ROLE OF DEMOGRAPHIC FACTORS AS A MODERATOR IN MOBILE BANKING ADOPTION.

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Abstract-

The study is based on adoption a mobile banking in rural region (Jampali) of Chhattisgarh, with a focus on demographic factors such as age, gender ,education, occupation and income .The study aims to determine whether these demographic factors have a significant impact on the adoption of mobile banking applications .T test and ANOVA test are used as statistical tools to analyze the data collected from 55 respondents. This study is valuable in understanding how various demographic factors influence the adoption of mobile banking in this region .it provides insights that can be useful for policy makers, financial institution and business aiming to promote mobile banking services in rural areas. Its main objective is to investigate the significant impact of demographic factors on the adoption of mobile banking application. Finding of the study states that age, education, gender, occupation, and income level have significant impact on mobile banking adoption, where gender doesn't significant effect on mobile banking adoption.

Keywords: Digital Payment, Mobile Banking Adoption, Demographic factors.

Introduction-

We all are aware of the revolution of technology and we have got a lot of benefits from this technology which we are also using in our day to day life. We belong to digital era. Banking industry has a huge contribution in this digital world, and mobile banking is one of most adoptable banking services. Now-a–days the banking industry's focal point is on increase the application of mobile banking. Mobile banking is defined as a way or a channel to introduce effective banking services to customers through a mobile device or a tab. The earliest only SMS facility was available in mobile banking service that's why it is called as SMS banking. Later on, with the introduction of smart-phone, many changes are found in the structure of mobile banking and improve its services criteria also.

The main reason behind the growth of mobile banking users in some other countries supported by only customer and different factors including mobile banking easy to use and its benefit the technology as a tense model explains that if individual perceive that a system is easy to use and they get all the benefit within a time then they will be interested in using it. Beside the comfort factor it conducting transaction so consideration for customer to complete transactions on line with in a few times, banking users can make transaction through mobile banking at any time in contrast to transaction made through bank branches, so that customer feel time saving and get benefit of effective cost.

Literature review

Mobile banking adoption

According to Mukhis (2014), among various digital banking platforms, mobile banking is highly used by customers because all financial transaction is done through a mobile device (Oladejo& yinus,2013) which is easy to carry and easy to operate also. The high-level security risk along with psychological risk is associated with mobile banking and this concern leads to.

Failure of financial transaction through digitally (Luarn& lin,2005; riqelme&rios ,2010). according to Laukkanen &Lauronen ,2005 a significant impact of mobile banking on retails has less cost that increase the volume of data processing and increase the efficiency in operating performance. Mobile banking is a branch of digital banking that provides us various facility towards banking transactions including balance enquiry, funds transfer, investment, loan, bill payment and other utility.as per olalekan,2011mobile banking has provisions of financial services using cellular phones.

Due to technological advancement, several innovative channels have involved themselves in retail banking to reach out to their consumers. Compared to other banking platforms, m-banking is one of the most convenient platforms to deliver banking services with greater ubiquity and localization (Shankar et al., 2020). Over m-banking platforms, consumers avail banking services using mobile phones (Laukkanen, 2016; Shankar et al., 2020a) in. In recent years, m-banking has emerged as a valuable mobile.

Mobile payment refers to individual's usage of mobile devices including wireless handsets, personal digital assistants, radio frequency devices, and near field communication-based devices for making payments to purchase goods and services (Alkhowaiter, 2020; Chen & Nath, 2008). This involves integration of payment systems with mobile devices enabling users to initiate, authorize, and complete financial transactions (Srivastava et al., 2010).

Mobile banking in Chhattisgarh and challenges to adopt mobile banking

After Covid pandemic most of the people adopt various digital platform for making payment because at that time maintenance of contactless transaction was high priority, which is a great contribution towards cashless economy. Then we updated mobile banking app which we are using now it provides banking facility along with other facilities also. To use mobile banking, proper awareness, good internet facility, digital literacy and self-efficacy is required so that a customer can do his all-financial transactions at home very easily.

But due to various factors customers are not convince to adopt mobile banking it may because of privacy risk, security risk etc. as per Siyanbola,2013 high level of cyber-crimes, fraudulent activities are happened through e-banking so this could be a big challenge for whole digital banking system.

