CALL FOR PAPER

NEW CHALLENGES IN THE BANKING SYSTEM:
THE ROLE OF DISTRIBUTED LEDGER TECHNOLOGY
International Virtual Conference

Rome, June 22nd - 23rd 2022

In the last decade, Distributed Ledger Technology (DLT) has attracted increasing attention in the financial sector and particularly in the banking sector. Indeed, it is perceived as an opportunity to achieve complexity reduction and cost savings in various processes (Carson et al., 2018; Al-Jaroodi & Mohamed, 2019; Buchinger et al., 2020), also considering the increasing pressure from incumbents and new players, and the need to recover efficiency because of the financial crisis.

DLT, configuring itself at the structural level as a community cooperating in regulatory and technological development without hierarchical levels but with shared governance, combines computer science, cryptography, and economic concepts relevant to inter-organizational cases in which multiple parties interact (Zheng et al., 2018; Buchinger et al., 2020). It enables secure processing of transactions between unprotected parties in a decentralized system (Kannengießer et al., 2019; Buchinger et al., 2020) while maintaining a single point of truth (Wattenhofer, 2017; Buchinger et al., 2020).

Therefore, the advent of DLT is challenging banks to move from established business models to a more technology-driven financial ecosystem that could trigger true disruption and produce a new era of value (Valero et al., 2020). Such solutions can help traditional banks modernize their technology and internal processes (among others, core-banking systems, identification and authentication applications, customer onboarding technologies, Know Your Customer (KYC) or Anti-Money Laundering (AML) procedures).

The application of distributed ledgers entails, therefore, internal challenges also related to the consolidation of a decision-making base with technical expertise (Fridgen et al., 2018; Buchinger et al., 2020) able to identify feasible use cases that generate increasing value for the bank (Glaser, 2017; Buchinger et al. 2020).

Thus, it seems clear that one of the biggest challenges facing traditional banks is to modernize their core banking systems, which have become outdated, expensive, and inflexible, by moving toward new business models.

The Conference is organised by the Department of Management of the Sapienza University of Rome and CIS Sapienza.

The goal of the Conference is to bring together people from academia, research, public institutions, and industries from different fields such as business, IT, and law in a unique program to discuss the opportunities and challenges of DLT in banking.

CALL FOR PAPER THEMES

To better explore open challenges, we will have two main tracks where original contributions are welcome:

1. Banking & Finance track;
2. Computer Science track.

This Call for Paper is dedicated to Computer Science track; you can find more information on Banking and Finance track on our website.

COMPUTER SCIENCE TRACK

This track welcomes original contribution on the specification, design and development of blockchain and DLTs with particular emphasis to their application in the banking domain. Topics of interest include, but are not limited to:

1. **DLT Distributed protocols;**
2. **Lightweight protocols and networking issues of DLTs and blockchains;**
3. **Fairness and Consistency (logical and economical) of blockchains;**
4. **DLTs security, privacy and cryptographic tools;**
5. **Theory of DLTs and Blockchain;**
6. **Cryptocurrencies, token valuation, governance and voting;**
7. **Trust models for blockchains;**
8. **Smart contracts and programming languages;**
9. **Formal methods for blockchains;**
10. **Secure multiparty computations (SMPC, e. g, auctions with sealed bids).**

PUBLICATION OPPORTUNITIES

Authors are solicited to contribute to the Computer Science track by submitting articles that illustrate research, project results and surveys that describe advances and experiences in the areas of DLTs and blockchain. We solicit two kinds of submissions:

- Regular paper containing original, unpublished contributions that will be included in an open-access, post-conference proceedings to be submitted as a volume of CEUR Workshop Proceedings

- Fast abstract paper reporting on preliminary work for oral presentation. This material will not be included in the post-conference proceedings volume.

Authors are requested to indicate the type of the submission in the abstract.

All submitted contribution will undergo a single-blind revision process and accepted regular papers will be included in an open-access, post-conference proceedings to be submitted as publication as a volume of CEUR Workshop Proceedings (cfr. http://ceur-ws.org for additional information).

All papers must be in English, formatted in pdf according to the EasyChair style

- Regular papers must be no longer than 10 pages, excluding bibliography. Extra material exceeding the page limit can be included in an appendix of at most 4 pages.
- Fast Abstract papers must be no longer than 4 pages, excluding bibliography.

The DLT conference will manage the review process for papers submitted to the conference.

IMPORTANT DATES

Submission Paper: no later than ~~April 10, 2022,~~ May 15, 2022
Notification Acceptance: no later than ~~May 10, 2022~~, May 30, 2022

More information is available on our website.