# Adoption of Green Banking (Mobile Banking, Internet Banking) on Individual Level - Literature Review of Theoretical Models

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### **Abstract**

In recent adoption of green banking (GB) by people and their motivations have drawn a lot of scholarly interest. This study examines the GB literature using nine adoption lenses. In recent studies it is depicted that GB is complicated & diverse procedure. Customers' social, psychological, utilitarian, personal, and behavioural components in tandem with adoption of green banking is more crucial and will ultimately lead to the desired conduct. Therefore, rather of directly influencing behaviour, top executives and banks should adopt an approach that focuses on consumers and, controlling behaviour development. The review also concludes that the state of GB research is equivocal and that there is wide variation in the methods and conceptualizations employed to comprehend the beliefs that actually shape GB activity. There is a dearth of research on the use of interventions that can help managers make wise choices and hasten the adoption process. This research helps the researchers that they can take any of the theory which can affect the adoption of green banking or they can integrate different theories to increase the number of factors.

**Keywords:** Literature review, green banking, theoretical models,

### Introduction

New inventions, technologies and bank-related services of banking sector like online banking, ebanking and the distribution channels for banking services underwent a significant change in the 1980s which is also a starting point of green banking in the form of digitization. As a result of the advancement of this type of new innovations and technologies, banking sector also increase their range of services and skills which help in providing new and innovative services to their consumers at minimum cost and with selfautomated channels. Such type of integration of new technologies into banking sector and securing our environment at corporate level, the level or scale of change is required by the availability of new term like GB. Individual acceptance,

adoption habits of retail customers is a key factor demonstrating effective implementation of green banking.

The IFC's creation of the "sustainable banking network" (SBN) in 2012 gave a great boost to green banking acceptance. A community of banking associations and financial sector regulatory bodies from emerging nations are dedicated to promote sustainable finance in accordance with global best practices. The primary players in this network are supervisors of banking. There are currently 38 countries that make up the SBN, and 15 of those nations have created their own policies, rules, charters, or implementation roadmaps for green banking (IFC, 2018). The banking industry has a lot of important things it can do to lessen the impact

of climate change worldwide. Since banks are the main providers of funding for various industries, they have significant power to shift business practices in favour of more ecologically friendly ones. Finally, through internal reorganisation, banks can lessen their own environmental impact and steer the industry towards eco-friendly lending (Bowman, 2010). Banks prioritise funding that is ecologically responsible by assessing the project's environmental risks before approving financing and by supporting green projects and efforts (Islam et al., 2013).

The interaction between the working system features related to technology of GB and the societal, economic, & environmental qualities of customers' make GB behaviour a complex process. According to this viewpoint, GB adoption is essentially the result of learning or communication process. Thus, study of variables of green banking usage is a crucial and first step in studying this process. GB must provide users with definite advantages to be successfully adopted and used.

Additionally, according to Lassar et al. (2005), advantages are viewed as necessary but insufficient prerequisites for understanding GB behaviour. Along with different social, psychological, and cultural factors, it is also important to consider the unique characteristics of each customer.

GB has drawn the attention of academics and practitioners since it began to gain popularity in the late 1990s, prompting a thorough study to understand how and why people choose to adopt or reject GB. As a result, this topic has received much of the attention in GB literature.

According to Fishbein and Ajzen (1975, p. 288), behavioural intention is "a person's subjective probability that he will perform some behaviour." In GB and IS research, the importance is well known that intention can predict adoption behaviour. (Taylor and Todd, 1995). The regularity, time of GB usage are typically used to gauge use.

This article's objectives are to give a comprehensive assessment of the existing GB literature, summarise it, address methodological and theoretical concerns, and suggest potential directions for further investigation. This article does not attempt a thorough evaluation due to the vastness of the literature. Instead, the author of this article highlights some of the more significant and original works in the literature review of green banking.

