

Digital Financial Inclusion: An Experimental Study among Weavers

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Abstract

The textile industry has vitally contributed to the economic growth of India. In the past, India was identified as a major textile exporter to the rest of the world. Due to mechanization, the concept of hand weaving was reduced gradually. Further, the weavers are struggling due to various financial and health issues. The Government of India, to uplift the weaver's community, announced various financial schemes. The objective of the research paper is to propose a unique conceptual model to study digital financial inclusion among weavers. The study is significant since it is helpful to investigate mobile payment adoption and implement remedial measures. The research will mainly focus on barriers to mobile payment adoption and degrees of resistance. The proposed empirical research study should concentrate mainly on Generation X, the age group of 40-60 years, as the youngsters are inclined towards the adoption of new technologies. India is the relevant geographical region for this study since it is an emerging economy and has witnessed exponential growth of mobile payment in the recent past. Again, the study can yield significant empirical results as a value addition to the present literature in the field of mobile payment adoption.

Keywords: Digital Financial Inclusion, Experimental study, financial issues, Indian weavers, and Mobile Payment Adoption

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1. Introduction

The Indian handloom sector is unorganized and an important contributor to the Indian economy. The Indian handloom industry holds excellent artisanship to represent and conserve pulsating Indian culture. India's handloom weavers are recognized worldwide for their weaving, hand-spinning and printing excellence. They are residents of small Indian villages and transfer skills to the next generation. India's largest cottage industry is the handloom industry, with approximately 23.77 lakh looms. This industry offers employment to more than three million people directly and through ancillary activities. In rural India, the Handloom industry is considered as largest employment provider next to agriculture. The environment-friendly, not capital intensive, low power consumption and flexibility to match the market are the advantages of the Indian handloom sector. As per Handloom Census 2019-20, this industry offers employment to 3,522,512 weavers and allied workers in India. Again, 72.29% of the handloom workforce is predominantly occupied by women.

1.1 Government initiatives

1.1.1 National Handloom Development Program (NHDP)

This program has various components to emphasize on different phases of the handloom business. The financial assistance to clusters is provided by Cluster Development Program (CDP). Around 66 clusters received financial support during 2021-22 out of CDP initiatives. Further, marketing assistance and awards to handlooms, haats scheme in Urban are initiated by GoI to support the handloom industry in India. Financial assistance of 30 Crores to 10,000 handlooms is planned by GoI for Megha handloom clusters.

1.1.2 Market access initiative (MAI)

It was initiated in 2018, reformed in 2021, and will be in force till 2026. This scheme will play the catalyst role in promoting the sustainable Indian exports. International marketing, capacity building, statutory compliance

support, conducting studies, evolving projects, offering foreign trade portals, etc, are the major activities under this initiative.

1.1.3 The Handloom Export Promotion Council (HEPC)

It was established in 1965 under the Ministry of Textiles to support and promote all products and fabrics produced by Indian handloom. It conducts market studies, circulates information, provides recommendations to governments, and offers export consultancy. It periodically conducts buyer-seller meets and international-level trade fairs in India and overseas.

1.2 Need for the study

The present era is the digital era, and E-Commerce is the most preferred mode of purchase by Indian consumers. E-Commerce can fetch manifold benefits like convenience etc., to consumers. It grows exponentially every day. An important part of E-Commerce is digital payment via mobile. The UPI is most used for mobile payment among vendors and online consumers. In addition, everyday purchases like groceries, vegetables, etc., can be made via UPI. On the other hand, the currency is the most used payment mode by retail consumers. The currency and coins act as a carrier of transmittable diseases since it carries a large quantity of microbiological organisms. The mobile payment can help to avoid currency and associated problems too.

The researchers have given considerable attention to mobile payment adoption by consumers. The research studies highlighted substantial differences in technology adoption among different generations. In spite of being good at technology, Generation X exhibits a comparatively slower rate of adoption than Generation X and Z. Thus, the slower adoption rate of Generation X is the research problem of the study.

2. Literature review

When a consumer purchases products or services, he can choose to pay through digital cash (i.e.) if the Smartphone with the internet is used for digital cash transactions, then the process is defined as Mobile Payment Solutions (MPSs) [1]. Examples of MPSs are net banking, mobile banking, and mobile wallets. Examples of mobile wallets are Paytm, PhonePe, Freecharge, Mobikwik, Google Pay, Amazon Pay, Airtel Money, etc. The mobile wallet is predominantly used by customers to pay for their purchases. The scope of mobile wallet is growing beyond retail transactions and is used for one-to-one cash transactions too. In fact, the mobile wallet has contributed a lot to the exponential growth of e-commerce and online shopping. The mobile wallet can provide multiple advantages like convenience, fast, and cost-effectiveness in digital transactions. In spite of all these benefits, the mobile wallet adoption is not widespread except few early innovators. The slow adoption of mobile wallets is a common phenomenon across all countries, irrespective of their economic development. Scholars have studied the influence of behavioural beliefs, trust, perceived security [2], and other variables in mobile wallet adoption. But comparatively, the research studies on the slow adoption of mobile adoption are few.

