

A Study On The Block Chain Technology And It's Awareness On Business And Industry

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Abstract:

The main concept of this paper is to define the modernization of traditional process and service industries, organization of trading and procurement procedure, related financial and logistical operation, change in the structure of consumption associated with the information technologies and digitalization of economic processes that creates the basis for formation of new markets conditions. Currently the digital economy is included in the list of the main aspects of the strategies development in Russia and many foreign countries. The block chain is a technology that is at the top of entire digital economy. The subject of research is not only this technology but also its commercial exploitation. The basic hypothesis is that block chain has achieved a great impact on financial sector, also it has the potential to radically change only the financial sector but also the way we buy and sell, our interaction with the authorities as a way of verifying the ownership from the authorship and the organic food production.

Introduction:

The financial sector is an important dominant to the economy. The Indian financial system purely depends upon a number of ingredients. It also helps full for the economy. The Indian financial system mainly depends upon that financial system. Here the Indian economy is part of the financial system. It depends on the sub-system of the financial system. i.e. Financial institutions. Financial markets, financial instruments, and financial services. The development of a country depends on all four categories. Financial services provide more loans and advances to the people. Banking and non-banking financial institutions provide loans and services to the people. People are utilizing their loans and advances leading number one position in the market. The regulatory body controls the total banking system. Different types of information, intermediaries, tax regulation all will be control the entire finance sector through regulatory bodies only.

Definition: Block chain is the technology used to change the way of dealing with money. With the development of this decentralized ledger system-a number of opportunities have opened up. Industries today are using block chain technology to increase efficiency and solve business problems associated with data privacy, security, information sharing. This technology can create value for business through cost savings and efficiency – in terms of speed and simplicity.

Keywords: Block chain, development,

Review of literature:

- Jaeshup Oh highlights in his article the cases of blockchain applied in Korea in 2017. In this paper real cases of blockchain technology introduced to financial institutions in 2017 are studied, to get a vision of business model innovation of financial institutions. To get the data, authors have interviewed ICT officers of major banks in Korea. The purpose of this interview was to understand the relationship between blockchain and business models of financial institutions.
- Inlee Said that in his article this article focuses on the Fin-tech relationship with information communication technology, Fin-tech is an innovative financial drive in the financial industry. It shakes the traditional financial markets also. Here mainly focusing that different business models and investment types. Here they are taken into the consideration real examples of Fin-tech investment decisions. Ultimately technical and managerial challenges for both Fin-tech and entrepreneurs and olden methods of financial institutions in this article discussed.
- The World Economic Forum (WEF) in 2016, Block chain technology is a important to the financial services. It is a primary step to connecting the consumers and customers. Now a days blockchain technology is a new innovative and inventions to the future course of action. It is a one of the new concept to the financial markets. Consequently number of companies either national as well as international connecting to the financial markets and have invested in the block chain sector.

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NEED OF THE STUDY

To know the awareness of use of block chain technology in the financial sector and people's opinion towards their experience in the use of this technology for business and trade purpose.

RESEARCH PROBLEM & RESEARCH GAP

As block chain is the growing technology in our country, many of the organizations have not yet adopted it. Block chain has many of the advantages like increasing speed and efficiency of the work, reduces the cost of transactions etc, even though the organizations have not adopted this due to lack of awareness. Because of its low or less use the awareness is yet to gain momentum.

Objectives:

- To study the feasibility of the application of blockchain technology by the business and industry.
- To study the practical application of blockchain technology by business, trade & industries.

Hypothesis: H₀: There is no impact of crypto currency on paper currency

H₁: There is impact of crypto currency on paper currency

H₀: Speed& Efficiency has no impact on referring block chain

H₁: Speed& Efficiency has impact on referring block chain

Data Analysis and Interpretation:

SAMPLING TECHNIQUE

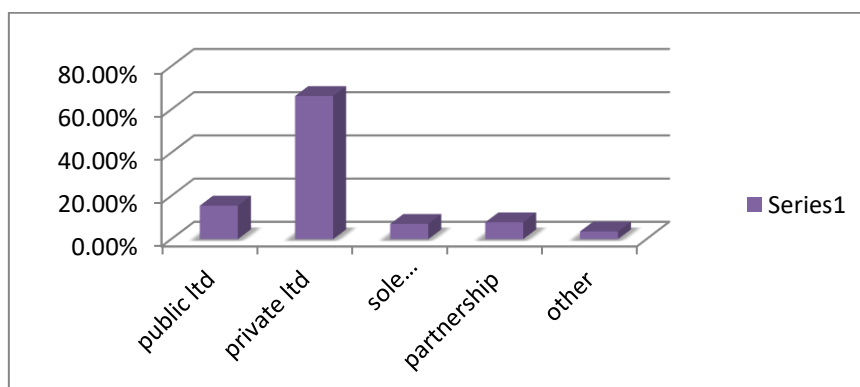
The focus of my study is to know the awareness about blockchain technology and its use in various sectors of the economy. Since the study can be conducted only through personal interviews and interaction it has been decided to go with the primary data in the form of a questionnaire which is structured according to the needs of the study. The sampling technique used is the purposive sampling technique under non-random sampling.

SAMPLING SIZE

The information gathered on the basis of a non-random method with a limitation of 142 respondents. In the study, it is also observed that there is a group called Block chained India with a total population of 257.

1. What kind of company that you are working in?

	No of Respondents	Percentage
Public Ltd	22	15.49%
Private Ltd	94	66.19%
Sole Proprietorship	10	7.04%
Partnership	11	7.74%
Other	5	3.52%



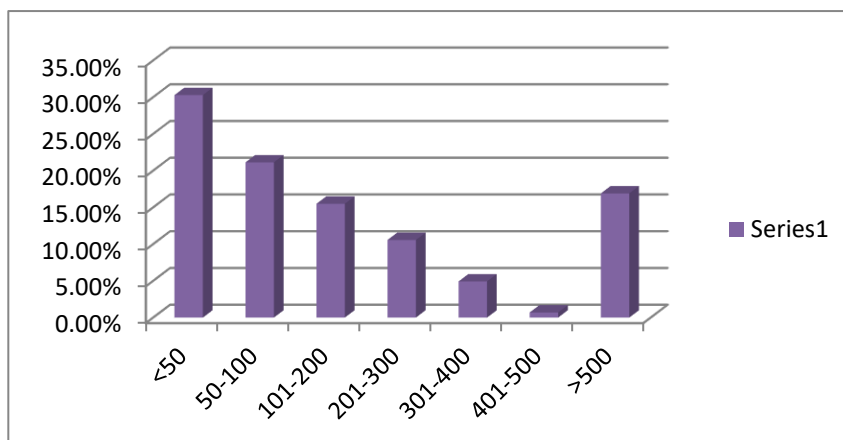
Question 1 has to give information about what kind of companies that have been using blockchain technology. It is observed that out of 142 samples 22 respondents in public ltd, 94 respondents in private ltd, 10 respondents in sole proprietorship firm, 11 respondents in a partnership firm, 5 respondents are others.

It has been found that one of 5 companies is using blockchain in private ltd. It is therefore we can understand private sector people are much more interested to use blockchain technology in their organization.

2. How many employees are there in your organization?

	No.of respondents	Percentage
< 50	43	30.28%
51 – 100	30	21.12%
101 – 200	22	15.49%
201 – 300	15	10.56%
301 – 400	7	4.92%
401 – 500	1	0.70%

> 500	24	16.90%
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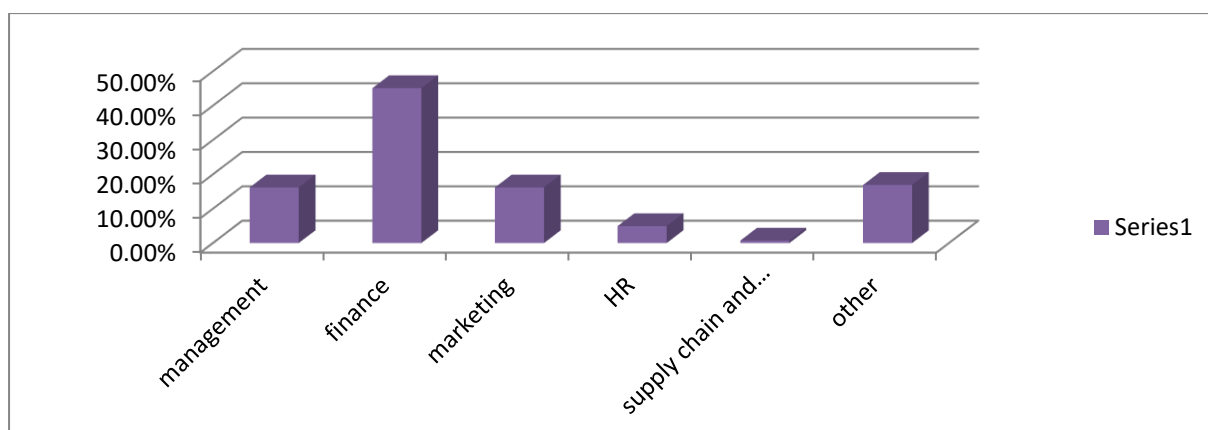


