IoTwins
BIG DATA OPTIMIZE INDUSTRY AND SERVICES

Grant Agreement N°857191

Distributed Digital Twins for industrial SMEs: a big-data platform

DELIVERABLE 8.14 – PROMOTIONAL VIDEOS (II)

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Executive summary

IoTwins TestBed videos expand on the “Short Video Interviews” series, delving into more technical details about a specific testbed of the project using data visualizations and results to target a more professional audience, while still being understandable a general audience. The video is suited for online communication through social media and web and can also be used to introduce a specific topic during online/live events.

1 Introduction

The IoTwins project foresees the creation of several videos during the project lifetime, each one with specific communication and dissemination purposes and targets, taking also into consideration the stage of development of the project and the achievement of results.

2 IoTwins Short Testbed Video

The short video associated to this deliverable consists in broad overview of Testbeds #5, going from its origins to its envisaged possible future usages. The video showcases data visualizations from the testbed and is anchored by short interviews of Albert Mundet (Director of Football Club Barcelona Innovation Hub) and Fernando Cucchietti (Head of BSC's Data Visualization and Analytics Group).

The video starts by introducing the problem to be solved, and the main objective of this testbed: Generating a Digital Twin of Football Club Barcelona stadium, in order to predict and understand the behavior of the public in a particular event, which is done through Machine Learning, Artificial Intelligence and Big Data. In order to accomplish this objective, within the IoTwins project, FCB and BSC join forces. This is symbolized by the participation of both FCB and BSC points of for IoTwins, each focusing on the most relevant parts that affects each institution.

On the one side, Albert (FCB) will focus on the importance of simulating FCB's environment, while ensuring its clients privacy, also stating the impact for FCB of the testbed and their participation in innovative projects such as IoTwins. On the other hand, Fernando (BSC) approaches the interview from a technical perspective, explaining how supercomputers, such as BSC's MareNostrum, are crucial for tackling these problems, and how will they evolve into the future.

In order to smooth the understanding of this Testbed's outcomes, the video interview incorporates several graphical elements from the testbed, such as dashboards including plots on the visitor's forecasting, and a visualization of a real simulation, showing how fans move through the stadium, following different patterns.

Finally, the short video emphasizes how relevant for the society is this testbed's current and future potential, as it might be the starting point for even more complex scenarios, such as the ones of cities and pedestrian mobility.

3 Video Structure

1. Animated opening
2. Target objective
    - Digital Twin for predicting and understanding the behavior of public in a particular event
3. Method and data sources
    - Using ML/AI/Big Data within FCB and BSC facilities and infrastructures
4. Details and outcome
    - Visualizations of a real simulation of the stadium
    - Plots regarding data analysis and attendance forecasting
5. IoTwins consortium
    - Fit within IoTwins project, and network of partners
6. Future work
    - Potential urban Digital Twin
7. Animated Ending

4 Links

Direct download:
https://drive.google.com/file/d/1J9JjQbhsRW9x9eVNhbskAo2HFZrzV2aD/view?usp=sharing

Youtube (IoTwins playlist): https://www.youtube.com/watch?v=5EKQ8TN6ybo

Iotwins website: https://www.iotwins.eu/a-new-video-on-the-digital-twin-of-the-camp-nou-stadium-has-been-released/