

1. Record Nr.	UNINA9910828001803321
Autore	Steinmetz Fred <1988->
Titolo	Blockchain and the digital economy : the socio-economic impact of blockchain technology // Fred Steinmetz, Lennart Ante and Ingo Fiedler
Pubbl/distr/stampa	Newcastle upon Tyne : , : Agenda Publishing, , [2020] ©2020
ISBN	1-78821-349-1
Descrizione fisica	1 online resource (153 pages)
Disciplina	005.74
Soggetti	Blockchains (Databases) - Economic aspects Blockchains (Databases) - Industrial applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Half Title -- Title Page -- Copyright Page -- Contents -- Preface -- Figures and tables -- 1. Introducing blockchain -- 1.1 A transaction -- 1.2 Key characteristics -- 1.3 Categories -- 2. Blockchain's basic components -- 2.1 Technical components -- Peer-to-peer networks -- Client-server architecture -- Grid-architecture -- P2P architecture -- Virtual machines and smart contracts -- Technical summary -- 2.2 Mathematical components -- Hash algorithms -- Public-key cryptography -- Mathematical conclusions -- 2.3 Economic, political and social components -- Consensus -- Governance -- Incentive patterns -- Conclusions -- 3. Potential and actual socio-economic impacts of blockchain -- 3.1 Crypto knowledge and crypto usage -- 3.2 Perceived and actual use of cryptocurrencies -- 3.3 Disintermediation, localization and individualization -- 3.4 Censorship resistance and privacy -- 3.5 Property and the empowerment of the individual -- 3.6 New markets and marketplaces -- 3.7 Crypto-secession: the most disruptive potential of distributed ledger technology -- 4. Applications of blockchain technology in different domains -- 4.1 Central bank digital currency (CBDC) -- 4.2 Energy markets and infrastructure -- 4.3 Self-sovereign identity -- 4.4 Capital markets and security services -- Clearing and settlement -- Initial coin offerings -- 4.5 Supply chains and logistics -- 4.6 Gambling industry

-- 5. Conclusion: possible directions of blockchain -- References --
Index.

Sommario/riassunto

Non-technical and accessible, this book seeks to demystify the functionalities of blockchains, their potential as well as their likely socio-economic impacts.