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ANVESHANA
2022

NATIONAL CONFERENCE ON

INNOVATIVE TRENDS IN THE FIELD OF

TECHNOLOGY, COMMERCE, MANAGEMENT & HUMANITIES

Editor-in-Chief
MR. Chethan. S

Presented By
NOBLE GROUP OF INSTITUTIONS
J. P. Nagar, Bengaluru

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Preface

Noble group of institutions hosted its 5th National conference Anveshana - 2022, a national conference on 'Innovative trends in the field of Technology, Commerce, Management and Humanities' ", with an objective to explore the future trends in various discipline and how these trends redefine and reconfigure the society. Scholars from commerce, Management, Science and Humanities were invited to contribute to this discussion of academic and social importance.

The Purpose of this conference was to

- To Provide an multi disciplinary platform to present and discuss the most recent innovations in the field of technology, commerce, management and humanities
- To explore the transformational changes experienced by the organizations post pandemic period
- To understand the practical implication and new innovative practices

The following were the main tracks of the conference

Track 1: Innovation in Commerce and management :Innovative business model, Industry 4.0-Internet and renewable energy, Fintech and the digital transformation of financial services, Sustainable innovation and business growth, Cross cultural communication and its impact on global business, Data analytics for sustainable business, Digital and social media marketing, Demands of the new e-Marketplaces Creativity & Innovation in the digital inclusion

Track 2: Innovation in science and technology: Artificial Intelligence, IOT, Data science, Application of AI in Future education system, Web 3.0 -NFT, Crypto currency, Bit coin, A.I and machine learning implications on Higher education, Digital Marketing for Sustainable growth Business Development

Track 3: Innovation in Arts, language and humanities: Shifts in language, teaching and research, Education 4.0- Practical and project based learning, Research scope in language, Globalization in language

Track 4: Digitalization and Innovation Sustainable business practices Transformation in Finance & Economics Core banking and future trends Technological Advancement/ Digitization, Cyber Security in digital banking, Green banking

Track 5: ICT, Entrepreneurship, Innovation: Upcoming trends in Corporate Finance, Revival of Economy and new business model, ICT and Marketing practices Role of ICT, Globalized Economy to Local Economy, Digital Branding Practices and Brand Architecture, Financial Inclusion

Track 6: Transformation in HRM & and Technology in Business Sustainability: Innovation and Entrepreneurship, Leadership Styles during innovation and digital transformation, Social Innovation and Entrepreneurship, Women Entrepreneurship Rural Entrepreneurship, Green Entrepreneurship Organizational behavior and technological Digital Innovation in education Challenges, Innovative Reward Systems, Talent Engagement, HR Branding and Analytics

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Acceptance of Fintech Banking Service by Banking Customers- An Empirical Study

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Abstract:

The world economic crisis has seen the start of new technology in offering innovative financial services, products and restructuring the financial sector, namely FinTech. Fintech is the combination of technology providing in banking sector that simplifies the banking service process. Fintech has introduced digital transformation and drastically changed the banking sector. The e-services provided by the banks are internet banking, mobile banking, ATM, online payments system, Debit card, Pay by phone system, point of sale transfer terminals and investing, etc. It provides the various benefits to banking customers like cost reduction, time saving and user friendly. Fintech adoption changes the habits and behavior of banking customer. The main purpose of this papers is to examine the various factors that impacts the acceptance of fintech banking service by banking customers.

Key words: Attitude, Trust, Perceived ease of use, Perceived risk, User innovativeness (UI), Brand image

1. Introduction:

In present scenario the Information Technology (IT) plays a significant role. The innovation, upgradation and advanced technology have impacted the individual decision-making process. The Information technology provides the strategic benefits to the strategic users. Potential information technology enhances competitive advantage and sustainability of the company (Malar et al., 2019). Understanding the technological factor is one of the important determinants that affects the decision making (Taylor & ; Todd, 1995). In e-commerce business web-based technology provides prime benefits like cost reduction (Ahmed et al., 2003), provides various business opportunities, provides personalized service provision to customer reduce lead time (Khare, 2010).

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Web technology and Convention banking is a fusion of online banking system provides improved quality service and superior service delivery with the banking sector (Dawes & ; Rowley, 1998). As per Mckinsey Banking Annual Review report states that the big data and analytics is used to team up with fintech and digital firm to manage and assess the risk. Due to digitize process the back-office cost is reduced (McKinsey's Global Banking Annual Review | McKinsey, n.d.).

The information technology plays a significant role in online banking services especially the relationship between online banking service system and mobile device were applying and sending security code that enhances services provided in India. Online banking service system helps in value co-creation like flexibility, comfortability, effective informational technology and centralized customer service. Multi-dimensional focus is required for an information technology effective strategy to enhance the value co-creation (Malar et al., 2019).

FinTech "as the use of platforms of technology and mobile devices to access transaction notifications, bank account and credit, as well as debit alerts via push notifications through short message service, application or another way of getting notifications"(Shaikh et al., 2020). FinTech "as the use of platforms of technology and mobile devices to access transaction notifications, bank account and credit, as well as debit alerts via push notifications through short message service, application or another way of getting notifications"(Hu et al., 2019).

Earlier researches stated that transaction expenses, better quality service, planned business structure and improved and upgraded information technology have provided the above said benefits in banking section. (al Ajlouni & Al-Hakim, n.d.). In financial sector, financial technology is the most significant innovations that includes rapid and speedy driven that is favorable to economy. Financial technology has changed the complete banking structure by reducing cost, improved service quality and creating various diversification. ('The FinTech Revolution,' 2015). The technological developments in infrastructure, big data, data analytics,

and mobile devices allow fintech startups to disintermediate traditional financial firms with unique, niche, and personalized services. According to PwC (2016), 83% of financial institutions believe that various aspects of their business are at risk to fintech startups. Due to fintech companies already having a significant impact on the financial industry, every financial firm needs to build capabilities to leverage and/or invest in fintech in order to stay competitive(Lee & Shin, 2018).

2. Literature Review

Attitude

Attitude refers to favorable or unfavorable thinking that affects the individual behavioral change(Raut & Das, 2017).Earlier research have clearly stated that there is positive correlation between attitude of individual towards banking technology and adoption intentions which has been confirmed in earlier research in banking stream *(Hu et al., 2019). Attitude has a major impact towards using the banking financial technology. Hence following hypothesis is constructed:

H1: Attitude has positive influence on Acceptability of banking fintech services.

Trust

Trust is one of the important factor that acts as a mental guarantee and that influences the human being to trust electronic transaction activity(Damghanian et al., 2016). In e-commerce trust plays the significant prerequisite role and most of the research on information technology have attentive on trust(Featherman & Pavlou, 2003). Trusting m-commerce users are willing to take risk thought it includes uncertainties like lack of face-to-face interaction, security and privacy issue(Chong et al., 2012). The earlier research has confirmed that the perceiveness of technology users relies on aspect called trust. Kesharwani et al. discovered that trust influence the individual behaviour*(Hu et al., 2019) . K. W. Lee et al., (2011) highlights that the risk is reduced due to trust, that improves the social relationship and have positive influence of trust on attitude towards switching to internet banking. Hence the following hypothesis is constructed:

H2: Trust has a positive impact on Acceptability of banking fintech services.

Perceived ease of use

Li & Li (2016) states that, if information technology is costly and takes too much time to learn and adopt it then individual will never prefer to use technology. The major dimension of a

technology includes perceived usefulness, perceived ease of use and compatibility (Damghanian et al., 2016). It refers as an utilizing the information system that can reduces the effort of an individual (Davis 1989, p.320). Perceived ease of use reflects simplicity and clarity (Li & ; Li, 2016) and adopting the mobile banking positively affects the individual attitude and perceived ease of use (L. L. Chong et al., 2021). Earlier research has stated the perceived ease of use refers to feeling of consumers towards accepting, adopting and using the Fintech services. Financial services provides better and advanced services to its banking customers, which reduces the banking system weakness and fulfils the customers' needs at affordable price.*(Hu et al., 2019). Lee (2009) states that perceived ease of use has significant impact perceived usefulness and attitude. Hence, the following hypothesis is constructed as:

H3: Perceived ease of use has positive impact on Acceptability of banking fintech services.

Perceived risk

Perceived risk refers uncertainty that may take place due to the decision made. It also refers to financial uncertain happening that affects the individual decision-making process. The major perceived risk is theft of personal identity like personal data, transaction data that is feeded in internet that affects the decision making. Financial risk always cause damage to customer concern. *(Hu et al., 2019). Hence, the following hypothesis is constructed as:

H4: Perceived risk has negative impact on Acceptability of banking fintech services.

User innovativeness (UI)

User innovativeness refers to the acceptance and adoption of new and innovative technology by users that is customers. The technology should be user-friendly and adopted by all. Early adoption of new product, new service and new technology states the success of technology by individuals. Increased innovativeness has always a positive impact on the users. (Hu et al., 2019). Hence, the following hypothesis is constructed as:

H5: User innovativeness has positive impact on Acceptability of banking fintech services.

Brand image

It refers to the asset that is intangible and have good economic value that states how it is distinctive and different from others. Hence brand image has impact on the individual to go with it or not than the services offered. Distinctive and abstract concepts have positive influence on the service reliable to its users. The brand is one of the important factors that influences and promote the users *(Hu et al., 2019). Hence, the following hypothesis is constructed as:

H6: Brand Image has positive impact on Acceptability of banking fintech services.

3. Research Methodology

This study is conducted to examine the influence of attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services. The population of the study comprise of individual using internet banking serice. Self-reporting questionnaire was used to collect the data on the basis of convenience sampling method. Questionnaire was administered through the available like known investors and stock brokers contacts using Google form and study received 110 responses.

Self-reporting questionnaire administered to collect the primary data includes questionnaire to measure attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services. The data is collected from online banking users using self-administered Likert-based questionnaire ranging from strongly disagree (1) to strongly agree (5).

Reliability of data has been measured through Cronbach's alpha. SPSS-20 has been used for reliability, correlation analysis and regression analysis. Regression analysis has been used to find out the influence attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services.

4. Result and Discussion

The main objective of the study is to examine the attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services. The following analysis are being conducted to test the validity, relationship, and influence between the variables.

Table No.1- Reliability Analysis:

Scale	**Items**	**Cronbach's Alpha (α)**
Attitude	3	0.965
Trust	2	0.868
Perceived ease of use	2	0.834
Perceived risk	3	0.843
User innovativeness	3	0.751
Brand image	2	0.853
Acceptability of banking fintech services.	3	0.887

Source: Primary Data

The reliability analysis for all the constructs showed the Cronbach's alpha values ranged from 0.751 to 0.965. All the constructs indicate alpha point above 0.7 (Nunnaly, 1978). This demonstrates that all the research variables Attitude (α =0.965), Trust(α =0.868), Perceived Ease of Use (α =0.834), Perceived risk(α =0.843), User innovative (α =0.751), brand image (α =0.853) and Acceptability of banking fintech services (α = 0.887), were internally consistent and had the acceptable reliability values. All items for the constructs were assessed using a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree)

Table No. 2- Relationship between attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services.

Variables	Attitude	Trust	Perceived ease of use	Perceived risk	User innovativeness	Brand image	Acceptability of banking fintech services.
Attitude	1						
Trust	.852**	1					
Perceived ease of use	.742**	.823**	1				
Perceived risk	.964**	.815**	.756**	1			
User innovativeness	.956**	.826**	.992**	.816**	1		
Brand image	.804**	.835**	.846**	.807**	.875**	1	
Acceptability of banking fintech services.	**.801****	**.742****	.742**	**.776****	.810**	.901**	1

Source: Primary data

Acceptability of banking fintech services behaviour is positively related to Attitude (α =0.801), Trust (r =0.742), Perceived Ease of Use (r =0.742), Perceived risk (r =0.776), User innovative (r =0.810) and brand image (r =0.901) at $p<0.05$. The bivariate correlation between the variable representing a strong and significant positive relationship, which explains that extent attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services.

Table No. 3a: Predictors of Acceptability of banking fintech services.

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.865a	.853	.848	.43167
a. Predictors: (Constant), **attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services**				

Source: Primary Data

The regression model in the table 3a shows that 84.8percent (Adjusted R Square 0.848) of the variability in acceptance of online banking behaviour is due to variability of attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image meanwhile the remaining 15.2 percent was due to other variables which are not included in the objectives of the research study.

Table no. 3b: Predictors of Acceptability of banking fintech services.

Coefficientsa						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)					
	Attitude	.221	.112	.369	1.979	.005
	Trust	.965	.465	.820	2.074	.001
	Perceived ease of use	.885	.083	**.737**	6.746	**.000**
	Perceived risk	.582	.667	.503	2.372	.009
	User innovativeness	.854	.834	**.735**	2.713	**.000**
	Brand image	.242	.074	.286	3.248	.001
a. Dependent Variable: Acceptability of banking fintech services.						

Source: Primary Data

In the above table 3b, the Beta under standardised coefficient of all the predictor variables showing strong and significant predictive ability on the Fintech Banking services. This means that attitude(β=.369), trust(β=.820), perceived ease of use(β=.737), perceived risk(β=.503), user innovativeness(β=.735), and brand image(β=.286) makes the significant contribution to explain the Acceptability of banking fintech services. Hence, it can be inferred that, attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services.

5. Conclusion:

Brand image and user innovation have significantly positive impacts on the adoption of Fintech services. These impacts are not only direct effects but can also have indirect impacts on trust in services, while trust will have a positive impact on the adoption of the service. Perceived risk can affect users' attitudes through their trust of Fintech services. The mechanism is that perceived risk has a significantly negative impact on trust, while trust actively guides users to engage with

Fintech services. This shows that users' perceived risk of Fintech services has a substantial role in reducing the level of trust in services. Financial institutions providing Fintech services need to adopt measures to reduce the perceived risk to users to strengthen trust in products and services, thereby increasing users' willingness to employ the services. Perceived ease of use has no significant impact on a user's adoption of Fintech services. The empirical result show that the perceived benefits, perceived ease of use and perceived usefulness have positive influence in online stock trading. This indicates that the advancement in the technology has simplified the day-to-day operation and made easy to access financial services in the tip of the fingers of investor and which facilitated the investment behaviour. This study explored the effect of attitude, trust, perceived ease of use, perceived risk, user innovativeness and brand image on acceptability of banking fintech services. which may act as a major limitation for the study because there might be many other factors not studied in this paper may also contribute on the investment decision. Additionally, the study has been restricted to only Bangalore region, perception and experiences might vary with geographical and economic differences. That implies that the findings of the study may not be generalizable to other part of country.

6. Appendix : Questionnaire items:

Sl. No	Construct
1	Attitude
a.	Using Fintech services is a pleasant experience
b.	I am interested in Fintech services.
c.	If I have used Fintech services, I am willing to continue using them
2	Trust
a.	I believe Fintech services keep my personal information safe.
b.	Overall I believe Fintech services are trustable.
3	Perceived ease of use
a.	I think the operation interface of Fintech is friendly
b.	It is easy to have the equipment to use Fintech services(smartphone or wifi)
4	Perceived risk
a.	I believe that the money is easy to be stolen by using Fintech
b.	I believe personal privacy will be disclosed by using Fintech services
c.	Overall, I feel Fintech services are risk
5	User innovativeness (UI)
a.	When I hear about a new product, I look for ways to try it
b.	I believe using Fintech services is a good idea.
6	Brand image
a.	I think I prefer to accept the services provided by familiar brands
b.	The bank has a good reputation.
7	Intention Acceptability of Fintech Banking Service
a.	If I have used Fintech services, I am willing to continue using them.
b.	I would like to use Fintech services soon
c.	I will recommend Fintech services to my friends*

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IMPACT OF DIGITAL FINANCE ON INDIA'S PAYMENTS SYSTEM

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ABSTRACT

India is one of the fastest developing countries and has set the target of achieving a five trillion dollar economy by 2025. Out of 10 Indians, Seven people are still residing in rural areas. United Nations projected that India's urban population will be doubled during the next thirty years. The current trends and future projections indicate that India is steadily moving along the path of urbanization. India's Digital program further reduced the gap between rural and urban digital finance accessibility. It motivated the rural people to access and use digital services like urban people in all aspects. As a result, millions of formerly excluded and below the poverty line, people are moving from exclusively cash-based transactions to formal financial services like payments, transfers, savings, credit, insurance, and even securities by using mobile phones or other digital technology to access these services. Penetration of mobile phones has further strengthened the government's initiatives of various services related to digital financial inclusions. India has 600 million smartphones adding 25 million more every quarter and has the highest monthly mobile data consumption rate in the world at 12 gigabytes per user per month. The primary objective of this study is to examine the impact of digital finance on India's payment system. An exploratory research design was adopted. Secondary data was taken from various reports to find out India's digital finance inclusions over the study period. Using SPSS tools, quantitative data was analyzed. Findings of this study revealed that India's digital payment has grown tremendous growth over the study period. Further, Covid pandemic accelerated India's digital payments system in most of the digital payments systems. The scope of future growth of digital financial inclusions is very promising in all parameters of digital payments systems which may indirectly pushes our economy to achieve its dream of a five trillion dollar

economy. The findings of this study will be useful to government and financial institutions to frame policies and produce products and services to satisfy the needs of end-users.

