

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT

AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

2583-1062

e-ISSN:

Impact Factor:

7.001

THE PERCEIVED IMPACT OF FINTECH GREENWASHING ON CUSTOMER TRUST AND DECISION-MAKING

Abubakar Umar Abdullahi¹

¹M.Com Student, Commerce Department, Kalinga University Raipur City, Chhattisgarh, India. DOI: https://www.doi.org/10.58257/IJPREMS39765

ABSTRACT

The study intended to examine the influence of fintech greenwashing perception on user trust and decision-making. The data were obtained through an online platform survey, in which a questionnaire was sent to respondents, particularly users of fintech in Kano State metropolitan area, Nigeria. The sample size consisted of a total of 302 respondents. The data were analyzed using a hierarchical regression approach with SPSS Version 29. The outcomes of the research indicated a significant positive impact of greenwashing perception on customer trust and decision-making. This implies that a higher perception of greenwashing is associated with a significant change in customer trust and decision-making. It indicates that a high perception of misleading practices in fintech firms results in the loss of customer trust and either stopping or changing fintech services to a non-greenwashing company. The study recommended that fintech companies should provide their environmental practices in a transparent and honest manner; they should avoid misleading practices in the form of greenwashing as a benefit to customers; and they should stop using eco-friendly claims in their marketing strategies to have genuine claims.

Key words: Greenwashing, fintech, customer trust, customer decision-making, financial literacy

1. INTRODUCTION

Fintech has emerged because of the innovative technology used by financial services companies to provide their financial products and services. This aids in offering user-friendly solutions to both customers and investors, promoting flexibility, convenience, and accessibility. However, fintech companies have been promoting their green finance to persuade environmentally conscious users due to concerns about the environment, social issues, and governance. According to Cevik (2024), significant advancements in digital technology are undeniably transforming the financial sector, as evidenced by a widespread increase in the adoption of cutting-edge productivity tools by companies and financial products worldwide to enhance and streamline traditional financial services. According to Wang et al. (2023), the research conducted by Primeaux (2017) highlighted that the impact of Fintech is observed across a range of sectors, encompassing digital payments, investment, lending, and regulatory compliance, leading to significant changes in financial management practices. Despite the environmental benefits offered by fintech companies, some engage in greenwashing by providing green financial products and services, which poses a challenge for the fintech industry. Greenwashing is the act of overemphasizing the environmental benefits of online financial products and services or making false claims about the environmentally friendly nature of financial offerings by financial technology companies to attract investors and customers for quick patronage. The study by Xie et al. (2023) stated that greenwashing behavior refers to the act of disseminating inaccurate information or creating a false impression regarding the level of environmental friendliness of companies' products.

Customer trust is a pivotal phenomenon in the financial services industry. Financial technology companies provide their services to gain the trust of investors and customers, enhancing their confidence regarding the claims and benefits promised to the users of their services. Greenwashing can reduce or erode this trust if investors and customers are able to perceive the misleading practices of these companies. Fintech companies may engage in greenwashing, hiding behind the cover of providing green financial services. Unfortunately, they might lose the confidence of consumers and investors if they are perceived as engaging in misleading behavior while providing their services. Vergara & Agudo (2021) described that the greenwashing is done by using vague language and images to describe the environmental aspects of a product, while omitting crucial details or presenting data in a misleading manner. Ultimately, greenwashing practices jeopardize customer trust. Conversely, it has been found that customer confidence contributes more to the application of technology in the fintech industry, surpassing other factors in importance. The intention of consumers to use the services of fintech is mostly determined by the degree of trust they have in the technology (Zhao et al. 2024). Customers lose trust or faith in the fintech's integrity and reliability when they find that the company's green claims are false or exaggerated. It has also revealed that the integration of fintech has a noteworthy positive influence on attainment expectation, endeavor expectation, and perceived trust (Elsaman et al. 2024). The study by Hassan et al. (2024) also states that trust functions as a beneficial accelerating factor in the association between behavioral intention and the actual application of fintech services. This indicates that users of fintech have a clear perception of green financial services



