

LEVEL 0 SUMMARY TEMPLATE

Instruction

This summary will be shared with L1, L2 and L3. Keep in mind that these levels do not have a full understanding of the subject. Try to write something easy to understand but not simplistic. Your summary should explain the main contribution of the paper with your own words. Furthermore, you can use simple examples, if necessary, to better explain the main ideas. Your grade will take into account the quality of your summary, the formal English language in which it has been written, and whether it helps the levels above in their own work.

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Source (e.g. scholars.google.com): <https://www.springer.com/fr>

Paper title: Data science and AI in FinTech: an overview

Keywords specific to the paper: FinTech, Finance, AI, Data science, Deep learning, modeling, Blockchain

This paper deals with using data science and AI in FinTech. Nowadays, finance has become interactive due to data science and artificial intelligence (DSAI) techniques. FinTech consists of synthesizing, transforming and innovating financial services, technology, economy, communication driven by DSAI techniques. FinTech has an important role in driving modern economies, technology, society and several areas. Now there is a new generation FinTech called Smart FinTech which is inspired by DSAI techniques.

Smart FinTech consists of synthesizing DSAI and transforming both finance and economy. The goal of Smart FinTech is to provide an intelligent, automated, personalized economic and financial businesses, systems and services. Smart FinTech is involved in many areas such as BankingTech, PayTech, RiskTech, TradeTech, cryptocurrencies, blockchain. DSAI is referring to classic AI areas such as knowledge representation, modeling, autonomous systems, expert system, optimization, complexity science, logic, planning etc. DSAI techniques are composed by intelligent interactions, complex system methods, quantitative methods, recognition, data analytics, deep learning, optimization and system intelligence enhancement.

DSAI redefines the objectives, tasks, content and concepts of FinTech. DSAI transforms modern economic and financial activities . It changes the operational management of businesses, that is to say, the way the business transacts, collaborates, interacts with its stakeholders and environment. Moreover, DSAI is at the core of new economic-financial mechanisms, models, products, services, tangible and intangible opportunities. Therefore, DSAI strengthens cost-effectiveness, customer experience, risk mitigation, regulation, security. In addition, DSAI is part of innovating economic-financial products and services. Indeed, thanks to DSAI these products and services are more efficient, personalizes, secure, intelligent, proactive. The synthetic product of DSAI compose the new area of Smart FinTech. Nowadays, Finance and economy are increasingly synergized with DSAI and FinTech. DSAI is crucial for the new generation of FinTech.

The main business domains and challenges in Smart FinTech include internet banking, mobile payments, online shopping, cryptocurrency, global supply chain management etc. FinTech major challenges are innovating businesses with sustainable mechanisms, products, platforms and also managing complex data. Smart FinTech covers several ecosystems, smart banking, smart insurance, smart lending, smart trading, smart assets, wealth management, smart payments, smart credit, risk management, smart internet finance, smart marketing, smart currencies, smart ethics, smart innovations etc. DSAI techniques can assist these Smart FinTech fields, such as smart insurance which enables insurance products, services, systems to ensure secure, proactive, tailored, trustful processes. Smart FinTech ecosystems enable the creation of personalized recommendations, efficient models, the optimization of smart contracts.

Overall, data science and artificial intelligence (DSAI) are important in FinTech. They help optimizing FinTech. Smart FinTech is becoming a huge part of modern and future economies. FinTech connects organizations, services, persons, products, business activities in several forms through channels like QR codes, WiFi networks, intelligent digital assistants etc. Finally, AI and data science are making finance smarter, participate in the evolution of FinTech and autonomous financial systems and personalized financial services.