

COMPETITIVE PROJECTS

Business Network Dynamics (BuNeD)

Lift-OSH



SUMMARY:

This project was made in response to the European Agency for Safety and Health at the Workplace (EU-OSHA) tender for ‘Supporting compliance and better OSH practice through leverage in market-based initiatives’. It will provide both an overview and in-depth case studies of market leverage initiatives in the construction and agri-food sectors, as well as an analytical part that will uncover factors that influences market leverage of OSH in supply chains such as regulation, market incentives, societal norms, business cases.

The consortium’s work contributes to research-based knowledge about the practical application of market-based leverage initiatives and instruments in the two sectors, which can be used by both policy makers and companies, as well as other stakeholders in the construction and agri-food sectors. Furthermore, it can inform policies and supply chain initiatives in other sectors.

To achieve the overarching goal of the project, the project brings together experts from five EU member states. Each represent different types of occupational safety and health and social insurance systems embedded in different socio-economic and regulatory contexts. The team’s cumulative and complementary expertise secures that the results will be based on state-of-the-art research and therefore provide the platform for contributing new research-based knowledge to the field.

Supporting compliance and better OSH practice through leverage in market-based initiatives

PRINCIPAL INVESTIGATOR:



Annachiara Longoni

PERIOD:

June 2021 – October 2023

FUNDING BODY:

European Agency for Safety and Health at the Workplace (EU-OSHA)

COORDINATING INSTITUTION:

University of Southern Denmark

CROWDWORK



Crowdsourced last mile delivery: a multi stakeholder perspective on organizational efficiency and worker health and safety performance

PRINCIPAL INVESTIGATOR:



Annachiara Longoni

PERIOD:

June 2020 – May 2024

FUNDING BODY:

MICINN-MCIU

REFERENCE:

PID2019-109248GA-I00

RESEARCH TEAM:

Cristina Gimenez, Vicenta Sierra, Frank Wiengarten, Cristina Sancha

SUMMARY:

The CrowdWork project aims to empirically investigate the implications of crowdsourced workforce in the last mile delivery industry for organizational efficiency (from the organizational perspective) and occupational health and safety (from the workers perspective).

Industries such as crowdsourced last mile delivery are built on the principle of matching supply and demand through digital labor platforms.

Workers in charge of the last mile delivery (i.e., drivers) receive their orders through the digital platform and are only paid on demand when a delivery is performed.

This model breaks the traditional employee-employer relationships to create a more flexible workforce. Digital labor platforms present employers with new opportunities to vastly reduce labor costs and increase flexibility. For sure, these work arrangements allowed the expansion of new digital businesses and the gig economy. However, there is a growing concern that these new non-standard forms of employment adversely affect workers by creating precarious work. Such precarious work might result in social and economic insecurities, psychological and physiological stress and working conditions negatively affecting worker health and safety.

We propose that from the operational perspective it is possible to identify configurations of best practices that might overcome possible trade-offs of crowdsourced work between efficiency and occupational health and safety. By best practice configurations we refer to human resource management practices, such as training, worker involvement and teamwork; and process design, such as process formalization. These practices combined to precarious work forms of crowdsourced work might prevent possible negative effects on worker occupational health and safety and maintaining efficiency in the operational setting.

From a theoretical perspective, we aim firstly to demonstrate the trade-offs between organizational efficiency and worker health and safety in crowdsourced work environments, such as the last mile delivery industry. Secondly, we aim to identify possible mitigation strategies for such trade-offs as combining crowdsourced work with human resource management practices and process design respectful of the workers.

From a practical perspective, our goal is providing guidelines for crowdsource last-mile delivery companies, as well as digital businesses in general, about work organization design at the operational level (which is about human resource management practices and process design to combine with crowdsourced workforce); and also stimulate governments and institutions to develop regulations considering such aspects of workforce arrangement.

eWork



Taking a holistic approach to assess the cost of digital last-mile delivery for workers, societies, and businesses

PRINCIPAL
INVESTIGATOR:



Annachiara
Longoni

PERIOD:

February 2020 – November 2022

FUNDING BODY:

LA CAIXA

REFERENCE:

SR19-000317

RESEARCH TEAM:

Cristina Sancha, Frank Wiengarten, Vicenta Sierra

SUMMARY:

Industries such as digital last mile delivery are built on the principle of matching supply and demand through digital labor platforms. Workers in charge of the last mile delivery (i.e., drivers) receive their orders through the digital platform and are only paid on demand when a delivery is performed. This contractual arrangement with the workforce allows companies to significantly reduce overhead and only activate workers in case of demand.