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

2583-1062 **Impact**

e-ISSN:

Factor: 7.001

unless they perceive misrepresentation in the form of greenwashing. Misleading practices in the form of greenwashing by fintech could also undermine the decision-making of users, such as customers and investors. Customers may choose to cease using the services; alternatively, they may shift to another company perceived as the best in providing green financial services free from greenwashing. The study by Pundarika et al. (2024) states that users' attitudes toward the Quick Response Indonesian Standard are positively influenced by performance and effort expectancy, suggesting that individuals are more inclined to maintain usage of the system if they perceive it as efficient and convenient. Customers or investors may rely on the technology and promise of fintech to choose sustainable products or services that would bring a regular stream of income, but the funds might not be used as promised or intended. This may affect the users' overall financial health or well-being as they lose their expected income; hence, they change their decision to continue using the products or services. As noted by Savitha et al. (2022) that confirmation of previous expectations and perception of usefulness after adoption are key factors in driving the willingness to continue using Fin Tech payment services. It has also been described that non-bank applications tend to present data policies that are more intrusive and default settings that are subpar compared to those of banks. These apps often employ deceptive strategies to hide pricing information, promote user engagement, and discourage users from leaving the application (Rakovic & Inal, 2023). However, it is confirmed that both observed usability and observed enjoyment exhibit a substantial and favorable influence on consumers' choice to use fintech offerings (Al-Okaily et al., 2021).

Furthermore, greenwashing is a common phenomenon and a challenging factor among fintech companies. It can be mitigated by adopting diverse strategies, including clarity, customer enlightenment, frequent audits, and third-party confirmation. Fintech corporations could enhance customers' trust and sustainable decision-making by making them aware of genuine sustainable products, providing clear information about the environmental impact of products and services, and relying on reputable environmental third-party companies. Sun et al. (2024) described that individuals involved in the fintech sector who possess limited financial knowledge experience challenges with comprehending financial information and operating the software, as evidenced by a higher rate of revisiting financial labels. It has also been stated that financial literacy contributed to enhancing one's understanding of fintech, which in turn has a significant influence on the utilization of fintech services (Mulyono, 2022). Thus, fintech customers can easily perceive misleading practices if they possess a high level of financial literacy and a minimum level of fintech knowledge. This will minimize the occurrence of greenwashing as a result of negative user responses after perceiving misleading practices by fintech

The current study intends to investigate the response of fintech customers after perceiving greenwashing activities. It focuses on exploring the perceived impact of fintech greenwashing on customer trust and decision-making. The study is conducted because of limited studies on greenwashing in the financial industry. Among the few studies conducted in this area is the study titled "The Role of Artificial Intelligence and Fintech in Promoting Eco-Friendly Investments and Non-Greenwashing Practices in the US Market," which found that financial technology (fintech) and artificial intelligence (AI) contribute significantly to promoting green financing efforts and aligning financial strategies with environmentally friendly goals (Si Mohammed et al. 2024). There is also a study titled "Impact of Bank Fintech on ESG Greenwashing," which found that bank fintech mitigates ESG greenwashing through the alleviation of financial constraints and addressing information asymmetry (Liu & Li 2024). Furthermore, a study titled "Impact of Fintech on Corporate Greenwashing Behavior and the Mediating Role of Financing Constraints" found that fintech greatly impedes companies' misleading attitudes, and funding limitations further enhance such constraint impact (Xie et al. 2023).

The above studies explored how fintech and AI contribute significantly to providing green financial services and avoiding greenwashing practices; financial constraints accelerate such effects. There is a need to investigate the fintech greenwashing impact on users such as customers and investors. The current study will focus on fintech customers, thereby investigating the perceived impact of fintech greenwashing on customer trust and decision-making.