(CONCEPTUAL MODEL)
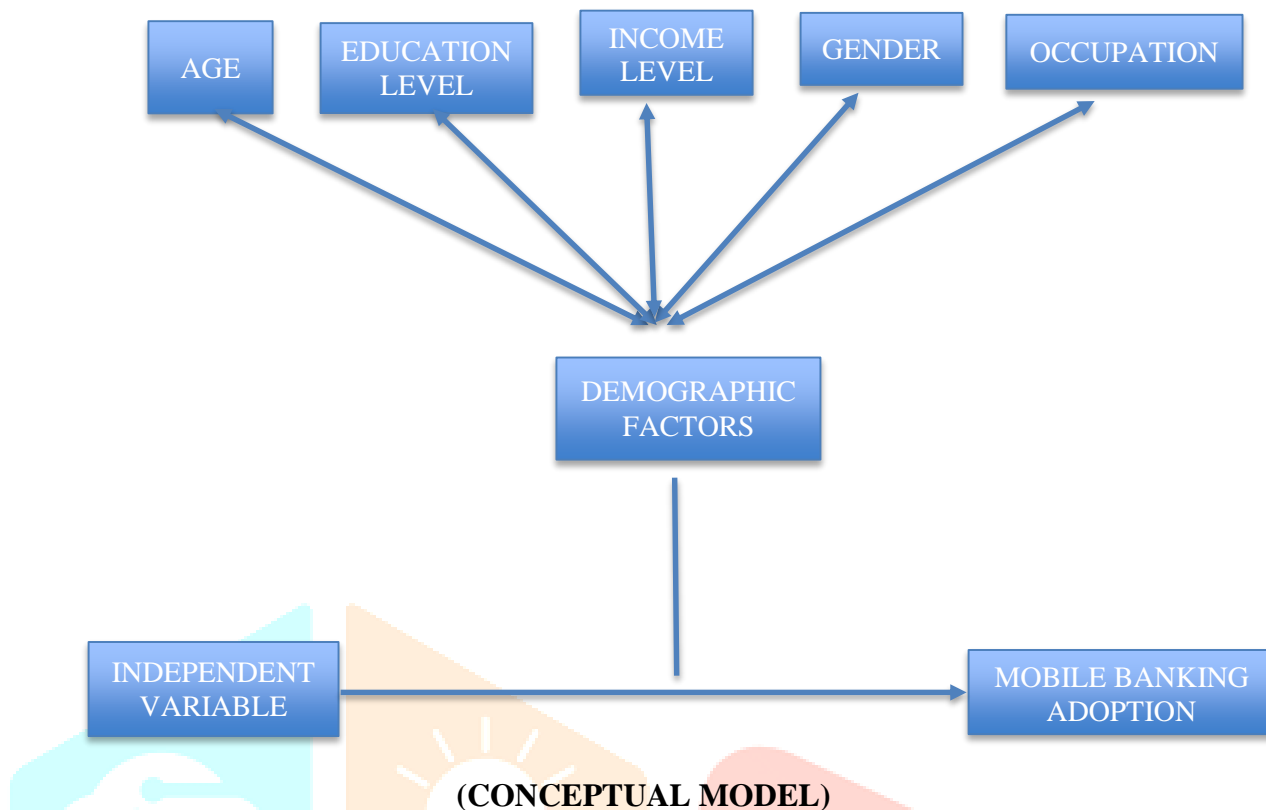
Objectives of The Study-

The following are the primary objectives of the study -

1. To study the effect of gender as a moderator to adopt mobile banking.

2. To study the effect of age as a moderator to adopt mobile banking.

3. To ascertain whether income level has any effect on customers to adopt mobile banking.

4. To verify whether the educational level of customers has an influence on mobile banking adoption.

5. To study the impact of occupational status on mobile banking adoption.

Hypothesis

1. **The gender factor does not exert a substantial influence on the propensity of customers to embrace mobile banking.** (The null hypothesis H0 suggest that there is no significant difference in mobile banking adoption between genders)

2. **Age doesn't significantly affect customers to adopt mobile banking.** (The null hypothesis H2 that there is no significant relationship between age and mobile banking adoption)

3. **Income level doesn't significantly affect customers to adopt mobile banking**. (The null hypothesis H3 implies that there is no significant impact of income levels on mobile banking adoption.)

4. **Educational level doesn't significantly affect customers to adopt mobile banking.** (The null hypothesis H4 suggests that there is no significant correlation between educational level and mobile banking adoption.)

