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ANWESHAN
ASTHA'S MANAGEMENT JOURNAL
Volume - VII, Issue - I, 2024
www.asthaeducation.in
http://anweshan.co.in

About the journal:

"ANWESHAN, ASTHA's Management Journal" (**ISSN : 2582-1504**) is a multi domain journal in the field of Management. This Journal is Published under the Banner of ASTHA School of Management, Bhubaneswar. It brings together the research works from across the Globe and assimilates them in the form of a journal. We are privileged enough to have an editorial board having eminent professors from national and international Universities across the globe headed by editor Professor (Dr.) Sharmila Subramanian. We have made every attempt to adhere to the strict double-blind-review process while selecting the articles with a zero plagiarism tolerance. We are also in the process of getting enlisted in the leading journal indices.

Publication Details

1.	Title of the Publication	:	ANWESHAN **ASTHA'S MANAGEMENT JOURNAL**
2.	Periodicity of the Publication	:	Yearly
3.	Language of the Publication	:	English
4.	Name & Address of Publisher	:	Dr. Bankim Mohanty, Executive Director -cum-Secretary ASTHA School of Management Flat No. 205/E, Panchamukhi Enclave, Raghunathpur, Bhubaneswar, Khurda, Odisha, PIN:754005,
5.	Address of Printer	:	Maruti Print Industry, D-1/2, Sector A Zone D , Mancheswar Industrial Estate, Bhubaneswar - 751010
6.	Name & Address of Editor	:	Prof. (Dr.) Sharmila Subramanian Plot-88/1, Pvt Plot, Kanan Vihar, Phase-I, Patia, Bhubaneswar, Kalarahanga - 751024
7.	Owner	:	ASTHA School of Management

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All manuscripts submitted for publication in the journal will go under double-blind review and decision of the reviewer and editors will be the final.

ANWESHAN
ASTHA'S MANAGEMENT JOURNAL

EDITORIAL

Dear Readers,

We are living in an era where the proliferation of digital technology is transforming the way organizations function, interact with the stakeholders, and drive growth. As we navigate through this era, we experience the profound impact of emerging technologies like block-chain and Artificial Intelligence (AI) on various sectors.

In marketing, AI-driven personalization is enabling businesses to provide individualized experiences to the customers. Block-chain technology ensures transparent and secure data management, fostering trust and loyalty. Fusion of these technologies rises the authenticity of the brand as well as the organization.

In financial services, block-chain's secure and decentralized nature improves transactions, enabling secure, transparent, and tamper-proof exchanges. AI-driven insights present complex financial data in an engaging format, facilitating informed decision-making. Compliance and risk management also become more efficient due to AI-powered thematic design.

In HRM, AI-driven recruitment and employee engagement strategies are transforming the way organizations attract and retain talent. Block-chain-based reward systems and AI-powered feedback mechanisms boost motivation and retention. Predictive analytics, enabled by AI, helps identify trends and insights, informing data-driven HR decisions.

The spread of digital technology introduces new risks such as cyber-attacks, reduction in face-to-face interaction, and dismal creativity. To navigate these challenges, organizations must balance innovation with caution. Investing in digital literacy, robust security, and ethical practices is crucial. By training employees to maximize technological benefits while minimizing its risks, organizations can fully harness the potential of digital technology, ensuring progress while protecting their long-term interests.

This edition of ANWESHAN addresses some of the queries involving digital technology that intrigue researchers quite often. The current volume of ASTHA's Management Journal presents enticing research articles that deal with marketing, finance, and leadership aspects of organizations. Prominent among these include studies on online impulsive buying, authorized and branded generics, and the influence of online marketing on NBFCs. Additionally, the journal offers in-depth analyses on financial perspectives such as international reporting standards, risk perception in equity investing, financial literacy in rural Odisha, block-chain innovation, and NPAs in Indian banks.

The edition also features a case study on Accounting Scandals, Expert Interview of one of the most promising woman entrepreneurs of Odisha, and a book review of Servant Leadership Roadmap by Cara Bramlett.

Overall there is an earnest effort by the team behind ANWESHAN to serve its readers a scrumptious platter of research studies that desires to satiate the crave for exploration, experimentation and examination of numerous data that surround us.

ASTHA School of Management
Bhubaneswar

Prof. (Dr.) Sharmila Subramanian

Contents

Understanding Online Impulsive Buying: A Social Commerce Perspective on Website Quality and Credit Card Usage

***Jyotisman Das Mohapatra**
****Dr. Pallabi Mishra**

Abstract

The impact of website quality on Online Compulsive Buying Behaviour (OCBB), the leading factors of the social commerce on credit card usage (CCU) based online shopping and online impulsive buying behaviour (OIBB) has been investigated in this study. The authors have employed a research model to look at the connections between the components of the study. Primary data on social commerce has been gathered from 350 respondents through an online survey form. The structural research model and data have been analyzed using a covariance-based structural equation modeling technique using AMOS 22.0. According to research, consumers' CCU and OIBB have positively impacted OCBB by the caliber of online shopping websites. Based on the findings, the study has recommended directions for further research and has highlighted factors that have an impact on consumer buying behaviour. By utilizing multiple website quality factors, this study has closed the information gap among CCU, OIBB and OCBB. The authors have created a new model to examine the relationship with the elements of website quality, based on CCU, OIBB and OCBB.

Keywords: Compulsive buying behaviour, Impulse buying behaviour, Social Commerce, Website quality factor.

Introduction

In the market, electronic commerce is now widely used. With online purchasing so accessible, people may become obsessive shoppers. Any online item may be bought at any time, based on earlier research. Important triggers for impulse purchasing include purchase resources (money, time), reasons (hedonic, utilitarian), traits (impulsive buying propensity, sensation-seeking), and marketing signals. Impulsive buying is typically used to acquire inexpensive items, but it can also be used to get expensive ones.

A popular past activity in today's culture is shopping. But when this behaviour turns into compulsive shopping, it might turn into something unwelcome and hazardous. Compulsive shopping has come up for consideration in consumer research. The tendency of customers to be obsessed with frequent shopping without much self-control as compulsive buying. As per the survey one in every twenty persons on average will have compulsive buying behaviours at some time in their lives. Compulsive buyers are inundated with and exposed to a multitude of marketing signals that accompany their online and easy-to-buy pursuits. This is a result of compulsive purchasers' poor self-esteem and their heightened sensitivity to marketing cues.

While it is acknowledged by academics that the primary factors influencing online purchasing

* **Jyotisman Das Mohapatra,** Research Scholar, Department of Business Administration, Utkal University, Odisha, Mail ID: jyotisman7381@gmail.com
** **Dr. Pallabi Mishra ,** Assistant Professor, Department of Business Administration, Utkal University, Odisha, mail ID: pallabi.iitkgp@gmail.com

behaviour (OBB) are website quality, credit card use, impulsive and compulsive buying, the interrelationships between these variables have not been investigated in the body of current literature. Thus, it remains unclear how website quality affects compulsive buying habits of consumers. Determining the influence of website quality on online compulsive buying behaviour is therefore the primary goal of our study, given the research gaps in the marketing literature that currently exist. Thus, the relationship between website quality and obsessive buying behaviour has remained unclear.

Our study's main objective is to ascertain the impact of website quality on online compulsive purchasing behaviour in light of the present research gaps in the marketing literature. Again objectives of our study encompass the following:

Objectives of the Study

(i) Ascertain the mediating influence of credit card usage (CCU) and online impulsive purchasing behaviour (OIBB) on the association between website quality and online compulsive purchasing behaviour (OCBB);

(ii) Ascertain the direct impact of different aspects of website quality on credit card usage and OIBB;

(iii) Ascertain, by leveraging credit card usage and OIBB, the indirect impact of different aspects of website quality on OIBB.

Therefore, the five main concerns that we focused on in the current study were as follows:

i How does the quality of a website affect CCU?

ii What effect does the quality of a website have on the OIBB of users?

iii What effect does CCU have on the OIBB of customers?

iv What impact does a website's quality have on a user's OCBB?

v What element of website quality influences CCU, OIBB, and OCBB the most or the least?

The effect of website quality on OCBB in underdeveloped nations is another area of interest for this study. Because South Asia is the only varied subcontinent in the world, India, a South Asian nation, was selected as the study's focus . Furthermore, India is a developing nation with a greater pace of Internet subscriber growth than the rest of the globe, and the vast majority of Indian internet users engage in heavy online shopping . Due to shifting consumer preferences, e-commerce businesses in India are expanding quickly to replace traditional marketing channels. Customers are becoming more knowledgeable about and interested in online shopping. A study conducted to measure the popularity of internet purchase and it was found that, internet purchasing is growing more and more popular among Indians. India may thus be a great place for study to validate empirical findings.

Literature Review

Because customers' perceptions of a website's quality have a direct impact on their purchase decisions, website quality is crucial in the e-commerce sector. Website quality has drawn a lot of attention from academics and practitioners due to its crucial role in increasing consumers' purchase intentions (Ongsakul et al., 2020). Customers expect high-quality customer service from e-commerce companies. It was Jeong et al. (2003) that introduced the concept of "website quality" to the hotel sector. According to Li et al. (2017), "website quality" is the whole perfection or usefulness of a website in conveying intended messages to users and consumers. Website quality, according to Jeong et al. (2003), is defined as a website‘s overall effectiveness or excellence in communicating intended messages to target users and consumers (Ongsakul et al., 2020). Based on interviews with online users and designers as well as past research, Loiacono et al. (2002) developed the WebQualTM model, which divides website quality into four categories: (1) usability, (2) ease of use, (3) enjoyment, and (4) complementing relationship.

A website's capacity to provide customers with sufficient information about goods and services is determined by how easy it is to use. The website is easy to use and enjoyable for visitors, as evidenced by its entertainment value and simplicity of navigation. The interaction between the website and other sales channels is represented by the complementarity dimension (Loiacono et al., 2002). Website design is a crucial factor in deciding the caliber of service provided to online customers, claim Li et al. (2017).

Consequently, earlier research (Hossain and Rahman, 2021; Hossain et al., 2018) explains that users experience flow due to interactive elements on websites, which influences their intention to make a purchase. Additionally, Bighiu et al. (2015) demonstrate that marketing campaigns benefit from high-quality websites. Customers are more likely to behave impulsively when they purchase online because of the ease of the ordering process, the availability of products that only need a few clicks to order, the speedy delivery, and the absence of social influences. Online shopping fulfils many basic necessities in today's society, including the need for food, clothing, water, and so on, without passing judgment on the goods or services purchased. Impulsive shopping happens a lot, but the causes are rarely investigated. Most customers are unaware of this, particularly in light of the fact that internet shopping has evolved into a socially acceptable addiction (Bighiu et al., 2015). The pervasive and evolving phenomena of impulsive purchase can be influenced by external factors or the fleeting psychological states of a buyer. Previous research (Akram et al., 2018) examined the function of impulsive purchasing in an online setting. The online impulsive buying depends on the website characteristics, hedonic motives, stimulants, and promotions (Madhu et al., 2023)

Furthermore, according to Hossain and Rahman (2021) certain characteristics of motivation, lack of control, financial impact, and total time commitment suggest that online compulsive purchasing is a unique behavioural disorder. Numerous studies have demonstrated that credit card signals enhance customer expenditure (Wong and Lynn, 2020). One reason for this might be that individuals have become accustomed to expecting credit card stimuli to be merged with goods and services that are paid for using credit cards. According to Wong and Lynn (2020), spending could also be a learnt reaction to credit card cues that have a conditioned motive.

The rise of consumer credit alternatives, including personal loans and bank overdrafts, is paralleled by the growing use of credit cards. Although credit cards give consumers flexibility in their purchases and stimulate spending (Pradhan et al., 2018), they can have a negative impact on society. Spontaneous CCU also affects customers' appreciation of material goods, which increases conspicuous spending. This might lead to a powerful and persuading desire to purchase, which could then cause credit card misuse to create a debit and weaken and erode self-control, ultimately resulting in OCBB (Eaglen and Schofield, 2017). Numerous earlier research (Pradhan et al., 2018) found that a consumer's CCU affects their compulsive behaviour.

The most important OBB driving factors have been identified by research (e.g., Lim et al., 2014), however the existing literature has not addressed the inter-associations among these variables (website quality, CCU, impulsive purchasing, and compulsive buying). However, Akram et al. (2018) examined the moderating impacts of credit card usage and sales promotions in addition to how website quality encourages impulsive online purchases. Pradhan et al. (2018) looked at the relationship between consumer credit cards and impulsive purchases, consumerism, and compulsive buying. On the other hand, the connection between the calibre of a website and compulsive buying has not been studied.

Conceptual framework

Online product sales are growing in popularity as a means of expanding one's customer base and better satisfying their demands (Prasad and Ghosal, 2021). As such, the number of customers making purchases online is rising quickly due to the proliferation of shopping websites (Sarkar and Ghosal, 2018; Ghosal, 2015). In our research, we explored if the quality of a website had an influence on a user‘s internal state. Additionally, Akram et al. (2018) found that CCU and OIBB were positively impacted by the quality of the website. Additionally, they claimed that CCU positively affects customer OIBB. Pradhan et al. (2018) state that consumer OCBB is likewise governed by CCU and OIBB. This study came to the conclusion that customer CCU and OIBB are positively impacted by the quality of a website. CCU and OIBB would have an impact on consumer OCBB (Figure 1).

Hypotheses

(a) Website quality and CCU

Hossain and Rahman (2021) assert that a customer's perception of the quality of a website affects their emotional states, including happiness and anxiety. Online shopping has several benefits that make it both enjoyable and beneficial for customers. The ability to purchase from the comfort of one's home as opposed to going to a physical store is the most important of these benefits: ease of use. The second advantage is the satisfying feeling you get from doing cashless transactions. With the advent of digital money and credit cards, online buying has grown increasingly alluring.

When compared to cash, credit cards enhance fast-food restaurant sales by 50–100% (Akram et al., 2018). Moreover, the perceived cost is decreased when paying with a credit card. Therefore, as website quality rises, credit card purchasing is anticipated to increase in the future (Akram et al., 2018; Pradhan et al., 2018). Drawing on the earlier conversation and focusing on the context of online purchases, we arrived at the following hypothesis:

H1a. Usability positively affects CCU.

H1b. Ease of use positively affects CCU.

H1c. Entertainment positively affects CCU.

H1d. Complementary functions positively affect CCU

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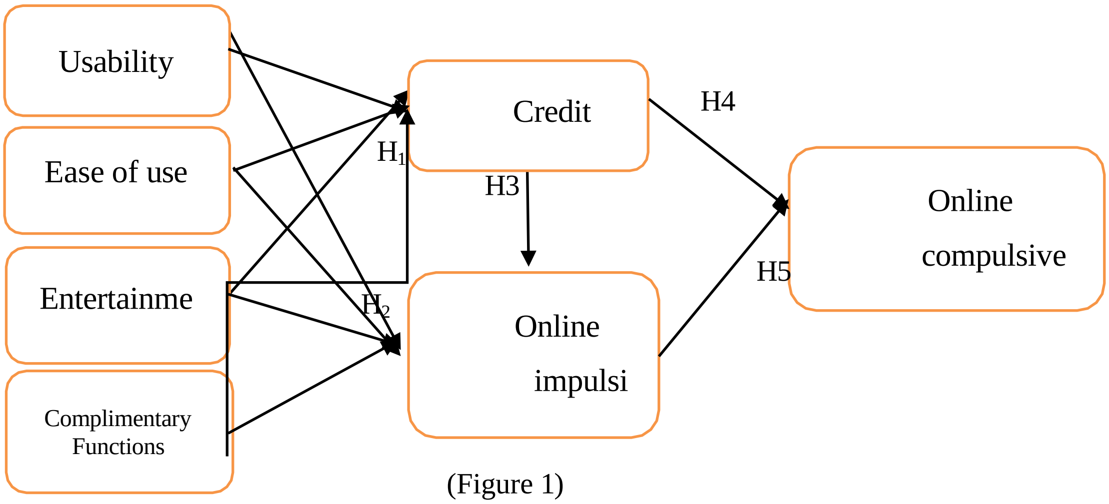

(Figure 1)

Source(s): Conceptual framework

(b) Website quality and OIBB.

Previous research examined the role of impulsive purchases in the setting of online shopping (Akram et al., 2018). Consumer research has focused a lot on customers' impulsive buying behaviour (Iyer et al., 2020). According to Dey and Srivastava (2017), OIBB is linked to speedier decision-making and fast ownership of products and services. Stern (1962) distinguished four types of impulse buying: "planned" impulse buying, suggestion impulse buying, pure impulse buying, and reminder impulse buying. Pure impulse shopping is the term used to describe situations in which consumers deviate from their regular buying habits and make an impulsive purchase. This is called a "suggested impulsive purchase," which occurs when a client finds out about the newest product and wishes they could have it. Suggested impulse purchasing, as opposed to pure impulse buying, could be more of a relational route than an exhilarating reaction (Stern, 1962).

Ali (2016) asserts that in order to maintain and strengthen customer support, online marketers should emphasize and enhance the quality of their websites, since neglecting to do so may drive away visitors. Hossain and Rahman (2021) examined consumers' online behaviour and found that well-designed website features significantly influenced the adoption of online buying. We deduced the following assumptions by focusing on online buying and using the previous discussion as a basis:

H2a. Usability positively affects OIBB.

H2b. Ease of use positively affects OIBB.

H2c. Entertainment positively affects OIBB.

H2d. Complementary functions positively affect OIBB.

(c) CCU and OIBB

At first, OIBB was thought to be an unexpected outcome unrelated to any underlying problem. Not every unforeseen acquisition stems from online whims. OIBB could also arise as a result of a positive in-store stimulus, such as the availability of credit cards (Pradhan et al., 2018).The availability of money significantly affects impulsive buying. Shah et al. (2016) claim that easing the pain of payments can increase spending and favourable evaluations during the buyer's consideration and acquisition process. Credit cards also have a positive effect on consumers' impulsive purchases. In particular, credit cards promote careless online buying (Akram et al., 2018). Customers‘ spontaneous purchase of clothing goods is associated to CCU, according to Akram et al. (2018). Accessible credit cards reduce the requirement for cash on hand to make purchases of goods and services, which leads to higher consumer spending and a rise in the frequency of impulsive purchases (Akram et al., 2018; Pradhan et al., 2018). We developed the following hypothesis in light of this, focusing on the context of online purchases:

H3. CCU positively affects OIBB

(d) CCU and OCBB

One of the addictions of the future is excessive online shopping. But this kind of conduct has been recognized before. German psychiatrist Emil Kraepelin used the word "oniomania" in the early 20th century to refer to the compulsive drive to consume goods (Bighiu et al., 2015). According to McElroy et al. (1994), compulsive buying is a recurring, chronic behaviour that started as a response to negative conditions. O'Guinn and Faber (1989) defined compulsive buying behaviour as a kind of consumer activity that is erroneous, often excessive, and chaotic in the lives of those who are impulsively driven to buy.

Although they are connected, compulsive and impulsive buying are not the same thing. Purchasing on the spur of the moment, such as adding a snack, piece of gum, or a beverage to your shopping basket while standing in line at the register, is known as impulsive buying. But in the case of compulsive shopping, the impulse to purchase comes from within; it might be a desire to feel better or happier, or it could be a sensitivity to anxiety that the individual wants to reduce (Bighiu et al., 2015). Essentially, every prior study that has been conducted has indicated a clear correlation between CCU and website quality and OCBB. As far as we are aware, no study has looked into how CCU affects OCBB when it comes to online purchases made based on the quality of the website. To close this research gap, this study offers a further hypothesis (H4).

H4. CCU positively affects OCBB.

(e) OIBB and OCBB.

Certain research claims that compulsive conduct is an extreme form of impulsive behaviour. Additionally, compulsive behaviour has been shown to be riskier than impulsive behaviour and to be a cause of ongoing and recurring disappointment in self-control (O'Guinn and Faber, 1989). As a result, impulsive purchase elevates consumer anxiety, which is connected to compulsive behaviour, which is a sort of customer addiction (Darrat et al., 2016). As far as we are aware, no study has looked into how OIBB affects OCBB when it comes to online purchasing depending on the calibre of the website. In order to address this research gap, the following hypothesis (H5) is developed in this work.

H5. OIBB positively affects OCBB.

3. Research Method

The general internet retailers in India were the focus of this study, and the virtual snowball sampling method was used to gather data. Only those who had previously utilized websites and payment cards were included in our study. We employed a snowball sampling strategy because it was quite challenging for us to locate such individuals. Respondents were requested to recommend further individuals by providing their email addresses.

The current study's findings indicate that CCU, OIBB, and OCBB are influenced to differing degrees by various website quality criteria. Consequently, the study fits under the comparative research category, where research issues or questions contrast the dependent variable with one or more explanatory factors. According to Dewasiri et al. (2018), quantitative studies look at the connection, difference, or relationship between the dependent and one or more independent variables.

The three parts of an online, web-based, structured questionnaire were designed to gather important data on customers' online purchasing experiences. The majority of the survey's questions were on identifying website and payment card transactions related to online purchases. The questionnaire's next section asked about the respondents' demographics, including their age, gender, marital status, and income (shown in Table 1).

Data Presentation:

Table1: Demographic Profile of the Respondents

Variables	Number	Percentage (%)
Gender		
Male	108	31
Female	242	69
Age		
18-25	48	14
26-35	77	22
36-45	123	35
Above 45	102	29
Education level		
High school or below	66	19
College	108	31
Graduate school or above	176	50
Occupation		
Public servant	66	19
Private job	68	20
Business	99	28
Others	117	33
Length of Internet experience		
1-3 years	156	45
4-6 years	98	28
7-9 years	78	22
Above 9 years	18	5
Hours per week on the Internet		
0-3	72	21
4-8	34	10
9-12	113	32
Above 12	131	37

Source: : Authors‘

Important questions were asked in the last section of the survey to find out how respondents felt about the main ideas of the study. As in an earlier study (Akram et al., 2018; Liet al., 2017), four dimensions—website usability, ease of use, entertainment, and extra services—were used to measure the quality of websites. These aspects were tested using six, four, five, and three questions, respectively. IBB (Darrat et al., 2016) and CBB (Pradhan et al., 2018) were evaluated using five items, whereas CCU (Pradhan et al., 2018) was evaluated using six and three items, respectively.

The primary data were recorded using a five-point Likert scale that went from 1 (strongly disagree) to 5 (strongly agree). Additionally, the method used to gather the data was modified from earlier studies (Hossain et al., 2018). 2,500 people were sent a survey link (URL), and 475 of them consented to take part. Additionally, the URL for the questionnaire was posted and shared on other social media sites, including as Facebook, WeChat, and IMO. From all sources, 437 responses in total were obtained. 350 final responders were selected for data analysis after all logically missing data had been filtered out and removed. Out of the 350 respondents, 31% of males and 69% of women answered the poll. The majority of the sample (35%) was made up of people between the ages of 36 and 45. Over 50% of the individuals involved had finished their postgraduate studies or other higher education. The majority of respondents (45%) have been using the Internet for one to three years, and 37% spend more than 12 hours a week on it. In total, 33% of respondents were jobless (e.g. retirees, housewives and students); 28% worked in business; 20% worked in private industry; and 19% worked in government. Table 1 displays the percentage of results derived from this demographic profile. To make sure the quality of the data we had acquired was high, we also looked at validity, reliability, and descriptive statistics.

After that we used covariance based structural equation modeling, or CB-SEM, together with AMOS 23.0 to assess the relationships between the research elements in our study model. We used AMOS to conduct structural equation modeling (SEM) in the current study because the partial least square (PLS) analysis method is more stringent when it comes to sample size and residual distribution than AMOS (Nam et al., 2018). Additionally, Hair et al. (2017) stated that the PLA-based algorithm is not appropriate for covariance-based SEM.

4. Data Analysis and Results:

4.1 Variance inflation factor test and bias in common methods

In self-report surveys and quantitative research, common method bias (CMB) or common method variance (CMV) is a regular occurrence. When one source of survey data is Concurrent microwave background (CMB) occurs. As a consequence, we employed Harman‘s one-factor test to investigate CMB for our research. Based on the results, all components had eigenvalues larger than one, and the first item only explained 5.095% of the variation. The CMB text led to the conclusion that CMV did not have a substantial role in the current study. Consequently, every construct examined in this study was determined to be trustworthy.

4.2 Analysis of validity and Reliability:

To ascertain if the constructs were internally consistent, dependability was examined and Cronbach's alpha was calculated. The coefficients of dependability between components (shown in Table 1) performed better than the 0.7 cut-off value suggested by Fornell & Larcker (1981). Consequently, every construction value showed suitable dependability. Confirmatory factor analysis (CFA) was also used to calculate the convergent and discriminant validity. Additionally, convergent validity was assessed using three specific metrics, as suggested by Fornell and Larcker (1981) and Hair et al. (2017): reliability, the AVE (average variance extracted), and the CR (composite reliability) of each concept. All indices were computed using the factor loadings (FLs) of the underlying construct (Ali, 2016; Hossain et al., 2018). Table 2 presents the construct's inner consistency and shows that every measurement FL above the lowest criteria (0.7) as stated by Ali (2016) and Hossain et al. (2021). Moreover, the

CR values, which show the range of the indicators of the latent construct, exceeded the minimal value of 0.7 that was specified. (2018) Hossain et al. In addition, the AVE values above the minimal value of 0.5 that was required, indicating the overall variation size in the latent construct indicators (Hossain et al., 2018).

Table 3 shows the shared variance of the research constructs as well as the squared inter-correlations between them. These values do not interfere with the square derivation of the explained standard variance. Consequently, the discriminant validity of the current study is confirmed.

Table 2: Reliability and Factor Loading

Sl. No.	Item	Factors Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)	Based on
Usability (reliability α=0.81)					
1.	UST1	0.90	0.90	0.62	Li et al. (2017)
2.	UST2	0.76			
3.	UST3	0.71			
4.	UST4	0.70			
5.	UST5	0.74			
6.	UST6	0.81			
Ease of use (reliability α=0.73)					
7.	EOU1	0.85	0.87	0.68	Li et al. (2017)
8.	EOU2	0.86			
9.	EOU3	0.75			
10.	EOU4	0.72			
Entertainment (reliability α=0.76)					
11.	ENT1	0.71	0.86	0.56	Li et al. (2017)
12.	ENT2	0.70			
13.	ENT3	0.84			
14.	ENT4	0.82			
15.	ENT5	0.82			
Complementary functions (reliability α=0.78)					
16.	CPY1	0.87	0.86	0.75	Li et al. (2017)
17.	CPY2	0.86			
18.	CPY3	0.81			
Credit card use (reliability α=0.82)					
19.	CCU1	0.76	0.86	0.54	Pradhan et al., (2018)
20.	CCU2	0.71			
21.	CCU3	0.74			

22.	CCU4	0.73			
23.	CCU5	0.78			
24.	CCU6	0.74			
Impulsive buying behaviour (reliability α=0.78)					
25.	IBB1	0.85	0.87	0.67	Darrat et al. (2016)
26.	IBB2	0.76			
27.	IBB3	0.81			
Compulsive buying behaviour (reliability α=0.89)					
28.	CBB1	0.75	0.86	0.57	Darrat et al. (2016
29.	CBB2	0.83			
30.	CBB3	0.84			
31.	CBB4	0.75			
32.	CBB5	0.73			

Source: : Authors‘

Table3: Squared inter-correlation among the Constructs

		1	2	3	4	5	6	7
1.	Usability	0.85						
2.	Ease of use	0.42	0.81					
3.	Entertainment	0.23	0.14	0.79				
4.	Complementary functions	0.06	0.12	0.31	0.77			
5.	Credit card use	0.04	0.03	0.35	0.43	0.81		
6.	Impulsive buying	0.03	0.03	0.04	0.24	0.12	0.75	
7.	Compulsive buying	0.23	0.12	0.05	0.04	0.21	0.04	0.78

Source: : Authors‘

4.3. The Structural Equation Model Analysis

The Chi-square (2) value was 821.19 since there were 362 degrees of freedom (df). This means that the ratio between the Chi-square value and the degree of freedom was 2.28, which is less than the maximum suggested value of 5 (Bagozzi and Yi, 1988). Our inquiry verified an excellent model fit (GFI 5 0.81, AGFI 5 0.86, CFI 5 0.94, IFI 5 0.92, NFI 5 0.91, NNFI 5 0.94, RMSEA 5 0.06) after evaluating all the fit indices of our study model using the recommended scale of values (Bagozzi and Yi, 1988). All of the standardized route coefficients are significant, as shown in Figure 2. Thus, the results showed a positive relationship between website quality and OIBB and UCC, respectively, supporting our hypotheses H2a to H2d and H1a to H1d. Furthermore, we discover that UCC has a positive correlation with OIBB and OCBB when it comes to online buying, which validates our hypotheses H3 and H4. H5 is also supported since OIBB and OCBB have a favourable relationship. It's interesting to note that website quality, the latent construct in our research that corresponded to usability, had the highest coefficient in predicting the user's usage of credit cards (0.130), followed by ease of use (0.131), complementary functions (0.128), and entertainment (0.111). Accordingly, the respondent's OIBB was most closely associated with the usability of the website quality (0.132), followed by entertainment (0.122), complementing services (0.114), and simplicity of use (0.103). In conclusion, the present research also found that the determination of OCBB was more strongly influenced by OIBB (0.101) and UCC (0.114).

