

# **Cryptocurrency as a Component of the Blockchain in the South African Banking Industry amid 4IR**

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## **Abstract**

The paper intended to offer insights on using Cryptocurrency as a Component of Blockchain technology in financial institutions with a focus on South Africa. The study sought: (1) To highlight the economic impact that blockchain and Cryptocurrency have on the finance industry; (2) To learn more about how respondents; perspectives and experiences of blockchain and Cryptocurrency; and finally, (3) To determine what factors are helpful and harmful in the actual context of what would be deemed as a banking environment customers use a new group of e-commerce methods to conduct transactions without involving banks. A questionnaire was used to collect data, followed by interviews on respondents' different views related to blockchain and Cryptocurrency. From the large number of respondents that use financial institutions' services as a target, a sample of 200 participants took place in the study. The study's descriptive measures include variables such as the Mean, standard deviation, and correlation analysis. The SPSS software summarized and analyzed the relevant data collected. Correlation analysis measured the inner relationship between factors and the study data. The study showed that Millennials and Generation Z are much more technology inclined. Most of them were educated and showed interest in blockchain technology and the use of Cryptocurrency. The results also revealed a strong relationship between the possibilities and risks associated with blockchain and Cryptocurrency. Blockchain has become a more efficient way to complete transactions. The study showed that respondents utilize Cryptocurrency and perform different transactions such as cash receipts, deposit corrections, and cross-border payments.

## **Keywords**

Blockchain, Cryptocurrency, Digitalization, Peer-to-Peer (P2P), and South Africa.

## **1. Introduction**

After the banking phone market innovation, businesses expect a shift in customer service delivery. For various reasons, more companies are adopting digital service platforms to address the need for speed and reliability (Babajide et al. 2020). Deloitte predicts by the year 2025, 10% of GDP will be recorded with blockchain technologies (World Economic Forum, 2015). Blockchain technology can be applied to banking, which makes it a viable option for online transactions (Vivekanadam, 2020). Cryptocurrency components are blockchain components made from the cryptographic technique (Machkour and Abriane, 2020). Applied to the liquidity of the economy, cryptocurrencies use cryptography in circulation (Machkour and Abriane, 2020). With no third parties required, customers benefit the banking sector significantly. The near limitless and timely nature of blockchain serves very well in online marketing by reducing friction, costs and time of every transaction (Vivekanadam, 2020). However, the construction of this innovation has introduced substantial risks regarding the protection of customers and the banking industry (Manocha, 2017). The regulation must address blockchain and Cryptocurrency's genuine threats and dangers (Manocha, 2017). While there are many opportunities and benefits of conducting online payment or transaction services, there are also risks and threats posed to individuals who bypass banks using digital means. Retailers, for instance, might be unaware that they are operating unregulated and uninsurable e-commerce outlets. As such, customers might be unaware of the risks and challenges associated with online cryptocurrency activity and lack the skills to navigate secure online transactions.

### **1.1 Problem statement**

The business environment is changing, and the fourth industrial revolution (4IR) has affected the global market (Patil and Dharwadkar, 2017). 4IR technologies and Cryptocurrency, introduced by Satoshi Nakamoto in the year-end 2008, are the forerunners of blockchain technology, helping virtual transactions succeed in the financial sector (Mohd et al. 2017). Digitalization has allowed for the simplification of Cryptocurrency, as it is now easier and more private to use than traditional currencies. Banks have been spared as cryptocurrencies are introduced due to the lack of third-party validation preventing central banks from monitoring them (Vivekanadam, 2020). The financial costs and time associated with e-commerce ensure compliance. A thorough legal framework should be developed that would effectively allow the government to regulate blockchain and Cryptocurrency. This updated legal system will allow for the most sophisticated use of these technologies (Shah and Jani, 2018).

### **1.2 Aim of the study**

This paper intends to offer insights into using Cryptocurrency as a Component of Blockchain technology in financial institutions with a focus on South Africa.