In different studies it shows that how GB research has developed, concentrating 9 distinct conceptual frameworks, replication studies. attempts to improve constructs, and the search for an alternative conceptual process which promotes adoption of GB. There are two main conceptualization levels in the GB literature. The first approach is first seven theoretical models propose that GB qualities are significant predictors of attitudes towards the use, intention to use, and actual adoption of GB. They aim to examine GB according to the adaptation and different theories aspect. Although these theories focus on various facets of the factors that influence behavioural change (i.e., the adoption of GB), they all start from the premise that adoption of GB on individual level is not dependent on 1 time activity & the process that leads to this decision is not linear. Over time, beliefs and attitudes are established, and these factors may

affect decisions. Ram et al. (1989) claim that individuals oppose utilising an invention by raising doubts at both the functional and mental stage is used in 2<sup>nd</sup> method, which play attention on the reasons for opposition or obstacles to adaptation of green banking. Different theories are used to explain this strategy.

# Theory of innovation diffusion (IDT)

Diffusion theory, the most popular framework that set the essential framework for subsequent research, models innovation adoption as a means of acquiring information and minimising uncertainty with the aim of evaluating the diffusion of innovation (Rogers, E. 1962). The acronyms RA, CO, CP, TR, OB, and TR, which stand for relative advantage, compatbility, complexity, trialability, and observability, were identified by IDT as the five variables that influence an innovation's adoption. These characteristics are based on multiple frameworks from many fields, mixed with literature for the adaption process, and have been used in many different fields. A person's belief that green banking (GB) is preferable to conventional banking is referred to as having a RA. It is connected to GB's diverse economic, social, practical, and satisfying traits. Research has shown that RA is a significant factor. CO is a person's belief that GB is consistent with their current values. Green banking help how can reduce the wastage of resources as well as interest in computer-mediated interactions. The impact of following iteration is that invention is anticipated to be favourable, particularly when there is compatibility in new inventions (Lee et al 2005). A prior adaptation method of comparable innovations & a high compatibility has an impact

on a person's readiness to accept a new technology. This will make it possible to interpret the new technologies are in a more comfortable setting. Customers' attitudes about using GB have been found to be favourably correlated with their impression of compatibility with other internet banking services (like ATMs, digital banking, and mobile banking) (Puschel et al., 2010).

GB's perceived complexity (CP) measures how challenging it is to understand and apply. Although CP and CO are closely related, there is a difference between the two in that CP focuses more on the actual competence and skill required to utilise GB while CO expresses overall attitudes about GB use. According to earlier studies, CP appears to have an adverse impact on green banking usage (Black et al. 2005). TAM (Technology acceptance model) introduces new construct PEOU that employ the IDT framework to replace CP (Koenig et al. 2010; Puschel, J., Mazzon, J. and Hernandez, J. (2010).

TA (Trialability) measures how much a person believes the bank is willing to let them try GB before making a choice. A few studies have indicated that TR is crucial for GB acceptance because, when given the choice of a less expensive trial of GB, people experienced that ease with the new invention (Black et al., 2001). Puschel, J., Mazzon, J. and Hernandez, J. (2010), other side, did not discover any relationship between adaptation of green banking and trialability.

Observability (OB)describe an individual's capacity which monitor others utilising that service & see when GB is available. The more visible an innovation and its benefits are, the more likely it is to be adopted because

people can more easily see the advantages of using it (Rogers, E. (1962). Other side, the majority of research utilising the theory of diffusion innovation discovered that observability is marginally significant in assuming GB pattern (Lee, E., Kwon, K. and Schumann, D.(2005) excluded it because observing people using GB is not only challenging but also unbelievable. Indirectly or overtly, this theory integrates other theories to analyze GB conduct. Most studies on GB dissemination, contend that only some constructs like relative advantage (RA), compatibility, comparability (CR) frequently linked to GB acceptance, and very few specifically test all five of Rogers' qualities Koenig-Lewis et al., 2010). This theory is beginning part for studying GB innovation diffusion, Black et al. (2001) pointed out that societal concerns and individual characteristics need to be added into the study.

Framework will help to comprehend. The perceived risk (PR) of an innovation was not mentioned by Rogers in 1962, but it has since been discovered to be a significant determinant.

