

An Empirical Study on M-commerce Adoption By Rural Businessmen in South Rajasthan

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Abstract

India being a developing market for Smartphone users, the focus of M-banking and M-commerce is likely to gain further momentum in the coming years. With the Union Government redrafting the telecom policy in India, broadband through wireless media like mobiles & tablets will have a whirlwind effect on the use of M-banking, m-transaction & M-commerce in India. The revenue is expected to jump from US\$ 39 billion in 2017 to US\$ 120 billion in 2020, growing at an annual rate of 51 per cent, the highest in the world based on a forecast by India-e-Commerce. In today's age of technology, people prefer to have everything on their finger tips and mobile phone is one solution to that. Internet penetration in the hinterland has led to a host of new developments, with growing access to technology such as broadband and 4G telecom standards, smart phones/ tablets and dongles along with the acceptance of the idea of e shopping which is set to drive future B2C and B2B transactions eco-system.

This paper empirically examines the factors that affect the adoption of mobile banking/m-commerce/m-commerce by rural businessmen of South Rajasthan (Udaipur, Sirohi, Dungarpur and Banswara). This study aims to test five hypotheses on factors that persuade the M-cash adoption with the help of data collected from a sample size of 200 retailers in The factors selected were Security concerns, Comparative advantage, Ease of Use, Rural user's Adaptability, Cost associated to assess their impact on mobile banking/m-commerce adoption for business. The study underlines the importance for rural people in South Rajasthan to adapt for mobile banking/m-commerce.

Keywords: Rural Area, Mobile banking, M-commerce, South Rajasthan

Introduction

In today's wired and wireless business scenario, recent studies in Rajasthan on electronic commerce (digital business practices) adoption by rural businessmen have paid attention to the (B2C) part of e business practices because the cyber dispersion rate has increased considerably in the last years. A current statistic by nic.in reveals that the average expansion rate of internet penetration in the country between 2014 and 2018 was 386.8 percent per year and in 2017 total Internet users were 34.8% of the population.

The enhanced potential in ease of business has encouraged rural businessmen to shift from conventional methods to the online mode. Thompson and Ranganathan in 2004 had put forth that retailers do have a superior inducement to espouse digital business practices than consumers since it offers numerous benefits to retailers such as immense cost cutting in transaction costs, enhanced competence and strategic liveness by increasing vibrant and flexible associations with the main trade partners.

Due to the global reach of digital business practices, retailers in the EM nations have begun to adopt digital business practices in their businesses as per study by (Rao and Metts 2003) but retailers in rural south Rajasthan as other emergent states are still unwilling to use digital business practices in their everyday business operation due to infrastructure impediments and cost overruns.

Hence, it is imperative to make out the factors that control digital business practices adoption among retailers in rural south Rajasthan. These would immensely help the managers who handle the distribution and Logistic support to the companies that supply SKU's to the retailers in predicting digital business usage rates and evaluating the potential growth of digital business practices in the area assigned to the individual manager.

To discover the relationship between various essential factors and intention to adopt mobile banking/m-commerce and analyze the factors that influences the intent to adopt digital business practices amongst retailers of rural south Rajasthan.

Objectives of the Paper

The rationale of this research is to study the key determinants of mobile banking/m-commerce adoption by businessmen in rural south Rajasthan. What factors determine adoption of mobile banking/m-commerce practice by rural businessmen? The paper is purports to look at the factors that persuade or daunt the rural users' adoption of digital business methods for transactions.

The implementation of Information systems is dependent upon "specific social, cultural,

economic, legal and political contexts, which may differ significantly between countries" as per certain research, this "limits the overview of research results from developed countries to developing country contexts" the businessmen awareness, perception or apprehension about his existing and potential use of digital techniques and tools to find out the factors that persuade or discourage digital business adoption.