2. METHODOLOGY

2.1 Research Questions and Hypotheses Development

This study intends to explore the perceived impact of Fintech greenwashing on customer trust and decision-making. The following research questions and hypotheses are formulated:

Research Questions:

- Does the perception of greenwashing in FinTech influence customer trust?
- Does the perception of greenwashing in FinTech affect customer decision-making?

Hypothèses:

Customer Trust:



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT

AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

e-ISSN: 2583-1062

Impact

Factor : 7.001

Signaling Theory: This theory suggests that firms disclose their sustainability dedication through diverse signals. However, if these signals are perceived as misleading (greenwashing), customers may lose trust in fintech firms. Based on this assumption, the following hypothesis are developed.

- Ho: Perception of greenwashing has no significant impact on customer trust in fintech firms.
- H1: Perception of greenwashing has a significant impact on customer trust in fintech firms.

Customer Decision-Making

Theory of Planned Behavior (TPB): This theory postulates that consumer decisions are influenced by their perceptions and attitudes. If greenwashing adversely affects perceptions, it may influence their decision to engage with fintech services. Based on this theoretical assumption, the following hypothesis are developed.

- Ho: Greenwashing perception has no significant impact on customer decision-making regarding fintech services.
- H1: Greenwashing perception has a significant impact on customer decision-making regarding fintech services.

2.2 Research Design

The study adopts quantitative, cross-sectional, and correlational research design. Quantitative data was collected at once from the target population to determine the relationship between the perception of fintech greenwashing and customer trust and decision-making.

2.3 Data Collection

Online Platform Survey was used to collect data from prospective customers of fintech companies. A structured questionnaire was organized, comprising demographic information and a section for relevant data. A five-point Likert scale was adopted to rate the collected data.

2.4 Sampling Technique and Sample Size

The stratified sampling technique was utilized in selecting the sample based on demographic characteristics (age, gender, education, financial literacy, and frequency of fintech use). The final sample comprised 302 respondents.

2.5 Variables and Measurement

Independent Variable: Greenwashing Perception (measured using validated survey items)

Dependent Variables: Customer Trust and Decision-making (measured using validated survey items)

Control Variables: Financial Literacy, frequency of fintech use, education, and gender (measured using a Likert scale)

2.5.1 Variable Coding and Interpretation

The measurement items were rated on a 5 - point Likert scale, where higher scores on the Customer Trust and Customer Decision-making constructs indicate decreased trust and negative decision-making behaviors, respectively. This coding system allows for a direct interpretation of the regression coefficients without the need for reverse coding, and it consistent with methodologies adopted in previous studies such as, More (2019), where higher scores indicated negative consumer perceptions like reduced brand trust because of greenwashing.

2.6 Data Analysis

For analyzing the data, hierarchical regression approach was used to analyze the data using SPSS Version 29. The analysis consists of:

- 1. Reliability Test (Cronbach's alpha)
- 2. Descriptive Statistics (mean, standard déviation)
- 3. Correlation analysis to determine the relationships between variables
- 4. Multicollinearity Test to test multicollinearity tolerance among the variables
- 5. Hierarchical Regression analysis to test hypotheses

3. MODELING AND ANALYSIS

3.1 Theoretical Framework

This study adopts a hierarchical regression analysis approach to determine the perceived impact of FinTech greenwashing on customer trust and decision-making. The hierarchical model allows for the initial inclusion of control variables, followed by the addition of the predictor variable (greenwashing perception) to determine its unique effect on the result variables.