Most of the research articles on mobile wallets tend to study the factors influencing the adoption of mobile wallets [3]. Few studies are focused only on developing a conceptual model to study the mobile wallet adoption. Few researchers have examined the influence of exclusive factors on mobile wallet adoption (i.e., trust and information sharing, addiction to smartphones etc.) (Eappen, 2019). The TAM (Technology Acceptance Model) is the most used theoretical framework. Further, theoretical frameworks such as UTAUT (Unified Technology Acceptance and Use of Technology), TPB (Theory of Planned Behaviour), IDT (Innovation Diffusion Theory), and TRA (Theory of Reasonable Action) are commonly used to develop a conceptual model and test the model empirically. But the consumer resistance of MPS is a less focused research area. The research article "The Barriers to the Adoption of E-Wallet Payment System" investigates the barriers to the adoption of an E-Wallet payment system using the IRT theory model (Izzati et al., 2020). Another research article, "An innovation resistance theory perspective on mobile payment solutions," tries to identify which IRT barriers are significant in the context of MPSs. Again, it tries to answer the second research question, "How do these barriers that existed prior to the adoption impact the future use and recommendation intentions of first-time MPS users" [4]?

As per the literature review, the slow adoption occurs mainly due to consumer resistance [5]. It is very common for retail innovations to face consumer resistance. But few innovations fail during the resistance phase, and successful innovations will sail through it. Resistance is a usual reaction towards potential innovations which can change the lifestyle and modify the present form (Ram & Sheth, 1989). For example, the introduction of personal computers too had resistance in the beginning, but it successfully completed it, and today, PC has become

essential for life. The firms offering innovative products/services, especially in digital solutions, should recognize that consumer resistance is a vital factor in deciding the success or failure of retail business [6]. Furthermore, the rate of new product/service failure is alarming, which necessitates that service providers study consumer resistance at the retail level and other influencing factors associated with it. Not only in consumer retail but even in the IT sector, user resistance is considered as a significant problem. But there is a dearth of empirical studies in the area of retail consumer resistance to adopt MPSs.

Consumer resistance affects not only the adoption rate but also the intention to adopt. In a model developed by [7], self-determination theory is framed as an antecedent to IRT theory, and further, it affects the consumer intentions to adopt MPSs. In another research [8], usage, value, risk, tradition, image, and related barriers are significant except for perceived cost barriers toward consumer adoption. The factors of self-efficacy, attitude, norms, and confidence significantly affect the respondents' adoption behavior. In another research study, usage barriers, value barriers, risk barriers, and perceived cost barriers are significant in the adoption of E-Wallet [9]. These results indicate that there is a need for studying the consumer resistance variables related to MPSs.

The growth of smartphones and internet connectivity has transformed financial transactions at the retail level. In the 1990s first mobile wallet was introduced, and today, we have plenty of mobile applications. But the number of research articles related to MPSs has increased only over the last decade. Previous research was conducted to study the variables affecting innovation adoption. The innovation resistance has been neglected by scholars, and only a few empirical research studies are available [10].

The IRT theory is a widely used theoretical framework to study consumer innovation resistance in the literature. Sometimes, researchers create a customized model using the IRT theory and IDT/TPB/Valence theory/TRA to examine consumer resistance.

Earlier studies focused on intentions to adopt, not actual adoption. Again, there is a research gap in understanding post-adoption behavior, such as the recommendations to others and resistance of specific user groups (teenagers and young adults). Further, in resistance studies, one or other form of regression or SEM is used for analysis. [11].

3. Research gap and research question

"Barriers to adoption" is a major research gap in the adoption of innovation research studies. In addition, "degrees of resistance" to adoption is an unexplored area. Again, there is a paucity of "adoption of innovation" research studies focusing on specific groups. Finally, there is a research gap in conducting an experimental study or longitudinal study.

The proposed study "Digital Financial Inclusion: An Experimental Study among Weavers" aims at filling all these major research gaps.

This research study proposed to focus exclusively on "Generation X Weavers." It aims at studying the moderating effect of socioeconomic variables, experience, and personality.