Keywords: Digital India, Digital Finance, Digital Payments, Financial Inclusions, Financial Services.

INTRODUCTION

Rapid advancements in the telecommunications sector motivated people to use more Digital payment systems. It creates an opportunity to connect poor households to affordable and reliable financial tools through mobile phones and other digital interfaces. Digital finance and cashless India are the primary focus of present India. After the demonetization, people have been motivated to a cashless economy by the way of using digital financial services. Further, Banks, financial institutions, and payment banks have opened the gateway for people to use more digital transactions through digital platforms. The Government of India and Reserve Bank of India has been using organized financial institutions and NGOs to promote Digital financial Literacy, especially in rural areas. Digital Saksharta Abhiyan (DISHA) is one such initiative taken by the Ministry of Electronics and IT, to provide digital financial literacy training to one crore rural citizens. Further, Vittiya Saksharta Abhiyan (VISAKA) is one more project launched by the Ministry of Human Resources to use more than 1 lakh students of higher educational institutions as a volunteer to use it for digital finance campaigns. The Training has been imparted the students to make them learn about the opening of the account, linking Aadhaar card with Bank account, linking Mobile to Aadhar card, Aadhaar based payment system, pre-paid card, Unified Payments Interface (UPI), Mobile wallet, Unstructured Supplementary Service Data (USSD). Pradhan Mantri Jan Dhan Yojana (PMJDY) which was launched on 28 August 2014 with a mission of ensuring access to financial services for the excluded section i.e. weaker section and the low-income group. The primary aim of this scheme is to make the people access the banking facilities, credit, insurance, and pension facilities. Besides, the beneficiaries would get a RuPay Debit card which covers accident insurance of Rs. 1 lakh. PMJDY has used in 450 schemes from across 56 ministries. The primary focus of this study is to explore India's digital finance inclusions and its growth prospects by taking various digital payments parameters as specified by RBI. Secondary data was taken from various reports of RBI, Statista, and National payment corporations to explore the findings of various digital payment systems used by the people during the study period. Findings of this data will be useful to the government to frame policies to cover the unreached people of digital accessibility. Banks and financial institutions can

produce niche products and services to meet the expectations of end-users to achieve our dream of a five trillion dollar economy.

OBJECTIVES OF THE STUDY

1. To examine the impact of digital finance on Indian payments system.
2. To identify the impact of major digital finance indicators on total retail payments systems.

METHODOLOGY OF THE STUDY

Being exploratory research, it is based on secondary data of National & International Journals, articles, government reports, books, newspapers, and magazines covering a wide collection of academic literature on "Digital Finance inclusions in Indian Perspectives". Considering the research objectives, the exploratory research design is adopted to have a more accurate and rigorous analysis of research studies. Available secondary data were extensively used for the study.

REVIEW OF LITERATURE

The Digital India program has three key vision areas. They are infrastructure as a utility to every citizen, governance and services on demand, and digital empowerment of citizens. These dimensions made the potential to provide an incremental 20- 30% increase in India's GDP by 2025. Since its launch in July 2015, significant progress has been made in several initiatives under the Digital India programme. Digital telecommunications have transformed the traditional financial system into a digital financial system. Digital communications eliminate the social, economic, and territorial divides. But the rural phenomenon is completely different. It should be addressed. (Whitacre et al., 2014,). Gupta and Arora (2015) found the Digital India programme has many schemes launched to boost agriculture and entrepreneurship development. Rani (2016) in her findings revealed that the Digital India program opens the door for rural people to use the latest technology. But still needs some transformational process, re-engineering, and refinements to achieve the desired service level objectives. Shekhar Srivastav (2017) found that implementing various digital services in rural areas needs to face some challenges of the digital India program. According to the report of RBI (2019), The digital payments ecosystem has made substantial progress on both the supply and demand side. There should be an equal balance between them. On the supply side, a wide range of payment services has been offered through

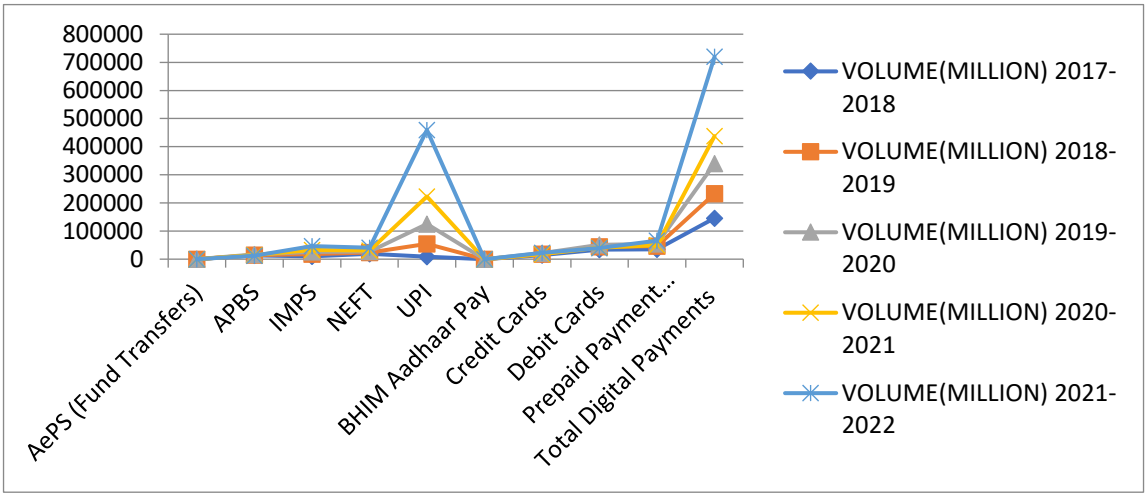
bank accounts, bank branches, business correspondence, cards, mobile phones, and related devices, backed by robust and resilient payments infrastructure, including RTGS, NEFT, IMPS, BHIM UPI, Card Networks, POS, BQR, ATMs, NACH, ECS, Mobile Wallets, APBS and AEPS. On the demand side, direct and indirect charges related to digital transactions, more private players for accepting digital payments, Cash - with its ease of usage, universal availability and acceptance, low cost to consumers, and no requirement of KYC – continues to play a significant role in payments. The adoption of the Unified Payments Interface (UPI) by the National Payments Corporation of India (NPCI) has shown tremendous results in terms of online transactions. RBI has also set an ambitious target of increasing the number of digital transactions from 2069 crore in December 2018 to 8707 crore in December 2021. Business dynamics have drastically changed. Digital payments made by the Indian people have shown rapidly increasing, (Dennehy, D. & Sammon, D., 2015). Further, they added that private players who provide many of the mobile wallets and e-commerce services are focusing on the rural locations to capture a strong market base. The government of India has taken many initiatives to make the digital platforms are user-friendly. With the help of many private companies, many digital platforms like the E-Wallets, Mobile app solutions (UPIs), made the digital market is gearing up towards more transparent and compliance-based systems and of digital trends Horowitz, M. J., (2012). Padmavathi & Adalarasi, (2014) advocate that Aaadhar based payment solutions have shown significant potential to increase the digital Payments system of rural households. Studies by Panchali, S., (2016) revealed that More POs solutions adopted by banks and financial systems ease and improve the payment system. Further, she added that Incentives allotted during fuel purchases using digital payment systems are a promising approach to encourage to use of more card-based digital transactions. At the same time, hurdles of merchandise digital transactions made by rural consumers should be sorted out, Singh, R., (2016.) Pahwa, N., (2016) pointed out that trust factors on using mobile wallets and other digital payment systems should be taken care of by the digital transaction service providers like banks, fin-tech companies. *Khurana (2017)* mentioned that the progress to a cashless economy has its points of interest and burdens from various measurements. It is comprehensively broadcasted to get improvement and give an extensive variety of advantages to every one of the players in the economy. One of the essential explanations behind this is to control the course of money as a real piece of it is charged to be static in form and stacked through unscrupulous means. Ali et al (2017) explained that Digital payment will bring the solution to resolve the traditional payment system by standing in long queues. Kumar, (2017), explored that the method of digital payment is advantageous to rural

people for their buy and sell activities in and around rural areas of India. Roy, (2018) opined that security on performing digital transactions should be acknowledged. Yang Y., (2015) argued that various risks quantify the perception of consumers towards the adoption of m-payment services. The perceived risk is an obstacle. Results of Kotecha P.S, (2018) suggest that the usage and adoption of m-wallet services have increased in recent years for payment services. Service providers should organize promotional activities to enlighten the users of mobile payment services (Liebana- Cabanillas, F.& Lara- Rubio, J. 2017). Other studies say that satisfaction of customers is directly related to benefits offered by mobile banking (Sampaio C.H. et al, 2017). Premium pricing, complexity, a lack of critical mass, and perceived risks are the barriers to the adoption of digital payment systems Taheam K, Sharma R, Goswami S (2016).

Table 1: Digital Payments Indicators

	VOLUME(MILLION)				
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Credit Transfers	58793	118481	206297	317868	577632
AePS (Fund Transfers)	6	11	10	11	10
APBS	12980	14949	16747	14373	12298
ECS Cr	61	54	18	0	0
IMPS	10098	17529	25792	32783	46625
NACH Cr	7031	8834	11100	16465	18730
NEFT	19464	23189	27445	30928	40407
UPI	9152	53915	125186	223307	459561
Debit Transfers and Direct Debits	3788	4914	6027	10457	12222
BHIM Aadhaar Pay	20	68	91	161	228
ECS Dr	15	9	1	0	0
NACH Dr	3738	4830	5842	9646	10788
NETC (Linked to Bank Account)	15	6	93	650	1207
Card Payments	47486	61769	72384	57787	61786
Credit Cards	14052	17626	21773	17641	22399
Debit Cards	33434	44143	50611	40146	39387
Prepaid Payment Instruments	34591	46072	53811	49743	65812
Paper-based Instruments	11713	11238	10414	6704	6999
Total – Retail Payments	156371	242473	348933	442557	724451
Total Payments	157615	243839	350440	444149	726530
Total Digital Payments	**145902**	**232602**	**340026**	**437445**	**719531**

Figure 1: Digital Payments (Volumes in Millions)



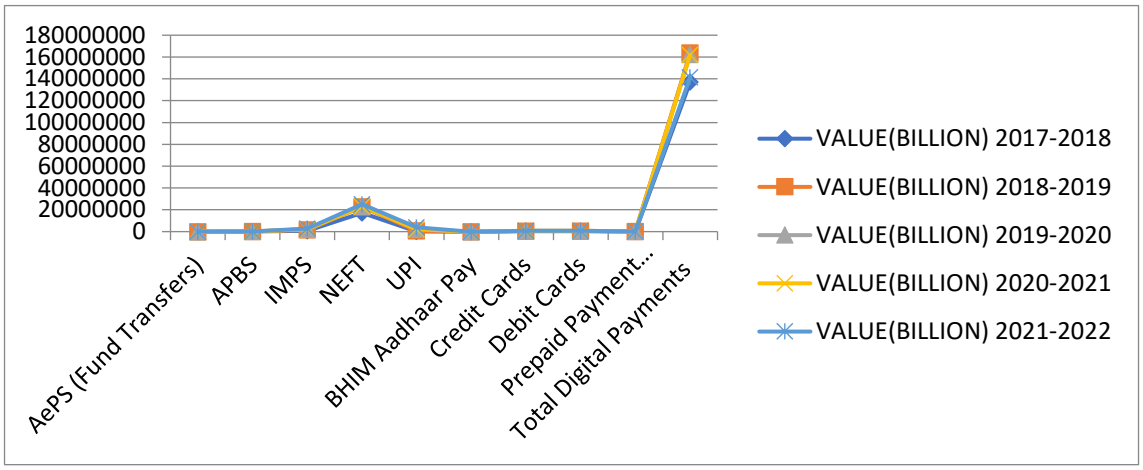
Volume of major digital payments indicators revealed that, during 2020 2021 and 2021 2022 the volume of digital payments have surged when compared to previous periods of digital payments. Covid pandemic made immobility drove the people to adopt and use digital payments in their daily course of financial transactions. Among the various digital payments indicators, UPI and various instruments in prepaid payment platforms have increased more than 100 percent growth during the study period.

Table 2: Digital Payments (Values in Billion)

	VALUE(BILLION)				
	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
AePS (Fund Transfers)	300	501	469	469	623
APBS	55949	86734	99448	99179	112747
IMPS	892498	1590257	2337541	2337541	2941500
NEFT	17222852	22793608	22945580	22945580	25130910
UPI	109832	876971	2131730	2131730	4103658
BHIM Aadhaar Pay	78	815	1303	1303	2580
Credit Cards	458965	603413	730895	730895	630414
Debit Cards	460070	593475	804870	703920	662667
Prepaid Payment Instruments	141634	213323	215558	215558	197695
Total Digital Payments	1.37E+08	1.64E+08	1.62E+08	1.62E+08	1.41E+08

Table explores the various digital payments indicators values in billions. NEFT transactions have shown higher values of transactions than the other modes of digital payments systems. An overall NEFT transaction has shown more growth during the covid and post covid period.

Figure 2: Digital Payments (Values in Billions)



MULTILINEAR REGRESSION MODEL

Regression is a statistical technique to formulate the model and analyze the relationship between the dependent and independent variables. It aims to check the degree of relationship between two or more variables. This is done with the help of hypothesis testing.

Hypothesis H_1: Digital payment indicators do impact the overall retail payments. Regression coefficient is taken to find out the influence of various digital payments variables on overall digital payments made during the study period.

Table 3: ANOVA

Model Summaryb				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.711a	0.504	0.492	0.59123

R value explains the correlation between dependent variable of total retail payments and dependent variables of Prepaid Payment Instruments, UPI, Debit Transfers and Direct Debits, Card Payments, NEFT, BHIM Aadhaar Pay and IMPS. R value should be greater than 0.40 for further analysis. Here, the R value is 0.711 which is higher the threshold limit of greater than 0.40 percent. R square explores the total variation of dependent variable that can be explained by the independent variable. Generally, R square value should be greater than 0.5. Here the value of R square is 0.504 which is good and acceptable. Both the R and R square are satisfactory for further analysis.

Table 4: F statistics

F statistics of ANOVAs table is 65.72 and its significance value is lesser than 0.05. Generally, 95% confidence interval or 5% level of the significance level is chosen for the study. Thus the p-value should be less than 0.05. In the above table, it is .000. Therefore, the result is significant. If Sig. is < 0.05, the null hypothesis is rejected. If Sig. is > 0.05, then the

Model		Sum of Squares	df	Mean Square	F	
1	Regression	97.56	2	23.39	65.72	.000[b]
	Residual	92.51	260	0.361		
	Total	190.07	262			

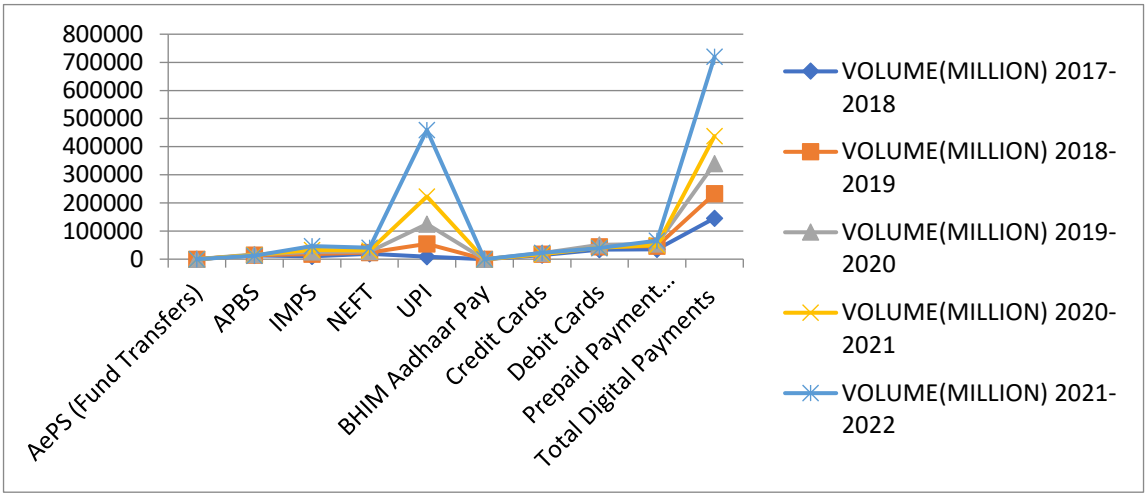
null hypothesis is not rejected. If a null hypothesis is rejected, it means there is an impact. Thus it signifies that null hypothesis should be rejected.