To know the size of companies which are been using block chain technology, it is mentioned that no of employees working in your organization. From the taken response it has been found that 43 responses have below 50 employees, 30 are having between 51 to 100 employees, 22 responses have 101-200 employees, 15 are having between 201 to 300, 07 have 301 to 400, 01 is having between 401 to 500 employees and 24 companies have more than 500 employees.

After this, it has come to know that the companies which are using block chain technology are having less than 50 employees in their organization i.e mostly medium scale organizations have adopted block chain technology to make their transactions done easily and quickly.

3. To which department do you belong in your company?

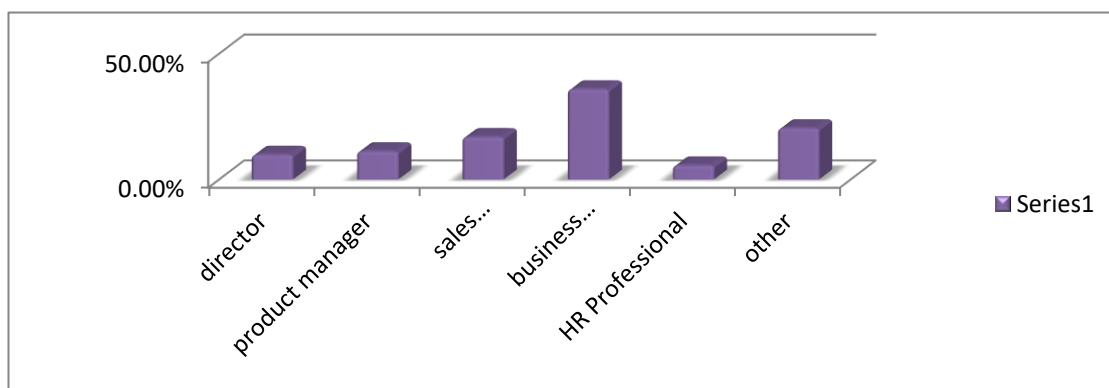
	No.of respondents	Percentage
Management	23	16.19%
Finance	64	45.07%
Marketing	23	16.19%
HR	07	4.92%
Supply chain and Logistics	1	0.70%
Other	24	16.90%



In this survey the question is given like, to which department do you belong. The reason behind asking this question is to know how many people do belong to financial sector, because this project is related to finance. From the output it is clearly defined that most of the people using block chain technology do belong to the financial sector i.e. 45.07%. As compared to other departments, mostly finance department people are using block chain technology.

4. What is your designation there?

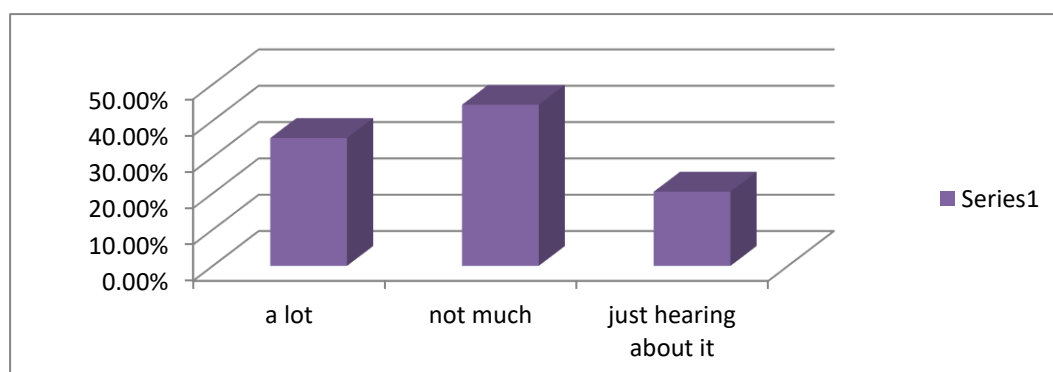
	Respondents	Percentage
Director	14	9.85%
Product manager	16	11.26%
Sales representative	24	16.90%
Business developer or Financial analyst	51	35.91%
Human resources professional	8	5.63%
Other	29	20.42%