### **1.3 Objectives**

Focused on the use of blockchain and Cryptocurrency in South Africa, the study seeks: (1) To highlight the economic impact that blockchain and Cryptocurrency have on the finance industry; (2) To learn more about how respondents; perspectives and experience of blockchain and Cryptocurrency; and finally (3) To determine what factors are helpful and harmful in the actual context of what would be deemed as a banking environment.

### **1.4 Scope of the study**

This paper is centred on the banking sector in South Africa. This is because finance is critical in every individual's life and the backbone of every country's foundation.

## **2. Brief Literature Review**

Traditional banking procedures can be traced back several centuries. In the early 1800s, businesses relied on steams to power the production of goods (Sommer, 2015). Banks used coinage to exchange for the products and services of a business (Sommer, 2015). As time progressed, power was more efficient than steam power, businesses changed to electricity, and banks became reliant on electronic data (Chu and Peretto, 2019). With the transition to the third industrial revolution, computers and telecommunications enabled financial companies to provide easy banking services (Min et al. 2019). Their services include credit card fees, relies on deposits, loans, etc.

The ability of individuals and customers to share data and finances over a decentralized network is called peer-to-peer networking (Turban et al. 2017). A successful blockchain uses peer-to-peer P2P technology, enabling users to transact without a central authority. Individuals store data to mine and purchase with records and coins. P2P platforms allow customers to share and transact with cryptocurrencies (Vivekanadam, 2020). Different platforms use P2P approaches to ensure that their customers transact with Cryptocurrency.

Blockchain technology has an ongoing collection of records called blocks. These blocks correlate with using cryptographic techniques, often reminding us of a protected session (Pilkington, 2016). A block includes a timestamp, a hash of the previous block, and an individual record (Pilkington, 2016). Background information is grouped in a way called a blockchain. The blockchain may not be altered as soon as synced information is submitted (Wang et al. 2015). A record is the collection of synced information in the blockchain (Wang et al. 2015). Blockchain does not allow any modifications to recordings after recording time (Wang et al. 2015). Blockchain uses a peer-to-peer process like a connected direct mailing list (Niforos et al. 2017). When clients (blockchain networks) need to receive a new step or transaction, they will send a request through the information usually held on databases (blockchains) managed by their computers, known as nodes. The hardware of the nodes will communicate to other nodes with the correct data to verify and confirm the transaction's authenticity (Niforos et al. 2017).

An exchange is a two-way transaction between different parties in which a trade is made (He et al. 2016). This can take the form of any business firm exchanging money for a commission (He et al. 2016). This commission received is often referred to as a "profit." A product is exchanged and received, known as a stock exchange (He et al. 2016). Stock buying is usually performed using electronic cash, debit cards, and credit cards. The most common way of buying stock is to execute a trade online; most exchanges allow individuals to invest directly in equity. A

cryptocurrency user is any individual or business firm that purchases products or services with virtual currencies intending to acquire products or services (Raymaekers, 2015). Users can convert virtual currencies for other virtual coins and avoid government fees, and receive products or services that can be purchased for virtual currencies. Gold or virtual currencies can be bought. To acquire virtual currencies, there are different ways to acquire money; some are purchasing products or services in return for these goods or selling items for a given amount of these currencies. Blockchain-related businesses are those that hold or operate software in blockchain technologies (Vivekanadam, 2020). Blockchain-related businesses hold and operate software that works with the blockchain or public cloud infrastructure (Raymaekers, 2015). Wallet providers are companies that use this software to facilitate the sales and funding of these goods and services (Raymaekers, 2015).

Business customers can be better understood and directed if data acquired through searches, studies, and analyses is monitored and frequently updated. Demographic data studies clients' behaviour patterns, spending, and attitudes (Chitra, 2018). Blockchain technology helps banks to share data, eliminate double data entries, and protect customer rights (Patil, 2017). Blockchain technologies are leveraged to assist with creating digital identification, which in turn permits the customers to access banking solutions and services (Patil, 2017). Distributed ledger technology supports a customer who is the founder of digital identity, gains access to banking services, and improves transaction costs. Business settlement times are enhanced by using distributed lists (ledgers) technology, and blockchain has become a more efficient way to complete transactions. Transactions are decentralized and faster, resulting in lower settlement times. The elimination of intermediaries and the protection of data and information are necessary for the industry. Blockchain technology is essential to the digital banking model (Patil, 2017). With it, the consumer's data is inaccessible to fraud and misuse. Thus, it makes it more difficult to fool trusted business firms (Chitra, 2018). Consumers can access the data created by trusted businesses.

