Chapter 2 Commodity Trading in the Blockchain Technology Era: An Investigation on Global Companies

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ABSTRACT

The emergence of Blockchain technology is gradually disrupting the traditional way of trading commodities. To go beyond the theory to the practical cases, this chapter provides an overview of the Blockchain-based digital transformation process behind and the pre-requisites for its inclusion in the commodity industry. A reality check through vivid examples of global companies highlights the increasing attention drawn to the Blockchain. Furthermore, this chapter discusses the impact of Blockchain technology's use in improving commodity finance trades at different levels and optimizing the transactions' effectiveness. Finally, future challenges and useful perspectives for managers and commodity firms are spotlighted.

INTRODUCTION

Over the last decade, digital technologies, such as the blockchain technology are increasingly attracting managers and media attention. Particularly, the introduction of the blockchain is about to metamorphose industries management, and it is disrupting businesses from their traditional customs to the digitalized era more than ever. To

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briefly pin down the denomination of "blockchain", it refers to a decentralized database that records a registry of assets and transactions through a Peer-to-Peer network (Taylor et al., 2019).

Faced with a plethora of benefits and innovations, many companies across different sectors are considering the implementation of the blockchain technology among their regular business and are in the process of a gradual transformation of their ways of management. This is mainly due to the additional visibility on transactions offered by this novel technology, the ability to handle an open and global platform where to store information, the availability of a worldwide network system, among other advantages. Within this context, several reports, like those of Belt & Kok (2018), ConsenSys (2020), and Forbes (2020), highlighted the progressive development of blockchain technology across commodity industries. Straying from the gory details, examples are manifold, while each case is unique. TradeCloud is a supply chain platform, created by a Singaporean start-up and intended to bring traders together, provide market liquidity for metals and minerals commodities (S&P Global Platts, 2018). Royal Dutch Shell launched its blockchain platform Vakt in November 2018 and designated to treat "post-trade transactions of Brent crude" (Payne, 2018). Louis Dreyfus Co. implemented the first blockchain trading platform designated to connect between commodity traders and negotiate and conclude online deals (Terazono, 2018). This leads to a key point: how does the blockchain technology reform the way of trading commodities?

Here, one shall stall and think through the rationale for commodity trading within this digital framework. The blockchain technology is being implemented at different steps of the commodity transaction life cycle and with the collaboration of financial technology solutions offered by banks and financial services (like supply chain management, networking, insurance, forecasting, and crowdfunding platforms, etc.). The future seems to be promising; however, it's necessary to bring to the limelight additional matters on how the blockchain technology drove a radical revolution to commodity trading. What are the aspects of migration to the digitalization age? How commodity industries coped with their management brush up? And, what are the key implications and challenges that commodity industries are effectively exposed to?

The purpose of this chapter is to highlight how the implementation of the blockchain technology has shaped a new way of trading commodities for global companies. This chapter provides relevant examples extracted from the real world, as it tracks records on their experiences in order to properly understand the influence of the blockchain technology on the commodities' business. Specifically, it mainly handles the perceived renovation on each step of the physical commodity transaction life cycle, through the negotiation of the contract terms to the delivery to final clients' companies. Equally, this chapter offers insights on the role of FinTech in transforming the means of trading commodities in the financial markets at different strands: a

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