Table 5: Standardized and Unstandardized Coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2535.175	194.401		13.041	.006
	NEFT	.189	.077	.407	80.009	.000
	IMPS	2.94	1.94	0.18	1.52	0.269
	UPI	1.56	1.46	0.10	1.01	0.040
	Debit Transfers and Direct Debits	0.51	0.32	-0.01	-1.58	0.255
	BHIM Aadhaar Pay	-0.28	0.22	-0.12	-2.11	0.170
	Card Payments	0.34	0.055	0.073	6.151	0.025
	Prepaid Payment Instruments	16.64	11.07	0.07	1.50	0.272
a. Dependent Variable: DIGITALPAYMENTS						

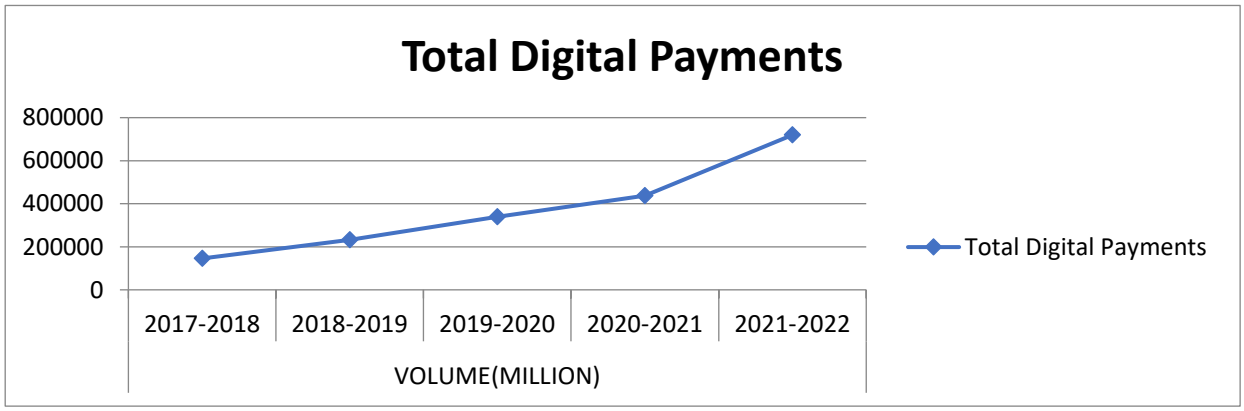
The significant value of NEFT, UPI and Card payments have shown less than 0.05 percent. It is lesser than the threshold limit of 0.05 percent. Hence, it revealed that NEFT, UPI and Card payments have significantly influence the total retail payments system. Hence the null hypothesis is rejected and alternate hypothesis is accepted. Other digital finance payment indicators significant value is higher than 0.05 percent, It shows that there is no impact of these variables on overall retail payments. With a 1% increase in the NEFT payments, the overall retail payments rate will increase by 2.94 % (Beta value).

Figure 3: Digital Payments



Volume of major digital payments indicators revealed that, during 2020-2021 and 2021 - 2022, the volume of digital payments have surged when compared to previous periods of digital payments. Covid pandemic made immobility drove the people to adopt and use digital payments in their daily course of financial transactions. Among the various digital payments indicators, UPI and various instruments in prepaid payment platforms have increased more than 100 percent growth during the study period.

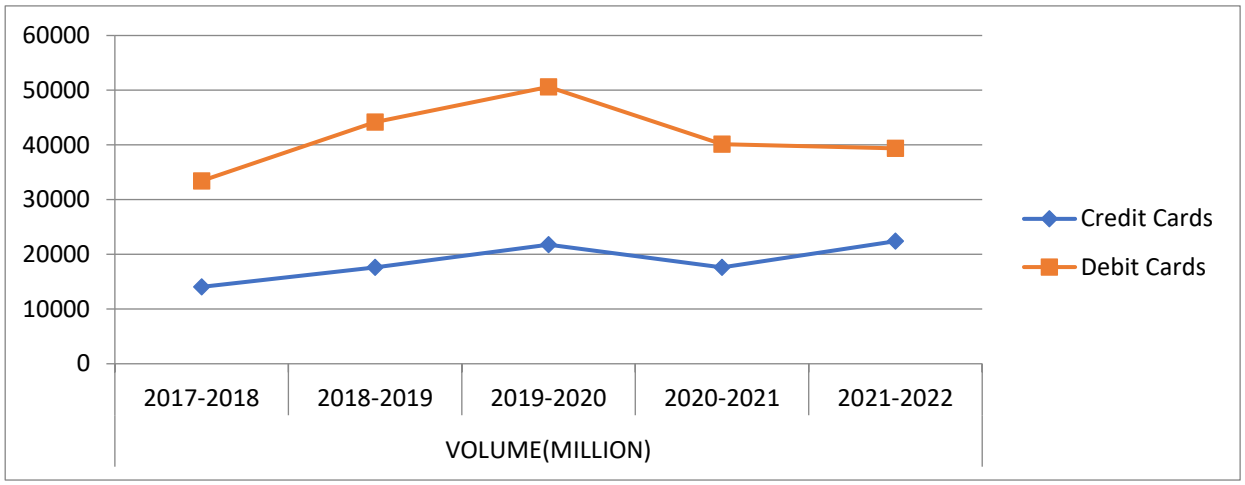
Figure 4: Digital Payments



Starting from 2016, digital India program has been incorporated into major government schemes for transparent and fast fund transfers to needed people through cash and kind subsidies. From 2017 **to** 2020, the volume of digital payments made by the user has shown a growth of more than 133 percent growth. During the covid period, the growth of digital payments has shown a surge of 29 percent compared to the previous year of 2019-2020. The covid pandemic has amplified the urgency of people to adopt digital payments for maintaining covid protocol of social distancing, safety, and security. During 2021 - 2022, growth has shown more than 64

percent growth. This shows that digital payments have shown positive trend on year on year which should be further strengthen by innovative products and services to end users.

Figure 5: Card Payments

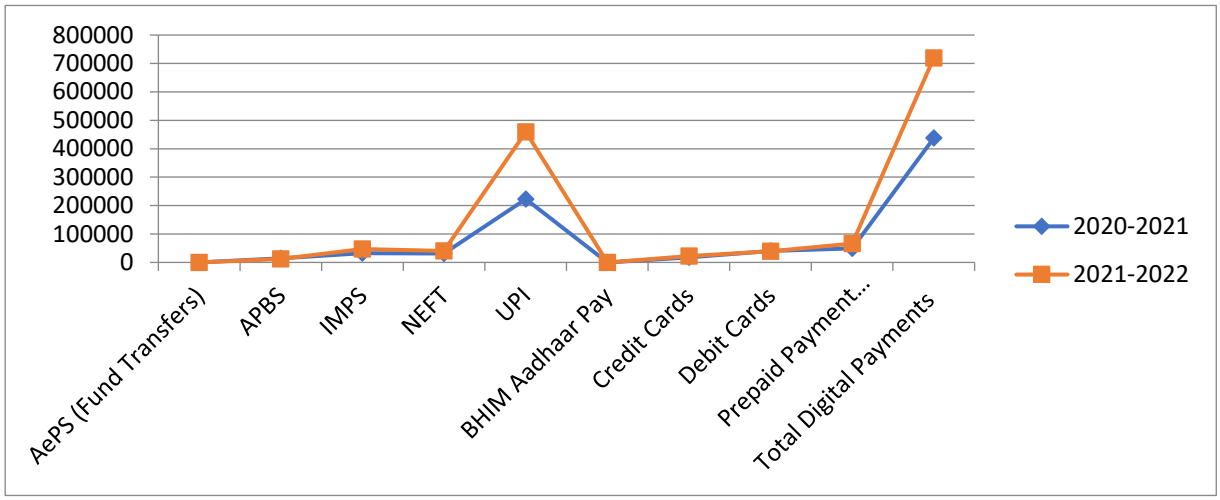


The growth of card payments has shown a uptrend phase since 2017. The volume of debit cards has shown more growth than credit cards. Banks should adopt more innovations in card payment systems, especially for people who don't afford to have mobile phones and mobile payment systems to sustain this growth.

DIGITAL PAYMENT SYSTEM DURING PANDEMIC PERIOD

Due to the COVID-19 pandemic, Indians are increasingly relying on digital banking platforms for their financial activities. People were driven to use digital money via demonetization in 2016. Users are even more inclined to use digital payments as a result of the current covid pandemic, as they desire convenience while also adhering to safety procedures.. The data for this study were collected between the beginnings of the Covid pandemic in India starting from March 2020 to the end of the third wave in December 2021.

Figure 6: Digital Payment during covid and post covid periods



From the pandemic period of March 2020 to December 2021, lockdown restricts the mobility of people from one part to another. People started to use more digital platforms for their daily course of activities. According to the retail digital payment transactions data, UPI based payments platforms have shown more than 100 percent growth in terms of volume transactions. Restricted mobility forced the people to adopt and use digital payments for their transactions. During post pandemic period of 2021 to 2022, the growth rate of UPI payments platform has been further doubled. This is a positive sign of digital India programme and digital payments system.

CONCLUSIONS

Digital finance provides an enormous opportunity for greater financial inclusions and expansions of basic financial services to the excluded and below poverty line people. Almost 50 percent of people in developing economies own a mobile phone. In India, we have 1.18 billion mobile connections, 700 million Internet users, and 600 million smartphones, which are increasing by 25 million per quarter. India's data consumption is expected to be doubled to nearly 25 GB per person a month by 2025, driven by affordable mobile broadband services. India’s digital program further motivated the people to adopt and use digital payment services in all personal and access government services of remittances and payments. Major findings of this study conclude that India’s digital financial inclusions have shown tremendous growth during the study period. Regression analysis suggested that digital finance indicators like NEFT, UPI and Card payments system have show significant impact on total retail payments system. The covid pandemic further increases digital finance payments in all aspects with almost more than 100

percent growth. Smart phones have played an important role in people's digital payments adoptions and usage. Using smart phones, people transact money through various mobile payment services like mobile wallets, application-based payments, card payments, QR code payments, etc. During the covid pandemic, people are restricted in mobility which further made the people forcefully adopt and use digital payments services. Mobile payments have reshaped the mindset of people who viewed mobile usage previously. It is not just for communication, entertainment, and browsing the internet. Mobile payments have made transactions simple, easy, and fast. Moreover, people can now transact anywhere and anytime. Mobile payments include fund transfer, ecom transactions, shopping, utility bill payments, making donations, checking bank balance inquiries, and even locating the nearby ATMs (automated teller machines). Government initiatives and liberalized policies of fintech companies played a major role in the surge of digital payments. The government, Fintech companies, Regulatory bodies, and financial institutions should adopt new policies to further strengthen the current growth of digital payments by the way of providing niche products and services to the end-users. Importantly, the services should reach the rural population in all aspects, in order to achieve India's five trillion dollar economy by 2025. An overall conclusion revealed that India's digital finance inclusion is a role model to other emerging nations in all parameters.

FUTURE IMPLICATIONS OF THE STUDY

This study has taken only nominal data from secondary sources to explore India's digital finance inclusion during the study period. Geographic and demographic characteristics were not focused on for this study. The future researcher can focus on the ignored portions of this study to further widen the digital finance concepts. Rural people should be focused on future studies to further strengthen the digital finance policies for providing better services to them. Finally, future research should also include longitudinal studies by comparing rural and urban people's digital payments to explore the gaps between them.

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AUTOPROGNOSIS MACHINE LEARNING MODEL TO DETECT HUNTINGTON'S DISEASE`

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ABSTRACT

Accurate diagnosis of the Huntington's disease is a challenging task that involves many physical, psychological and neurological examinations. The examinations include investigating a number of signs and symptoms, reviewing the medical history and checking the nervous system conditions of a patient. Recently, researchers use voice disorders to diagnose Huntington's disease patients. They extract features of a recorded human voice and apply classification methods to diagnosis this disease. Machine learning helps to interpret the obtained data and in predicting the type of Hb variants, thus reducing the workload of health professionals. In this study, the obtained data are classified using the following classifiers, namely logistic regression, support vector classifier (SVC), k-nearest neighbor (KNN), Gaussian naïve bayes, decision tree, random forest. The pre-processing, visualization and the classification steps were implemented using Python 2.7 on an Intel Core i5 computer. The performance of each classifier was then tested by initially creating a confusion matrix. Indices including "precision," "recall," and "f1-score" were used to quantify the quality of each model. KNN, decision tree, and random forest show better classification results in comparison to the other classifiers. With a precision of 93.89%, recall of 92.78%, and f1-score of 93.33%, the decision tree and random forest classifiers prove to be better classifiers in predicting the Hb variants with a higher accuracy

Keywords: Huntington's, neurodegenerative, classification, Logistic Regression, Decision Tree, Naïve Bayes.

1. INTRODUCTION

Huntington's disease (HD) is a rare neurodegenerative disorder of the central nervous system characterized by unwanted choreatic movements, behavioral and psychiatric disturbances and dementia [1]. It is a rare, inherited disease that causes the progressive breakdown (degeneration) of nerve cells in the brain [1]. he first symptoms of Huntington's disease often include: difficulty concentrating. Memory lapses. Depression including low mood, a lack of interest in things, and feelings of hopelessness. Stumbling and clumsiness. Mood swings, such as irritability or aggressive behavior [2]. Huntington's disease is a condition in which certain brain regions become dysfunctional over time. nIt is inherited from an individual's parents. [2]. It gets gradually worse over time and is usually fatal after a period of up to 20 years. There's currently no cure for Huntington's disease or any way to stop it getting worse. But treatment and support

can help reduce some of the problems it causes. he challenges currently faced by Medical Science is the early detection of PD24in the affected patients. If diagnosed early, the patients can improve their quality of life even if the disease progresses15. However, this is difficult as HD symptoms have overlap with the symptoms of other diseases and hence PD might go undetected, or worse, diagnosed inaccurately. Another complication is that traditionally, the diagnosis of HD comprises of various procedures like taking an extensive neurological history of the patient and observing the patient's motor skills under different circumstances With advancements in technology and the prevalence of audio collecting devices in daily lives, reliable models that can translate this audio data into a diagnostic tool for healthcare professionals would potentially provide diagnoses that are cheaper and more accurate. In this paper, various features have been extracted from the voice signals of healthy people and people suffering from Huntington's disease.

In this paper, we evaluate the performance of three classification methods, which are a Decision Tree, Naïve Bayes, and Neural Network for the diagnosis of Huntington's disease. The following section reviews the related work. Section 3 presents the research methodology and the activities that are implemented to complete this work. Section 4 outlines the experiments and the corresponding results and Section 5 analyzes and discusses the results. Section 6 presents the conclusion and proposes future work.

2. RELATED WORK:

In [3], authors present an application to predict the onset of Huntington's disease several years in advance based on data from MRI brain scans and concluded that results clearly shows that informative predictions are possible with satisfactory accuracy, and predicting onset of symptoms 10 years in advance is realistic.

In [4], Classifies Huntington's disease stage with support vector machines based on oculomotor performance. Using features provided to the classifier, the authors used linear SVM to predict unknown participants and classify eye tracking data for the pre-HD, HD, and control groups.

