FAIRWORK EXPLOITATION TOOLS (WEBSITE, SOCIAL MEDIA, FLYER)

D8.1

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EXECUTIVE SUMMARY

This report is the accompanying document for deliverable 8.1 (D8.1), in which communication and exploitation tools were created and instantiated for the FAIRWork project. They will be used to communicate information during the project runtime and support exploitation of created artefacts within and after the project runtime. Additionally, the document discusses the FAIRWork innovation shop, which is not yet available, but will be established in D8.2.

The following list provides an overview of the tools, which are discussed in this document and includes important links to where they can be found:

- **Website:** https://fairwork-project.eu/
- **Flyer:** https://zenodo.org/record/7677298/files/FAIRWork_Flyer_1.0.pdf?download=1
- **Brochure:** https://zenodo.org/record/7673832/files/FAIRWork_Brochure_1.0.pdf?download=1
- **Social Media:**
    - LinkedIn: https://www.linkedin.com/company/fairwork-project/
    - Twitter: https://twitter.com/fairwork_eu
    - YouTube: https://www.youtube.com/@fairwork_eu
- **Zenodo:** https://zenodo.org/communities/fairwork/
- **Webinars:**
    - Publicly available webinar recordings on YouTube: https://www.youtube.com/playlist?list=PLDKnDRTHllZrGrXZsiePXmvylV1gHvh9K
    - Event subpage of the webpage (including the webinars): https://fairwork-project.eu/events/
- **Innovation Shop**: https://fairwork-project.eu/innovation-shop/ (future link)

PROJECT CONTEXT

Workpackage	WP8: Exploitation and Sustainability
Task	T7.1: Communication and Dissemination T8.1: Generation of Training Material and operating Innovation Shop
Dependencies	WP7

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Version History

Version	Date	Authors	Sections Affected
1.0	February 28, 2023	OMiLAB	All

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1 INTRODUCTION

This report is the accompanying document for deliverable 8.1 (D8.1). The deliverable itself provides the set-up of communication and exploitation tools: website, flyer, brochure, social media accounts, Zenodo community and webinars. This report accompanies the available tools in form of a documentation and describing them. Additionally, this report contains a first introduction of the innovation shop, which is not yet available, but will be created in D8.2. The innovation shop and the website will be available till after the project ends, to support exploitation of the project results.

The introduced tools will be utilized in WP8 and WP7. Therefore, D8.1 is also connected to WP7 and its tasks. This is because the usage of the tools for communication will be planed and done in WP7. WP8 will focus on the utilisation of the tools for exploitation.

The next section introduces each of the created tools and the innovation shop, in addition to the links where they can be found and viewed.

2 COMMUNICATION AND EXPLOITATION TOOLS

2.1 Website

The FAIRWork website was created using *Jekyll*[1] and can be reached via: https://fairwork-project.eu. The website acts as a first point of information about the project. At the moment, it contains introductory information about the project, its motivation, and its idea. Additionally, an overview of the project partners and facts about the project, like but not limited to start date and funding are available. Also, information about events (e.g., webinars) is provided. A screenshot of the website can be seen in Figure 1. Currently, the following sections, which can be accessed via the menu bar on the top of the website, are available:

- **About:** Introduction to the FAIRWork project
- **Insights:** Describes the motivation and the idea behind the project
- **Partners:** Overview of the project partners
- **Events:** Overview of events
- **Project Facts:** Overview of important project hard facts
- **Contact:** Allows to send an e-mail to the project coordinator