Researchers have identified quite a few factors that persuade for the adoption of Information Technology systems in various industries, prominent amongst them are (a) The cost of technology (b) Exterior pressure (c) the characteristics of the owner-manager (d) Security etc. Consequently, these factors are creditable to be explored while explaining the adoption blueprint of digital business methods for transactions by retailers in rural south Rajasthan. In addition to these factors the expenditure on adoption and maintenance of the system is also a significant aspect.

The rationale of this study is to identify the key factors persuading the mobile banking/m-commerce adoption by businessmen in South Rajasthan. Security Concerns, Comparative advantage, ease of use, rural user's Adaptability and Cost Associated were found to be significant in envisaging the rural users' intention to use mobile banking/m-commerce practices.

A) Security

In a number of studies it was found that the main barrier in developing Digital or mobile business transactions and practices is the security of using the same. To adopt Digital business protocols information securely, it is crucial for the entity to have reliability of the complete system.

The alarm of losing trade secrets creates disinclination from businessmen to consider getting into the Digital business procedures in the business arena as per Killikanya 2000.

H₀₁: Rural businessmen who have a high perceived security risk are less likely to adopt mobile banking/m-commerce

B) Comparative Advantage

Comparative advantage has been established as the formidable predictor and also positively associated with an innovation, with a view of the recompense that m-cash offers, it would thus be anticipated that businessmen who perceived e cash as beneficial would probably adopt it.

H₀₂: Rural businessmen who have a higher perceived comparative advantage from the implementation of mobile banking/m-commerce are favorably inclined to follow its adoption.

C) Ease of Use

Information systems that the user perceives to be easier to apply in his business as also being less complex, increases the likelihood of its adoption and usage, this would be likely to be accepted by users only when the proper skills and consideration of the technology are available.

H₀₃: Ease of Use has a positive effect on adoption of mobile banking/m-commerce.

D) Rural Retailer's Adaptability

The level of rural users' adaptability has frequently been identified as a significant factor of Information Technology adoption. An organization which does not have such a capacity is disinclined to as well as less likely to adopt, the businessmen with deficient inclination may incur elevated initial costs when executing the innovation.

H₀₄: Rural businessmen with superior adaptability are more likely inclined to adopt mobile banking/m-commerce practices.

E) Cost Associated

The expenditure on the adoption of the digital practices is a vital factor in use of the digital

platforms. The costs of digital cash practices comprise of investment in the route of its adoption like physical assets of networks, laptops/ tablets/ Smart phones etc there is a straight and major relationship that exists between adoption of technology and the expenditure thereto. The lesser the cost of adoption, higher is the probability of the novel innovation such as the digital business practices being adopted by the entity and vice versa.

H₀₅: Rural businessmen who perceive higher costs are involved in the adoption of mobile banking/m-commerce are less likely to adopt the same.

Research Methodology

An experiential analysis was undertaken to test the hypotheses consisting of survey method.

Data collection - The area of the field survey was South Rajasthan (Udaipur, Sirohi, Dungarpur and Banswara) with a focus on the rural businessmen. A total of 320 businessmen were selected through stratified sampling from the sample. A Survey tool comprising of a questionnaire were administered to the selected businessmen of the research sample. A total of 208 filled questionnaires were received, out of which 8 questionnaires were found inadequate due to deficient responses hence, 200 questionnaires were put in use for the subsequent analysis.

Result and Discussion

The profile of the responding businessmen is as below. A majority of the surveyed Rural businessmen i.e. (56%) had been in the business for tenure < 1 year but > 2 years, barely 18% respondents were in the business < 1 year, 35% were in business > five years.

