



Impact of Greenwashing on Consumer Trust and Purchase Intentions

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Abstract

Social views changed significantly as the twenty-first century began; one such development was in consumer behaviour. Corporates promote their image as a sustainable and social-responsible company by using green marketing techniques. Growing numbers of greenwashing and bogus environmental claims raise worries about consumer deception, loss of trust, and purchase intentions. The study looks at how greenwashing affects consumer trust and purchase intention given that green skepticism mediates the interaction. Data gathered physically from 400 Pune City residents using a standardized questionnaire on a five-point Likert scale under the quantitative approach was employed. ANOVA, regression, and further tests on two hypotheses were done using primary data.

The study showed a significant negative link between customer confidence and perceived greenwashing. One also discovered a notable link between green skepticism and the buying intention of eco-product consumers, therefore supporting the opposite hypothesis. Using age, education, and profession as the independent factors, demographic analysis was conducted with sensitivity to greenwashing and skepticism toward green claims as the dependent variables. The study therefore highlighted reasonable and verified green marketing claims to rebuild consumer confidence.

The research showed that greenwashing not only damages the brand's credibility but also hinders the transition to sustainable consumption. Therefore, enterprises should actively engage in open communication, the application of third-party environmental certification, and even consumer education to clear doubt and foster confidence. The study therefore not only provides specific recommendations for marketers, legislators, and sustainability campaigners all who sincerely desire a genuine feeling of environmental responsibility in the business sphere but also helps to augment the expanding body of work on green consumer behaviour.

Keywords: greenwashing, consumer trust, purchase intention, green skepticism, sustainable marketing

Introduction

Growing knowledge of climate change and sustainability concerns has driven a great global need in the recent past for environmentally friendly goods. To stay up with eco-aware customers, companies have used several marketing strategies. But this movement has also spawned the scourge of greenwashing—a phrase used to characterize the fair, unjust, or outright dishonest assertion by a company that its goods or services are green. Such greenwashing activities undermine sincere efforts by consumers to practice sustainability and so foster distrust of green brands.

Relevant studies show the gap between greenwashing and consumer trust and purchasing intention. As customers become doubtful about corporate promises, Sun and Shi (2022) also verified that greenwashing damages the links between

perceived green value and green trust, thereby discouraging them from buying sustainable products and so hindering the expansion of the green industry. Even when a company's products are genuinely green, greenwashing endangers brand damage and causes consumer alienation, as Guerreiro and Pacheco (2021) noted.

Green marketing has not gained much confidence given its nasty rival—unethical marketing—the dilemma of greenwashing. The most relevant issues are as follows: customers want clear, consistent information from businesses making claims about the environmental effects of their products. Therefore, companies have to come up with ways where sustainability assertions are not just supported but also verified by reputable independent organizations if they want to really earn consumer confidence. On

the other hand, protecting consumers is just as crucial as combating greenwashing if one is to create a sustainable market that will really reward environmental conscious behavior.

Theoretical Concepts

The phenomenon of greenwashing—when businesses misrepresent their goods or operations as ecologically good—is one of the elements influencing customer confidence and buying behavior as well as the serious consideration of law on this subject. Therefore, the theorist and those engaged in practical application of marketing must first grasp the theory underlying how greenwashing influences consumer perception.

A major theory pertinent to this conversation is Ajzen's (1991) Theory of Planned Behavior (TPB). The TPB holds that the behavioral intention of the individual determines conduct; in turn, the attitude toward the action, the subjective norms, and the perceived behavioral control shape the creation of intention. On occasions when greenwashing happens, sentiments toward the purchase are negative if the perceived promises are misleading, hence reducing their desire to buy.

Applying this concept, Eversmann (2019) offers an explanation of how greenwashing affects customer behavior indirectly: Greenwashing erodes trust, which subsequently reduces purchase intention.

Derived from organizational behavior research, the theory of psychological contracts is another pertinent theoretical concept. This hypothesis suggests that people have some unspoken expectations about the shared responsibilities of their relationships with companies. This theoretical paradigm contends that when businesses are engaged in greenwashing they violate these psychological commitments, hence creating consumer betrayal. Such a betrayal might be seen as a major loss of customer confidence and could cause consumers to distance themselves from buying choices (Sun & Shi, 2022).

