

Blockchain technology its disruptive impact of financial intermediaries

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CHAPTER 1

1.1 INTRODUCTION

Blockchain technology is changing the financial industry and is capable of majorly disrupting traditional finance. Essentially, blockchain is a shared digital log that handles transaction securely, transparently and in a way that can't be changed, without the requirement for a single authority, allowing individuals to exchange money directly with one another.

One can really see how blockchain changes things in areas dealing with payments, trading, cross-border transfers and asset transactions, for example by eliminating intermediaries it can make transactions faster, cheaper and safer.

In addition, smart contracts may make it possible to automate tasks that need human input such as complicated financial processes, using blockchain.

The rise in adoption of cryptocurrencies, DeFi and CBDCs is causing traditional banks to introduce new ways of operating, as blockchain offers potential for better efficiency and more inclusion, but brings up many concerns that need to be dealt with.

Blockchain is bringing big changes to financial intermediation and the results, issues and future outlook of these changes are being explored.

After being recorded on a blockchain, data cannot be changed, making fraud very difficult. Blocks dependence on a single authority, making systems safer from hackers and corrupt people. Records of all transactions are stored and given to authorized participants which helps build trust in finance, supply chain and voting systems.

Banking alternative is now available to people without a bank account with cryptocurrencies like bitcoin and Ethereum.

Provides people with tools to manage their own data and identify securely which is vital considering the many data breaches observed these days. is used in voting, land registries, healthcare operations, welfare payment and other important services to cut fraud and improve efficiency.

Blockchain can do much more than cryptocurrencies. It is giving rise to a new way of storing, checking and sharing data making processes more secure, transparent and efficient across many businesses. Because both public and private organizations are more interested, there is a need to learn about what demand blockchain can provide and where it has shortcomings. Because there are many data breaches and cases of fraud today, blockchain provides stronger security and

honesty which make it important to study further. Because there is no universal or standard approach, research can help develop universal best practices.

Since blockchain keeps developing, there are many opportunities for new ideas, so it must be studied regularly to see how it will fit with AI and IOT. Policy and regulation matters: when it comes to lawmaking, research gives more insight to guides decisions. King must work on this research to address gaps, give advice on decisions and help the industry grow sustainably.

Blockchain technology is studied in domains that represent its wide-ranging, fast-developing characteristics. Here I will provide a quick outline of the main sections:

Scalability issues:

- Bitcoin and Ethereum classically don't handle a lot of transactions per second (bitcoin -7 Taps, Ethereum -15tps).
- Increased network traffic from many people using the system.
- Users have to wait for a long time for blocks to be confirmed.

Energy consumption:

- Consensus methods based on a lot of energy usage like proof of work
- Environmental factors, mainly affecting older blockchain blockchain network.

Not knowing what legal rules will apply:

- A clear set of laws is missing in many countries.
- Different countries have different policies which causes the system to be used unevenly.

Interoperability:

- Blockchain networks are unable to communicate easily with each other
- Reliance on bridge services introduced by other providers which makes the systems less secure.

How usable and easy to use an app is.

- Non -technical people may struggle because the interfaces are difficult to learn.
- Hard to get help from their customer service and you can't reverse your transactions.

Cost and the state of the structures:

- Fees can become very high when many people are using popular blockchains.
- It is necessary to have strong hardware and good internet to run each node.
- Blockchain technology is a revolutionary and block chain structure of blocks and distributed network enables secure, transparent transaction without centralized control.
- This technology disrupts financial intermediaries and transforms how financial commodities are traded tracked and managed.

1.2 OBJECTIVE OF THE STUDY.

- Asses the redistribution of value and control:

The redistribution of value and control refers to the way in which economic, social and relocated in different group with society. the redistribution of value and control is a complex and multifaceted issue that requires a nuanced understanding.

An effective assessment should consider the interplay between these factors, the historical context of inequalities and the potential for transformative change through policy intervention and movement. engaging with diverse perspective is crucial in evaluating the effectiveness of redistribution efforts and their impact.

- Examine how blockchain reduces the need for traditional intermediaries:

It seems like your question is about examining how to block and reduce the need for traditional intermediaries in the context, possibly related to business. Traditional intermediaries are entities that facilitate transaction between two parties. By examining how to block and reduce the need for traditional intermediaries, origination can streamline process, cut costs and foster innovation. however, careful consideration of the associated risks and challenges is essential for successful implementation.

- To examine real world application block chain:

Blockchain technology has numerous real-world applications across various industries. each participate in the supply chain (manufactures, suppliers, distributors, retailers) can access a shared blockchain that records every transaction involving the product. this includes details such as production dates, shipment tracking and quality checks.

These examples illustrate how blockchain technology can transform traditional process in supply chain management and financial services, providing enhanced transparency, efficiency and security .as adoption continuous to grow, we can expect to see even more innovation application across various sector.

CHAPTER -II

2.1 Literature review

In the last ten years, many people have become interested in blockchain because it could greatly change the way financial systems work. In 2008, a person called Satoshi Nakamoto introduced Blockchain as the basis for Bitcoin. It was created to let people transact safely and openly, without needing a central authority. Basically, blockchain maintains a ledger of transactions on many computers in the network, making the data impossible to alter and capable of verification. The aim was to make a system where people could interact financially without the help of intermediaries like banks or payment companies (Nakamoto, 2008).

In order to build trust, traditional finance depends on banks, brokers and clearinghouses. They manage the books, handle transactions, store cash and validate who people are. Foundational though they are, these services have obstacles such as high transaction fees, slow settlement and a lack of openness. Having a centralized system makes it more likely for fraud to happen, for major errors to cause breakdowns and for the whole system to fall apart in crisis times. Blockchain divides the work of keeping records and validating transactions among everyone in the network instead of giving that role to just one organization.

According to the World Economic Forum (2020), blockchain technology could greatly change the financial industry. It indicates that because of blockchain, operating expenses decrease and times for completing financial activities are reduced, with much better security, traceability and transparency. Cross-border payments that usually need several days and many banks to complete can be done in minutes using technology based on blockchain.

For a great deal of time, financial intermediaries have played a key role in the way today's economies function. Banks, insurance companies, investment groups and clearinghouses make up these organizations which link the different parts of the financial system. Their direction is to streamline the process of transferring money for people who don't know each other well. People known as intermediaries link buyers with sellers which makes it more convenient and less risky to transfer information and trade.

As pointed out by Mishkin (2015), it is the work of financial intermediaries that allows savers with extra funds and those in need of capital to connect. In fact, commercial banks help the economy by lending money to people, companies and governments after receiving deposits from the public. Intermediaries give loans, but they also do jobs like transferring funds, helping with investment decisions, pooling risks with insurance and looking after customers' assets.

You need to trust your partner a lot during these procedures. To make sure their clients' money is safe such institutions invest in maintaining their reputation, keeping client information secure and meeting the law's demands. But there is a

cost to pay for these benefits. Banks and other such institutions typically charge a lot for things like interest, brokerage fees, transaction costs and management expenses. Besides this, it was revealed during the 2008 global financial crisis that they create the risk of fraud, leaks of information, system breakdowns and systemic collapse since they rely on central systems.

The financial sector is often seen as a key industry where blockchain might make a big difference, according to written works. One of the main ways to understand disruptive innovation is through Clayton Christensen's Theory of Disruptive Innovation (1997). The theory states that such technologies usually start by addressing a niche or overlooked market and only once they are refined do they replace or challenge older technologies. Blockchain is regarded as disruptive technology in finance because it questions the basic ways traditional financial services are handled and the role of central authorities in them.

