

D 6.4

Animated pictures or Project Video – First iteration

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¹ PU: Public, CO: Confidential, only for members of the consortium (including the Commission Services)

² RE: Report, OT: Other; ORDP: Open Research Data Pilot



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Executive Summary

Deliverable 6.4 presents the first ConnectedFactories 2 (CF2) video, providing an overview of the project context, illustrating the CF2 digitisation pathways in manufacturing and showing opportunities to get involved.

The CF2 project video is in English and is available at the following URL address:

<https://www.youtube.com/watch?v=AT78aMMYS2s>

The document at hand gives a short overview of the video's development, structure and content, including screenshots of the different scenes as well as a transcript of the text. S2i (task lead), together with EFFRA, planned the video and collaborated in its realisation with a professional video production company. The CF2 video is a continuation of the animated pictures that have been implemented in the previous ConnectedFactories 1 project [Pathways to digitalisation of manufacturing | Connected factories](#).

The video starts setting the scene regarding the current evolution towards digital manufacturing. Thereafter, it dynamically details pathways to transform a non-digitised factory into a smart factory of the future and points out important cross-cutting factors needed for a safe and successful digitisation journey. It ends with a call to the audience to explore the project results in more depth and actively engage with the consortium.

The video provides a powerful tool to visualise the project context and results in a dynamic way and together with the clear narrative it will provide a wide reach and good accessibility to different audiences including the manufacturing community and the broader public. The video builds on the project branding and communication materials like logo, website, newsletter, to ensure good recognisability.

1 Introduction and Context

The ConnectedFactories 2 (CF2) project video was published on 31 May 2021 and is available at the URL address:

<https://www.youtube.com/watch?v=AT78aMMYS2s>

Videos represent one of the most effective media for disseminating project activities to a large and broad audience, raising awareness on project results and extending the community. The CF2 video targets at stakeholders interested in digital manufacturing, companies seeking digital transformation, end-user and solution providers of digital tools, as well as the broader public. Special attention has been paid to ensure the accessibility of potentially complex information and present it in an easily digestible way.

The CF2 project video provides a visual description of the project, its objectives, and the CF2 pathways on digitalisation in manufacturing, including the dynamic presentation of a factory transforming into a smart and connected factory of the future.

The project video exploits the 'Autonomous Smart Factories pathway' as an example and provides an overview of the other pathways that have been developed in ConnectedFactories 1 (Hyperconnected Factory and Collaborative Product-Service Factory) and are being developed in CF2 (Circular Economy for manufacturing, Data Spaces for manufacturing, Artificial Intelligence for manufacturing and Cybersecurity).



The pathways within the project video reflect how digitalisation and digital platforms can bring value to different manufacturing situations, such as factory automation, value networks or product-service development. Ultimately, the pathways have been developed to enhance the awareness among various stakeholders about the present and future use of digital technologies in manufacturing and facilitate the migration from legacy situations towards innovative approaches.

Furthermore, the pathways include milestones indicating digitalisation becoming more advanced in each level. The pathways and associated examples (cases) reflect how different digitalisation approaches co-exist in a concrete business environments and indicate how research and innovation projects contribute to the future deployment of digital platforms. This will facilitate and stimulate the discussion and identification of company-specific innovation strategies.

2 The Project Video

The CF2 video is a continuation of the ‘animated pictures’ of the ConnectedFactories 1 project. It has been implemented in collaboration with a professional video production company. S2i and EFFRA developed the concept, structure, text and overall storyboard of the video. The video entails animations and film footage to explain and support the key messages presented in a clear narrative. The video is split into different scenes (introduction, challenges for factories, example of a pathway, cross-cutting factors, overview of pathways, invitation to contribute) accompanied by an engaging but non-distracting background musik.

A detailed structure of the video is presented below:

- Intro sequence
- Futuristic maunufacturing scenario
- Presentation of the CF2 project
- Example of a pathway
- Detailed animation of the pathway in five levels
- Interconnections between pathways and cross-cutting factors
- Overview of all seven pathways
- Presentation of the CF2 website and case catalogue
- Call for engagement
- Outro

The video is available at the URL:

<https://www.youtube.com/watch?v=AT78aMMMyS2s>

The following pictures present sceenshots taken from the various video scenes.