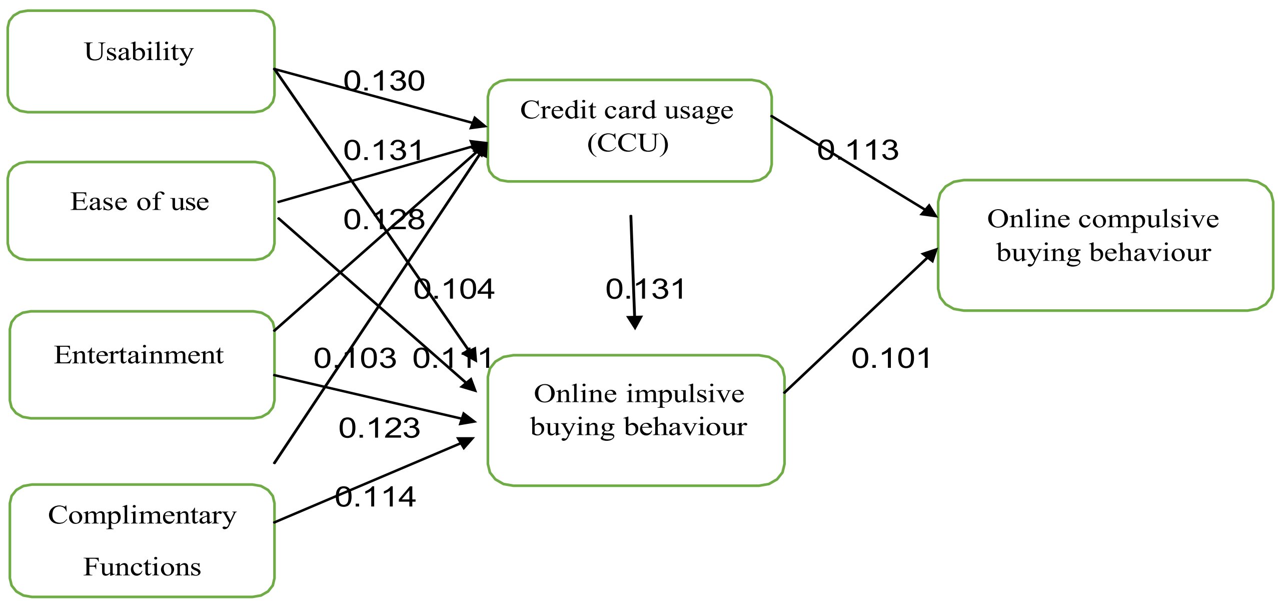

Fig.2. Output of SEM from AMOS 22.0

5. Discussions:

We assessed our study model and looked into the suggested hypotheses using the CB-SEM method. The structural modeling analysis's findings (Figure 2) demonstrated both direct and indirect correlations between the variables under study, providing evidence in favour of our research approach. Based on the results, we found that a number of website quality factors affect customers' OCBB, OIBB, and CCU. Furthermore, our data demonstrated that CCU affected OIBB and OCBB, as well as OIBB influenced OCBB. Moreover, the present investigation revealed that every facet of website excellence influenced users' CCU and OIBB, therefore influencing their OCBB.

6. Conclusion

As internet shopping grows in popularity, marketers have more possibilities to close deals and must contend with a fiercely competitive e-commerce industry. Marketers who can develop high customer OIBB and OCBB may experience higher demand and profitability. The current study assessed and combined website quality, CCU, and OIBB—three crucial elements of online purchasing activities—to ascertain the website's impact on OCBB. Consequently, our results raised some important questions regarding how website quality affects OCBB through CCU and OIBB as well as other crucial aspects of online commerce. Since website quality dimensions have a big influence on online purchasing activities and those dimensions quickly increase sales levels, developing and supplying a high-quality website is essential for modern businesses engaged in online marketing. Since our research showed that all factors of website quality may affect CCU, OIBB, and OCBB when combined, our results can help online marketers increase profits by providing better website quality.

Additionally, we demonstrate how elements of a high-quality website, such as its usability, ease of use, entertainment value, and complementary features, affect consumers' OIBB (impulsive buying behaviour) and CCU (the latent construct that characterizes consumers' less cautious, more impulsive behaviour, concerns about debt, desire to maintain multiple credit cards, and desire to pay the least amount possible on credit card bills while shopping). We also highlighted that OIBB is impacted by CCU. Last but not the least, CCU and OIBB both had an effect on OCBB, demonstrating that consumers are unhappy with their current purchases, desire to regularly acquire new items, and wish to dump them without using them.

Therefore, to boost website earnings, online marketers should enhance website usability, which is defined as making sure that their website efficiently provides customers with the useful information they want, that customers trust the information provided, that customers can connect with the website and feel secure in transactions, and that the website loads quickly. Easy-to-read language, easily navigable pages, a user-friendly website, and a user-friendly experience for customers are all important aspects of e-commerce websites. Better entertainment should also be provided by the website, which suggests that it is aesthetically pleasing and pleasant, that its design is up to date, and that users are happy when they visit it. In conclusion, the website ought to offer additional free services, implying that it facilitates online transactions that buying through the website is more convenient than through email, fax, or phone, and that communicating online is more practical.

6.1 Practical Implications:

Our research yields valuable insights for consumers and online advertisers alike, and it may even have global applicability beyond underdeveloped countries. According to our research, online impulsive buying, CCU, and website quality are all related to marketing.

Online obsessive shopping is a pleasant and robust approach. Website users and customers are two different things when they visit a website. Because of this, a website's content and design should prioritize user friendliness and offer information that is specific to the needs of users as well as tools for navigating and finding relevant content. Online marketers should pay special attention to website quality since it plays such a significant role in online obsessive and impulsive purchase. Consequently, our study helps marketers comprehend the crucial earning factors that influence customer OIBB and OCBB.

Our research, however, showed that OIBB, which is connected to OCBB, increases consumers' concerns about using credit cards to make online transactions. It is important for marketers to remember that credit cards increase sales volume, particularly when used for impulsive purchases. Financial organizations should thus use caution when pursuing credit card customers who may start off as impulse shoppers but eventually turn into compulsive purchasers as their buying impulses get stronger. These consumers could overspend as a consequence and be unable to pay back the loan, which would have a detrimental psychological impact on both the clients and society at large. Therefore, it is imperative that the government, regulators, and economists develop appropriate policies to stop credit card theft.

Furthermore, by monitoring their compulsive credit card buying activity, internet consumers can evaluate their susceptibility to unforeseen and risky purchase behaviours. In addition, we created a research model to help marketers assess how website quality affects OCBB based on credit card use and impulsive online buying patterns. This can assist marketers in understanding how credit cards and impulsive buying behaviour impact customers' compulsive purchase intent as well as developing -13- appropriate marketing strategies for conducting business online.

7. Limitations and Scope for Future Research:

There are some limitations of our findings that need to be taken into account in further research. Since our study only examined one developing nation, future research examining multiple nations could enhance the findings, particularly if various nations have distinct technological structures (e.g., credit card usage, Internet cost, and percentage of Internet and/or credit card users).Second, since our sample was self-selected, other practical approaches to studying sample moderation may be evaluated in subsequent research projects.

Third, additional important factors that have been covered in the literature and are related to website quality include system, information, and service quality. We might include these issues in our model.

Fourth, because frequent and infrequent consumers differ greatly from one another, further study is needed to identify them and assess their respective advantages in terms of website quality, CCU, OIBB, and OCBB.

Finally, the term "quality" for a website has several meanings. Only four elements were examined in this study to gauge a website's quality. Future study may thus find even more connections between the idea of a high-quality website and subsequent investigations.

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INTERNATIONAL REPORTING STANDARDS: INSIGHTS & IMPLICATIONS

***Dr. C. S. Pattnaik**
****Dr. S. K. Chaudhury**
***** Prof. (Dr.) Ashok Kumar Panda**

Abstract

Increasing global interaction marked by the mergers and acquisitions (M & A) culture has changed the socio-economic scenario of the globe in all aspects. Hence there is a need for a universal financial accounting standard that is harmonized and adapted globally. It implies that all the accounting standard settlers worldwide come to the same platform and agree on a single wisecrack. In India, financial reporting is in a stage of transition where many changes are being accounting standards. It is also recognized that having a framework of credible financial reporting standards in India compatible with internationally accepted norms is one of the essential perquisites for attracting foreign investment and globalization. If coherent and consistent internationally accepted accounting procedures and practices are developed, they will encourage free border flow of capital and make substantial investments for the development of the economy. Against this backdrop, the authors have collaboratively made an effort to bring out the need and significance of unanimously accepted worldwide standards for reporting. The authors have presented by taking relevant insights from reliable secondary sources of data and have brought the implications of these to the limelight of Corporate Governance Practitioners and Policymakers across the globe for both academic and corporate interests.

Keywords: IFRS, Corporate Governance, International Reporting, GAAP

Introduction:

International Reporting Standards refer to a set of guidelines and principles that govern how companies and organizations report their financial information to stakeholders across borders. These standards ensure transparency, comparability, and consistency in financial reporting, regardless of the country or industry. International Reporting Standards are designed to apply to companies and organizations operating in diverse geographic locations and industries. They provide a common language for financial reporting, facilitating communication and analysis across borders. While adoption may involve challenges and costs, the benefits of standardized financial reporting are significant for companies, investors, and stakeholders. International Reporting Standards aim to harmonize accounting practices worldwide, facilitating easier comparison between companies operating in different countries. Adhering to International Reporting Standards can increase investor confidence by providing reliable and consistent financial information. Investors can make informed decisions about allocating capital

* **Dr. C. S. Pattnaik ,** Professor & Principal Omega P G College-MBA, Osmania University-Hyderabad ,Mail Id: cpattnaik8@gmail.com

** **Dr. S. K. Chaudhury,** Faculty Member, Department of Business Administration, Berhampur University-Odisha, Mail Id: sumankchaudhury72@gmail.com

*** **Prof. (Dr.) Ashok Kumar Panda,** Director Statutory Compliance and Communication, ASTHA School of Management Bhubaneswar. Mail Id: ashokpanda659@gmail.com

based on the standardized financial reports of companies. For multinational corporations, adhering to International Reporting Standards streamlines financial reporting across various jurisdictions. This consistency simplifies compliance with regulatory requirements and reduces the risk of misinterpretation or confusion. Companies that follow International Reporting Standards may find it easier to access capital in international markets. International Reporting Standards promote transparency by requiring companies to disclose relevant information about their financial performance and position. This transparency enhances comparability between companies, enabling stakeholders to evaluate their performance and make meaningful comparisons. Compliance with these standards signals credibility and transparency to potential investors, lenders, and stakeholders, thereby enhancing the company's reputation and creditworthiness.

The International Financial Reporting Standards (IFRS) Foundation, along with the International Accounting Standards Board (IASB), is responsible for developing and maintaining International Reporting Standards. These standard-setting bodies collaborate with stakeholders worldwide to ensure that the standards meet the needs of users and reflect evolving business practices. Thus, by following these standards, companies can strengthen their governance structures and build trust with stakeholders. Hence it promotes mutual economic cooperation and development in world trade and transactions.

1.1 Why Differences in Accounting Framework?

An Indian subsidiary if a UK company has to prepare UK GAAP (Generally Accepted Accounting Principles) and Indian GAAP accounts. If the company plans to spread its business in the US, it will also have to prepare accounts as per the US GAAP accounting standards. Since the UK is now moving to international financial reporting standards (IFRS – formerly known as IAS) the Indian subsidiaries are in the process of converting their UK GAAP accounts to IFRS. Differences in accounting framework impose additional costs, reduce the reliability of financial statements and divert management attention from real business issues. Today, investors are looking at global opportunities and making informal decisions but the differences in accounting standards act as the main barrier to making quick business decisions.

1.2 Which Accounting Standard is to be Accepted?

By 2005, many companies across the world had adopted International Financial Reporting Standards. Globally, the two accounting frameworks that work are IFRS and US GAAP. The basic difference between IFRS and US GAAP is that IFRS is principal-based while the US GAAP is rigid and rule-based. The US GAAP requires research and development costs to be taken into account when it is incurred whereas the IFRS makes a difference between research costs and development costs. Goodwill presently requires amortization under the IFRS but not under the US GAAP. Tangible and intangible assets can be revalued under IFRS but not under the US GAAP. Last in first out (LIFO) method of valuation of inventories is permitted under the US GAAP but it is not in the IFRS.

The Indian GAAP have by and large followed IFRS though there are significant differences. The Indian GAAP seem to be doing a 'Yes' or 'No' act on the fair valuation principle which is firmly established both under the IFRS and the US GAAP. A full convergence of variation GAAP at this point seems a distant dream. There is a need for disclosure of the Accounting Standard Framework.

2. International Financial Reporting Standards:

Significant milestones were reached last year in the SEC‘s ongoing effort to promote and achieve a single set of high-quality global accounting standards. Consistent with our 2005 roadmap, the commission approved the elimination of the reconciliation requirement to US GAAP for foreign private issuers that file in IFRS as issued by the IASB. The commission took this action only after certain preconditions were met. First, the commission needed to be satisfied that there was a robust process towards convergence. Second, we needed assurance that IFRS as published by the IASB was being consistently and faithfully applied. And third, we needed to have confidence in the IASB and its oversight by the IASC foundation. On all of these issues, the commission was able to reach a positive conclusion and, ultimately, determine that eliminating the reconciliation requirement would further our broader goal of achieving greater convergence and a single set of global accounting standards. The commission‘s consideration of IFRS continues to focus now on whether US issuers should similarly be able to choose between filing in IFRS or US GAAP. The commission issued a concept release in August and held roundtables in December probing this question.

The concept releases seeking information about the extent and nature of the public's interest in allowing US issuers to prepare financial statements by IFRS as issued by the IASB generated many thoughtful responses. The comment period closed on November 13, 2007, and we have been carefully reviewing all the comments submitted. The roundtables also provided the Commission with extremely valuable information. The professional staff of the Division of Corporation Finance, led by John White, and the Office of Chief Accountant, led by Conrad Hewitt, did an outstanding job organizing two days of highly informative panels. The first Round Tables focused on the general question of whether US issuers should be permitted to use IFRS. The second Round Table focused on how to make the transition to IFRS. Each roundtable consisted of two panels, one from a US market perspective and another from the perspective of global market.

While there was a range of differing views expressed on key particulars and necessary preconditions common to allowing IFRS use in the US, it was interesting to observe agreement – particularly given the diverse constituencies represented on important fundamental issues. For example, everyone agreed that the ultimate goal should be a single set of high-quality accepted accounting standards. There was also a general belief that the uniform global standards would ultimately be IFRS, not US GAAP. And finally, panelists suggested that a roadmap should be established to transition US issues to IFRS. Although there are significant challenges ahead that will require strong leadership from all stakeholders, the round tables offered encouraging news concerning the level of agreement concerning some threshold considerations. The Commission will remain highly engaged in this area and can expect another productive year ahead.

2.1 IFRS in India:

A speedy and swift movement is required for convergence to IFRS by the government, industry and accounting professionals in India. The adoption or convergence of IFRS will allow India to have an effect on and mould international accounting standards. The adoption will benefit the Indian capital market as well as the Indian business. This is the right time to adopt IFRS in India as it opens doors to foreign investments. In 2005, the Institute of Chartered Accountants of India (ICAI) advised listed and large entities to adopt IFRS will induce foreign investors to invest the Indian firms. The other advantages are savings in the cost of preparing a separate set of financial statements savings in cost of capital and also the increasing opportunity for accounting Indian professionals aboard.

A switch to IFRS in India will be an easy task as Indian Accounting Standards are designed closely along the lines of IFRS. Even the recently issued accounting standards are closely aligned with IFRS. However, some complexities may arise due to the legal and regulatory frameworks. The preparation for the adoption of IFRS by the economy, accounting profession and industry in the country is an issue which needs to be addressed. The ICAI is discussing the matter given the issues involved with Accounting Standards. Board (ASB). The board feels that there will not be any significant effect on the accounting discipline in the country. However, the economy may be affected. To resolve this issue a concept paper was developed and released for the interested parties like the government, regulators, industry and the National Advisory Committee of Accounting Standards. This paper is a roadmap designed for India for convergence to IFRS, discussing the strategy and approach to be implemented. It provides along with the introduction to the discussing need, the objectives and effectiveness of switching to IFRS. An evaluation of Indian Accounting Standards in comparison to IFRS is also a part of this paper

2.2 Recent Changes:

Recent changes in the Indian accounting norms have resulted in significant changes in the balance sheet. Recent developments in the accounting field have resulted in quite a few unfamiliar items appearing on these financial statements. One of the biggest additions has been due to the fact the balance sheet has a new item in the form of deferred assets, or deferred tax liability, depending on the situation in which the company finds itself. This results from the difference between taxable income and accounting income. Significantly, this Item now forms a crucial part of the balance sheet of most corporations. It can be found on either side of the balance sheet depending on how it is shown.

Another head is the employee stock option. The value of the stock option is equal to the aggregate of the fair value of the options granted and is amortized on a straight-line method over the vesting period. Further, as and when the option is exercised by an employee the same will be accounted for as paid-up capital to the extent of the face value and as share premium to the extent of excess market price over face value on the grant date.

2.3 Proposed New Accounting Norms:

The Government Accounting Standard Board (GASAB) was set up in 2002; the process to introduce about 48 accounting standards for preparation of the financial statements by the central and state governments over the next few years. The objectives are to make government account more transparent so, the disclosure level will be increased drastically and the format for presenting statements will be reworked, to make them easier to read. For example: the first of the standards, the standards on guarantees, given by the governments. The disclosure requirement has been in the process of notification. The next important norms are exposure drafts for three standards- (i) accounting and classification of grant-in-aid (ii) presentation of financial statements and (iii) cash flow statements. Three exposure drafts are accepted to be clear very soon.

The GASAB is also in the process of preparing exposure drafts on loans and advances made by the government, foreign currency loss/gain by exchange variations and debt and borrowings of governments. However, these changes require wholehearted support from all government officials. The accounting bodies are now proposing a common reporting standard for the preparation of annual accounts. The move is gaining momentum within the Asia-Pacific region with the Confederation of Asian Pacific Accounts (CAPA) an association of National Accountancy Organization in the region.

The newly-elected CAPA president, Robin Harding said the countries would need to work towards convergence of the international standards with their own to ensure that inference drawn from a financial statement by anyone anywhere was the same. Adoption of a common standard will ensure that the interpretation made from reading a statement by anyone anywhere in the world is no different from the interpretation made by another person in another part of the world. For Indian companies, the adoption of the IFRS along with IAS will have less paperwork in the form of restatement of accounts when they plan to approach investors overseas.

The adoption of IFRS will make the consolidation of financial statements of foreign subsidiaries of holding companies much easier. Currently, companies are required to follow the accounting and reporting standards prescribed by the host country when preparing their accounts. For Indian companies' adoption of the IFRS along with IAS will have less paperwork in the form of restatement of accounts when they plan to approach investors overseas. The adoption of IFRS will make the consolidation of financial statements of foreign subsidiaries of holding companies much easier. Currently, companies are required to follow the accounting and reporting standards prescribed by the host country when preparing their accounts.

2.4 Compliance of Accounting Norms and Role of ICAI:

To bring about a greater level of standardization in the accounting procedures followed by companies in the globalised scenario, the Department of Company Affairs (DCA) plans to make it mandatory for companies to comply with the accounting standards prescribed by the Institute of Chartered Accounts of India (ICAI). The following are the accounting norms prescribed by ICAI:

- ❖ Mandatory powers vested with ICAI
- ❖ Accounting standards redefined
- ❖ Auditors to certify compliance
- ❖ Companies must disclose all material departures from accounting standards
- ❖ Firms have to give reasons for the departures and impact of such a departure

2.5 Suggestions:

While many accounting standards need refinement to conform better to IAS, there is also an urgent need to review standards on amalgamations and mergers. The key changes suggested include:-

- ❖ Presentation of financial statements with supplementary disclosure of Balance sheet.
- ❖ Every financial statement should be accompanied by cash flow statements.
- ❖ There should be a clear distinction between current and fixed assets and liabilities.
- ❖ Depreciation should be charged taking into account the economic benefit provided by that particular asset over a stipulated period. There should not be any guesswork in determining the period for which depreciation will be charged to P/L account.
- ❖ Insisting on the specialized industries to adopt the formats which are more appropriate in full disclosure of accounting aspects rather than adopting the old methods.
- ❖ In the case of manufacturing industries, especially the industries producing chemicals, pesticides, alcohols, paints, etc, a system of environmental accounting standards should be evolved for sustainable development of the natural resources.

2.6 **IFRS and Role of an Accountant**:

IFRS not only help the investors, industries and economy but also the professionals. The accounting department aims to prepare its financial statements whereas the audit department certifies the true and fair view of the financial statements for its national and international clients. Accounting professionals have no choice other than immediately converging with the IFRS with an increase in the need for internationally acceptable accounting principles.

2.7 Scope of IFRS:

IFRS is gaining recognition through globalization and fast e-communication. They have become an essential need for an accounting professional. The scope of IFRS is:

IASB Standards are known as International Financial Reporting Standards (IFRS).

- ❖ All International Accounting Standards (IAS) and Interpretations issued by the former IASC and Standing Interpretation Committee (SIC) continue to be applicable unless and until they are amended or withdrawn.
- ❖ IFRS apply to the general purpose financial statements and other financial reporting by profit-oriented entities – those engaged in commercial, industrial, financial and similar activities, regardless of their legal form.
- ❖ IFRS apply to individual companies and their consolidated financial statements.
- ❖ A complete set of financial statements includes a balance sheet, an income statement, a cash flow statement, a statement showing either all changes in equity or changes in equity other than those arising from investments by and distributions to owners, a summary of accounting policies and explanatory notes.
- ❖ IFRS will present fundamental principles in boldface type and other guidance in non-bold type (the 'black letter' / 'grey letter' distinction). Paragraphs of both types have equal authority.
- ❖ The provision of IAS one that has conformity with IAS requires compliance with every applicable IAS and interpretation requires compliance with all IFRS as well.

2.8 Key Steps for Adoption of IFRS:

The IASB has published an implementation plan outlining the key activities for the adoption of IFRS. One of the key actions is the progress review which determines the date for the changeover, the objectives of which are: (a) to evaluate the changes in the environment as a convergence strategy is developed to revise the previous plans, and (b) to assess the state of awareness in the Canadian business community for the changeover. The changes in the new system will bring out ideas to capture new data and procedures differently. They also create opportunities to re-examine accounting policies to evaluate the advantages accessible in IFRS. They help to understand the changes likely to occur in financial statements. The changeover brings in the organization to know about the effects of the standards and their evaluation.

3. Convergence of Indian Standards with International Standards:

As per the survey conducted by Ernst & Young, 95% of the chief financial officers have opined that the country‘s accounting standards and governance practices must be converged with global standards. But 64% have preferred convergence with IFRS and 36% US GAAP.

In 2007, a presentation on Trade and Development by an intergovernmental working group was made at a UN conference. According to the presentation, there were originally 41 IAS out of which 12 standards have been withdrawn leaving 29 Accounting Standards to be followed. In addition to these, seven IFRS standards have been issued totalling 36 standards to be complied with. When compared with these standards, 26 Indian Accounting Standards are similar but with some minor changes. India is also moving towards convergence of accounting standards along with other countries.

3.1 Revisions Effective from 1 January 2024:

The following amendments have been made to all the reporting periods beginning on or after 1 January 2024. It may be possible to apply these changes early depending on local legislation and the requirements of the particular change in concern. The Standards are:

- ❖ Classification of Liabilities as Current or Non-current (Amendments to IAS 1)
- ❖ Non-current Liabilities with Covenants (Amendments to IAS 1)
- ❖ Lease Liability in a Sale and Leaseback (Amendments to IFRS 16)
- ❖ Supplier Finance Arrangements (Amendments to IAS 7 and IFRS 7)

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The IASB has issued amendments to IAS 1 to clarify its previously issued guidance and rectify the prevailing issues:

3.1.1 The amendments elaborate on guidance set out in IAS 1 by:

- ❖ Clarifying that the classification of a liability as either current or non-current is based on the entity‘s rights at the end of the reporting period
- ❖ Stating that management‘s expectations around whether they will defer settlement or not does not impact the classification of the liability
- ❖ Adding guidance about lending conditions and how these can impact classification
- ❖ Including requirements for liabilities that can be settled using an entity's instruments.

3.1.2 The amendments set out in „Non-current Liabilities with Covenants (Amendments to IAS 1)

State that at the reporting date, the entity does not consider covenants that will need to be complied with in the future, when considering the classification of the debt as current or non-current. Instead, the entity should disclose information about these covenants in the notes to the financial statements. The IASB wants these amendments to enable investors to understand the risk that such debt could become repayable early and therefore improve the information being provided on the long-term debt.

3.1.3 Additional Guidance in IFRS 16 on Accounting for Sale and Leaseback Transactions:

Previously 16 only included guidance on how to account for sale and leaseback transactions at the date of the transaction itself. However, the Standard did not specify any subsequent accounting when reporting on the sale and leaseback transaction after that date.

As a result, without further requirements, when the payments include variable lease payments there is a risk that a modification or change in the leaseback term could result in the seller-lessee recognising a gain on the right of use they retained even though no transaction or event would have occurred to give rise to that gain.

They require entities to disclose:

- ❖ The terms and conditions of the arrangement
- ❖ The amount of the liabilities that are part of the arrangements, breaking out the amounts for which the suppliers have already received payment from the providers, and stating where the liabilities are included on the statement of financial position
- ❖ Ranges of payment due dates

3.1.4 Liquidity Risk Information:

These additional disclosure requirements address investors wanting more visibility around supplier finance arrangements, which in some jurisdictions around the world are better known as reverse factoring arrangements.

Conclusion:

Corporate reporting plays a pivotal role in the world of accounting by providing transparency and accountability to stakeholders. Through systematic disclosure of both financial and non-financial information, companies establish trust and credibility with investors, regulators, and the wider public. In an era of interconnected global markets, the demand for consistent and comparable corporate reporting has become increasingly critical. International Financial Reporting Standards (IFRS) have emerged as a fundamental requirement in today's business landscape due to varying accounting standards across countries. Standardized frameworks like IFRS and Generally Accepted Accounting Principles (GAAP) facilitate cross-border investments and enhance market efficiency

However, achieving convergence with IFRS is a complex process that hinges on effective change management and risk mitigation strategies. Companies that respond swiftly and adeptly to these developments stand to benefit from enhanced quality, clarity, and credibility in this new global reporting paradigm. Ultimately, corporate reporting stands as the bedrock of modern accounting, serving as a key indicator of organizational performance, integrity, and reliability. As businesses navigate a dynamic and intricate global environment, robust and dependable corporate reporting remains indispensable. It serves as a crucial benchmark that ensures companies meet stakeholder expectations and contribute to the stability and transparency of the global economy.

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A STUDY ON AUTHORIZED GENERICS AND BRANDED GENERICS: A PERSPECTIVE ANALYSIS AMONG THE PHARMACY STUDENTS IN BHUBANESWAR CITY, ODISHA

***Avinav Swain**
****Pramit Chandra Rout**

Abstract:

Consumers nowadays are increasingly opting for generic medicines due to their significantly lower costs. Healthcare expenses, often paid out of pocket, can be substantial. Authorized generic medicines, produced by the same companies that manufacture brand-name drugs, fall under the category of generic medicines. Branded generics are generic drug molecules marketed under unique names. This study aims to explore pharmacy students' knowledge and perspectives on generic drugs and their usage, while also examining the specific differences between branded generics and authorized generics. A standardized questionnaire was administered among pharmacy students for this purpose. The questionnaire is designed to investigate how students from various pharmacy disciplines perceive and understand generic medicines, and to elucidate the reasons behind their preference for using generic drugs, both branded and authorized. One of the major challenges identified is the need to increase awareness, which could be addressed through regular training programmes such as workshops and Continuing Medical Education (CME). Government regulations governing the purchase and sale of generic drugs by patients and pharmacists, in place of costly brand drugs, should be reconsidered.

Keywords: **-** Pharmacy, Generics Medicine, Brand Drug, Perspective, Branded Generics.

1. Introduction:

Today, people utilize generic medicines more frequently since they significantly lower the price of the medicines. Healthcare costs are undoubtedly significant expenses that are frequently paid out of pocket. So, in terms of these fallouts, generic drugs have emerged as one of the better options. According to the Food and Drug Administration (FDA), ―Generics drug are just as safe and just as effective as their brand-name counterparts, and they are a cost-effective way of achieving substantial savings ―. A generic counterpart of the brand-drug has some proofs that makes it as safe as the branded drugs. Generic medications offer patients the same efficacy and safety profile since they have the same active components, potency, dose form, and route of administration. There are a number of explanations that help to explain why generic medicines are less expensive than branded ones. It is regarded as the "Essential Drug Criteria" by the World Health Organization (WHO). Because manufacturers of generic medicines do not need to construct a separate laboratory for research and development, hence their products are so inexpensive. Manufacturers of generic medicines do not squander money on advertising.