Because they use centralized models, traditional financial intermediaries are required to manage ledgers, handle value storage and transfers and verify people's identities. Despite some achievement, they often come with big costs, long processing times, poor visibility and vulnerability to problems in the system. Unlike traditional methods, blockchain relies on decentralized architecture and gives confidence to technology, mainly distributed networks, agreement processes and cryptography.

Catalini and Gans (2016) discuss one of the main economic impacts of bitcoin. Because of blockchain, it is now possible to avoid a central authority and reduce two kinds of expenses: spending less on connecting parties involved in transactions and spending less on identification verification. Since blockchain technology slashes the expenses, it allows people to exchange money directly with each other without having to check their transactions with a third party. As a result, the new systems are faster, more affordable and open, while including more people.

The practical and concrete examples used to assess blockchain technology are confirming why it is attractive on paper. Many financial sectors, including trading, lending, asset management and payments, are currently testing and using blockchain, regularly with excellent results. They present real cases that show blockchain replacing traditional financial services.

Cross-border payments which has been managed mostly by banks and the SWIFT network, is considered a key example. Because there are many intermediaries in each transaction, using traditional methods to send money internationally often means it takes a long time and it's expensive, with little transparency. Alternatively, Stellar and Ripple among blockchain-based platforms have found ways to reduce the fees and speed up transactions. To illustrate, Ripple's network uses its digital asset (XRP) to bridge currencies on demand and allows for immediate payment settlement. Likewise, Stellar tries to help financial institutions handle faster, less costly transactions in developing nations. Li and Wang (2019) say this proves blockchain can ease some of the biggest inefficiencies in the international finance sector.

Extremely useful platforms like Ethereum make it possible to conduct transactions using smart contracts which programmable finance relies on heavily. Because of these agreements, transactions between banks can be completed automatically and without relying on middlemen. Because of blockchain, a new sector, Decentralized Finance (DeFi), has come into existence with services similar to those offered by traditional banks. More than \$50 billion worth of digital assets currently circulate on platforms including Uniswap (used for decentralized trades), Compound (for deposits and borrowing) and Aava (engaged in lending). Trading, lending, borrowing and earning interest through these platforms do not require users to deal with a bank, broker or centralized exchange.

Blockchain technology seems very promising for the future of financial intermediation, but it has some issues. A number of people from academia and the business field have issued an alert that the use of blockchain in critical financial structures raises several new and perplexing challenges.

Scalability is currently one of the biggest problems in programming. Increasing numbers of participants and organizations using blockchain means more data is handled on the network. Public blockchains, like Bitcoin and Ethereum, have seen many transactions during busy periods which has resulted in things like sluggish processing and costlier transactions. Yermack (2017) indicates that although blockchain may cut down costs and speed up transactions in theory, it often faces

issues processing high transaction volumes at the speed global financial markets need. Until it is solved, blockchain cannot fully take over traditional systems except by adding new features.

Other problems include the dependability and security of smart contracts. Smart contracts are needed to run decentralized finance (DeFi) systems, as they carry out selected actions automatically. They are also subject to vulnerabilities and mistakes in code. Many times, flaws or exploits in smart contracts have led to tremendous financial loss. To demonstrate why trust in these systems is sometimes lost, look at the 2016 DAO hack which saw \$60 million in Ether disappear. Even though blockchain alone may be secure, since it has cryptographic features, many of the applications built on it are commonly less secure. Yermack (2017) points out that strong auditing and quality assurance paired with more automation is needed to avoid any surprises.

Not knowing what rules will be put in place is hard for businesses. Because blockchain is used globally and not always controlled by traditional regulations, it causes major legal and compliance problems. Zetsche et al. (2020) point out that centralized financial companies often have more accountability than decentralized platforms which raises doubts over consumer safety, compliance with AML rules and stability in the financial sector. When regulation is not managed from a central point, it is hard to take action against fraud, loss or wrongdoing. Since many blockchain platforms offer anonymity or pseudonymity, it is harder to monitor criminal activity.

The texts available on how blockchain affects the financial industry give a detailed and evolving look at what it can do well and what its weaknesses are. Many academics, business people and users of blockchain believe that it means a key shift in the way data, value and trust are managed systemically. Because it introduces decentralized trust, this tech tries to change the role of central, traditional financial companies like banks, clearinghouses and payment processors.

Many positive features of blockchain-based approaches have been pointed out by research. In the first place, using automation and relying less on external help, the technology allows the system to work faster. Also, since all transactions on a public blockchain are time-stamped and can be checked, this encourages greater transparency and easier audits. In addition, since blockchain cuts out intermediaries, allows direct transactions and reduces paperwork, it results in saving money. The benefits are clear in real-life cases like lending, trading through DeFi with Aava, Compound and Uniswap and cross-border payments with Ripple and Stellar, because there has been a real improvement in both speed and cost.

Some studies within the literature list valued obstacles that may change or stop blockchain from achieving its disruptive nature. Growing and more complex blockchain networks mean problems of scalability, interoperability and smart contract security will keep appearing. Because there is no clear accountability in decentralized systems, governments and regulatory bodies have difficulties handling them and what regulations they want to use. Some regulators hesitate to use blockchain immediately because they are concerned about fraud, consumer rights, ensuring the financial system is stable and money laundering.

One significant finding from the literature is that the influence of blockchain on financial intermediation might not be solely based on displacement, meaning that traditional institutions might not be completely replaced. Rather than entirely replacing current structures, a growing number of academics suggest a hybrid model in which blockchain enhances them. For instance, rather than completely renouncing their roles, some traditional banks are incorporating blockchain to enhance their back-office operations, settlement systems, and compliance mechanisms. According to this perspective, blockchain serves as an enabling technology that creates new efficiencies in the current financial ecosystem and makes new, decentralized options available to people who are underserved or excluded by traditional institutions.

CHAPTER- III

2.2 RESEARCH METHODOLOGY

Since it could disrupt common methods of moving money and investing, blockchain is being spoken about and recognized more internationally. Clearinghouses, banks and brokers used to protect and smooth the process of economic transactions. Because of them, it is possible for today's financial markets to efficiently manage, distribute and handle payments in all parts of the world. Even so, there are disadvantages; this has led many to look into other alternatives, because of

inefficiency, high cost of running these institutions, lack of clarity about how they are run and worries about risks from having everything controlled in one place.

In 2008, Satoshi Nakamoto came up with blockchain which he eventually used to make Bitcoin, allowing people to send money between each other online without involving third parties and restoring trust among individuals. While centralized authorities would continue to manage records and transactions before, blockchain challenges this by applying distributed ledger to secure, transparent and unchangeable records.

The focus of the study is to determine how much blockchain impacts regular financial intermediation, how it helps in decentralizing banking activities and what changes this brings to the system's strength, effectiveness, cost savings and level of openness. It also tries to see if blockchain can fully replace financial experts or if it is more useful to simply strengthen existing financial methods.

Those who design regulatory rules, run financial institutions and study new ways in banking all need to know about technological changes. Because this field is exploratory and mostly theoretical, the entire research process is secondary in nature, giving us the ability to examine existing academic papers along with reports from the industry, whitepapers, case studies and regulatory studies. Using this process, learners can fully understand how blockchain technology disrupts various industries and its effects on the economy and social areas.