Figure 1 Video introduction with a European map and the ConnectedFactories logo

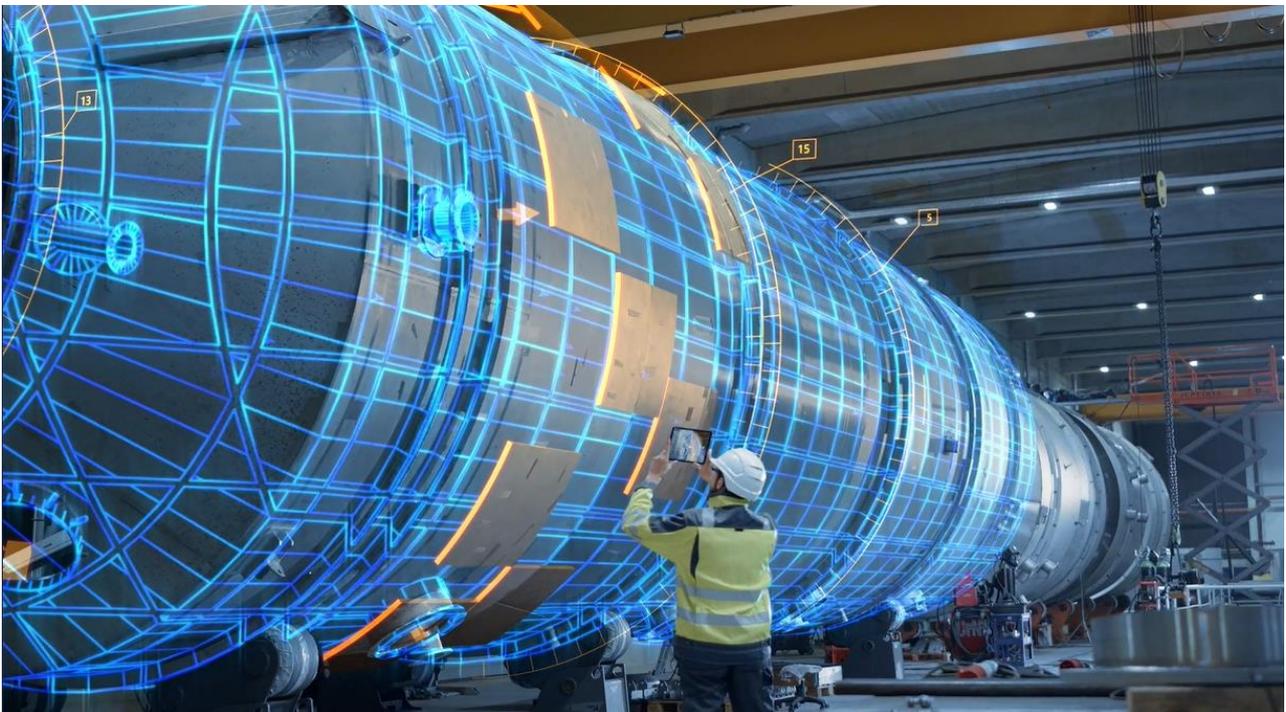


Figure 2 Illustrations of a connected factory of the future to introduce ConnectedFactories 2