2. Concepts regarding authorized generics and branded generics:

* Avinav Swain, Asst. Prof. , Siksha _O‘ Anusandhan University, Email ID: avinavswain05@gmail.com
** Pramit Chandra Rout, Adv. Orissa High Court, Email ID: pramitchrout@gmail.com

2.1 Authorized Generics Drugs:

Authorized generic drug fall under the generic drug category and are produced by the brand-name drug's producer. They are the drug is similar to the brand-name medicine, except the drug is similar to the brand-name medicine, except is not printed on the label and they could be made of a different material and colour . An authorized generic is not included in the Food and Drug Administration's list of approved pharmaceuticals with therapeutic equivalency evaluation since it is sold with the New Drug Application (NDA) for the brand-name drug. Because it is the same drug, an authorized drug is regarded as being functionally equal to its brand-named counterpart. Authorized generics could be the perfect solution for pharmaceutical companies whose brand-name drug patents have expired. The brand name manufacturers could create their own generics rather than taking a chance on losing market share when other pharmaceutical companies enter the generics market.

2.2 Branded generics drugs:

Generic medicines that have been given a brand name are known as branded generics. They may be marketed in a manner akin to that of branded drugs. Branded generic drugs provide generic drug molecules exclusive names. After the original drug's patent has expired, branded generics may be manufactured by the original manufacturer or a generic drug company and marketed. They are advertised by submitting an abbreviated new drug application (ANDA) to the regulatory authority, and they must be clinically comparable to the original drug whose patent has expired. They are also known as value-added generics, and they can either be a modified form of the drug's molecule or a new dosage form of an off-patent drug produced by a different manufacturer.

2.3 The Hatch-Waxman Amendment regarding Generic drugs (The Bible for the generic medicines)

In accordance with the "Drug Price Competition and Patent Term Restoration Act of 1984," also referred to as the Hatch-Waxman Amendments Section 505(j) of the Federal Food, Drug, and Cosmetic Act allows applicants to submit an abbreviated new drug application (ANDA) to get approval for generic drug products (FD&C Act). The Hatch-Waxman Amendments contain clauses relating to new drug applications' patents, exclusivities, and 180-day privilege for specific ANDA applicants. Generally speaking, these statutory provisions have been used in the context of application-specific regulations by the Food and Drug Administration (FDA or the Agency) decisions. Large corporations are capable of competing with generic firms' drugs during this time without having to cut the price of their own brand-name products thanks to authorized generics. So, it is possible that authorized generics will lower the amount of money that independent generic companies make during this time.

3. Review of Literature:-

Kirtida R. Tandel, Nirav Kumar, M Patel, Sameer M Zaiwala, Milesh B Chavda, Nation V Dhanani in the paper (2018) ―A study of knowledge, attitude and practice on generic drugs among teaching faculties at a tertiary care teaching hospital in South Gujarat, India‖ states that the practice of prescribing, dispensing, and substituting generic medications in developing countries has generated debate among doctors, particularly because of concerns about quality, safety, and efficacy. These debates are a result of regional variations in drug policies and laws as well as specialized experts who deal with generic medications. As a result, there is a disparity between awareness about and attitudes toward brand-name and generic medications. Therefore, it appeared that widespread awareness campaigns were required to close the gap. These initiatives would boost the use of generic drugs, lowering the overall cost of healthcare in the process.

Ajitabh Dash in the paper (2021) ―Assessment of patient satisfaction with generic medication in Emerging Economy using the treatment satisfaction on questionnaire for medication‖ explains that one method to raise national health standards is through giving patients access to safe, high-quality medications. The findings of the study revealed an affirmative relationship of effectiveness and convenience with patient‘s satisfaction with generic medicines.

Pawel Lewek, Janusz Smigeiski and Przemyslaw Kardas(2015) in the paper entitled ―Factor affecting the opinions of the family physicians regarding generic drugs- a questionnaire based study‖ states that many variables are thought to have a detrimental impact on doctors' perceptions of generic medications. There were two main points of view that emerged from the responses when it came to the efficacy of generic medications and how people perceive them. These are the option to purchase less expensive versions of brand-name medications for personal use and the belief that pharmacists do indeed let patients know they can purchase less expensive versions of brand-name medications when they are prescribed.

4. Objectives of the Study:

The objectives of the study are: -

- ❖ To analyze the specific difference between the authorized and branded generics from the pharmacy students
- ❖ To understand the knowledge and perceptions regarding generic medicines and their use from pharmacy students

5. Hypotheses of the Study:

The hypotheses of the study are as follows:

- ❖ There is no specific difference between the authorized and branded generic drugs that is obtained from the pharmacy students
- ❖ There is no knowledge and perception regarding generic medicines and their use among the pharmacy students.

6. Research Methodology:

Pharmacy students were given a standardized questionnaire designed to explore the rationale for using generic medications and to investigate how various branches of pharmacy perceive and interpret generic medicines, both approved and branded. The questionnaire comprises three sections. A pilot study involving 10 pharmacy students and gathering opinions from 5 professionals was conducted to validate the questionnaire's constructs. The demographic profile of the respondents is presented in the first section of the questionnaire. The second and third sections focus on respondents' knowledge and usage of generic drugs, as well as their perspectives on generics.

7. Analysis of the study:

7.1 **Study Design*:*** A systematic questionnaire is given to pharmacy students as part of the study in order to gauge their level of familiarity with generic medicines. In all, there are 15 questions, as well as a demographic profile. A questionnaire is being developed to examine the pharmacy students' knowledge, attitudes, and views of generic medicines as well as to identify the precise distinctions between branded and authorized generics. The below table shows the demographic status of the respondents:-

Table 1: Demographic Variables of the respondent (N=110)

Characteristics	Factors	Frequency (%)
Gender	Male	55
	Female	55
Age(In years)	0-20	07
	20-40	99
	40-60	04
	60-80	Nil
	80 and above	Nil
Qualification	D.Pharma	08
	B.Pharma	68
	M.Pharma	34

Source: *Author's own compilation*

The above table shows the demographic characteristics of the respondents that include gender, age and qualification of the participants. There is equal distribution of males and females among the sample to provide unbiased results among the gender criteria. The age-group is divided into 5 major categories for screening purposes. The qualification consists of three main categories; D. Pharma, B. Pharma and M. Pharma respectively.

7.2 Knowledge of Generic Medicine:

Table2: Knowledge of Generic Medicines among the Pharmacy Students

Questions	Yes	No	Neutral
A generic drug has same composition as the branded drug.	80	28	2
Are generic drugs more expensive than the branded drugs?	27	83	
Generic drug companies always need to conduct bio-availability and bio-equivalence to analyse the equivalence between generic and innovator drug.	97	12	1
Are you aware about the scheme of Government of India ―Pradhan Mantri Bharatiya Janaushadhi Pariyojana‖?	102	7	1
Do you know that there is stringent law in the country to prescribe generic drugs?	97	12	1

Source: *Author's own compilation*

The table above provides some evidence in favour of the claim that pharmacy students who will all go on to manufacture products in the future are cognizant and aware of generic medicines. 73% of the participants agreed that generic medications contain the same ingredients as branded medications. They did not support the idea that both had the same composition, according to 26% of them. Surprisingly, 76% of respondents believed that generic medicines are not more expensive than name-brand medicines, while just 24% of respondents agreed that generic medicines are more expensive. 88% of the participant respondents believe that there is agreement with the facts that the pharmaceutical drugs producing generic medicine will have to show the bio-equivalency and bio-availability to analyze the difference and equivalence between generic and innovator drug and 11% of them denied the same fact. 93% of the participant respondents actually knew about the generic medicine and the umbrella scheme of ―Pradhan Mantri Bharatiya Janaushadhi Pariyojana‖ The government has stringent law regarding prescribing generic medicine. The Indian government is aware that the majority of doctors do not prescribe generic medications, despite court rulings and pertinent Medical Council of India regulations. In this regard, clause 1.5 of the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002 states that all doctors must prescribe drugs with generic names that are readable and, if possible, in capital letters, and they must also make sure that the drugs are prescribed and used in a rational manner. Also, the former Medical Council of India (MCI) has circulated circulars directing all Registered Medical Practitioners to adhere to the aforementioned regulations.

7.3 Knowledge regarding Generic Medicine (Practice & Usage):

Table 3: Practice and Knowledge regarding Generic Medicine related Responses among the Respondents

Questions	Yes	No	Maybe
1. Do you know the difference between ―Branded drugs‖ and ―Generic drugs‖?	95	15	0
2. Do you the difference between ―Authorized generic drug‖ and ―branded generic drug‖?	94	16	0
3. Do you feel generic drug have same efficacy as the other drugs have?	98	10	2
4. Do you believe that transferring all the patients from a brand drug to generic versions might affect the treatment‘s results?	98	12	0

***Source**: - Author’s own compilation*

This study reveals that the majority of medical schools currently have significant knowledge about generic medicines, which could leave a lasting legacy for future generations of medical experts. Among the respondents, 86% expressed confidence in their ability to distinguish between branded and generic medicines, while 14% regretted their lack of such distinction. Additionally, 85% of all respondents demonstrated awareness of the differences between branded generics and authorized generics, while 15% did not. Regarding effectiveness, 89% of the interviewees agreed that generic drugs are as effective as other branded drugs, while 9% disagreed. Furthermore, 89% concurred that transitioning patients from brand-name medications to generic equivalents could potentially influence the course of treatment, whether positively or negatively.

Reliability and Adequacy of the Sample Collected: To assess the sample's strength, the Kaiser-Meyer-Olkin (KMO) test was conducted using SPSS, yielding a result of 0.76, indicating sufficient adequacy for the need of the study. Additionally, the Cronbach's Alpha test was performed to determine the reliability of the sample, resulting in a high score of 0.90, indicating strong internal consistency.

7.4 Facts about the Jan Aushadhi Scheme:

The Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) is a flagship program initiated by the Government of India to provide generic medicines at significantly reduced prices. Pradhan Mantri Janaushadhi Kendras (PMBJKs) have been established nationwide to promote this scheme. The Bureau of Pharma PSUs of India (BPPI) oversees the implementation of PMBJP. All medicines procured under this program undergo quality assurance testing at NABL-accredited laboratories and comply with WHO GMP (World Health Organization's Good Manufacturing Practices) standards.

The government provides incentives up to 2.5 lakhs for setting up PMBJKs, which can be established in various locations, including outside hospital premises, by physicians, pharmacists, business owners, self-help organizations, NGOs, and charity societies. The Bureau of Pharma PSUs of India (BPPI), under the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, has developed the "Janaushadhi Sugam App." This app helps users locate nearby Janaushadhi Kendras using Google Maps, search for Janaushadhi generic medicines, and compare prices between generic and branded medications, enabling significant cost savings for consumers.

7.5 The Cost Analysis of Janaushadhi Scheme:

Since the acceptance of modern medicine as a dependable and scientific form of treatment, the trend of utilizing drugs to treat illnesses has been rising globally. Medicines and medicines account for a sizeable component of out-of-pocket (OOP) household health spending in India and are becoming a significant source of catastrophic costs for both outpatient services and inpatient (hospitalization) fees. The private OOP spending on medications by low income households is what drives families into poverty.

8. Conclusion:

While most faculty members exhibited positive attitudes and understanding of generic medicines, this sentiment did not translate into the number of prescriptions written, highlighting a gap between theory and practice. A key issue identified was awareness, which could be addressed through regular training programs such as workshops and continuing medical education. It is essential for doctors, starting from their undergraduate studies, to receive early education on generic medications. In addition, clinicians should have access to or be provided with copies of the National Guidelines on Generic Medicines. Government regulations concerning the sale and purchase of generic medications by patients and pharmacists should be revised to prioritize cost-effective alternatives over expensive innovative drugs.

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RISK PERCEPTION AND PORTFOLIO MANAGEMENT OF EQUITY INVESTORS -A CRITICAL STUDY

***Ashis Kumar Mahapatra,**
****Aiswarya Swain**
*****Dr. Bishnu Prasad Kar**

Abstract:

Equity investors are individuals who allocate capital to a company in exchange for a share of ownership, thereby participating in the company's potential growth and profits. Understanding risk perception and its influence on investment behavior is a central focus of behavioral finance research. Equity investors typically encounter two primary types of risks: systematic risk, which affects the entire market, and unsystematic risk, which is specific to a particular company or industry. To effectively manage these risks, equity investors often rely on portfolio management.

Portfolio management is the sophisticated practice of selecting the optimal investment strategy to achieve the dual objectives of minimizing risk and maximizing returns. Under the expert guidance of a portfolio manager, investors receive tailored advice on the best investment mix based on their income, budget, age, and risk tolerance. The portfolio manager‘s role is to craft a diversified portfolio that aligns with the investor's financial goals while mitigating potential risks.

The primary aim of this study is to explore the risk perceptions of individual equity investors and examine how these perceptions influence their portfolio construction and management strategies. Additionally, the study delves into the diverse profiles of individual equity investors, analyzing variations in investment behavior based on factors such as income, occupation, gender, and age. Through this lens, the research seeks to provide a comprehensive understanding of how different demographic groups navigate the complexities of equity investment and risk management.

Keywords: Portfolio Management, Risk Perception, Systematic Risk, Behavioural Finance.

1. Introduction:

Risk perception is a deeply personal concept, shaped by an individual's understanding of the nature and severity of potential risks. It encompasses a wide array of cognitive and emotional factors, including beliefs, attitudes, judgments, and feelings, as well as the social, cultural, and individual values that influence decision-making. When evaluating hazardous activities, substances, or technologies, people's perceptions of risk play a crucial role in guiding their choices. This is particularly evident in the context of equity investments, where the perception of risk has evolved over time, reflecting the prevailing attitudes and sensibilities of different eras.

Throughout history, the perception of risk has oscillated between instinctual responses and analytical measurements, mirroring the broader temper of society. In the realm of equity investment, this perception is especially significant,

*Ashis kumar Mahapatra, Credit Manager, Aditya Birla Finance, Email Id: ashish.mahapatra@adityabirlacapital.com
**Aiswarya Swain, Operation Manager, Airbox Shipping, Emailid: aiswarya.s@airboxshipping.com
***Dr. Bishnu Prasad Kar, Assistant Professor, ASTHA School of Management, Emailid: bpkar@ asthaeducation.in

as investors recognize that they have little control over the returns generated by equity shares. This lack of control introduces an element of uncertainty, making equity investments inherently risky. However, the acceptance of this risk is seen as a legitimate human endeavor, driven by the pursuit of opportunity and the willingness to explore, experiment, and demonstrate choice. Investors, aware of the unpredictable nature of returns from equity shares, must carefully navigate the trade-offs between risk and reward. The inherent uncertainty in equity investments requires individuals to balance their desire for potential gains with the recognition that returns are never guaranteed. As they weigh these factors, investors make decisions that reflect their unique risk perceptions, striving to achieve a delicate equilibrium between the risks they are willing to bear and the returns they hope to realise.

Additionally, people are generally risk averse, they like to invest where the returns are higher for a given level of risk or risks are least for a given level of return. Risk perception and equity share investments are negatively correlated, indicating that low risk perception will lead to high equity investment .Higher equity investments make people more entrepreneurial and catalyze them to take more risks, leading to the growth of the economy

Risk perception is a vital constituent in several assessments and, hence, psychologists are continuously attempting to find out the best way of measuring risk perception. Risk perception of an individual can be controlled provided that a person is aware of the different aspects of his/her risk perception, as well as the reason for the given risk perception. Therefore, authorities entrusted with the job of framing policies should strive to measure the risk perception of the individuals who manage it and implement the policies. Thus, there is a need to manage the risk perception of people which is only possible if it can be measured. Equity related risk perception among the retail investors is different in economically advanced regions compared to economically backward and geographically remote regions. The levels of literacy, income, and available infrastructure in economically backward regions are relatively low compared to those of economically advanced regions

Therefore, a study on measuring the risk perception level of investors‘ in equity shares and the factors influencing the aforementioned risk perception will not only be important but also contemporary in order to understand the current equity investment scenario.

In order to measure the risk perception of equity investors, a survey on the basis of a structured questionnaire was given to the retail equity investors. The questionnaire was framed using the variables identified

2. Review of Literature:

A detailed and comprehensive literature review was undertaken to understand the facets of the area. The literature relevant to risk perception was studied to know the factors studied by other researchers. Karmakar (2001) opined that the people are in general risk-averse and safety is given the highest priority while taking an investing decision. Purkayastha (2008) revealed that age, salary, and designation do impact the risk appetite of an investor. In reality, investors tend to invest in average-risk mutual funds, irrespective of their demographics and risk tolerance.

Singh and Bhowal (2010a) highlighted that the risk perception of the employees for the shares of their own company share is relatively lower than the risk perception for the shares of other companies. Singh (2009) found that investors perceive mutual funds as relatively less risky than that of direct investment in equity. Roszkowski (2010) stated that the economic crisis of 2008 was said to lower the risk tolerance of the investors. MacCrimmon and Wehrung (1990) conducted a study among the executives to know the characteristics of risk-taking by them and it was found that the most successful executives are the biggest risk takers and most mature executives are the most risk-averse. Lion and Meertens (2005) suggested that risk avoiders and risk takers differ in the extent to which they focus on the worst and best outcomes of the risky activity.

Veeramani and Karthikeyan (2014) concluded that investors‘ perception of the total investment risk and return determines the capacity of investors and investors prefer less risky investment avenues.

Risk perception can be managed and in order to achieve this, there is a need to measure risk perception . Sitkin and Weingart (1995) highlighted the determinants of risky decision-making behavior and the role of risk perceptions. There were studies conducted to design the appropriate measure of risk and to establish a relation between risks and return (Powers 2009). Palmer (1996) and Weber (2001) have focused on the way where people subjectively convert objective risk information (i.e., possible consequences of risky choice options such as mortality rates or financial returns and their likelihood of occurrence) in ways that reflect the impact that these events have on their lives.

MacGregor et al. (1999) and Koonce et al. (2005) in their studies asked financial experts to rate the risks involved in various types of investments. The results of these two studies were comparable, in line with each other, and found that quantitative aspects (probability of loss and volatility) and qualitative aspects (such as worry and anxiety, and knowledge) were both significant predictors of perceived risk.

Duxbury and Summers (2004), Klos et al. (2005), Nosic and Weber (2010), and Veld and Veld-Merkoulova (2008) presented their results of studies using experimental approach which commonly reveal that potential losses arise larger than the volatility of outcomes both for describing risk judgments and predicting investment decisions.

Singh and Bhowal (2011) measured investors risk perception from the perspective of the marketing mix. Singh (2012) studied the risk perception of general investors in respect of their investment in Initial Public Offer (IPO) of shares. Deb and Singh (2018) have used the scale of Singh and Bhowal (2011) to study the risk perception of investors in respect of mutual funds.

2.1 Research Gap:

There have been many studies on measuring risk and risk perception in several situations and markets, but no attempt has been made to measure the risk perception of retail equity investors. Therefore, this study has made an attempt to measure the risk perception of retail equity investors. Based on the above background and gap areas, the present study tries to bridges the gap between the existing literatures to measure the risk perception of retail investors in equity shares. The investigation on the risk perception of the investors will help in knowing the level of risk perception of the investors. The study is also helpful in framing policy with respect to investment education so that misperception, if any, can be eliminated or reduced.

2.2 Objectives the Study:

- To determine the perception of risk of different individual investors
- To determine the portfolio construction and its management of equity investors.

3. Method of Study:

3.1 Sources of Data & Statistical Tools Applied:

The data were collected from primary sources for this study for which a structured questionnaire was developed for the target respondents from urban areas specifically from Cuttack and Bhubaneswar and the sample size was taken as 120. The statistical tools of Chi-square test were applied to measure the perception of individual equity investors by taking different parameters in to consideration.‘

4. Presentation of Data and its Analysis:

The following table highlights the demographic background of the respondents from different perspectives.

Table 1: Consolidated Data of Respondents Demography.

Parameter/ Gender	Male				Female			
Age	<20	20-30	30-40	>40	<20	20-30	30-40	>40
	10	48	09	16	00	19	12	06
Education	10th	12th	Grad.	P.G	10th	12th	Grad.	P.G
	00	11	26	46	00	05	17	15
Occupation	Govt. employees	Private employees	Professi onal	Business Person	Govt. employ ees	Private employees	Professiona l	Business Person
	23	30	28	02	08	13	15	01
Income	<250000	<400000	<60000 0	>600000	<25000 0	<400000	<600000	>600000
	34	12	17	22	13	08	07	09
Choice of Investment Avenues	Equity		Equity Linked Mutual Fund		Equity		Equity Linked Mutual Fund	
	59		25		31		05	
Proportion of Investment	<10%	10%-20%	20%-30%	>30%	<10%	10%-20%	20%-30%	>30%
	22	38	24	00	09	19	08	00

Source : Author's Own Compilation

To understand the perception of respondents towards equity investments, data was collected from both male and female participants. By analyzing the choice of investment avenues for each gender, we aim to gain insights into their attitudes and preferences regarding equity investments. This approach will help expedite the study and provide a comprehensive understanding of gender-based investment behaviors

Table 2: Choice of Investment Avenues of Male Respondents:

Parameter/ Investment Avenues	Equity				Equity linked Mutual Fund			
Age	<20	20-30	30-40	>40	<20	20-30	30-40	>40
	10	38	05	06	00	11	04	09
Occupation	Govt. Employee	Pvt. Employee	Profess ional	Business Person	Govt. Emplo yee	Pvt. Employee	Professio nal	Busines s Person
	7	17	22	13	04	09	07	06
Income	<250000	<400000	<60000 0	>600000	<2500 00	<400000	<600000	>60000 0
	24	08	09	18	10	04	08	04

Source : Author's Own Compilation

Table 3: Choice of Investment Avenues of Female Respondents:

Parameter/ Investment Avenues	Equity				Equity linked Mutual Fund			
Age	<20	20-30	30-40	>40	<20	20-30	30-40	>40
	00	14	12	05	00	06	00	00
Occupation	Govt. Employee	Pvt. Employee	Professional	Business Person	Govt. Employee	Pvt. Employee	Professional	Business Person
	03	06	05	04	04	07	05	04
Income	<250000	<400000	<600000	>600000	<250000	<400000	<600000	>600000
	11	06	06	09	02	02	01	00

Source : Author's Own Compilation

4.1 Analysis of Respondents Demography:

The analysis of equity and equity-linked mutual fund investments unveils several compelling insights into the demographics and preferences of the respondents. Out of the 120 individuals surveyed, 83 are male and 37 are female, reflecting a predominant male interest in these investment avenues. Notably, 64% of the respondents are 30 years old or younger, with a composition of 58 males and 19 females, underscoring a pronounced inclination among the younger demographic towards equity investments. Educationally, a remarkable 52% of respondents possess a postgraduate degree or higher, with an additional 35% holding a bachelor's degree, highlighting a correlation between higher education and a propensity for engaging in risky investments. Professionally, 72% of the respondents are employed as private sector workers or professionals, a group evidently more willing to embrace risk for the prospect of quick financial returns. Investment preferences further reveal that 75% of investors favor direct equity investments over equity-linked mutual funds, with two-thirds of these investors being male. Additionally, 48% of the respondents allocate 20% to 30% of their earnings to these investment opportunities. Overall, the data suggests that equity investments are particularly favored by young, well-educated individuals in private and professional roles, who are not only inclined to invest a significant portion of their earnings but also show a clear preference for direct equity investments over mutual funds.

4.2 Analysis of Risk Perception of Respondents:

Before investing in any financial products or instruments, it is essential for individuals to have adequate knowledge about their chosen investment options. This understanding not only helps investors make informed decisions but also allows researchers to accurately gauge the perceptions and attitudes of investors towards these products or instruments. While analysing the risk perception of individual investors towards equity investment the following point has to be considered.

- Understanding of equity product
- Familiarity with Equity Products
- Risk of losing money
- Risk of getting lower return

Table 4: Understanding of equity Product

	Number of Respondents		Total
Understanding equity products	Equity	Equity linked Mutual Fund	
Easy	36	6	42
Quiet easy	38	1	39
Quiet difficult	9	18	27
Difficult	7	5	12
Total	90	30	120

Source : Author's Own Compilation

Table 5: Familiarity with Equity Products

	Number of Respondents				Total
Familiarity of equity products	Govt. employees	Private employees	Professional	Business Person	
Not familiar	12	7	5	0	24
Some-how Familiar	17	17	12	1	47
Familiar	2	14	23	1	40
Very familiar	0	4	5	0	09
Total	31	42	45	02	120

Source : Author's Own Compilation

Table 6: Risk of Losing Money

	Number of respondents			
Risk of losing money	Govt. employees	Private employees	Professional	Businessman
Very low	3	12	11	0
Low	6	17	25	1
High	16	7	5	1
Very high	6	6	4	0

Source : Author's Own Compilation

Table 7: Risk of Getting Lower Return

	Number of respondents			
Risk of getting lower return	Govt. Employees	Pvt. Employees	Professional	Businessman
Low	6	11	6	0
Medium	11	17	22	1
High	17	12	13	0
Very high	0	0	3	1

Source : Author's Own Compilation

Formulation of Hypotheses:

((H_{01})= The equity investors does not have

better understanding of equity products.

(H_{11}) = The equity investors have better understanding of equity products.

Here the frequencies are arranged in the form of 4*2 contingency table. Hence the degrees of freedom are (4-1)(2-1)=3*1=3

(H_{02})= Government employees are familiar with equity products.

(H_{12}) = Government employee are not familiar to equity products.

Here the frequencies are arranged in the form of a 4*4 contingency table. Hence the degrees of freedom are (4-1)(4-1)=3*3=9

(H_{03}) = Government employees are high risk taker.

(H_{13}) = Government employees are low risk taker.

Here the frequencies are arranged in the form of a 4*4 contingency table. Hence the degrees of freedom are (4-1)(4-1)=3*3=9.

(H_{04})= Risk of getting lower return is high fo-r**37-** private and professional employee.

(H_{14}) = Risk of getting lower return is low for private employees and professionals.

Here the frequencies are arranged in the form of a 4*4 contingency table. Hence the degrees of freedom are (4-1)(4-1)=3*3=9.

4.3 Results & Discussion:

The analysis of equity product understanding and risk perceptions reveals several insights. For understanding equity products, the Chi-square value of 33.62 far exceeds the tabulated value of 7.815 at 3 degrees of freedom and a 5% significance level, leading to the rejection of the null hypothesis. This indicates that individuals who have directly invested in equity products generally find them easy or quite easy to understand. In terms of familiarity with equity products, the Chi-square value of 24.584 surpasses the tabulated value of 16.919 at 9 degrees of freedom and a 5% significance level. This result highlights that government employees are less familiar with equity products compared to private employees, professionals, and businessmen, who demonstrate greater familiarity. When examining the risk of losing money, the Chi-square value of 97.133 is significantly higher than the tabulated value of 16.919, leading to the rejection of the null hypothesis. This finding suggests that government employees are generally lower risk-takers, whereas private employees and professionals exhibit a higher risk tolerance. Lastly, regarding the risk of getting lower returns, the Chi-square value of 33.575 exceeds the tabulated value of 16.919, resulting in the rejection of the null hypothesis. The analysis indicates that private employees and professionals perceive a lower risk of getting lower returns, while businessmen have a more varied perception, with some viewing the risk as both low and very high.

Table 8: Consolidated Statement of Chi-square Analysis

Sl. No.	Hypothesis	Degree of freedom	Chi-square Values		Result
			Tabulated	Calculated	
1	The equity investors do not have better understanding of equity products.	3	7.815	33.62	Rejected
2	Government employees are familiar with equity products	9	16.919	24.584	Rejected

3	Government employees are high risk taker	9	16.919	97.133	Rejected
4	Risk of getting lower return is high for private and professional employee.	9	16.919	33.575	Rejected

Source : Author‘s Own Compilation

5. Research Findings:

The investment patterns of individuals vary significantly across different age groups and occupations, reflecting distinct risk tolerances and levels of familiarity with equity products. Young investors (20-30 years) predominantly invest in equities over equity-linked mutual funds due to their higher risk tolerance and preference for direct equity investments. Middle-aged investors (30-40 years) tend to balance their portfolios, distributing investments equally between equities and equity-linked mutual funds, indicating moderate risk tolerance and a desire for diversification. Older investors (above 40 years), who generally have a lower risk appetite, prefer equity-linked mutual funds, supported by the availability of investment guidance. Across all age groups, most investors allocate approximately 10% to 20% of their income to both equities and equity-linked mutual funds, suggesting a balanced approach to investment. In terms of perception and understanding, those directly investing in equities find these products easier to comprehend, while those in equity-linked mutual funds often view them as more complex. Occupationally, private sector employees and professionals, who are more familiar with equity products, tend to be higher risk-takers, perceiving a lower risk of receiving lower returns. In contrast, government employees, less familiar with equities, exhibit lower risk tolerance and perceive a higher risk of lower returns. Businessmen display a variedrisk perception, with some viewing the risk of lower returns as high, while others perceive it as low, reflecting diverse approaches to risk management.