### Theory of Reasoned Action (TRA)

The TRA is a famous model that relies on an assumption that individuals are rational (Fishbein et al. (1975). In this theory of reasoned action, an individual's deliberate actions are a function includes both his perspective on exhibiting the act and his impression about friends, and peers believe in general. The more enthusiastic one is about GB and its goals, the more likely they are to succeed.

The more societal pressure people feel to use GB, the stronger their intention is to start or continue using it. The acceptance and use of

green banking, particularly online Banking System, internet banking, can be compre-hended through the application of the Theory of Reasoned Action (TRA). According to the Theory of Reasoned Action (TRA), a person's intention to carry out a behaviour is what defines their behaviour, and this intention is shaped by their attitude towards the behaviour and subjective norms. An individual's favourable or negative feelings regarding engaging in a particular behaviour are referred to their attitude towards the behaviour. In the context of green banking, users are more likely to plan to utilise internet banking if they have a positive attitude towards it and believe it to be efficient, secure, and convenient. Subjective norms are the perceived societal pressures to act in a certain way or not.

The fact that TRA overlooks contextual aspects that might affect the attitude-intention-behavior interaction makes it difficult to foresee circumstances in which people lack volitional control, which is a key critique of TRA (Yousafzai et al., 2010).

There has been little use of TRA to examine GB behaviour. Shih, Y .and Fang, K. (2006) applied and expanded the basic theory of reasoned action by adding some new constructs in it like safety, speed of transactions and quality of information.

# Theory of Planned Behaviour (TPB)

Perceived Behavioural Control (PBC) was added as a new factor in the (TPB), expanding on the limitations of the Theory of Reasoned Action (TRA). This addition helps to address behaviors that people have limited control over (Ajzen, 1985).

Once a person realises that there are technology and other resources available to him and that they aren't prohibitive in the context of GB when a fee is incurred, such as a price for a e-connectivity, he is more likely to adopt or keep using GB if he is able to do so. TPBhas also come under fire for failing to consider other crucial elements that could affect the relationship between intention and behaviour.

In this theory some new factors have been added by Tan (2000) such as FC (facilitating conditions) and SE (self-efficacy). The users' belief in their competence to carry out GB transactions, they said, access Governmental assistance, access to technology resources, and infrastructure, all have a significant impact on GB. In many studies help from government including positive internet banking conduct (Chonget 2010). Theory of planned behaviouris estimate the usage of internet banking behaviour and had proven to be superior to TRA (Yousafzai et al., 2010).

One of the earliest research models to focus on examining how a person's opinions regarding the usefulness and usability of technology was the Technology Acceptance Model (TAM).

# Technology Acceptance Model (TAM)

Your attitude towards using a certain technology influence how it is ultimately used (Davis, 1989). In contrast to PEOU, which is the belief that utilising GB would not need any effort, perceived usefulness (PU) relates to a human value who use GB will enhance their working capabilities. The impacts of outside factors, such training and technological features on behavioural intention and usage are mediated by

PU and PEOU. PEOU affects PU because, assuming everything else is equal, a technology might be more useful if it is simple to use. TAM suggests as well that only in the early phases of use that there is direct relationship between technology and intention behaviour (Venkatesh et al., 2003). As user experience improves over time, this effect shifts from direct to indirect and uses perceived usefulness (Venkatesh et al., 2000). According to a paucity of data regarding effects of perceived ease of use (PEOU), Alsajjan, B and Dennis, C.(2010) merged perceived ease of use and perceived behavioural control (selfefficacy and controllability metrics) into one combined element it was referred to as perceived manageability, that examined how customers viewed internal and external barriers to use GB technologies.

The TAM model has been used the most frequently to examine GB conduct. The theoretical foundation of Technology Acceptance Model variables (Eriksson, K. and Nilsson, D. 2007; Celik, H. (2008) and framework replication (McKechnie et al., 2006) have been the main topics of previous research using TAM in the GB setting.