5. **Occupation status doesn't significantly affect customers to adopt mobile banking**. (The null hypothesis H5 asserts that there is no significant association between occupation and mobile banking adoption)

These hypotheses provide clear statements to be tested through statistical analysis, allowing for a systematic

investigation into the factors influencing the adoption of mobile banking. The results will help draw meaningful conclusions about the impact of gender, age, income, education and occupation on mobile banking adoption.

Methodology-

For this research primary data is used which was obtained from the responded samples through questionnaires. The population of the study consists of individual mobile banking users, with sample size of 55.

Data Presentation, Analyses and Interpretation-

Description of Respondents' Demographics

This section contains information about the demographic's respondents of the study. The demographic variables include: gender, age, educational level, monthly income and occupational status of respondents. The result is presented in table 1.

TABLE1: Demographic Profile of the Respondents

Demographic Variable	Variable Description	Frequency	Percentage (%)
AGE	<18 YEARS	7	12.73
	18-30 years	18	32.73
	30-50 years	20	36.36
	>50 years	10	18.18
	TOTAL	55	100%
GENDER	Male	25	45.45
	Female	30	54.55
	Total	55	100%
MARITAL STATUS	Married	30	54.55
	Unmarried	25	45.45
	Total	55	100%
EDUCATIONAL LEVEL	Up to class 12(10th -12th)	5	9.09
	Graduates	25	45.45
	Post Graduates	13	23.64
	Others	12	21.82
	Total	55	100%
OCCUPATION	Student	17	30.91
	Home maker	6	10.91
	Business man	12	21.82
	Employee	20	36.36
	Total	55	100%
INCOME LEVEL	Rs25,000-Rs 50,000	10	18.18
	Rs 50,000-Rs.1,00,000	25	45.45
	Rs 1,00,000-Rs 1,50,000	11	20

	➢ Rs.1,50,000	9	**16.37**
	Total	**55**	**100%**
TYPES OF BANKING	Public Mobile Banking	25	**45.45**
	Private mobile banking	30	**54.55**
	Total	**55**	**100%**
USES OF MOBILE BANKING	About to 1year	10	**18.18**
	2years -5years	42	**76.37**
	>5years	3	**5.45**
	Total	**55**	**100%**

(Source: Field work)

  Age – As per Table No -1, the influence of age is clearly visible. Here the age factor is further divided in to 4 categories (less than 18 year), (18 years -30years), (30years -50years) and (more than 50years)**.** The most respondents (36.36%) as per data were between 30years to 50years group. Where 32.73% respondents were belonging to again young adult group between 18years to 30years.on the other hand (below 18years) has 12.73percentile and (18.18%) belongs to more than 50years age group.

  According to figure 1 the adoption capacity of Young generation is very crucial towards mobile banking.

  Gender- As per (Venkatesh and Morris,2000) they found that gender is a major influencer of adoption of any technology. Among the 55 samples (54.55%) belongs to female which is 20% more than male respondents (45.45%).

  Marital Status- Among the 55 samples (54.55%) belongs to married group and (45.45%) respondents were unmarried.

  Income- For mobile banking adoption, a person must have a smart phone with a good internet connectivity only. Rationally the level of income is a key factor and has a direct effect on mobile banking adoption to afford the device and need sufficient bank balance to use mobile banking facility.

  The demographic structure from table no-1 shows that the income (Rs.50,000- Rs.1,00,000) belongs to 45.45% of total sample. Where 18.18% belonging to (Rs25,000- Rs.50,000), 20% belonging to (Rs.1,00,000-Rs.1,50,000) income group.

  Educational level- In order to use mobile banking, one must be able to afford a smart phone with internet facility. According to this perception income can be considered as a core factor for adoption of mobile banking. Additionally, in order to operate mobile banking, digital literacy and financial literacy is required.

  On the basis of previous literature review (Venkatesh and Morris,2000) there is a better chance of an educated community in adopting new banking technology.so the survey data is classified in to 4 different group under educational background such are- Group-1 (up to class 12th) , Group-2 –(Graduation),Group-3 –(Post Graduation) ,Group -4 –(others)

  There is a strong and positive relationship between educational factor and adoption of mobile banking. According to Table 1-most respondents (45.45%) are Graduate group and then Post Graduate group (23.64%). Where very less respondents belongs to 12th standard (9.09%) because they are not allowed to use mobile phone as per their parent's statement during survey.