6. Conclusion & Scope for Future Research:

The analysis reveals that investment decisions are significantly influenced by factors such as age, income, occupation, and educational qualifications. Younger individuals, private sector employees, professionals, and businessmen, who are generally more risk-tolerant, prefer direct equity investments and find these products relatively easy to understand. In contrast, risk-averse individuals, particularly those over the age of 40 and government employees, are more inclined to invest in equity-linked mutual funds and often perceive equity products as more difficult to comprehend. This difference in understanding also correlates with the perceived risk of financial loss and potential lower returns, highlighting the critical role of financial literacy in investment decision-making. Future research could explore the impact of targeted financial education programs on improving the understanding and confidence of risk-averse individuals, particularly government employees and those over 40, in equity investments. Additionally, studying the long-term performance and satisfaction levels of investors in direct equities versus equity-linked mutual funds could provide deeper insights into the effectiveness of various investment strategies. Analyzing the role of technological advancements and digital tools in enhancing financial literacy and investment outcomes across different demographic groups could also offer valuable directions for further study.

List of Appendices

Appendix-1:

Chi-square Data Analysis-1 (Understanding of equity Products)

O_i	E_i	O_i-E_i	$(O_i-E_i)^2$	$(Oi - Ei)^2/E_i$
30	26.25	3.75	14.06	0.53
32	24.75	7.25	52.56	2.12
7	16.50	-9.5	90.25	5.40
6	7.5	-1.5	2.25	0.3
5	8.75	-3.75	14.06	1.60
1	8.25	-7.25	52.56	6.37
15	5.50	9.5	90.25	16.40
4	2.5	1.5	2.25	0.9
2	4.68	-2.68	7.182	1.534
				33.62

Appendix-2:

Chi-square Data Analysis (Familiarity with Equity Products)

O_i	E_i	O_i-E_i	$(O_i-E_i)^2$	$(Oi - Ei)^2/E_i$
0	5.2	4.8	23.04	4.430
14	10.14	3.86	14.899	1.469
2	8.84	-6.84	46.785	5.292
0	1.82	-1.82	3.312	1.82
6	7	-1	1	0.142
14	13.65	0.35	0.122	0.008
12	11.90	0.1	0.01	0.0008
3	2.45	0.55	0.302	0.123
4	7.40	-3.4	11.56	1.562
10	14.43	-4.43	19.624	1.359
19	12.58	6.42	41.088	3.266
4	2.59	1.41	1.988	0.767
0	4	-4	16	4
1	0.78	0.22	0.048	0.061
1	0.68	0.32	0.102	0.15
0	0.14	0.14	0.019	0.135
				24.584

Appendix 3:

Chi-square Data Analysis (Risk of Losing Money)

Oi	E_i	Oi-Ei	$(O_i-E_i)^2$	$(Oi - Ei)^2/E_i$
2	5.46	-3.46	11.971	2.192
5	10.66	-5.66	32.035	21.375
13	6.24	6.76	45.697	7.323
6	6.64	2.36	5.569	1.529
10	7.35	2.65	7.022	0.955
14	14.35	-0.35	0.122	0.008
6	8.40	-2.4	5.76	0.685
5	4.90	0.1	0.01	0.002
9	7.77	1.23	1.512	0.168
21	15.17	5.83	33.988	2.240
4	8.88	-4.88	23.814	2.68
3	5.18	2.18	4.752	0.91

0	0.42	-0.42	0.176	0.419
1	0.82	0.18	0.032	0.039
1	0.48	0.52	27.04	56.33
0	0.28	0.28	0.078	0.278
				97.133

Appendix 4: Chi-square Data Analysis (Risk of getting Lower Return)

$\mathbf{O_i}$	E_i	$\mathbf{O_i\text{-}E_i}$	$(O_i\text{-}E_i)^2$	$(Oi - Ei)^2/E_i$
5	5.20	-0.2	0.04	0.007
18	10.92	-2.92	8.526	0.780
13	9.10	3.9	15.21	1.671
0	0.78	-0.78	0.608	0.779
10	7	3	9	1.285
14	14.70	-0.7	0.49	0.033
11	12.25	-1.25	1.562	0.127
0	10.5	-10.5	110.25	10.5
5	7.40	-2.4	5.76	0.778
19	15.54	3.46	11.971	0.770
11	12.95	-1.95	3.802	0.293
2	1.11	0.89	0.792	0.713
0	o.4	-0.4	0.16	0.4
1	o.84	0.16	0.025	0.029
0	o.7	0.7	0.49	0.7
1	o.94	0.94	0.883	14.71
				33.375

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IMPACT OF FINANCIAL LITERACY PROGRAMS ON BANKING PRACTICES IN RURAL ODISHA

*** Subhankar Behera**
****Ananya Swain**

Abstract:

This study examines the impact of financial literacy programs on banking practices in rural Odisha, a region with limited access to formal financial services and low financial awareness. The research aims to evaluate whether these educational initiatives effectively enhance financial behaviour such as savings, credit usage, and financial planning among rural households. Data were collected from 500 participants across various villages, including individuals who participated in financial literacy programs and a control group who did not.

Descriptive and inferential statistical analyses were conducted to assess differences in banking practices between the two groups. Findings indicate a significant positive correlation between participation in financial literacy programs and improved banking behaviour. Program participants exhibited higher rates of savings account ownership, more frequent saving deposits, and more judicious use of credit facilities. Additionally, there was a marked improvement in budgeting, financial planning, and understanding financial product terms among participants.

The study highlights the critical role of financial literacy in fostering trust in formal banking institutions, which is essential for enhancing financial inclusion in rural areas. These results emphasize the importance of expanding financial literacy programs to promote economic development in underserved regions. The research provides insights for policymakers, financial institutions, and NGOs working to improve financial inclusion and economic empowerment in rural India.

Keywords: Financial Literacy, Financial Inclusion, Economic Development, Economic Empowerment, Credit Facility.

1. Introduction:

Financial literacy refers to the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing . It encompasses a range of knowledge and competencies necessary for making informed and effective decisions with financial resources. Financial literacy is crucial for individuals to navigate the complexities of the financial system, make prudent financial decisions, and achieve financial well-being. Improved financial literacy can lead to better banking practices. Individuals with higher financial literacy are more likely to understand the benefits of saving, the risks and rewards associated with credit, and the importance of planning for future financial needs . This understanding translates into more effective use of banking services, such as maintaining a savings account, using credit responsibly, and investing wisely.

Furthermore, financial literacy has significant

* Subhankar Behera, TPCODL, Email: subhankarbehera054@gmail.com
** Ananya Swain, Assistant Professor ASTHA School of Management, Email: ananyaswain1997@gmail.com

implications for economic outcomes. At the individual level, it can lead to increased savings, reduced debt, and better preparation for financial emergencies. At the community level, higher financial literacy can contribute to economic stability and growth. Well-informed consumers are better equipped to make decisions that support the health of the financial system, thereby fostering economic resilience. Additionally, financial literacy can enhance economic inclusion, enabling more individuals to participate fully in the economy, access credit, and invest in opportunities that promote personal and communal economic development.

Odisha, located on the eastern coast of India, is characterized by a predominantly rural population with agriculture being the mainstay of the economy (Sarma & Pais, 2011). Despite its rich cultural heritage and natural resources, Odisha faces significant socio-economic challenges, particularly in its rural areas. The rural economy is marked by low income levels, limited access to education, and inadequate infrastructure (Kumar, 2013). These factors contribute to a cycle of poverty and economic exclusion for many rural households.

One of the major issues in rural Odisha is the limited access to formal financial services. Many rural residents rely on informal sources of finance, such as moneylenders, who often charge exorbitant interest rates (Singh & Kumar, 2017). The lack of access to formal banking services is compounded by low levels of financial literacy, which prevents individuals from understanding and utilizing available financial products and services. This situation underscores the need for targeted financial literacy programs to bridge the knowledge gap and promote financial inclusion (Ananth, Chen, & Rasmussen, 2012).

Financial literacy programs are essential in rural Odisha to educate residents about the benefits and usage of formal financial services. These programs can provide critical information on topics such as savings, credit management, insurance, and investment options (Banerjee et al., 2015). By enhancing financial knowledge, these initiatives aim to empower rural individuals to make better financial decisions, access affordable credit, and manage their finances more effectively. Moreover, financial literacy can help build trust in formal financial institutions, encouraging more people to transition from informal to formal financial services, which is crucial for their economic up-liftment.

The primary objective of this research is to evaluate the effectiveness of financial literacy programs in enhancing banking practices among rural households in Odisha. The study aims to assess whether participation in these programs leads to improved financial behaviours, such as increased savings, responsible credit usage, and better financial planning.

2. Review of Literature:

In order to simulate the idea and the scope of the concerned study, some of the literatures has been reviewed and presented in the form of sub-themes:

2.1 Financial Literacy:

Lusardi, A., & Mitchell, O. S. (2014) in the paper **"The economic importance of financial literacy: Theory and evidence."** states to give a thorough explanation of the value of financial literacy, stating that it is essential for making wise financial decisions. According to their findings, improved financial behaviors—like saving for retirement and building wealth—are linked to higher levels of financial literacy and are crucial for the stability and expansion of the economy.

Atkinson, A., & Messy, F. (2012) in the paper **"Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study".** draws attention to the condition of financial literacy around the world and how it relates to financial behaviour. Higher financial literacy levels result in better saving practices and lower borrowing costs, which increase overall economic well-being, according to the OECD/INFE pilot study.

Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013) in the paper **"Financial literacy, financial education, and economic outcomes"** mentioned in the research on the effects of financial literacy on economic consequences. They discover that financial literacy instruction enhances people's ability to make sound financial decisions, which results in better money management, higher savings rates, and wiser investment selections.

Lusardi, A., & Tufano, P. (2015) in the paper **"Debt literacy, financial experiences, and over indebtedness" e**xplored the idea of debt literacy and how experiences with money are affected by it. According to their research, those who are more financially literate are less likely to take on expensive debt and are more likely to properly manage their debt, both of which improve financial health.

2.2 Banking Practices:

Cole, S., Sampson, T., & Zia, B. (2011) in the paper **"Prices or knowledge? What drives demand for financial services in emerging markets?"** Examine the variables influencing the need for financial services in developing nations, placing special emphasis on the need of financial literacy. Their findings show that formal banking services like credit and savings are used far more frequently when people are more informed about money matters.

Karlan, D., Ratan, A. L., & Zinman, J. (2014) in the paper **"Savings by and for the poor: A research review and agenda‖**, mentioned the impact of financial literacy on the savings habits of the impoverished. They arrive to the conclusion that financial education initiatives help low-income people save more money and have better financial planning.

Miller, M., Godfrey, N., Levesque, B., & Stark, E. (2009) **"The case for financial literacy in developing countries: Promoting access to finance by empowering consumers."** emphasises how crucial financial knowledge is to improving underdeveloped nations' access to banking services. According to the report, financial literacy initiatives result in improved financial decision-making, higher savings rates, and increased credit utilisation.

Collins, J. M. (2012) **"Financial advice: A substitute for financial literacy?."** investigates the possibility of substituting financial advice for financial literacy. The study highlights the value of financial education in enhancing banking practices by finding that, although financial advice can be helpful, people with greater financial literacy are better able to make wise financial decisions.

Agarwal, S., et al. (2010) **"Financial counselling, financial literacy, and household decision making. In Financial Literacy: Implications for Retirement Security and the Financial Marketplace"** examines the connection between household financial decisions, financial guidance, and literacy. According to their research, having a better understanding of finance can greatly improve the efficacy of financial advising, which in turn can improve banking practices and financial results.

Grohmann, A., Klühs, T., & Menkhoff, L. (2018) in the paper **"Does financial literacy improve financial inclusion? Cross country evidence."** examines how financial inclusion is affected by financial literacy in various nations. Their findings imply that financial education is essential to enhancing banking practices, as there is a correlation between higher financial literacy levels and improved access to and usage of banking services.

Lusardi, A., & de Bassa Scheresberg, C. (2013) in the paper **"Financial literacy and high-cost borrowing in the United States."** investigates the relationship between expensive borrowing and financial literacy. Their results underline the importance of financial literacy in encouraging responsible banking practices, as people with more financial literacy are less likely to partake in expensive borrowing behaviours.

2.3 Regional Studies:

Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015) in the paper **"The miracle of microfinance? Evidence from a randomized evaluation."** outlines a randomised assessment of Indian microfinance that incorporates elements of financial literacy. The study concludes that while microfinance on its own has mixed outcomes, adding financial literacy greatly enhanced participants' financial habits, including their use of loans and savings financial literacy initiatives can successfully increase participants' financial management abilities, which can result in better banking procedures and more favourable business outcomes.

Kumar, N. (2013) in the paper **"Financial inclusion and its determinants: Evidence from India."** focuses on the importance of financial literacy while examining the factors that influence financial inclusion in India. According to the study, increased use of banking services, especially in rural regions, is linked to higher levels of financial literacy and promotes economic empowerment.

Singh, C., & Kumar, R. (2017) in the paper **"Impact of financial literacy on the use of financial services: Empirical evidence from India."** Examine how financial literacy affects India's use of financial services. According to their findings, financial literacy, especially in rural areas, greatly improves people's capacity to get and make efficient use of banking services.

2.4 Objectives of the Study:

- ❖ To measure the current levels of financial literacy among rural residents in Odisha and identify gaps in knowledge and understanding.
- ❖ To determine the impact of financial literacy programs on the financial behaviours of participants. This involves comparing the banking practices of individuals who have participated in financial literacy programs with those who have not.
- ❖ To identify the barriers that prevent rural residents from accessing and utilizing financial literacy programs and the factors that facilitate their effective implementation.
- ❖ To provide evidence-based recommendations for policymakers, financial institutions, and non-governmental organizations to design and implement more effective financial literacy initiatives aimed at improving banking practices and economic outcomes in rural Odisha.
- ❖ To explore the long-term effects of financial literacy on economic stability and growth, considering the potential for scalability and sustainability of financial literacy programs.

By achieving these objectives, the research aims to contribute to the broader goal of enhancing financial inclusion and economic empowerment in rural Odisha, ultimately leading to improved economic outcomes for individuals and communities.

2.5 Research Hypotheses:

The study hypothesizes that participation in financial literacy programs significantly improves the banking practices of rural residents in Odisha. Specifically, it posits that those who participate in these programs are more likely to own a savings account, use credit more responsibly, and engage in more effective financial planning compared to non-participants. To test these hypotheses, the study will utilize t-tests to compare mean differences in banking practices, including savings account ownership, credit usage, and financial planning, between participants and non-participants.

3. Research Method:

3.1 Research Design: This study employs a cross-sectional research design to assess the effectiveness of financial literacy programs in enhancing banking practices among rural households in Odisha, India. A cross-sectional study allows for the collection of data at a single point in time, providing a snapshot of the current situation regarding financial literacy and banking practices among the study participants.

3.2 Sampling:

The sampling technique used in this research is stratified random sampling. Odisha's rural areas are diverse in terms of socio-economic characteristics and access to financial services. To ensure representativeness, the state will be divided into strata based on geographical regions within rural Odisha. Within each stratum, households will be randomly selected to participate in the study. Participants will be selected based on specific criteria: residing in rural areas of Odisha, age 18 years or older, and willingness to participate in the study. Efforts will be made to include a diverse range of participants in terms of age, gender, education level, and income to capture a comprehensive understanding of the impact of financial literacy programs.

3.3 Data Collection:

Data were collected through structured surveys administered face-to-face by trained researchers. The survey instrument include questions designed to assess participants' levels of financial literacy, banking practices (such as savings habits and credit usage), and participation in financial literacy programs. Additionally, qualitative insights were gathered through semi-structured interviews and focus group discussions to provide a deeper understanding of participants' experiences and perceptions regarding financial literacy and banking practices.

3.4 Variables Considered:

- **Independent Variables:** The primary independent variable was participation in financial literacy programs. This variable is measured on the basis of self-reported participation in formal financial education sessions or workshops conducted by governmental or non-governmental organizations.
- **Dependent Variables:** Dependent variables include changes in banking practices, such as frequency of savings, use of formal banking services, and adoption of financial planning strategies. These variables were assessed through self-reported behaviour collected during the survey.

4. Data Analysis:

The collected data were analysed using both descriptive and inferential statistical methods. Descriptive statistics, such as frequencies and percentages, were used to summarize participants' demographic characteristics, levels of financial literacy, and current banking practices. To evaluate the impact of financial literacy programs on banking practices, regression analysis were employed. Specifically, multiple regression analysis were conducted to examine the relationship between participation in financial literacy programs (independent variable) and changes in banking practices (dependent variables), while controlling for relevant socio-economic factors.

Furthermore, t-tests or ANOVA was used to compare mean differences in banking practices between participants who have undergone financial literacy training and those who have not, providing additional insights into the effectiveness of these programs.

4.1 Ethical Considerations

Ethical considerations will be adhered to throughout the research process. Informed consent will be obtained from all participants, ensuring voluntary participation and confidentiality of responses. The study will also comply with ethical guidelines regarding data handling and participant anonymity to protect their privacy and rights.

Table 1: Demographic Characteristics of Respondents

Basis	Variables (in %)				
Gender	Male		Female		
	49.45		50.5		
Age	18-24	25-34	35-44	Above 45	
	23.64%	26.00%	24.36%	26.00%	
Education	No formal education	Primary	Secondary	Higher Secondary	Graduate and above
	21.09%	19.82%	20.18%	17.45%	21.48%
Income (Monthly)	< 10000	₹10000-20000	₹20001-30000	>30,000	
	24.91%	21.09	25.27%	28.73%	

Source: Author‘s Own Compilation

4.2 Analysis of Respondents" Demography:

The study's participants are characterized by a balanced gender distribution, with females constituting 50.55% and males 49.48%, suggesting that the findings are likely to be gender-neutral. The age distribution is fairly even, with the largest groups being 45 and above and 25-34, each comprising 26% of the sample, followed by the 35-44 group at 24.36% and the 18-24 group at 23.64%, indicating that the study captures a broad spectrum of experiences related to financial literacy and banking practices. The participants also exhibit diverse educational backgrounds, with graduates and above making up 21.45%, those with no formal education at 21.09%, secondary school graduates at 20.18%, primary school graduates at 19.82%, and higher secondary school graduates at 17.45%, reflecting varied educational perspectives. Additionally, the income distribution shows that 28.73% of participants earn above ₹30,000, followed by 25.27% earning ₹20,001-30,000, 24.91% earning below ₹10,000, and 21.09% earning ₹10,000-20,000, suggesting that the findings will offer insights into the impact of financial literacy programs across different economic strata.

Table 2: Financial Literacy and Banking Practices

Basis	Variables (in %)				
Participation in Financial Literacy Programs	Yes		No		
	52.18		47.82		
Level of Financial Knowledge	Very Low	Low	Average	High	Very High
	58.36	10.55	9.64	10.36	11.09

Savings Account Ownership	Yes			No		
	49.64			50.36		
Frequency of Deposit	Never	Occasionally	Daily	Weekly	Monthly	
	63.45	10.18	7.45	9.09	9.83	
Use of Formal Banking Services	Yes			No		
	48.18			51.82		
Frequency of Banking Services Used	Never	Occasionally	Daily	Weekly	Monthly	
	61.09	11.09	8.55	10	9.27	
Loan Taken	Yes			No		
	50.73			49.27		
Purpose of Loan	None	Education	Agriculture	Business	Housing	Others
	49.27	3.64	3.27	3.09	2.91	37.82
Change in Financial Management	Yes			No		
	23.45			76.55		
Usefulness of Financial Literacy Programs	Usefulness Rating					
	1	2	3	4	5	
	59.46	8.91	11.09	10.36	10.18	
Satisfaction with Financial Literacy Programs	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	
	9.82	9.64	60.18	9.27	11.09	

Source: Author‘s Own Compilation

4.3 Analysis of Financial Literacy and Banking Practices

The study's findings reveal a diverse landscape of financial literacy, banking practices, and program effectiveness among participants. A slight majority, 52.18%, have undergone financial literacy programs, while 47.82% have not, allowing for meaningful comparisons. Notably, 58.36% of participants rate their financial literacy as very low, with only 11.09% considering their knowledge very high, highlighting a generally low self-assessed financial literacy. Savings account ownership is nearly evenly split, with 49.64% having an account, suggesting relevance in studying the programs' impact on banking behaviors. Deposit frequency varies, with small portions depositing daily (7.45%) and never depositing (63.45%), reflecting diverse financial habits. Additionally, 51.82% of participants do not use banking services, indicating potential for increased service utilization through financial literacy programs. However, 61.09% never use these services, pointing to low overall engagement. Loan-taking behavior is also nearly evenly split, with 50.73% having taken loans for varied purposes, emphasizing diverse financial needs. Most participants (76.55%) did not change their financial management practices, and the usefulness of financial literacy programs received low ratings, with 59.45% rating them at the lowest level. Finally, satisfaction with these programs is mixed, with 60.18% feeling neutral, while smaller percentages expressed varying levels of satisfaction and dissatisfaction. These findings underscore the need for targeted improvements in financial literacy programs to better address the participants' financial knowledge and behaviors.

Table 3: Inferential Statistics

Participation in Financial Literacy Programs	Count	Mean	Standard Deviation	Minimum	25th Percentile	Median	75th Percentile	Maximum
Yes	100	0.86	0.35	0	0.75	1.00	1.00	1
No	100	0.70	0.46	0	0.50	1.00	1.00	1

Source: Author‘s Own Compilation

The table provides a statistical summary of participants' involvement in financial literacy programs. Those who participated (Yes) had a mean score of 0.86, with a standard deviation of 0.35, indicating high and consistent participation. Non-participants (No) had a lower mean score of 0.70, with a higher standard deviation of 0.46, suggesting more variability. Both groups had the same median (1.00) and maximum (1), but differed in their 25th percentile values (0.75 for Yes and 0.50 for No), indicating greater participation in the Yes group.

Table 4: T-test Results for 'Savings Account'

Group Comparison	T-statistic	P-value
Yes vs. No Participation in Financial Literacy Programs	**3.44**	**0.0007**

Source: Author‘s Own Compilation

The t-test results for 'Savings Account' indicate a significant difference between participants who underwent financial literacy programs and those who did not. The t-statistic of 3.44 and the p-value of 0.0007 (which is well below the common significance threshold of 0.05) suggest that the difference in the mean scores for having a savings account between the two groups is statistically significant. This implies that financial literacy programs have a positive impact on participants' likelihood of maintaining a savings account, supporting the effectiveness of these programs in improving banking practices among rural populations.

5. Implications of the Study:

This study's implications are multifaceted and crucial for policy makers, financial institutions, and NGOs aiming to enhance financial inclusion in rural Odisha and similar regions. Firstly, the findings underscore the effectiveness of targeted financial literacy programs in improving banking practices among rural households. This suggests that investing in such initiatives can lead to tangible benefits such as increased savings, better credit management, and improved financial planning skills. Secondly, the study highlights the role of education in building trust and familiarity with formal financial institutions. By fostering this trust, financial literacy programs can help reduce reliance on informal and often exploitative financial services prevalent in rural areas. This shift towards formal banking can potentially stabilize household finances, reduce vulnerability to economic shocks, and contribute to long-term economic resilience.

Furthermore, the research underscores the need for tailored approaches to address regional disparities in financial access and awareness. Insights gained from this study can guide the design of more effective interventions that account for local socio-economic contexts and cultural dynamics. Ultimately, the study's implications extend beyond academia to practical applications in policy formulation and program implementation. It emphasizes the importance of sustained investment in financial education as a cornerstone of broader efforts to promote inclusive growth and economic development in underserved communities.

6. Scope for Further Research:

Future studies in this area could explore longitudinal impacts of financial literacy programs to assess sustainability of improved banking practices over time. Comparative studies across different regions within Odisha could provide insights into regional variations in program effectiveness. Qualitative research could delve deeper into the behavioral changes and socio-economic factors influencing banking decisions post-program participation. Moreover, examining the role of technology, such as mobile banking, in complementing traditional financial literacy initiatives could offer innovative strategies for scaling up financial inclusion efforts. Lastly, a gender-focused study could investigate differential impacts of these programs on men and women, addressing gender-specific barriers to financial empowerment in rural communities.

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TECHNOLOGY AND INNOVATION IN BLOCKCHAIN FOR BUSINESS AND MANAGEMENT IN FUTURE INDIA

M. R. Ramesh

Abstract

Blockchain technology, known for its decentralized and immutable ledger system, is rapidly transforming business operations and management practices globally. In the context of India, this innovative technology presents a remarkable opportunity to enhance transparency, efficiency, and security across various sectors. This paper examines the current state and future prospects of blockchain technology in India's business landscape, focusing on its applications in supply chain management, financial services, healthcare, and public administration. By providing a secure and transparent way of recording transactions, blockchain can significantly reduce fraud, streamline operations, and ensure regulatory compliance. The paper also discusses the potential for increased adoption of blockchain across diverse industries in India, driven by ongoing technological advancements and supportive regulatory developments. However, the widespread adoption of blockchain faces challenges such as technical complexity, scalability issues, and regulatory uncertainty. This study highlights the need for a robust regulatory framework and investment in skill development to overcome these challenges. By leveraging blockchain technology, Indian businesses can achieve sustainable growth and maintain a competitive edge in the global market. The insights provided in this paper aim to guide policymakers, industry leaders, and researchers in understanding the transformative potential of blockchain technology for business and management in future India.

Keywords: Blockchain, Innovation, Technology, Decentralized Ledger, Transparency, Sustainable Growth

1. Introduction

Blockchain technology, characterized by its decentralized, secure, and transparent ledger system, has the potential to revolutionize various industries. Initially introduced as the underlying technology for Bitcoin, blockchain has evolved far beyond its crypto currency origins. In the context of business and management, blockchain can transform traditional practices by enhancing efficiency, transparency, and security. In India, the adoption of blockchain technology is gradually increasing, driven by the need for more efficient and trustworthy systems. This research paper aims to explore the current state of blockchain technology in India, its applications in business and management, and its future prospects. The paper also examines the challenges and opportunities associated with blockchain adoption in the Indian business landscape.

M. R. Ramesh, Indira Gandhi Centre for Atomic Research, Kalpakkam-603102, Tamilnadu, India, Email: gascramesh@gmail.com

1.1 Background of the Study:

Blockchain technology was introduced in 2008 by an anonymous entity known as Satoshi Nakamoto through the creation of Bitcoin, the first cryptocurrency. The core idea behind blockchain is a decentralized ledger that records transactions in a secure, immutable, and transparent manner. Each transaction is verified by a network of nodes and then added to a block, which is linked to the previous block, forming a chain of blocks – hence the name blockchain.

While blockchain's initial application was in cryptocurrencies, its potential for other uses quickly became apparent. Blockchain's characteristics of decentralization, immutability, and transparency make it suitable for various applications beyond finance. Industries such as supply chain management, healthcare, and public administration have begun exploring blockchain to address long-standing issues related to transparency, security, and efficiency.

In India, the adoption of blockchain technology is in its nascent stages, but the interest is growing rapidly. Both the government and private sector are keen to explore blockchain solutions to enhance operational efficiency and reduce fraud. The Indian government has shown a proactive stance by launching initiatives such as the National Strategy on Blockchain, aimed at fostering blockchain innovation and adoption across different sectors.

1.2 Objectives of the Study:

The primary objective of this research paper is to examine the role of blockchain technology in transforming business and management practices in India. The specific objectives include:

1.2.1 Analysing the Current State of Blockchain Adoption in India

- Assessing the extent to which blockchain technology is being adopted across various industries in India.
- Identifying the key drivers and barriers to blockchain adoption in the Indian business landscape.

1.2.2 Exploring Applications of Block-chain in Business and Management

- Investigating how blockchain is being used to improve supply chain management, financial services, healthcare, and public administration in India.
- Highlighting successful case studies and pilot projects where blockchain has been implemented.

1.2.3 Assessing the Future of Block-chain in India

- Evaluating the potential for increased blockchain adoption across different sectors in the future.
- Discussing the role of regulatory developments in shaping the blockchain ecosystem in India.
- Exploring technological advancements that could enhance the capabilities and scalability of blockchain solutions.

1.2.4 Identifying Challenges and Opportunities

- Examining the technical, regulatory, and operational challenges associated with blockchain adoption in India.
- Identifying the opportunities that blockchain presents for businesses in India, particularly in terms of innovation, efficiency, and security.

1.2.5 Providing Recommendations for Businesses and Policymakers

- Offering insights and recommendations for businesses on how to leverage blockchain technology for sustainable growth.
- Suggesting policy measures that can support and accelerate the adoption of blockchain technology in India.

2. Current Applications of Block-chain in Business and Management:

2.1 Supply Chain Management:

One of the most promising applications of blockchain technology in business is supply chain management. In India, supply chains are often complex and involve multiple intermediaries, which can lead to inefficiencies, fraud, and lack of transparency. Blockchain addresses these issues by providing a decentralized ledger that records every transaction in the supply chain. Each participant in the supply chain can access the same information in real-time, ensuring transparency and traceability. For example, agricultural companies in India are using blockchain to track the journey of produce from farm to table, ensuring the authenticity and quality of products. This traceability is crucial in combating counterfeit products, which is a significant issue in the Indian market.

2.2 Financial Services:

The financial sector in India is undergoing a transformation with the adoption of blockchain technology. Blockchain enables secure, transparent, and efficient transactions, which is particularly beneficial for financial services. One of the key applications is in cross-border payments. Traditional cross-border transactions are time-consuming and expensive due to the involvement of multiple intermediaries. Blockchain simplifies this process by enabling direct peer-to-peer transactions, reducing the time and cost involved. Indian banks and financial institutions are also exploring blockchain for Know Your Customer (KYC) processes, which are essential for regulatory compliance. Blockchain can streamline KYC by providing a single, immutable source of truth for customer identity verification, reducing duplication of effort and enhancing data security.

