

Chapter 1

Blockchanging Trust: Ethical Metamorphosis in Business and Healthcare

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ABSTRACT

By cutting transaction costs and streamlining agreements' execution via "smart contracts," blockchain technology (BT) turns decentralization into an economic advantage and an antidote against politically harsh decisions that can obliterate privacy, freedom, and democracy. Although BT's ethical bottom line is still uncertain, its use can smooth out the trade-off between privacy and convenience, reconciling both. BT can also help reconfigure the compromise between intellectual property rights and the common good, opening more ethical routes to the diffusion of innovation. BT's data security can be translated into straightforward access to information. On the one hand, this signals new inclusion routes for "identityless" and unbanked people, and on the other, it releases society from biased information and fake news providing access to trusted data. BT guarantees contents precision, distributing a consensual tamper-proof "hyperledger" proving transactions' authenticity and data's integrity. As consensus should be plural, BT's decentralization is thought to be a must in ethical terms.

INTRODUCTION

"Technology is neither good nor bad, nor is it neutral" (Kranzberg, 1986). Kranzberg's First Law

This chapter's main objective is to show why an ethical reform can be expected in a *new normal* (Berwick, 2020; Tam, 2021) time of shaken confidence, perhaps even more shaken than in the last financial crisis (2007-2008). Hence, the ethical impact of Blockchain Technology (BT) on the *Cyberethics-mix* will be considered, entailing four fundamental ethical issues to cope with in the cyberspace: (i) *Privacy*

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of Personal Data; (ii) Property Rights on Digital Data; (iii) Possibility of Accessing Information; (iv) Precision of Digital Content (Rodrigues, 2012).

BT is a data management technology (Alcazar, 2017, p. 93) for distributed databases, which can be seen as an institutional or social technology for coordination (Davidson et al., 2016; Swan, 2015) that creates a “secure, robust, and transparent distributed ledger able to leverage resources within a global peer-to-peer network by building algorithmic trust” (Narayan, 2020, p. 121442).

Seeking to understand the political-economic implications of a new trust mechanism underlying human transactions that it is thought will profoundly change society, this chapter relates Internet evolution with the referred four ethical issues, especially noting business and healthcare.

First, it should be mentioned that this chapter emphasizes the author’s liberal perspective. The chosen investigation method was based on qualitative research, using the literature review research methodology, which is considered adequate to overview several thematic areas on a given topic. Among the literature reviews available, the most used for business studies are systematic review, semi-systematic review, and integrative review (Snyder, 2019). Considering the need to carry out a synthesis to envision the intended ethical repercussions of BT, the author used the integrative literature review, which is indicated to frame a study from new perspectives, especially when it comes to research themes and topics little explored (Torraco, 2005), as is the case as far as the author was able to observe.

This chapter is sequentially organized to accomplish four specific objectives. The first one is to shed light on the evolving trade-off between privacy and convenience, highlighting that BT’s protocol makes it possible to overcome secular privacy limitations and emphasizing that its innovative features eventually can be restrained by misinformed or mistaken (to say the least) political decisions. The chapter’s second specific objective is to observe the trade-off evolution or the changing compromise between self-controlling personal data and public interest. The chapter’s third specific objective is to remark how BT can catalyze access to information and digital inclusion (*e.g.*, access to financial services), assuring information integrity and avoiding a silo mentality usually justified by privacy constraints. It is also discussed why BT is a double-edged sword, which also can reinforce data centralization and the lust for power, pushing society into a worrisome non-democratic path. The chapter’s fourth and last specific objective is to highlight the ethical importance of content precision and accurate information in a time of fake news and political distrust, showing that BT can deliver transparency and trust, eventually inspiring the wake of a Truth Age. Finally, the author presents solutions and recommendations, observes some technical limitations, advocates research priorities, and concludes.

BACKGROUND

Business Ethics and Trust

Defining business ethics, Somerville & Wood (2008) pointed out that “[it] focuses on how we use and should use traditional ethical views to evaluate how institutions orchestrate human behavior” (p. 143). It is known that ethics focuses on studying human conduct, but when it has to do with business, it is also essential to assess how institutions impact humans. Hence, it is crucial not losing sight of what is next, considering that Blockchain Technology (BT) allows even strangers to transact without intermediaries.

The blockchain protocol, which is based on a set of cryptographic techniques, ignited a second phase of the Internet, the definitive “Internet of Value” (Twesige, 2015), a decentralized operating system

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