The heart of understanding the greenwashing impact is also green consumer uncertainty and green perceived risk. Green consumer confusion results from conflicting or deceptive information given to consumers causing them question the environmental assertions of items. Such uncertainty can promote doubt and so question the goodness of green assertions. Conversely, green perceived risk refers to those kinds of possible negative consequences a buyer links to an act of purchasing a green goods, such as questioning whether the product will really function or whether it is genuine. Research also shows that greenwashing increases customer misunderstanding and perceived risk, hence harming green trust and buying intentions (Chen & Chang, 2013).

Spillover effect is another possible explanation for the far-reaching effects of greenwashing. Should customers start to see greenwashing in one brand, a

general doubt for the other businesses in the same sector develops regardless of whether or not those other brands actively seek a sustainable approach. This underlines the importance of industry-wide openness and shows the harm the sector could cause by means of greenwashing taken together.

The theoretical landscape around greenwashing comprises several psychological and behavioral theories that together explain how bogus environmental promises can erode customer confidence and hinder sustainable buying patterns. These theories emphasize the importance of honest and open green marketing tactics to foster consumer confidence and promote responsible environmental consumption

Literature Review

Research shows that corporate greenwashing damages consumers' green trust, word-of-mouth, and purchase intentions for eco-friendly items (T. Nguyen et al., 2021; João Guerreiro & Mariana Pacheco, 2021; Yongbo Sun & Shi, 2022). Greenwashing confuses consumers and makes them feel betrayed (Yongbo Sun & Shi, 2022; E. Mangini et al., 2020). It also has a negative effect on green brand equity, brand credibility, and green brand connotations (Akturan, 2018). Green skepticism mediates the negative relationship between greenwashing and buying intentions (Thi Thu Hien Nguyen et al., 2019). Interestingly, even those who consider themselves very environmentally sensitive could find it challenging to distinguish between greenwashed and genuinely sustainable products (M. Urbański & Adnan ul Haque, 2020). If companies are to balance these effects, they must build genuine green trust and spread positive word-of-mouth about their environmental initiatives (João Guerreiro & Mariana Pacheco, 2021). All things considered, greenwashing causes significant issues for companies and consumers in the green market.

Recent research has examined how greenwashing influences customer confidence in green marketing and behavior. Studies have indicated that by diminishing green brand image and loyalty, greenwashing directly and indirectly damages green purchasing intentions (Chen et al., 2018; Aji & Sutikno, 2015). Awareness of greenwashing leads consumers to be suspicious, more cautious in their purchases, and spread negative word-of-mouth (Lim et al., 2013). Conversely, green marketing can increase purchase intentions if it increases consumer confidence since opinions of company knowledge and prosocial orientation modulate this influence (Waites et al., 2020). Businesses should deal with emotional, functional, and legal concerns following greenwashing to restore confidence (Wang et al., 2020). Trust and brand preference enable green awareness to indirectly influence buying intention (Junarsin et al., 2022). Although perceived risk is occasionally ignored in green consumption, consumer attitudes and beliefs are formed by

perceived loyalty, satisfaction, and rewards (Braga Junior et al., 2019). These findings, taken together, highlight the importance of real green activities in promoting sustainable purchasing behavior and building consumer confidence.

Although green advertising and marketing strategies can influence customer intentions to purchase eco-labeled products, their effectiveness is influenced by factors such as trust and promotional emphasis (Sun et al., 2020; Rahman & Nguyen-Viet, 2022). Though greenwashing—misleading consumers about environmental performance—is growing more prevalent and can erode confidence in green products (Delmas & Burbano, 2011). While individuals with low worry may think but not intend to buy, those with strong environmental care may challenge green claims (Ulusoy & Barretta, 2016). Ironically, green advertising could create unfavorable impressions when a company's environmental record is good (Nyilasy et al., 2013). Greenwashing harms buying behavior, loyalty, and green brand image (Çavuşoğlu, 2021). Consumer awareness of greenwashing helps to shape the relationship between green advertising receptivity and purchasing behaviour (Jog & Singhal, 2020). These findings highlight the complex interaction between green marketing, consumer perceptions, and purchase intentions.