2.3 Healthcare Management:

In the healthcare sector, blockchain technology is being leveraged to improve data management and security. Patient data are highly sensitive and requires stringent security measures to prevent breaches. Blockchain provides a secure and immutable ledger for storing patient records, ensuring that data cannot be altered or tampered with. This enhances patient privacy and data integrity. In India, healthcare providers are beginning to implement blockchain for managing electronic health records (EHRs). Blockchain can also facilitate interoperability between different healthcare systems, allowing seamless sharing of patient data among hospitals, clinics, and laboratories. This interoperability is crucial for improving patient care and outcomes.

2.4 Government and Public Services:

The Indian government is exploring blockchain applications in various public services to enhance transparency, efficiency, and security. One of the notable applications is in land registration. Land records in India are often plagued with issues of corruption, fraud, and inefficiency. Blockchain can address these issues by providing a transparent and immutable ledger of land ownership and transactions. This ensures that land records are accurate, tamper-proof, and easily accessible to all stakeholders. Another application is in identity verification. Blockchain can provide a secure and decentralized system for verifying identities, reducing the risk of identity theft and fraud. The government is also exploring blockchain for voting systems, which can enhance the security and transparency of elections.

2.5 Retail and Consumer Goods:

Retail and consumer goods sectors in India are also benefiting from blockchain technology. Blockchain enables retailers to track the entire lifecycle of a product, from manufacturing to delivery. This transparency helps in verifying the authenticity of products, especially in luxury goods and pharmaceuticals, where counterfeiting is a significant issue. Consumers can scan a product's QR code and access its entire history, ensuring that they are purchasing genuine products. Additionally, blockchain can enhance loyalty programs by providing a secure and transparent ledger of rewards points, ensuring that points are accurately recorded and cannot be tampered with.

3. Prospects of Block-chain in India:

Block-chain technology, with its decentralized and immutable ledger system, is poised to revolutionize various industries in India, particularly in business and management. As the technology matures and its adoption becomes more widespread, several future prospects emerge that highlight the potential impact of blockchain on India's business landscape. These prospects include increased adoption across industries, regulatory developments, and technological advancements.

3.1 Increased Adoption Across Industries

One of the most significant future prospects of blockchain in India is its increased adoption across diverse industries. Currently, blockchain is primarily used in sectors such as finance, supply chain management, and healthcare. However, as the technology's benefits become more widely recognized, its applications are expected to expand to other sectors, including agriculture, education, real estate, and retail.

In agriculture, blockchain can enhance supply chain transparency, ensuring the authenticity and traceability of products from farm to table. This can help in combating food fraud and ensuring food safety. In education, blockchain can be used to securely store and verify academic credentials, making it easier for institutions and employers to validate qualifications. In real estate, blockchain can streamline property transactions by reducing the need for intermediaries and minimizing the risk of fraud.

3.2 Regulatory Developments

The regulatory landscape for blockchain in India is still evolving. The Indian government is keen on leveraging blockchain technology for various public services, but a comprehensive regulatory framework is necessary to support its widespread adoption. Future regulatory developments are expected to provide clarity on the legal status of blockchain-based transactions and smart contracts, as well as guidelines for data privacy and security.

Clear and consistent regulations will encourage investment in blockchain technology and foster innovation. For instance, regulatory support for blockchain in the financial sector can lead to the development of new financial products and services, such as decentralized finance (DeFi) platforms, which can increase financial inclusion. Moreover, regulatory clarity can also help in addressing concerns related to data privacy and security, ensuring that blockchain solutions comply with existing laws and regulations.

3.3 Technological Advancements

The future of blockchain in India is also closely tied to ongoing technological advancements. As research and development in blockchain technology continue, more robust and scalable solutions are expected to emerge. Innovations such as smart contracts, decentralized applications (DApps), and interoperability solutions will enhance the capabilities of blockchain, making it more versatile and efficient.

Smart contracts, which are self-executing contracts with the terms of the agreement directly written into code, can automate complex business processes and reduce the need for intermediaries. This can lead to significant cost savings and increased efficiency in various industries. Decentralized applications (DApps) can provide new business models and services, enabling peer-to-peer transactions and creating new opportunities for entrepreneurs and developers.

Interoperability solutions, which enable different blockchain networks to communicate and share data, will also play a crucial role in the future of blockchain in India. Interoperability can facilitate seamless data exchange between different blockchain platforms, enhancing collaboration and innovation across industries.

4. Challenges and Considerations:

Blockchain technology holds immense potential to transform business and management practices in India. However, the adoption and implementation of this technology are not without challenges. This section explores the key challenges and considerations that businesses and policymakers must address to harness the full potential of blockchain technology in India.

4.1 Technical Complexity:

One of the primary challenges of adopting blockchain technology is its technical complexity. Blockchain systems require a high level of technical expertise to develop, deploy, and maintain. This includes understanding the underlying cryptographic principles, consensus mechanisms, and smart contract development. The shortage of skilled professionals in blockchain technology in India can hinder its widespread adoption. Businesses need to invest in training and development to build the necessary technical skills within their teams. Additionally, educational institutions should incorporate blockchain technology into their curricula to prepare the future workforce for this emerging field.

4.2 Regulatory Uncertainty:

Regulatory uncertainty is a significant barrier to the adoption of blockchain technology in India. While the Indian government has shown interest in exploring blockchain applications, clear and consistent regulatory policies are still lacking. Businesses are often hesitant to invest in blockchain projects due to concerns about compliance and legal ramifications. To foster blockchain innovation, the government needs to establish a comprehensive regulatory framework that addresses issues such as data privacy, security, and digital asset management. Clear regulations will provide businesses with the confidence to invest in and adopt blockchain technology.

4.3 Scalability Issues:

Scalability is another critical challenge for blockchain technology. Current blockchain networks, such as Bitcoin and Ethereum, face limitations in transaction speed and capacity. These limitations can hinder the ability of blockchain systems to handle large volumes of transactions required for business operations. Scalability solutions, such as sharding, off-chain transactions, and layer-2 protocols, are being developed to address these issues. However, these solutions are still in the experimental stage and need further research and development before they can be widely adopted.

4.4 Interoperability:

Interoperability between different blockchain networks is essential for the seamless exchange of information and assets across platforms. Currently, there is a lack of standardization in blockchain protocols, making it difficult for different systems to communicate with each other. This can limit the potential applications of blockchain technology in business and management. Developing interoperability standards and protocols is crucial to enable the integration of blockchain networks and maximize their utility.

4.5 Security Concerns:

While blockchain technology is inherently secure due to its decentralized and immutable nature, it is not immune to security threats. Smart contract vulnerabilities, 51% attacks, and phishing scams are some of the security risks associated with blockchain systems. Businesses must implement robust security measures to protect their blockchain applications from these threats. This includes conducting regular security audits, implementing multi-signature wallets, and educating users about potential security risks.

4.6 Integration with Legacy Systems:

Integrating blockchain technology with existing legacy systems can be challenging for businesses. Many organizations have invested heavily in their current IT infrastructure, and transitioning to a blockchain-based system can be costly and time-consuming. Businesses need to carefully assess the compatibility of blockchain technology with their existing systems and develop a clear integration strategy. This may involve adopting hybrid solutions that combine blockchain with traditional systems to ensure a smooth transition.

4.7 Energy Consumption:

Block-chain networks, especially those using proof-of-work (PoW) consensus mechanisms, consume significant amounts of energy. This has raised concerns about the environmental impact of blockchain technology. As India seeks to promote sustainable development, the energy consumption of blockchain systems must be addressed. Transitioning to more energy-efficient consensus mechanisms, such as proof-of-stake (PoS) or other alternatives, can help mitigate the environmental impact of blockchain technology.

5. Recommendations for Businesses and Policymakers:

5.1 Recommendations for Businesses:

Invest in Block-chain Education and Training: Businesses should prioritize investing in education and training for their workforce to build expertise in blockchain technology. Understanding the fundamentals of blockchain, smart contracts, and decentralized applications (DApps) is essential for leveraging this technology effectively. Companies can collaborate with educational institutions or provide in-house training programs to equip employees with the necessary skills.

Pilot Block-chain Projects : Before committing to large-scale blockchain implementations, businesses should consider running pilot projects. Pilot programs allow organizations to test blockchain solutions in a controlled environment, evaluate their effectiveness, and identify potential challenges. This approach minimizes risks and provides valuable insights for scaling up successful blockchain applications.

Foster Partnerships and Collaborations: Collaboration with technology providers, research institutions, and industry peers is crucial for successful blockchain adoption. Businesses should actively seek partnerships to gain access to cutting-edge blockchain technologies, share knowledge, and stay updated on industry trends. Collaborative efforts can also help in addressing common challenges and accelerating the development of blockchain solutions.

Focus on Use Case Identification: Identifying and prioritizing specific use cases where blockchain can deliver significant benefits is key. Businesses should analyze their operations to determine areas where blockchain can enhance transparency, efficiency, and security. Common use cases include supply chain management, financial transactions, and data integrity. Tailoring blockchain solutions to address specific business needs ensures more effective and impactful implementations.

Ensure Data Privacy and Security: While block-chain provides enhanced security, businesses must ensure that their blockchain implementations comply with data privacy regulations. Organizations should implement robust data protection measures and ensure that blockchain solutions align with legal and regulatory requirements. Addressing data privacy concerns helps build trust with customers and stakeholders.

5.2 Recommendations for Policymakers:

Develop a Clear Regulatory Framework: Policymakers should focus on creating a clear and comprehensive regulatory framework for blockchain technology. Clear regulations will provide businesses with the guidance they need to navigate the legal landscape and ensure compliance. The framework should address aspects such as data privacy, security, and smart contract enforceability while fostering innovation.

Promote Block-chain Research and Development: Investment in block-chain research and development is crucial for advancing the technology and its applications. Policymakers should encourage research initiatives by providing funding, grants, and incentives for academic institutions and private sector entities. Supporting R&D helps drive innovation and positions India as a leader in blockchain technology.

Facilitate Industry-Academia Collaboration: Facilitating collaboration between industry and academia can accelerate blockchain innovation and adoption. Policymakers should support initiatives that bring together researchers, technology providers, and businesses to work on blockchain projects. Collaborative efforts can lead to the development of practical solutions and help bridge the gap between theoretical research and real-world applications.

Establish Block-chain Standards and Best Practices; Developing industry standards and best practices for blockchain technology can help ensure interoperability, security, and efficiency. Policymakers should work with industry stakeholders to establish standards that promote consistency and reliability in blockchain implementations. Standards can also help mitigate risks and enhance the overall effectiveness of blockchain solutions.

Encourage Block-chain Integration in Public Services: Policymakers should explore the integration of blockchain technology in public services to improve transparency and efficiency. Blockchain can be used for applications such as land registration, identity verification, and public procurement. By adopting blockchain in public services, the government can demonstrate the technology's potential and inspire broader adoption across the private sector.

Conclusion:

Block-chain technology presents a transformative opportunity for business and management in India, offering significant advantages in terms of transparency, efficiency, and security. Its potential to enhance supply chain management, financial services, healthcare, and public administration underscores its importance in addressing critical challenges faced by various sectors. As India continues to embrace blockchain, the technology promises to drive innovation and streamline operations across industries.

However, realizing the full potential of blockchain requires overcoming several challenges, including technical complexity, regulatory uncertainty, and scalability issues. The development of clear regulatory frameworks and continued advancements in blockchain technology will be crucial for facilitating widespread adoption. Additionally, investment in education and skill development will be essential to build the expertise needed to harness blockchain's benefits effectively.

Looking forward, the integration of blockchain into diverse sectors in India is poised to foster sustainable growth and improve operational efficiencies. By addressing existing challenges and leveraging technological advancements, India can position itself as a leader in blockchain innovation, paving the way for a more transparent, efficient, and secure business environment.

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NPAS AND PROFITABILITY IN INDIAN BANKS: AN EMPIRICAL ANALYSIS

***Diptiranjan Nayak**
****Dr. Sasmita Mishra**
*****Sarada Kar**

Abstract:

The paper examines the impact of non-performing assets (NPAs) on the profitability of Indian public sector and leading private banks, using data from 2005 to 2019. NPAs, defined by the Reserve Bank of India as loans overdue for more than ninety days, are categorized into substandard, doubtful, and loss assets. High NPAs reduce bank profitability due to declining interest margins and rising operating costs. This study uses panel data from 39 banks, estimating profitability determinants through both bank-specific factors (non-performing advances, deposits, non-interest income, interest income, operational efficiency, capital adequacy) and macroeconomic factors (GDP growth, inflation, interest rates). The findings indicate that increasing NPAs negatively affect profitability, while non-interest income, interest income, capital adequacy, and GDP growth positively contribute. The study suggests reducing NPAs and operating costs to enhance profitability. Though data for 2020 is available, it was excluded due to recent mergers among Public Sector Banks, reducing their number from 20 to 12. Future studies may incorporate the effects of these mergers over a longer period to understand their impact on NPAs and profitability.

Keywords: NPA, Profitability, Operating Cost, Merger

1. Introduction:

Growing rates of nonperforming loans or advances could have a negative effect on banks' performance by pinching their profits and lowering their profitability. Non-performing assets (NPAs) are typically defined as loans or advances that are not repaid in full or that are unable to be serviced by the borrower. Not only does an NPA render an asset unproductive, but banks are also unable to recoup their original capital. The bank's ability to generate income is reduced on the one hand, but there is also a chance that the principal will be recovered. While declining interest revenue has a direct effect on a bank's profitability, a bank's capital base may erode if principal capital is not recovered.

Assets for which interest payments due for more than ninety days are classified as non-performing assets (NPAs) by the Reserve Bank of India (RBI). Within this category, the RBI has categorized three different kinds of assets such as ; substandard assets, doubtful assets, and loss assets.

An asset is classified as substandard when the payment has not been realised for less than or equal to a year and it is considered an NPA. Similarly, an asset that has remained non-performing for longer than a year is considered as questionable asset. When an asset is lost, the loss has already been determined and the associated cost has not been written off it is considered as loss

*Diptiranjan Nayak, Research Scholar C.V. Raman Global University, Bhubaneswar, Mail id: diptiranjan175@gmail.com
**Dr. Sasmita Mishra, Associate Professor, C.V. Raman Global University, Bhubaneswar, Mail id: sasmitamishra@cgu-odisha.ac.in
***Sarada Kar, Research Scholar, Ravenshaw University, Cuttack, Mail id: karsarada1969@gmail.com

asset. Total non-performing assets (NPAs) of a bank are the sum of the three asset classes mentioned above. These NPAs make the banks less profitable because their interest margins are declining and their operating costs are rising,. According to studies, banks with high NPA levels typically have to pay "carrying costs" on their non-performing assets, which lower their profitability. Additionally, as a significant portion of operational profits must go toward funding visioning obligations, an increase in non-performing assets (NPA) is likely to have a negative effect on bank profitability. Thus, the provisioning and carrying expenses associated with non-performing assets (NPAs) deplete the banks' profitability.

There are several factors, including non-performance of loans that can potentially affect the profitability of the banks. It can broadly be categorised into the bank specific, and macroeconomic factors. The bank-specific factors include non-performing advances deposits non-interest income, interest income, operational efficiency and capital adequacy. The macroeconomic factor includes GDP growth, rate of inflation, and interest rate,

.The present paper empirically analyses the impact of NPAs on the profitability of Indian public sector and leading private banks. Accordingly, the determinants of profitability have been estimated. The paper spreads over five sections. The introduction section has provided the background of the paper. The methodology section elaborates on the empirical strategy, data, variables and estimation model.

2. Literature Review:

Prior research consistently shows that non-performing assets (NPAs) negatively impact bank profitability. NPAs, though just one of many factors affecting profitability, have been widely studied.

Martin's analysis of the US banking industry from 1970 to 1976 found that increasing NPAs hurt bank profits. Masood and Ashraf's study of 25 Islamic banks across 12 countries from 2006 to 2010 showed that non-performing loans reduced bank profitability and performance. Similarly, Ongore and Kusa's study of Kenyan commercial banks from 2001 to 2010 identified a negative correlation between non-performing loans and bank profitability.

Al-Jafari and Alchami's analysis of 17 Syrian banks from 2004 to 2011 found that higher credit risk, measured by loan loss provisions, negatively affected profitability. Cucinelli studied 488 Italian banks from 2007 to 2013, revealing that increased credit risk led banks to reduce lending, harming profitability due to the need for higher provisioning. Duraj and Moci's study of Albanian banks from 1999 to 2014 also confirmed this negative relationship.

Research consistently shows that non-performing loans (NPLs) negatively affect bank profitability across various regions and periods. Islam and Nishiyama (1997-2012) found a negative correlation between NPLs and profitability in 259 commercial banks in South Asia, including India. Hashem (2004-2014) discovered that higher loan loss provisions, indicating higher credit risk, lower asset quality, and profitability in Egyptian banks. Bace (2014-2015) examined 13,000 deposit-taking institutions worldwide and found a similar negative correlation. Etale et al. (1994-2014) also reported a negative relationship between NPLs and profitability. Ozurumba (2000-2013) concluded that NPLs negatively impacted the profitability of Nigerian commercial banks, while Ozgur and Gorus (2006-2016) found a negative correlation between NPLs and profitability in Turkish banks. Overall, higher non-performing loans consistently lead to lower bank profitability across different countries and time periods.

2.1 Macro-economic Determinants of Profitability:

GDP growth Rate: It is the value of all final goods and services produced in a country in a given period of time. During higher eco- nomic growth, profitability of banks would be higher because it encourages banks to lend more and charge higher interests.

Inflation: It is the rate at which general price level of goods and ser- vices rises and the purchasing power of currency falls. Studies have found that profitability of banks will be higher with inflation. It has been used by prior studies on banks‘ profitability.

Interest rate: There has been mixed evidence with respect to the relationship between interest rate and profitability. Low interest rates along with stiff competition among banks put pressure on interest margins of banks and hence negatively affect bank profitability (Trujillo-Ponce 2013). Studies such as Demirguç-Kunt and Huizinga, Bourke have found a positive relationship between interest rates and bank profitability. The repo rate has been used as it reflects the lending rate of banks.

There are very few studies that cover current phase of NPAs with the revised definition while analysing the NPAs and profitability in Indian banks. The present study not only covers the recent phase of NPAs crisis, but also covers the time period with revised or new definition of NPAs. The definition of NPAs in the present study follows uniformity.

3. Method of Study:

3.1 Collection of Data:

In this study, we have drawn a sample of 39 scheduled commercial banks, out of which 20 are Public sector Banks (PSBs) and 19 are domestic private banks. As per the recent data, these 39 banks constitute more than 90 percent of the banking operation in terms of assets, and close to 95 percent in terms of deposits and credit disbursement in India.

In case of Public Sector Banks (PSBs), the overall management responsibility lies with the Government, as it remains the majority stakeholder. The PSBs are governed by specific acts (banking acts) passed by the parliament. On the other side, the private banks are registered under the Companies Act and governed as per that act. Their management lies with the majority promoters or shareholders. In terms of NPA volume, it is largely the PSBs and some private banks that have been badly affected by the NPA crisis. Few small private banks were dropped from the analysis due to unavailability of data. The time period of the study is from 2005 to 2019. The period of the study has been chosen as the definition of NPA underwent a change in 2004, and the NPA data from 2005 onward follow uniformity with the new definition. Annual data for the sample of 39 banks was collected from a Reserve Bank of India (RBI) publication Statistical Tables Relating to Banks in India. The bank specific determinates or factors that potentially explain the profitability of banks were obtained the above report. The data for macroeconomic variables were collected from the Handbook of capital adequacy. The study has used the following macroeconomic predictors of bank profitability—economic growth, inflation and interest rate to estimate the determinants of profitability.

3.2 Model Applied:

To understand how NPAs impact the profitability, we have estimated the determinants of profitability of Indian scheduled commercial banks. We have employed the panel data estimation procedure to estimate the factors that have affected the profitability of banks in India. The following functional relationship has been employed to analyse the determinants of profitability.

$profitability_{i,t} = \beta_0 + \beta_1 Non\text{-}performing\ advances_{i,t} + \beta_2 deposits_{i,t} + \beta_3 non\text{-}interest\ income_{i,t} + \beta_4 interest\ income_{i,t} + \beta_5 operational\ efficiency_{i,t} + \beta_6\ capital\ adequacy + \beta_7 economic\ growth_{tmm} + \beta_8 inflation\ rate_t + \beta_9 interest\ rate_t + \varepsilon_{i,t}$

Statistics on Indian Economy a publication of the RBI.

4. Analysis of Variables:

In this study, we have estimated the determinants of profitability of Indian Scheduled Commercial Banks. The dependent variable is profitability, which is determined by a set of bank specific and macroeconomic factors (Table 1). In the study, the Return on Assets (ROA) has been used as the variable for profitability. In literature, the ROA is widely used as indicator or proxy for bank profitability. It is an appropriate indicator of profitability, as it measures the earnings of a bank in relation to its total assets. Therefore, it has been used as the dependent variable. We have used the following bank specific explanatory variables like Net NPA, total deposit, interest income, non-interest income, operational efficiency and where i = bank, 1,….0.39, and t = time, 1,….,15. εi,t is the error term.

In the above equation, six bank specific factors and three macro-economic factors collectively determine the profitability of a bank. In the paper, we have employed both the fixed and random effect approach to estimate the determinants of bank profitability. By using fixed effect (FE) model, the impact of variables those are time variant can be analysed. The FE estimation also controls for all time invariant heterogeneity among the sample banks. Therefore it is likely to produce unbiased coefficient estimates due to omitted time invariant characteristics.

Table 1: Description of Variables Used in the Study

Notation	Variable	Description	Expected effect
Dependent Variable	Profitability	Ratio of Net Income to Total Assets (%)	ROA
NNPA	Net Non-Performing Assets	Ratio of Net NPA to Net Advances (%)	Negative
Ln TD	Total deposit	Natural Logarithm of Total Deposit	Positive
NII	Non-Interest Income	Ratio of Non- Interest Income to Total Income (%)	Positive
II	Interest Income	Net Interest Margin (%)	Positive
OCTII	Operating Cost	Ratio of Operating Cost to Total Interest Income (%)	Negative
CapT1	Capital Adequacy	Tier 1 capital as per Basel norm (%)	Positive
GDPGr	GDP growth rate	Annual Economic Growth rate (%)	Positive
INF Inflation	Inflation	Annual rate of Inflation (%)	Positive
IR	Interest rate	Annual Average Repo Rate (%)	Positive

The general form of the fixed effects model can be expressed in the following equation.

$$P_{i,t} = C + \beta X_{i,t} + \mu_i + u_{i,t} \quad (2)$$

In Eq.(2), the dependent variable ‗profitability' is Pi,t for i-th bank and t-th year. The dependent variable Pi, t is determined by a set of exogenous regressor that includes both the bank specific and macroeconomic variables, Xi, t , for i-th bank and t-th year; and βs are model parameters. Beta value in regression is the estimated coefficients of the independent or explanatory variables. It indicates a change in the dependent variable as a result of a unit change in explanatory variables keeping other independent or explanatory variables constant. The unobserved individual bank effect is μi, and the random error is, ui,t. It is assumed that the set of explanatory variables is uncorrelated with the error term ui,t , and the error term is normally distributed, ui,t~N(0,σ 2), where σ 2 is>0.

Table2: Summary Statistics of the Dependent and Explanatory Variables

Variables	Obs	Mean	SD	Min	Max
ROA	585	0.65	0.96	— 5.49	2.13
NNPA	585	2.41	2.72	0.01	16.69
lnTD	585	4.84	0.62	2.82	6.46
NII	585	1.17	0.46	0.16	3.57
II	585	2.70	0.71	0.23	5.61
CAPT1	585	10.27	4.12	4.88	55.93
OCTII	585	0.24	0.08	0.11	1.33
GDPGr	585	6.80	1.49	3.09	8.50
INF	585	6.01	2.57	2.28	10.53
IR	585	6.82	0.93	5.08	8.00

We have estimated the following random effect (RE) model to analyse the determinants of profitability in Indian scheduled commercial banks.

The general form of the RE model can be expressed in the following equation .

$$P_{i,t} = C + \beta X_{i,t} + \mu + u_{i,t} + \varepsilon_{i,t} \qquad (3)$$

In Eq. (3), the random error, εi,t is with in entity error term and ui,t is between entity error term. μ is the bank specific random independent variables. More clearly, it assumes that the unobserved heterogeneity is uncorrelated with each explanatory variable across in all time period. Then, if the random effect model is significant, it indicates that the unobserved individual (cross-sectional) effects are uncorrelated with all the explanatory variables across all time-period.

The following fixed effects (FE) model has been estimated to analyse the determinants of profitability.

$$ROA_{i,t} = C+\beta_1 NNPA_{i,t} +\beta_2 TD_{i,t} +\beta_3 NII_{i,t} + \beta_4 II_{i,t} + \beta_5 OCTII_{i,t} + \beta_6 CapT1_{i,t} + \beta_7 GDPGr_{i,t} + \beta_8 INF_{i,t} + \beta_9 IR_{i,t} + \mu_i +u_{i,t} \quad (4)$$

In Eq. (4), the dependent variable is ROAi,t . It is determined by a set of exogenous regressors that includes both the bank specific and macroeconomic variables. The unobserved individual bank effect is μi, and random dependent and explanatory variables for the time period between 2005 and 2019 is presented in the form of mean, standard deviation, minimum and maximum. The results show that the return on profitability (ROA) ranges from 5.49 to 2.13, with a mean ROA value of 0.65.

Similarly, the minimum and maximum values of the explanatory variables range low to high. The mean and standard deviation values of the variables suggest that there is variation between the two.

The correlation matrix with correlation coefficients of the variables used is presented in Table 3. The results suggest that there is no multi-collinearity problem in the data. The results show a negative association of ROA with NNPA and CapT1. The rest of the explanatory variables exhibit positive association with ROA.

Table-3 Co-relation Matrix:

ROA		NNPA	*ln*TD	NII	CapT1	OCTII	GDPGr	INF	IR	II
ROA	1.000									
NNPA	- 0.770	1.000								
*ln*TD	- 0.099	0.264	1.000							
NII	0.373	- 0.195	- 0.019	1.000						
CapT1	0.277	- 0.205	- 0.250	0.162	1.000					
OCTII	- 0.093	- 0.025	- 0.350	0.388	0.178	1.000				
GDPGr	0.050	0.015	- 0.075	0.021	- 0.074	0.064	1.000			
INF	0.357	- 0.458	- 0.307	0.083	0.003	0.050	- 0.169	1.000		
IR	0.215	- 0.265	- 0.031	- 0.146	-0.033	- 0.130	- 0.388	0.128	1.000	
II	0.516	- 0.399	- 0.206	0.327	0.411	0.319	0.018	0.089	0.072	1.000

Unlike the fixed effects model, in the random effects (RE) model, it is assumed that the error term is uncorrelated with the explanatory variables. It allows the time invariant variables to act as similar to the predictors in the model.

The benefit of RE is that the inferences can be generalized , beyond the sample drawn in a model.

We have estimated the following random effect (RE) model to analyse the determinants of profitability in Indian scheduled commercial banks.

The general form of the RE model can be expressed in the following equation.

$ROA_{i,t} = C + \beta 1NNPA_{i,t} + \beta 2TD_{i,t} + \beta 3NII_{i,t} + \beta 4II_{i,t} + \beta 5OCTII_{i,t} + \beta 6CapT1_{i,t} + \beta 7GDPGr_{i,t} + \beta 8INF_{i,t} + \beta 9IR_{i,t} + \mu + u + \varepsilon_{i,t}$ (5)

Table 4: Determinants of bank profitability: panel regression, time period: 2005–2019

Variables	**Fixed effect model**			**Random effect model**	
Dependent variable: ROA	Coefficient	SE		Coefficient	SE
Explanatory variables					
NNPA	— 0.2136***	0.0258		— 0.2083***	0.0207
lnTD	0.0978	0.3103		0.1640***	0.0505
NII	0.4911***	0.1051		0.5266***	0.0740
II	0.2687***	0.0866		0.3097***	0.0635
CAPT1	0.0282***	0.0092		0.0291***	0.0097
OCTII	— 2.9788**	1.2694		— 3.3055***	1.1504
GDPGr	0.5507***	0.1737		0.5126***	0.1629
INF	— 0.4228	0.4191		— 0.3160	0.2167
IR	1.3884	1.2767		1.0733	0.7345
C	— 10.5673	5.8362		— 9.2618	4.5848

Number of observations	585			585	
Number of Banks	39			39	
R-Square	0.735			0.734	
Prob [*F* Statistics]	0			0	
***$p < 0.001$; ** $p < 0.05$; *$p < 0.01$					

We have estimated both the fixed effect (Eq. 4) and random effect (Eq. 5) models to analyse the determinants of profitability in Indian scheduled commercial banks. The estimation result of the FE model shows that there is an inverse relationship between the rate of profit (ROA) and non-performing loans (NNPA), and the association is statistically significant (Table 4). Non-interest income (NII), interest income (II), capital adequacy (CAPT1) and GDP growth (GDPGr) are found to be positively associated with the rate of profit (ROA). The estimates are found to be statically significant. Ratio of operating cost to interest income (OCTII) shows negative relationship with profitability (ROA). The other macroeconomic variables like rate of inflation and interest rate show negative and positive associations, respectively. However their association is not statistically significant.