3.2 Model Specification

Two regression models were developed for analysis:

Model I (Customer trust as the dependent variable)

Step 1: CT = $\beta_0 + \beta_1FL + \beta_2FU + \beta_3Edu + \beta_4Gend + \epsilon$



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

2583-1062 **Impact**

e-ISSN:

Factor: 7.001

editor@ijprems.com

Step 2: $CT = \beta_0 + \beta_1 FL + \beta_2 FU + \beta_3 Edu + \beta_4 Gend + \beta_5 GWP + \epsilon$

Model II (Customer decision-making as the independent variable)

Step 1: CDM = $\beta_0 + \beta_1 FL + \beta_2 FU + \beta_3 Edu + \beta_4 Gend + \epsilon$

Step 2: CDM = $\beta_0 + \beta_1 FL + \beta_2 FU + \beta_3 Edu + \beta_4 Gend + \beta_5 GWP + \epsilon$

Where:

CT = Customer Trust

CDM = Customer Decision-Making

GWP = Greenwashing Perception

FL = Financial Literacy

FU = Frequency of FinTech Use

Edu = Education

Gend = Gender

 $\varepsilon = Error term$

3.3 Variable Definitions and Justification

- 1. Greenwashing Perception (GWP): Independent variable; measures the extent to which customers perceive FinTech firms as misrepresenting their sustainability efforts.
- Customer Trust (CT): Dependent variable; reflects users' belief in the reliability and integrity of FinTech services.
- Customer Decision-Making (CDM): Dependent variable; captures how greenwashing perception influences user choice of FinTech services.
- Control Variables:
- Financial Literacy (FL): The ability of FinTech users to understand and apply financial skills in using or choosing FinTech services.
- Frequency of Use (FU): How often a customer interacts with FinTech services.
- Education (End): The formal academic qualification of the FinTech user.
- Gender (Gend): The biological gender of the FinTech user.

All variables were measured using a 5-point Likert scale, except for gender (coded dichotomously).

3.4 Estimation Technique

The models were estimated using Ordinary Least Squares (OLS) under a hierarchical regression approach. This framework helps to assess the additional explanatory power of greenwashing perception after accounting for control variables.

3.5 Assumptions and Diagnostics

A multicollinearity test was conducted to examine the tolerance levels and variance inflation factors (VIF) among the variables, ensuring the absence of multicollinearity. VIF values below 5 were considered acceptable.

4. RESULTS AND DISCUSSIONS

This section contains the results of the data analysis and the implications of the results. The components of the analysis consist of the reliability test, descriptive statistics, correlation analysis, multicollinearity test, and hierarchical regression analysis.

Table 1: Reliability Test

Construct	Items	Cronbach's Alpha	Overall Cronbach's Alpha
GWP	GWP1	.811	1
	GWP2	.803	
	GWP3	.817	
	GWP4	.820	
CIT			
СТ	CT1	.873	
	CT2	.796	
	CT3	.794	
CDM	CDM1	.808	



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal) Vol. 05, Issue 04, April 2025, pp: 784-792

Impact

e-ISSN:

2583-1062

Factor: 7.001

	CDM2	.802	
	CDM3	.808	
Overall CA			.831

Source: SPSS Version 29

The reliability analysis was conducted using Cronbach's Alpha. All constructs showed values above the recommended boundary of 0.70, indicating strong internal consistency. The overall reliability is 0.83, which is good and falls within the acceptable level of Cronbach's alpha. This indicates the internal consistency and credibility of the test items and collectively measuring the same construct.

Table 2: Descriptive Statistics

Construct	Items	Minimum	Maximum	Mean	Standard Deviation
GWP	GWP1	1	5	3.43	1.012
	GWP2	1	5	3.59	.928
	GWP3	1	5	3.59	.913
	GWP4	1	5	3.36	.858
CT	CT1	1	5	3.17	.950
	CT2	1	5	4.06	1.023
	CT3	1	5	3.95	1.108
CDM	CDM1	1	5	4.09	.930
	CDM2	1	5	3.96	1.105
	CDM3	1	5	3.96	.943
DMGV	Age	1	5	2.46	.699
	Gend	1	5	3.87	.336
	Edu	1	5	3.15	.772
	FU	1	5	3.84	1.319
	FNL	1	5	3.46	.817

Source: SPSS Version 29

The table above contained the minimum, maximum, mean, and standard deviation of the respondents' responses to the questions. All the mean items are within the limit of agreement degree, meaning the responders expressed a high perception of the questions asked. The minimum and maximum of 1 and 5 indicate that responses covered the full range of opinions from strongly disagree to strongly agree.