3.1 Research question

To study the inhibitors of digital financial inclusion (barriers of mobile wallet adoption) among weavers and suggest remedial strategies

3.1.1 Research objectives

To identify the sequence of "barriers of mobile wallet adoption" in terms of most dominant to least dominant

To identify the sequence of "degrees of resistance" in terms of most dominant to least dominant

To study the moderating effect of age, education, income, occupation, experience, and personality variables between barrier of adoption and degrees of resistance

To study the relationship between the variables "barriers of adoption" and "degrees of resistance."

To study the effect of experimental treatment on the adoption rate

To study the effect of inertia on the intention to continue among adopters

4.0 The Conceptual Model

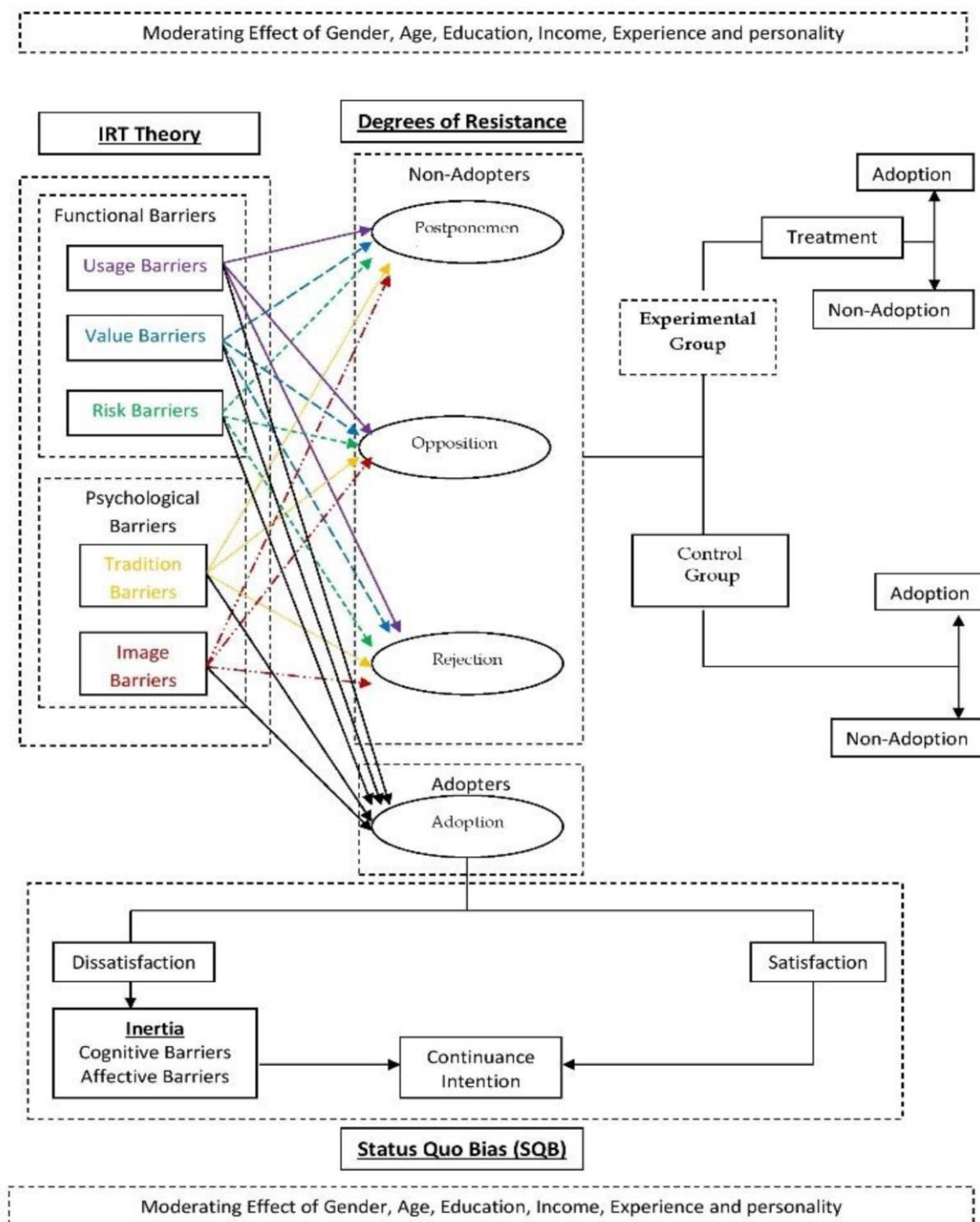


Figure 1: The conceptual model of the research study

The existing research gaps require a holistic model with a multi-dimensional approach, which can be used to study consumer resistance to the adoption of different digital innovations. A conceptual model was developed to bridge the major research gaps. This model can be used to examine the resistance to the adoption of any new products/services based on IRT theory [12] and degrees of resistance [13].