The seeming expensive technology is essential in adopting cryptocurrencies and blockchain systems (Toufaily, 2021). The rapid adoption of industry standards is impeded by a lack of industry standards (Toufaily, 2021). Adopting an approach requires adherence to policies so that it is clear who owns what other and what measures should be taken to enforce the rights to information (Hellwig, 2019). Banks are advanced economies and technical institutions, but their long-term data storage costs are higher than that of cryptocurrencies (Hellwig, 2019). Consumers accept cryptocurrencies as a means of payment. The cryptocurrency market's volatility and the currency's instability are problems in the finance industry (Toufaily, 2021). Customers need to be confident in the systems that banks provide. The features of security elements are a significant concern for adopting blockchain and cryptocurrencies in banking. Banks and their shareholders require a robust security mechanism to protect consumers' data and information (Toufaily, 2021). Online banking has created a cyber-security job market to increase bank costs (Kouhizadeh, 2021). Anonymity is an entirely different issue for banks using cryptocurrencies in banking (Kouhizadeh, 2021).

### **3. Methodology**

#### **3.1 Research design**

This research is descriptive with a quantitative presentation of data. The paper is classified as survey research and was a chosen method to collect data from relevant respondents. Surveys are more accessible and less costly to collect data about the respondents' perceptions and tastes in the business environment (Jani, 2019).

#### **3.2 Data collection**

The data collection technique is used to apply extrapolation of the respondents' data to represent the whole population. This paper highlights the views, adoption of blockchain, and legal requirements feasible to protect respondents when using cryptocurrencies. Therefore a survey based on quantitative nature was identified as a suitable measure in ensuring that all the objectives are met.

A questionnaire was used to collect data, followed by interviews on respondents' different views related to blockchain and Cryptocurrency. The questionnaire distributed had four sections to achieve the objectives of the study. Section A: included respondents' background information such as their age, educational records, banking industry and banking sector respondent's use, and how they define the concepts of blockchain and Cryptocurrency in general. Section B: tested respondents' experience related to the utilization of blockchain and service of Cryptocurrency. Section C: covered risks and beneficial opportunities that respondents think they are aware of when using Cryptocurrency. Section D: covered legal requirements in terms of the acts/policies that might be feasible in helping to regulate the use of blockchain and Cryptocurrency.

### 3.3 Data Analysis

The study's descriptive measures include variables such as the Mean, standard deviation, and correlation analysis (Friese et al. 2015). The SPSS software summarized and analyzed the relevant data collected. Correlation analysis measured the inner relationship between factors and the study data (Everett, 2018). A reliable and valid questionnaire is essential for the research to be significant (Everett, 2018). Thus, Cronbach's Alpha was used to measure reliability in the study. The studies discussed in this paper achieved reliability and validity. They also identified associated factors that might lead to the issue of instability in the original measurement using factor analysis.

### 3.4 Population and Sample

To reduce biases, a simple random sampling technique was used. From the large number of respondents that use financial institutions' services as a target, a sample of 200 participants took place in the study. The total number of respondents who use financial institutions' services is unknown and was a challenge for the study. Therefore, selecting a sample of 200 sizes was appropriate and reliable to address the study population. To overcome this challenge, a survey method was utilized using online resources to ensure that the target was met. Ethical clearance was issued, the researcher had permission to distribute the survey effectively, and respondents voluntarily participated in an online platform.

## 4. Findings

The study did not consider gender as significant to meet the objectives. However, the age of the respondents was significant to determine the age-generation that has an interest in the use of blockchain and Cryptocurrency. Respondents' education level was also significant in determining whether the use of Cryptocurrency relates to educational standards.