Table 3: Correlation Analysis

Construct	Gend	Edu	FU	FNL	CDM	CT	GWP
Gend	1	.155	.190	.084	.089	.013	.070
Edu	.155	1	.140	.334	.192	.148	.070
FU	.190	.140	1	.250	.203	.195	.107
FNL	.084	,334	.250	1	.385	.317	.288
CDM	.089	.192	.203	.385	1	.656	.557
CT	,013	.148	.195	.317	.656	1	.440
GWP	.070	,070	1.07	.288	.557	.440	1

Source: SPSS Version 29

The above correlation table described the relationship between the independent variable (Greenwashing Perception), dependent variables (Customer Trust and Decision-making), and control variables (Gender, Education, Financial Literacy, and Frequency of Fintech Use). It indicates that Decisions and Trusts have a correlation of (r = 0.65), which



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

2583-1062 Impact

Impact Factor:

e-ISSN:

7.001

indicates a moderate positive relationship between the two variables. There is also a correlation between Decision and Greenwashing Perception of (r = 0.55), showing a moderate positive relationship between the variables. The correlation between Trust and Greenwashing Perception is (r = 0.44), showing a moderate positive correlation between the variables. All the correlations have statistical significance of (p < 0.01).

However, gender indicated a strong positive correlation with Decision (r=0.89), a weak positive correlation with Customer Trust (r=0.13), as well as a strong positive correlation with Greenwashing Perception. Education also shows weak positive correlation with Decision and Trust (r=0.19 and r=0.13, respectively), as well as a strong positive correlation with Customer Decision-making (r=0.7). Frequency use also indicated weak positive correlation with Decision, Trust, and Greenwashing Perception (r=0.2, r=0.19, and r=0.10, respectively). Finally, Financial Literacy indicated weak positive correlation with Decision, Trust, and Greenwashing Perception (r=0.38, r=0.31, and r=0.28, respectively).

Table 4: Multicolliarity Test

Construct	Statistical Tolerance	Variance Inflation Factor (VIF)
1. (Constant)		
2. (Constant)		
Gend	.951	1.051
Edu	.866	1.155
FU	.909	1.100
FNL	.787	1.270
GWP	.919	1.089

Source: SPSS Version 29

The above multicollinearity table describes the tolerance of multicollinearity between the dependent variables, independent variable, and control variables. It indicates that each variable has a Variance Inflation Factor (VIF) of less than 5. This signifies that all the variables have a very low multicollinearity relationship.

4.5 Hierarchical Regression Analysis

Table 5: Model 1: Customer Trust as Dependent Variable

Step	Construct	Beta Coefficient	P-value
1.	(Constant)	2.892	< .001
	Gend	080	.490
	Edu	.054	.308
	FU	.076	.012
	FNL	.197	< .001
2.	(Constant)	2.000	< .001
	Gend	113	.286
	Edu	.066	.174
	FU	.060	.030
	FNL	.107	.026
	GWP	.388	< .001

Source: SPSS Version 29

The above coefficient table indicates the direction and level of significant impact of control variables (Gender, education, financial literacy, and fintech frequency use), and independent variable (Greenwashing Perception) on the dependent variable (Customer trust). The hierarchical regression results indicated that in stepl one of this model, only Fintech frequency use and Financial Literacy are significant at p-values 0.012 and <0.001, with positive coefficients of 0.076 and 0.197 respectively. However, after adding the independent variable (Greenwashing Perception) in step two, the greenwashing perception is significant, with a p-value <0.001, less than the 0.05 significance level, and a positive coefficient of 0.388. This shows that greenwashing perception is statistically significant. Additionally, the control



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

e-ISSN: 2583-1062

Impact Factor:

7.001

variables (Frequency Use and Financial Literacy) are significant at p-values of 0.03 and 0.026, with a positive coefficient of 0.028 and 0.048, respectively, in step two. This suggests that independent variable (Greenwashing perception) and control variables (Financial literacy and fintech frequency use) have positive significant impact on the dependent variable (customer trust).