Table 1: Demographic Profile and Descriptive Statistics

No of years in business	Frequency	Percent
>1 year	18	9
1 year > 5 years	112	56
5 > 10 years	52	26
10 <	18	9
Education level of Respondents'	Frequency	Percent
>Graduate	44	22
Graduation	130	65
P.G.	26	13
Internet usage	Frequency	Percent
Internet user	124	62
Non Internet user	76	38
Period of Internet usage	Frequency	Percent
> 1 year	60	30
1 > 3 years	76	38
3 >5 years	49	24.5
>5 years	15	7.5

Source: Field Data

Only 7.5 percent of the respondents were Internet users of more than 5 years, only 24.5% rural businessmen were Internet users exceeding 3 years. It emerged that, barely about 38 percent of the responding businessmen were Internet users of >1 yrs but < 3 years. The results point to the fact that majority is highly educated inclusive of 78%

of respondents being either a graduate or a postgraduate.

Measuring Instrument

The respondents were asked to rate the responses on a six-point Likert scale, with 6 as strongly agree and 1 as strongly disagree.

Table 2: Multiple Regression Results

Variable	Coefficient	t-value	Sig.	Supported
Organizational inclination	0.123	2.459	.015*	Yes
Comparative Advantage	0.282	3.951	.000**	Yes
Ease of Use	0.247	3.454	.000**	Yes
Security	0.282	3.902	.000**	Yes
Cost Associated	0.044	0.585	.559	No

Level of significance of the t-value: *p ≤ 0.05; **p ≤ 0.001

Source: Statistical Analysis

Organizational Inclination

The higher levels of perceived organizational inclination are associated with amplified intentions to adopt digital business practices in the trade. As per data analysis of this study, Organizational inclination demonstrated significant influence over the adoption of mobile banking/m-commerce business transactions (beta = 0.123, p-value = 0.015).

Comparative Advantage

The results of the analysis indicate that most of the respondents' perceive Comparative advantage to be a considerable forecast for mobile banking/m-commerce adoption for business purpose (beta = .282; t-value 3.951 significant at $p < 0.05$), which provides strength to this hypothesis.

Simplicity of Use

The perceived simplicity of use is also considerably associated with increase in intentions to use mobile banking/m-commerce practices for business purpose. Analysis shows the results of ease of use (beta = 0.247, p-value = .000), indicating that ease of use has a positive effect upon mobile banking/m-commerce practices adoption amongst rural businessmen.

A majority of the prior studies put forward that more complex a new technology is perceived to be, less likely it would be adopted. One probable reason is that rural businessmen in South Rajasthan are still reluctant to use Digital/Electronic Commerce in trade operations. Only about 25 per cent of the businessmen in South Rajasthan have a presence on the www and also utilize IT on a daily basis according to latest UCCI data. Since these rural users are reluctant to use digital business practices, apprehensions that are aggravated by any potential complexity are the main and significant deterrent of digital business practices adoption amongst them.

Security

A series of research concludes that concerns regarding perceived security are the main hurdle to the use of digital business practices by rural

users. Superior levels of perceived security are related to decreased intentions in the adoption of digital business practices initiatives. The analysis illustrates that (beta = -0.306, p-value = .0001), this illustrates that when rural businessmen are fearful about security; the degree of digital business practices adoption is lower.

Cost Associated

Although the findings conclude that perceived cost has a positive relationship with digital business practices vis- a- vis the intention to adopt, this relationship is not significant (beta = 0.044, p-value = .559).

Conclusion

This paper has endeavored to research the adoption or rejection of mobile banking/m-commerce practices by the rural businessmen in South Rajasthan, analysis illustrates that Comparative advantage, organizational inclination and security and cost associated are significant elements of digital business practices adoption.

The study concludes that there is a 53 percent variance in the users' intention to adopt mobile banking/m-commerce practices. As we increase our share in the e-biz pie of the country it is imperative that the factors that hold sway over the rural users' adoption of the mobile banking/m-commerce practices be properly understood so that it is put to use in perspective regarding the future trends in digital business practices expansion.

This study has concluded that respondents have cited that digital business practices is a multifaceted structure and the system should be prepared in such a manner which can be as user-friendly as doable, because not all the users in many parts of the country are well acquainted with mobile technology, computers and the www, especially the businessmen who are senior citizens.

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