I began by searching and choosing secondary resources that were believed to be meaningful for the research. The sources used were scholarly journal articles, higher education books, papers, case studies and official reports from institutions and companies such as the International Monetary Fund, World Economic Forum and others. Because rigor and thoroughness were important, scholars followed a detailed procedure to closely evaluate each source. To identify the three main themes relating to financial intermediaries, blockchain and practical applications disrupting traditional financial services, a preliminary analysis of the literature was performed.

To evaluate and compare the different opinions, research used case studies, theories and data from experiments. A solid theoretical foundation was created by including popular models like Christensen's Theory of Disruptive Innovation. Several cases such as decentralized finance and blockchain-based financial platforms were used to explain how practical disruptions happen. The research also tried to weigh the advantages as well as the negative side of blockchain, relying on prior studies. The study achieved a detailed and well-supported view of blockchain's disruptive effects on financial industries because of its careful and systematic approach.

In order to fully investigate the changing effects of blockchain technology on financial intermediation, the study uses a qualitative, descriptive, and analytical design. Because it allows for a thorough comprehension of intricate processes, historical contexts, and new trends without depending on numerical data, a qualitative design was selected. When examining phenomena like blockchain technology, which entail novel, complex, and dynamic alterations to established financial structures, qualitative research works especially well.

The research's descriptive component aims to provide a methodical and understandable explanation of how blockchain technology works, the roles that traditional financial intermediaries play, and how blockchain disrupts these established systems. The study establishes a solid foundational understanding required for more complex analysis by thoroughly describing these components.

It is necessary to use analysis when dealing with the findings obtained from secondary sources. It allows us to see major trends, links and important differences between financial systems that work on blockchain and those that do not. To make sure the study reviews and judges' possible impact of blockchain innovations, similarities and differences are spotted and compared.

Furthermore, a lot of effort is given to thematic analysis, helping to group the collected literature into themes such as decentralization, trust distribution, transaction efficiency, vulnerabilities in security and difficulties with regulations. Stellar, Ethereum, Ripple and two DeFi platforms, Aava and Uniswap, are studied and discussed to support each theme.

When looking at how blockchain technologies may take over or gradually work alongside traditional intermediaries, the analysis also employs Christensen's Theory of Disruptive Innovation. Thus, the design fosters controlled, careful thinking

and talking rooted in the main objectives of the study, also providing useful insights about future trends in the financial industry.

The study mainly depended on a literature review matrix because it relied only on information from secondary sources. It was designed and put in place to make sure a broad selection of secondary data was gathered, categorized, assessed and combined carefully. It gave a framework for recommendations which made dealing with all the different data from institutions, businesses and academia far simpler.

Data was set up in the matrix following important dimensions. Among these were the main features of traditional financial intermediaries, the technological aspects of blockchain, the ways blockchain has changed financial services, the expected improvements in efficiency and visibility and concerns about scalability, hacking and policies. So that the analysis is thorough, each text was examined using these given dimensions.

All key data from sources was carefully included in the matrix, including the name(s) of the authors, the year of publication, the methods used, the main theories, the main conclusions and their relevance to blockchain and financial intermediation. Because the researchers could look at several studies in comparison, the research covered individual experiences and also showed what was common, what was new and where people might have differing views in the area.

Academic rigor was assured through using strict standards to select and organize the literature. The evidence was categorized by how strong it was, how credible the journal or organization was and how recently the study had been done (focusing on recent studies unless the subject couldn't progress without foundational ones).

Also, the analysis of the research was largely guided by the matrix. The analysis pointed out where important information is missing, contradictions among sources, uncertainty and what needs further research. This means the systematic literature review matrix worked as more than a tool for organizing information; it was crucial for presenting all the research on blockchain's influence on the finance industry in a cohesive and orderly manner.

The study used methods that allowed it to get original information about how blockchain disrupts the flow of funds and financial services. Comprehensive insights were obtained by conducting interviews and surveys with a prominent group such as financial experts, blockchain designers, lawmakers and researchers. A purposive sampling technique was used to select respondents who possess relevant experience or knowledge about blockchain and financial systems. The survey included both open-ended and closed-ended questions designed to capture quantitative trends and qualitative insights. Interviews were conducted with experts to gain a deeper understanding of practical disruptions, perceived benefits, regulatory challenges, and technological limitations associated with blockchain technology.

The primary data was collected over a span of four weeks using digital communication tools such as Google Forms, Zoom, and email correspondence to ensure accessibility and efficiency. Responses were securely recorded and anonymized to maintain confidentiality and comply with ethical standards. A thematic analysis was applied to the qualitative responses to identify major recurring themes, while descriptive statistics were used to summarize and interpret quantitative responses.

This hands-on approach allowed the study to generate original insights and capture up-to-date industry perspectives, enriching the overall analysis with firsthand empirical evidence and bridging the gap between theory and real-world application.

It was much easier to perform secondary research through the help of several digital tools and platforms. Precision and accuracy in citing scholarly references were attained by ordering and managing them with Mendeley and Zotero. Google Docs and Microsoft Word were both used to help draft, edit and format the research manuscript. Using software like Turnitin for plagiarism detection helped to ensure integrity by preventing mistakes and checking for originality. Students turned to Google Scholar and ResearchGate to gather and examine academic text. They made sure the study was built on recent information by giving access to various peer-reviewed articles, working papers and reports from the industry.

Even though this article points out how blockchain is disrupting financial intermediation, its results are limited by specific problems in the methodology. As all data is taken from studies or reports that have been carried out before, the researcher

depends on these sources for availability, quality and range. As the study was based on original sources, any biases, errors or errors they hold could have influence its results.

Another challenge is how fast blockchain technology is improving. With blockchain constantly developing and new applications showing up, the data looked at may lose relevance or become obsolete with time. Consequently, capturing the ongoing changes in economics and predicting new ones is quite hard.

Because the study does not collect primary data directly, it cannot get the most recent information straight from developing companies, people involved in blockchain, financial groups and industry experts. More details and accuracy might have been added to the analysis by using such accounts.

Because different countries may have diverse laws, how quickly they adopt innovations and how mature their markets are, geography is another factor that affects research. Even so, since this field looks at the world as a whole, the study does not compare regions in detail.

The language barrier was a small challenge too. The research mainly included English sources which could have prevented it from finding important studies in other languages that might have improved the findings.

Even though these are major problems, the study remains a reliable effort that delivers significant analysis by evaluating numerous secure secondary sources. The methodology used in the study, stressing clear secondary research, was built on a proper academic model. A wide variety of sources such as findings from studies, research articles, case studies and reports on industries, have been carefully collected and evaluated in this study to show how blockchain changes the financial sector.

Depth is valued in the study, as researchers use detailed, written and analytical methods instead of trying to generalize with numbers. The description enables a clear and organized explanation of old financial models versus new blockchain systems and a qualitative approach lets us study the detailed features and changes of blockchain technology. Through comparative study, thematic analysis and finding important patterns between traditional and decentralized systems, the method continues to improve.

Digital support was provided by reference systems like Mendeley and Zotero which made it easier to handle sources, by using software such as Google Docs and Microsoft Word to write assignments and using software that identifies plagiarism, allowing the research process to be more organized and of high quality. For the study to rely on solid evidence, information was gathered from JSTOR, ScienceDirect and ResearchGate which are complete literature databases.