PU and PEOU, extended model with the help of new dimensions as straight predictors of view, intents, or usage, as well as model alterations by fusing TAM and alternative models are some examples of model modifications (Chan and Lu, 2004). The TAM was discovered by Yousafzai, S., et al.,(2010) to be the most precise-predictor of real GB behaviour among TAM, TPB, and TRA. Compared to the other two models, this model is empirically superior. Parsimony, utilitarianism, and a

technological concentration, are the main benefits of TAM, which might cause one to neglect the impact of a customer's social and psychological judgements on the adoption of a technology. The failure to recognise individual characteristics is a major critique of TAM (Agarwal and Prasad, 1999). Age, sex, prior experience, and a variety of other personality traits, such inventiveness, may affect attitude towards technology and, in turn, influence intent to use, are not taken into consideration in the original TAM. Numerous studies have included different factors to get around these restrictions. For instance, Luarn and Lin (2005) discovered combination of TAM's predictive capabilities for uptake of m-banking was greatly enhanced by the inclusion of perceived cost as well as self-efficacy and perceived credibility. According to their definition, perceived cost refers to how much a person thinks they can afford something.

Utilising a technology requires both individual and institutional resources, including knowledge, money, software, hardware, data, documentation, and human support. However, there is conflicting research findings regarding this factor, (Koening 2010) discovered the perception of expenses had no bearing on a person's inclination to use mobile banking.

After recognising & theorising SI (social influence) and the cognitive instrumental processes (relevancy regarding work, quality of output, and PEOU used as the factors of PU which is included in TAM2. The new framework also includes experience and willingness as moderators. Venkatesh (2000) added FC as one of the factors of PEOU along

with Computer playfulness, computer fear, and computer self-efficacy. Using TAM2, GB behaviour has been accurately predicted.

Previously, Venkatesh et al. (2008) combined TAM2 and the TAM1 paradigm to create an integrated TAM (TAM3). Since no study has yet been conducted to evaluate the model in the context of an GB, TAM3 offers the most comprehensive version of TAM.

# Perceived Innovation Characteristics (PCI)

By substituting PEOU for CP, PCI integrated TAM constructs with IDT attributes and dissected observability (OB) in 2 directions: VS (visibility) and Relative advantage which studied by Moore, G. and Benbasat, I. in 1991. As an invention is adopted, a new construct image is presented within a particular social environment, and as a result, the adoption choice affects the adopter's reputation. Eight variables that reflected the components of adaptation technologies made up the conceptual framework PCI that was the end result. Despite PCI's thoroughness and improved capability, it received little attention in GB literature to describe complicated innovation adoption phenomena. Gounaris and Koritos (2008) discovered that IB adoption was significantly influenced by social and psychological aspects, and that perceived innovation characteristics produced superior outcomes to IDT and TAM. Their research supported the importance of RA, voluntariness, PEOU, and image in explaining GB behaviour. However, Puschel et al. (2010) did not discover evidence in favour of TR and image and m-banking practises. Additionally, the person who want to work themselves have

not evaluated by researchers utilising PCI model into context of GB adaptation because the usage of GB is optional in nature and people do not follow commands from their high authorities to use or abstain from using GB.

### Technology, Organisation, and Environment Model (TOE)

The Tornatzky and Fleischer (1990) TOE framework makes use of a general set of assumptions to forecast the possibility of adoption of a new framework. According to the organisational factors, business and organisational reconfiguration, and the industrial environment (Kowtha and Choon, 2001) all have an impact on adoption (Kauffman and Walden, 2001). Different factors affecting the adoption of new technology. Among the technological factors considered are the firm's internal and external technology resources. Other important factors include perceived relative advantage (RA), compatibility, trialability, complexity and observability. Organisational refer here en-capsulates business of banks, top management support, organisational culture, the complexity of the managerial structure as measured by centralization, formalisation, and vertical differentiation, the scope of the organisation, and size itself.

Environmental context is related to the facilitating and impeding elements in operational settings. Most important factors among them are technological support infrastructures like government contribution, pressure from the consumers and pressure from top authorities. Rogers (1995) identified types of predictors related to adoption: leader attributes related to change; internal features (organisational scale, complexity, formalisation, interconnectivity); and

external features (open nature of system). This framework highlights these three groups of predictors. Limitation of TOE framework is that it's mostly applies to big corporations instead of services sector like banks. Although each adoption predictor offers more dimensions than the original TOE, combining TOE with other models like TAM offers richer theoretical lenses for understanding adoption behaviour.