The proposed framework has three phases. The phase one comprises of functional and psychological barriers of IRT theory. Additionally, other relevant barriers based on digital innovations under consideration can be included. The inclusion of new and context-specific barriers is important since the penetration of digital innovation is increasing in trend globally, but consumer adoption is still complex due to confrontations.

The second phase has two groups, namely mobile wallet adopters and non-adopters. The non-adopters are segregated into three different degrees of resistance (rejecters, postponers, and opponents). The consumer resistance can be categorized into any of these three degrees initially. Even the adopters will be included in the resistance study, and their resistance level will be comparatively lower than that of non-adopters. Further inertia among the adopters will be measured. The inertia and intention to continue will be negatively correlated.

In the third phase, the entire sample will be divided into two groups, namely, the experimental group and the control group. The mobile wallet usage will be demonstrated to the experimental group. In addition, the experimental group will get access to a smartphone with internet connectivity and a mobile wallet. The experimental group will be guided by the interviewer to practice the mobile wallet payment using a QR Code (participative product demonstration). On the other hand, the control group will not be given such treatment. After 3 months, the experiment group respondents will be contacted to know whether they have adopted the mobile wallet or not. If they have made a few purchases using a mobile wallet, then it will be considered as adoption. If the consumer resistance changes into adoption, then the participative product demonstration will be considered effective if not it is ineffective. If there is a statistically significant difference between the adoption of the experiment group and the control, then the participative product demonstration is effective [14].

Focus group discussion/open-ended essays are qualitative approaches that help to establish context-specific scales if the researcher is interested in customized scales. Sometimes product/service-specific new barriers can be identified by focus group discussion due to its explorative nature. This model is flexible to engage one or more moderating variables while treating other variables as control variables. For example, if the study is conducted in a country (moderating variable), other socio-economic variables can be treated as control variables. To investigate how personal differences of consumers' impact digital innovations, context-specific moderating variables can be added.

4.1 Hypotheses

- H₁: The Usage, value, risk, tradition, and image barriers are significantly higher in non-adopters than in adopters
- H₂: Usage, value, risk, and image barriers are positively correlated with different degrees of resistance
- H₃: Tradition barriers are **not correlated** with different degrees of resistance
- H₄: The impact of usage, value, risk and image barriers with different degrees of resistance is more pronounced (higher) at higher values of **age** as a moderator
- H₅: The impact of usage, value, risk and image barriers with different degrees of resistance is less pronounced (lower) at higher values of **education** as a moderator
- H₆: The impact of usage, value, risk and image barriers with different degrees of resistance is less pronounced (lower) at higher values of **income** as a moderator
- H₇: The impact of usage, value, risk, and image barriers with degrees of resistance is less pronounced (lower) at higher values of **experience** as a moderator
- H₈: The impact of usage, value, risk, and image barriers with degrees of resistance is less pronounced (lower) at higher values of **openness** as a moderator
- H₉: The impact of usage, value, risk and image barriers with degrees of resistance is more pronounced (higher) at higher values of **neuroticism** as a moderator
- H₁₀: The impact of usage, value, risk and image barriers with degrees of resistance is less pronounced (lower) at higher values of **extraversion** as a moderator
- H₁₁: The impact of usage, value, risk and image barriers with degrees of resistance is more pronounced (higher) at higher values of **Conscientiousness** as a moderator
- H₁₂: The impact of usage, value, risk and image barriers with degrees of resistance is more pronounced (higher) at higher values of **agreeableness** as a moderator
- H₁₃: The adoption rate of the experimental group is significantly higher than that of the control group
- H₁₄: The adoption rate of postponers in the experimental group is significantly higher than opponents and rejecters in the experimental group
- H₁₅: The adoption rate of opponents in the experimental group is significantly higher than rejecters but lower than postponers
- H₁₆: The adoption rate of rejecters in the experimental group is significantly lower than the opponents and postponers
- H₁₇: The inertia and the intention to continue among adopters are **negatively** correlated

5. Conclusion

The proposed experimental study is substantial as it covers the financial inclusion research gap in the existing literature. The study will highlight how to encompass digital financial inclusion among the weavers' community. The result of the study will be useful input for government and other stakeholder to frame policies and promote

mobile payment adoption. Thus, the study proposes measures to alleviate poverty among weavers by promoting digital financial inclusion.

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