

An Interpretative View on Innovation Acceptance for Bitcoin and Blockchain Phenomena: Knowledge Creation and Activism in Social Learning

Christian Rainero

 <https://orcid.org/0000-0003-3112-8886>

University of Turin, Italy

Giuseppe Modarelli

University of Turin, Italy

INTRODUCTION

Nowadays, the global condition seems to be characterized by emblematic and rapid modifications especially in the information and technology (IT) hardly impacting on the socio-political and economic perspective. The advent of the Internet, the digitalization of processes and communication technologies are affecting cities, public/private entities/companies and humans are subjected to a new “smart” view. In this sense, the digital transformation (DT) seems to be necessary, but it remains really difficult and shows criticalities under a wide-range of aspects. Sousa et al. (2022) consider that hand in hand with innovation advancements, innovative administration methods should be experienced. In this sense, organizations, considered mirror systems of the evolving reality, perceive the necessity to adapt themselves to the evolving environment in which they operate. These adaptations are indisputable solutions to socio-political issues, and technology can help the decision-making processes by the application of innovative and “*disruptive technologies*” (Bresciani, 2016; 2017) like blockchain and its descending extension (bitcoin), more in general: cryptocurrencies. As done by the advent of the Internet and the e-mail and instant messaging for communication systems, technologies like blockchain could become commonplace on a large scale (Olesen & Myers, 1999), only by a general acceptance and barriers reduction. A great paradigm of perspective could be shaped by the blockchain technology, able to affect virtually all segments of socio-organizational life, shaping the borders of new way for promoting services for citizens, as considered by Allam and Dhunny (2019) and Secinaro et al. (2021), as well as the working environments in private and public sector (Tandulwadikar, 2016; Rodriguez Bolívar, 2018; Hughes et al., 2019; Cogliano, 2017; Lacity, 2018; Ruozi, 2017; Rainero & Modarelli, 2021a; Rainero & Modarelli, 2021b). Nowadays, the digital technologies are increasing and constantly in evolution. They are able to permit a wide-range process of data-acquiring; these data made available on several platforms, by the World Wide Web protocol and the databases are simply memorized for storage and accumulated in huge quantities (Correani et al., 2020). The emerging problem is strictly linked with the knowledge creation. A lot of data could create information, but at the same time the risk of information-overload and information chaos (Kleijnen et al., 2009; Lefebvre et al., 2015). The authors use this evidence to exploit the observation of humans’ behavior referred to the BTC-BC phenomenon. Precisely the construction of knowledge, on a tool that in itself builds knowledge, tracking, storing and distributing countless quantities of data

DOI: 10.4018/978-1-6684-7366-5.ch003

This article, published as an Open Access article in the gold Open Access encyclopedia, Encyclopedia of Information Science and Technology, Sixth Edition, is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