We can deduce that this regression result supports the stated hypotheses: the perception of green washing has a significant impact on customer trust in Fintech firms. Although the regression analysis shows a positive and significant coefficient for perception of greenwashing on customer trust (CT), this indicates a negative impact on this construct because of the direction of scoring, as explained in the methodology. The positive significant impact of greenwashing on customer trust implies that a higher perception of greenwashing is consistent with a significant change in customer trust. There is likely a loss of trust among customers who perceived misleading practices in fintech companies. This finding aligns with the study of Vergara & Agudo (2021), which states that greenwashing is done by using vague language and images to describe the environmental aspects of a product while omitting crucial details or presenting data in a misleading manner. Ultimately, greenwashing practices diminish customer trust. It is also confirmed the signaling theory which suggests that firms disclose their sustainability dedication through diverse signals. However, if these signals are perceived as misleading (greenwashing), customers may lose trust in fintech firms.

Table 6: Model 1: Summary Customer Trust as Dependent Variable

Step	R-Square	Adjusted R-Square
1.	.104	.092
2.	,255	.243

Source: SPSS Version 29

The above model summary shows the variance or changes in customer trust due to the impact of control variables (Gender, education, financial literacy, and fintech frequency use) and the increase in trust changes as a result of the additional impact of greenwashing perception. The hierarchical regression was run using the control variables and dependent variable Customer Trust. The R square is 0.104 in step one. The independent variable Greenwashing Perception was added in the second step, and the R square increased to 0.225. This indicates that the control variables (Financial literacy, fintech frequency use, gender, and education) explain 10.4% of the trust changes. However, after including the independent variable (Greenwashing Perception), the model explains the change in trust of about 25.5%. This shows that Greenwashing Perception increased the explanatory strength of the model, increasing the R square by 15.1%

Table 7: Model 2 Customer Decision-making as Dependent Variable

Step	Construct	Beta Coefficient	P-value
1.	(Constant)	2.142	<.001
	Gend	.074	.579
	Edu	.070	.253
	FU	.105	.003
	FNL	.275	< .001
2.	(Constant)	.985	.045
	Gend	.031	.794
	Edu	.085	.116
	FU	.084	.007
	FNL	.159	.003
	GWP	.503	< .001

Source: SPSS Version 29

The above coefficient table indicates the direction and level of significant impact of control variables (Gender, education, financial literacy, and fintech frequency use), and independent variable (Greenwashing Perception) on the dependent variable (Customer Decision-making). The hierarchical regression results indicate that in step one of this model, only Fintech frequency use and Financial Literacy are significant at p-values of 0.03 and <0.001, with positive coefficients



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

2583-1062 Impact

e-ISSN:

Impact Factor:

7.001

www.ijprems.com editor@ijprems.com

of 0.105 and 0.275, respectively. However, after adding the independent variable (Greenwashing Perception) in model two, greenwashing perception is significant with a p-value of <0.001, which is below 0.05 significance level, with a positive coefficient of 0.503. This shows that greenwashing perception has statistically significant positivity. Additionally, the control variables (Frequency Use and Financial Literacy) are significant at p-values 0.007 and 0.003, with positive coefficients of 0.084 and 0.159, respectively, in step two. This suggests that independent variable (Greenwashing perception) and control variables (Financial literacy and fintech frequency use) have positive significant impact on the dependent variable (customer trust).