In [5], the authors proposed suicidality prediction models using machine learning approach in Huntington disease gene expansion carriers (HDGECs).Prediction algorithm was based on Boosted Trees (implementation from XGBoost Library for Python).

In [6], authors provided an overview of the general trends in employing computational approaches for the monitoring and diagnosis of neurodegenerative disease and concluded neurodegenerative diseases have been extensively studied in recent years with the help of computational approaches, especially via traditional machine learning or deep learning networks.

In [7], author employed a machine learning models that have important applications for Huntington's disease in predicting both protein and genetic interactions of huntingtin protein and can be easily extended to other PolyQ and other neurodegenerative disorders such as Alzheimer's and Parkinson's disease.

Max A. little et al [14] suggested a novel technique for the classification of subjects into Parkinson diseased and control subjects by detecting dysphonia. In their work, pitch period

entropy (PPE) a new robust measure of dysphonia was introduced. The data was collected from 31 people (23 were PD patients and 8 were healthy subjects) which comprised of 195 sustained vowel phonations. Their methodology consisted of three stages; feature calculation, preprocessing and selection of features and finally the classification. For the classification purpose, they used linear kernel support vector machine (SVM). Their proposed model achieved an accuracy of 91.4%.

3. HUNTINGTON'S DISEASE:

Huntington's disease (HD) is also called as Huntington chorea, Huntington chronic progressive hereditary chorea, Huntington's chorea and Huntington's disease is a hereditary neurodegenerative disorder that gradually robs sufferers of the ability to control movements and induces psychological and cognitive impairments, neurodegenerative condition, characterized by movement disorders, cognitive decline, and psychiatric disturbance [8-9].

3.1 *Symptoms of Huntington's Disease:

Huntington's disease can affect someone physically, their thinking and their behaviors. Physical symptoms of HD include:

- stiffness
- rapid, involuntary movements of the fingers, limbs or facial muscles (called chorea). This can progress from mild movements to severe thrashing as the disease progresses
- reduced movements of the eyes
- loss of fine motor coordination, such as writing
- changes in balance and co-ordination
- loss of control of bodily functions such as swallowing and speaking
- fatigue*

3.2 Causes of Huntington's Disease

In 1993, researchers found the gene that causes Huntington's. Everyone has the HD gene, but in some families an abnormal copy of the gene gets passed from parent to child. If you have a parent with Huntington's disease, you have a 50% chance of having the gene and developing the disease [10]. Huntington's disease is caused by mutations in the HTT gene. Huntington is a protein that can be made using the instructions in the HTT gene. Although this protein's function is unknown, it appears to play a significant role in brain nerve cells (neurons).

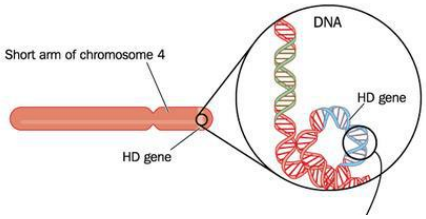

Figure 2: Huntington's disease is caused by a mutation in a gene[11]

A DNA segment known as a CAG trinucleotide repeat is involved in the HTT mutation that results in Huntington disease. A series of three DNA building blocks—cytosine, adenine, and guanine—appear multiple times in a row in this section. The CAG segment typically appears anywhere from 10 to 35 times throughout the gene. The CAG segment is repeated 36 to more than 120 times in Huntington disease patients. People with 36 to 39 CAG repeats may or may not develop Huntington disease symptoms, whereas people with 40 repeats or more almost always do.

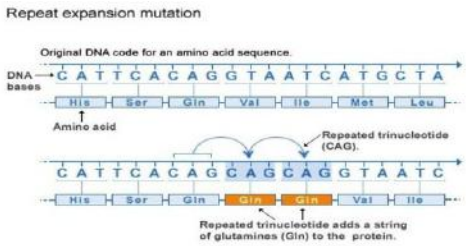

Figure 3: Repeat expansion variant [11]

3.3 Treatment for Huntington's disease

Many clinical and preclinical trials have been conducted so far for the effective treatment of HD however, none of the drugs has shown complete relief[12]. Huntington's disease cannot be changed by treatments. However, medications can alleviate some movement and mental health disorders symptoms. In addition, for a predetermined period of time, multiple interventions can assist a person in adapting to changes in abilities.

4. METHODOLGY TO BUILD PROPOSED AUTOPROGNOSIS MODEL

4.1 METHODOLGY

The methodology for building a model to detect the HTT disease using the machine learning algorithms is presented in figure4. It consists of the following steps:

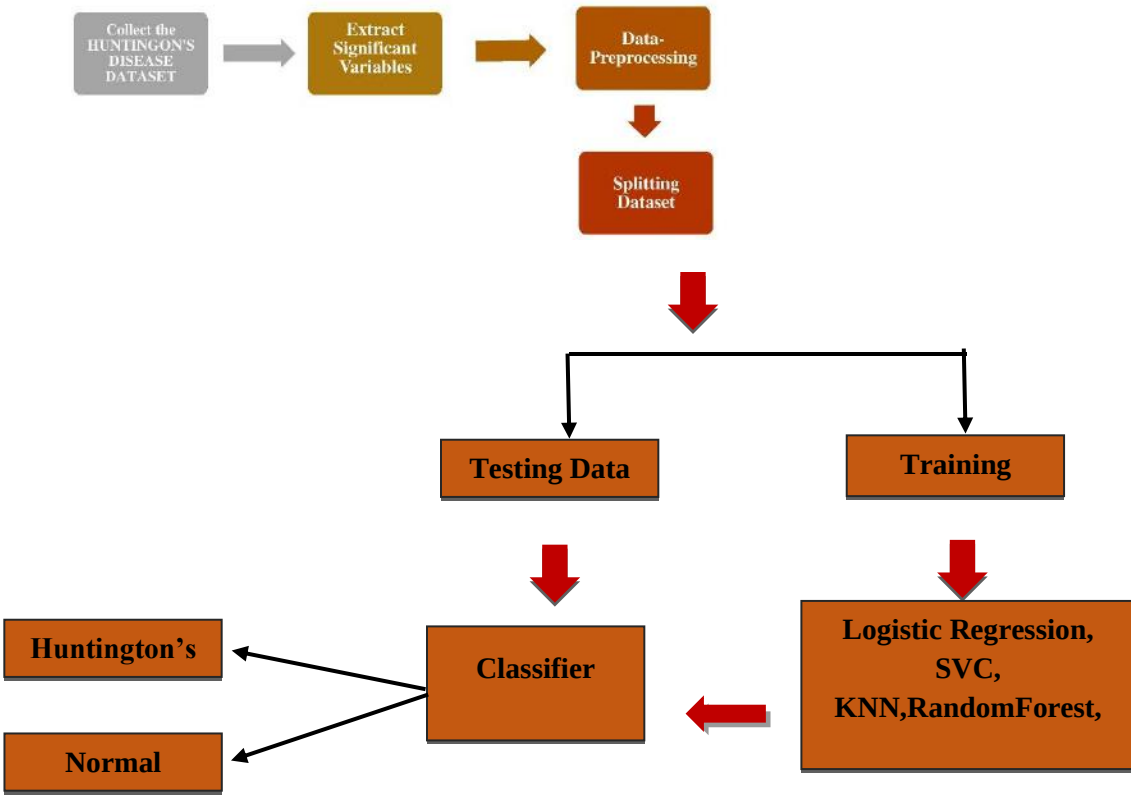

Figure 4: Proposed Auto prognosis Machine learning Model to detect Huntington's Disease

4.2 DATASET

The paper aims to build a machine learning model which will predict the severity of HD using Lee Silverman Voice Technique LSVT Voice Rehabilitation dataset from UCI ML repository.
The dataset was created by Athanasios Tsanas (tsanasthanasis '@' gmail.com) of the University of Oxford, extracting clinical information from speech signals which were provided by LSVT Global, a company specializing in voice rehabilitation. The dataset used consists of 126 instances and 309 attributes.

4.3 Data Pre-processing

Preparing raw data for use in a machine learning model is the goal of data preprocessing.

Feature Scaling
Feature scaling final step in machine learning's data preprocessing process. It is a method for standardizing the dataset's independent variables within a particular range.For feature scaling, we will import the StandardScaler class of sklearn and place our variables in the same range and scale to ensure that no one variable *dominates the other. Library for preprocessing as:

```
from sklearn.preprocessing import StandardScaler*


scaler = StandardScaler ()

scaler.fit(X_train)

X_train = scaler.transform(X_train)


X_test = scaler.transform(X_test)
```

5.Implementation Technologies for Classification Models:

We used Google Collaboratory as a platform to put the machine learning classification models into action.

5.1 About Google Collaboratory

Google Colab is particularly well-suited to machine learning, data analysis, and education because it allows anyone to write and execute arbitrary python code through the browser.*Colab is a cloud-based, free environment for Jupyter notebooks. Numerous well-known machine learning libraries are supported by Colab and can be loaded quickly into your notebook.

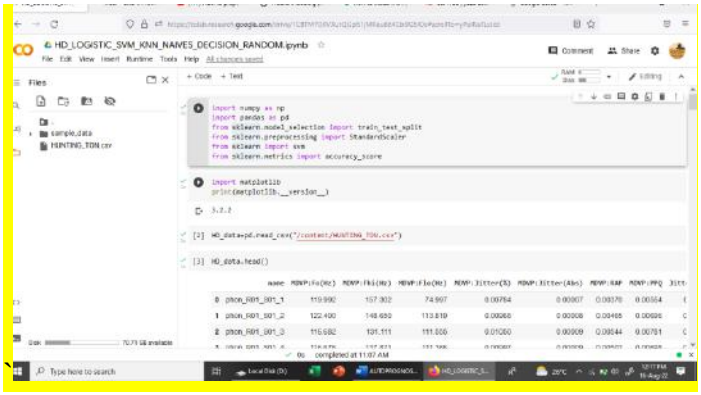

Figure 5 : Google Colab Notebook

5.2 A variety of libraries are utilized, and their versions are listed in the table below.

LIBRARY	VERSION
numpy	1.21.6
Pandas	1.3.5
sklearn	1.0.2
matplotlib	3.2.2

Figure 6 : Libraries used to implement machine learning models

6 RESULT AND ANALYSIS

This section displays the Logistic Regression, Naive Bayes, Random Forest, and Decision Tree outcomes. Accuracy score, Precision (P), Recall (R), and F-measure are the metrics used to analyze the algorithm's performance.

$$\text{Precision}=\frac{TP}{(TP+FP)}$$

$$\text{Recall} = \frac{TP}{(TP+FN)}$$

$$\text{F1– Measure} = \frac{(2*Preciosn*Recall)}{(Precsion+Recall)}$$

- TP: True positive: the patient has the disease and the test is
- positive.
- FP: False positive: the patient does not have the disease but
- the test is positive.
- TN: True negative: the patient does not have the disease and
- the test is negative.
- FN: False negative: the patient has the disease but the test is
- negative.*

The accuracy score obtained for Logistic Regression, Random Forest, Support vector Classifier-nearest Neighbor's and Naive Bayes classification techniques is shown below in Table 3

	LR	SVM	KNN	Decision Tree	Naïve's Bayes
Accuracy	85.2	90.2	91.2	81.2	89.5
Precision	84.1	87.5	90.6	80	87.6

Recall	87	84.28	90.6	82.5	90
F1-Score	85	87.7	90	81.4	89.3

Table 3: PERFORMANCE METRICS OF DIFFERENT ML ALGORITHMS

7 CONCLUSION:

Brain Neuron is one of the essential and vital part of human body and prediction about Huntington's diseases is also important concern for the human beings so that the accuracy for algorithm is one of parameter for analysis of performance of algorithms. Accuracy of the algorithms in machine learning depends upon the dataset that used for training and testing purpose. The prediction of Huntington's disease is most important and challenging problem for biomedical engineering researchers and doctors. We have evaluated various algorithms for the predative analysis of Huntington's disease in voice recorded data and presented our findings in this paper. The algorithms' ability to distinguish Huntington's patients from healthy individuals is evaluated and contrasted with previous findings. we find K Nearest Neigh our(KNN) ML model is best one. For the Future Scope more machine learning approach will be used for best analysis of the Huntington's diseases and for earlier prediction of diseases so that the rate of the death cases can be minimized by the awareness about the diseases

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IMPACT OF SOCIAL MEDIA AND DIGITAL MARKETING ON CONSUMER BEHAVIOUR

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Abstract: Social media is the best way of digital marketing to reach the products and services to the consumers. Social media marketing is the use of social media and the platforms on which users build social networks and share information to build a company's brand, increases sales, and drive website traffic. In social media marketing, the consumer has more power over the brands. Social media gives customers the ability to publicly share their views about a product without the fear of trial. It takes away the power of influence from businesses and empowers the customers. This paper emphasizes that how the social media and digital marketing strategies will influence the consumers to purchase the products and how the social media reviews will have the significant impact on consumer behaviour. The article also tries to study different social media marketing strategies by reviewing various books, journals, studies, published papers, researches, etc.

Key words: Digital marketing, social media, consumer behaviour, consumer engagement, search engine marketing.

INTRODUCTION

Social media marketing is marketing that involves creating and sharing content on social media networks in order to achieve your marketing and branding goals. Social media marketing includes activities like posting text and image updates, videos, and other content that drives audience engagement as well as paid social media advertising.

Social media marketing is the process of creating content for social media platforms to promote your products and/or services, build community with your target audience, and drive traffic to your business. With new features and platforms emerging every day, social media marketing is constantly evolving. Social media marketing mainly deals with customized content creation for individual social media sites as per the product required to get maximum customer engagements. Conventional marketing methods were generic and common for everyone. But today social media sites offer a very personalized and focused approach to address your customers.

Digital marketing is a form of marketing for promoting and selling products or services on the Internet. It's the process of leveraging different online marketing channels like search engines, social media networks, and email to reach your target audience.

Through digital marketing, you can find people interested in your offering, interact with them, and build trust with your brand. Digital marketing has a number of **types**, the most important are website marketing, search engine optimization (SEO), content marketing, PPC advertising, social media marketing, email marketing, video marketing, and affiliate marketing.

Digital marketers spend their time studying how people relate to one another online, creating content for online consumption, and mastering digital mediums. As you get more comfortable with marketing in the digital space, your readership, viewership, and sales will likely grow. Digital marketing is also the use of digital technologies, such as SMS and push notifications, to reach people on Internet-connected devices.

CONSUMER BEHAVIOUR

Consumer behaviour is the study of consumers' action during searching for, purchasing, using, evaluating and disposing of products and services they expect will satisfy their need. It helps marketers in understanding consumer decision-making process.

SOCIAL MEDIA AND CONSUMER

Social media is a dynamic source of social proof, which is an important consideration when making purchases. In order to assess a product or service before making a purchase, more than half (51%) of consumers read reviews on forums or social media. A potential consumer can be turned away with just one or two negative reviews. As platforms like Facebook, Twitter, and Instagram took off, social media transformed not only the way we connect with one another but also the way businesses are able to influence consumer behaviour—from promoting content that drives engagement to extracting geographic, demographic, and personal information that makes messaging resonate with users.

IMPACT OF SOCIAL MEDIA ON CONSUMER BEHAVIOUR

1.Customers increasingly make direct purchases on social media platforms.
Social media is almost as widespread for learning about brands as TV or radio advertisements and word-of-mouth marketing. Three out of ten consumers said they would prefer to learn about brands in the future in this manner. But more and more, consumers are turning to social media to find brands and make purchases from them.
2.Social media reviews have a significant impact on consumer behavior.
Social media is a dynamic source of social proof, which is an important consideration when making purchases. In order to assess a product or service before making a purchase, more than half (51%) of consumers read reviews on forums or social media. A potential consumer can be turned away with just one or two negative reviews.
3.Customers anticipate two-way communication with brands.
The relationship between a business and its customers now has a new facet thanks to social media. A brand is no longer a distant, nameless thing we only learn about in books or on Google. Analysing a brand's network enables you to evaluate its principles, current news and products, and relationship with its target market.

4.For customer assistance, consumers use social media.
How would you anticipate communicating with a brand's customer service division before social media? You can get in touch with them by calling, writing, visiting, standing in line to see them in person, etc. Consumers now prefer to communicate with brands via social media when they have a complaint or a concern about their service.