To identify which level of employees are using block chain technology in the organization. It is observed that out of 142 sample data 14 respondents belongs to director's category, 16 people does belong to product manager's category, 24 respondents belongs to the department of sales, 51 people does belong to business development/financial analyst category, 8 are from HR department and the remaining 29 are from other sectors. By this it has come to know that most of the people who are using block chain technology do belong to business development or financial analysts.

5. How much have you heard or read about block chain technology?

	No.of respondents	percentage
A lot	50	35.21%
Not much	63	44.36%
Just hearing about it in this survey	29	20.42%

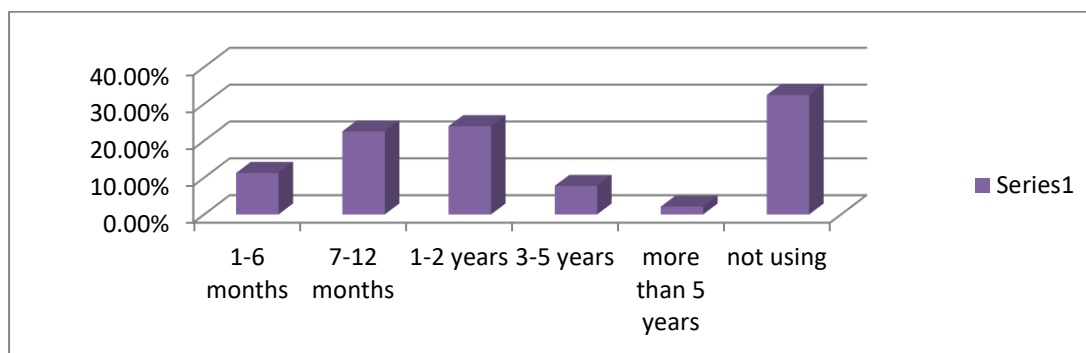


The main objective of this study is to know the awareness regarding block chain technology in the financial sector. To find whether they are aware or not, this question is added in this survey. The respondents have given their view on this. It is identified that out of 142 respondents 50 people do know about block chain a lot, 63 respondents are not knowing much about it and the rest of the of people i.e. 29 people are completely not knowing about block chain technology.

So the highest percentage i.e. 44.36% of respondents does know about block chain technology in brief.

6. How long have you been using Block chain Technology?

	No. of respondents	Percentage
1-6 months	16	11.26%
7-12 months	32	22.53%
1-2 years	34	23.94%
3-5 years	11	7.74%
More than 5 years	03	2.11%
Not using	46	32.39%

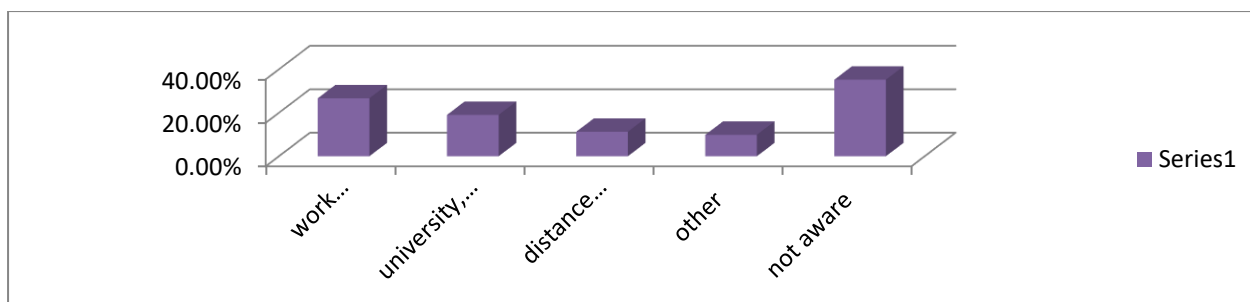


It is to find that from when the people are using block chain in their organization i.e. who are aware of it. It has found that 16 people from total 142 sample data are using it between 1-6 months, 32 are using it between 7-12 months, 34 are in between 1-2 years, 11 respondents are using between 3-5 years, the people who are using more than 5 years is only 3 respondents and the rest of the people are not aware of block chain i.e. 46 members.