A systematic literature review matrix was the main tool, allowing me to organize and put side by side data about centralization, transaction speed, transparency, problems with regulations and security challenges. By using this method, researchers could more accurately examine how blockchain works and identify emerging patterns and parts of blockchain that have yet to be studied.

Even with its shortcomings, its process is effective, given the main used sources are secondary and despite the quick development and complexity of blockchain technology. It describes how blockchain is playing a part in changing the ways financial intermediation works. This study provides a good base for academic research and explains well how the financial sector keeps transforming due to blockchain thanks to careful analysis and comprehensive use of many solid sources.

CHAPTER -IV

4.1 DATA COLLECTION

A survey was carried out for data collection which was next studied using tables with proper descriptions. The data was handled with care and the outcome is seen as logical.

4.2 ANALYSIS AND INTERPRETATION PERSONAL

INFORMATION:

1.) Gender of the respondent:

Table 1.1

Gender	No of respondent	Percentage
Male	15	39.5
Female	21	55.3
Prefer not say	1	2.6
Other	1	2.6

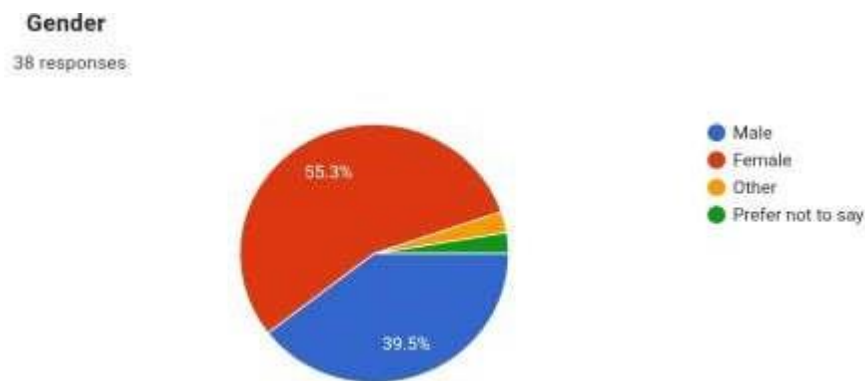


FIGURE 1: GENDER OF THE STUDY

INTERPRETATION:

We see from the table that out of the 38 respondents who completed the questionnaire, 15 are (male), 21 are (female) and 1 are (prefer not to say). Majority of respondents state they are female, filling around 51% of the sample. Around 39% identify as male and the other two groups are quite small.

1. AGE FACTOR OF THE RESPONDENTS

Age bracket	No of respondent	Percentage
Below 18 years	3	7.9
18-25 years	28	73.7
26-35 years	6	15.8
36-50 years	1	2.6
Above 50 years	0	0

Age

38 responses

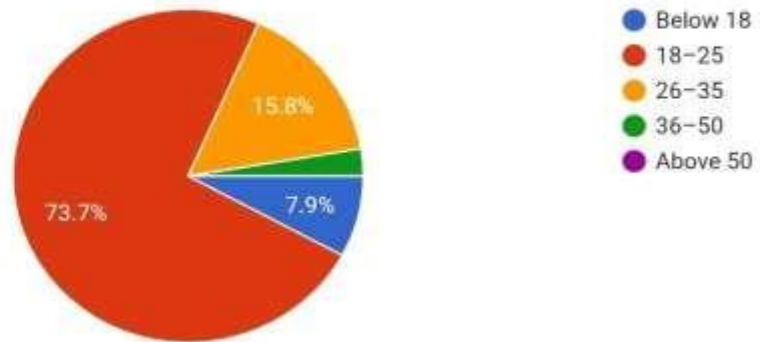


FIGURE 2: AGE FACTOR OF THE STUDY.

INTERPRETATION

Among the participants, those who are aged 18-25 make up the highest group (73.7%) and there are 15.8% who are 26-30, 7.9% below 18, 2.6% between 36 and 50 and no participants are above 50 years old. The survey mainly captures the opinions of people who are young. This is by far the biggest of the six groups in red; it means almost three out of every four people who responded fell in that age group. As you can see, in orange, so there are more of them. Nearly all students or nearly one hundred people, are under the age of 36 and only a single person (aged 36-50) is present.

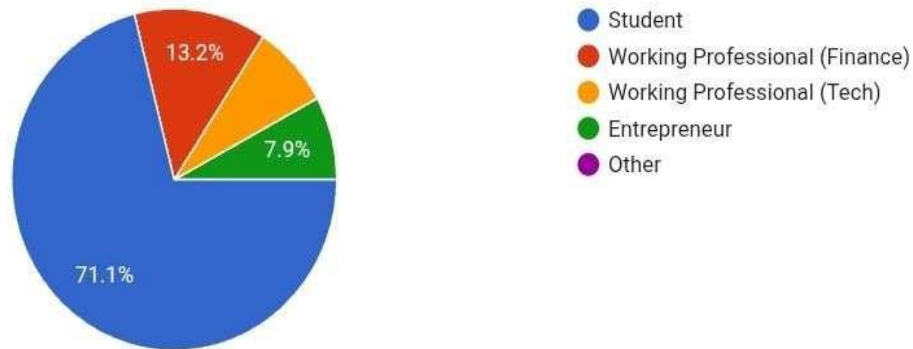
2. OCCUPATION

Occupation	No of respondent	Percentage
Student	27	71.1
Working professional (finance)	5	13.2
Working professional (tech)	3	13.2
Entrepreneur	3	7.9
Other	0	0

Occupation



38 responses



INTERPRETATION:

Of the responses, the largest group was students (71.1%), followed by working professionals (13.2%) and entrepreneurs (7.9%). An occupation of student is seen as better than others and a second one with a professional (finance) background comes after that.

FIGURE 3: OCCUPATION OF THE STUDY.

4. EDUCATION QUALIFICATION

Education	No of respondent	Percentage.
Under graduate	31	79.5
Post graduate	6	15.4
Professional certificate	2	5.1
PHD/ research scholar	0	0

Education Qualification

39 responses

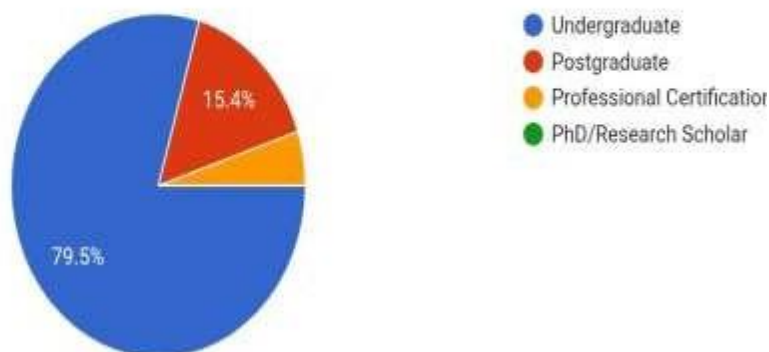


FIGURE 4: EDUCATION QUALIFICATION

INTERPRETATION:

The biggest portion of this student is in the undergraduate level (79.5), followed by the postgraduate level with (15.4) and the rest is in the professional certification category (2.6). (0) indicates a new research scholar in the ph./D program. Many

use blockchain as students than other postgraduate and professional certificate & ph./d research scholar because educational qualifications are student.