  Profession/Occupation- Along with age, education and income, occupation is a core determinant that affect directly on mobile banking adoption. Because the professional level states the uses and significance of mobile banking in one's life. According to Figure 1 most respondents belong to employees (36.36%) and then students (30.91%) category. On the other hand (10.91%) are household and (21.82%) are business man.

  Types of Mobile Banking Application - People are using both public Mobile banking application and private mobile banking. As per the survey data people are mostly use private mobile banking, which is 20% more than public Mobile banking users.

Use of Mobile Banking -There are very people who have been using mobile banking for more than 5years, while 76.37% have been using mobile banking for (2-5years) due to emergence of covid-19.

TABLE-2: T- test/ANOVA for significance of demographic variables on mobile banking adoption

DEMOGRAPHIC Variable	Variable description	mean	SD	T test	P value
Age	<18 years	3.59	0.05	1.657	0.044
	18-30 years	4.01	0.44		
	30-50years	3.80	0.49		
	>50years	3.63	0.73		
Gender	Male	3.51	0.80	4.273	0.073
	Female	3.89	0.42		
Education level	Up to class 12th	3.47	0.09	2.474	0.047
	Graduation	3.92	0.38		
	Post-Graduation	4.07	0.35		
	Others	3.68	0.45		
Income level	25,000-50,000	3.85	0.43	0.248	0.05
	50,000-1,00,000	3.92	0.38		
	1,00,000-1,50,000	3.78	0.46		
	>1,50,000	3.74	0.44		
Occupation	Student	3.82	0.48	0.455	0.048
	Home Maker	3.40	1.01		
	Business man	3.68	0.45		
	Employee	3.98	0.51		

- **Age, Education and Occupational status -** P-value for age, education and occupation are all less than 0.05(5% level of significance).so, the null hypotheses for age, education and Occupational status are rejected. Therefore, we accept the alternative hypotheses, indicating that age, education and occupational status have a significance impact on the adoption of mobile banking.

● **Gender-** The p-value for gender is greater than 0.05(5% level of significance).so the null hypothesis for gender is accepted, suggesting that gender doesn't significantly affect the adoption of mobile banking services.

● **Income level -** The p-value for income level is equal to the standard value 0.05(5% level of significance).so the null hypothesis for income level is rejected and accept the alternative hypothesis, indicating that income level has a significant effect on the adoption of mobile banking services.

These interpretations contribute valuable insights into influence of various demographics factors on the adoption of mobile banking services in this study.

Findings-

This research is about to study to know the effect of demographic factors on mobile banking adoption, where demographic factors are act as a moderators.as per T-test statistical tool mobile banking adoption does not get affected significantly on the basis of gender and marital status. Where ANOVA results signified that the impact of age factor, Occupation factor, education factor are different. age, education and occupational statues had p-value of 0.045, 0.047and 0.048 respectively (their individual p-values are less than 0.05 (5% level of significance). Gender has probability value of 0.047 which is greater than 5% level of significant. Where the income level has a p value of 0.05.

The results indicate that mobile banking adoption is considerably influenced by age, education, income, and profession level. Conversely, gender does not exert a significant impact on the uptake of mobile banking services. These findings are highly informative concerning the moderating role of demographic factors in shaping consumers' decisions to adopt this innovative financial service. The implications of these outcomes for practitioners, policymakers, and scholars interested in devising customized strategies to foster mobile banking adoption among specific population segments are substantial. Notably, our study contributes to the existing literature on mobile banking adoption by providing valuable insights into how demographic characteristics can influence consumer behavior towards digital financial products and services.

Conclusion-

After the Covid-19 pandemic, a large portion of the population has become accustomed to digital payment methods, including mobile banking. Prior research indicated that income level played a significant role in determining mobile banking adoption rates; however, current trends reveal that even students who do not belong to any particular income bracket are utilizing mobile banking services on a daily basis according to their needs. As long as an individual possesses a bank account and sufficient funds, they can easily operate mobile banking services. Research suggests that demographic factors such as age, education level and profession significantly impact the adoption of mobile banking services while gender does not appear to have a significant effect due to increased levels of education and employment opportunities for both men and women in this modern era. Future research should focus on examining patterns of continuous usage among existing users or exploring perceptions held by non-users towards these digital platforms.

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