### 4.1 Respondents' Background Information

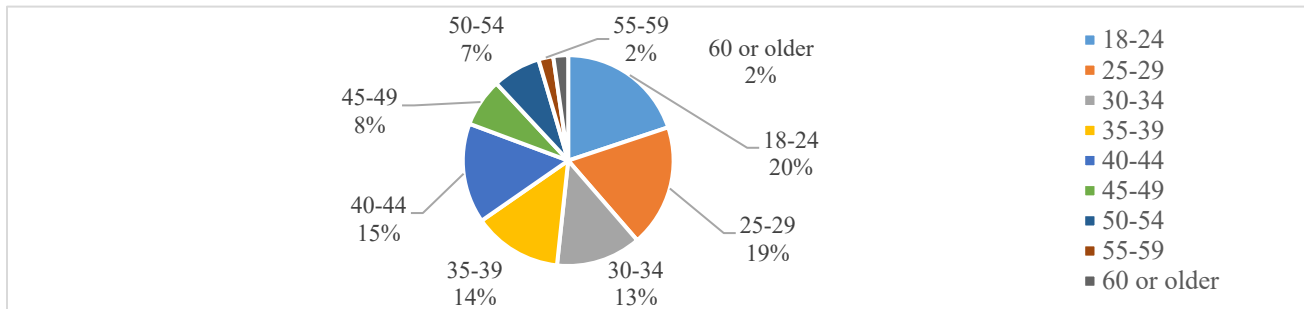


Figure 1. Respondents' participation as defined by age

Figure 1 shows the primary participating respondents of the study. It shows that respondents from 25-29 and 18-24 years primarily took part in the survey at 19% and 20%, respectively. The age groups of 40-44 and 35-39 were also considered, with 15% and 14% recorded, respectively.

Millennials and Generation Z are overall much more technologically inclined. Various reasons drive these responses: being able to acquire convenience with the rapid adoption of technology and being flexible to adopt change. They utilize online shopping using mobile technology and buy digital currency to provide quicker transactions. These results support the study that concluded that core (Gen Z and Millennial) groups in South Africa are interested in using Cryptocurrency and blockchain. This is the study by Walton and Johnston (2018) Exploring Perceptions of Bitcoin Adoption: The South African Virtual Community Perspective Interpreting Gen Z generation. It examines the conditions of Gen Z and Millennials, who use non-fungible tokens (NFT) in South Africa. This research is restricted access related to blockchain and Cryptocurrency and involves the analysis of blockchain and digital.