5. HOW FAMILIAR ARE YOU WITH BLOCKCHAIN TECHNOLOGY.

Option	No of respondent	Percentage
Not at all familiar	8	20.5
Slightly familiar	16	41
Moderately familiar	11	28.2
Very familiar	4	10.3
Expert	0	0

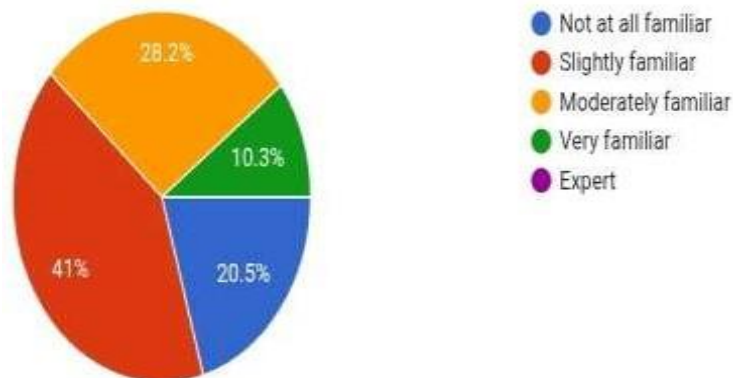


FIGURE 5. FAMILIAR OF THE BLOCKCHAIN

INTERPRETATION:

Around 41% of participants handpicked the coverage in familiar products than any other which is more common as the participants were familiar with products.

6. DO YOU BELIEVE BLOCKCHAIN CAN REDUCE THE NEED FOR FINANCIAL INTERMEDIARIES LIKE BANKS OR BROKERS.

Option	No of respondent	Percentage
Yes	19	48.7
No	7	17.9
Not sure	6	15.4
Maybe	7	17.9

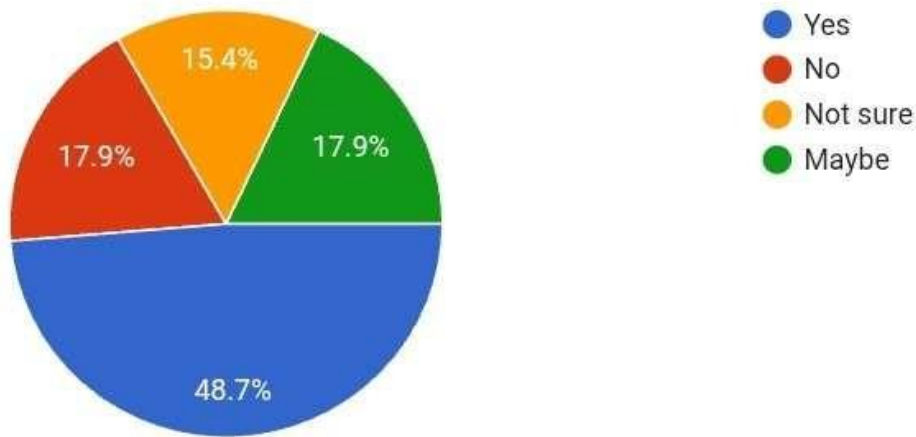


FIGURE 6. FINANCIAL INTERMEDIARIES LIKE BANKS AND BROKERS

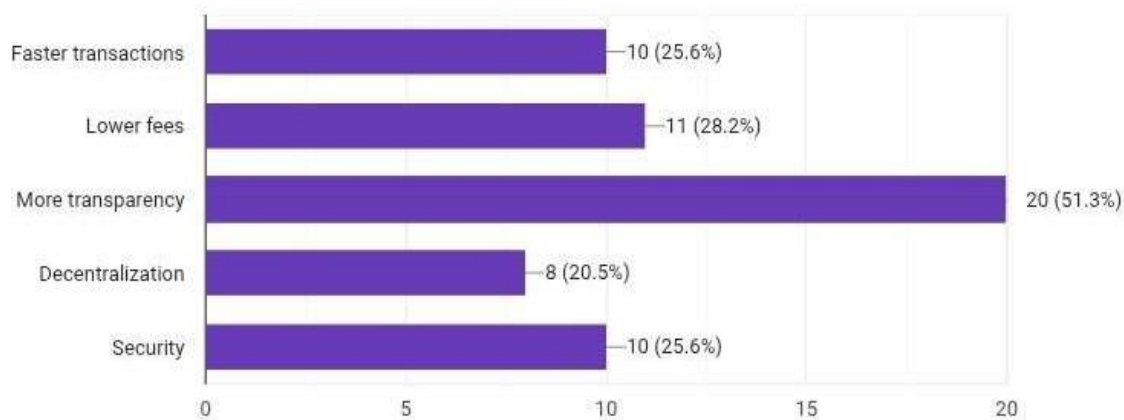
INTERPRETATION

The pie chart shows that most people (48.7%) believe blockchain will replace more financial intermediaries, compared to the people who have doubts in the system (17.9%). Because many people prefer to work with blockchain because it gets the job done efficiently.

7. WHAT DO YOU THINK IS BIGGEST BENEFIT OF BLOCKCHAIN IN FINANCE?

Benefits	No of respondent	Percentage
Faster transaction	10	25.6
Lower fees	11	28.2
More transparency	20	51.3
Decentralized	8	20.5
Security	10	25.6

FIGURE 7. BENEFITS OF BLOCKCHAIN



INTERPRETATION

The highest part (51.3%) is the most transparency & (28.2%) is the lower fees less than highest. (25.6%) in the faster transaction & security. (20.5%) in the decentralized. 51.3% are most transparency because in a finance transparency of details are important for growth of business and rather than others.

8. HAVE YOU EVER USED ANY BLOCKCHAIN BASED FINANCIAL PLATFORM?

Option	No of respondent	Percentage
Yes	19	48.7
No	20	51.3

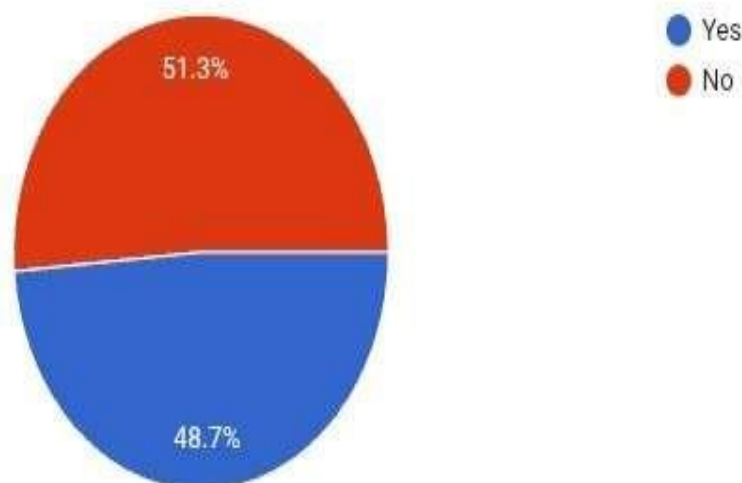


FIGURE 8: USES OF BLOCKCHAIN BASED ON FINANCIAL PLATFORM.

INTERPRETATION:

The more used blockchain platform (52.6%) is the yes & (47.4%) is the no in this pie chart. Because mostly financial intermediaries use the blockchain for work done easily and effective and efficiently and work done by full security.

9..IN YOUR OPINION, WHICH SECTOR WILL BLOCKCHAIN DISRUPT THE MOST IN THE NEXT FIVE YEARS?