Table 5: Hausman test

Chi-Sq. statistics	Chi-Sq. d.	Prob
23.7	20	0.255

The regression estimates of the RE model also give a similar result (Table 3). NPAs and operating cost (OCTII) are negatively associated with the rate of profit (ROA). Their relationship is statistically significant. On the other side, deposit (lnTD), non-interest income (NII), interest income (II), capital adequacy (CAPT1) and GDP growth (GDPGr) exhibit positive association with profitability (ROA). Their association is statistically significant. The other two macro- economic explanatory variables, the rate of inflation and interest rate exhibit negative and positive associations, respectively. While total deposit was found to be significant in RE, it is found to be insignificant in FE model. In order to arrive at an appropriate test between FE and RE, the Hausman test was conducted. The results of Hausman test suggest that the RE estimate will be appropriate for the sample as the ‗p'value is greater than 0.05 (Table 5).

5. Discussion:

In this paper, we have examined the impact of NPAs on the profitability of Indian banks. Using set of bank specific and macroeconomic variables, we have estimated the determinants of profitability of 39 commercial banks in India. The estimation result suggests that growing incidence of NPA is likely to reduce the profitability of the banks considerably. Results also suggest that increase in operating cost has negative impact on the profitability in Indian banks. The negative association between profitability (ROA) and NPA (NNPA); and profitability (ROA) and operating cost (OCTII) is statistically significant. The results show that there is a positive relationship between profitability (ROA), and interest earning (II) and non-interest earnings (NII). Their association is found to be statistically significant. The results further show that the volume of deposit (lnTD) is positively associated with the profitability (ROA). As financial intermediaries, commercial banks largely relay on interest earnings as their major source of income. In order to boost up their interest earnings, the banks must reduce their NPA volumes. The result suggests that Indian banks must reduce NPAs and operating cost in order to enhance their profitability.

The findings of the empirical estimation are similar to the findings of the studies by Kannan et al. , Sensarma and Ghosh , and Sinha and Sakshi. A study by Kannan et al. , using data for 86 Indian banks, for the period from 1995–96 to 1999–2000 found that banks with higher NPAs have relatively lower profit margins. A study by Sensarma and Ghosh of Indian commercial banks, for the period from 1997– 98 to 2000–01, reported that a rise in NPA adversely affects the interest margins for banks and hence reduces bank profitability. Similarly, Sinha and Sakshi, in their study of 42 Indian commercial banks for the period from 2000 to 2013, found that higher credit risk, as measured by provision non-performing assets, negatively impacts bank profitability. Analysing NPAs in 46 Indian commercial banks from 2007 to 2014, Bawa et al. found a negative relationship between NPAs and return on assets.

6. Conclusion:

The paper has empirically estimated the factors that determine the profitability of Indian scheduled commercial banks, in order to understand the relationship between increasing non-performing advances and the rate of profit. The determinants of profitability have been estimated by taking a set of bank specific and macroeconomic explanatory variables. From the panel data estimation of 39 Public Sector and private banks, we found that the increase in non-performing advances has negative impact on the rate of profit. Operating cost is also found to be negatively associated with profitability. The estimates of both the FE and RE model suggest that non-interest income, interest income, capital adequacy and GDP growth rate have positively contributed to the rate of profit of the Indian banks. Given that, banks to a large extent depend on the performance of their loan assets as a critical source of income and profit, the rising NPAs is a cause of concern. It on the one hand reduces their interest earning and on the other side also affects their future deposits and increases their operating cost as the cost of recovery of NPAs will go up. The study suggests that the banks must reduce their NPAs and operating cost to improve their profitability.

7. Limitation of the study and Avenues for Future Research:

The findings of the study are based on a sample of banks that mostly covers the PSBs and the private banks, covering the time period from 2005 to 2019. Though data for the year 2020 are available, it could not be incorporated due to recent bank mergers in India. Between 2020 and 2021, several mergers took place within the Public Sector Banks (PSBs). Post-merger, the number of PSBs has declined from 20 to 12. While it would be interesting to include the mergers into the empirical analysis. However one year is a too short time period to make any meaningful conclusion. The effect of merger in the analysis of NPAs and profitability of banks can be studied in future, with the availability of data for a longer time period.

Appendix:

S. no.	Name of bank	Category	S. no.	Name of Bank	Category
1	ALLAHABAD BANK	PSB	21	AXIS BANK	Private
2	ANDHRA BANK	PSB	22	CATHOLIC SYRIAN BANK LTD	Private
3	BANK OF BARODA	PSB	23	CITY UNION BANK LIMITED	Private
4	BANK OF INDIA	PSB	24	DCB BANK LIMITED	Private
5	BANK OF MAHARASHTRA	PSB	25	THE DHANALAKSHMI BANK LTD	Private
6	CANARA BANK	PSB	26	FEDERAL BANK	Private
7	CENTRAL BANK OF INDIA	PSB	27	HDFC BANK	Private
8	CORPORATION BANK	PSB	28	ICICI BANK	Private
9	DENA BANK	PSB	29	IDBI BANK LIMITED	Private
10	INDIAN BANK	PSB	30	INDUSIND BANK	Private
11	INDIAN OVERSEAS BANK	PSB	31	JAMMU & KASHMIR BANK LTD	Private
12	ORIENTAL BANK OF COMMERCE	PSB	32	KARNATAKA BANK LTD	Private
13	PUNJAB AND SIND BANK	PSB	33	KARUR VYSYA BANK	Private
14	PUNJAB NATIONAL BANK	PSB	34	KOTAK MAHINDRA BANK LTD	Private
15	SYNDICATE BANK	PSB	35	LAKSHMI VILAS BANK	Private
16	UCO BANK	PSB	36	RBL	Private
17	UNION BANK OF INDIA	PSB	37	SOUTH INDIAN BANK	Private
18	UNITED BANK OF INDIA	PSB	38	TAMILNAD MERCANTILE BANK LTD	Private
19	VIJAYA BANK	PSB	39	YES BANK LTD	Private
20	STATE BANK OF INDIA & ITS ASSOCIATES	PSB			

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THE INFLUENCE OF ONLINE MARKETING SERVICES ON NON-BANKING FINANCE COMPANIES (NBFCS)

Dr. Jay Prakash Verma

Abstract:

The present study examines the various dimensions of digital marketing services and their impact on Non-Banking Finance Companies. The total number of questionnaires distributed in the self-administered survey was 350. The purposive sampling method is applied in this research for selecting the sample. Finally, 253 valid sets of questionnaires were responded and then used for further analysis using SPSS software version 21. A structured questionnaire was used to collect the data regarding influence of digital marketing services towards non-banking finance companies. The survey revealed that the respondents feel digital marketing can provide faster service. There is a significant influence of online marketing services on NBFCs.

Keywords: NBFC, Digital Marketing, Market Overview,

1. Introduction:

By targeting customers who are interested in your goods and services, digital marketing may assist you in generating new traffic, leads, and sales for the company. Web marketing is the practice of promoting business to high-value clients and potential leads online. Your business growth depends heavily on online marketing. There are several options to attract individuals who are interested in your business given that there are over 4.3 billion users of the internet and two billion of them make purchases online. In the past, businesses prioritized marketing via print, television, and radio. These choices are still available today, but the development of the internet caused a change in how businesses interact with their customers. Digital marketing becomes useful in this situation. Websites, social media, apps, search engines—anything that combines marketing with consumer feedback or a two-way connection, are used in this type of marketing. Newer trends and advanced technology led businesses to alter their self-promotion strategies. In the beginning of digital marketing, email was a widely used marketing medium. The focus switched to search engines like Netscape, which enabled companies to keyword things and tag their products to stand out. Sharing websites like Facebook have made it easy for businesses to collect data and respond to customer needs. Nowadays, businesses find it simpler to promote themselves to consumers, along with their goods and services, thanks to smartphones and other digital devices. According to studies, consumers prefer to access the internet on their phones. Therefore, it shouldn't come as a surprise that 70% of people decide what to buy before actually making the transaction (often on their phones).

Digital marketing is the component of marketing that utilizes internet and online based digital

Dr. Jay Prakash Verma, Assistant Professor-Marketing, Pune Institute of Business Management, Pune , Email Id: jayprakashverma@gmail.com

technologies such as desktop computers, mobile phones and other digital media and platforms to promote products and services. Its development during the 1990s in the new millennium, changed the way brands and businesses use technology for marketing. As digital platforms became increasingly incorporated into marketing plans and everyday life, and as people increasingly use digital devices instead of visiting physical shops, digital marketing campaigns have become prevalent, employing combinations of Search Engine Optimization (SEO), Search Engine Marketing (SEM), Content Marketing, Influencer Marketing, Content Automation, Campaign Marketing, Data-Driven Marketing, E-Commerce Marketing, Social Media Marketing, Social Media Optimization, Email Direct Marketing, Display Advertising, E–Books, And Optical Disks and Games have become commonplace practices. Digital marketing extends to non-Internet channels that provide digital media, such as television, mobile phones (SMS and MMS), call back, and on-hold mobile ringtones.

Non-banking Financial Companies (NBFCs) are financial institutions that provide certain types of banking services but do not hold a bank license. The NBFCs in India made a humble beginning way back in the 1960s to serve the need of the saviour and investors whose financial requirements were not sufficiently covered by the existing banking system. The NBFCs began to invite fixed deposits from the investors and work out leasing deals for big industrial firms. Initially they operated on a limited scale and could not make a significant impact on the financial systems. However between the 1980s and 1990s, NBFCs have gained strength in the Indian financial system. They are registered companies conducting business activities similar to regular banks. Their banking operations encompass making loans and advances available to consumers and business, acquisition of marketable securities, leasing of hard assets such as automotive hire purchase and insurance business. Though they are akin to banks, they differ in a couple of ways. NBFCs cannot accept demand deposits and cannot issue clearance facility to customers and also the deposits with them are not insured by the Deposit Insurance and Credit Guarantee Corporation (DICGC).

2. Literature Review:

The NBFCs are not only serving financial assistance to the SHGs group, but also contributing in the field of health, education, investment and infrastructural development (Kandpal, V. et al.,2023). After the recent Covid led pandemic, all these services came to digital platform to reach quickly to the clients (Surge, A. S., 2022). Since the year 2019, the NBFCs sector has also adopted automation of their major services to eliminate the monotonous and repetitive work (Jangir, K., et al., 2024). ESAF bank is a prominent example of providing mobile banking services even for business loan and other services (Shankar, N. S., & CA, M. A., 2024). Fintech is a new regime in the Indian financial sector, which plays a vital role in Indian financial Market. The technology like Block chain, Insuretech and Investech are used in NBFC sector (Sharma, S., Begde, P., & Sane, A., 2024).

Das (2016) also examined the growth and performance of NBFCs by comparing the same with that of Indian Banks. Data were collected from the Reserve Bank of India website for the period 2006-2014 for the research. During the study period, it is revealed that there is an increase in the proportion of NBFCs when compared to the banking sector. Kaushal (2016) examined the impact of NBFCs to the growth of Indian economy. The previous researcher conducted a descriptive research paper based on secondary data wherein it was revealed that the financial health and profitability of Indian NBFCs have improved over the years; however, NBFCs should open venues for overseas investors to make tie-ups in the form of technology transfer and requisite expertise. Rasyida et al., (2016) attempted to combine servperf model with important performance analysis technique to assess the service quality of service firms and identify dimensions which prioritize customer satisfaction. They employed case study method in hmad international airport Indonesia to demonstrate the applicability of the method. Their research had twofold objectives; one was to assess the service quality using the servperf model and second was to identify service firms selection attributes perceived as important to offer strategic implications that should be pursued to boost their competitiveness. They found that servperf model can be considered superior over the servqual model. Vivekanandan and Mohan (2016) in their study ―A review on impact of financial sector reforms on non-banking financial corporation‖ analysed the comparatively mature financial service practices in India particularly by Non-Banking Financial Corporations (NBFCs) in terms of services offered by this sector. NBFCs had turned out to be an integral part of growth of Indian financial system and the reforms of these sectors showed a positive response in terms of providing services across the country. The activities of NBFCs also enhanced competition and diversification in the financial sector which also spread risks, particularly at the time of financial distress, and had been increasingly recognized as a complementary service provider of the banking system at competitive cost of financing. The study showed that NBFCs in India represented a varied group of privately-owned, medium and small-scale financial intermediaries which offered a variety of services including hire purchase, equipment leasing, short term and long term loans, investments and chit fund activities, gold loan, etc. These companies also played an important role in providing credit to the unorganized sector and to the small borrowers in the semi-urban and rural areas. The study finally concluded that as the banking sector was highly regulated, the NBFCs received an advantage over banks in respect of simplified loan sanction procedures, flexibility, suitability in meeting the credit needs and low cost financing in the course of providing financial services. Basu (2019) in his paper ―Financial Performance of NBFCs – A Comparative Study on Selected Investment and Assets Finance Companies‖ makes a comparative analysis of the financial performance of selected investment and assets of finance companies during the period from 2005-06 to 2014-15. To compare the performance of NBFCs on the basis of selected performance indicators the study employed Kruskal-Wallis Test (H Test). The study concluded that there is no difference between the financial performances of each category of NBFCs apart from their nature of activities under their respective categories.

3. Theoretical Prospective:

3.1. Market Overview:

In 2020 and 2021, a significant expansion of the digital marketing industry was anticipated. Every part of our life has been influenced by the Pandemic during this two years, yet the digital world has continued to grow significantly. In 2022, a further rise was expected. The country with the second-largest internet population is India. Across the nation, high adoption rates for the internet have been seen. By 2023, it was anticipated that there will be over 5.3 billion internet users worldwide and around 666 million users in India. This suggests a wider customer movement toward online purchasing, making it wise and profitable for retail companies to get involved in digital marketing. Data usage is increasing in volume , people who use the internet for activities like online shopping and video streaming have grown in number significantly in recent years. It is anticipated that this number will increase due to the growing digital revolution. More money is being spent on digital marketing and promotion. The marketing expenditures of the biggest companies are currently being rearranged to focus mostly on digital platforms. According to statistics, the epidemic and several lockdowns would help the Indian e-commerce market reach Rs 7 trillion in 2023. This is another proof that digital marketing is becoming more popular and has a positive impact on both businesses and people's daily lives. This has expanded the market for independent content producers that support the digital economy. Along with these changes, a brand-new sector of ‗cloud-only businesses' has emerged, dealing in everything from cutlery and furniture to beauty items and technology. This new growth path is fuelled by digital marketing and supported by a wealth of online product evaluations, buying guides, and word-of-mouth advertising on social media.

The advancement and Innovation has achieved a change in perspective in all parts of banking. The result of these innovation driven developments and changes is that they put the brokers and clients in a mutually beneficial arrangement. The target of this study is to research the computerized advancements embraced by the Public Area Banks and Confidential Area Banks for online business Practices in India.

3.2. Indian Overview:

According to a Group M annual estimate, digital world already had surpassed television in 2022. During this year, India was spend Rs.107,987 crores on advertising while Rs. 88,334 crores was spent on advertisements in 2021, according to Business Standard. in 2022, digital spending was amount to 48,603 crores. The pandemic-related lockdown was the primary cause of this surge. According to World-meters, currently there are 1,484,384,066 people living in India. This includes 46.7 billion users of social media (The Global Statistics). In the country, there will likely be one billion smartphone users (Deloitte). According to the Global Statistics research, 76.5% of those who now own smart-phones , use Instagram. Users of Twitter and Facebook (now Meta) adhere to this. In the up-coming years, the numbers will increase much higher. Using social media for business in India is surely advantageous. However, they need to employ the appropriate platforms and the appropriate messaging. Do have a look at Zomato and Swiggy's digital marketing approaches.

A significant chunk of Indian consumers will start applying for credit online as they become more accustomed to the notion of buying and conducting business online. Fintechs, banks, and even major Internet businesses are scrambling to find solutions to issues that prevent credit from being disbursed more swiftly, safely, and effectively. The creation of the India Stack, which can be used as the foundational layer to obtain consent from users, conduct digital documentation, and process payments online, is accelerating their efforts. According to the Boston Consulting Group, these innovations would create a $1 trillion (about Rs 68 trillion) potential in the digital lending sector in India over the next five years.

3.3. Risks & Challenges:

Digital lending apps sponsored by non-financial services businesses or unregulated entities have surged since the beginning of digitisation and transformation in lending, raising worries about possibility of unethical business practices, mis-selling, cybersecurity, and data protection issues. The following are some of the main obstacles facing the present digital lending environment:

- There is no regulatory structure in place for digital loans like fast loans and consumer loans.
- The lack of preventative safeguards against money lending platforms.
- The absence of LSP and digital lending app monitoring systems.

Fintech, distributors, SaaS providers, and other third parties frequently interact throughout the loan lifecycle in digital lending from origination through collections, exposing borrowers and institutions to new and elevated levels of risk. The cutting-edge organizational structures and operational models that resulted from the development of digital lending call for a thorough assessment of risks in order to protect borrowers, including data, and secure the institutions. Traditional methods of risk management must be replaced with more proactive ones that include the appropriate system controls and limitations as well as early warning signals. Banks and NBFCs have begun utilizing digital touch points as part of their current frameworks for managing financial crime risk in order to proactively analyze customer risk. However, the current frameworks function in silos, which leads to insufficient use of the intelligence gathered across several monitoring platforms. An intelligent and comprehensive risk score (one-view risk profile) for customers may be provided by tying together the digital contact points across multiple risk categories, enabling clients to make smart decisions across the full loan lifetime. Additionally, rule engines and real-time behavior recognition capabilities might need to be adjusted to spot any abnormal transactions. With the fast development of the fintech application market, advertising exercises in the Fin-Tech area ought to likewise extend (Bhateja, F. (2023); Cooperation of Fin-Tech and Promoting) Successful utilization of online entertainment showcasing is urgent for client fascination and maintenance, particularly in a serious scene where client inclinations may rapidly move. Stressing the cooperation among FinTech and promoting can investigate undiscovered market potential, address individuals' monetary necessities, assemble trust, influence information, and alter content, items, and administrations in light of purchaser bits of knowledge and assumptions.

4. Method of Study:

A mixed method is applied to carry on the present study. Primary data along with the secondary were collected and analysed to find out the results. There are three objectives and hypotheses articulated. The research questions are put to the questionnaire and simple sampling method is used to collect the relevant data from Pune City. Factor analysis and reliability test is used to connect the data and result.

4.1 Objectives of the Study:

- To examine the factors influencing digital marketing services on Non-Banking Finance Companies.
- To analyze the digital service growth pattern in NBFCs.
- To analyze the future scope of digital service in NBFCs.

4.2 Research Hypotheses:

- H1: Digital Service is dependent on other factors.
- H2: Growth of digital service in NBFCs is dependent on xyz.

Research Strategy: Survey and structured questionnaire method using Google-Forms.

Study Area: Pune city region, semi-urban and rural area from the selected area.

Sampling Frame of the study: In this study, list of every Individual who wants to purchase and take loan for 2 wheeler electrical vehicles in Pune City were targeted.

4.3 Research Method

Keeping in view the objectives of the study the data collection method used for getting respondents viewpoint about the impact of digital marketing services on NBFCs are primary data. The Primary data collection tool used in the research work is a close ended questionnaire seeking sector specific developments and customer insights. It was spread among various respondents on demographic and socioeconomic parameters like gender, age, geographical area, occupation etc. to get required outcomes. The questionnaire was designed with the help of Google forms and data were analyzed with the help of MS Excel and SPSS version 23. Data were collected from 253 prospective customers from Pune. The research design used by the researcher is exploratory research design and the sampling tool used is convenience sampling. Secondary sources of data were also utilized for aggregating information by accessing research papers to ease the buildup of fundamental structure of exploration. The papers are accessed from various sources like Web journals, Google scholar and articles for reference. Here is the summary of the survey conducted:

4.4 Tools Used for Analysis:

The result found in this study were put in a tabular form and later explained based on the content of each table. The profile of respondents which consists of age, gender, marital status, and family members are studied in this research.

Factor Analysis: Factor analysis was used to ensure that the number of items can be reduced to the number of concepts that were initially hypothesized. Minimum acceptable value for KMO is 0.50 for Bartlett‘s test of sphericity to be significant. For the Eigen-value, the value should be 1 or greater. The cut-off point for significant factor loading should be at least 0.35 on one factor. Table 2 summarizes factor loadings and cross-factor loadings for independent variables that were extracted from the rotated component matrix. In this study, the variables include Attitude, Location, Living Space, Public Service, Friends Influence, and Reference groups namely Friends Influence, and other Reference Group and intention to purchase real NBFCs loans through digital services. Factor analysis was done on all items measuring the independent and dependent variables.

4.5 Reliability Analysis:

Reliability Analysis was conducted to ensure the consistency or stability of the items (Sekeran, 2003). The Cronbach‘s alpha test was used to analyze the reliability of the instrument. In this section all variables, namely Attitude, Location, Living Space, Public Service, and Reference groups namely - Friends Influence, and other Reference Group and intention to purchase real estate, are included in the reliability analysis. Table 2 also shows the values of Cronbach‘s alpha for

5. Results and Discussion:

The following tables demonstrate the interpretation results and findings of the study.

Table1: Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Customer_seg	1.50	.501	253
Age	1.98	.816	253
Geographic	2.57	1.179	253
Are_you_struggling	1.94	.782	253
Digital_marketing_channel used	1.94	.815	253
Convenience	3.09	1.383	253
Curiosity	3.03	1.408	253
Safe_n_secure	2.98	1.374	253
Low_service_charge	2.90	1.356	253
Features_n_VAS	3.07	1.401	253

Source: Author‘s own compilation

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.508
Bartlett's Test of Sphericity	Approx. Chi-Square	44.596
	df	45
	Sig.	.489

Source: Author‘s own compilation

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.377	13.770	13.770	1.377	13.770	13.770	1.284	12.839	12.839
2	1.170	11.702	25.472	1.170	11.702	25.472	1.175	11.748	24.587
3	1.143	11.431	36.904	1.143	11.431	36.904	1.138	11.382	35.968
4	1.092	10.918	47.822	1.092	10.918	47.822	1.132	11.315	47.284
5	1.026	10.256	58.078	1.026	10.256	58.078	1.079	10.794	58.078
6	.934	9.344	67.422						
7	.917	9.166	76.587						
8	.844	8.437	85.024						
9	.763	7.635	92.659						
10	.734	7.341	100.000						

Source: Author‘s own compilation

Table 4: Component Matrix

	Components				
	1	2	3	4	5
Customer seg	.024	-.037	.670	.395	.262
Age	-.428	.378	-.313	.152	.358

Geographic	.189	.435	.071	.578	.126
Are_you_struggling	.248	-.196	-.292	-.071	.751
Digital_marketing_channel_use	-.168	-.679	.314	.054	.152
Convenience	.431	-.235	-.528	.157	-.003
Curiosity	-.387	-.325	-.177	.411	.168
Safe_n_secure	.569	.166	.068	.300	-.060
Low_service_charge	-.608	.263	-.036	.000	.040
Features_n_VAS	.198	.281	.302	-.535	.440
Extraction Method: Principal Component Analysis.					
a. 5 components extracted.					

Source: Author‗s own compilation

Interpretation:

- As per the Keiser-Meyer and Olkin Test, The p-value is .508.
- Here we can say that, customers are highly dependent on digital services of NBFCs on the factors like ―Safe and Secure‖, ―Convenience‖, etc.
- Age of the customer does not make any matter to adoption of the digital banking (σ=0.816).
- New customers are struggling in use of the online banking for a certain period (σ = 0.782).

Findings:

- It is found that customers are highly dependent on safe and secure services.
- It is observed that most of the ―business‖ customer segment are dependent on safe and secure service and they are not dependent on convenience, value added services.
- It is also observed that business customer group with 40+ years need low service charge and is more curious towards Digital Marketing services of NBFCs.

6. Scope for Future Study:

Banks, non-banking financial institutions, and fintech players are still waiting for clarification on a number of issues, such as the First Loss Default Guarantee (FLDG) system and difficulties banks encounter when working with Fin-techs, after the Reserve Bank issued guidelines on digital lending. On the other hand, the state governments have yet to control hundreds of unlawful lending applications that are outside the purview of the RBI. The practice of offering loans that are applied for, disbursed and maintained through digital means is known as digital lending. Lenders leverage digital data to create intelligent customer engagement and make lending choices. Digital Lending, as it has developed in India, looks to be the fusion of technology with traditional unorganized retail lending, complete with high interest rates and harsh collection techniques.

7. Conclusion:

Digital marketing is a modern-day activity that involves promoting goods, services, information, and ideas over the Internet and other electronic means. Because of its importance in increasing organizational performance, several research studies have focused on the usage of digital marketing in businesses. The digital marketing concept has changed as a result of the advancement of digital technologies. The communication in digital marketing is intended towards profiled targets who are engaged in the process. Every communication flow has the ability to request information from the market. This possibility allows for immediate feedback and feed-forwards, allowing digital communication to be monitored quickly and cheaply. Digital communication flows are disseminated at ever-lower prices, but it requires communication managers to have specialized and deep competencies. The NBFC sector is a driving force behind the country's economic progress. The RBI is always working to make essential reforms in the NBFC regulatory environment in order to give proactive regulatory support to the sector and to maintain long-term financial stability. We expect that the upcoming adjustments would increase the NBFC sector's resilience and allow them to operate in a regulatory climate that is favorable to them. In India, non-banking financial companies (NBFCs) have become significant in a variety of operations, including hire purchase finance, equipment lease finance, loans, and investments. NBFCs have a wider reach and are more flexibility when it comes to accessing resources. Because of their aggressive nature and personalized services, NBFCs may be able to endure difficult times. Fee-based business is more common for NBFCs than fund-based business. In India, the NBFC growth trend is continuing to gain attraction. Their importance in the economy cannot be overstated, and the RBI should implement regulations on ethics of NBFC digital marketing that would enable them to thrive while also protecting their investors. The NBFC should face the consequences and challenges of digital revolution by way of improving their business models, creativity and innovation; social media brand health and organization capabilities. The NBFC should focus on customer insights, new metrics and analytical talent gap in order to improve the effectiveness of digital marketing.

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LEVERAGING STARTUPS, USING DIGITAL MARKETING AND AI TOOLS

***Dr. Bhavyadeep Bhatia**
****Prof. Nidhi Gupta**

Abstract:

Advanced advertising is the act of advancing items utilizing advanced channels to arrive at shopper‘s destination. This involves many exercises, including site improvement of SEO (Search Engine Optimization), content advertising, virtual entertainment promoting, email showcasing, etc. The objective is to associate with clients inducing them to invest a significant quantum of time and energy on the particular Web. New businesses in the form of Start-ups , need an exhaustive way to deal with overseeing information. The executives in a computerized setting face great difficulty in making the most of the open doors, introduced by advanced technology through man-made brainpower (AI) advancements, which are reshaping product promotion initiatives. Artificial Intelligence (AI) facilitates re-enactment of human knowledge in machines that are modified to think like people and copy their activities. To promote Startups, man-made intelligence plays an extraordinary role , essentially changing how brands collaborate with shoppers and deal with their showcasing exercises as part of ―CRM‖.

Keywords: Digital Marketing, Customer Relationship Management, Artificial Intelligence, Leverage, Startups

1. Introduction:

There is an urgent need for more essential promoting skill to drive business, and computerized change and artificial intelligence innovations offer extraordinary guarantee to assist organizations with conquering deterrents, challenges in down to earth application. In this paper, we investigate a focal inquiry: how could organizations with few assets and scarcely any representatives push computerized change in showcasing and coordinating the strategies for Information dissemination. The Board and Customer Relationship Management (CRM) exercises the virtual signal through AI. The CRM, as in Client Information Broadband can be critical to accomplishing this goal. This study utilizes a subjective methodology to investigate the results. It uncovers that organizations with limited capacities and assets can in any case take on mechanical improvements in leading showcasing. Advertising offices can profit from the enormous information that man-made intelligence gives by mining it to valuable client experiences that can be utilized to reinforce client relationship and the executives procedures. Hierarchical factors, for example, client center, a culture of joint effort and information sharing, technique and backing from top administration, a coordinated construction, and the mix of capabilities are vital to the progress of customer relationship management in the business.