Figure 3 Presentation the objectives of ConnectedFactories 2

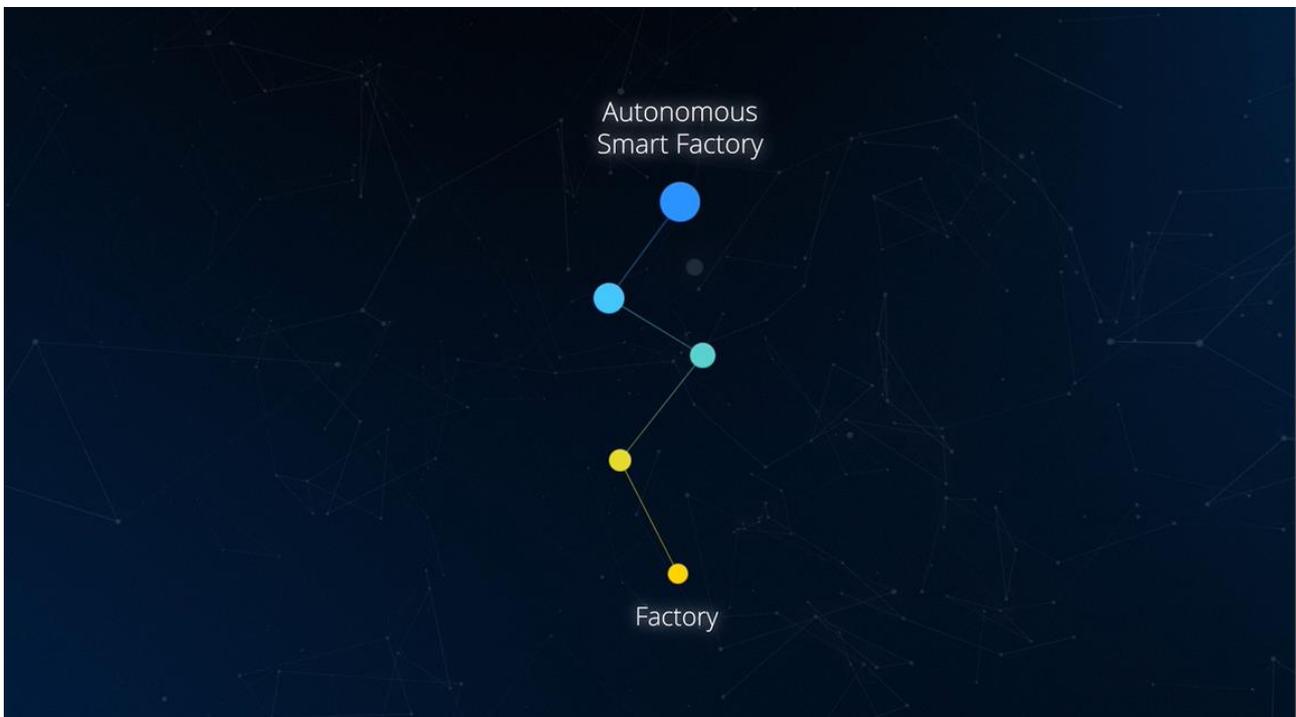


Figure 4 Example of a pathway from a non-digitalised factory to an Autonomous Smart Factory