Sector	No of respondent	Percentage
Banking	16	40
Insurance	4	10
Real estate	7	17.5
Education	3	7.5
Healthcare	2	5
Government	2	5
Not sure	6	15

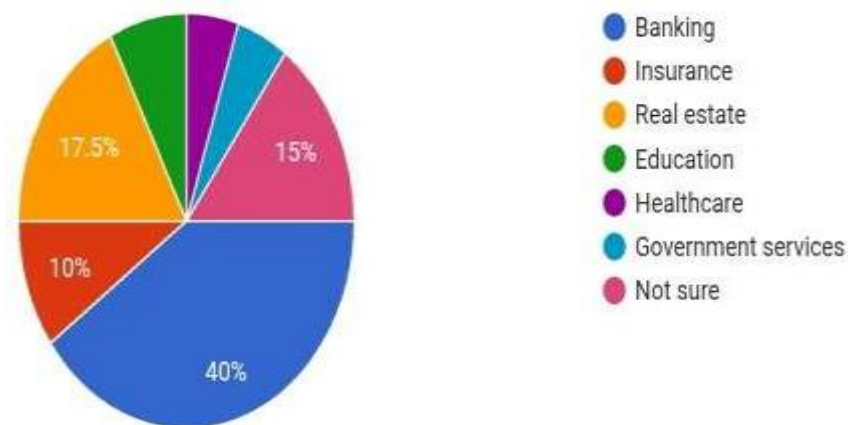


Figure 9. SECTOR WILL BLOCKCHAIN DISRUPT THE MOST IN THE NEXT FIVE YEARS?

INTERPRETATION:

The banking sector (41%) & (7.7%) are insurance & (17.9%) are real estate. (7.7%) are education & (5.1%) are healthcare & (5.1%) are government security & (15.4%) in the not sure. According to this data banking sector are more useful to blockchain for work rather than insurance, education, real state and others, due to the work are done by proper manner.

10. WHICH OF THE FOLLOWING SERVICES DO YOU THINK CAN BE IMPROVED OR REPLACED BY BLOCKCHAIN?

Services	No of respondent	Percentage
Cross- border	21	52.5
Stock trading	19	47.5

Lending and borrowing	14	35
Insurance	10	25
Identify verification	6	15
None of above	1	2.5

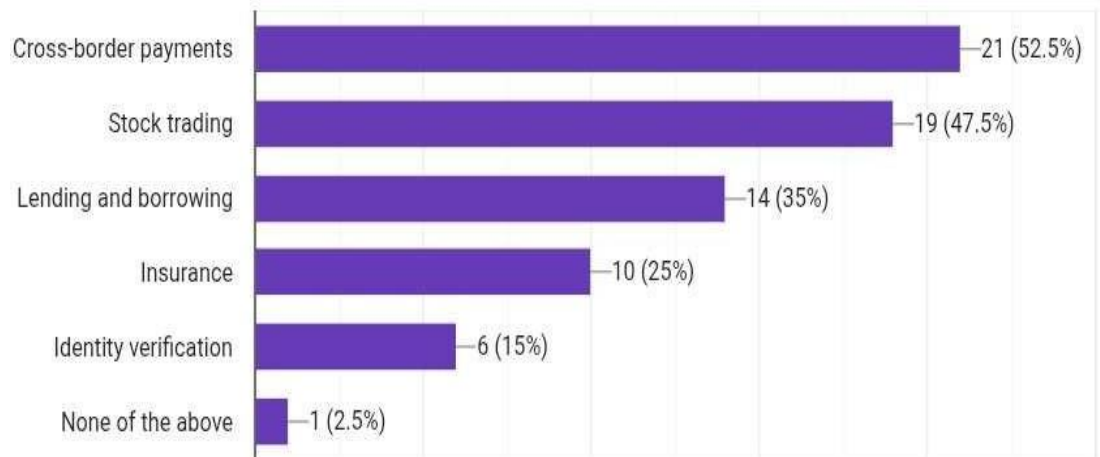


FIGURE 10. SERVICES REPLACED BLOCKCHAIN TECHNOLOGY.

INTERPRETATION:

Cross border payment (53.8%) & (46.2%) in the stock trading & (33.3%) lending and borrowing & (23.1%) insurance & (15.4%) identity verification & (2.6%) in the none of above. Cross border payment are mainly uses in business for transfer of money and other work rather than insurance and stock trading. due to cross border payment is easily away to transfer money.

11. DO YOU TRUST BLOCK CHAIN -BASED PLATFORM MORE THAN TRADITIONAL BANKS?

Option	No of respondent	Percentage
Yes	7	17.5
No	12	30
Trust both equally	10	25
Not sure	11	27.5

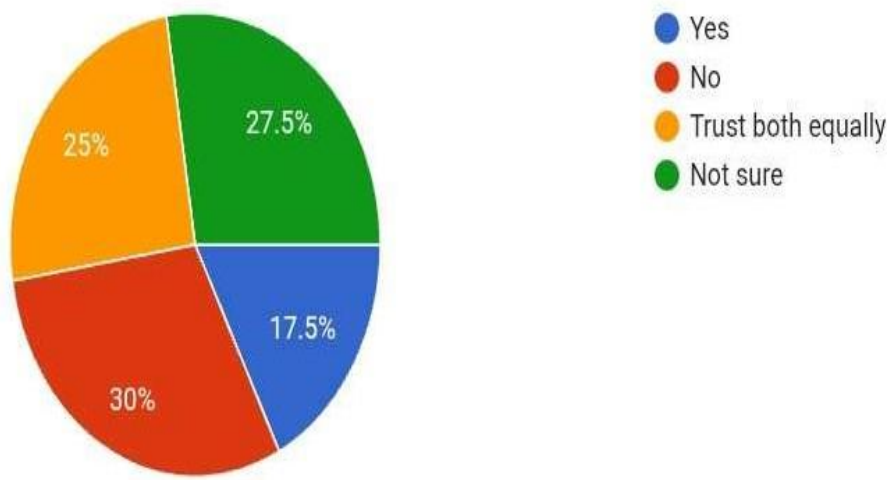


FIGURE 11. BLOCKCHAIN BASED PLATFORM MORE THAN TRADITIONAL BANKS.

INTERPRETATION:

The most related option (30.8%) is no.& (17.9%) is the yes & (25.6%) is trust both equally & (25.6%) is not sure (.30.8 %) are based on block chain rather than traditional banks due to the traditional banking system are very outdated way at a time Ai technology enhanced the sector for work proper and effectively.