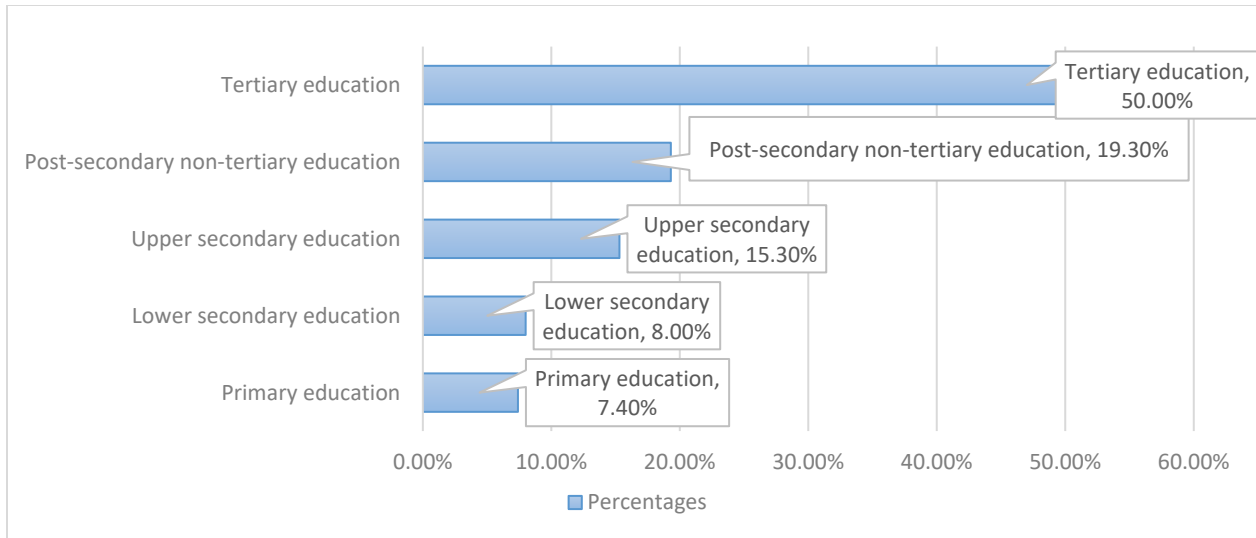


Figure 2. Respondents' Level of Education

When we broke down the survey data into more specific levels of education in Figure 2, we found that the respondents have different educational backgrounds. Out of 100%, 50% of the respondents had tertiary schooling, 19.3% had post-secondary education, followed by respondents with an upper-secondary education followed with 15.2%, and lower secondary education recorded an 8%. In this survey, it can be implied that most millennials and Generation Z respondents are educated and technology savvy. They are computer-intelligent, quick to learn new things, and practical. These customer business institutions should focus on and offer services due to their taste and preferences.

#### 4.2. The use of blockchain and cryptocurrency

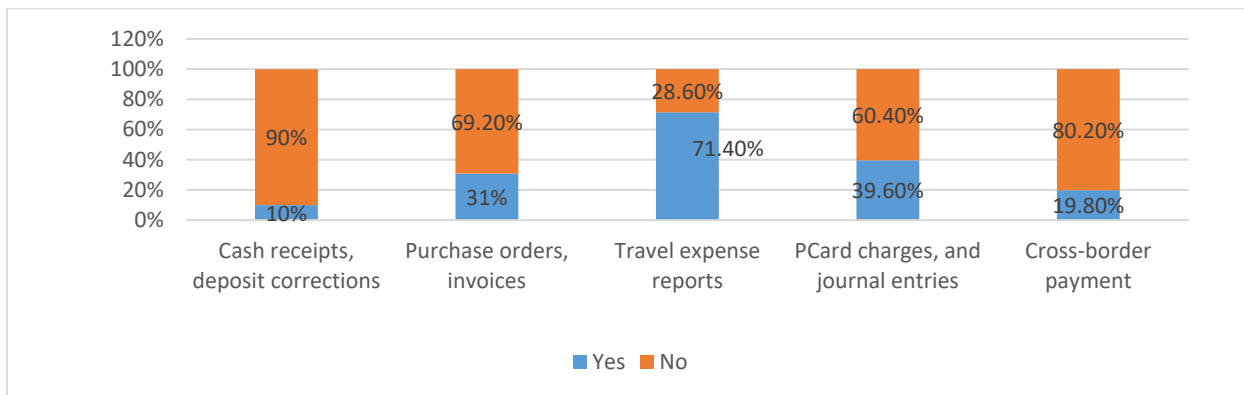


Figure 3. Performed transactions using Cryptocurrency

Figure 3 shows that most respondents use digital currencies to perform cash receipts and deposit corrections (90.10%). They also serve a high percentage of cross-border payments (80.30%). However, the rate of respondents who use Cryptocurrency to complete travel expense reports transactions is low (28.70%). Respondents use blockchain and cryptocurrencies for peer-to-peer exchange without banking intermediation, traditionally used in this transaction. Mobile money has become one of the most prominent ways of going mobile and switching payment methods. Luno, and Crypto-Change blockchains are all peer-to-peer platforms.

#### 4.3. Frequency respondents had performed transactions using Cryptocurrency

Table 1 shows the number of times respondents used blockchain and Cryptocurrency to purchase online products and services.