Literature Gaps

Important differences remain despite past studies documenting the negative consequences of greenwashing on customer trust, brand credibility, and purchase intentions (Nguyen et al., 2021; Akturan, 2018; Sun & Shi, 2022). Although little attention is paid to the impact of consumer characteristics—such as green literacy, cognitive dissonance, or demographic variations in moderating these effects—existing research generally focus on direct or mediated effects through trust, skepticism, or brand image. Moreover, although much has been said about skepticism (Nguyen et al., 2019), especially in digital and social media environments the mechanisms by which consumers recognize and evaluate greenwashing signals remain underexplored. Lacking longitudinal research on how consumer trust is regained following greenwashing occurrences, studies are generally cross-sectional as well. Industry-specific perspectives and local variations in consumer responses must also be assessed. Addressing these shortcomings will enable more credible green marketing strategies and assist to rebuild consumer confidence.

Research Methodology

The study examines how greenwashing influences consumer confidence and purchase intentions using a statistical research method. Data was collected using a closed-ended question designed questionnaire based on a five-point Likard scale. The

survey instrument measured key concepts such as perceived greenwashing, consumer trust, green scepticism, and purchase intention. Examining validated scales from prior studies, the questionnaire was designed; it was pre-tested for dependability and clarity before full-scale deployment.

The study population consists of urban consumers in Pune city who are aware of or have previously purchased eco-labeled or ecologically marketed products. These individuals are considered appropriate since they represent a demographic likely to encounter green marketing claims and are more likely to form views on greenwashing.

Cochran's sample size formula was used to select 400 respondents, therefore ensuring statistical validity and generalizability of results. A non-probability purposive sample method was used to seek respondents who were knowledgeable about environmental items or green advertising. Pune city was chosen for its growing population of ecologically conscious consumers and its variety in age, career, and educational background. This approach of sampling ensures relevant and context-specific findings.

Surveys both online and offline sent out via various methods collected primary data. Existing literature, periodicals, and market reports also supplied secondary data to strengthen the theoretical framework. SPSS tools were used for data coding, cleaning, and statistical analysis. Testing both hypotheses, regression analysis was utilized to assess the association between greenwashing and trust as well as the impact of skepticism on purchase intention. Descriptive statistics and ANOVA were also used to investigate group variances across demographics, hence ensuring comprehensive analysis and robust results.

Identified research problems

1. Consumers struggle to distinguish between genuinely sustainable products and greenwashed claims, leading to mistrust.
2. Greenwashing negatively influences consumer trust and may reduce their intention to purchase eco-friendly products.
3. Limited understanding exists on how consumer demographics and green skepticism moderate the impact of greenwashing.

Research Questions of the study

1. How does perceived greenwashing affect consumer trust in green brands?
2. What is the relationship between greenwashing, consumer skepticism, and purchase intentions?
3. Do consumer responses to greenwashing differ based on demographic factors such as age, education, or environmental concern?

Objectives of the study

1. To understand consumer perceptions of greenwashing and its effect on trust in green brands.
2. To analyse the relationship between greenwashing, consumer skepticism, and purchase intentions across different demographic groups.
3. To suggest effective green marketing strategies for rebuilding consumer trust and promoting sustainable purchase behavior.

The hypothesis of the study**Hypothesis 1:**

- H_0 (Null): There is no significant relationship between perceived

greenwashing and consumer trust in green brands.

- H_1 (Alternative): There is a significant relationship between perceived greenwashing and consumer trust in green brands.

Hypothesis 2:

- H_0 (Null): There is no significant difference in purchase intentions across consumer groups with varying levels of green skepticism.
- H_1 (Alternative): There is a significant difference in purchase intentions across consumer groups with varying levels of green skepticism.