12. WHAT CONCERNS DO YOU HAVE ABOUT BLOCKCHAIN TECHNOLOGY IN FINANCE?

Option	No of respondent	Percentage
Lake of regulation	15	37.5
Understanding	18	45
Security risks	17	42.5
Legal uncertainty	10	25
Price volatility	5	12.5
None	2	5

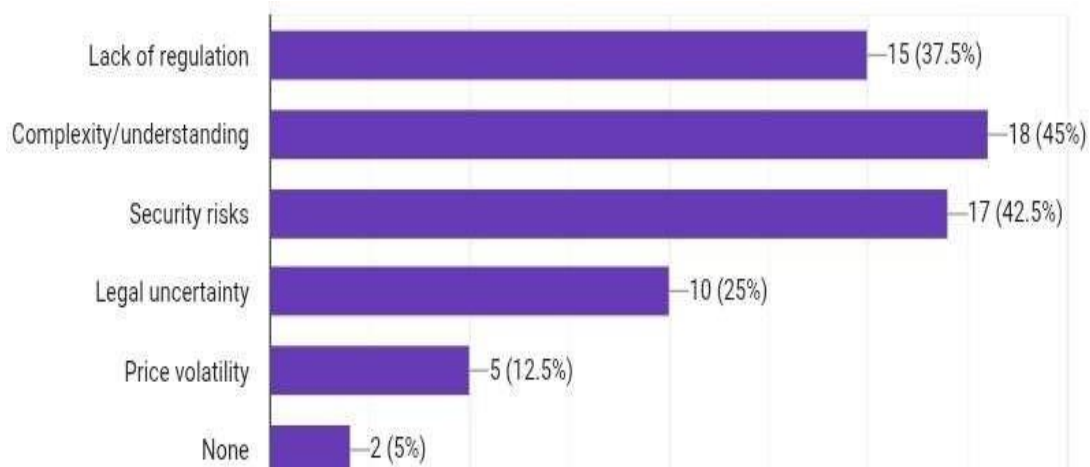


FIGURE 12. BLOCKCHAIN TECHNOLOGY IN FINANCE.

INTERPRETATION:

Lake of regulation (35.9%) & understanding (46.2%) & (41%) security risks & (23.1%) legal uncertainty & (12.8%) price volatility & (5.1%) are none. according to this table lake of regulation ration are lower rather than understanding due to the before use blockchain most important to understanding about topic and process and benefits for growth.

12. DO YOU THINK BLOCKCHAIN WILL FULLY REPLACE TRADITIONAL FINANCIAL INTERMEDIARIES?

Option	No of respondent	Percentage
Yes	9	23.1
No	16	41
Maybe	14	35.9

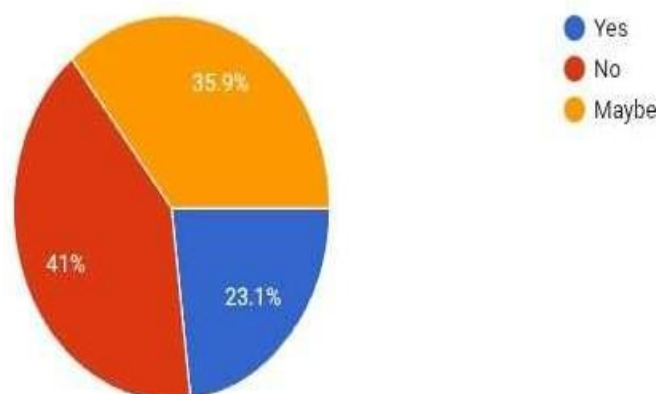


FIGURE 13. BLOCKCHAIN WILL FULLY REPLACE TRADITIONAL FINANCIAL INTERMEDIARIES?

INTERPRETATION:

The blockchain replace financial traditional intermediaries (23.7%) yes& (42.1%) no & (34.2%) are maybe. Majority of fully replaced the traditional bank are 41 % rather than another 23.7 % & 34.2 %.

14.. WOULD YOU PREFER USING A BLOCKCHAIN -BASED FINANCIAL PLATFORM OVER A TRADITIONAL BANK IF BOTH OFFERED THE SAME SERVICE?

Option	No of respondent	Percentage
Yes	14	35
No	5	12.5
Maybe	21	52.5

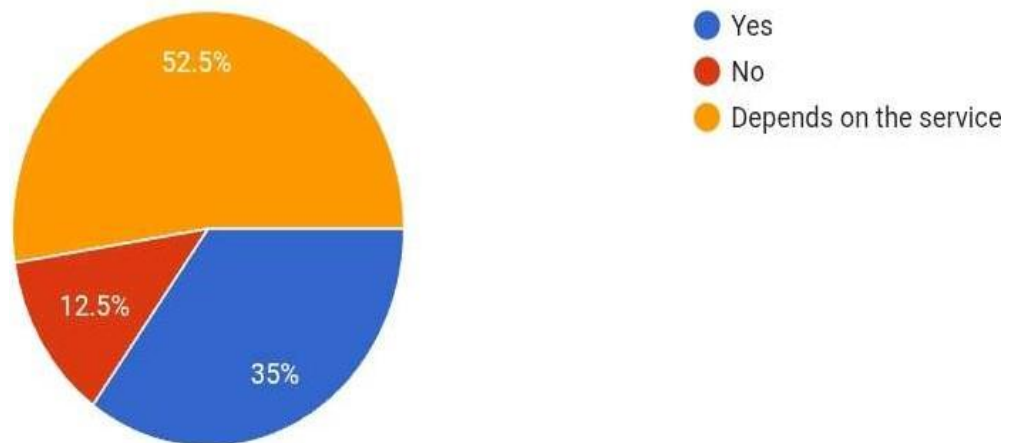


FIGURE 14. A BLOCKCHAIN -BASED FINANCIAL PLATFORM OVER A TRADITIONAL BANK IF BOTH OFFERED THE SAME SERVICE?

INTERPRETATION:

The most prefer using a blockchain based on financial platform over a traditional bank (51.3%) depends on the service & (35.9%) yes & (12.8%) are no. 51.3% population are using financial platform for work rather than others.

15.DO YOU BELIEVE BLOCKCHAIN MAKES FINANCIAL SYSTEM MORE INCLUSIVE?

Financial system	No of respondent	Percentage
Strongly agree	9	22.5
Agree	13	32.5
Neutral	13	32.5

Disagree	4	10
Strongly disagree	1	2.5

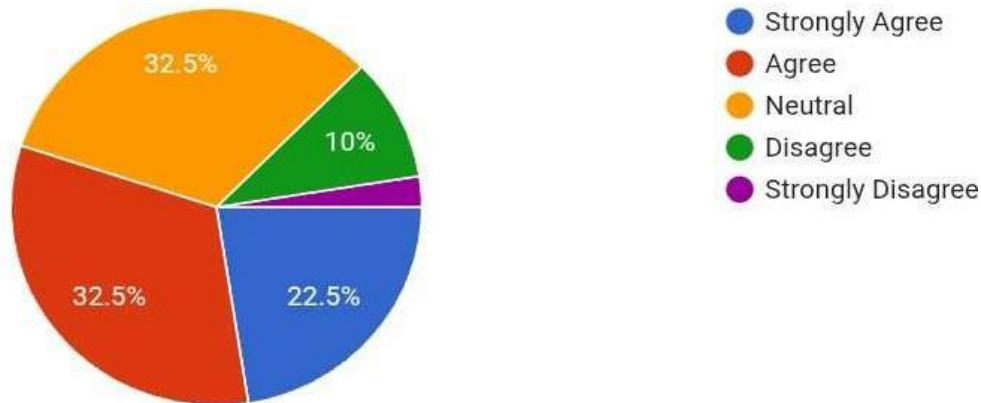


FIGURE 15. BLOCKCHAIN MAKES FINANCIAL SYSTEM MORE INCLUSIVE

INTERPRETATION:

The strongly agree (20.5%) & (33.3%) are agree & (33.3%) are neutral & (10.3%) are disagree & (2.6%) are strongly agree. (33.3%) are agree for blockchain makes financial system more inclusive for work rather than other due to the work effectively and efficiently.