*Dr. Bhavyadeep Bhatia, Assistant Professor, Ajeenkya D Y Patil University, Email: bhvyadeep44@gmail.com
**Prof. Nidhi Gupta, Assistant Professor, Ajeenkya D Y Patil University, bnidhiig@gmail.com

2. Literature Review:

FinTechs have changed monetary help conveyance by utilizing innovation to execute numerous customary financial capabilities in an unrivaled way. Inside innovation utilization, the reception of troublesome advances like Man-made brainpower (artificial intelligence) has been the most talked about in the FinTech space. Be that as it may, the whole conversation has been either according to the point of view of the utilization of information driven calculations, the advantages of man-made intelligence, or the impact of computer based intelligence on the work market. Not many research have focused on analyzing how executing troublesome advancements, for example, simulated intelligence can influence FinTech new businesses' inside hierarchical assets and outer regular assets including minerals and the unified enterprises. The current review tends to this hole by gathering subjective information from 25 workers of FinTech new businesses in the Assembled Realm to comprehend their effect on assets, especially the regular ones including minerals. The gathered information was broken down to uncover how the execution of troublesome advanced advancements, for example, simulated intelligence in everyday tasks and computerized advertising of FinTech new businesses affected the interior authoritative assets, including workers. They likewise tried to uncover the effect on the outside assets - clients, and the climate including mineral assets and the unified business. The review's discoveries give significant knowledge into how FinTech in new businesses can acquire from simulated intelligence execution in their activities, advanced promoting, and asset use improvement. (**Almansour, M. (2023**);

New businesses face a huge test with regards to embracing innovation and computerized change. The greatest impediment for youthful organizations is fostering a complete methodology for computerized Information for the executives. This will permit them to make the most of the open doors introduced by the computerized change. Associations need to foster new capacities to make a fruitful change to computerize. Associations could profit from concentrates on that aide and assess their ongoing mechanical capacities and systems, as well as those that inspect the similarity of IT procedure with other useful and functional parts of the business. **(Idrus, S., et.al 2023)**

Almansour, M. (2024) states the current review endeavors to overcome this issue by directing a subjective report to gather information from 35 proprietors/workers of food and drink new businesses and utilizing the grounded hypothesis to deal, code it and recognize key topics. The discoveries indicate Content investigation of the 35 reactions uncovered the fundamental topics: the effect of the Coronavirus pandemic on tasks of food and refreshment new businesses.

AI enabled digital marketing is upsetting the manner in which associations make content for crusades, produce leads, lessen client procurement costs, oversee client encounters, market themselves to planned workers, and convert their reachable shopper base by means of web-based entertainment. True instances of associations who are involving computer based intelligence in advanced showcasing flourish. For instance, Red Inflatable and Harley Davidson utilized simulated intelligence to mechanize their advanced promoting efforts. In any case, we are right off the bat during the time spent both the down to earth utilization of artificial intelligence by firms comprehensively and by their showcasing capabilities specifically. One could contend that we are considerably progressed in the exploration cycle of conceptualizing, speculating, and exploring the utilization and effect of artificial intelligence. Similarly as with most advancements of huge potential, the use of computer based intelligence in promoting causes commonsense contemplations as well as moral inquiries also. The capacity of simulated intelligence to computerize exercises, that in the past individuals did, likewise raises the issue of whether showcasing experts will embrace computer based intelligence as a way to liberate them from additional everyday errands to invest energy on higher worth exercises, or will they view computer based intelligence as a danger to their work. Given the early idea of examination on artificial intelligence, as of now, the full abilities and constraints of computer based intelligence in advertising are obscure. This unique release makes a significant stride in enlightening both what we know and what we yet need to explore. **Van Esch, P., & Stewart Black, J. (2021)**

Campbell, C., (et. al 2020) had mentioned that the Artificial Intelligence (AI) is at the front line of a transformation in business and society. Man-made intelligence bears the cost of organizations to better comprehends, foresee, and connect with clients. Inside showcasing, simulated intelligence's reception is expanding year-on-year and in differed settings, from offering support help during client associations to aiding the ID of ideal advancements. However, as inquiries regarding artificial intelligence stay as to work computerization, morals, and corporate obligation, the promoting area faces its own interests about man-made intelligence. With this article, we try to solidify the developing group of information about computer based intelligence in promoting. We make sense of how simulated intelligence can upgrade the showcasing capability across nine phases of the promoting arranging process. We additionally give instances of current utilizations of artificial intelligence in advertising.

Tung, T. M., Oanh, V. T. K., Cuc, T. T. K., & Lan, D. H. (2024); In their paper investigate the capability of Computerized reasoning (simulated intelligence) applications in driving business accomplishment for business people. Procedure: A multi-strategic methodology is utilized, including: writing survey, contextual investigations, and master interviews. Discoveries: The paper analyzes key regions where simulated intelligence can be utilized, including mechanization of errands, information driven direction, customized client encounters, and advancement in item improvement. While recognizing the difficulties of cost, mastery, and moral contemplations, the paper points out the significant advantages of simulated intelligence coordination. Genuine contextual analyses show the way that business visionaries can use man-made intelligence instruments and methodologies to accomplish business development. Unique Worth: This examination plans to furnish business visionaries with a complete comprehension of computer based intelligence applications and enable them to embrace this extraordinary innovation to take an upper hand.

The idea of Man-made consciousness (computer based intelligence) as a business-troublesome innovation has created in scholar and expert writing in a turbulent and unstructured way. This study intends to give lucidity over the peculiarity of business initiation of artificial intelligence through a thorough and methodical writing, survey, pointed toward proposing an unmistakable depiction of what Man-made consciousness is today. The review investigations a corpus of 3780 commitments through a unique mix of two laid out AI calculations (LDA and various leveled grouping). The survey delivered an organized characterization of the different floods of momentum research and a rundown of promising arising patterns. Results have revealed insight into six points inferable from three distinct topics, to be specific - Ramifications, Applications and

Strategies (IAM model). Our examination could furnish specialists and experts with a significant outline of the group of information and exploration plan, to take advantage of man-made intelligence as a successful empowering influence to drive business esteem. **Sestino, A., & De Mauro, A. (2022);**

AI is quickly changing advanced showcasing rehearses. While the surviving writing broadly covers man-made intelligence applications that for the most part benefit organizations and clients, there is meager exploration on simulated intelligence arrangements that worsen issues for monetarily weak clients. These clients have restricted admittance to monetary frameworks, administrations or advancements. To amend this examination shortfall, this paper portrays the difficulties facing organizations as they endeavor to incorporate simulated intelligence into the advanced advertising of their monetary administrations. Eventually, Al-empowered advanced showcasing isn't quite as basic as gathering enormous information and utilizing scientific calculations; the innovation may not necessarily in all cases assist organizations with focusing on their clients all the more. This paper analyzes the connections between man-made intelligence, computerized showcasing, and monetary administrations comparable to weak clients, featuring key ramifications in the assortment, handling, and conveyance of data, as well as the significance of human association for ideal client experience and commitment with monetary administrations suppliers. Grasping moral ramifications, as well as information and demonstrating difficulties, is fundamental for the fruitful use of simulated intelligence. This study gives a hypothetical structure to monetary administrations suppliers, artificial intelligence designers, advertisers, policymakers, and scholastics, helping the comprehension of the problematic circumstances confronting weak clients, and the manners by which they can all the more really be reached. **Mogaji, E., Soetan, T. O., & Kieu, T. A. (2020**).

Artificial intelligence in a globalized world of living cascades society at unprecedented speed with technical opportunities. Many businesses work on how to align with digital transformation. Every sector and business has been impacted by digital trends. Design thinking became a topic of wide discussion in the last century. The magic and accomplishment that the American design consulting company IDEO managed to achieve was the thing that made Design thinking so popular. This fresh approach is increasingly prevalent to organizations _strategic practices in addressing market issues and creating value innovatively. As an innovation process model, design thinking itself contains stages which can be impacted and enhanced through fresh techniques and digitalization. Artificial intelligence transforms companies, but many people believe that it doesn‘t blister. In fact, AI is now responsible for making decisions from culture to banking credits, and previously exclusively automated customers.AI can advance technology and gradually available technology such as platform development and extensive information storage and handling capabilities. If an industry, assessment provides a clear test of their competitive dynamics, study by start-ups working in the very same sector often helps us to know what is likely to develop such dynamics over time. This is why in my work I began analyzing the world start-up ecosystem. These new enterprises are versatile, innovative and lean; they can play an important part in the field‘s growth and can provide us with insight into the future of this domain. Objective of this thesis is to exploit a database of startups to firstly, understand the validity regarding how AI technology would affect and facilitate the process of design thinking

methodology. Secondly, to define how AI can support design thinking and its ecosystem. **(AIBARADARAN, B. (2018);**

The AI is implemented in five stages in the business process. A business model canvas is prepared to understand the whole business process. Digital marketing in the core marketing activities is indulged to supervise the marketing activities. Later on the AI application is applied to the digital marketing content building. The impact AI will continue to be there on companies and also brands are remembered by AI. A holistic process is designed to help marketing managers leverage AI to design their objective to achieve the goal. **Venkatesan, R., & Lecinski, J. (2021),**

AI in marketing and advertising leverages advanced technologies to make automated decisions based on data collection, analysis, and insights into audience behavior or market trends that could influence marketing strategies. AI is often employed in scenarios where speed is critical, using data and customer profiles to determine the best ways to engage with clients. It then delivers personalized messages without the need for human intervention, ensuring maximum efficiency. For many marketers today, AI enhances marketing teams by handling tactical tasks that require less human nuance. As a field, artificial intelligence involves creating intelligent machines that can think and react like humans. Since the Industrial Revolution, AI has been seen as a potential solution to many global challenges, with the ability to drive innovation, create new industries, and shape favorable business environments.

3. Method of Study:

This study is basically based on the new Start-Ups and their behavior towards Digital Marketing and AI tools adopting in their new venture. Where these tools is leveraging to their business performance? This is the main objective of the study. The extraordinary force of AI is reshaping ventures and reforming the manner in which companies are working. While monsters like Netflix have prepared with their computer based intelligence manufacturing plants, the improvement of such abilities isn't restricted to tech goliaths alone. The excursion of building a man-made intelligence processing plant is an engaging undertaking that can upset enterprises and drive development. By embracing simulated intelligence, organizations can open additional opportunities, advance innovative work, and make an upper hand in an undeniably simulated intelligence driven world. In this era of fast developing mechanical scene, AI is logically arising as the widespread motor of execution, essentially reshaping the functional underpinnings of organizations across ventures. This groundbreaking power is disturbing conventional working models, deleting constraints on development, and reforming the manner in which organizations contend and work. As man-made intelligence and advanced working models keep on reshaping organisations and the cutthroat scene, pioneers and chiefs should explore this groundbreaking excursion successfully.

This study focuses on the behavior of new startups toward adopting digital marketing and AI tools in their ventures. The primary objective is to understand how these tools enhance business performance. The extraordinary power of AI is reshaping industries and revolutionizing the way companies operate. While giants like Netflix have pioneered AI with their sophisticated systems, the development of such capabilities is not limited to tech behemoths. The journey of building an AI-driven enterprise is a transformative endeavor that can disrupt industries and drive innovation. By embracing AI, businesses can unlock new opportunities, advance research and development, and create a competitive edge in an increasingly AI-driven world. In this era of rapidly evolving technological landscapes, AI is emerging as a universal engine of performance, fundamentally reshaping the operational foundations of businesses across various sectors. This transformative power is disrupting traditional operating models, removing barriers to innovation, and revolutionizing how companies compete and function.

As AI and digital working models continue to redefine organizations and the competitive landscape, leaders and executives must navigate this transformative journey effectively. Embracing AI can lead to significant advancements in efficiency, innovation, and overall business success, making it a crucial strategy for startups aiming to thrive in the modern market.

By embracing artificial intelligence, investing in digital capabilities, and adapting traditional management systems to new models, both established companies and startups can thrive in the era of AI. As we move into a future where AI and digital networks intersect with the physical world, organizations and individuals must embrace change to create, capture, and deliver value in this exciting new landscape.

The Startups Data AI interceptor is used to set a Digital Start-Ups Ecosystem through Gather, Clean, Normalize, Integrate, Supervise, Reinforce and, Storage and Analyze the data (Figure 1).

The leveraging digital marketing is initially shows dip result, but grows after certain period (Figure2), where it brings more profit than the traditional marketing process.

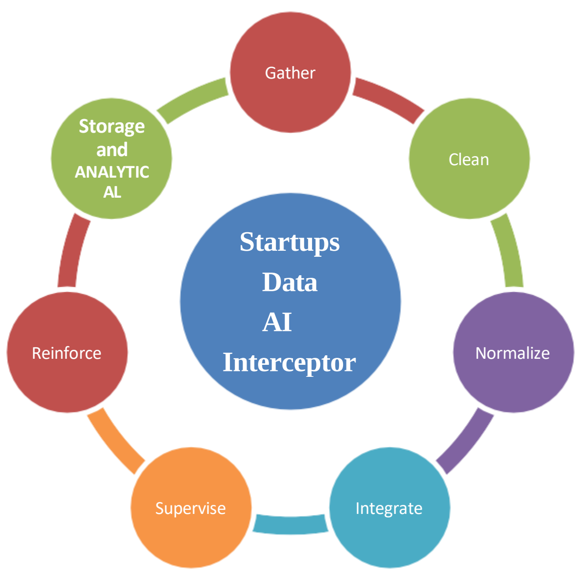

FIGURE 1 AI-DIGITAL DATA DRIVEN PROCESS
Source: Author's own compilation

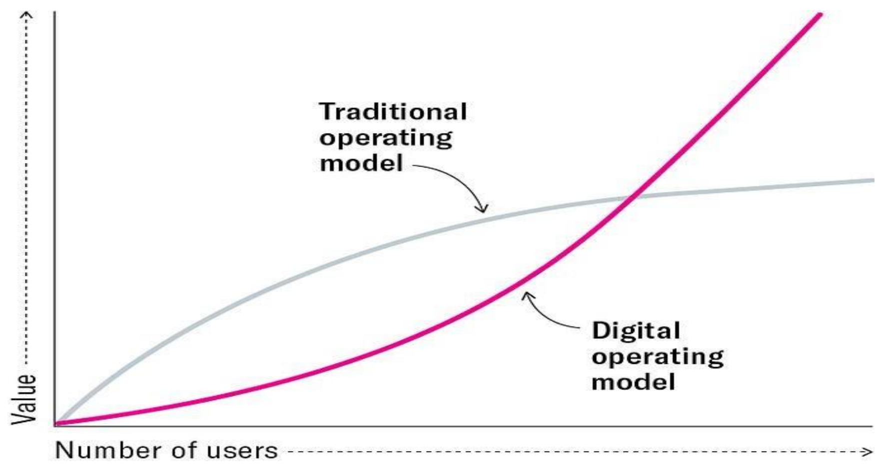

FIGURE 2 LEVERAGING DIGITAL MARKETING

Source: Author's own compilation

Although the ecosystem provides positive result, it has some challenges and ethical considerations.

Challenges:

1. **Data Privacy-** there's a heightened risk of data breaches and privacy violations
2. **Learning Curve-** Startups must invest time and resources into training their teams to effectively use these tools.
3. **Strategic Approach-** AI is not a one-size-fits-all solution.

Ethical Considerations:

1. Algorithmic Bias- AI systems can in advertently perpetuate biases if they're trained on skewed datasets.
2. Transparency and Consent- Users should be informed about how their data is being used and given the option to opt-out.
3. Manipulation and Persuasion- There's a fine line between personalized marketing and manipulation.

3.1 Data Collection Process and Sample Size:

The primary data were collected from 20 StartUps from Pune City; WhizAI, Digi Mkey, Quytech, Merkle Sokrati ,ApptWare, Infeedo , Active M E D I, TechSpeed, Harley Davidson, IDEO, Mad Sense, Mindbowser Global, Solicitious, Nirmeete, Dataeaze, Mobisoft, Kreedalabs, Rede, Prolinecure. Focused Group Discussion is arranged in all above companies, where minimum 8 numbers of managers from each Start- ups have participated and give their responses through the structured questionnaire. The main research question is pertaining to that whether Digital Marketing and AI tools will leverage their business or not. How such technologies are helping in their business. Finally 163 respondents have given their responses, which are used in further study.

3.2 Objectives of Study:

(1) To study the leverage of the Digital Marketing AI tools in Start-Ups Business.

(2) To identify the factors related to digital marketing AI tools that influence the performance of start-up businesses.

3.3 Hypotheses:

1. **H_0:** Digital Marketing AI tools insignificantly influence the Start-Ups Business.
H_1: Digital Marketing AI tools significantly influence the Start-Ups Business.

2. **H_0:** Digital Marketing AI tools has insignificant leveraging factors of Start-Ups Business

H_1: Digital Marketing AI tools have significant leveraging factors of Start-Ups Business.

Table 1: Leveraging the Start-Ups

Items	N	Minimum	Maximum	Mean	Std. Deviation
Digital Platform	163	1.000	5.000	3.016	0.428
Leverage Profit	163	-0.211	0.302	0.042	0.101
CRM- Value Creation	163	0.044	17.53	2.312	3.098
AI Interceptors	163	0.087	0.561	0.239	0.981

Source**:** Author's Own Compilation

Table 2: Reliability and Construct Validity

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
1. Emotional Intention-Gather	0.889	0.889	0.911	0.801
2. Image Processing-Clean	0.847	0.953	0.912	0.768
3. Digital security- Normalize	0.816	0.878	0.886	0.721
4. Convenience-Integrate	0.833	0.874	0.884	0.683
5. External Control-Supervise	0.841	0.864	0.902	0.724
6. Easy Adoption-Reinforce	0.901	0.907	0.915	0.739
7. Liveliness-Digital	0.751	0.766	0.852	0.667
8. Outcome- Profit leverage	0.812	0.824	0.869	0.733
9. Efficacy-CRM- Storage	1.000	1.000	1.000	1.000
10.Customer Influence-Analytical	0.815	0.966	0.934	0.829
11.System Capability-Performance	0.813	0.857	0.883	0.614
12. Innovation- IT change	0.749	0.762	0.842	0.677
13.Simulated-AI	0.823	0.864	0.874	0.766
14. AI-Advertisement	0.812	0.874	0.883	0.711
15. StartUps- AI ecosystem	0.811	0.854	0.872	0.619

Source: Author's Own Compilation

Table 3: (rho A) Rank

Rank	Composite Reliability	Construct
1	1.000	Efficacy-CRM- Storage

2	0.934	Customer Influence-Analytical
3	0.915	Easy Adoption-Reinforce
4	0.912	Image Processing-Clean
5	0.911	Emotional Intention-Gather
6	0.902	Easy Adoption-Reinforce

Source: Author's Own Compilation

4. Findings and Conclusion:

The study demonstrates that leveraging AI and digital marketing tools significantly impacts startup business performance. Descriptive statistics reveal that while the initial performance of digital marketing AI tools is not satisfactory ($\bar{X} = 0.042$, $\sigma = 0.101$, with a minimum value of -0.211), long-term use supports substantial business growth. As illustrated in Figure 2, digital marketing outperforms traditional marketing methods over time.

Reliability tests and construct validity analyses using SPSS 21.0 confirm the significant influence of digital marketing AI tools on startup performance. With a Cronbach's Alpha (α) greater than 0.80 for 12 out of 15 parameters, the alternative hypothesis (H1) is accepted, validating the positive impact of these tools. The composite reliability figures in Table 2 and the rank orders in Table 3 identify key factors contributing to this influence, such as Efficacy-CRM- Storage (Rank 1), Customer Influence-Analytical (Rank 2), Easy Adoption-Reinforce (Rank 3), Image Processing-Clean (Rank 4), Emotional Intention-Gather (Rank 5), and Easy Adoption-Reinforce (Rank 6).

Six factors with composite validity exceeding 0.90 are considered the most reliable and influential on startup business performance. The null hypothesis is rejected, affirming that digital marketing AI tools significantly leverage startup success.

The integration of AI in the digital ecosystem not only streamlines operations but also provides startups with a competitive edge in a rapidly evolving digital landscape. Investing in technology leads to substantial growth and innovation for startups, positioning them to make a significant impact.

5. Future Trends:

The future of AI in digital marketing is poised to be transformative, with several developments on the horizon that could significantly impact how brands engage with consumers:

1. **Generative AI:** AI now able to produce text, visual, and video content from prompts.
2. **Autonomous AI**: AI that can operate independently will enable more sophisticated and Self-optimizing marketing campaigns.
3. **Causal AI**: Understanding cause and effect relationships in consumer behavior.
4. **Conversational AI:** Chatbots and virtual assistants will become more advanced.
5. **Predictive Analytics:** AI's ability to process vast amounts of data will continue to improve, offering even more detailed insights into consumer behavior and market trends

Ways to Integrate AI into Marketing Strategies Creatively:

These trends present exciting opportunities to innovate in the field of digital marketing:

- AI-Driven Campaigns: Design marketing campaigns that use AI to adapt messaging and delivery channels.
- Interactive Content: Develop AI-powered interactive content that changes based on user interactions.

- Voice Search Optimization: With the rise of voice assistants, optimize content for voice search.
- Ethical AI Use: Ensuring that marketing practices respect consumer privacy and promote trust.
- AI in Analytics: Utilize AI to analyze social media trends and consumer feedback.
- Enhancing Personalization: AI algorithms analyze customer data to deliver personalized marketing messages
- Optimizing Campaigns: Through predictive analytics.
- Improving Customer Insights: AI tools process vast amounts of data.
- Automating Repetitive Tasks: email marketing and social media posts can be automated, saving time and resources.
- Increasing Efficiency: AI-driven tools provide real-time adjustments to marketing strategies

The integration of AI in digital marketing not only streamlines operations but also provides startups with a competitive edge in a rapidly evolving digital landscape. It's an investment in technology that can lead to significant growth and innovation for startups looking to make their mark.

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THE ROLE OF AUDITING IN DETECTING FINANCIAL IRREGULARITIES: A CASE STUDY ON SOME RECENT ACCOUNTING SCANDALS

***Dr. Sanjay Kumar Lenka**

**** Priyanka Jena**

Abstract:

The aim of this research is to investigate the critical role played by auditing in detecting financial irregularities, with a focus on recent accounting scandals as case studies. By employing a case study methodology, this study explores the effectiveness of auditing practices in identifying and addressing financial irregularities. Ten notable accounting scandals from recent years were selected as cases, based on their significance and attention from regulatory and legal authorities. The chosen cases include The Akasa Air accounting scandal, The Bharat Pe accounting scandal, The Vedanta accounting scandal, Amtek Auto accounting scandal, Nirav Modi Scam, ABG Shipyard Scam, DHFL-Yes Bank Scam, IL&FS Scam, DHFL accounting scandal, and Karvy Stock Broking. Through in-depth analysis of these cases, the study seeks to uncover vulnerabilities in financial reporting systems and underscore the need for stringent auditing procedures to safeguard the interests of stakeholders. The findings from this research will provide valuable insights for regulators, auditors, and organizations to strengthen financial governance and mitigate risks associated with financial irregularities. By understanding the effectiveness of auditing practices in detecting irregularities, this study contributes to the ongoing efforts to enhance transparency, accountability, and integrity in financial reporting. Furthermore, it offers valuable lessons for the design and implementation of future auditing practices to ensure the credibility and reliability of financial information in the corporate world.

***Keywords*--**Financial irregularities, Accounting scandals, Financial reporting systems, Regulatory authorities, Financial governance.

1. Introduction:

Fraud has become a global issue for businesses, including India. Financial fraud may damage a company's finances, reputation, and shareholder confidence. Financial accounting fraud detection has garnered attention due to the growth in financial frauds and white-collar crimes in competitive economies. Over the last decade, The Akasa Air accounting scandal, the BharatPe accounting scandal, the Vedanta accounting scandal, Amtek Auto accounting scandal, Nirav Modi Scam, ABG Shipyard Scam, DHFL-Yes Bank Scam, IL&FS Scam, DHFL accounting scandal, Karvy Stock Broking have been involved

***Dr. Sanjay Kumar Lenka,** Asst. Professor II, KIIT School of Economics & Commerce, Email ID: sanjay.lenkafcm@kiit.ac.in
****Priyanka Jena,** Research Scholar, KIIT Deemed to be University, Email: priyankajena7157@gmail.com

in high-profile financial fraud investigations . Due to the sharp growth in accounting fraud, investors, academics, the media, the financial community, and regulators have focused on financial accounting fraud detection.

Financial irregularities, such as fraudulent activities, accounting manipulations, and misappropriation of funds, pose significant threats to the credibility and trustworthiness of financial information. In the corporate world, where stakeholders rely on accurate and transparent financial reporting, the detection and prevention of such irregularities are of paramount importance. This is where auditing, as a vital component of corporate governance, plays a crucial role . Auditing is an independent and systematic examination of an organization's financial records, transactions, and internal controls. Its primary purpose is to provide stakeholders, including investors, creditors, regulators, and the public, with assurance that the financial statements present a true and fair view of the organization's financial position and performance. By critically assessing financial information and identifying any material misstatements or irregularities, auditors play a key role in ensuring the accuracy and integrity of financial reporting .

Through an exploration of the role of auditing in detecting financial irregularities, this study aims to emphasize the indispensable role of auditors in maintaining transparency, accountability, and confidence in financial reporting. By enhancing our understanding of the effectiveness of auditing practices, the paper offers valuable insights for regulators, policymakers, auditors, and organizations seeking to strengthen financial governance and mitigate risks associated with financial irregularities.

1.1 Aim of the Study:

The aim of this study is to explore the crucial role played by auditing in detecting financial irregularities, using recent accounting scandals as case studies. The research seeks to investigate the effectiveness of auditing procedures in identifying and addressing financial irregularities. By examining prominent accounting scandals that have impacted major corporations, the study aims to identify vulnerabilities in financial reporting systems and emphasize the need for stringent auditing practices to safeguard stakeholders' interests. The findings of this study will provide valuable insights for regulators, auditors, and organizations seeking to strengthen financial governance and mitigate risks associated with financial irregularities.

1.2 Problem Statement:

The occurrence of accounting scandals and financial irregularities continues to raise concerns about the reliability and integrity of financial reporting systems. These irregularities, such as fraud, misappropriation, and unethical accounting practices, have significant consequences for businesses, investors, and the overall financial ecosystem. In the wake of these scandals, questions arise about the effectiveness of auditing practices in detecting and preventing such irregularities.

2. Method of Study:

The present study utilizes a case study methodology to examine the role of auditing in detecting financial irregularities. This approach allows for in-depth analysis and understanding of specific instances of accounting scandals, providing valuable insights into the effectiveness of auditing practices in identifying and addressing irregularities.

2.1 Case Selection:

Ten accounting scandals that have occurred in recent years were chosen as case studies for this research. The selection of these cases was based on their representation of notable and significant accounting scandals in contemporary times, which have garnered attention from regulatory and legal authorities. The chosen cases are:

- The Akasa Air accounting scandal
- The Bharat Pe accounting scandal
- The Vedanta accounting scandal
- Amtek Auto accounting scandal
- Nirav Modi Scam
- ABG Shipyard Scam
- DHFL-Yes Bank Scam
- IL&FS Scam
- DHFL accounting scandal
- Karvy Stock Broking

2.2 Data Collection:

Data for each case study were collected from various sources, including financial statements, audit reports, regulatory reports, news articles, and academic publications. This multi-source approach ensures a comprehensive and well-rounded understanding of the accounting scandals and the role of auditing in their detection.

The data utilised in this study was obtained from diverse sources, encompassing news articles, scholarly journals, governmental reports, and court documents.

2.3 Methods Applied:

The collected data will be analysed using qualitative methods. Thematic analysis will be employed to identify common patterns, themes, and issues that emerge from the case studies. The analysis will focus on how auditing processes were conducted in each case, the specific irregularities detected, the timing of their detection, and the consequences faced by the organizations involved.

3. Data Analysis:

The following table demonstrate the Auditing process the objectives underlying with this process.

Table 1: Auditing Process and its Underlying Objectives

Auditing Process	Description
Risk Assessment	Description of the risk assessment process and its importance in identifying potential irregularities.
Internal Controls Testing	Description of how auditors assess and test internal controls to identify any weaknesses or potential fraud.
Financial Statement Analysis	Description of how auditors analyse financial statements to detect inconsistencies or misstatements.
Audit Sampling Techniques	Description of the sampling methods used by auditors to test a subset of data for irregularities.
Forensic Accounting	Description of how auditors utilize forensic accounting techniques to investigate and identify financial irregularities.

The following section of the study demonstrates the analysis of the cases, aiming to investigate the role of auditing in detecting financial irregularities. Ten selected accounting scandals have been thoroughly examined to gain insights into the effectiveness of auditing practices in identifying and addressing irregularities in contemporary times. Through a comprehensive analysis of each case, this section sheds light on the challenges and strengths of auditing in safeguarding the credibility and integrity of financial reporting.