Table 1. Frequency of times respondents have used Cryptocurrency to purchase products and services

		Once a year	Once in 6 months	Once in 3 months	Once a month	Few times a month	Once a week	Daily	Total
Cash receipts, deposit correction	Count	9	10	7	6	34	10	10	86
	%	10.5%	11.6%	8.1%	7.0%	39.5%	11.6%	11.6%	100.0%
Purchase orders, invoices	Count	7	10	7	4	29	8	6	71
	%	9.9%	14.1%	9.9%	5.6%	40.8%	11.3%	8.5%	100.0%
Travel expense reports	Count	16	5	4	6	6	6	4	47
	%	34.0%	10.6%	8.5%	12.8%	12.8%	12.8%	8.5%	100.0%
P-Card charges and journal entries	Count	10	8	8	4	18	5	12	65
	%	15.4%	12.3%	12.3%	6.2%	27.7%	7.7%	18.5%	100.0%
Cross-border payment	Count	6	7	10	14	21	7	13	78
	%	7.7%	9.0%	12.8%	17.9%	26.9%	9.0%	16.7%	100.0%

Table 1 shows that more respondents use blockchain and Cryptocurrency to perform cash receipts corrections and purchase order invoice transactions. This is shown as 40.80% and 39.5% for the category "few times a month" was recorded, indicating that these transactions are mostly used using blockchain and Cryptocurrency. Table 1 also shows that they are an increasing number of times respondents perform cross-border payments using Cryptocurrency, as indicated with a category "few times a month", "once a month", and "daily" with 26.9%, 17.9%, and 16.7% respectively. This implies that fintech in South has significantly grown, and easier access to mobile devices and the internet has enabled customers to perform economic transactions using digital funds. Kudichs (2018) finds that finance and technology has increased in South Africa, specifically in the payment sector. The increase in finance and technology has eliminated banks as third parties.

#### 4.4. Legal requirements that might be feasible to regulate Cryptocurrency

Table 2 shows the requirements listed in the original text as possible laws that could constitute regulations in South Africa. National Credit Act, Financial Market Act, Consumer Protect Act, and Company Act, and Financial Intelligence Centre Act, 2001 (FICA) recorded 82.40%, 83.60%, 88%, 82.90%, 77.30%.

Table 2. Legal Measures as Requirements to regulate Blockchain and Cryptocurrency

	Not useful	Somewhat useful	Useful	Very useful	Extremely useful	Total
National Credit Act	14	17	44	35	66	176
	8.0%	9.7%	25.0%	19.9%	37.5%	100.0%
Insurance Act	31	32	46	34	33	176
	17.6%	18.2%	26.1%	19.3%	18.8%	100.0%
Financial Market Act	16	13	45	51	51	176
	9.1%	7.4%	25.6%	29.0%	29.0%	100.0%
Consumer Protection Act	14	7	30	56	69	176
	8.0%	4.0%	17.0%	31.8%	39.2%	100.0%
Company Act, 2008	14	16	30	63	53	176
	8.0%	9.1%	17.0%	35.8%	30.1%	100.0%

Financial Intelligence Centre Act, 2001 (FICA)	18	22	38	48	50	176
	10.2%	12.5%	21.6%	27.3%	28.4%	100.0%
Income Tax Act	45	52	24	31	24	176
	25.6%	29.5%	13.6%	17.6%	13.6%	100.0%
Electronic Funds Transfer Act	13	23	44	50	46	176
	7.4%	13.1%	25.0%	28.4%	26.1%	100.0%
Virtual Currency Businesses Act	20	26	32	58	40	176
	11.4%	14.8%	18.2%	33.0%	22.7%	100.0%
Internal Revenue Services (IRS) policy	52	39	22	35	28	176
	29.5%	22.2%	12.5%	19.9%	15.9%	100.0%
Bill: money-laundering Act	23	28	34	43	48	176
	13.1%	15.9%	19.3%	24.4%	27.3%	100.0%

Respondents agree that the government's regulation of crypto helps to prevent cybercrime and the use of Cryptocurrency for illegal activities, which can limit cases like unlawful financial transactions and electronic fraud. The findings concurred with the research "Rethinking the Regulation of Virtual Currency in South Africa" (Mukwehwa, 2019). They concluded that the need for effective legal and regulatory frameworks would make governments and regulators push ahead with innovative digital currency regulations.