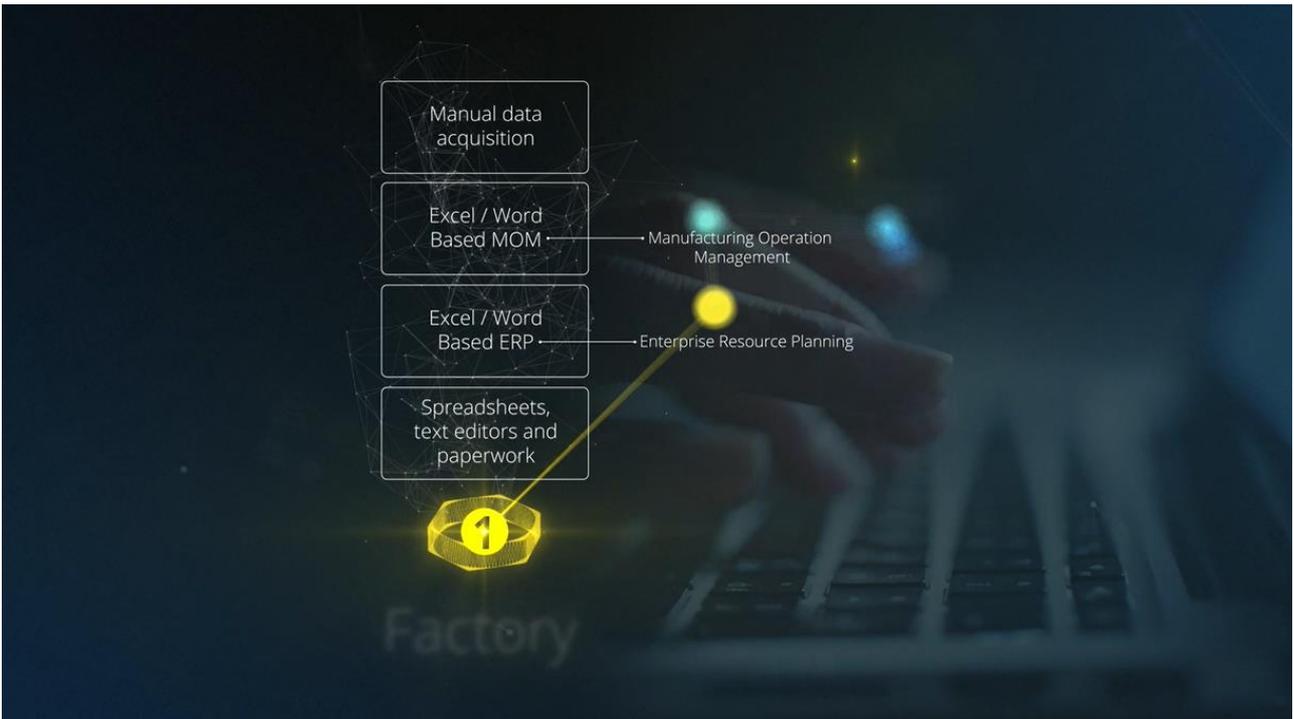


Figure 5 Level 1 of the Autonomous Smart Factory pathway



Figure 6 Level 2 of the Autonomous Smart Factory pathway



Figure 7 Level 3 of the Autonomous Smart Factory pathway



Figure 8 Level 4 of the Autonomous Smart Factory pathway

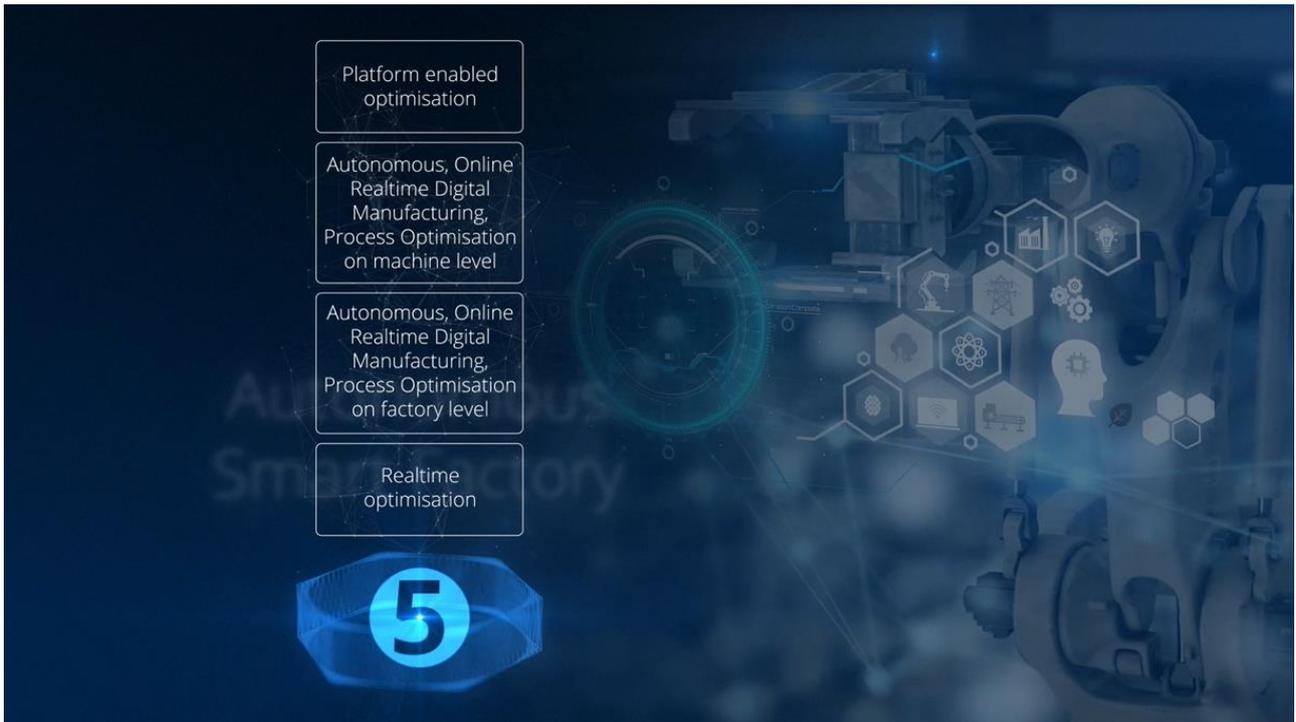


Figure 9 Level 5 of the Autonomous Smart Factory pathway

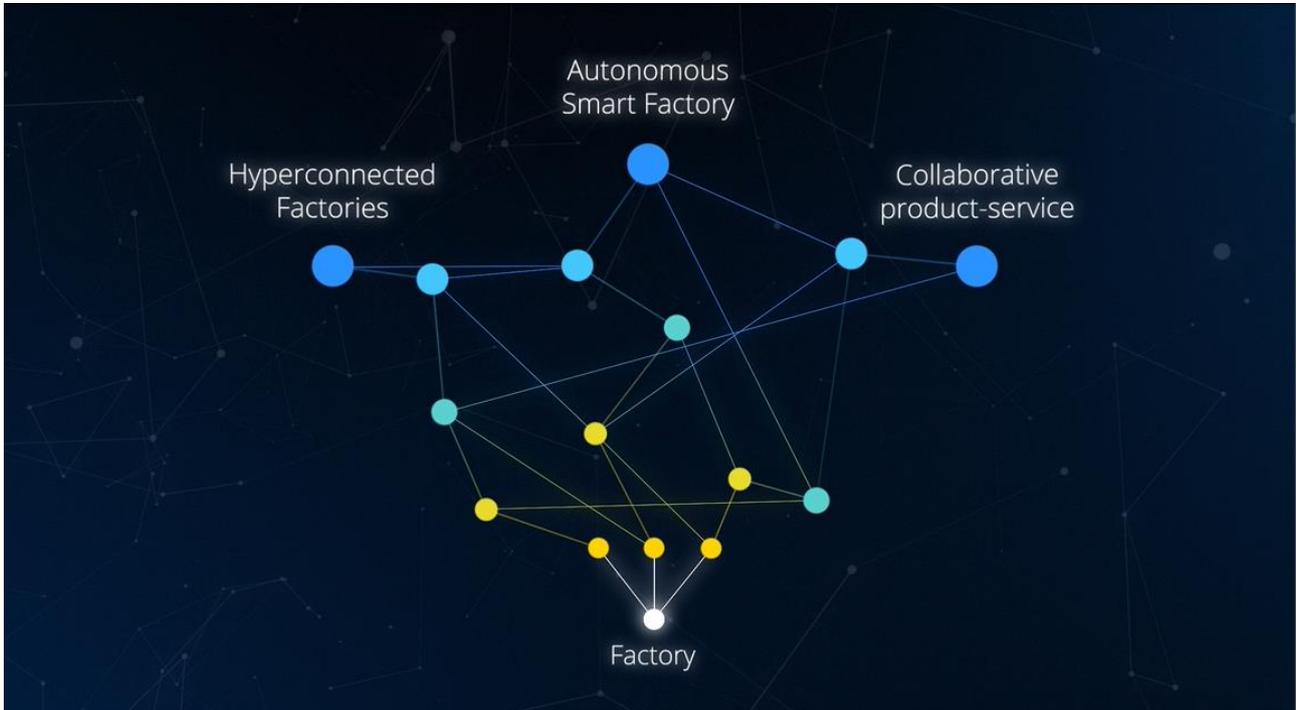


Figure 10 Animation of three interconnected pathways

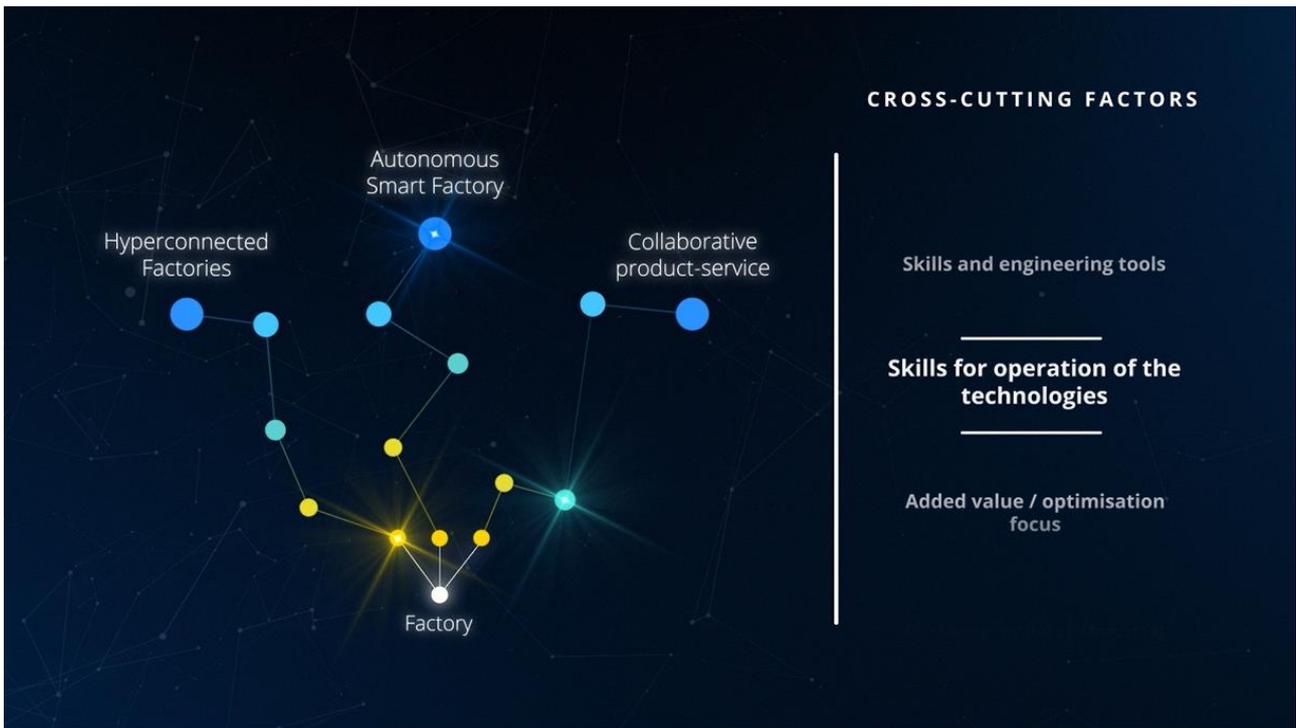


Figure 11 Showcasing the connected cross-cutting factors of the pathways

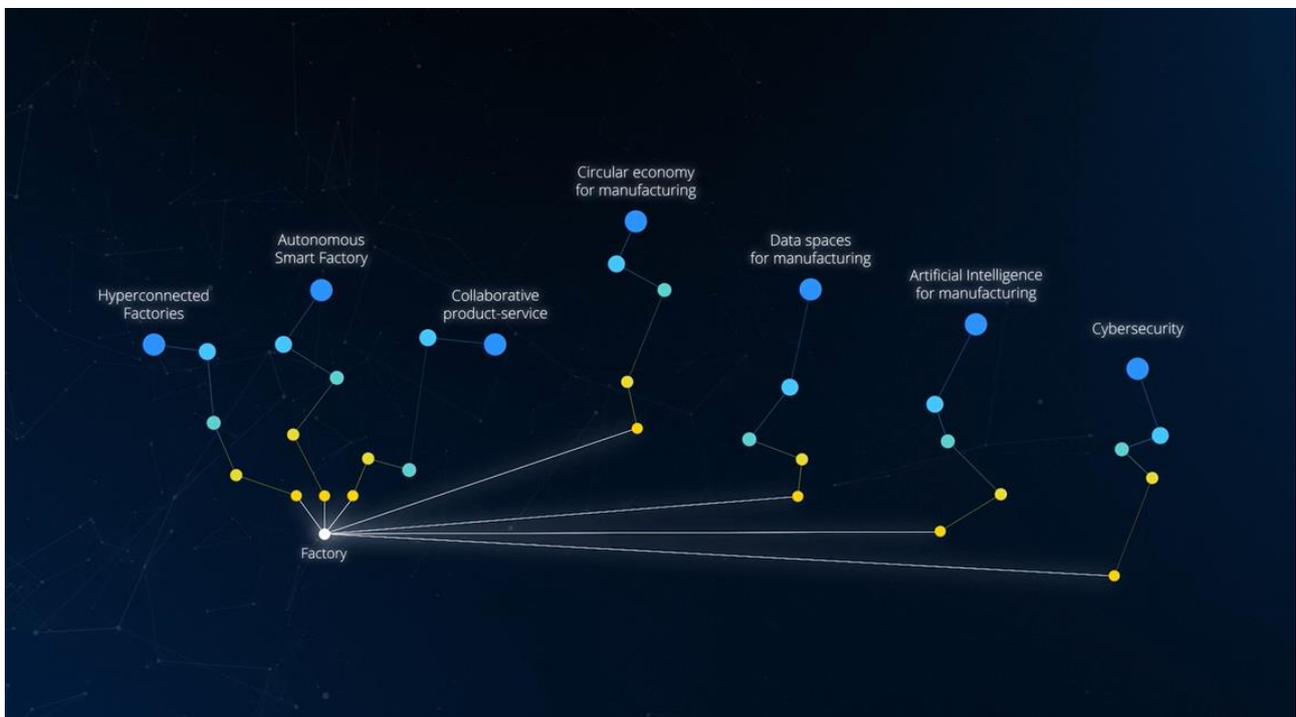


Figure 12 Overview of different Connectedfactories pathways

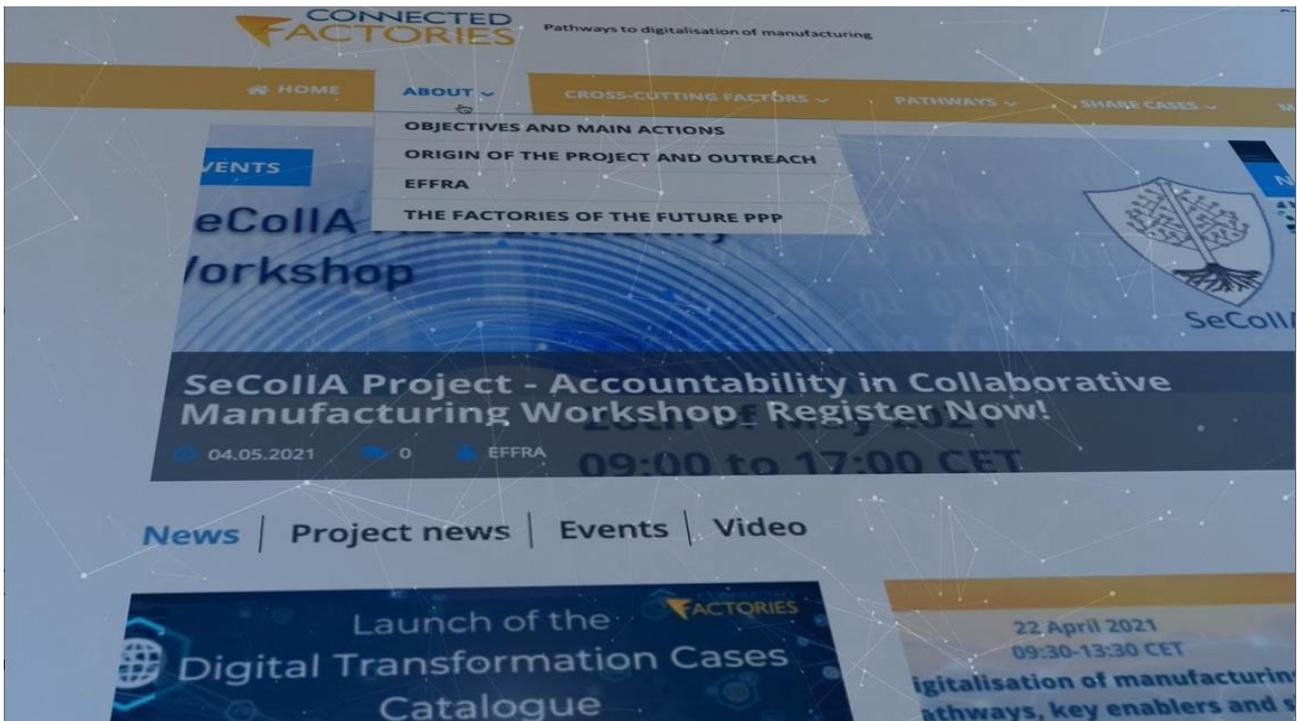


Figure 13 Presentation of the features of the ConnectedFactories webpage

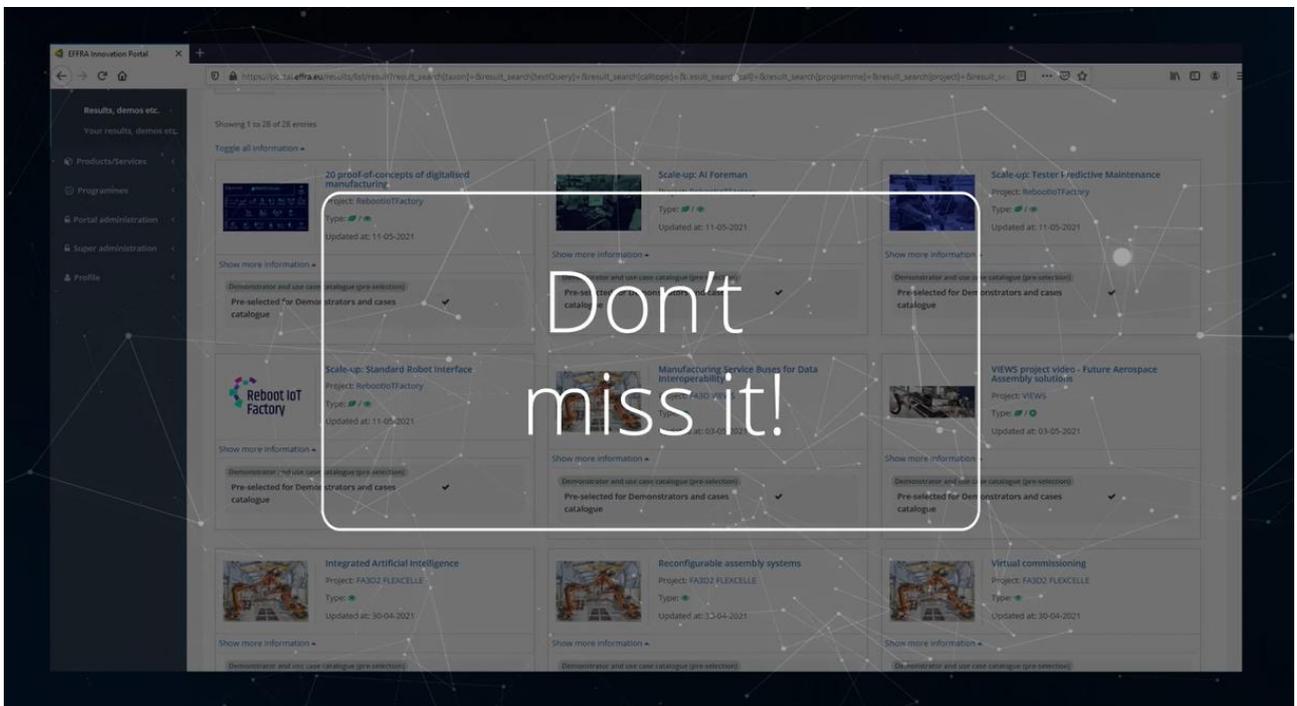