### Unified Theory of Acceptance and Use of Technology (UTAUT)

Unified theory of acceptance and use of technology (UTAUT) was developed by comparing and combining 8 theories to create single framework. these 8 theories are (Theory of reasoned action, Theory of planned behaviour, Technology acceptance model, Decomposed theory of planned behaviour, DOI, and a combined framework of (TPB or TAM) were combined. EE (Effort Expectancy), PE (Performance Expectancy), and Social Influence were confirmed by the UTAUT direct and significant factor of intention of intentions. PE displays a person's view of how utilising GB improves performance (for instance, time savings and proper utilization), and Effort expectancy represents how easy they perceive using GB to be. EE has a good impact on PE because when someone believes that GB is simple and effortless, he will judge its performance more favourably. Social influence highlights the influence of pressure from society, like the perception of GB usage among peer group, family, and coworkers. The model is a new approach for the adoption process but hasn't been used as widely like TAM and UTAUT. However, it has gradually gained attention from academics, especially in the context of internet banking adoption. (Yuen,

Y., et al., 2010). Expanded UTAUT by considering how culture affects GB adoption in Korea and the United States. The task-technology fit model (TTF) and UTAUT were integrated by Zhou et al. (2010) in their research they investigate that m-banking significantly affected the intention adoption. More Research on this model's validity, replication qualities in GB's context is required.

# Theory of Innovation Resistance (TIR)

According to studies in this area done by the researchers exhibits changes biasness, or beliefs that the technology innovation must be improved (Ram and Sheth, 1989). Adoption behaviour often coexists with consumer resistance to change, and both academics and marketing professionals need to understand the underlying causes of this type of barriers must be reduced before the adoption of new innovations can begin since it may create delay, opposition, or rejection. (Ram, S.(1987). The group of non-adopters is ignored in GB literature, which leaves out a crucial source of data that can be essential to the effective creation, application of internet banking (Laukkanen, T. and Lauronen, J. 2005). Despite of fact that the most of GB scholarship (utilising the framework and ideas listed above) has focused in understanding the reasons why people adopt, the scarce use of TIR theory in comprehending GB behaviour tries to define the drivers which obstruct in the procedure of adaptation.

Ram et al., (1989) claim in GB research, it has been utilised to better understand the hurdles towards GB adoption that human reject the usage of new innovations by building resistance at the functional and psychological levels. Studies on GB have shown that in

addition to usage and value barriers, there are also risk barriers (mistakes when transactions have been done, and input of data) and value barriers (practical benefits, money worth, expenses related to internet facilities, purchase of information quality, and increase in liabilities).

Barriers based on custom (the concern that using GB will alter customary practises and reduce control, as well as the preference for dealing with traditional methods of working, problems related to internet facilities, and issues related to safety.

GB technology can be realised by banks by creating appropriate strategies regarding marketing, promotional campaigns, training facilities to customers, and web designing for GB after recognising factors that influence resistance to adoption of GB.

Benefits are frequently considered in the context of consumer behaviour, according to TPR theory.

### TPR (Theory of perceived risk)

According to Ostlund (1974), PR functions like a roadblock to adaptation of innovative technology. Here are some types of risk studied related to GB: risks related to performance, safety, finances, and society. The chances of misuse of important data and information are a security and privacy. Network and data transaction assaults of unauthorised access to the account due to faulty or false authentication can jeopardises the security of GB adoption.

In many studies related to this study highlights that customers avoid utilising certain services due to absence of human interaction and physical proof. Social risk is the danger that using GB will cause you to lose your selfesteem, prestige, or the approval of your family, friends, or coworkers. Risks related to the time include potential improper utilization of their time& experiencing inconvenience because a website is difficult to use or is disorganised or unclear, or because a transaction takes longer than expected to complete. The final definition of performance risk is the losses that could occur because of GB Website flaws or malfunctions, as well as system server failures or Internet disconnections, have all been proved to decrease the likelihood that a consumer will utilise internet banking (Yiu, et al.,(2007);Lee, M. (2009).