#### **4.5. Analysis of the interviews**

Online surveys addressed how respondents understand blockchain technology and its relations with digital currency. Respondents predominantly used the term cryptocurrency during their interviews. A lack of understanding of the fourth industrial revolution may be why respondents are unfamiliar with blockchain technology.

#### **4.6. Descriptive analysis: Mean and standard deviation**

##### **4.6.1. Mean and standard deviation of the use of Cryptocurrency**

Table 3. Mean and standard deviation of the use of Cryptocurrency

<b>Interval</b>	<b>Mean</b>	<b>Standard deviation</b>
Cash receipts, deposit corrections	4.47	2.010
Purchase orders, invoices	4.30	1.930
Travel expense reports	3.40	2.309
P-Card charges	4.34	2.347
Cross-border payment	4.58	2.048

Table 3 shows that using blockchain and Cryptocurrency to make cash receipts, deposit corrections, payment orders, P-card charges, and costs-border payment is typical in South Africa. The descriptive analysis shows few respondents use blockchain and Cryptocurrency to perform travel expense transactions, with a 3.40 mean recorded on average.

##### **4.6.2. Mean and standard deviation of financial Acts/Policies**

Table 4. Mean and standard deviation of financial Acts/Policies

<b>Financial Acts/Policies</b>	<b>Mean</b>	<b>Standard deviation</b>
--------------------------------	-------------	---------------------------

National Credit Act	3.69	1.282
Insurance Act	3.03	1.356
Financial Market Act	3.61	1.232
Consumer Protection Act	3.90	1.198
Company Act, 2008	3.71	1.215
Financial Intelligence Centre Act, 2001 (FICA)	3.51	1.300
Income Tax Act	2.64	1.387
Electronic Funds Transfer Act	3.53	1.219
Virtual Currency Businesses Act	3.41	1.297
Internal Revenue Services (IRS) policy	2.70	1.471
Bill: money-laundering Act	3.37	1.375

Table 4 shows that respondents were most familiar with the Consumer Protection Act, Company Act, National Credit Act, and Financial Market Act with 3.90, 3.71, 3.69 and 3.61, respectively and indicated that it would be helpful to help regulate the use of blockchain and Cryptocurrency in South Africa. Respondents, on average, were mainly familiar with the Income Tax Act, Virtual Currency Business Act, and Bill: money laundering Act, with 2.64, 3.41, and 3.37 recorded, respectively.

#### 4.6.3. A correlation matrix

Table 5. Inter-item correlation matrix for opportunities related to the use of Cryptocurrency

Correlation Matrix					
		a. Puts clients at risk because there is a lack of regulations)	b. Increases chance of fraudulent activities e.g. money laundering	c. Exposes clients to a highly volatile, unstable currency	d. Exposes clients to a loss of coin if the owner dies
	a. Puts clients at risk because there is a lack of regulations)	1.000	0.673	0.735	0.721
	b. Increases chance of fraudulent activities e.g., money laundering	0.673	1.000	0.799	0.625
	c. Exposes clients to a highly volatile, unstable currency	0.735	0.799	1.000	0.676
	d. Exposes clients to a loss of coin if the owner dies	0.721	0.625	0.676	1.000

Table 6. Inter-item correlation matrix for risks related to the use of Cryptocurrency

Correlation Matrix				
	a. Puts clients at risk because there is a lack of regulations	b. Increases chance of fraudulent activities e.g.	c. Exposes clients to a highly volatile,	d. Exposes clients to a loss of coin if the



			money laundering	unstable currency	owner dies
a. Puts clients at risk because there is a lack of regulations	1.000	0.673	0.735	0.721	
b. Increases chance of fraudulent activities e.g., money laundering	0.673	1.000	0.799	0.625	
c. Exposes clients to a highly volatile, unstable currency	0.735	0.799	1.000	0.676	
d. Exposes clients to a loss of coin if the owner dies	0.721	0.625	0.676	1.000	