in real time (Blockchain) (Knirsch et al., 2019; Mendling et al., 2018; Ruozzi, 2017; Harvey and Cheng, 2017), would assume a pivotal role in shaping the lines of a model of action, in which the voluntariness in information seeking, should be considered as an antecedent of acceptance, and the knowledge creation (in terms of informed context building), a great strategy to facilitate digital transformation (DT) and technologies penetration in the work environments. In fact, as observed in the last two years, if on one hand, the Covid-19 and the coronavirus deriving crisis, exacerbated the need for digitalization and the pervasiveness of web-mediated communication systems, in some ways accelerating the acceptance of new tools, with scarce knowledge on it and scarce preeminence of use in the specific environment of application (Rainero & Modarelli, 2020). Clegg (2000) affirms that a scarce involvement of employees into the processes of DT, should be considered as one of the main causes of failure related to digital and innovative transition. In this sense and according to what aforementioned, the exploratory and embryonic approach to the empirical analysis proposed, due to the rapid emergence of the phenomenon object of the study, still smoky today, and the observation time (2018-2019), would be a great starting point for the main implication of the interpretative paradigm provided by this study on the BTC-BC scene. Considering the social learning view, the aforementioned implication could be found on the managerial side, thanks to the possible indirect knowledge-based strategy operated by the internet users (potentially employees and workers), able to shape an informed social context, promoting the future probable and potentially facilitated application of these “disruptive” technologies in several work-environments. The objective of the study proposed tries to overcome the Blockchain and Bitcoin phenomena per se and the influences they produce, their interacting actions, but primarily to go beyond the emergent enthusiasm and excitement to their plausible introduction in different sectors. The direction of the research design follows the assumptions inherent the origin of Bitcoin and Blockchain. First of all, the main assumption could be posed starting from the fact that the Bitcoin emergence would be due to the Blockchain introduction, as innovation in technological ambit. In this sense, the authors, observing the reality and the advancement state of the emergent technology, in addition to the wide-range interest provoked at every level, from the private sector, to the public one and academic side, started to consider BTC-BC spread, embryonically a social learning phenomenon. In fact, considering humans’ information-seeking approach towards the “new” (in this case: BTC-BC as innovative tools), that activity would be directly linked to the legitimacy and acceptance need (Oliver, 1991). Only by the reduction of barriers and reticence, inherent and endemic in human beings against the innovation and change, this latter (in terms of innovative development) could be useful for constructive applications in several environments (Karpela, Hallikos & Dohlberg, 2017; O’Leary et al. 2018; Subramanian, 2018; Kokina, Mancha & Pachamanova, 2017; Guo & Liang, 2016; Iansiti & Lakhani, 2017; Azaria et al. 2016; Tarr, 2018). The main focus of the research study proposed is based on the intrinsic potential that these new technologies, defined by Bresciani (2016), Borgonovi (2018) and other academics as “disruptive”, could have by their impact on social, political and economic side, specifically through a generalized acceptance mediated by knowledge-creation. The study proposed by the authors tends to explore the assumption aforementioned, strictly intersecting three main areas of interest: (a) information-seeking, (b) its great connection with knowledge-creation processes, (c) finalized to the building of consciousness in decision-making oriented to the innovative tools application, mediated by the acceptance. According to the main pillars of the research, it should be necessary to trace the lines of what expressed by Berryman (2008) in the paradigm of the theory of rational-decision, and more pragmatically in the theory of rational-management provided by Migliavacca et al. (2017). In this direction, framed theoretically, the authors, following the aims and scope of the research, connect the decision-making approach to the knowledge creation by the individual/organizational information-seeking activity, shaping the lined of a social-learning paradigm,

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/an-interpretative-view-on-innovation-acceptance-for-bitcoin-and-blockchain-phenomena/315810

Related Content

Increasing Continuous Engagement With Open Government Data: Learning From the Saudi Experience

Ibrahim Mutambik, Abdullah Almuqrin, Yulong David Liu, Waleed Halboob, Abdullah Alakeeland Abdelouahid Derhab (2023). *Journal of Global Information Management* (pp. 1-21).

www.irma-international.org/article/increasing-continuous-engagement-with-open-government-data/322437

Perceptions and Attitudes About eCommerce Development in China: An Exploratory Study

Antonis C. Stylianou (2004). *Advanced Topics in Global Information Management, Volume 3* (pp. 295-311).

www.irma-international.org/chapter/perceptions-attitudes-ecommerce-development-china/4538

On Challenges for Implementing ISO Standards in Software: Can Both Open and Closed Standards Be Implemented in Open Source Software?

Björn Lundell, Jonas Gamalielsson and Andrew Katz (2018). *Corporate and Global Standardization Initiatives in Contemporary Society* (pp. 219-251).

www.irma-international.org/chapter/on-challenges-for-implementing-iso-standards-in-software/197467

A Web-Based Data Warehouse Planning - A Large-Scale Project Management Information System in Taiwan

Jia-Lang Seng (2002). *Global Perspective of Information Technology Management* (pp. 190-207).

www.irma-international.org/chapter/web-based-data-warehouse-planning/19284

Fundamentals of Integrated Management: Analysis of Innovation

Sergey Krylov (2025). *Encyclopedia of Information Science and Technology, Sixth Edition* (pp. 1-26).

www.irma-international.org/chapter/fundamentals-of-integrated-management/320494