Ozdemir, S. and Trott, P. (2009) noted that it has become challenging to compare risk-related studies due to the growing variety considering perceived risk dimensions and the multiple correlations between these dimensions and conceptual models above outlined. For instance, the constructs of PCI's image, TRA's subjective norm, and UTAUTs, SI are conceptually related to social risk. The same is true for variables like perceived usefulness from technology acceptance model, relative advantage from theory of diffusion of innovation, and performance expectancy from UTAUT model.

### Research Methodology

The study is descriptive in nature. We employed literature from a variety of digital libraries and databases, including EBSCO host JSTOR, and Google Scholar, to find articles, journals, and papers about our subject. Reports from regulatory agencies and financial organisations were also taken into account. In our analysis, we also included relevant keywords and phrases like "Internet

Banking", "Adoption Theories," and "Technology Acceptance Model". Once a sizable number of sources had been gathered, we vetted them to make sure we were taking into account the most current and pertinent data related to the theories. We did this by looking at the sources' publication date, credibility, and relevancy to our issue. We went on to retrieve the relevant data from these sources while concentrating on the questions we had for our investigation.

This entails learning about the elements impacting adoption of green banking and looking at adoption theories already in place, such as the Technology Acceptance Model (TAM2). In order to find patterns, trends, and gaps in the body of existing literature, the extracted data was analysed. We combined these data to provide a thorough summary of what is currently understood regarding use of green banking.

### Results and scope for future research

According to research that was offered in earlier sections, the literature on adoption of GB at individual level is widely used and contributes to a coherent conceptual body by explaining the factors that influence adaptation and usage decisions. Those who are interested in understanding GB behaviour have surely been pleased by the theory's and research's rapid expansion, but it has also had some undesirable side effects. Despite GB investigations, as well as the application of a variety of conceptual framework, a more thorough investigation will reveal the ongoing changes, lack of conceptual progress have made it more difficult to integrate the findings of these studies and articulate variables that help in usage of green banking. These theories have also been explained in the context of internet banking adoption which provide a list of factors which effect internet banking adoption (Shumaila Y. Yousafzai 2012). In the most research it has been described that introduction of new variables to these models will amplify their ability to forecast and explain. However, as a result, some of the similarities in these variables have gone unnoticed. Although it is typical to have these parallels glossed over, if not totally ignored, a thorough study of theoretical background of the variables covered in the last section reveals a connection in the mid of these models.

Furthermore, unless these novel linkages have been well supported and rooted in a solid theoretical foundation, this technique does not definitely ensure a significant theoretical contribution. Without a solid theoretical foundation, a combination of theoretical viewpoints won't add much (Puschel et al., 2010). These studies do offer an empirical contribution by supporting earlier stud's suggestions and demonstrating the resilience of current frameworks, but they do not add any new knowledge. The current status of GB research can also be characterised by Venkatesh et al.'s (2007) observation that this research needs more modifications and changes.

Despite of different studies, researchers have come to conclusion that GB research is still in infancy stage. We run the risk of producing a body of literature that may ultimately be of little use to the discipline unless more attention is paid to more thorough conceptual study of various variables and their relationship with each other.

The lack of adequate study on the actions that can reduce early consumer refusal to accept and increase adoption of GB may be a gap in the body of GB literature. For instance, TAM, the most extensively used model in the GB literature, does not provide practitioners with useful advice. Green banking does not offer proper information to practitioners how to change attitude that might eventually result in greater adoption. This is clear from Alan Dennis' observation. renowned expert on information systems: "Imagine going to a manager and explaining that technology must be beneficial and simple to use in order to be adopted. The response, in my opinion, would be "Duh!" What makes technology practical and simple to use are the more crucial considerations. The existing research lacks a deeper knowledge of how a consumer, for instance, determines what is beneficial in GB. The GB literature also lacks a more thorough and philosophically grounded explanation of these interventions. In their TAM3 proposal, Venkatesh, and Bala (2008) divided the interventions into areas for preimplementation (design elements, consumers involvement, support by top executives) or post-implementation (corporation and help from friends). Results which are dependent on factors that make up the models outlined in the preceding section can help managers to make decisions that are both effective and efficient, hastening the adoption process.