The eWork project aims to empirically investigate the implications of current working conditions in the digital last mile delivery industry in Spain to determine their impact on workers' occupational health and safety and the consequences on businesses and the society. Specifically, we will analyze working conditions in terms of adoption of precarious work arrangements, limited control and presence of vulnerable workforce. Thanks to such empirical analyses we aim to understand the current working conditions in the digital last-mile delivery industry in Spain and their effects on workers, businesses and society. Based on the findings, we aim to contribute to the definition of new forms of work in the digital service industry taking into consideration occupational health and safety aspects and benefiting the Spanish socioeconomic context.

Business Network Dynamics (BuNeD)



**PRINCIPAL
INVESTIGATOR:**



Cristina
Gimenez

PERIOD:

January 2017 – September 2021

FUNDING BODY:

AGAUR

REFERENCE:

2017 SGR 367

RESEARCH TEAM:

Vicenta Sierra, Frank Wiengarten, Joan Rodon Modol,
Annachiara Longoni, Esteban Koberg, Khaled Hassan

SUMMARY:

The aim of these grants from the Catalan Government is to promote the activities of research groups that allow to strengthen the scientific, economic and social impact of research, as well as promote its international projection.

ENTREMILK



Integrated engineering approaching validating reduced water and energy consumption in milk processing for wider food supply chain replication

PRINCIPAL INVESTIGATOR:



Cristina
Gimenez

PERIOD:

January 2014 – December 2017

FUNDING BODY:

EU FP7

REFERENCE:

613968

RESEARCH TEAM:

Research team: Ariadna Dumitrescu, Joan Rodon, Melania Duarte, Esteban Koberg

SUMMARY:

The ENREMILK project investigated how to reduce water and energy consumption across the entire dairy industry supply chain. Consortium members achieved significant and quantifiable savings at the pilot and industrial demonstration scale via two case studies. These were based on dried skimmed milk powder and mozzarella processing lines linked to innovative in-situ by-product recovery and wastewater treatment and recycling systems. Researchers employed a combination of model simulations and physical trials to validate a savings of 30 % for water and 20 % for energy compared to the consumption baseline of existing dairy operations. The initiative included decision-making tools for further developing and implementing technologies and tested their technical and economic viability. ENREMILK supports SMEs and the dairy industry through reductions in energy and water consumption and the integration of novel technology for improvement in production processes and greater sustainability. This will help to make Europe's dairy industry more competitive in the global market place, whilst supporting local communities with more jobs and the attainment of new skills.

More info:

<https://cordis.europa.eu/project/id/613968>

FoodSCM



Gestión de la cadena de suministros para conseguir seguridad alimentaria y eficiencia operacional en el sector agroalimentario

PRINCIPAL INVESTIGATOR:



Cristina Gimenez

PERIOD:

January 2014 – December 2017

FUNDING BODY:

MICINN-MINECO

REFERENCE:

ECO2013-47794-R

SUMMARY:

The management of food supply chains is of vital importance since its outputs play a key role in sustaining human life and well-being. Another characteristic is that, normally, the upstream side of the chain is very fragmented and is composed by a large amount of small family owned businesses (small livestock production holders and farmers). Based on these characteristics, we can distinguish two main challenges in food supply chains: (1) to guarantee food safety along the chain and (2) to develop the capabilities of the small suppliers that compose its upstream side.

The project studied how to effectively manage the food supply chain to make it safer and more efficient.

In particular, the project's two objectives were: (1) to study how the different entities that entail the food supply chain can collaborate to guarantee product safety; (2) to analyze the implementation process of supplier development programs and their implications both for food safety assurance and for the improvement of small food suppliers' operational capabilities. The main results of this project can be summarized as follows:

- The main practices for extending sustainability and ensuring food quality can be classified into two basic types: Assessment and Collaboration.
- Both relational (more collaborative) and transactional mechanisms contribute to improving sustainability and quality.
- In environments with low product complexity, such as the food supply chain, relational mechanisms are more effective.
- To develop very small suppliers, the role of NGOs and other similar institutions (cooperatives, etc.) is key, as they provide the purchasing company with the complementary resources necessary to access this type of supplier and develop its technical capacities to achieve greater efficiency and safety.