CHAPTER -V

5.1 CONCLUSION

On block chains, money transfers are recorded using a shared ledger system managed by many computers rather than a single entity.

Because of technology, the financial industry has seen a major change in how banks, insurance companies and brokers used to act as intermediaries between savers and borrowers and investors and capital markets.

Because it replaces trusted third parties with an automated system, blockchain is well-placed to change financial intermediation. Though challenges exist, adding blockchain to money and financial transactions makes the process more open, practical and less controlled by a few.

Because of this technology, financial companies including banks, clearing houses and payments processors may face challenges from peer -to -peer transactions and the automated trust provided by cryptographic agreements.

Trust between parties in regular finance often grows through the efforts of banks, brokers and clearinghouses. They manage and organize records, settle all types of transactions, keep cash and verify people's identities. Even if these services are important, they cause drawbacks such as high transaction expenses, slow processing and lack of openness. Because financial systems are centralized, they are at greater risk of fraud, single flawed parts and large-scale breakdowns in times of crisis. As it uses a network of computers, blockchain avoids trust being placed in only one group and distributes this role to everyone online.

An interesting view on economic effects is found in the work of Catalini and Gans (2016). According to them, blockchain reduces major expenses: the networking cost, where parties sort themselves out without needing a central party and the verification cost which checks the authenticity of the transaction or identity. With blockchain, it becomes possible for people to conduct safe financial transactions directly between themselves, since there is no need for a third party to approve them. So, we can use better systems that run faster and at a lower cost, as well as being accessible and open to everyone

Information was gathered over four weeks with the help of Google Forms, Zoom and emailing. All answers were kept safe and made untraceable to comply with ethical rules. The major recurring themes found in the qualitative answers were identified by doing a thematic analysis and descriptive statistics were used to examine and explain the results in the quantitative section.

Special attention is also given to thematic analysis which helps to group the papers by topics including decentralization, trust management, how quickly transactions take place, security problems and complications caused by regulations. As examples, Ripple, Stellar, Ethereum and platforms in decentralized finance like Aava and Uniswap help to get insight into and make each area stronger.

For this study, researchers used methods to collect information directly from the source, all about the disruption of financial intermediation by blockchain technology. A group of financial professionals, blockchain developers, policymakers and academic researchers were interviewed using a structured format to gather much knowledge.

5.2 DISCUSSION OF REPORT

Blockchain technology has emerged as transformative force in financial systems by enabling decentralized, transparent, and tamper-resistant ledger. Unlike traditional system that rely heavily on central authorities such as banks, brokers, and clearing house, blockchain facilitated that can be securely verified and recorded without intermediaries by streaming process, reducing costs and enhancing security and trust.

- Blockchain core capabilities -smart contracts, decentralized ledger and tokenization undermine the necessity of intermediaries by automation many of their function.
- Cryptocurrencies like bitcoin and stablecoin reduce reliance on banks and payments (DEFI) platforms allow user to lend or borrow assets directly, governed by smart contracts. immutable ledgers make auditing and recorded verification faster and more reliable.
- Traditional financial institution may need to adapt or integrate blockchain into operation to stay competitive. some are already exploring private blockchain or offering crypto-related services.
- A complete disintermediation is unlikely in the short term -but partial disruption and hybrid models are already emerging. Blockchain is reshaping the financial landscape by questioning the necessity and value of their traditional intermediaries
- The encouraging greater efficiency openness and innovation. the success of this transformation will depend on technological maturity, regulatory clarity and the willingness of institution to evolve.

5.3 LIMITATION:

- Limited empirical data:
blockchain is a relatively new and evolving field. many decentralized finances (DEFI) platform and blockchain based financial services are still in experimental or early adoption phases. there is a lack of long term, large scale empirical data to fully measure the impact of blockchain on traditional financial intermediaries.
- Rapidly changing technology landscape:
blockchain technology evolves quickly, with frequent updates in protocols, platform and regulation. this research may become outdated quickly especially if new breakthrough or regulatory shifts occur after the time of writing.

- **Regulatory uncertainty:**

The regulatory environment for blockchain and cryptocurrencies is still highly uncertain and varies by country prediction made in the report may not hold if government implant strict controls or ban blockchain -based services

- **Focus on potential, not practicality:**

While the research may highlight the theoretical benefits of removing intermediaries, it may not fully explore the practical barriers to implantation (e.g., user adoption legacy system integration, legal risks).

5.4 FUTURE RESEARCH DIRECTION:

Blockchain is an emerging and fast-changing technology. While this report provides foundational insights, further research is necessary to fully understand its evolving role in business ecosystems. Below are key areas for future exploration

1. Long-Term Impact on Financial Intermediaries:

Examine how blockchain reshapes traditional banking roles over the next 5–10 years.

Analyze whether intermediaries will be fully replaced or will adapt and integrate blockchain.

Study hybrid models that combine centralized trust with decentralized infrastructure.

2. Cross-Industry Applications Beyond Finance:

Investigate blockchain's role in supply chain management, healthcare, real estate, logistics, and identity verification.

Assess its ability to reduce fraud, improve transparency, and optimize operations in non-financial sectors.

3. Regulatory Frameworks and Legal Implications:

Explore how governments and regulators are adapting to blockchain technologies.

Research needed on creating international regulatory standards for DeFi, crypto assets, and tokenization.

Study the legal enforceability of smart contracts across jurisdictions.

4. Consumer and Business Adoption Barriers:

Investigate what factors (trust, knowledge, usability) influence user adoption of blockchain-based systems.

Examine resistance from incumbent institutions and the role of public education in promoting adoption.

Example Future Research Statement for a Report

“Future research should focus on the long-term institutional impacts of blockchain, cross-industry adoption barriers, and the development of supportive regulatory environments. Interdisciplinary studies combining technology, law, business strategy, and social science will be crucial to understanding blockchain's true potential and limitations in reshaping modern economies.”

CHAPTER -VI

6.1 REFERENCE:

- **Accenture.** (2020). *Banking on blockchain: A value analysis for investment banks*.
<https://www.accenture.com/us-en/insights/capital-markets/blockchain-investment-banks>
- **Catalini, C., & Gans, J. S.** (2016). *Some simple economics of the blockchain*. MIT Sloan Research Paper No. 5191-16.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2874598
- **Christensen, C. M.** (1997). *The innovator's dilemma: When new technologies cause great firms to fail*. Harvard Business Review Press.
<https://hbr.org/product/the-innovators-dilemma-when-new-technologies-cause-great-firms-to-fail/10018E-KND-ENG>
- **KPMG.** (2019). *Blockchain and the future of finance*.
<https://home.kpmg/xx/en/home/insights/2019/06/blockchain-and-the-future-of-finance.html>
- **Mishkin, F. S.** (2015). *The economics of money, banking, and financial markets* (10th ed.). Pearson.
<https://www.pearson.com/en-us/subject-catalog/p/the-economics-of-money-banking-and-financial-markets/P200000003169>
- **Nakamoto, S.** (2008). *Bitcoin: A peer-to-peer electronic cash system*.
<https://bitcoin.org/bitcoin.pdf>
- **Tapscott, D., & Tapscott, A.** (2016). *Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world*. Penguin.
<https://blockchain-revolution.com/>
- **World Economic Forum.** (2020). *The future of financial infrastructure: How blockchain can reshape financial services*.
<https://www.weforum.org/reports/the-future-of-financial-infrastructure>