Table 5 reveals a strong correlation between the Cryptocurrency's high chances of fraudulent activities and the client's exposure to a volatile currency. The study also revealed that the Cryptocurrency's high chances of fraudulent activities and the client's chances of losing coins after their death are related, with a relationship of 0.673. The other connections are followed with a degree of importance of 0.799, indicating a strong relationship. Importantly, all factors are connected and share a commonality, which sheds light beyond. Table 6 reveals a strong correlation between the Cryptocurrency's lack of regulations with exposes clients to a highly volatile, unstable currency with a value of 0.735. The study also reveals that Cryptocurrency's lack of rules strongly correlates with telling clients to a loss of coins if the owner dies with a relationship of 0.721. The other connections are followed with a degree of importance of 0.799, indicating a strong relationship.

#### **4.7. Reliability and Validity Analysis**

##### **4.7.1. Reliability analysis**

A Cronbach's Alpha was used to perform a reliability analysis of the study. Table 7 and 8 shows the Cronbach's Alpha scores achieved for the study.

Table 7. Reliability test on the respondents' responses on how frequently they use Cryptocurrency

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	N of Items
0.922	0.924	5

Table 7 shows that an alpha score of 0.924 was achieved in this set of questions which was good as it shows the consistency of the responses from respondents.

Table 8. Reliability test on the usefulness of measures to regulate the use of blockchain and Cryptocurrency

<b>Reliability Statistics</b>		
Cronbach's Alpha	Cronbach's Alpha based on Standardized Items	N of Items
0.923	0.924	11

Table 8 shows that an alpha score of 0.924 was achieved in this set of questions which was good as it shows the consistency of the responses from respondents.

In total, there was a high number of alpha scores. This means that the respondents understood the questions of the questionnaire and the content, and was positive for the reliability of the study.

#### **4.7.2. Validity analysis**

A factor analysis was conducted to confirm that the subject was valid and significant. KMO and Bartlett statistical tests were performed to verify how the factors explain between variables (Table 9).

Table 9. Factor analysis of the use of Cryptocurrency to perform transactions

<b>Transactions</b>	<b>Factor</b>
	1
Cash receipts, deposit corrections	0.852
Purchase orders, invoices	0.881
Travel expense reports	0.817
P-Card charges,	0.898
Cross-border payment	0.931

Table 10. KMO test for the use of Cryptocurrency to perform transactions

<b>KMO and Bartlett's Tests</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.807
Bartlett's Test of Sphericity	Approx. Chi-Square	171.127
	Df	10
	Sig.	0.000

As shown in Table 10, the Kaiser-Meyer-Olkin measure of sampling adequacy conducted was 0.807. This indicates that the findings so long as adequate to perform the factor analysis led using Cryptocurrency as they have a higher value of 0.807. The overall research analysis showed an acceptable factor and measured the validity of the whole study.

## **5. Conclusion**

The study offered perspectives on Cryptocurrency in South Africa. This was done by highlighting the economic impact that blockchain and Cryptocurrency have on the finance industry. The study showed that Millennials and Generation Z are much more technology inclined. Most of them were educated and showed interest in blockchain technology and the use of Cryptocurrency. The study objective was met as the questionnaire suggests regulating blockchain and cryptocurrencies would be possible. The study also showed a strong relationship between the possibilities and risks associated with blockchain and Cryptocurrency. The use of interviews also showed respondents' views concerning the use of blockchain and Cryptocurrency. Blockchain has become a more efficient way to complete transactions. The study showed that respondents utilize Cryptocurrency and perform different transactions such as cash receipts, deposit corrections, and cross-border payments. Transactions are decentralized and faster, resulting in lower settlement times.

The elimination of intermediaries and the protection of data and information are essential for the industry. For future studies, the investigation can be conducted with a different methodology and a bigger sample size to achieve a holistic view of customer use and experience of blockchain and Cryptocurrency in South Africa.

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