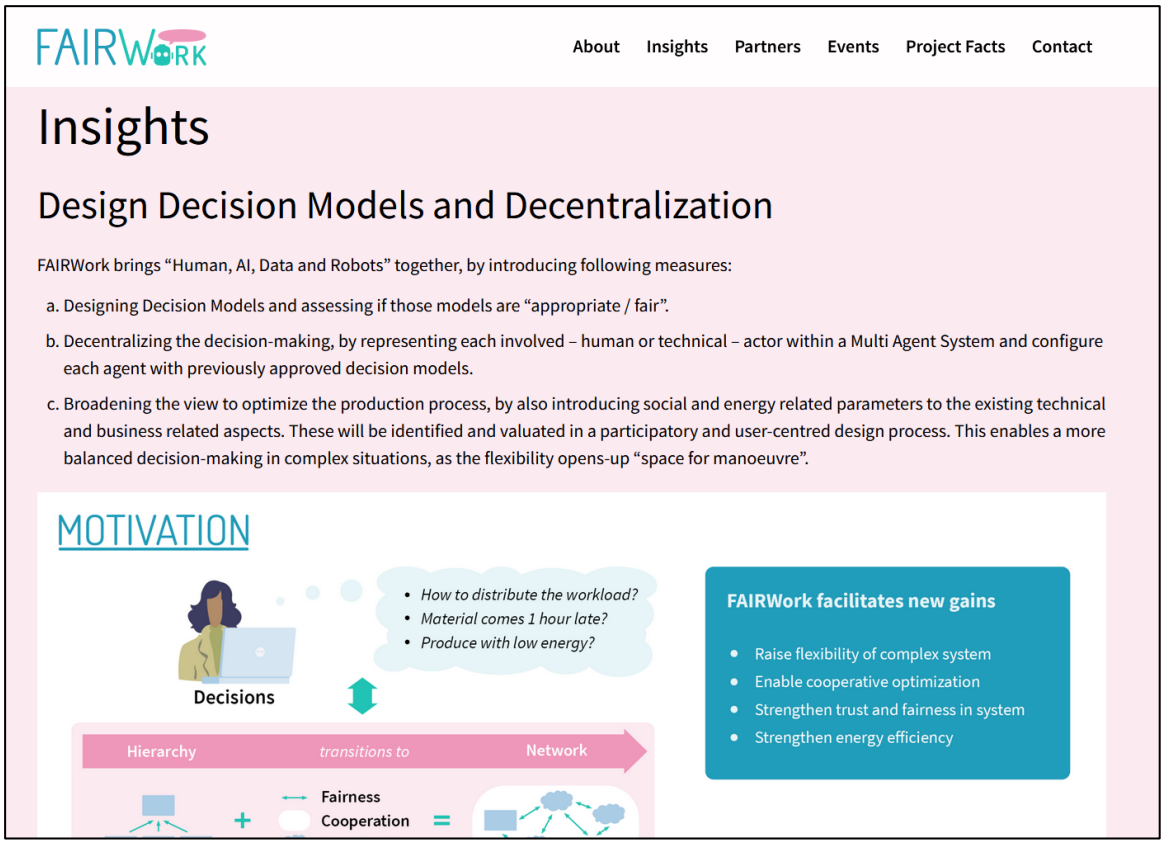


Figure 1: Screenshot of the Insights Section of the FAIRWork Website

During the project's runtime, additional information in conjunction with the progress of the project will be integrated into the website. The website will be available for at least three additional years after the project is finished. Therefore, the project webpage can be found and used even after the project to facilitate exploitation.

The traffic on the webpage will be analysed using the *Google Analytics*[2]. This is necessary to evaluate the impact the webpage is making and if the communication and exploitation tools and strategies are working as planned. If not, the strategy must be adapted accordingly.

2.2 Flyer and Brochure

Information materials in the form of a flyer and a brochure are available. They will be provided digitally but formatted to be printed in order to allow a physical distribution. The digital version of the flyer and the brochure will be published online, so that the link can be used by the project partners to distribute information.

In Figure 2 an excerpt of the flyer can be seen. The cover page of the brochure is provided in Figure 3 as a preview. The digital documents of the flyer and the brochure are available in the introduction part of the website and can be downloaded from Zenodo:

- Link to introduction section of the website, where the flyer and the brochure can be found: https://fairwork-project.eu/index.html#0_Introduction
- Download link for the flyer: https://zenodo.org/record/7677298/files/FAIRWork_Flyer_1.0.pdf?download=1
- Download link for the brochure: https://zenodo.org/record/7673832/files/FAIRWork_Brochure_1.0.pdf?download=1

(a) Flyer Front Side (b) Flyer Back Side

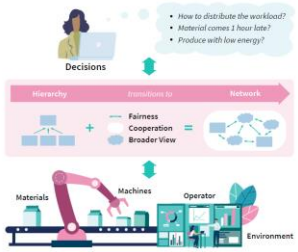
Figure 2: Flyer for the FAIRWork Project

Introduction

Current automated and hierarchical structured production processes can only insufficiently deal with the upcoming flexibilization. We foster the "democratization" of decision-making in production processes, hence the participation of all involved stakeholders, by introducing a decentralized AI system. Our Democratic AI-based Decision Support System (DAI-DSS) finds democratically the appropriate decision for a concrete situation during production. Each human or technical actor is represented by an agent who negotiates based on the current status provided by the digital shadow and twins. The future situation is predicted by AI algorithms for each individual actor considering the modelled knowledge base that defines each negotiation strategy. A multiple optimization algorithm finds the most appropriate solution considering the needs of all involved human and technical stakeholders.

