partner leading the dissemination and promotion is carrying out a dissemination plan to promote this first open call including:

- A strong social media strategy through Twitter account: @digitbrain_EU,
- Press release, launched in February 2021 in three different languages (English, German and Spanish), link here.
- An Open Call promotional video on YouTube, link here.
- A Call Announcement document published in DIGITbrain website three months before the launch of the 1st Open Call, link here.

In addition to all these promotional activities, DIGITbrain partners involved in open calls organization and execution have scheduled specific dissemination activities:

- Two specific webinars for applicants (QA and Support). First of them planned by 20th April. Further information here.
- Frequently Asked Questions (FAQ) area included in the Open Call portal, link here.
- Other online events, with a regional coverage will be carry out lead by DIHs.

Finally, all DIGITbrain partners are broadly promoting the open calls through their own channels, like social media, newsletters, LinkedIn groups and other online channels.

Response to the call-in detail

	Number of proposals	Funding requested
Proposals received	27	2.660.748,00 €
Eligible proposals	27	2.660.748,00 €
Proposals above threshold	20	1.979.182,92 €
Selected proposals	7	693.370,85 €

Table 3: Number of proposals and funding requested

List of beneficiaries

Proposal acronym	Organisation	Country	Type of organisation	Funding awarded

DRIVEN	SEGURIDAD INDUSTRIAL S.A.	Spain	SME	40.000,00 €
DRIVEN	LIS SOLUTIONS.LOGISTIC INTELLIGENCE AND DATA ANALISYS, SL	Spain	SME	60.000,00 €
COATWIN	REPLASA ADVANCED MATERIALS, S.A.	Spain	MID - CAP	39.970,00 €
COATWIN	TEKNOPAR INDUSTRIAL AUTOMATION	Turkey	SME	59.990,00 €
ProMED	PREMET Kft.	Hungary	SME	33.333,00 €
ProMED	Consiglio Nazionale delle Ricerche	Italy	Research Organization	33.333,00 €
ProMED	Opendot srl	Italy	SME	33.333,00 €
DITAC	Restart	Italy	SME	24.281,25 €
DITAC	IDM-Systems Ipari Szolgáltató Zártkörűen Működő Részvénytársaság	Hungary	SME	55.195,00 €
DITAC	Consiglio Nazionale delle Ricerche	Italy	Research Organization	20.000,00 €
3D_BRAIN	BARCELONA THREE DIMENSIONAL PRINTERS SL	Spain	SME	46.112,50 €
3D_BRAIN	SAVVY DATA SYSTEMS S.L.	Spain	SME	**18.445,00 €**
3D_BRAIN	IDEKO S. COOP.	Spain	SME	**29.837,50 €**
DIGITBREAK	COSBERG S.P.A	Italy	SME	**27.562,50 €**
DIGITBREAK	EnginSoft SpA	Italy	SME	31.587,50 €
DIGITBREAK	MADE s.c.a r.l.	Italy	DIH	40.500,00 €
DT4DRYER	PRODESA MEDIOAMBIENTE S.L.	Spain	SME	29.141,00 €
DT4DRYER	Electroingeniería Industrial XCLC	Spain	SME	**37.758,00 €**
DT4DRYER	Memorandum Multimedia	Spain	SME	**10.491,60 €**
DT4DRYER	University of Zaragoza	Spain	Research Organization	**22.500,00 €**

Table 4: Funding awarded per beneficiary

List of selected proposals

Proposal Acronym	Proposal Title	Abstract
DITAC	DIgital Twin for Agile Changes	The DITAC project will focus on the investigation and implementation of methodologies to introduce Digital Twin based solutions to the design process at Restart Srl, an SME specialized in supply (from design to material realization) of tailor-made industrial automation solutions to provide important support in case of after-sales changes. In the Restart case, after-sales requests for changes from the final user are not isolated and they request significant work on the machine, causing interruption of work/production. The DITAC project aims to reduce the efforts needed for an after-sale change, providing virtual support/simulation for the required design changes.