Data Analysis**Demographic Information****Table 1: Demographic Characteristic of Participants**

Demographic Factor	Categories	Frequency	Percentage (%)
Gender	Male	220	55
	Female	180	45
Age Group	18 to 25	100	25
	26 to 35	150	37.5
	36 to 45	90	22.5
	46 & above	60	15
Education Level	Undergraduate	80	20
	Graduate	140	35
	Postgraduate	150	37.5
	Doctorate	30	7.5
Occupation	Student	90	22.5
	Private Employee	110	27.5
	Government Employee	70	17.5
	Self-employed	80	20
	Others	50	12.5
Monthly Income (INR)	Below 15,000	40	10
	15,001 to 30,000	100	25
	30,001 to 50,000	120	30
	50,001 to 75,000	90	22.5

	Above 75,000	50	12.5
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The demographic table summarizes 400 research participants. The sample is 55% male (220) and 45% female (180), suggesting a reasonable gender distribution. The largest age group, reflecting a predominantly young adult population, is 26–35 years (37.5%), followed by 18–25 years (25%). In terms of education, postgraduates (37.5%) constitute the majority, indicating a well-educated group. By occupation, private employees (27.5%) and students (22.5%) are the most prevalent, suggesting a mix of young people and early-career professionals. Most reflect a middle-income group and earn between ₹30,001 and ₹50,000 (30%), then ₹15,001 to ₹30,000 (25%). This demographic profile increases the relevance of the study population since the participants are likely aware of environmental issues and sensitive to marketing claims, especially about greenwashing and sustainability.

Table 2: Response Summary for Hypothesis 1 – Impact of Greenwashing on Consumer Trust

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average / Mean
I believe greenwashing reduces my trust in green brands.	26	40	59	155	120	3.76
Companies that mislead about eco-claims lose my trust.	36	53	76	131	104	3.54
I feel betrayed when a green claim turns out to be false.	23	38	83	152	104	3.69
My trust in green products decreases when greenwashing is exposed.	24	40	73	171	92	3.67
Greenwashing makes me question the credibility of all eco-friendly products.	45	57	75	122	101	3.44

The table displays the distribution of responses to five Likert-scale questions assessing the impact of greenwashing on customer trust among 400 participants. The average (mean) ratings for all questions, which range from 3.44 to 3.76, reveal a general agreement among respondents that greenwashing undermines their faith in green brands. Especially for comments like "I feel betrayed when a green claim turns out to be false" and "My trust in green products decreases when greenwashing is exposed," a greater concentration of responses falls under the "Agree" and "Strongly Agree" groups. This pattern suggests a significant correlation between customer trust and perceived greenwashing, hence validating the alternative theory. These findings underline the need for companies to maintain openness and sincerity in green marketing if they want to preserve brand credibility and consumer confidence.

Table 3: Response Summary for Hypothesis 2 – Influence of Green Skepticism on Purchase Intentions

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Average / Mean
I am less likely to purchase a product if I suspect greenwashing.	38	52	78	132	100	3.51
My purchase decision is affected by my skepticism toward eco-friendly claims.	36	69	74	117	104	3.46
I compare multiple green products before making a purchase.	43	65	71	117	104	3.44
I avoid brands that have been accused of greenwashing.	29	53	74	152	92	3.56
I trust eco-labels only when verified by reliable sources.	17	49	71	143	120	3.75

From 400 respondents, the table summarizes answers to five Likert-scale questions assessing the influence of

green skepticism on purchase intentions. Averaging from 3.44 to 3.75, the mean scores across all questions imply that most respondents feel that their buying decisions are significantly influenced by skepticism of green claims. There was particularly significant agreement on statements such "I avoid brands that have been accused of greenwashing" and "I trust eco-labels only when verified by credible sources." The higher rates in the "Agree" and "Strongly Agree" categories support the contrary hypothesis, suggesting that consumers with more skepticism are less inclined to purchase products perceived as greenwashed. Emphasizing the need of certified eco-labels and transparent corporate communication, this trend highlights the need of perceived authenticity and trustworthiness in influencing customer behavior in green markets.

Hypothesis Testing

Hypothesis 1:

- H_0 (Null): There is no significant relationship between perceived greenwashing and consumer trust in green brands.
- H_1 (Alternative): There is a significant relationship between perceived greenwashing and consumer trust in green brands.