DIGITAL MARKETING AND CONSUMER BEHAVIOUR

Digital marketing can affect consumer behaviour in many ways. It has the ability to inform, persuade, or even entertain consumers. It enables brands to put their best foot forward by highlighting certain aspects of their product or service while downplaying others. All of this occurs in an environment where consumers are able to freely pursue information which is relevant to their needs and interests.

As you can see, digital marketing has a significant impact on consumer behaviour which can be positive or negative depending on the situation. However, the effectiveness of digital marketing can differ among brands and industries. Therefore, a better understanding of how consumers behave will help all marketers to achieve more effective results.

REVIEW OF LITERATURE

1. Liu, Q., Zhang, X., Huang, S., Zhang, L., & Zhao, Y: Social media is giving an opportunity to the consumers to get the feedbacks and reviews about a product and services. Result from the primary and the secondary data shows that the product recommendations can lead to an impulse buying behaviour. This impulsive buying behaviour is decided on the basis of the trust on the recommender and an affection towards that particular product. In simple words, it is influenced by both the recommender and the product itself.

2. Varghese, S., Nandhini M: in their article speaks about the influence of demographic factors towards the purchase intention of customers. Article also reveals about the internet usage pattern among the customers. This can be related as an opportunity for the increased engagement of companies with customers through social media.

3. The study made by Bhagwat and Goutam et al.: assert the need for social networking sites in a business. They found that social technology is connecting people in ways to share information and other things to each other. From their study they establish that Facebook to be the leading Social media networking site. They have also provided with statistical data which shows that social media sites are growing and providing facilities to both business organizations and the people. Their reputation in short time is in lieu of their requirement in society for communication and also for business as well.

4. Dr. Priya Grover and Rama Krishna Mandan: investigates the buyer behavior matrix of auto products and social media. Looking into the strategic role of social media in promotion of passenger cars in India, the paper tries to understand the changing consumer perception towards social media and its role in consumer decision making. At the same time, it also empirically derives a consumer–centric methodology for social media marketing by car manufacturers in India. The paper concludes with reference to the consumer decision making model, consumers are influenced by social media only till evaluation of alternatives and there also the mass media

still dominates, though the post purchase behavior of consumers is seen online when they share their feedback and experiences.

5. Chintan H Rajani and Dr. Ashvin Solanki: in their research paper identifies key motivating factors behind use of social media among Indian users. The study reveals that feedback and personal utility, entertainment and socializing, content sharing and networking as key motives for using social media. This study followed uses and gratification approach to identify above mentioned key motives for using social media. The study concludes that preliminary people use social media platform for personal benefit to review and share feedbacks followed by satisfying their entertainment and socializing needs. Content sharing is key feature which helped in driving masses towards social media. Networking and finding new people is an add-on benefit which people seek while using different social media platforms

6. Yadav: has made an attempt to set up the significance of social networks as an advertising medium and evaluated the existing advertising methods that are in trend via certain case studies and concluded that social websites are not just a tool to interact with the different people but also medium to reach the prospective customers.

7. Bhakuni & Aronkar: tried to understand the usage pattern of social media among the students of Gwalior city and also assessed the influence of social media advertising on the purchasing intention of the students. The study concluded that social media is a rapidly growing area with large number of young students associating with it and there is a strong positive relationship between purchase intention and social media advertising.

PURPOSE OF STUDY

the purpose of this study is to study the impact of social media and digital marketing thoroughly, and to summarise the various factors influences on consumer behaviour. This will provide us the opportunity to become closely familiar with the current work being done in social media and digital marketing and provide research gap that, why the area is of interest and what work remains to be done in that area.

RESEARCH METHODOLOGY

The methods or techniques used to classify, choose, process, and interpret knowledge about a subject are referred to as research methodology. The methodology portion of a research paper helps the reader to objectively assess the study's overall validity and reliability.

DATA COLLECTION

The primary data has been collected through survey method. The Secondary data has been collected from websites, the research Papers and articles published in different Journal.

FINDINGS

The review found that modern marketers are using a well-integrated social media marketing strategy along with traditional medium to communicate about their products to the consumers. Consumers are finding social media advertisements as more interesting, innovative and interactive as social it has become easier to use social networking sites with the aid of information and modern communication technologies.

- Consumers are more attracted towards the content that shows discounts, promotions and influencers because it keeps that ability to change customers mindset and their perception.
- The marketing methods should be designed in such a way that could attract the various age and class of the customers.
- Majority of Internet users are aware about social media and digital marketing and they are using it also, so marketers should move their promotional efforts from traditional tools to social media tools and must use a well-integrated social media strategy considering different platforms.
- Social media and digital marketing not only make customers‟ aware about brands, but customers also prefer the brands advertised through social media while making their final purchase. They purchase now-a-days to get, so called “like”. So marketing strategy must be more comprehensive including informative and shareable content as well as a proper consumer engagement policy to build relations is to be adhered.
- Customers have positive perception towards social media marketing practices; they consider social media advertising more comprehensive, communicative, creative and dependable in comparison to traditional advertising. Therefore, more of the business promotion budget should be earmarked to it

SUGGESTIONS

- Companies should give more importance to social media and digital marketing. Their presence on digital marketing can give them more visibility and it can also increase the brand value that will lead to more customer loyalty and customer lifetime value.
- Companies can be more connected with customers through social media because the brands can communicate with them regularly and help or guide them to make a better purchase decision.
- Companies can use social media more frequently to draw the consumer attention and brand awareness.
- Brands can be more interactive with the customers and it can get more customers insights and their reviews and feedbacks to make them feel that they are a part of the brand.
- Brands can share more positive experience of the customers who have already used that product so that the prospects and the ones who are already planning to buy can relate themselves more.
- Brands need to show themselves as more influential and it should try to make the product viral on social media.
- Social media influencers should be chosen wisely, they should be the one who can connect with the customers with their want and needs.

CONCLUSION

The research has shown a powerful impact of social media and digital marketing on consumer buying behaviour in digital age. No doubt that digital marketing had brought major changes to both, consumer as well as businesses. The research has shown that consumers are highly selective while making a purchase. Though there is a plenty of data and sources of information on social media, still personal attitude of the consumers makes a lot of difference in selecting and making a purchase. The quality of content on social media makes a big impact so it should be consumer relevant. When the marketing is done through social media and digital marketing it is

not all about consumer awareness or selling the product itself. It is more than that which includes retaining a built-up relationship and building it between the potential buyers and corporations

Digital marketing has definitely bridged up the gap between the brands and the consumers. Considering this fact, companies are now making each possible effort in making the buyer feel connected with the brand and allowed them to put their views, opinions, feedbacks and reviews. The company that are adapting an integrated strategic approach with the aim of social network platforms that is becoming the most successful in getting, engaging, influencing and retaining the customers. Factors, that can change the customer's brand perception and a will to buy includes the strategies that led to consumers perspective, and the opinion of the people who create content on social media. So, these strategies definitely need a high degree of maintenance and those companies that are using the method should be ready to fix all the marketing services to retain the existing customers and to increase the customer lifetime value.

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Green Banking As A Trending Technology In Banking – A Study

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Abstract

Green Banking means performing banking business practices in such a way that it promotes an eco friendly sustainable activities which reduces the emission of carbon footprints and also investing in such firms which works for the safety and protection of the environment. Green banking works or promotes the well being of our environment and also to preserve natural resources. It is also called as ethical banking or sustainable banking. This study is conducted to understand the working of green banking activities in various banks of India and practices undertaken by banks to promote eco-friendly banking system in India and how it is beneficial to the environment. The information for this study is collected from the official website of the bank and other sources..

Key words – Green banking, ethical banking, sustainability, green funds , carbon foot print , eco friendly

Introduction

Green banking was introduced in the year 2009 in state of Florida ,"A green bank is a normal bank which considers all the social and environment / ecological factors with an aim to protect the environment and conserve natural resources" – Indian Banks Association (IBA 2014), Green Banking is one of the positive step towards conservation of our environment and sustainable development by banks. Banks have come up with this initiative to protect the environment and introduce eco-friendly services to there customers.

State Bank of India being one of the largest public sector commercial bank with more than 24000 branches in India which provides services like Savings a/c, fixed deposits, home loans ,education

loans, SME loans had come up with a Green Banking Policy in the year 2007 to overcome various environmental issues such as global warming , deforestation etc. The main aim of green banking is to reduce the usage and wastage of energy and other natural resources. SBI bank succeeded in green banking through various measures such as paperless booking, water harvesting , installation of windmills, green finance etc. and practicing banking activities through online portals, green CDs, and online money market accounts, payments of bills through online so on.

As part of green banking SBI had installed 10 windmills in the states of Tamilnadu, Maharashtra and Gujarat in the year 2010, the windmills were setup to decrease the dependency on thermal power and also preserve natural resources.

SBI launched Green funds which aims to contribute to sustainability by promoting various activities such as waste management program, construction of bio-toilets, installing solar panels and plantation of saplings.

Objective of Green banking

The main aim of green banking is to utilize the natural resources and stop depending on artificial resources which is done by polluting the environment which is not good for both the environment and the mankind.

Importance Of Green Banking

By adopting Green Banking in the banking practices in the financial institutions there are many benefits to both the banks and the environment, through green banking banks can optimize the cost, reduce the risk and it also helps in the increase of the bank's reputation and also contribute to the conservation and environmental sustainability. If fulfills both the commercial objective and also social responsibility.

Importance Of The Study

- To know the benefits of green banking
- To study the green banking services rendered by SBI Bank.
- To study what are the measures and practices initiated by SBI bank towards green banking.
- To know the challenges to succeed green banking.

Research Methodology

The research is basically conceptual study based on secondary data from official website of the SBI bank, and The Hindu and The Economic Times were referred to gather the required information for this study.

Green banking in SBI

State Bank of India being the largest commercial bank with 1/4th, market share, serves over 45 crore customer through it's vast network of over 22,000 branches took a step towards green Banking. In order to promote eco-friendly practices. SBI holds the dignity of being the first Bank in India for choosing green Banking in the year 2007, SBI at formulated green Banking policy to provide solutions to the issue of global warming and climate change. From then SBI as been taking measures in order to reduce carbon footprint in all it's activities. SBI had adopted measures like efficient lighting systems, paper less banking, installation of energy savers, water harvesting and efficient water usage method and plantation of fruit bearing trees for maintaining sustainable development.

Initiatives taken by SBI

- SBI had 10 windmills with an aggregate capacity of 15 MW In the states of Tamilnadu, Maharashtra and Gujarat.

- SBI launched it's first digital platform on 24th November 2017. SBI provides various services to it's customer like banking services investments insurance etc… To educate it's customers to migrate from paper based banking to paperless banking.

- SBI launched green fund to allow customers to participate in the sustainability machine by contributing their reward points. This measure demonstrates SBI's commitment towards the society and environment. Customers earning reward points through yono will be given an option to convert it into green reward points which on conversion can be contributed to the fund and the contributed green points will be used by SBI for sustainable activities.

Activities supported through SBI green fund.

1. Contribute to COVID 19 relief fund – COVID 19 relief fund was launched for implementing various initiatives to strengthen the healthcare infrastructure and diagnosis facilities, effective patient management meet the nutritional requirement of individuals infected and a helpline to address psychological concerns that had arisen due to the pandemic and a certain portion of this fund would also be allocated to promote research and innovation efforts to combat the virus.

2. Plantation – Planning trees is one of the effective and most sustainable way to positively affect the environment. SBI had plans to plant approximately 5 million trees through contributions from green fund.

3. Construction of bio toilets – Bio toilet is a type of dry toilet that treats human waste by a biological process called composting. This process leads to the decomposition of organic matter and turns human waste into compost-like material. Bio toilet should be treated as a priority in the sanitization revolution in India. Bio toilet are affordable and also reduce the usage of water.

4. Water conservation - Construction of RO plants

Today India is suffering with a severe water crisis and 2 lakh people die due to inadequate access to clean water each year. According to niti aayog 70% of water resources in India are polluted. Through the contribution from SBI green fund water conservation project are set up than 10 cities - towns .

5. Waste management program:- avoidance of single use plastic . Indian cities generates tones of plastic everyday. India alone uses 14 million tones of plastic annually. According to United Nations, there are the lot of waste which is thrown in the world ocean with an estimated value of 100 million tones. Through the contribution of SBI green funds all the waste which are dumped into the ocean and other places are recycled and managed.

6. Providing solar lights , solar panel renewable and clean energy make our planet better for the coming generation therefore, to reduce the carbon footprint and promote sustainable living they provide a solar panel to individual household in identified 5 cities - towns through contribution from green fund .

- Green car loan - customers are provided loan at a lower interest rate in order to purchase electric vehicle.
- Green saving and bonds - here customers will be able to invest on projects which focused on the environment.
- Green mortgages - Is a mortgage specifically targeted at green building as in incentive. And they are charged low interest rate.
- Green home modernization loan - lease enable firm home owner to make energy saving renovation to their property.

Benefits of Green banking

- Green banking reduces the usage of paper which in turn reduces deforestation.
- It promotes eco friendly vehicles as it provides loans with low interest rates which is good for the environment.
- Transactions happen online which are easier.
- Transactions are faster when compared to traditional banking as all the operations happen online.
- It helps in economic development as people may develop eco friendly projects which will improve the environment and also our economy.

- Helps in job creation which reduces unemployment.
- Recycling of the waste products.
- Reduction of waste getting into water bodies which reduces waters pollution and protects marine habitat .
- Effective and efficient use of natural resources which reduces dependency on artificial things.

Findings and suggestions .

- To improve the digital platform as most of the customers may not use digital platform if it is not up to the mark.
- From the above analysis suggestion drawn could be- achieving processing speed, reducing errors and risks, lack of regulatory policies, lack of technical support and also higher initial cost incurred in renewable energy projects are the field need to be focused by the banks.
- The bank has an environmental policy, measures and reports its carbon footprint and has also been publishing a sustainability report. From the above analysis suggestion drawn could be achieving processing speed, reducing.
- There is emerging competition from E-Commerce players, further re-skilling/up-skilling of Employees is constantly required to stay in competition for which bank need to initiative investing more towards improvement of technology artificial intelligence to enhance its digital capabilities. The bank is about to get partnered with various universities and academic institutions to conduct research into what the banking ecosystem could look like in 2021-22.
- Natural disasters like drought and floods can result in non-performing assets in the Agro and Allied sectors which leads to bank's lending portfolio, for which banks can segment its funding strategies to agro business along with focusing on dairy farming finance, supply chain finance, horticulture and other forms of financing to mitigate risk and protect portfolio quality.

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THE INFLUENCE OF ARTIFICIAL INTELLIGENCE IN BANKING INDUSTRY

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Abstract

Artificial Intelligence called Machine Intelligence from time to time is the advancement of human intelligence in machines. It is the intellect of machines in contrast to knowledge demonstrated by humans. It is progressing at a rapid pace.
AI has taken numerous sectors in each and every field like banking industry. The huge gap of difference between the old banking to the present banking has a boom in Artificial Intelligence.
This research is mainly concentrated on Artificial Intelligence in three field of banking. The changes brought in and it's impact on manpower. The work handled by humans who had chances of giving errors is not evolving into Artificial Intelligence with advancement technology.

Key words: Artificial Intelligence, Advantages, Banking.

Introduction

The simulation of intelligence possessed by humans help in building smarter machines which are capable in working more than humans in more smarter way. AI is just like a human brain. The similar way we think, solve, create, solutions likewise, AI works with more accuracy based on the data provided.

The spectaculated changes brought by Artificial Intelligence in the field of banking are noteworthy. The services through AI save more time and money of humans. The back use algorithms to generate accurate results which help enhancing customer service and generate better performance. The errors are reduced to minimum - which is the important task. The information through the data is interpreted and conclusions are drawn from it.

One best example for Artificial Intelligence is ATM- as we all know Automated Teller Machine. The evolution brought in has changed the scenario of banking system. Earlier people used to wait

in queues to drop in cash and draw their amount. But after the introduction of ATM, people can access 24/7 which in turn saves the time and energy of humans.
ATM is an automated teller machine which is a computerized telecommunication device providing customer with access to financial transactions without the need of humans.

Another best example is AI-based Chatbot service is one of the significant use of AI in banking sector.