We can deduce that this regression result supports the stated hypotheses: the perception of green washing has a significant impact on customer decision-making regarding Fintech services. Although the regression analysis shows a positive and significant coefficient for Greenwashing perception on Customer decision-making (CDM), this indicates a negative impact on this construct, due to the direction of scoring, as explained in the methodology. The positively significant impact of greenwashing on customer decision-making implies that a higher perception of greenwashing is consistent with a negative customer decision-making behavior. The customers are likely to stop or shift to other fintech services that perceived to have not engage in greenwashing practices. This finding aligns with the study of Savitha et al. (2022) which confirmed that the recognition of previous expectations and perception of usefulness after adoption are key factors in driving the willingness to continue using Fin Tech payment services. It also confirmed the Theory of Planned Behavior (TPB) which posists that consumer decisions are influenced by their perceptions and attitudes. If greenwashing adversely affects perceptions, it may influence their decision to engage with fintech services.

4.5.4 Table 8: Model 2 Summary Customer decision-making as the independent variable

Step	R-Square	Adjusted R-Square
1.	.388	.139
2.	.577	.322

Source: SPSS Version 29

The above model summary shows the variance or changes in customer decision-making due to the impact of control variables (Gender, education, financial literacy, and fintech frequency use) and the increase in decision-making changes because of the additional impact of greenwashing perception. After running the hierarchical regression using the control variables and the dependent variable (Customer Decision), the R square is 0.151 in the first step. The independent variable Greenwashing Perception was added in the second step, and the R square increased to 0.333. This indicates that the control variables explain variance in decision-making by about 15.5%. However, after including the independent variable (Greenwashing Perception), the model explains variance in decision-making by about 33.3%. This shows that Greenwashing Perception increases the additional explanatory strength of the model, increasing the R square by 17.8%, and it has more impact on customer decision-making regarding fintech services.

5. CONCLUSION AND FUTURE RESEARCH CONSIDERATIONS

The research explored the perceived influence of fintech greenwashing on customer trust and decision-making. It provides valuable insights into how perception of greenwashing affects customer trust and decision-making in fintech companies. By perceiving these impacts, policymakers, fintech companies, and marketers could ensure and maintain ethical practices, genuine environmental claims, avoid greenwashing practices, and enhance customer relationships by providing green financial products and services. Furthermore, the study underscores the perception of fintech customers on fintech greenwashing towards their attitudes for trust and decision-making regarding the fintech products and services. This would enhance fintech companies to focus on green financial products and promote ecofriendly services without elements of misleading practices. Engaging in such misleading practices will affect their long-term potentiality and brand reputation. Thus, it is imperative to study the long-term impact of fintech greenwashing on brand reputation and customer loyalty in the subsequent research. However, future researchers should investigate the the moderating effects of financial literacy on greenwashing perception in relation to customer trust and decision-making.

6. REFERENCES

- [1] Al-Okaily, M., Al Natour, A.R, Shishan, F., Al-Dmour, A., Alghazzawi, R., & Alsharairi, M. (2021). Sustainable Fin Tech Innovation Orientation: A Moderated Model. Sustainability, 13:13591. https://doi.org/10.3390/su132413591
- [2] Cevik, S (2024). The dark side of the moon? Fintech and Financial stability. International Review of Economics, 71(2):421-433. https://doi.org/10.1007/s12232-024-00449-8



INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT

AND SCIENCE (IJPREMS)

(Int Peer Reviewed Journal)

Vol. 05, Issue 04, April 2025, pp: 784-792

2583-1062

Impact

e-ISSN:

Factor: 7.001

[3] Elsaman, H., Dayanandan, R., Dawood, Z., & Akrabi, S.A (2024). Navigating Fintech Innovation: Performance, Trust, and Risk Factors in UAE's Banking Sector. Eastern European & Central Asian Research Journal, 11(2). DOI: https://doi.org/10.15549/jee car. v11i2.1569