Table 4: ANOVA Table – Hypothesis 1

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1450.75	2	725.38	113.03	0
Within Groups	2550.2	397	6.42		
Total	4000.95	399			

The ANOVA table assesses the variance among groups related to perceptions of greenwashing and levels of consumer trust. The calculated F-value of 113.03 with a significance level (p-value) of 0.000 shows a statistically significant variation in trust levels among groups depending on their view of greenwashing. The Between Groups Sum of Squares (1450.75) is much higher than the Within Groups Sum of Squares (2550.20), suggesting that variations in trust are largely influenced by differences in perceived greenwashing. The null hypothesis is rejected since the significance value is below the customary threshold of 0.05, hence confirming the alternative hypothesis that consumer trust is strongly affected by greenwashing perceptions. This result underlines the necessity for companies to avoid deceptive green marketing since it directly affects the trust and credibility individuals have in ecologically branded products.

Table 5: Regression Analysis Table – Hypothesis 1

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	1.102	0.213		5.17	0
Perceived Greenwashing	-0.487	0.045	-0.682	-10.82	0

The regression study looks at how perceived greenwashing influences consumer confidence. The model indicates a negative unstandardized coefficient ($B = -0.487$) for perceived greenwashing, implying that as views of greenwashing increase, customer trust falls significantly. This link is statistically significant with a t-value of -10.82 and a p-value of 0.000, much below the 0.05 criterion. The standardized beta coefficient of -0.682 reveals a strong inverse relationship between the variables. The constant term ($B = 1.102$) also shows the baseline level of faith in the lack of greenwashing perception. These results confirm that customer trust is damaged by perceived greenwashing, hence strongly supporting the alternative theory. The strength and relevance of the connection emphasize the need of transparency in green marketing as misleading assertions can significantly erode customer trust and damage brand reputation.

Hypothesis 2:

- H_0 (Null): There is no significant difference in purchase intentions across consumer groups with varying levels of green skepticism.
- H_1 (Alternative): There is a significant difference in purchase intentions across consumer groups with varying levels of green skepticism.

Table 6: ANOVA Table – Hypothesis 2

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1325.4	3	441.8	65.44	0
Within Groups	2674.6	396	6.75		

Total	4000	399			
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The ANOVA table evaluates if groups with varying degrees of green skepticism exhibit statistically significant variations in purchasing intentions. The results show a high F-value of 65.44 with a significance level (p-value) of 0.000, much below the normal alpha threshold of 0.05. As indicated by the Between Groups Sum of Squares (1325.40) in relation to the Within Groups Sum of Squares (2674.60), differences in degrees of green skepticism account for a large portion of the variation in purchase intentions. These results contradict the null hypothesis and support the alternative hypothesis, so confirming that the degree of doubt consumers have about green promises significantly influences their purchasing behavior. These findings underline the importance of creating credible and verifiable green marketing strategies, especially in relation to environmentally conscious and critical customer groups.

Table 7: Regression Analysis Table – Hypothesis 2

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	1.214	0.187		6.49	0
Green Skepticism	-0.433	0.041	-0.631	-10.56	0

A statistically substantial negative correlation between green skepticism and purchase intentions is shown by the regression table. Keeping other factors unchanged, the unstandardized coefficient ($B = -0.433$) suggests that for every one-unit rise in green skepticism, purchase intention falls by 0.433 units. The model shows notable statistical support for the alternative hypothesis with a t-value of -10.56 and a p-value of 0.000. The standardized beta coefficient of -0.631 verifies that more skepticism about green claims is connected with less intention to purchase eco-friendly items. The constant ($B = 1.214$) shows the baseline buying desire when skepticism is absent. These results highlight the pressing need for companies to reduce consumer skepticism by enhancing the transparency, sincerity, and trustworthiness of their green marketing messages, particularly as suspicious consumers tend to critically evaluate and often reject greenwashed claims.

Findings

The findings of the study suggest the following:

- A significant negative relationship was found between perceived greenwashing and consumer trust, indicating that misleading green claims reduce trust in eco-friendly brands.
- Green skepticism significantly influences purchase intentions, with skeptical consumers showing a lower likelihood of buying green products.
- Demographic factors such as age, education, and occupation moderately affect consumer sensitivity to greenwashing.
- Higher levels of green trust and brand credibility are essential in mitigating the adverse effects of greenwashing on purchasing behavior.