Branches of Artificial intelligence
AI is used to solve real world problems by many techniques:

1. **Machine learning**
   It is the science of getting machines to interpret process and analyse data to solve real world problems.

2. **Deep learning**
   Process of implementing neural networks on high dimensional data to gain insight and form solution. It is advanced form of machine learning to solve complicated problems. This logic is adapted on Facebook, self-driving cars, virtual assistance like Siri, Alexa, etc.

3. **Natural language processing**
   It refers to the science of drawing insights from human language in order to communicate with machines and expand its operations. Twitter uses NLP to filter terroristic language in their tweets, Amazon uses NLP to understand customer reviews and improve its standard.

4. **Robotics**
   The branch of Artificial intelligence which focus on different branches and application of robots. AI robots are artificial agents that act in real-world environment to produce accountable actions. A good example of AI in robotics is Sophia.

5. **Expert systems**
   It is an AI based computer system that learns to reciprocate decision making ability similar to a human expert. It is used to solve complex problems and are mainly used in Information management, medical facility, loan analysis.

6. **Fuzzy logic**
   It is a computing approach based on principles of Boolean instead of modern computer logic. It is used in medical field to solve complex problem which involves decision making. They are used in automatic gear box, vehicle control, etc.

Types of Artificial Intelligence

ANI – **Artificial Narrow Intelligence**
It comprises basic/role/task performed by Chabot, personal assistance like Siri by Apple, Alexa by Amazon.
AGI – Artificial General Intelligence
It comprises human level task performed by self-driving cars by Uber, Auto pilot by Tesla. It involves continual learning by machines.
ASI – Artificial Super Intelligence
It refers to intelligence way that is smarter than humans

Applications of AI in banking

AI has become an integral part of world and banks have started integrating this technology into their products and service. AI based system help bank reduce cost by increasing productivity and making decisions based on information.

A report by business Insider suggests that nearly 80% banks are aware of the benefits that AI presents. Almost all the sectors are moving towards AI to improve efficiency, service, and productivity and reduce cost.

1. RISK MANAGEMENT

The factors like fluctuations in currency, natural factors, have serious impact on banking sector. During these times, every decision has to be taken cautiously. AI- driven analytics help to stay prepared and make timely decisions. AI helps by studying past behaviour data and analyze future behaviour.

2. REGULATORY COMPLIANCE

The banking sector is one of the highly regulated sectors worldwide. Government use this authority to ensure that banking customers are not using banks to build financial crimes. To avoid these fraudulent activities, banks maintain a team to deal with these problems, this in turn takes a lot time and requires huge investment and banks need to update their process and regulations constantly.
With the adoption of AI, it uses deep learning to provide decision. It cannot replace a compliance analyst but can make things faster with more efficiency

3. CUSTOMER EXPERIENCE

Customer always looks for better convenience and experience.
For example- The convenience ATM's gave customer was innovative. It helped them to deposit/ withdraw money even though when banks were closed. This took through more innovations. Now customers can even open their bank account online without stepping the physical bank.
Integrating AI in banking services enhanced customer experience and increased their satisfaction. Almost all the services provided by bank like KYC, loans or credit, opening an account, changing PIN etc are based on AI software without any errors.

4. CHATBOTS

This is the best example of application of AI. This is a 24/7 service provides which help customer to redress anytime unlike the humans having fixed working hour. This ensures that banks are connected with customers round the clock. It understands the human behaviour and avails certain requirements as needed by a customer.
One example of Chabot is- Dr LalPathLabs Virtual Assistant which helps us customers with covid related information, tracking reports and guides various test and pricing.

ARTIFICIAL INTELLIGENCE AND BANKING PROFITABILITY

AI contributes to banking profitability in two ways:

- By taking over repetitive tasks from bank employees , autonomous AI software reduce the demand for less skilled labour which improves efficiency. This is helpful as employee compensation represents a large share of banks' cost base.

- It's implementation help revenue generation. Example: It helps banks to develop new products and offer tailor made products better suited to client preferences.

  The link between use of AI and bank profitability identification and lack of micro data. There are various matters which determines bank profitability that need to be noticed. However in banking IT implementation are largely in demand by customers. The strong competition makes modern technology to boom those banks which are not in profit. By increasing the AI the banks make profit by reducing their cost.

  AI contribution to bank profitability should not be under estimated where the competitions are intense. Start-ups and large technology firms that are challenging in the economy have rapid implementation of AI driven software for banks to remain competitive.

Challenges of AI in banking

1. Security Of Data

The main challenge of AI in banking is the data collected as it contains sensitive information which requires additional security to be implemented. So, the right technology will offer variety of security options to be handled.

2. Lack Of Proper Data

Bank needs data which should contain security to be handled .With data which should input AI-software helps in property maintenance of banking sector

3. Elimination Of Errors

The challenge for AI is to eliminate the errors and take data which is required without harming sensitive information of the users.

Therefore eliminating errors is an important task for every banking sector.

Findings and Suggestion

- **Customer support**

AI has brought drastic change in redressing issues, queries through customer support. This helps users from waiting in line queues, reduces time, enhance efficiency of service.

- **Digitalizing sector in all areas**

Almost all the transactions, activities since are through online. Digitalizing had helped a lot to improve in making the task efficient.

- **Providing advice**

Customer are often placed through suggestions given by AI applications this can be made helpful to take decisions regarding financial advice, calculations and forecasts

- **Smart wallets**

There are numerous number of payment gateways which are growing popular and setting a trend in banking field. This decreases the use of physical cash

Impediments

- Hackers might try to steal the data for his personal benefits.
- There is a chance of creating fake social media accounts, websites, news which influences AI decision making.
- Cyber attacks

A STUDY ON SCOPE FOR VALUE CREATION TO UNFAMILIAR AYURVEDIC HERBS IN INDIA- A BOOSTER FACTOR FOR ECONOMY

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Abstract : India is the base land for several varieties of precious Ayurvedic Herbs which is packed with healing properties for chronic ailments which otherwise could not be cured by any other system of medicine. Despite , Indian Ayurvedic Drug Manufacturing Companies are not showing much interest towards value creation for some of the precious Ayurvedic Herbs whose magical healing properties are yet to be made available to the larger benefit of the society, as it is known that a healthy society can build a healthy nation. Value creation for some of the unnoticed unfamiliar Ayurvedic Herbs by the Ayurvedic Drug Manufacturing Companies can not only contribute towards constructing healthy society , but can also generate lot of employment opportunities to the youths and entrepreneurial opportunities to the farmers who can commercially grow these Ayurvedic Herbs and thus can turn out to be a booster for the revival of economy. The research work undertaken encompasses identification of 10 indigenous varieties of unfamiliar Ayurvedic Herbs to which there is lot of scope of value creation by Ayurvedic Drug Manufacturing companies and it also encompasses the quantum of value added products which are available in the market with regard to these 10 indigenous varieties. The outcome of the research indicated that the value creation for those 10 indigenous varieties of Ayurvedic Herbs is very minimal or zero which implied that the Ayurvedic Drug Manufacturing Companies have not given due importance to these herbs , which can be undertaken in the days to come through which they can revive the Indian Economy by creation of employment and entrepreneurial opportunities

Key words : Ayurvedic Herbs , Ayurvedic Drug Manufacturing Companies , Indigenous Varieties , Value Creation

INTRODUCTION

The Indian sub continent from ages is known for its rich base of AYURVEDIC HERBS. It is said that India is base land for more than 2000 indigenous varieties of AYURVEDIC HERBS which is considered as elixir for several types of chronic ailments. These herbs which is there in the form of creepers, climbers , small plants, bushes and to big trees are well known globally for its ailment curing properties. There are umpteen number of instances where Some of the incurable diseases under ENGLISH SYSTEM OF MEDICATION or HOMEOPATHY etc , are cured under AYURVEDA SYSTEM OF MEDICATION completely from its root level. Due to this naturally there is acute demand at the global level for the AYURVEDIC HERBS which are used for the preparation of Ayurvedic medicines. Ayurvedic medicines for the commercial purpose can be prepared using AYURVEDIC HERBS which takes the following forms.

1) CHOORNA : Powdered form of the pre determined blend of AYURVEDIC HERBS
2) LEHYA : Semi solid form of pre determined blend of AYURVEDIC HERBS
3) ARISHTA : Liquid form of pre determined blend of AYURVEDIC HERBS
4) GUTIKA : solid (pills) form of pre determined blend of AYURVEDIC HERBS.

All the above mentioned commercial forms of Ayurvedic medicines are nothing but VALUE ADDED PRODUCTS for which VALUE CREATIONS has been done for the only some of the well known AYURVEDIC HERBS such as Ashwagandha , Shatavari , Guduchi, Amalaki, Haritaki, Bibhitaki ,Ginger , Black Pepper , Long pepper , Turmeric, Cumin , Fenugreek , Aloe vera and many more for which VALUE CREATION has already been done and they are taking the packaged form of VALUE ADDED PRODUCTS. But apart from the above mentioned varieties of AYURVEDIC HERBS, there are many unfamiliar AYURVEDIC HERBS which might have not come to the notice of Ayurvedic Drug Manufacturing Companies or it is rarely available for which VALUE CREATION has not been done so far and there is lot of scope for these AYURVEDIC HERBS to which VALUE CREATION can be done and ultimately give the form of VALUE ADDED PRODUCTS by the Indian Ayurvedic Drug Manufacturing Companies. This research paper is intending to bring those unfamiliar hidden AYURVEDIC

HERBS into forefront to which VALUE CREATION can be done and secure a good market too in the days to come.

Though There are about 8407 AYUSH registered Ayurvedic drug manufacturing in India as on 1st April 2021 (source www.pharmabiz.com) , there are only about 50 companies like HAMDARD, BAIDYANATH,HIMALAYA ,CHARAK PHARMA, PATANJALI AYURVED,SANDU PHARMACEUTICALS , VICCO LABORATORIES , SRI SRI TATTVA , DHOOTHPAPESHWAR, SN PANDIT , BV PANDIT etc which is offering a wide range of Ayurvedic value added products which covers all the avenues of treatments such general health , specific ailment cure, beauty enhancement etc. It implies that there is lot of scope for some of the vital players of Ayurvedic Drug Manufacturing Companies to expand their operations in the form of value creation to several Ayurvedic Herbs which is totally neglected by these Ayurvedic Drug Manufacturing Companies and thus these companies can generate employment opportunities to the youths and also create entrepreneurial opportunities to the farmers which will play a pivotal role in boosting up of our economy. Operational Definitions:

1) Ayurvedic Herbs : Ayurvedic herbs includes roots, tubers, leaves, seeds , flowers ,barks and any other parts of tree/plant/climber/creeper/grass/bush/algae etc.
2) Value creation : value creation means converting the crude substances into brining value to a particular product which can be commercially sold.

OBJECTIVES OF THE STUDY

1) To explore those Indian origin Ayurvedic herbs to which value creation has not been done vibrantly so far.
2) To give suggestions to Ayurvedic drug manufacturing companies to include them in value creations.

LIMITATIONS OF THE STUDY:

1) The study limits to only 10 types of unfamiliar Ayurvedic herbs to which value creation is not up to the mark or zero

LITERATURE REVIEW :

1) Ashuthosh Chauhan , Deepak kumar semwal, and two others (October 2015), authored a paper titled “Ayurvedic research and methodology: Present status and future strategies “ and examined as how to focus to improve the research methodology for Ayurveda with

main emphasis on the fundamental research and need to encourage young researchers to work on various areas of research for the development and promotion of Ayurveda. The paper concluded telling that there is an acute need to have a requirement based research in ayurveda

2) **Saikat Sen and Raja Chakraborty (April 2017) authored a paper titled "Revival, modernization and integration of Indian traditional herbal medicine in clinical practice: Importance, challenges and future" and deliberated on the rich quality of ayurveda , siddha, and unani form of medications and concluded that Several steps have been taken in India to promote such medicine and to integrate them into clinical practice and advocates that Evidence based incorporation of Indian traditional medicine in clinical practice will help to provide quality healthcare.**
3) **Sanjeev verma (April 2018) authored a paper titled "Critical Success Factors for Ayurvedic and Herbal Product Launch-Evidence from India" and have found out that Product benefits emerged as the most important influencer in Ayurvedic andherbal product launch. Consumers look at Ayurvedic and herbal products as alternate better choice with lesser side effect and have concluded that Consumers still emphasize on product benefits and product quality.Brand image which will be instrumental in success of new Ayurvedic and herbal product launch.**

4) Neeraj pandey and Gaurav paul (January 2020) authored a paper titled "Marketing at Patanjali Ayurved : creating value in herbal way" and have found out that Patanjali Ayurved Limited had created high visibility and awareness about its brands among consumers using the herbal and wellness positioning. The CAGR (compound annual growth rate) of 100 per cent since the last 4 years was an indicator of preference of herbal products by the consumers . However, the competitors were launching various herbal product ranges to counter Patanjali Ayurved Limited and concluded Baba Ramdev knew that consumer 'trust' in the brand building of herbal products was crucial and he was exploring various options for keeping the present trust intact.

5) Remya lakshmanan and arushi agarwal (July 2020) authored a paper titled "invigorating ayurveda in the times of covid-19 : India's position and investment opportunities " and found out that Ayurveda, as a segment, has scope for tremendous growth which can benefit from investments in identified spaces and this will allow Ayurveda to evolve

itself to a form that is cognisant of the needs and trends of new generations and concluded that technological advancements, environmental changes and evidence-based research methodologies have enabled Ayurveda's affordability and pre-existing user base, and this can help advance the system's benefits to the population at large.

RESEARCH GAP : The review of literature clearly identifies the gap, which this study seeks to address. Lot of research studies has been undertaken to study value creations that has been done to Ayurvedic products and their future prospects over a period of time. But the value creation for the unfamiliar Ayurvedic herbs still is researchable.

STATEMENT OF PROBLEM: There are still many indigenous varieties of Ayurvedic herbs from the Indian origin to which value creation is very minimal or absolutely zero. These Ayurvedic herbs are packed with healing properties to many chronic ailments which other wise could not be cured through any other system of medicine. Unfortunately these Ayurvedic herbs are ignored by the Indian Ayurvedic drug manufacturing companies , consumers etc, to which value creation opportunities are abundant. Ayurvedic drug manufacturing companies of India has tremendous opportunities to bring value creation to these much unexplored Ayurvedic herbs, through which it can not only improvise on its financial well being but also can contribute enormously towards a healthy Indian society.

RESEARCH DESIGN :

1) Data Type : Primary Data
2) Data Procurement Method : Primary Data is procured through INTERVIEW METHOD from the Prominent Ayurvedic Drug Selling outlets situated in Bangalore City about the availability of value added products manufactured out of some of the rare and unfamiliar Ayurvedic herbs and Primary Data is also Collected from 10 famous Ayurvedic Practitioners in Bangalore City about the AYURVEDIC HERBS to which Value Creation has not been done so far or it is very minimal.

   The data is therefore collected by (a) putting a query with Ayurvedic Practitioners about to indicate those rare and unfamiliar Ayurvedic herbs packed with healing properties but value creation is almost nil.(b) putting query with popular Ayurvedic drug selling outlets

about the availability of value added products which is indicated by Ayurvedic practitioners

3) Type of Research : exploratory research.

DATA ANALYSIS AND INTERPRETATION :

I --- QUERY TO AYURVEDIC PRACTITIONERS TO INDICATE SOME RARE AND UNFAMILIAR AYURVEDIC HERBS TO WHICH VALUE CREATION IS MINIMAL OR NIL

RESPONSE : THE AYURVEDIC PRACTITIONERS INDICATED THE FOLLOWING AYURVEDIC HERBS PACKED WITH HEALING PROPERTIES TO WHICH VALUE CREATION IS VERY MINIMAL OR ZERO.

1) Cactus Fruit : Cactus Fruit is known for its immense health benefits such as treating high cholesterol , diabetes , obesity and hangovers. It is also a trusted name for its antiviral and anti inflammatory properties. Ayurvedic practitioners , in their response , they indicated that Cactus Fruit is one such amazing Ayurvedic herb which is neglected by Ayurvedic Drug Manufacturing Companies.