The FAIRWork project receives research funding from the European Union's Horizon Europe Framework Programme. However, this output reflects the views of the author(s) only, and the European Union cannot be held responsible for any use which may be made of the information contained herein.

MOTIVATION



FAIRWork facilitates new gains

- Raise flexibility of complex system
- Enable cooperative optimization
- Strengthen trust and fairness in system
- Strengthen energy efficiency

FAIRWork reduces pains

- Reduce dependencies
- Reduce uncertainty in decisions
- Reduce unforeseen situations
- Reduce decision stress

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Insights

Design Decision Models and Decentralization

FAIRWork brings "Human, AI, Data and Robots" together, by introducing following measures

(a) Designing Decision Models and assessing if those models are "appropriate / fair".

(b) Decentralizing the decision-making, by representing each involved – human or technical – actor within a Multi Agent System and configure each agent with previously approved decision models.

(c) Broadening the view to optimize the production process, by also introducing social and energy related parameters to the existing technical and business related aspects. These will be identified and valuated in a participatory and user-centred design process. This enables a more balanced decision-making in complex situations, as the flexibility opens-up "space for manoeuvre".

AI Decisions and Cooperative Networks

We want to transform the decision making of current production processes towards a cooperative decision-making, by

(a) introducing concepts that make human workers trust the decision making independently of whether the decision is performed by a human, by an AI, or in a hybrid manner,

(b) enabling cooperative decision-making to capture the real world situation in a more complete and holistic way and

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(c) introducing more influence factors to transform the current automated and hierarchical system towards cooperative networks with individual responsibilities and competences.

The production process is the central knowledge platform and starting point, when analysing which – conflicting or relevant – "decisions" need to be taken, by whom, with which information and for which goal. We support human decision makers in making decisions (a) under uncertainty, (b) strong dependencies on unknown future events, (c) affecting human and machines work balance, (d) affecting the overall success of the production process, (e) using with "best effort" the available data in (f) often a very complex and conflicting situation. The decision with influence factors is represented in the cloud of the figure in the right.

Fig. 1. Risk assessment.

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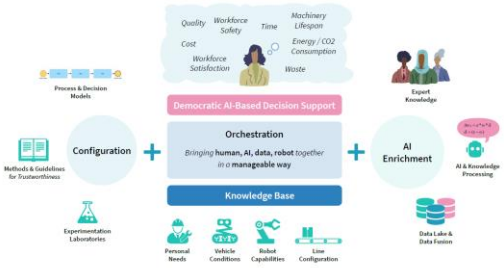
IDEA



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Conclusion

The assumption is that decision relevant information is currently in digital shadows and twins, or can be represented in digital shadows and twins. Our idea is to digitally describe all relevant stakeholders as digital twins, and define an agent for each digital representation that continuously negotiate with all other agents to find cooperative decisions. Each agent aims to optimize all decisions for each individual actor by simultaneously contributing to the overall optimization of the production process.

Partners

BOC Products & Services AG
www.boc-group.com

Jotne EPM Technology AS
www.jotne.com

Centro Ricerche Fiat S.C.p.A.
www.crf.it

S.C. FLEXTRONICS ROMANIA S.R.L
Flextronics International GmbH
www.flex.com

RWTH Aachen University
www.cybernetics-lab.de
www.humtec.rwth-aachen.de

MORE - Laboratório Colaborativo Montanhas de Investigação - Associação
www.morecolab.pt

JOANNEUM RESEARCH Forschungsgesellschaft mbH
www.joanneum.at/digital

OMiLAB gGmbH
www.omilab.org

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FAIRWORK

Coordinated by
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Design Your Enterprise

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Figure 3: Preview of the Brochure

2.3 Social Media

Different social media platforms are used to distribute information about content, artefacts, and events. The information will be provided either in advance and/or after a certain event has occurred. In advance the platforms are used to draw attention to content, artefacts or events and the afterwards social media can be used to inform possible stakeholders. The accounts are managed in WP7.

Table 1 shows the social media accounts for the FAIRWork project. Here it should be noted that LinkedIn will be used as the main social media platform for the project. This means that most campaign plans and initiatives will focus on the LinkedIn platform. Where needed, other social media platforms will be utilized, like YouTube to share videos and live streams and Twitter to distribute current information.

