

13 Blockchain and the Future of the Sharing Economy: A decentralized sharing economy

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Introduction

The sharing economy is a socio-economic system that has changed the meaning of sharing around the world. Similarly, blockchain technology has changed the way of doing business online. Trust was once the main problem in doing business online, while cutting out the middleman was another contentious issue, but the new Generation Z (Gen Z) wants to share more freely and securely. Blockchain is a disruptive technology and Gen Z is the future driver of the economy. Blockchain technology has enabled transactions to be decentralized, secure, and transparent in the sharing economy. Gen Z will be more comfortable with decentralized sharing economy business models in the future. In this chapter, the future of the sharing economy will be discussed under the disruptive technology of blockchain and Gen Z's needs. The first part of the chapter will focus on Gen Z's sharing economy perspective. The second part will cover the sharing economy's transformation into digitalization. The third part will examine the details of blockchain technology and smart contracts. The fourth part is about blockchain technology working systems and models with smart contracts. Finally, the conclusion part of this chapter will deliver an overall evaluation of the integration of blockchain with smart contracts into the sharing economy, with the decentralized sharing economy's benefits and future effects being discussed.

There are many ways for people to exchange goods and services. Many people used to perform all types of exchanging methods between each other in a narrow local environment: trading, lending, and renting involve money exchange; bartering is an exchange of goods, with no money being involved in the transaction; sharing may or may not include the exchange of money during the transaction, but sharing is the oldest way of exchanging goods and services all around the world (Mallinson et al., 2020). Sharing used to be between people who know and trust each other, like relatives or friends.

The resource scarcity and ownership perspective of new generations have created a new model of sharing via online platforms and businesses. This sharing economy was born as a new economic model that enabled the exchange of goods and services among people all around the world who do not actually know each other. The global economic crisis has also played an important role in the development of the sharing economy (Cinjarevic et al., 2019). The sharing economy occurs when people share (peer to peer activity) their unengaged and underused assets (Babkin et al., 2018). This used to take place between friends and family members, but e-business has allowed them to share their unused possessions with anybody who has access to the internet. However, despite e-business having been around for more than 20 years, owners have not been able to conduct transactions without a middleman, like banks. Blockchain technology is appearing to be the perfect solution for sharing economy business owners (Hawllitschek et al., 2020).

Blockchain is one of the latest technologies that will have a significant impact on many different sectors. Even though the technology is at the early development stage, cryptocurrencies, smart contracts, and decentralized applications have begun to influence online and traditional businesses. Blockchain technology will change the sharing economy models because it offers decentralized data storage, communication usage, and trust (Pazaitis et al., 2017; Chang & Wang, 2018). Trust is an important issue for upcoming generations, especially in the sharing economy (Hawllitschek et al., 2018).

Gen Z and the sharing economy

The sharing economy became very popular after ICT enabled businesses to both reach people all around the world and to progress the development of e-payment methods. The sharing economy started in 1995, when eBay launched the world's first auction website (Mallinson et al., 2020). The sharing economy is also known as the peer to peer (P2P) economy; it became very popular when the nature of possession changed for new generations like the Z Generation (Chang & Wang, 2018; Cinjarevic et al., 2019; Schroth, 2019).

Generation Z (Gen Z) comprises people born between 1996 and 2010 (Schroth, 2019). Gen Z people's lives are full of the internet and social media because they were born during or right after the internet boom. The first representatives of Gen Z have graduated in 2020 and have started to work among other generations (the X and Y Generations). Although Gen Z are the next workforce in the job market, they are the target customers in the coming decades as regards the primary consumer market. Gen Z will play an important role as a user and owner of the shared economy, because of

their technological prowess and their attitudes towards possession. As they were born and brought up in internet culture, Gen Z is different from other generations (Schroth, 2019).