Figure 14 Call to use this opportunity and share experiences and use cases

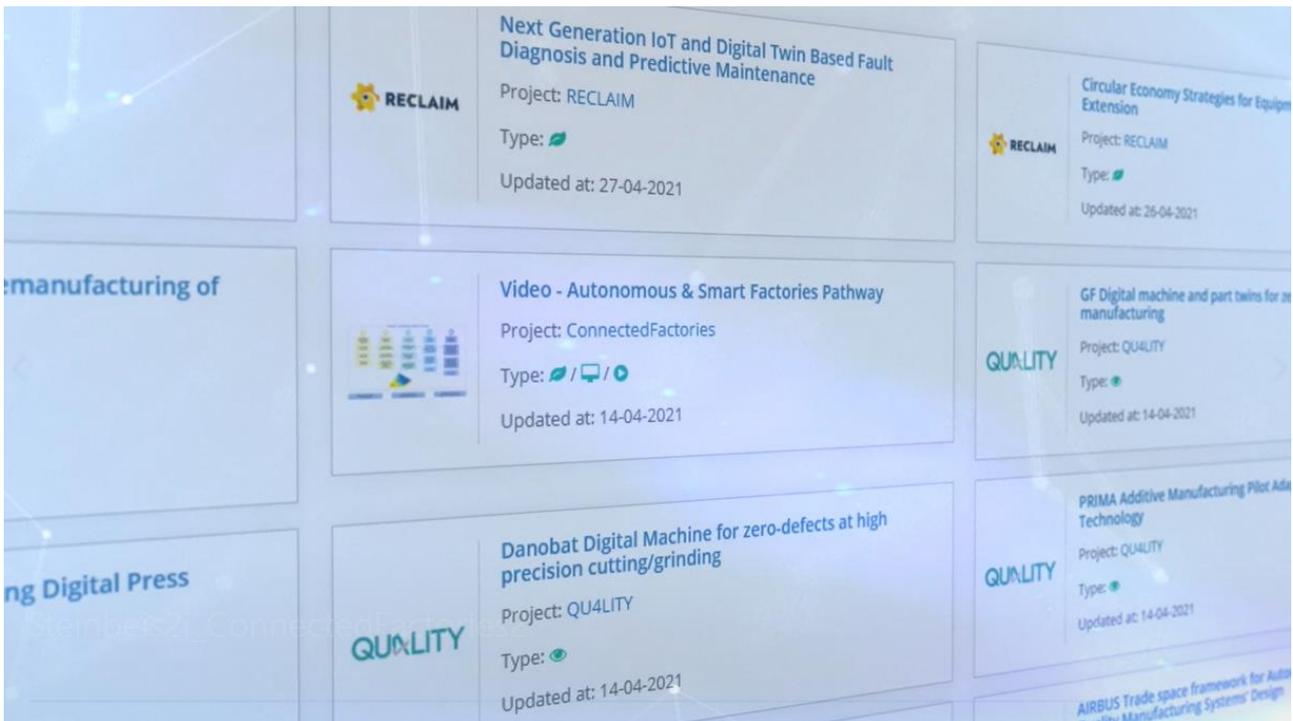


Figure 15 Presentation of the 'Digital Transformation Cases Catalogue'



Figure 16 Outro with the ConnectedFactories logo and the EU funding statement

3 Conclusion

A ConnectedFactories 2 project overview video has been developed to explain and disseminate the project aims and results as well as to visualise the digitisation pathways. This dynamic format has been chosen to communicate the key messages widely and actively engage interested stakeholders.

More videos are planned within the project lifetime, diving deeper into the individual digitisation pathways.



4 Transcript of the Video

Digitalisation has a huge impact on our society. Industry is transforming quickly. Digital technologies are implemented and are embedded within economic and industrial processes on all levels.