Table 2: Identification and Examination of Various Dimensions of Auditing which Contribute to the Identification of Financial Irregularities

Sl. No	Scandal Name	Company	Year	Nature of Irregularity	Outcome	Source
1	The Akasa Air accounting scandal	Akasa Air	2023	The airline has been accused of manipulating its accounts by overstating its revenue and understating its expenses. ₹100 crores	The airline has denied any wrongdoing, but the investigation is ongoing.	The Economic Times, which was published on January 25, 2023
2	The BharatPe accounting scandal	BharatPe	2023	The fintech company has been accused of misusing customer funds and inflating its revenue figures.500 crores	The investigation is ongoing, and the company has been fined by the Reserve Bank of India	*The Economic Times*, which was published on January 25, 2022
3	The Vedanta accounting scandal	Vedanta	2023	The mining company has been accused of manipulating its accounts by overstating its profits and understating its liabilities. ₹3,000 crores	The company has denied any wrongdoing, but the investigation is ongoing	This information came from a piece that was posted on January 25, 2023 by the financial news website The Economic Times
4	Amtek Auto accounting scandal	Amtek Auto	2022	The company was accused of inflating its revenue and understated its expenses in order to appear more profitable than it actually was. ₹10,000 crores	The company's promoters were arrested by the Central Bureau of Investigation (CBI) in May 2022 and company is currently under investigation by the Serious Fraud Investigation Office (SFIO).	The Economic Times, which was published on January 25, 2023

5	Nirav Modi Scam	Gitanjali Gems	2021	Nirav Modi, the owner of a jewellery company called Gitanjali Gems, is accused of defrauding Punjab National Bank (PNB) of over Rs. 13,000 crores by using Letters of Undertaking (LOUs) to import diamonds from overseas suppliers. The LOUs were never honoured, and PNB was left with a huge financial loss.	Nirav Modi and his uncle Mehul Choksi are both fugitives, and they have been charged with fraud by the Indian government.	The source of this information is the Central Bureau of Investigation (CBI), which filed a case against Nirav Modi and his uncle Mehul Choksi in 2018
6	ABG Shipyard Scam	ABG Shipyard	2021	The scam was perpetrated by the ABG Group, which is a shipbuilding company based in Mumbai. The group allegedly manipulated its accounts and falsified documents to obtain loans from banks. 22,842 crores	The company is currently under investigation by the Serious Fraud Investigation Office (SFIO), and its promoters have been arrested.	The source of this information is the Serious Fraud Investigation Office (SFIO), which filed a case against ABG Shipyard and its promoters in January 2019
7	DHFL-Yes Bank Scam	DHFL-Yes Bank	2020	The company has been accused of diverting funds from Yes Bank and of falsifying financial statements. 34,615 crores	The SFIO is investigating the case, and Yes Bank has been taken over by the government.	The source of this information is the Serious Fraud Investigation Office (SFIO), which filed a case against DHFL and its promoters in March 2020
8	IL&FS Scam	IL&FS	2020	The company has been accused of diverting funds from investors and of falsifying financial statements. ₹99,000 crores	The SFIO is investigating the case, and IL&FS has been placed under the CIRP.	The source of this information is the Serious Fraud Investigation Office (SFIO), which filed a case against IL&FS and its promoters in August 2018.
9	DHFL accounting scandal	DHFL	2019	DHFL, a housing finance company, was accused of inflating its profits and understating its losses in order to	The company's former chairman, Kapil Wadhawan, was arrested by the CBI in September 2019,	The source of this information is the Serious Fraud Investigation Office (SFIO), which filed a case against DHFL

				appear more profitable than it actually was. 65,000 crore s	and the company is currently under investigation by the RBI.	and its promoters in 2019
10	Karvy Stock Broking	Karvy Stock Broking	2019	Nagarjuna Construction Company, a construction company, was accused of inflating its profits ₹2,300 crores and understating its losses in order to appear more profitable than it actually was .	The company's former chairman, P.V. Ramana Rao, was arrested by the CBI in December 2019, and the company is currently under investigation by the RBI.	The source of this information is the Securities and Exchange Board of India (SEBI), which filed a case against KSBL and its management in 2019

The following table signifies a concise overview of accounting scandals, their allegations, consequences, and lessons learned. These scandals have significantly impacted the Indian financial sector, highlighting vulnerabilities in financial reporting systems and the need for robust auditing procedures. It emphasizes the importance of transparency, accountability, and strong corporate governance in preventing financial misconduct. The role of independent auditing and whistleblowing in detecting and addressing financial irregularities is underscored. This table offers valuable insights into the crucial role of auditing in safeguarding stakeholders' interests and provides essential lessons for regulators, auditors, and organizations to enhance financial governance and mitigate risks in the future.

Table3: List of Accounting Scandals, Allegations, Consequences, and Lessons Learned.

Name of the Scandal : The Akasa Air accounting scandal	
Allegations	In 2022, Akasa Air was accused of inflating income and passenger counts to attract investors. A whistleblower claimed to have seen internal corporate records that proved financial statement falsification
Consequences	Indian aviation has suffered from the Akasa Air accounting controversy. The scandal has tarnished India's corporate governance and the low-cost airline sector.
Lessons Learned	**Corporate governance:** It manages and controls a corporation. Strong corporate governance provides clear rules and processes to avoid fraud and protect shareholders. **Independent auditing:** Independent auditing checks a company's financial accounts for accuracy and reliability. Independent auditors should be neutral and competent to spot financial statement issues. **Whistle blowing:** Workers should feel safe disclosing suspected financial wrongdoing to their managers or the authorities. Whistleblowers prevent and uncover financial

	wrongdoing. **Risk management:** Companies need a solid risk management strategy to detect and reduce hazards. Financial fraud, market, credit, and operational risks are included. **Transparency:** Companies should disclose their financial transactions. They should present investors with clear and accurate financial performance information. **Accountability:** Businesses must take responsibility. Financial fraud is their responsibility. **Importance of transparency:** Financial fraud regulators need significant enforcement powers. This will dissuade phoney firms.
Name of the Scandal : The BharatPe accounting scandal	
Allegations	The Serious Fraud Investigation Office (SFIO) investigated BharatPe for financial irregularities in January 2022, according to Entrackr. The allegations included BharatPe co-founder and managing director Ashneer Grover using company funds for personal expenses like rent, plane tickets, and skincare products; Grover and his wife, Madhuri Jain Grover, using company credit cards to make personal purchases; BharatPe inflating its revenue figures by booking fictitious transactions; and BharatPe engaging in related-party transactions with companies owned by Grover and his family. The company's board of directors investigated BharatPe's denials. Grover and Jain were sacked after the inquiry confirmed the charges.
Consequences	BharatPe suffered from the accounting controversy. The corporation cannot issue fresh shares due to its falling stock price. Grover and Jain lost their jobs and face criminal accusations. The issue has highlighted worries about corporate governance in India. Many Indian corporations have been accused of financial issues, including BharatPe. These incidents have prompted financial sector regulation in India.
Lessons Learned	**Strong business governance:** Clear financial reporting standards and processes may avoid accounting fraud. It may also guarantee that checks and balances avoid employee dishonesty. **Independent auditing:** Independent auditing may discover accounting fraud by assessing the company's financial statements. Auditors should watch for signs of fraud, such as rapid financial performance changes or sophisticated financial transactions. **Importance of whistle blowing:** Whistle blowing helps discover accounting fraud. Employees should feel safe reporting fraud to authorities.
Name of the Scandal : The Vedanta accounting scandal	
Allegations	Moneycontrol announced in January 2023 that the Serious Fraud Investigation Office (SFIO) was investigating Vedanta for financial irregularities. The claims included Vedanta chairman Anil Agarwal and his family using business credit cards and cash to buy rent, airline tickets, and skincare items. Vedanta boosting income using bogus transactions. Vedanta transacting with Agarwal's family's firms.
Consequences	Vedanta has suffered from the accounting controversy. The corporation cannot issue fresh shares due to its falling stock price. The SFIO questioned and charged Agarwal.The issue

	has highlighted worries about corporate governance in India. Many Indian firms have been accused of financial wrongdoing, including Vedanta. These incidents have prompted financial sector regulation in India.
Lessons Learned	1. **Importance of strong corporate governance:** Strong business governance prevents accounting fraud by setting clear financial reporting regulations. It may also guarantee that checks and balances avoid employee dishonesty. 2. **Importance of independent auditing:** Independent auditing helps discover accounting fraud by assessing the company's financial statements. Auditors should watch for signs of fraud, such as rapid financial performance changes or sophisticated financial transactions. 3. **Importance of Whistle blowing :** Whistle blowing helps discover accounting fraud. Employees should feel safe reporting fraud to authorities. The Vedanta accounting controversy has harmed the corporation and Indian financial markets. The scandal may also be used to learn from errors and avoid future fraud.
Name of the Scandal : Amtek Auto accounting scandal	
Allegations	The Serious Fraud Investigation Office (SFIO) charged Amtek Auto and its sponsors with false accounting in 2017. Accounts were falsified and assets were inflated. Unsecured bank loans.. Funding connected parties
Consequences	Indian automakers were affected by the Amtek Auto accounting scandal. The scandal has tarnished India's corporate governance and the automobile component sector.
Lessons Learned	**Corporate governance:** It manages and controls a corporation. Strong corporate governance provides clear rules and processes to avoid fraud and protect shareholders. **Independent auditing:** Independent auditing checks a company's financial accounts for accuracy and reliability. Independent auditors should be neutral and competent to spot financial statement issues. **Whistleblowing:** Workers should feel safe disclosing suspected financial wrongdoing to their managers or the authorities. Whistleblowers prevent and uncover financial wrongdoing. **Risk management:** Companies need a solid risk management strategy to detect and reduce hazards. Financial fraud, market, credit, and operational risks are included. **Transparency:** Companies should disclose their financial transactions. They should present investors with clear and accurate financial performance information. **Accountability:** Businesses must take responsibility. Financial fraud is their responsibility. **Importance of enforcement:** Financial fraud regulators need significant enforcement powers. This will dissuade phoney firms.
Name of the Scandal : Nirav Modi Scam	
Allegations	Nirav Modi allegedly submitted bogus LoUs to PNB for 13,500 crores (US$1.8 billion).Used LoUs to borrow 6,000 crores (US$840 million) from other banks.
Consequences	Indian finance has been affected by the Nirav Modi scam. The affair has raised questions about Indian corporate governance and financial regulation. The crisis has also eroded trust in PNB and other institutions.

Lessons Learned	**The Importance of Corporate Governance:** It runs a company. Corporate governance prevents fraud and protects stockholders. **The Importance of Independent auditing:** Financial accounts are audited by outside parties. Financial statement concerns should be identified by independent auditors who are impartial. **The Importance of due diligence:** Do your homework before investing. They should study management, financial accounts, and industry to determine hazards. **The Importance of Whistle blowing:** Workers should feel confident reporting financial malfeasance to management or authorities. Whistleblowers expose financial malfeasance.
Name of the Scandal : ABG Shipyard Scam	
Allegations	In 2020, the Central Bureau of Investigation (CBI) charged ABG Shipyard and its founders with defrauding banks of 22,842 crores (US$3.1 billion). Accounts were falsified and assets were inflated. Unsecured bank loans. Funding linked parties.
Consequences	The ABG Shipyard scandal impacted India's financial system. The scheme has tarnished India's corporate governance and the shipbuilding sector.
Lessons Learned	**Corporate Governance:** It manages and controls a corporation. Strong corporate governance provides clear rules and processes to avoid fraud and protect shareholders. **The Importance of Independent auditing:** Independent auditing checks a company's financial accounts for accuracy and reliability. Independent auditors should be neutral and competent to spot financial statement issues. **Whistle blowing:** Workers should feel safe disclosing suspected financial wrongdoing to their managers or the authorities. Whistleblowers prevent and uncover financial wrongdoing. **Risk management:** Companies need a solid risk management strategy to detect and reduce hazards. Financial fraud, market, credit, and operational risks are included. **Transparency:** Companies should disclose their financial transactions. They should present investors with clear and accurate financial performance information. **Accountability:** Businesses must take responsibility. Financial fraud is their responsibility. Financial fraud regulators need significant enforcement powers. This will dissuade phoney firms.
Name of the Scandal : DHFL-Yes Bank Scam	
Allegations	There was a significant financial scam that involving DHFL and Yes Bank. According to allegations, DHFL obtained a loan from Yes Bank on false pretences. Yes Bank is accused of lending money to DHFL without doing enough due diligence.

Consequences	• The Indian financial system has been significantly impacted by the DHFL-Yes Bank fraud. • Concerns concerning the level of corporate governance in India have been raised in light of the fraud. • The fraud has also caused NBFCs and private sector banks to lose customers.
Lessons Learned	• It runs a company. Corporate governance prevents fraud and protects stockholders. • Independent audits verify a company's financial records. Financial statement concerns should be identified by unbiased, competent independent auditors. • Whistleblowing: Employees should feel secure reporting suspected financial malfeasance to supervisors or authorities. Whistleblowers expose financial malfeasance. • Risk management: Companies require a robust risk management plan to recognise and mitigate dangers. Financial fraud, market, credit, and operational risks. • Transparency: Companies should report financial transactions. Investors should get reliable financial performance data. Businesses are accountable. Financial dishonesty is theirs. Financial fraud regulators demand strong enforcement. This deters scammers.
Name of the Scandal : IL&FS Scam	
Allegations	IL&FS is accused of defrauding banks and other lenders by submitting inflated asset valuations and bogus loan agreements. Using bank and other lender loans to support its own activities and purchase assets for its promoters.
Consequences	• The IL&FS affair might lead to fines. • Management may be prosecuted. • Shareholders may lose. • The scandal might hurt the Indian economy and investor faith in its banking sector. • L&FS's bailout might strain the Indian government's budget.
Lessons Learned	**Corporate Governance:** It manages and controls a corporation. Strong corporate governance provides clear rules and processes to avoid fraud and protect shareholders. **Independent auditing:** Independent audits verify a company's financial accounts. Independent auditors should be neutral and competent to spot financial statement issues. **Risk management:** Companies need a solid risk management strategy to detect and reduce hazards. Financial fraud, market, credit, and operational risks are included. **Transparency:** Companies should disclose their financial transactions. They should present investors with clear and accurate financial performance information. **Accountability :** Businesses must take responsibility. Financial fraud is their responsibility. Financial fraud regulators need significant enforcement powers. This will dissuade phoney firms.
Name of the Scandal : DHFL accounting scandal	

Allegations	DHFL overstated its assets by 48,000 crores (US$6.7 billion).Understated liabilities of Rs25,000 crores (US$3.4 billion).12,000 crores (US$1.6 billion) to relevant parties.lied about 10,000 crores (US$1.4 billion).
Consequences	The DHFL accounting scandal has affected the Indian financial sector. The incident has raised worries about corporate governance in India and eroded trust in NBFCs.
Lessons Learned	• The Importance of Corporate governance: Corporate governance regulates a company. Corporate governance prevents fraud and protects stockholders. • The Importance of Independent auditing: A company's financials are audited. Financial statement concerns should be identified by unbiased, competent independent auditors. • The importance of Whistle blowing: Report suspected financial fraud to management or the authorities. Whistleblowers expose financial malfeasance.
Name of the Scandal : Karvy Stock Broking	
Allegations	KSBL pledged client securities worth 2,300 crores (US$310 million) without authorisation.Used US$140 million in customer money.Provided inaccurate account information.
Consequences	The Karvy Stock Broking scam affected the Indian financial system. The affair has raised questions about Indian corporate governance and financial regulation. The issue has also tarnished KSBL and other stock brokerages.
Lessons Learned	**The Importance of Corporate governance:** Corporate governance regulates a company. Corporate governance prevents fraud and protects stockholders. **The importance of Independent auditing:** A company's financials are audited. Financial statement concerns should be identified by unbiased, competent independent auditors. **The importance of Investor education:** Investors risk business mismanagement. They should also invest in companies audited by reputable accounting firms.

4. Results & Discussion:

The findings from the case study analysis of accounting scandals reveal the critical role played by auditing in detecting financial irregularities. The selected scandals, such as Akasa Air, BharatPe, Vedanta, Amtek Auto, Nirav Modi Scam, ABG Shipyard, DHFL-Yes Bank Scam, IL&FS Scam, DHFL accounting scandal, and Karvy Stock Broking, highlight the vulnerabilities in financial reporting systems and underscore the importance of robust auditing practices. Corporate governance emerges as a crucial aspect in preventing accounting fraud, ensuring clear financial reporting standards, and establishing checks and balances to avoid employee dishonesty. Independent auditing proves essential in identifying potential financial statement issues and signs of fraud, contributing to improved financial transparency and reliability. Whistleblowing plays a significant role in discovering financial malfeasance, encouraging employees to report suspected wrongdoing without fear. Moreover, risk management and accountability are emphasized to detect and mitigate financial risks and hold companies responsible for their actions.The consequences of these scandals have had far-reaching impacts on India's financial sector and corporate governance reputation. Lessons learned from these cases highlight the urgency of implementing stringent auditing procedures, promoting transparency, and enhancing enforcement powers for financial fraud regulators. The insights gained from these findings provide valuable guidance for auditors, regulators, and organizations in strengthening financial governance and protecting stakeholders' interests. By addressing the identified challenges, stakeholders can work towards a more resilient financial system that fosters trust, reliability, and accountability.

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EXPERT INTERVIEW:

PHILANTHROPY AND ENTREPRENEURSHIP

Introduction:

Entrepreneurship and philanthropy come together to bring about meaningful change by combining creativity and compassion. Motivated by a desire to address societal issues, entrepreneurs use their business acumen to promote charitable causes and create sustainable solutions that strengthen communities. In addition to meet urgent needs, the collaboration promotes long-term growth and leaves a positive legacy that goes beyond conventional charity models, inspiring others to make significant contributions to the advancement of humanity.

Profile of the Experts:

Shanta Baliarsingh, a former faculty in Behavioral Sciences and Management, an APA Associate, is the founder of WOOD APPLE School and Chocolaca. She was a former member of the Child Welfare Committee, Bhubaneswar. She also serves as an Empanelled Psychologist at the Juvenile Justice Board, Khordha,

Rita Baliarsingh, a certified chocolatier, is the co-founder WOOD APPLE School, and a trustee of Shree Sai Niketan. She holds qualifications from Stanford and Utkal University. She also teaches at Unacademy.

Since 2016, they have dedicated themselves to work with children with special needs through the establishment of Wood Apple School. Their journey began with a philanthropic intent to nurture the children with special needs especially the ones with autistism and Down's Syndrome. While nurturing these children through their childhood to adolescence, the philanthropists were perturbed with the idea of making these young person‘s self-dependent and self-reliant. Vocational training was always an option. However, getting them placed was a great challenge. Inclusive environment in organizations is still not very popular. Thus, WOOD APPLE School gave birth to the idea of a venture where these special persons can find their own prosperity. In 2021, they launched Chocolaca, a venture to fund the school, and provide vocational training to the special persons.

Chocolaca's success story is a narrative of immense dedication of two sisters Rita and Shanta Baliarsingh, who turned traditional Odia ingredients into exquisite chocolates. Founded with the capital drawn from the venturists' savings , Chocolaca is Odisha's first bean-to-bar and millet chocolate manufacturer, prioritizing organic ingredients without additives. Their efforts have earned recognition, including the MSME Excellence Award, Odisha Millet Innovation

Challenge Award, Audience Choice Award, Best Women Entrepreneur Award, Swayamsidhha Samman, and Woman Leadership Award.

The following interview unfurls the determination of two philanthropic women who are in the spree to win over the business space for making the corporate world more inclusive and sustainable.

Prof. Ananya: Madam could you please share your background? How did you come up with the idea of starting Chocolaca? What Inspired you to start your own business?

Experts: So basically, we both are educationalist. We started our school in 2016, which is for the special needs. The name of the school is Wood Apple. The school provides congenial atmosphere to specially challenged children .Then we started conducting some CSR at that time who conduct annual events. Then gradually we shifted to Chocolaca because we need some funding for the sustainability of the school. So earlier, it was just like any other chocolates, making chocolates from compounds. Then in 2009, we both went out and we got the training of how to make chocolates from cocoa beans.

Prof. Kali Prasad: Madam please tell us about your products and process?

Experts: We are making healthy chocolates. We are making chocolates from cocoa beans, cocoa butter. No refined sugar has been added to our chocolates. Then we blend chocolates with millets and other few spices like turmeric, ginger, cinnamon, all these things with our chocolates. Whatever is available in Odisha's agricultural land, we blend chocolate, and coffee as well. And last year just we have established a millet-based bakery. We are just converting every junk food to millet-based things. Like vada pav, pizza, puffs, everything millet. From the healthy point of view, this is safe to take a forward step. Healthy and tasty both. Healthy and tasty, the most vegetarian one can have.

Prof. Ananya: Madam how do you market your products, or any marketing strategy?

Experts: Earlier we are just putting stalls in every exhibition. Then we get with corporate people and made gift bags. The companies were JSW and Infa and Medan, Nalco also. Now we were doing mainly Diwali and New Year gifts as well. We send festive packages like Rakhi, Valentine‘s Day. And online, w-1e01- have not tapped it I feel, like we are having our own website, chocolaca.in We are present on Amazon, Flipkart , Bioscale, India Mart, Just Dyer.

Prof. Kali Prasad: Madam why do we have very few women entrepreneurs as compared to men entrepreneurs?

Experts: So there is a gender concept that comes to our mind. Few are having, but like the government as well as the corporate, everyone is giving importance to women primarily. And another thing there is many facilities available for women entrepreneurs like fundings and governmental help.

Prof. Ananya: Madam what challenges do women entrepreneurs face that men may not?

Experts: It‘s very obvious that the challenges come from home itself. Managing house and then devoting towards business, is not so easy. So it is really difficult around the house to manage both the house and attend all the related seminars as well as looking after all this manufacturing, marketing and everything. So yeah, it is challenging. So we are utilizing it evidently. Then other part is that whether you are secured or not secured properly in the society. So it may be beneficial for us. We two are working together in every situation. But no one is there to recognise our activities. That‘s the biggest struggle.

Prof. Kali Prasad: Madam what are the success factors of women entrepreneurship?

Experts: Talking about ourselves first, As I said, the government and the public from every sector, we are getting support as women entrepreneurs. That's the best part of it. Like, Odisha is progressing. Odisha is progressing in women entrepreneurship. Like we have obtained the PMFMS scheme, where we availed 35% subsidy. We have tied ourselves with IRCTC and E-catering services. And now we are taking help of the incubation of IIT Bhubaneswar. Because we are less people, we will start with Jackfruit Seeds. So, it's in the pre-inhibition stage now. Since you both are devoted towards enterprises. Hence, we women need to find out our own path.

Prof. Ananya: Madam both of you are devoted to this enterprise. How do you maintain Work-life balance?

Experts: We are women and we have our personal and professional life. But, if we are earning then we can hire someone at least to help in the household chores. That should be our contribution for a healthy maintenance. Time management should be the first priority. You don‘t need to supervise everything, but you can just do a phone call. Like, I am watching the outlet from my phone always. You see, the technical concepts or technology, they are very important.

Prof. Kali Prasad: Madam what role do you think mentorship plays in the success of women entrepreneurs?

Experts: Simple word is patience, the need to give. Because you know, you are struggling so much and you are paying to 15 or 16 employees, but you are not earning for yourself. Hence, patience is our beneficial idea.

Prof. Ananya: Madam what are your future plans?

Experts: So financially we want to grow stronger. Another project is going to be finalized where we are going to work for around 24 levels of Rayagada. I will show you a few things in the outlet so that you can see a little bit of the explanation. We are going to a very small unit also over there. There are only small units over here as well. So they will work with us. So we need to reach 100 women. For now this is our future plan.

Prof. Kali Prasad: Madam you both have won many awards. Kindly tell about your moment of pride.

Experts:

- Shri Ram College of Commerce [1st Edition of Startup Conclave 2024] ―Audience Choice Awards‖
- MSME Excellence Award by WORLD TRADE CENTER
- 2nd Runner up in Odisha Millet Innovation Challenges
- SWAYAMMSIDDHA SANMAN
- OASME ―Best Women Entrepreneurs

Prof. Ananya: Madam what advice would you give to other women who are aspiring entrepreneurs?

Experts: ―Never lose hope and patience always keep trying until you achieve‖

Prof. Ananya & Prof. Kali Prasad:

Thank you Madam for sharing your Experience and Insights !

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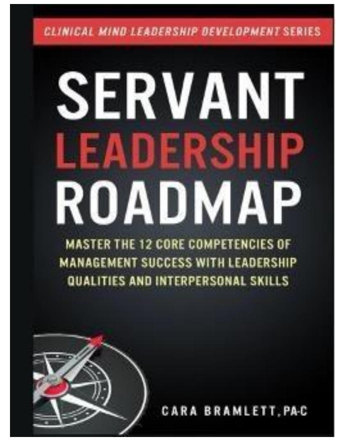
BOOK REVIEW

Priyanka Jena & Ananya Swain

Title of the Book	**:**	**Servant Leadership Roadmap**
Author	**:**	**Cara Bramlett**
Edition	**:**	**April 2024**
ISBN	**:**	**979-8322098454**
Price	**:**	**$24.99**
Page	**:**	**118**
Publisher	**:**	**Independently Published**



Servant leadership is a timeless and profound leadership philosophy that emphasizes the leader's role as a servant first. At its core, this concept involves individuals who prioritize serving others above their own ambitions and desires. Servant leaders are committed to empowering those around them, fostering an environment where individuals can grow, develop, and reach their full potential. They focus on meeting the needs of their team members, ensuring that their basic requirements for well-being, support, and encouragement are fulfilled. By placing the needs of others at the forefront, servant leaders create a culture of trust, collaboration, and mutual respect. This approach not only enhances individual and team performance but also cultivates a sense of purpose and belonging, ultimately leading to a more positive and productive organizational environment.

Cara Bramlett sets the stage by introducing the concept of servant leadership, emphasizing the importance of leaders serving their teams to foster a productive and positive work environment. She outlines the twelve core competencies that will be explored in detail throughout the book. This introduction establishes the foundation for understanding the value of servant leadership and prepares readers for the journey ahead.

Based on the introduction and chapter summaries, here's an elaborated chapter-wise review of "Servant Leadership Roadmap: Master the 12 Core Competencies of Management Success" by **"Cara Bramlett":**

The first chapter envisage on the aspects of listening and its importance on understanding and valuing others' perspectives. As per the author's view practical exercises aims to enhance active listening skills which is crucial for building trust and fostering effective communication within teams.

In the second chapter the author describes how **Empathy** encourages leaders to connect emotionally with their team members. Strategies such as recognizing non-verbal cues and putting oneself in others' shoes enhance interpersonal relationships there-by creating a supportive team environment.

The third chapter stretched the need of creating a safe space for team members to express themselves and recover from setback which he describes as **"Healing".** According to the author, techniques for providing emotional support and fostering resilience highlight the leader's role in maintaining team morale and well-being.

In the fourth chapter description has been made on awareness where the author underscores the importance of self-awareness and situational awareness. She also provides some tools for leaders to understand their strengths, weaknesses, and team dynamics, thereby promoting the level of concentration which ultimately reflected in leadership quality.

Fifth chapter highlights the relevance of **―Persuasion"** which contradicting the traditional authoritative approaches and advocating to influence others through reason and empathy. Methods for effective persuasion that engage and respect team members promote a collaborative and inclusive leadership style.

The sixth chapter is all about envisioning a big picture while managing day-to-day tasks. Bramlett encourages long-term thinking and creativity and offering exercises to enhance strategic planning and innovation which will help leaders in balancing their immediate needs with future goals.

Seventh chapter describes about **―Foresight"** which involves anticipating future trends and consequences. Insights into developing the foresight can be made possible by aligning the past experiences and current trends which ultimately emphasize the importance of proactive and strategic leadership.

The eighth chapter emphasizes the ethical responsibility of leaders to manage resources and people with care which the author termed as **―Stewardship‖**. This competency focuses on serving the needs of other and acting as caretakers of the organization's mission and values, underscoring the leader's duty to act with integrity and responsibility.

The ninth chapter is all about **―Commitmen**t‖ to the Growth of People, where the author focuses on fostering personal and professional growth within teams. He suggests for providing learning opportunities and encouraging career advancement and highlighting the importance of investing in team members' development.

In the tenth chapter the author describes the need for **―Building Community‖** to create a cohesive and motivated team. He also stretches the need to create strategies for fostering a sense of belonging and unity, such as team-building activities and open communication practices which is crucial for creating a strong and supportive team culture.

This chapter focuses on **―Authenticity‖** which according to the author advises leaders to be genuine and transparent, building trust and respect from team members. The Author encourages leaders to embrace their true selves and communicate honestly to build stronger, more authentic relationships.

In the last chapter the author describes the word **"Humility‖**, which according to her encourages leaders to recognize their limitations and value the contributions of others. From the author's point of view being open to feedback, learning from mistakes, and sharing successes with the team promote a culture of continuous improvement and mutual respect.

Together, these chapters form a comprehensive guide to servant leadership, emphasizing empathy, ethical responsibility, and a commitment to the growth and well-being of others.

Bramlett concludes by reiterating the interconnectedness of the twelve competencies and their collective impact on effective leadership. She provides a summary of key takeaways and encourages readers to continue their journey of personal and professional development. The conclusion ties together the concepts discussed throughout the book and reinforces the importance of servant leadership.

Cara Bramlett's **"Servant Leadership Roadmap"** is a comprehensive and practical guide that systematically addresses the core competencies necessary for effective servant leadership. Each chapter is well-structured, with clear explanations, real-world examples, and actionable exercises. This book is an invaluable resource for leaders at all levels, providing the tools and insights needed to lead with empathy, integrity, and a commitment to the growth and well-being of their teams.

About the Author:

Cara Bramlett is a dedicated and experienced Physician Assistant with 18 years of practice. Her extensive career spans primary care, urgent care, and onsite clinics, where she has provided comprehensive medical care, immediate treatment for acute conditions, and healthcare services in workplace environments. Cara graduated with her Physician Assistant degree from the Medical College of Georgia in Augusta and holds a Master's degree from the Arizona School of Health Sciences. She also possesses a Master's Certification in Lean Enterprise Solutions from Villanova University, further enhancing her ability to optimize healthcare processes and outcomes.

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Volume - VIII, Issue - I, 2025

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