

Lytvynenko Inna
PhD Student,
International University of Finance

DOI: <https://doi.org/10.36059/978-966-397-296-1-6>

GLOBAL DEVELOPMENT AND IMPLEMENTATION OF BLOCKCHAIN IN NATIONAL ECONOMIES

The world saw the technology and the first project based on blockchain called Bitcoin in the fall of 2008 (first public release in January 2009). Satoshi Nakamoto, the pseudonym of the author of this technology, sent a letter to a certain group of people, describing the algorithm of his idea. This was the first significant breakthrough in history that would later greatly change the IT project market and leave a mark as one of the most divisive technologies in the public eye. As many believe, the motivation of the creator was to eliminate a third party as an intermediary in the financial matters of two trading parties. In other words, the feature of Bitcoin, a cryptocurrency written on the blockchain, was the ability to transfer digital currency without an additional controlling entity such as a bank or other financial institution.

Blockchain is a foundational technology: It has the potential to create new foundations for our economic and social systems. But while the impact will be enormous, it will take decades for blockchain to seep into our economic and social infrastructure. The process of adoption will be gradual and steady, not sudden, as waves of technological and institutional change gain momentum [2].

Blockchain technology is a chain of blocks containing data, which increases in size as miners add new blocks with records of the latest transactions. The primary innovation of this technology lies in its architecture, which enables decentralized transactions distributed across all participants in the process.

An estimated 3.9% of the global population uses cryptocurrency. This means that there are more than 300 million people who use cryptocurrency – and, by extension, blockchain – around the world.

Table 1

The breakdown of the number of cryptocurrency users by continent

Continent	Number of Cryptocurrency Users
Asia	160 million
Europe	38 million
Africa	32 million
North America	28 million
South America	24 million
Oceania	1 million

About 400,000 Bitcoin transactions take place each day. This is the rate as of January 2021, and just one month before, in December 2020, there were about 330,000 daily Bitcoin transactions taking place [4].

The blockchain industry is worth \$11.54 billion. This is the valuation of the global blockchain technology industry as of 2022 and is expected to grow to \$162.84 billion by 2027. The value of the global blockchain market in 2022 will reach 100 times his value of \$1.57 billion in 2018, so from 2022 to 2027 it will increase 100 times in 5 years grow up. A key factor influencing the market capitalization of the blockchain industry is the total global spending on blockchain solutions. It was just \$750 million in 2017 and is expected to reach \$11.7 billion by 2022, a compound annual growth rate of 73.2%.

The blockchain industry is developing by a CAGR of 85.9%. This is often the evaluated compound yearly development rate from 2022 to 2030. In 2022, the worldwide blockchain innovation showcase is evaluated to be worth \$11.54 billion, and in 2018 it was fair \$1.57 billion. By 2027, the advertise is anticipated to reach a valuation of \$162.84 billion. The financial services industry is the most player within the blockchain advertise, bookkeeping for more than 38% of the worldwide market's income in 2021, the biggest share of any industry. This isn't shocking since 90% of the major U.S., Canadian, and European banks are either arranging to consolidate or have joined blockchain innovation into their operations.

The showcase pioneer in blockchain innovation is the Joined together States. From 2017 to 2022, the nation was assessed to account for 36%

of the worldwide blockchain market’s income, the foremost of any nation.

Table 2

Country	Implementation	Year
Switzerland	the province of Zug	November 15th, 2017
Chile	the Energy Department	April 19th
Estonia	blockchain-based E-resident programme	December 18th, 2017
UK	welfare payment and student loans	August 3rd, 2016
Georgia	land titles on blockchain	December 3rd, 2017
Australia	tourism in Queensland	Recently
Singapore	Finance Department	October 13th, 2017
Venezuela	Petro Coin Venezuela’s Primary Currency	At the dawn of 2018
USA	for democracy and decision making	May 2018
Sweden	land registry	
Brazil	write laws and petition processing on ETH	
Dubai	all government departments	
Canada	government grants on Ethereum	
Indonesia	data management	May 6th, 2018
India	digital economy	February 1st
European Union	information exchange	April 11th, 2018
Ukraine	voting	August 2018

The U.S. moreover has the most noteworthy share of blockchain-related work openings, with almost 50% of the world’s open positions. As distant as businesses go, the back industry leads the charge in blockchain innovation, bookkeeping for 38% of the market’s worldwide revenue in 2021. This can be fueled, in portion, by a critical number of banks effectively moving toward executing blockchain innovation – 90% of the major banks within the U.S., Canada, and Europe are either looking into it or have as of now actualized it.

References:

1. Deloitte Insights. "Deloitte's 2021 Global Blockchain Survey. A new age of digital assets", 2022.
2. Iansiti, Marco, and Karim R. Lakhani. (2017) The truth about blockchain. *Harvard business review*. № 95.1. P 118–127.
3. Irish Tech News. "Global Blockchain Adoption: Which Countries are Leading the Charge?" URL: <https://irishtechnews.ie/global-blockchain-adoption-which-countries-are-leading-the-charge>.
4. Zippia. "20+ Essential Blockchain Statistics 2023: Market Size + Trends" URL: <https://www.zippia.com/advice/blockchain-statistics>.