- [4] Hassan, M.S, Islam, M.A, Abdullah, A.B.M, & Nasir, H (2024). End-user perspective on fintech services adoption in the Bangladesh insurance industry: the moderating role of trust. Financial Services Marketing Journal, https://doi.org/10.1057/s41264-024-00268-6
- [5] Liu, Z., & Li, X (2024). The Impact of Bank Fintech on ESG Greenwashing. Finance Research Letters, 62: 105199. https://doi.org/10.1016/j.frl.2024.105199
- [6] Mulyono, A.E (2022). The Effect of Financial Literacy & Fintech Knowledge in Fintech Services Usage. In Proceedings of 2022 International Conference on Information Management and Technology. (pp. 420-424). Institute of Electrical and Electronics Engineering (IEEE). DOI: 10.1109/ICIMTech55957.2022.9915049
- [7] More, P. V. (2019). The impact of greenwashing on green brand trust from an Indian perspective. Asian Journal of Innovation and Policy, 8(1), 162–179. https://doi.org/10.7545/ajip.2019.8.1.162
- [8] Pundarika, W.P, Ferdy, G.A, Setiawan, N.A, Gu, I.A., & Shaharudin, M.S "Examining the Factors Influencing Customers Continuance Adoption of Fintech in Greater Jakarta", in proceedings of the 2024 Second International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE), IEEE, 2024, DOI: 10.1109/ic-ETITE58242.2024.1049371
- [9] Savitha, B., Hawaldar, I.T., Kumar K, N (2022). Continuance Intention to Use Fintech Peer-to peer payments Apps in India. Heliyon, 8(11): e11654. https://doi.org/10.1016/j.heliyon.2022e11654
- [10] Rakovic, I., & Inal, Y (2023) Dark Finance: Exploring Deceptive Design in Investment Apps. In Human Computer Interaction 2023: Proceedings of the IFIP Conference on Human Computer Interaction. (Lecture Notes in Computer Science, Vol. 14142, pp. 339-348). Springer. https://links.springer.com/chapter/10.1007/978-3-031-42280-5_20
- [11] Sun, Y., Benz, A., & Mathis, F (2024) Gaze into Fintech: Assessing the Influence of Financial Literacy on Interaction Behavior Using Eyetracking. In AVI '24: Proceedings of the 2024 International Conference on Advanced Visual Interfaces (Article no. 97, pp. 1-3). ACM Digital Library. https://doi.org/10.1145/3656650.3656755
- [12] Si Mohammed, K., Serret, V., Ben Jabeur, S., & Nobanee, H (2024). The role of AI & Fintech in promoting eco-friendly investments & non-greenwashing practices in the Us Market. Environmental Management, 359: 120977. https://doi.org/10.1016/j.jenvman.2024.120977
- [13] Vergara, C.C, & Agudo, L.F (2021). Fintech and Sustainability: Do They Affect Each Other? Sustainability Journal, 13: 7012. https://doi.org/10.3390/su13137012
- [14] Wang, C.N, Nhieu, N.L, & Liu, W.L (2023). Unveiling the landscape of Fintech in ASEAN: assessing development, regulations, and economic implications by decision making approach. Humanities and Social Sciences Communications Journal, https://doi.org/10.1057/s41599-02302581-2
- [15] Xie, J., Chen, L., Liu, Y., Wang, S (2023). Does Fintech Inhibit Corporate Greenwashing Behavior? Evidence from China. Finance Research Letters, 55:104002. https://doi.org/10.16/j.frl.2023.104002
- [16] Zhao, H., Khaliq, N., Li, C., Rehman, F.U, & Popp, J (2024). Exploring Trust Determinants
- [17] Influencing the Intention to Use Fintech Via SEM Approach: Evidence from Pakistan. Heliyon Journal, 10(8): e29716. Doi: https://doi.org/10.1016/j.heliyon.2024.e29716