Figure 1 Cactus Shrub Bearing Cactus Fruits

2) Peacocks Tail : Peacocks tail is popularly known as ‘Mayura Shikha’ in Sanskrit. It is known for its immense health benefits such curing skin infections , burns and long term itching etc. It is said that it can show proven results for all kinds of skin disorders. Ayurvedic practitioners , in their response , indicated that Peacock Tailt is one such amazing Ayurvedic herb to

which Ayurvedic Drug Manufacturing Companies have given very minimal drugs.

Figure 2 Mayura Skhikha or Peacocks Tail

3) Flax Greens : Flax Green or Sesbania Grandiflora is very rich in Amino acids and Vitamin A and is believed as a trusted treatment for night blindness. It is also rich in vitamin B12 and Omega 3 fatty acids which can improve heart health and brain health. Ayurvedic practitioners , in their response , indicated that Flax Greens is one such amazing Ayurvedic herb which is neglected by Ayurvedic Drug Manufacturing Companies.

Figure 3 Flax greens (Agathi Keerai)

4) Dioscorea : Dioscorea bulbifera is popularly known as “Halu Geneasu” in Kannada, off late which can be seen very rarely. Dioscorea is packed with high potassium , manganese and calcium which can be a food supplement for the malnutrition. It can cater as booster for those who have recovered from chronic diseases , who would require rejuvenation of energy. Ayurvedic practitioners , in their response , indicated that Dioscorea is one such power packed Ayurvedic herb which is absolutely neglected by Ayurvedic Drug Manufacturing Companies.

Figure 4 Dioscorea Bulbifera

5) Turkey Berry : Turkey Berry is popularly known as ‘Sundaikkai’ in Kannada and Tamil. Turkey berry is said to be a proven solution to problems of severe Gastroenteritis and long time incurable Diarrhea . It is also a perfect medicine for some of the gynaecology related problems. Ayurvedic practitioners , in their response , indicated that Turkey Berry is one such nice Ayurvedic herb which is neglected by Ayurvedic Drug Manufacturing Companies to which value creation is zero.

Figure 5 Turkey Berry Plant

6) Citron Lime : Citron Lime is known as ‘Herale Kayi ‘ in Kannada and ‘Nartham Pazham’ in Tamil. Citron Lime is a proven medicine for boosting immunity and is a rich source of Vitamin C , Citron Lime is packed with anti-inflammatory properties which can considerably reduce acute pain in cases of Arthritis. Ayurvedic practitioners , in their response , indicated that Citron Lime is one such amazing Ayurvedic herb to which Ayurvedic Drug

Manufacturing Companies have done minimum efforts in giving value creations

Figure 6 Citron Lime

7) Ceylon stilwort – thumba plant : Thumba Plant is commonly known as ‘Thumbe Gida’ in Kannada which is packed up with antioxidants and nutrients which have proven remedies for skin related ailments, such as white patches , eczema , Gynaecology problems , acute gastric , sore throat etc. Ayurvedic practitioners , in their response , indicated that Ceylon Stilwort is one such power packed Ayurvedic herb which is totally neglected by Ayurvedic Drug Manufacturing Companies.

Figure 7 Tumba Plant

8) Sarpagandha Plant : Sarpagandha is known as Rauvolfia Serpentina which is a proven remedy for chronic ailments such as high blood pressure , insomnia , asthma , acute stomach ache ,and also mental health issues like neuropsychiatric disorder , psychosis and schizophrenia . Ayurvedic practitioners , in their response , indicated that Sarpagandha is one such amazing Ayurvedic herb to which Ayurvedic Drug Manufacturing Companies have given least importance regarding its value creation.

Figure 8 Sarpagandha Plant

9) Bamboo Shoots : Bamboo Shoots are one of the important food suppliments packed with lots of nutritional values which can also cure indigestion problems , abdominal disorders and can aid in weight loss and can cure some of the cardiovascular diseases. Ayurvedic practitioners , in their response , indicated that Bamboo shoots is one such nutrient packed Ayurvedic herb which is neglected by Ayurvedic Drug Manufacturing Companies in value creation

Figure 9 Bamboo Shoots

10) Euphorbia Heterophylla : Euphorbia Heterophylla or BEDI-SOPPU in Kannada is a rare Ayurvedic herb . In Sidhha type of treatment the plant parts are used to cure stomach related ailments such as intestine worms , abdominal infections and also some of the sexually transmitted ailments such as gonorrhoea. Ayurvedic practitioners , in their response , indicated that Euphorbia Heterophylla is one such amazing Ayurvedic herb which is neglected by Ayurvedic Drug Manufacturing Companies.

Figure 10 Euphorbia Heterophylla

II --- QUERY TO AYURVEDIC DRUG SELLING OUTLETS WHETHER THERE ARE ANY VALUE ADDED PRODUCTS AVAILABLE PERTAINING TO ABOVE MENTIONED AYURVEDIC HERBS

RESPONSE : THE AYURVEDIC DRUG SELLING OUTLETS INDICATED THE FOLLOWING RESPONSES

1) Value added products of CACTUS FRUIT :
   As of now no value added product of Cactus Fruit is being manufactured by any Ayurvedic drug manufacturing company in India in any form i e LEHYAS , CHOORNAS , ARISHTAS or GUTIKAS. Therefore it can be interpreted that value creation for Cactus Fruit is totally nil I e no Ayurvedic drug manufacturing company is producing any value added product with Cactus Fruit and its value creation is zero.

2) Value Added Products of PEACOCK TAIL :

As of now only one brand of Choorna is right now available with PEACOCK TAIL as ingredient but its availability is very minimal and it is highly priced and no other form of value added products made out of PEACOCK TAIL is available in the market at present. Therefore it can be interpreted that the value creation for PEACOCK TAIL is almost nil or it is very minimal.

3) Value added products of FLAX GREENS :

At present only 2 Ayurvedic drug manufacturing companies are making the choornas and lehyas form of only flax seeds but not flax greens , and it is not available abundantly and is restricted only to some areas where the Ayurvedic practitioners are educating patients about its immense uses. Therefore is clear that no value added product is available containing FLAX GREENS as the main ingredient and its availability is very minimal.

4) Value added products of DIOSCOREA :

At present absolutely no value added products are available with Dioscorea as the main ingredient in any form and Ayurvedic drug manufacturing companies are not even aware of its very existence as it usually grown in thick forests and not grown commercially. Therefore it can be interpreted that no value added product is available in any form comprising Dioscorea as the key ingredient and its value creation is zero

5) Value added products of TURKEY BERRY :

At present only one small Ayurvedic drug manufacturing company is making TURKEY BERRY choorna and arishta that too only on a very minimal scale and it is not available in all the Ayurvedic drug selling outlets. Apart from this very minimal applicability no branded value added products are available with TURKEY BERRY as the main ingredient. Therefore the above response it is clear that the value creation for TURKEY BERRY is almost zero and its not available in the form of any Ayurvedic drugs in any form and its value creation is zero.

6) Value added products of CITRON LIME

At present there are 3 varieties of Lehyas available and one variety of Arishta where CITRON LIME is just an ingredient in that and till now no value added product has

come with CITRON LIME as the main ingredient which can cure specific ailments by CITRON LIME and therefore it can be interpreted that the value creation for CITRON LIME is very minimal

7) Value added products of CEYLON STILWORT

At present there are absolutely no value added products available with CEYLON STILWORT as a main ingredient. Therefore it can be interpreted that value creation for CEYLON STILWORT is zero

8) Value added products of SARPAGANDHA

At present , there is only one variety of 'Gutika' with SARPAGANDHA as the main ingredient to cure insomnia and asthma and there is one 'Arishta' with SARPAGANDHA as a main ingredient to cure a particular variety of psychological disorder. Therefore it can be interpreted that there is no much value addition has happened for SARPAGANDHA

9) Value added products of BAMBOO SHOOTS

At present there is only one health mix powder , which is (taken under GUTIKA category here) a food supplement being produced by a famous Ayurvedic Drug Manufacturer , where in BAMBOO SHOOTS is one of the ingredients. Apart from this no other value added products is available with bamboo shoots as an ingredient in that and therefore it can be interpreted that value creation for BAMBOO SHOOTS is very minimal or almost zero

10) Value added products of EUPHORBIA HETEROPHYLLA

At present there is absolutely no value added product is available with EUPHORBIA HETEROPHYLLA as an ingredient in that. Therefore it can be interpreted that the value creation for EUPHORBIA HETEROPHYLLA is zero .

FINDINGS , CONCLUSIONS AND RECOMMENDATIONS

1) From the above responses it can be found that the value creations for most of the Ayurvedic Herbs is either minimal or zero. In this regard the following findings can be summarised.
   a) CACTUS FRUIT : AYURVEDIC PRODUCTS WITH CACTUS FRUIT AS AN INGRIDIENT

CHOORNA 0 , LEHYA 0 , ARISHTA 0 , GUTIKA 0

b) PEACOCK TAIL : AYURVEDIC PRODUCTS WITH PEACOCK TAIL AS AN INGRIDIENT

CHOORNA 1 , LEHYA 0 , ARISHTA 0 , GUTIKA 0

c) FLAX GREENS : AYURVEDIC PRODUCTS WITH FLAX FREENS AS AN INGRIDIENT

CHOORNA 1 , LEHYA 1, ARISHTA 0 , GUTIKA 0

d) DIASCOREA : AYURVEDIC PRODUCTS WITH DIASCOREA AS AN INGRIDIENT

CHOORNA 0 , LEHYA 0, ARISHTA 0 , GUTIKA 0

e) TURKEY BERRY : AYURVEDIC PRODUCTS WITH TURKEY BERRY AS AN INGRIDIENT

CHOORNA 0 , LEHYA 0 , ARISHTA 1 , GUTIKA 0

f) CITRON LIME : AYURVEDIC PRODUCTS WITH CITRON LIME AS AN INGRIDIENT

CHOORNA : 0 , LEHYA : 3 , ARISHTA : 1 , GUTIKA : 0

g) CEYLON STILWORT : AYUVEDIC PRODUCTS WITH CEYLON STILWORT AS AN INGRIDIENT

CHOORNA : 0 , LEHYA : 0 , ARISHTA : 0 , GUTIKA : 0

h) SARPAGANDHA : AYURVEDIC PRODUCTS WITH SARPAGANDHA AS AN INGRIDIENT

CHOORNA : 0 , LEHYA : 0 , ARISHTA : 1, GUTIKA : 1

i) BAMBOO SHOOTS : AYURVEDIC PRODUCTS WITH BAMBOO SHOOTS AS AN INGRIDIENT

CHOORNA : 0 , LEHYA : 0 , ARISHTA : 0 , GUTIKA : 1

j) EUPHORBIA HETEROPHYLLA : AYURVEDIC PRODUCTS WITH EUPHORBIA HETEROPHYLLA AS AN INGRIDIENT

CHOORNA : 0 , LEHYA : 0 , ARISHTA : 0 , GUTIKA : 0

2) From the above findings it can be **concluded** that the Ayurvedic herbs chosen for research has minimal value addition and it can be inferred that there is lot of scope for Ayurvedic Drug Manufacturing companies to create value addition to these valuable herbs which is packed with healing properties .

3) It is highly **recommended** from the researcher's desk that the Ayurvedic Drug Manufacturing Giants such as Himalaya Drug Company , Baidyanath , Dhoothpapeshwar , Dabur , etc should tap this opportunity and can bring value additions to these **unfamiliar Ayurvedic Herbs and thus contribute towards building a healthy society which in turn result in healthy nation which can also bring about lot of employment opportunities in the Ayurvedic Drug Manufacturing companies and entrepreneurial opportunities to the farmers who can take initiatives in growing such unfamiliar and high demand Ayurvedic Herbs. This phenomenon of employment and entrepreneurial opportunities will definitely be instrumental in boosting the Indian Economy and can contribute towards an augmented GDP.**

FURTHER SCOPE OF RESEARCH : Substantial research can be undertaken with regard to the other unfamiliar Ayurvedic herbs which is not covered in this research paper to which value creations are yet to be undertaken.

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The Role of Co-working spaces in the establishment and development of Start-ups by the millennials.

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Abstarct

This paper attempts to identify the role and significance of Co-working space in the establishment, development and creating wealth resources in a start-up eco system. "Customer is a true reality" --Millennials think big and dream small about a start-up. Coworking can be understood as shared workplace, totally independent of the rest of the office. It is a great concept in itself as its features are comfortably conducive to many those who want to work in isolated space. It also enables individulas who want to check their prospective of a start-up with minimum possible input and funding. In cities like Bengaluru going for an individual work place is a big gamble often ending up in its closure resulting from the hap hazardous budgeting and unplanned incidental expenses. Co-working space provides Millennials an opportunity of working in a 'personalised work ambience' being away from the distractions of home and costly offices. Millennials prefer to be 'individual' in their operations viz., consultants, architects, educational tutors etc. The term 'millennials' is often applied to those individuals who reached adulthood moving in transition from 20th century to 21st. As they grew up in technologically driven world the business tendencies have been highly revolutionized working in socially networked world. Having believed in the mantra " Follow your dreams-they know the way" they prefer to work in less risk factor operational management and Coworking spaces grabbed the opportunity and obviously developed 'market in marketing'.

(key words : Coworking spaces, millennials, budgeting, business tendencies, inviduals etc.)

INTRODUCTION

The term "business" has taken several different interpretations in various spheres of life. Cambridge dictionary limits itself to define the term as "***the activity of buying and selling goods and services".*** [1]

Millennials have, perhaps, taken the term 'business' in sentence "***mind your own business***" in its literal sense and not surprisingly Generation Y people are into these start-ups more than ever before. They single out themselves in the usage of technology ranging from basic mobile phones to tablet PCs and smartest of phones. As a result, entrepreneurship has become synonym of cake-walk to the extent where currently business consultancy also claims as a start-up.

Extensive usage of social media also eased the business operations and with the advent of internet globally, the start-up ecosystem spread like wildfire so much so that a vendor in the North Eastern province in China can identify his loyal customer in the extreme corner of a Latin American country and his needs will be met with in no time.

However, the funding for a start-up has been a perennial concern since times immemorial despite the availability of other factors within the range. At this juncture there came the business concept of "Coworking space" which has revolutionized the ease of doing a business to unimaginable heights is a wonderful concept in the millennium. It allows individuals to check themselves where they are as entrepreneurs. Simply put it, it is '***business with businessmen.'***

Chapter I
Millennials and Start-up business system

Millennials are people of the millennium who turned into adulthood at the beginning of 21st Century, although the definition varies from one source to another and various authors have put them in different time frames. People across the world born between 1978 and 2000 (approximately) are considered as millennials who are the largest generation born in the 20th Century. They are marked by a few common characteristics all over the world. *Invidualism* is one such patent trait which idealises the conception of millennials and "I'm the boss of myself" is their mantra. Millennials identify themselves with self- realization and individual progression. Grown up in the most advanced technological environment they are synonymous with self-confidence, self-esteem and hence they track "*Follow your dreams-they know the way*" ideology. Thoroughly drenched by online and socially networked world, they tend to be confident and having passed through insecure life style and uncertain job structure of previous generations, millennials initiated to think differently and began to discover themselves in the new world of technical advancement. Millennials have also been haunted by the economically less successful Silent Generations and Baby Boomers and this has led to launch themselves with less risky business operations and establishments. They throw the seeds of imagination wildly in the space of opportunity and take the results into their stride.

Millennials and work attitude:

Some adaptations have come about from employers accommodating Millennials. The bring-your-own device trend (BYOD), for example, is at least in part a reaction to the Millennials' near-addiction to mobile devices. Workplace satisfaction matters more to Millennials than monetary compensation and work-life balance is often considered essential. They are less likely than previous generations to put up with an unpleasant work environment and much more likely to use social networking to broadcast their concerns. On the other hand, satisfied Millennials are often employee advocates for the organizations they work for, providing honest, free -- and convincing -- public relations (PR). [2]

They prefer to expose themselves to new people and new ideas and expand their horizon of discerning abilities.

Concept of Start-up :

A start-up is a small business venture in a humble operational ambience.