- Consumers demand transparent, verifiable, and authentic green marketing efforts to build and maintain trust in sustainable brands.

Conclusion

The study reveals that greenwashing significantly undermines consumer confidence and buying intentions for ecologically friendly products. Deceptive or exaggerated environmental claims, called greenwashing, erode brand credibility and consumer confidence as companies more and more use green marketing strategies to attract environmentally conscious customers. The results show that those who believe a brand is participating in greenwashing are less inclined to trust it and therefore less likely to buy its goods. Moreover, green skepticism affects consumer choices; those who are doubtful tend to examine and oppose green assertions more closely. Demographic variables including age, education level, and profession also shape these opinions, suggesting that marketing strategies should be tailored to different consumer groupings. The report, therefore, emphasizes the urgent need for companies to adopt clear, consistent, and provable sustainable policies. Genuine green projects not only foster confidence but also promote sustainable consumption and long-term consumer loyalty. Companies have to move beyond merely applying eco-labels and demonstrate genuine commitment by means of honest acts, third-party certifications, and transparent communication if they want to regain or bolster consumer confidence. This study offers useful ideas for companies trying to ethically put themselves in the green market and contributes to the increasing debate on the psychological and behavioral consequences of greenwashing.

Suggestions of the Study

Research results show that organizations should

adopt honest and open green marketing strategies to build and maintain consumer confidence. To avoid any customer skepticism, brands must support all of their environmental assertions with strong data and third-party certifications. Sustainability messaging must be clear and precise since even the most well-meaning green claims could seem false if they are not presented properly. Companies can also emphasize consumer education projects increasing green literacy so that customers can more clearly distinguish between actually eco-friendly items and those that are only greenwashed.

Understanding that various demographic groups respond differently to greenwashing, marketers should develop communications plans fit for particular segments. Highly educated or environmentally conscious consumers are more prone to question green promises and look for more robust evidence of sustainability initiatives. Engaging doubtful customers and enhancing trust can be achieved by including interactive and open tools such product traceability applications or environmental scorecards. Finally, companies should proactively address customer issues following any events by admitting their failings and describing the steps they have taken—this strategy fosters trust and preserves long-term brand loyalty. These actions not only protect brand reputation but also significantly support the bigger environmental movement.

Limitations

Although this paper clarifies how greenwashing influences customer confidence and purchase choices, it has several limitations. For one, the study is confined to Pune city, which could complicate application of the results to other locations with varied consumer backgrounds and degrees of environmental consciousness. Self-reported responses collected using a standardized survey provide the data; this method might occasionally cause social desirability bias or false memories. Furthermore, the cross-sectional methodology only records consumer opinions at one point in time, thus tracking long-term behavioral changes or trust shifts becomes challenging. The emphasis is mostly on educated, metropolitan respondents, hence the viewpoints of rural or less-knowledgeable consumers may be overlooked. The study also relied just on quantitative techniques; including some qualitative analysis would have provided a fuller knowledge of customer opinions. These constraints highlight the necessity of more thorough, mixed-method research in forthcoming studies.

Significance of the study

Although this work clarifies how greenwashing influences customer confidence and purchase choices, it has several limitations. For one, the study is confined to Pune city, which could complicate application of the results to other locations with

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Future Scope of the Study

The work opens the door for interesting future studies on greenwashing and its influence on consumer behavior. Expanding the range to cover several geographic areas and a diversity of demographic backgrounds will help us to make the results more relevant across many cultures and locations. Tracking how customer trust and buying intentions change over time using a longitudinal method could be quite beneficial, especially following a greenwashing event or when corrective actions are implemented. Qualitative techniques—such as interviews or focus groups—could also help future studies to explore more thoroughly the emotional and cognitive responses to greenwashing. Examining how social media, peer reviews, and eco-label certifications shape customer behavior would also help to shed light on the green market. Examining particular sectors—such as fashion, food, or automotive—could highlight particular variations in how greenwashing is viewed across industries. Key to fine-tuning marketing tactics and strengthening the ethical foundation of sustainable branding will be this future study.

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