COATWIN	OPTIMISATION OF THE ENERGY CONSUMPTION AND OPERATION OF A COIL COATING INDUSTRIAL LINE	The project aims at achieving an optimisation of the energy consumption in a coil coating line. Taking advantage of the benefits of using digital twins for the manufacturing industry, the experiment will replicate digitally the existing production process in order to explore different use cases, based on the selection of different parameters, with the main objective of finding the most optimal working point.
DT4DRYER	Digital Twin for Rotary Dryers	A rotary dryer reduces the humidity in particulate matter through direct contact with combustion gases from fossil or renewable fuels (biomass). The design and operation of a rotary dryer present significant challenges, mainly because it must be flexible enough to adapt to a multitude of operating modes. Under this context, we want to prove the benefits for the manufacturer of the industrial product of the development of a digital twin for the rotary dryer. The digital twin will support the design, production and operation phases of the rotary dryer. It will contribute to the faster and more reliable design, better integration of the equipment in the customers' general process and provide an optimal configuration of the process.
ProMED	PRODUCTION OPTIMIZATION FOR ADDITIVE MANUFACTURING OF MEDICAL DEVICES	The main objective of ProMED is to optimize the production of customized metal medical devices through the combined use of additive and subtractive manufacturing. This hybrid technique, often referred to as Sint & Mill (S&M), consists in creating a semi-finished product with a 3D printer and to subsequently apply precision CNC milling for surface finishing. The experiment aims at finding whether the end user PREMET can (1) reduce the production costs and/or (2) improve the product quality, both by choosing the right fabrication parameters. A digital twin of PREMET's production pipeline will be developed and used to quickly simulate a large number of fabrication processes. The rich set of "virtual" data produced by the simulation will be used to train an intelligent module that will be eventually able to support PREMET in its decisions for real productions.
DRIVEN	DIGITAL BRAIN FOR PREDICTIVE MAINTENANCE IN AUTOMOTIVE SECTOR	Machine efficiency losses are one of the main and most common concerns in industrial processes. With that in mind, DRIVEN proposes to analyze, simulate and optimize the entire operation of product movements between the parts warehouse, the packaging process in an automotive component factory. Even models, analytics and optimizations exist, DRIVEN will develop and use two new technologies. Digital Twin for machine performance analysis, based on artificial vision and image recognition and Risk of Failure Forecasting, monitoring the machine performance in real time through the digital twin using Convolutional Neural Network. To that, DRIVEN will make intensive use of the DIGITbrain platform, from the edge layer to the user interfaces in a web-based environment. The experiment will optimize production processes by achieving a significant increase in the OEE, and also fostering the democratisation of technologies, opening the way to new business models based on data exploitation.
3D_BRAIN	Smart Digital Twin based 3D Printing Process Reliability	The experiment seeks to develop an experimental Data Driven Digital Twin which will permit i) edge in process control through a process stabilization monitoring and control system and ii) post process

	Assurance Add-on enhanced with Cloud based iterative learning	Quality Assessment combined with a continuous learning tool that will extract Geometry based Knowledge rules from multi machine XYZ Datasets allocated in the Digit Brain Platform; to "a priori" find improved Printing parameters and feed forward control strategies.
DIGITBREAK	Digital Twin to optimize design of cars braking system assembly line	Producer of manufacturing assembly lines faces unprecedented challenges in optimizing design and engineering to meet evolving market needs while ensuring, efficiency and productivity challenges. DigiTBrake will solve this challenge developing a Simulated Base Digital Twin of a pilot line assembling small calipers and pistons for automotive braking system to be integrated into DIGITBrain. The experiment follow Test Before Invest (TBI) methodology deploying use case installed at Digital Innovation Hub. It will ensure widening of DIGITBrain EU network. End User, IVS and DIH will benefit from integration of Data, Model and Algorithm of pilot line DT into the DIGITBrain consolidating its international commercial presence.

Table 5: list of selected proposals