"A startup is a young company that is just beginning to develop. Startups are usually small and initially financed and operated by a handful of founders or one individual. These companies offer a product or service that is not currently being offered elsewhere in the market, or that the founders believe is being offered in an inferior manner." [3]

Since millennials intend to take up tasks with least possible risk element, start-ups are a boon in disguise for them. They usually come into business establishments without a legacy or a successful family background of business empires and the success rate is demoralising and most of the times start-ups end in the closure. Lack of experience, abrupt stop of inflow of funds, incubators failure to raise to the occasion etc., lead to the uncertainty of these start-ups. At this juncture, we need to listen to what Bill Gross has to say about the factors responsible for the success or failure of a start-up. Bill Gross has founded a lot of start-ups, and incubated many others — and he got curious about why some succeeded and others failed. So he gathered data from hundreds of companies, his own and other people's, and ranked the success rate on five key factors.

Fig 1. Bill Gross' factors for the success of a start-up

Bill Gross goes on to say : "We believe that entrepreneurship can unlock human potential and make the world a better place. We look for big problems in the world that have technology solutions and test many ideas in parallel. When one shows great promise, we recruit a great team, spin it off into a company, and help them grow a successful business." [4]

Therefore it is more than important for one to identify one's potential before they take up the avatar of an entrepreneur and sustain for a longer time frame in order to realize one's dreams.

Chapter II
Start-ups and Co-working Space

It is time now to understand the methodology of a start-up and one of its integral parts i.e. ecosystem. "A start-up ecosystem is formed by people, start-ups in their various stages and various types of organizations in a location (physical and/or virtual), interacting as a system to create new start-up companies." [5]

Fig 2 : Diagram showing a start-up ecosystem's elements

These organizations can be further divided into categories: universities, funding organizations, support organizations (like incubators, accelerators, co-working spaces etc.), research organizations, service provider organizations (like legal, financial services etc.) and large corporations. Different organizations typically focus on specific parts of the ecosystem function and/or start-ups at their specific development stage(s). The trend is that most of the companies focus on crowd funding or digital financing as an alternative investment and essentially millennials with their new start-ups look for such companies through internet connectivity globally. Entrepreneur is an individual but a start-up is a team activity with co-funders who are equally responsible and this start –up largely depends on it ecosystem for its sustenance as well as for its linear progression.

Therefore, it is considered imperative to work on one of the key elements of this ecosystem i.e. Co-working space which plays a vital role in the success of a start-up. As one of the support organisations Co-working space is crucial for the initial establishment of a start-up and its sustainability.

How does it work ?

Basically it is a shared office space where individuals work independently or collaboratively in a typical office ambience. The owner provides basic amenities and facilities which would be conducive to working in a detachable attachment. The culture of Co-working space enables entrepreneurs to get an opportunity to interact, associate and learn numerous aspects of business establishments. The aroma of fresh coffee, crackling of snacks, large office tables with 24/7 internet connectivity with uninterrupted power supply, entrepreneurs focus on their systems in incessant air-conditioned atmosphere which beats the outside temperature. Primarily, Coworking spaces offer affordable office space for those entrepreneurs who fancy some space away from the distractions of home and disturbances of regular offices. One of the major advantages of these spaces is the flexibility of time. One can walk in at one's will and walk out at any of one's convenient time. As they are devoid of traditional office leases strat-ups appreciate the flexibility and they can choose to either continue with their activity or close down on it. Co-working spaces develop a unique culture which includes great mobility and freedom. Besides the private meeting rooms, working beyond time frames provide the opportunity of 'true freedom' which the millennials seek for. In a city like Bengaluru where the office space comes with exorbitant rentals accompanied by huge advance amounts, it is beyond anyone's imagination that Co-working space with all the above mentioned amenities and provisions comes for a mere Six

thousand rupees (i.e. 85 US dollars approximately) of rent with no other hinges like power bills, remunerations, maintenance and incidental expenses etc.

CONCLUSION

Millennials influence people of not only their generation but Generation X also so much so that the older generation use the electronic gadgets more than the Gen Y people. This is for more than one reason. Their sense of individuality, respecting privacy, sharing of information to the greatest possible extent. Their intention of start-ups has revolutionised the business industry and World Economy to such an extent even large establishments began to spare some Co-working space besides their regular office where in they accommodate freelancers and entrepreneurs and others to be a part of this Co-working culture and it yielded unimaginable benefits to the parent company. Many sought to become a part of the Start-up ecosystem after having realized the significance of the ever changing global scenario.

As the number of freelancers increase day by day the need for Co-working space also will increase proportionately and this will lead to reorganising the Start-up ecosystem where in this co-working space will be a major element.

What the researchers say about Co-working space :

"A team of researchers have been studying the effects of co-working on productivity and recently recounted some of their findings in the **The Harvard Business Review**.

Their research showed a strong connection between employees thriving in these shared workspaces vs regular offices. So much so that they decided to take a deeper look at co-working spaces. The team of researchers found that people who use co-working spaces have different attitudes as a result of their space. Correlated with co-working spaces were feelings of: more meaningful work, more job control, and having a sense of community." [6]

Co-working space is more a culture than just a space with a table and a chair.

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A Study on the impact of cryptocurrency on the growth and development of a nation – A review

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Abstract

Cryptocurrency is a form of digital currency embracing the use of the blockchain technology. Each transaction is automatically recorded over digital ledgers maintained by the users connected to their servers. The popularity of virtual or digital currency or cryptocurrencies like Bitcoins, Litecoin, Ethers, and many more forms is expected to drive and dominate the market in the forthcoming years, hence necessitating the study. The study's objective focuses on analyzing cryptocurrency usage, understanding the growth pattern of cryptocurrency and evaluating the impact of cryptocurrency on development of nation. The entire study is purely dependent on secondary data collection from various sources available like Google scholar, Delnet – e-resources and print journals. The Scope of the study relates to the studies that concentrate on the said theme all over the world. The study is basically a meta-analysis of the literature that is available in the print and non-print form. The researchers want to understand the impact of cryptocurrencies on the growth and development of the nation, also focusing on the Indian context. It was found from the reviews that Cryptocurrencies have both positive and negative impact on the growth and development of the country.

Keywords: Cryptocurrency, blockchain, growth, development, nation

Introduction

The popularity of virtual or digital currency or cryptocurrencies like Bitcoins, Litecoin, Ethers, and lots of more are expected to drive the market in the forthcoming years. People from developed countries are likely to adopt the straightforward and flexible transactional method offered by digital currency. This popularity of virtual currency as an exchanging medium led the

financial institution to support digital currency. Companies can enjoy fluctuating digital currency prices and strengthen their digital assets. The cryptocurrency market will develop at a pace set by the key participants, characterized by likely growth spurts of legitimacy from one or more of those participants in what we call "credentialing moments." For the market to succeed in the next phase in its evolution toward mainstream acceptance and stable expansion cryptocurrencies can help to execute transactions much faster and cheaper than traditional bank transfers. By eliminating some intermediaries, mobile payment operators and cryptocurrency transactions can reduce the prices and increase the speed of the transactions Cryptocurrencies are often very promising for remittance payments. The lower transaction costs for using cryptocurrencies also will leverage microcredits since only a smaller amount of each transaction will be deducted for banking and the conversion fees, this might affectaffect the countries growth and development directly or sometimes indirectly.

Research Methodology

The study is entirely based on secondary data wherein the researchers have reviewed the articles published in various journals and books and tried to summarise the impact of cryptocurrencies on the growth and development of the nation

Objectives of the study

1. To analyse the usage of cryptocurrency.

2. To understand the growth pattern of cryptocurrency.

3. To evaluate the impact of cryptocurrency on development of nation.

The study is purely based on secondary data collection from various sources available.

Scope

The scope of the study is not limited to a particular area, and the researcher's reviewed the articles available in the stated field.

Limitations

The research is primarily based on only secondary data and hence suffers from the limitations of the secondary data.

The research can be extended to analytical study

Discussion

The researchers reviewed the following article and found out the following implications that crypto currencies have on the growth and development of the nations. Forrester, Javin H., (2015) in his doctoral thesis in USA stressed on the advantage a bitcoin offers through hedging opportunity and also companies trading in them also tend to benefit and also provides future market flexibility. This would also foster innovation and benefit the company and the economy as a whole.

Oleksii Drozd,Yaroslav Lazur,Ruslan Serbin(2017). The theoretical, methodological, and legal possibilities of application of certain sorts of legal responsibility to the relations, which are connected with crypto currency. Some sorts of liability in the field of cryptocurrency relations make the subject of the study. The research is predicated on a comparison of legal regulation of the sphere of crypto currency in Ukraine and in foreign countries. Advantages and drawbacks of different modes of cryptocurrency turnover are determined: from direct prohibition to granting the status of the official payment system. It is made on the basis of the analysis of peculiarities of the circulation of virtual money in Australia, Germany, Netherlands , New Zealand, Singapore, Indonesia, China, the Russia , Bolivia, Ecuador, Thailand, Vietnam, the USA, Japan, Spain, and a few other countries. On the idea of the comparative legal study of certain provisions of the civil, administrative, tort, and criminal legislation of Ukraine, the chances and limits of the application of certain types of legal responsibility to violations in the field of cryptocurrency are determined. The results of the comparative legal study have shown that, unlike most foreign countries, in Ukraine, there's no legislative consolidation of the legal status of the virtual currency. during this regard, today within the national legislation, there are not any direct rules that would predict the occurrence of administrative, criminal or civil liability for the offenses within the field of cryptocurrency relations.

Seetharaman et al (2017) in their study titled 'impact of bitcoin as world currency' found in their study that bitcoins and other similar cryptocurrencies could probably pose a serious threat to US

Dollar thereby impacting the world economy at large as most of the businesses happen in USD. It also found that various regulators across the world may not encourage the usage of this virtual currency due to limited supply, exchange rate issues and regulators hurdles, with only positive being people may be willing to explore the technology as we live in an technological era. Carrick, J. (2016) in his study on bitcoin as a complement to emerging market currencies found that bitcoin as a digital currency has gained remarkable traction as economic instrument and also proved that it has a possibility of emerging as world market currency in future thereby impacting the growth and development of the country.

James B et al (2018) in their study on impact of cryptocurrencies on Indian economy found that it has got a negative impact on Indian Economy as the government and RBI has not authorised the legality of the instrument and also that it may pose a serious threat to banking system of the country. This is due to the reasons like reliability and security of the currency, it is speculative and risky, has taxation issues and there is no regulatory body for the same in India. Though it is not legal in India, there has been an increase in investors in India, thus giving a ray of hope and promise in the near future.

Jani, Shailak. (2018) in her article based on her thesis titled The Growth of cryptocurrency in India pointed out that the use of virtual currency is increasing day by day in India. She identified and grouped the countries as to friendly, neutral or hostile with respect to the regulations of the government. Accordingly, USA, Canada, Japan, Singapore, Iran, Russia, Switzerland, Italy, Mexico, South Africa, Poland, Venezuela and Australia were classified as Friendly countries with respect to cryptocurrency regulations. South Korea, Thailand, Vietnam, Britain, France, and Germany are all neutral and China and Brazil were hostile with respect to regulations. It was also found that these concepts would bring a promising and revealing opportunities in the positive direction with respect to e-business and e-payment sectors thus positively impacting the growth and development of the country.

Mohamed Noureldin Sayed and Nesrin Ahmed Abbas.(2018) in their study found that Cryptocurrency may be a form of digital currency embracing the use of the blockchain technology where each transaction is automatically recorded over digital ledgers maintained by the different users connected to their various servers. They also found that Crypto currency has

introduced a safer, cheaper and more convenient mode of transacting requiring lesser procedural requirements for the individuals transacting over this mode of currency. Gulf States are recognized as emerging markets mostly embracing the expansion of the various emerging economic revolutions. The study focuses on the revolutionary introduction of cryptocurrency within the Gulf States and how it impacts their economies. Safety, efficiency, and trust in cryptocurrency have enabled the event and revolutionary of the economic market in the Gulf States.

It was found from the above study that introduction of cryptocurrency has actually had a positive impact on the Fintech economy because of the benefits it provides like flexibility, convenience, security and transparency of the transaction. Though it also had a small amount of negative impact in terms of money laundering and threatening the existence of banks and their operations. But the study concluded that the same is doing fairy good enough in emerging markets than in the developed nations.

S. Alzahrani (2019) in their research said that cryptocurrency is a significant innovation in the finance industry. They found that technical factors like control over the system, anonymity, fast transfers, innovation of blockchain technology and security aspects would make the adoption of cryptocurrency an easy one. Also, economic factors like opportunity for investment, low transaction costs, alternative banking system, limit on supply, increased demand for altcoins and recognition by business houses makes it easy for its easy adoption. Since the adoption levels are increasing, there may also be a possible positive impact on the world economy. Though the negative aspects like lack of clear laws to regulate may pose a serious threat.

Agarwal S et al (2020) in their study on The sanctioning of cryptocurrency: positive and negative ramifications in India identified the positive impacts like growth in jobs, creation of wealth, increase in digital payments trends thus having a good impact on growth and development of nation. They also highlighted the negative ramifications like scalability, cyber security concerns, regulations may have a negative impact on the economy. They also highlighted the positive changes to e-business and e-commerce and thus on the economy as a whole.

Praveena L (2020) in their article found that usage of bit coins which is one of the crypto currency in India has a predominantly negative impact on the country, but it may also have a positive impact on consumer behavior pattern and has a potential for replacing the traditional monetary system in our country and also would take India to reach the next platform of e-commerce. It was found that Indians would be highly benefitted by the usage of bit coins individually but not for the nation as a whole. Thus, she concluded that bit coins are more of a boon to Indians than a bane to them.

Abdirahman Rejeb et al (2021) in their study investigated the role and significance of crypto currencies in modern-day transactions and economic systems primarily focussing on bitcoins. They also stated that cryptocurrencies help to spur innovation and help in the creation of new business model. These help the entrepreneurs and investors to fund new projects, thereby increasing employment opportunities and contributing to the growth and development of the nation directly or indirectly.

Biswajit Palit et al (2022) in their research article found that cryptocurrencies have enormous potential to reap the benefits of trade and cause enormous economic growth for the nation. They also highlighted that the crypto market has the possibility of perfectly substituting hard cash and thereby harnessing a lot of prospects for growth and development of the nation.

The discussion could be summarised in the table below

Author	Year	Impact
Forrester, Javin H.,	2015	Positive impact on economy
Oleksii Drozd,Yaroslav Lazur,Ruslan Serbin	2017	Negative impact on economy
Seetharaman et al	2017	Positive impact on economy
James B et al	2018	Negative impact on economy
Mohamed Noureldin Sayed and Nesrin Ahmed Abbas	2018	Positive impact on economy

Jani, Shailak.	2018	Positive impact on economy
S. Alzahrani	2019	Negative impact on economy
Agarwal S et al	2020	Negative impact on economy
Praveena L	2020	Negative impact on economy
Biswajit Palit et al	2022	Positive impact on economy
Abderahman Rejeb et al	2021	Positive impact on economy

Source: Self compiled from Literature

Conclusion

The researchers conducted a descriptive study by reviewing the published and peer-reviewed research articles from various databases like Google scholar, Delnet, and other web sources to analyze the impact of crypto currency on the growth and development of the nation. From the above discussions, it could be summarized that out of the papers reviewed, 55% of the papers pointed out that crypto currencies would positively impact the economy and 45% pointed out that it would negatively impact the growth and development of the nation. The researchers could state that crypto currencies do have a positive and favorable impact on the growth and development of nations, though there are also a few negative implications. The favorable impact could be articulated in the fact that many business houses abroad has started accepting crypto currencies for transaction purposes, thus stimulating the economic growth and development of the nation. Although it has been recognized and permitted across the globe, Indian Government and Reserve Bank of India- the regulator of banks has not still legalized the trading / investing in crypto currencies and hence may not yield a positive impact on the growth of the nation. Also, the government's stand on taxing the crypto currencies may further lead to negative impact. Since the concept itself is in nascent stage, the impact could be well understood after a certain number of years. Also, the study is in very early stage in Indian context as the same is not authorized and legalized and hence there is a great scope in that direction as some of the Indian investors are already players in crypto currency arena. The analytical study could prove this point further in the future as well. There is a scope for conducting an analytical study to find out the impact of crypto currencies on the growth and development of the countries.

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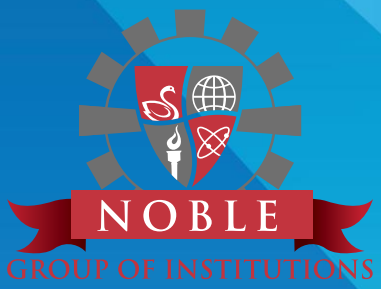

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