



WP 5 - SupTech



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement no. 825215 (topic ICT-35-2018, Type of action: CSA)The content reflects only the author's view and the Commission is not responsible for any use that may be made of the information it contains.

WP5 - Suptech (UNIPV)

- The objective of the work package are summarized by three main tasks
- **Task 5.1. Technical coordination.** Through the creation of common material (slides and use cases) for the SupTech workshops (all, UNIPV). For the purpose of ensuring common understanding and expertise concerning risk management models related to the application in finance of each of the three main technologies (big data analytics, artificial intelligence and blockchain), the SupTech WP will organise workshops at the national level, based on the common materials. Specifically, UNIPV provides partners with a deadline for sending slides in latex taken from use cases, each supported by paper, data and code, concerning the three topics. UNIPV assembles the material in latex, produces a pdf version, and sends it to all partners, for its use as a common material. Partners can add to the common material personalised content.
- **Task 5.2. Execution of SupTech workshops.** Each partner organises 3 SupTech Workshops, each of which consists of at least 16 hours of knowledge exchange with the corresponding national supervisor, based on the project use-cases (at least 3), plus personalised material. Collaborations between partners is encouraged, through cross-training and joint regional workshops. All partners carrying out the training are responsible for the registration of all participants and for collecting their feedback, to be sent to the dissemination work package leader.
- **Task 5.3. Monitoring the execution of the SupTech workshops.** UNIPV is responsible for monitoring the execution of the SupTech activities and make sure that activities are carried out in line with the proposed programme containing, in particular, the presentation of at least three use cases from the consortium per topic. UNIPV will also check whether all SupTech hours are correctly completed, the use cases are presented and the feedback is collected.

SupTech – 87 National Workshops

- Each partner is responsible for arranging 3 x 16 hours SupTech workshops, with the assigned national regulators. Joint workshops can be organized at the regional level (e.g Baltics, Bulgaria/Romania, Scandinavia, Greece/Cyprus).
- The training material for the workshop must consist of slides common to all countries, for the BDA, AI and Blockchain parts. Each partner can add to the common slides personalized material, depending on the needs of the local supervisors.
- The common part is based on the project use cases in fintech risk management, which are the result of the research activity of the partners in WP2, WP3, WP4.
- The use cases are selected, among those presented by the partners, by the WP leaders, together with UNIPV, based on the received feedback. To be selected, a use case must be documented by: open access data, open source code and an open access paper published.

SupTech – Use cases (so far)

- BIG DATA ANALYSIS RISK MANAGEMENT
- Network based scoring models to improve credit risk management in peer to peer lending (UNIPV & ZHAW)
- Factorial network models to improve peer to peer lending credit risk management (UNIPV & ZHAW)
- Spatial regression models to improve credit risk management (UNIPV)
- ARTIFICIAL INTELLIGENCE RISK MANAGEMENT
- Convergence and divergence in European bonds correlations (ZHAW)
- Network models to enhance automated cryptocurrency risk management (UNIPV)
- Explainable AI in credit scoring and portfolio construction (FIRAMIS and UNIPV)

SupTech – Use cases (so far)

- BLOCKCHAIN RISK MANAGEMENT
- Libra or Librae? Basket based stable coins (UNIPV)
- Initial coin offerings success drivers: a textual analysis (UNIPV)
- Phenotypic convergence of cryptocurrencies (ASE and UBER)
- Financial risk monitoring for cryptocurrencies (UBER)

Partners' activities - Overview

Partner's Short name	# Publications	# Pre-prints	# Use Cases	Hours BDA (16)	Hours AI (16)	Research events	Regtech events	Effort (P/M)	% Effort completion
UNIPV	17	2	7	21	18.5	1		61.10	75.4%
UBER	2	15	1	17	18.5	1		8.47	40.3%
ZHAW (two regulators)	6	2	3	28	34.5	1	1	8.48	58.5%
UCL	5	2		6	17	1		6.11	28.4%
ASE Bucuresti	0	2	1	16	19	1		8.91	63.6%
MODEFINANCE (no regulators)	0	0		0	0		1	4.00	72.7%
FIRAMIS	1	1	1	14.5	14	1	1	32.50	100.0%
PANTEION (two regulators)	1	0		19.5	33			17.75	93.4%
INESC TEC	1	0		16	16			3.41	37.9%
Paris 1	0	0		11.5	9.5	1	1	18.07	62.3%
POLIMI	0	2		20	20			11.30	141.3%
UCD	1	0		19	9			4.00	50.0%
UL	0	0		16	17			7.50	93.8%
JSI	0	0		25	7			3.10	38.8%
UNIWARSAW	0	0		16	16			5.13	64.1%
UNIRIJEKA	0	1		26.5	19.5			6.70	74.4%
UCM	2	0		17	23.5		1	15.23	80.2%
EUBA	0	0		24	17			6.50	72.2%
KTU (three regulators)	1	0		13	56			27.97	103.6%
MU	0	1		19.5	20.5			9.03	112.9%
B-HIVE	0	0		16	16			1.27	8.5%
UE Varna	0	0		17	18			4.41	49.0%
UTA (two regulators)	0	0		43.5	36			3.07	38.4%
WU	0	0		17	16		1	9.00	100.0%

Event planning

[illegible]

Next event: Madrid, 23rd October 2020

AGENDA

REGTECH WORKSHOP V

Operational Risk in

Blockchain - I

Fin – Tech HO2020 project

23rd October 2020

Universidad Complutense de Madrid
Madrid, Spain

9:00-9:30	Registration
9:30-10:00	Welcome & Introduction Javier Arroyo & Paolo Giudici
10:00-11:00	Use case I: Initial Coin Offerings: risk or opportunity? (Toma A., Cerchielli P. University of Pavia). Use case II: A Statistical Classification of Cryptocurrencies. (Traian D., Wesselhöfft N., Härdle W., Kolosiat M., Yatracos Y. Bucharest University of Economic Studies, Humboldt University of Berlin, Singapore Management University, Tsinghua University, University of Cyprus).
11:00 – 11.30	Coffee break and discussion
11.30 – 12.30	Use Case III: Libra or Librae? Basket based stable coins to mitigate foreign exchange volatility spillovers. (Giudici P., Leach T. and Pagnottoni P. University of Pavia).
12:30-13:00	Wrap-Up Session – Q&A on all Use-Cases.
13:00-14:30	Lunch
14:30-16:00	Hands on Coding Session & Coding/Data Support
16:00-16:30	Wrap-Up Session
16:30-17:30	Open Discussion with Coffee
17:30-19:30	Management Board meeting

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825215 (Topic: ICT-35-2018 Type of action: CSA)

Forthcoming

Activities with Supervisors and Regulators at the European level:

- ECB: Suptech activities to be planned following the interest shown during the roundtable on January 2020 in Frankfurt
- EBA: use case on Libra invited at the EBA 2020 Policy Research Workshop (12-13 November)
- BIS: on-going discussion to organise specific Suptech activities