From the result it has been observed that 36% of sample data are not using block chain technology due to lack of awareness and 23% is the highest percentage using it i.e. in between 1-2 years.

7. Where/How did you learn about Block chain Technology?

	No. of respondents	Percentage
Work place training	35	26.64%
University, Technical college etc.,	27	19.01%
Distance learning	16	11.26%
Other	14	9.85%
Not Aware	50	35.21%

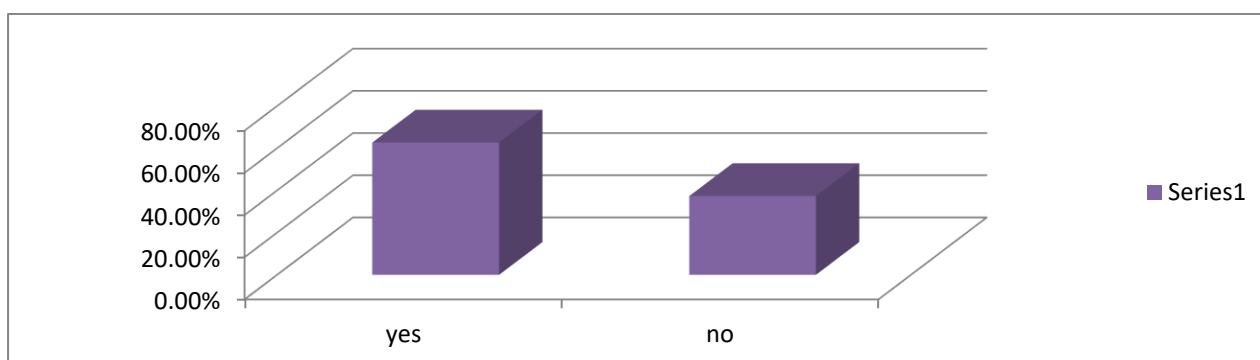


To know the source through which they have gained knowledge about block chain. It is observed that out of 142 responses 35 have learned about block chain at their workplace, 27 people at their educational level, 16 respondents have learned through distance, 14 are through other sources and the rest of the 50 respondents are not aware of it.

It is observed from the responses that the people who are aware have gained knowledge mostly from their work place i.e. 35 (26.64%).

8. Have you ever bought Bit coins/any other crypto currencies?

	No.of respondents	Percentage
Yes	89	62.67%
No	53	37.32%



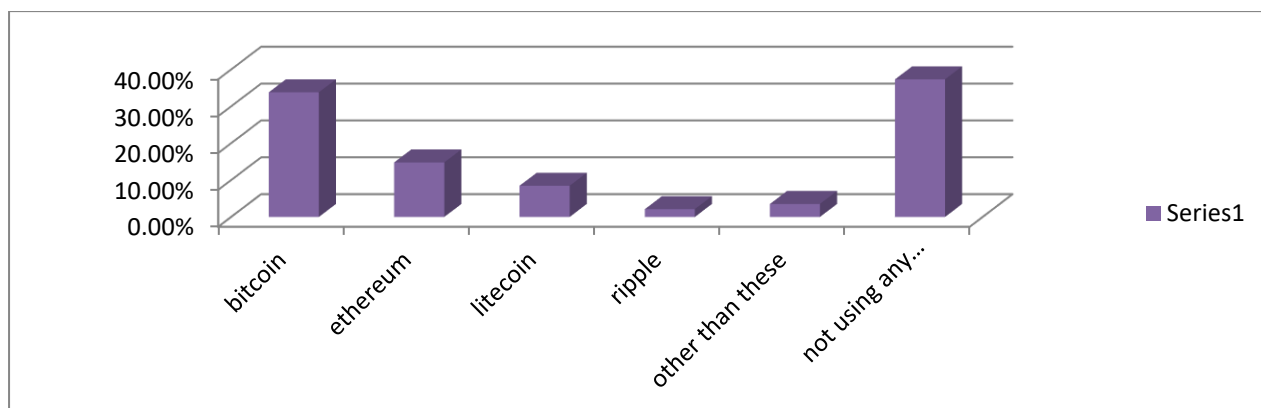
To understand whether they are trading in any cryptocurrencies or not, mainly bit coin. It has been defined that out of 142 sample data 89 people have agreed that they are trading in cryptocurrencies, 53 people have expressed that they are not aware of cryptocurrencies.