So... How to transform a factory into a smart and connected factory of the future?

Together with experts and stakeholders across Europe the ConnectedFactories project develops pathways that help you navigate through the digital opportunities and challenges.

For example, we created the 'smart & autonomous pathway' that focuses on the digital transformation of processes that happen within the factory.

Our starting point in that pathway is a factory with a lot of paperwork, manual data acquisition and the use of general-purpose tools such as spreadsheets and text editors.

The next step for many companies is the use of ERP systems, Manufacturing Operation Management Software and tools for shop floor data acquisition, however mostly operating in silos.

A crucial step forward towards smart manufacturing is to connect all these ICT processes, connecting the shop floor with other processes on higher levels in the factory.

This connectivity is required so that the factory can truly take advantage of digitalisation.

The collected and aggregated data can at a first stage be used for offline optimisation from machine to factory level.

... and of course, humans need to be actively connected into the optimisation processes.

The most advanced phase is real-time manufacturing optimisation supported by digital platforms and data spaces.

Other pathways show important milestones on the way to realise a hyperconnected or a collaborative product service factory.

There are many factors or enablers such as skills, business models, standards, interoperability and cybersecurity, which are pivotal for your long-term success in this digital transformation.

These cross-cutting factors are relevant for many milestones within the pathways and despite the very individual pathway of each factory they play an important role along many specific situations and use cases.

More pathways are available and are being developed, covering for instance Circular Economy, data spaces, cybersecurity and artificial intelligence for manufacturing.

We have gathered a lot of relevant and useful information for you on our project website and the EFFRA Innovation Portal and we are regularly holding thematic events.

But we are also keen to promote and help you share your experience among the European Research and Innovation community along the journey on these pathways. For this purpose, we are launching the 'Digital Transformation Cases Catalogue'.

Don't miss this opportunity and share your experiences and best practices us and the manufacturing research & innovation community!

For more information, check us out at 'www.connectedfactories.eu'.