For customers, the adoption of new technology in the banking industry has turned into a never-ending uphill battle. By the time people get used to the existing technology, fresh technology development and introduction force consumers and bankers to move towards new innovations. GB requires a lot of skills, so resources must be continually invested in the adoption and training process. Innovation adoption depends on consumers' desire and changing their work pattern, the services literature makes a strong case that customers must likewise modify their behaviour with each modification to the service delivery model (Bateson and Hoffman, 1999). Therefore, in addition to studying how banking clients embrace new technology, further repeatedly examination is also needed to determine the effects of this ongoing adaptation and readaptation on the launch of the next generation of technology. Divergent viewpoints have been presented in previous study on this topic. According to one line of research, familiarity with one technology can make it more difficult to learn a new one (Lippert and Forman, 2005). This is because familiarity with one technology interferes with learning a new one. Additionally, UTAUT contends that there is a critical stage in the adoption of technology when it is no longer as simple and connected with the processes. At this stage, understanding and interest in the innovation may decline. Rogers' model shows that adoption is speed up and made easier by prior exposure to a similar technology. These opposing points of view blatantly point out gaps in the existing research and demand more investigation into the implications of ongoing adoption cycles as a key area for future study.

The review also emphasises how complicated and nuanced technology acceptance behaviour, is particularly GB behaviour it is a multi-dimensional process about which knowledge and understanding have gradually grown over time. Many factors that are always in

contact with one another influence whether a person ultimately decides to adopt or reject GB. This decision can also be influenced by change agents, peer and organisational pressure, social interactions, societal norms, and other factors. The result of conduct is also significantly influenced by the views, attitudes, and ideas that individuals have about the characteristics of GB. Personal characteristics such as prior knowledge, ideas regarding particular and basic talents connected with ultimate conduct that can be use to develop these beliefs.

One element alone cannot provide a complete insight of GB behaviour. The customers' personal characteristics or consumers opinions on the psychological, and utilitarian elements of GB should be considered jointly to increase the forecasting accuracy of adoption behaviour.

As a result, it is suggested to use different factors to effectively study IB behaviour. Now, no model or theory—except for TAM3—can fully account for all these qualities. Adoption of green banking constitute another understudied area of research. Read, W., et al, (2010) recently demonstrated that the habits of consumers must prevents them from adopting electronic books. Social cognitive theory provides more support for the idea that emotions have an impact on our beliefs, environment, and culture (Bandura, 1986).

In conclusion, it can be noted that banking system must adopt an approach that focuses on consumers when creating new technology-based distribution channels. Jaffee (1998) asserts that adoption does not acceptable without qualification. Adoption

alone is less significant than the combined comprehension of the cognitive, emotional, and contextual processes of the client, which will ultimately lead to the desired outcome. GB research is generally exciting and vibrant, and this paper aims to advance the field by bringing attention to several critical challenges.

### Conclusion

The financial industry was revolutionised by the idea of green banking, which has drastically changed how banking services are provided and accessed. Due to factors like rising internet penetration, rising concern for environment, rising smartphone usage, and banks investing in green infrastructure, green banking has been progressively gaining traction in economy. Convenience and efficiency have their benefits, yet problems like poor literacy regarding green banking and cyber security still exist. But with ongoing efforts by banks and other partners to resolve these problems, green banking appears to have a bright future. The adoption and use of green banking can be better understood by using theoretical models such as Task Technology Fit (TTF), Unified Theory of Acceptance & Use of Technology (UTAUT), Initial Trust Model (ITM), Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Diffusion of Innovation (DOI), Customer-Based Perspective, and Trust-Based Perspective. In India, green banking adoption is expected to increase. By enhancing customer experience, utilising technology, and tackling current obstacles, green banking may significantly contribute to the advancement of financial inclusion and economic expansion. It would be interesting to see how green

banking market develops as technology keeps changing.

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