So it is identified that most of the people are aware of cryptocurrencies and also interested to trade i.e. 62.67%.

9. What kind of cryptocurrency are you using?

	No.of respondents	Percentage
Bitcoin	48	33.80%
Ethereum	21	14.78%
Lite coin	12	8.45%
Ripple	03	2.11%
Other than these	05	3.52%

Not using any cryptocurrency	53	37.32%
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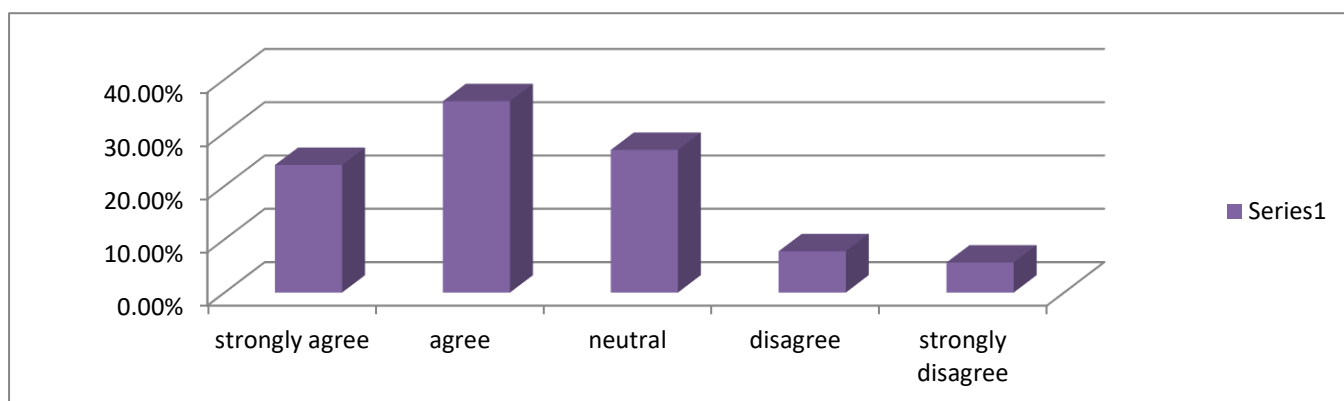


If they are trading in cryptocurrencies I would like to know in what kind of cryptocurrencies they are trading. From the responses it has come to know that 48 are trading in Bitcoin, 21 in Ethereum, 12 are interested in Litecoin, 03 in Ripple, 05 people out of 142 are trading in other cryptocurrencies than these and 53 are not at all trading in any cryptocurrency due to lack of awareness.

It has been observed from the above analysis that most of the people are trading in Bitcoin i.e. 48 out of 142 (33.80%).

10. Do you feel cryptocurrency is better than paper currency?

	No.of respondents	Percentage
Strongly Agree	34	23.94%
Agree	51	35.91%
Neutral	38	26.76%
Disagree	11	7.74%
Strongly Disagree	08	5.63%



To understand the people's perception towards cryptocurrency and paper currency (traditional currency). 23% of people have strongly agreed that cryptocurrency is better than paper currency, 35% of people have agreed, 26% of sample data are neutral i.e neither they are supporting nor they are opposing, 7% are disagreed and finally 5% of people are strongly disagreed about cryptocurrency is better than paper currency.

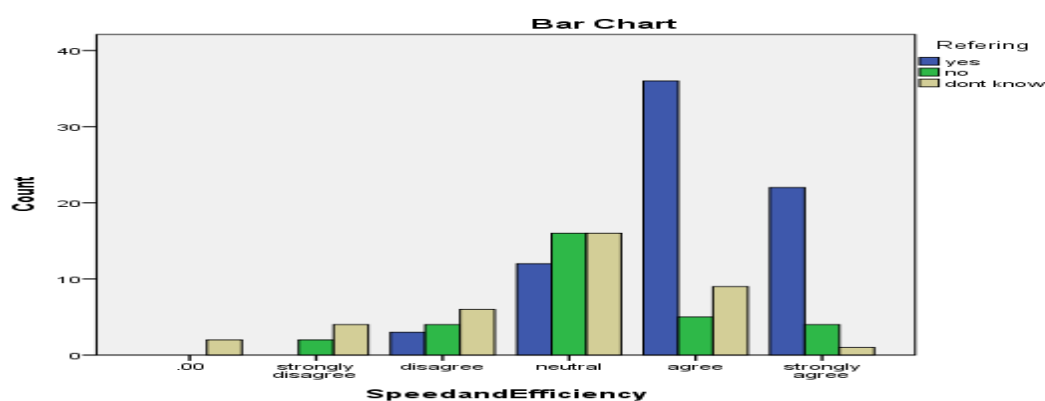
From the responses received, it is observed that majority of the people are agreed that cryptocurrency is much better than paper currency i.e. 51 out of 142, in terms of percentage is 35.91%.