Platform	Name or Tag	Link
LinkedIn	FAIRWork	https://www.linkedin.com/company/fairwork-project/
YouTube	@fairwork_eu	https://www.youtube.com/@fairwork_eu
Twitter	@fairwork_eu or fairwork-project.eu	https://twitter.com/fairwork_eu

Table 1: Overview Social Media Accounts

2.4 Zenodo

Zenodo[3] is a platform to publish research results, independent of the format, size, access rights or license. We will use this platform to additionally publish created key elements and make them accessible to a broader audience. The published information will be available till after the project is finished, to allow for further exploitation of the created project results.

Everything that will be published on Zenodo will be grouped together via the FAIRWork Zenodo community. This will ease the identification and finding of FAIRWork artefacts. Additionally, the artefacts can be added to other communities to increase the chances of them being found. The Zenodo community can be found at: https://zenodo.org/communities/fairwork/

The artefacts published on Zenodo will be available even after the project is finished to support the exploitation of FAIRWork artefacts. These artefacts will mainly come from WP3 and WP4.

2.5 Webinar

During the project, webinars will be held to provide insights to the project for interested parties. These webinars can be used to introduce different topics, like software, cases, methods, or other developed artefacts. On one side they are used to establish awareness and disseminate project results. On the other side they can be utilized as training events and materials. The webinars will be held by different partners based on their expertise. In this way the knowledge of the partners can be utilized, and the webinars gain quality input, increasing their usefulness.

A webinar can either be joined directly by interested third parties or a recording of the webinar can be provided publicly to be consumed asynchronously. This allows on the one hand a direct exchange and on the other hand to have an informative artefact for the project which can be used within and after the project. Before the recordings are provided publicly, they will be checked if the fulfil all legal and project requirements.

The webinars will be held using Zoom[4] and the records will be made publicly available over YouTube. WP7 supports the planning and conducting of the webinars.

The YouTube playlist of public available webinar recording can be found under the following link: https://www.youtube.com/playlist?list=PLDKnDRTHllZrGrXZsiePXmvylV1gHvh9K

The event subpage of the website (including the webinars) can be found at: https://fairwork-project.eu/events/

2.6 Innovation Shop

During the FAIRWork project an innovation shop will be created. It is not yet available, but it will be created in D8.2 and will be published at: https://fairwork-project.eu/innovation-shop/. The FAIRWork innovation shop will be similar to ones that were established for other EU-funded projects: Change2Twin[5], CaXman[6], CloudSocket[7].

The goal of the innovation shop is to describe and provide the created innovation items in a way, so that they can be easily understood and used by interested parties. Through this the usage of the project results should be enabled, which supports their exploitation. Here not only finished products should be shared, but all artefacts, that can be interesting, like prototypes of a component or an experiment. Important is that the innovation items are independent from each other and can be used without the knowledge or complete infrastructure of the FAIRWork project. The exact type of innovation items, which will be available in the innovation shop will be defined during the creation process of the innovation shop.

As the innovation shop should support the exploitation of the created artefacts, it will be available after the project ends, along the website. Therefore, it will be kept online at least three years after the project ends.

3 SUMMARY AND CONCLUSIONS

Deliverable 8.1 created the exploitation and communication tools for the FAIRWork project. This accompanying document contains a documentation of the established tools and provides a short introduction to the innovation shop, which is not yet available but will be set-up in D8.2. Additionally, links to the tools are provided.

The website, the flyer, the brochure, the social media accounts, Zendo, and the webinars will be used in WP7 for communication, dissemination and training. WP7 also oversees their further development and adaptations. The usage of the tools for the project will be discussed in the reports of D7.1 and D7.2.

The innovation shop will be used in WP8 and will be established in D8.2. In D8.2 not only the innovation shop but also some of its content will be created. Additional content comes from other work packages, like WP3. Further, the future artefacts on Zenodo and the innovation shop will support the exploitation efforts of WP8.

4 REFERENCES

[1] Jekyll Homepage: https://jekyllrb.com/ (accessed: 13-2-2023)
[2] Google Analytics Homepage: https://analytics.google.com (accessed: 15-02-2023)
[3] Zenodo Homepage: https://zenodo.org/ (accessed: 23-02-2023)
[4] Zoom Homepage: https://zoom.us/ (accessed: 22-02-2023)
[5] Change2Twin Marketplace: https://www.change2twin.eu/marketplace/ (accessed:13-3-2023)
[6] CaXman Innovation Shop: https://caxman.boc-group.eu/innovation-shop (accessed: 22-02-2023)
[7] CloudSocket Innovation Shop: https://site.cloudsocket.eu/cloudsocket-innovation-shop (accessed: 22-03-2023)