Gen Z people are not afraid of technology, unlike previous generations. They are users of technology, which also influences their consumption behavior and attitude. They are much braver and open to taking risks than their families. Gen Z people are achievement-oriented, free spirited, highly educated, technologically sophisticated, have informal communication preferences, are entrepreneurial, self-directed, demanding, materialistic, impatient, instant-minded, and less motivated by money (McGowan, 2018; Schroth, 2019). In the work environment, Gen Z people like to have transparency, flexibility, freedom, and the latest available technology (Schroth, 2019). The smartphone is an inseparable item for Gen Z people. They cannot function without their smartphones, social media, and internet connections (McGowan, 2018).

Gen Z people, who like to share, will continue to be the driving force in the sharing economy concept in the future (Chang & Wang, 2018). Gen Z prefers to share things within a short space of time because they want to have more flexibility and adaptability (McGowan, 2018). Cinjarevic et al. (2019) found that new generations prefer collaborative consumption because they are involved in the process of purchasing, costs, and saving. Gen Z prefers to share taxis, travel, and hotel accommodation, but on their terms, not on terms based on companies' rules and regulations (McGowan, 2018; Schroth, 2019). The nature of the possession of goods has changed with Gen Z. This generation does not want to just own goods and services. Gen Z wants to enjoy a more free, flexible, comfortable, and easy-going lifestyle (McGowan, 2018).

This generation was born in the sharing economy and this is what they know. Gen Z will continue to buy products and services online, and they will continue to demand to have more smart devices for immediate data experiences and rapid consumption. Gen Z wants to do data sharing without any preconceived concerns about confidence, privacy protection, data profiling, and data privacy (McGowan, 2018; Cinjarevic et al., 2019; Schroth, 2019). Therefore, Gen Z will continue to push boundaries and evolve what is possible regarding sharing economy models in the future.

The sharing economy in the digital world

The 'sharing economy', the 'peer to peer economy', the 'collaborative economy', the 'on-demand economy' and the 'platform economy' tend to be used interchangeably to refer to peer-to-peer-based sharing of goods and

services over the internet (Mallinson et al., 2020). A new economic model, which is called the sharing economy, has changed the way to share goods and services (Mallinson et al., 2020). The sharing economy is 'a socio-economic system' (Davlembayeva et al., 2019). This socio-economic system includes peer-to-peer-based activity, using technology to reach suppliers without a middleman, through the pooling of human and physical resources, buying and selling and online platforms (Davlembayeva et al., 2019; Hawlitschek et al., 2020).

One of the unique sides of the sharing economy is the enablement of selling and buying activity among strangers, nationally or internationally. What all definitions of the sharing economy have in common is that sharing through online platforms with strangers, either nationally or internationally, can be done without a middleman (Mallinson et al., 2020). In the sharing economy, there are three key actors: owners, seekers or users, and platforms (Davlembayeva et al., 2019). It also allows someone to have an ownership of something or not to have it. Gen Z do not need to have ownership or possession of something; instead, they prefer to access goods and services at any time they want, or anywhere (Cinjarevic et al., 2019). New generations like Gen Z prefer to use a product rather than be a lifetime owner of it.

Owners and seekers/users access products or services via online platforms. These platforms are a market that provides a link between owners and seekers, with a renting fee (Belarmino & Koh, 2020). Traditional business has some products that are easy to share over the internet while some of them are not: some goods and services involve transfer of ownership, but there are goods and services that are access-based (no transfer of ownership). The ownership concept has also changed for the new generation of sharing economy companies. For example, Uber does not own any cars (Davlembayeva et al., 2019), while Airbnb does not own any properties or rooms, but the digital sharing platform has been valued at \$31 billion because of its business model of selling time in other people's properties or rooms (Belarmino & Koh, 2020). Airbnb offers flexible, easy to access, different choices of unstandardized accommodation. Airbnb sells other people's rooms for a fee, while couchsurfing.org offers rooms for free (Chang & Wang, 2018).

As the generations have changed, the concept of the sharing economy business has also changed, especially in the service industry. Gen Z does not want to own things, it just wants to access them temporarily. New access-based sharing economy business models are more suitable for the service industry. Airbnb, Couchsurfing, Bookabach, and Homeaway are good examples of sharing accommodation platforms (Belarmino & Koh, 2020). Different sectors have sharing economy platforms specializing in specific