TESTING OF DATA

Cross Tabulation

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SpeedandEfficiency * Referring	142	100.0%	0	0.0%	142	100.0%

SpeedandEfficiency * ReferringCrosstabulation					
Count					
		Referring			Total
		yes	no	dont know	
SpeedandEfficiency	.00	0	0	2	2
	strongly disagree	0	2	4	6
	Disagree	3	4	6	13
	Neutral	12	16	16	44
	Agree	36	5	9	50
	strongly agree	22	4	1	27
Total		73	31	38	142



INTERPRETATION

The above table represents the information regarding cross tabulation between speed and efficiency of blockchain. Out of 142 respondents the highest no of respondents agreed that blockchain increases the speed and efficiency of the work, rest of the respondents are neutral that blockchain does not increase the speed and efficiency and remaining are not aware of blockchain technology.

Chi-Square Test

SpeedandEfficiency			
	Observed N	Expected N	Residual
.00	2	23.7	-21.7
strongly disagree	6	23.7	-17.7
disagree	13	23.7	-10.7
neutral	44	23.7	20.3
agree	50	23.7	26.3
strongly agree	27	23.7	3.3
Total	142		

Refering			
	Observed N	Expected N	Residual
yes	73	47.3	25.7
no	31	47.3	-16.3
dont know	38	47.3	-9.3
Total	142		

Test Statistics		
	SpeedandEfficiency	Refering
Chi-Square	85.070 ^a	21.394 ^b
df	5	2
Asymp. Sig.	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 23.7.		
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 47.3.		

INTERPRETATION

In this test it is proved that speed and efficiency has impact on referring blockchain to others. Hence H_1 is accepted ($PV < 0.05$).

From the above analysis it is observed that the relationship between speed & efficiency and referring blockchain technology to others.

It is indicated that there is a relationship between speed & efficiency and referring blockchain to others with the use of chi-square test. The P value of chi-square test is 0.000. This is less than 0.05. Hence it is proved that there is a relationship between speed & efficiency and referring.

Correlation

Correlations			
		Comparison	Dominant
Comparison	Pearson Correlation	1	.552**
	Sig. (2-tailed)		.000
	N	142	142
Dominant	Pearson Correlation	.552**	1
	Sig. (2-tailed)	.000	
	N	142	142
**. Correlation is significant at the 0.01 level (2-tailed).			

INTERPRETATION

For testing the relation between the two variables like comparison between paper currency & crypto currency and the performance of crypto currency in the coming 2 years correlation has been chosen. From the output it is found that the relation between two variables is significant at 0.01 level.

CONCLUSION& FINDINGS

In a succinct conclusion it has come to know that the maximum people who are working in the financial sector are aware of blockchain technology according to this survey. According to my knowledge only these people are aware of this technology but the remaining people might be not aware of this. Their opinion on blockchain technology is positive i.e. the respondents are feeling this technology helps the organization to increase the speed and efficiency of the work and they would like to refer this technology to others.

SUGGESTIONS

- As blockchain has not gained importance in India due to lack of awareness, for that the government has to create awareness on it because it fasters the transactions, removes the mediators which leads to the economic development.
- Blockchain is a decentralized ledger system which will not entertain any hackings or frauds. So by making awareness on blockchain the financial system of India will be strong.
- Financial sector development takes place when financial instruments, markets, and intermediaries work together to reduce the costs of information, enforcement and transactions.
- A solid and well-functioning financial sector is a powerful engine behind economic growth. It generates local savings, which in turn lead to productive investments in local business.
- Furthermore, effective banks can channel international streams of private remittances. The financial sector therefore provides the rudiments for income-growth and job creation.

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