BLOCKCHAIN TECHNOLOGY: FUTURE IN THE FINANCIAL SECTOR

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"Blockchain technology continues to redefine not only how the exchange sector operates, but the global financial economy as a whole." - Bob Greifeld, Chief Executive of NASDAQ

A new technology in the FinTech Industry, blockchain, is widely talked about. Its concept has energized the financial services industry globally and already brought a disruption in the industry. The influential non-profit believes blockchain will one day be as ingrained in financial services as past innovations like mainframes, messaging services, and electronic trading have become. We bring you the overview, technology, application areas and use cases of the blockchain.

A blockchain is a public ledger of all bitcoin transactions that have ever been executed. A block is the "current" part of a blockchain which records some or all of the recent transactions, and once completed, goes into the blockchain as permanent database. Each time a block gets completed, a new block is generated. Blocks are linked to each other (like a chain) in proper linear, chronological order with every block containing a hash of the previous block. The full copy of the blockchain has records of every transaction ever executed.

Blockchain has been one of the most awe-inspiring innovations since the Internet came into existence. Blockchain technology basically allows everyone to hold and make transactions as strangers but in a completely transparent manner. There is no mediator in between two people making the transaction, and the entire process becomes easier and cheaper. This concept can be applied to the entire digital world making any kind of exchange/transactions secure.

The interest of financial institutions on blockchain is quite evident considering that Santander Bank, the world's 10th largest bank, has identified 20 to 25 use cases for the technology. The Deutsche Bank has said that it has been exploring various use cases of blockchain in areas like payments and settlement of fiat currencies, asset registries, enforcement and clearing derivative contracts, regulatory reporting, KYC, AML registries, improving post-trade processing services, etc. NASDAQ initially revealed that they were planning to use blockchain as an enterprise-wide technology to enhance their capabilities on the NASDAQ Private Market Platform. Goldman Sachs participated as a lead investor in bitcoin startup Circle Internet Financial Ltd.'s.

UBS has a cryptocurrency lab in London and is experimenting in the areas of payments, trading & settlement, smart bonds.

For now a vast swathe of Blockchain start-ups are focusing on the development of solutions for the financial services industry:

- Provide customers with access to crypto-currencies and support crypto-currency-related financial services
- Track and settle both digital and mainstream financial assets in a cryptographically secure environment
- Reduce the complexity and number of intermediaries involved in existing transaction processes
- Better manage digital risk (e.g., settlement risk, custodial risk, counterparty risk)
- Develop distributed ledger based alternatives to traditional financial services infrastructure and processes
 - Improve the ability to verify historical transactions

Although we are not going to see a blockchain technology causing a paradigm shift in the near term, we are most definitely seeing a voracious interest in the underlying technology and its cross industry potential use cases.

MODERN VIEW ON THE PROBLEM OF INEQUALITIES IN THE CONTEXT OF SOCIO-ECONOMIC DEVELOPMENT

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At present, it is fashionable to discuss capitalism as never before. The reason for it is the book by French economist Thomas Piketti *Capital in the 21st Century*, which has become a bestseller in the West. Picketti analyzed macroeconomic data of the US and European countries over the past century and a half and came to the conclusion that today capitalism and social inequality play into the hands of the rich minority.

Capital in the Twenty-First Century is primarily a book about the history of the distribution of income and wealth. The first objective in this book is to present the body of historical evidence, and try to analyze many economic, social, and political processes that can account for various evolutions that we observe in different countries since the Industrial Revolution.