

Hedging the Purchase: Integrating Financial Risk into the Webrooming Journey

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Abstract

In this study, the authors analyse the effects of smart shopping perception, salesperson assistance, and socialisation on webrooming behaviour, with financial risk as a moderating factor. PLS-SEM is used to analyse the data and shows that these variables have a significant effect on webrooming behaviour. Physical stores can provide in-store expert advice and foster a positive atmosphere for customers to interact with one another, motivating them to visit physical stores at the time of purchase. Furthermore, customers with a higher financial risk perception are more likely to exhibit webrooming than those with a lower one. Online companies can minimise the financial risk associated with online purchases, retain customers in a single channel – online – and prevent them from switching at the time of purchase.

Keywords: Webrooming, Socialisation, Sales-Staff Assistance, Smart-Shopping, Financial Risk

Introduction

Advancements in digitalisation, the internet and mobile phone usage change the environment altogether. Customers' buying behaviour shifted from a classical consumption process to a more digital, complex behaviour (Hall et al., 2017). The availability of various shopping channels has enabled customers to utilise and integrate these – online and offline – channels for better, well-informed purchase decisions. This multichannel, emergent technology has changed the way customers' entire buying process works – from information search to actual purchase behaviour (Nam & Kannan, 2020). Customers' behaviour is becoming more complex and multi-channel, rather than a traditional linear purchase path. For instance, a few may search for the product in a physical store and later purchase it online, exhibiting showrooming behaviour. Whereas, some customers may behave in the opposite way, searching for the product on online stores and later purchasing it from a nearby store, exhibiting webrooming behaviour (Flavián et al., 2016; Kang, 2018). Among these two multichannel behaviours, webrooming is the most frequently observed by customers and has also attracted the attention of researchers (Flavián et al., 2016).

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Various studies have shown that webrooming is prevalent in today's multichannel retail landscape, driven by several factors. For instance, technological advancements are making customers more capable of searching and switching among offline and online channels in a single purchase process (Chiu et al., 2011), customers desire to pursue hybrid utilities (Kalyanam & Tsay, 2013) and finally, intense usage of the internet and mobile phones (Wolny & Charoensuksai, 2014). Accenture Consulting (2016) report claimed that 72% of UK shoppers, 81% of USA shoppers and 76% of Canada shoppers are engaged in the webrooming behaviour intentionally during their purchases. Studies on webrooming highlight both its benefits and drawbacks. Webrooming offers customers the convenience of searching for products online (Schröder & Zaharia, 2008) and access to abundant information. At the same time, customers also benefit from the immediate possession of products (Aw, 2019) and the ability to evaluate products by touch and feel (Mehra et al., 2017). However, webrooming negatively affects the profitability of online stores (Chiu et al., 2011; Arora & Sahney, 2017) and impacts various product categories (Flavián et al., 2016).

Most existing literature on webrooming focuses on utilitarian drivers, such as time saving (Atkins & Kim, 2012). However, the psychological (Aw et al., 2021) and financial benefits of webrooming have been neglected and warrant further study. This research integrates "egoic" motivations, such as smart shopping perceptions, with service-driven factors, such as sales staff assistance and socialisation. From a financial perspective, customers may webroom to reduce perceived risks, such as paying more than necessary or missing better options elsewhere. Existing studies have not thoroughly explored how financial risk serves as a boundary condition. While some research has examined product involvement as a moderator (Arora & Sahney, 2018), the desire to avoid financial loss may also prompt customers to switch from online to offline stores. This study uses financial risk as a moderator to understand why customers shift from online to offline stores to avoid potential financial loss.

The primary objective of this study is to examine the psychological and financial factors influencing webrooming behaviour. Smart shopping perceptions, sales staff assistance, and social interaction act as antecedents of webrooming attitudes. The moderating effect of financial risk on the relationship between consumer attitude and actual webrooming intention will also be examined.

This study draws on anticipated regret theory (Sheeran & Orbell, 1999) and uncertainty reduction theory (Berger & Calabrese, 1975). Webrooming behaviour—seeking online information to reduce post-purchase regret—aligns with anticipated regret theory. In line with Flavián et al. (2020), who found that webrooming leads to a sense of personal achievement and smart shopping, this study includes a measure of smart shopping perception. By introducing financial risk as a moderator, the study applies behavioural finance concepts, such as loss aversion, to the retail context. This suggests that webrooming serves as a "hedging" strategy against the financial uncertainty of buying online only.

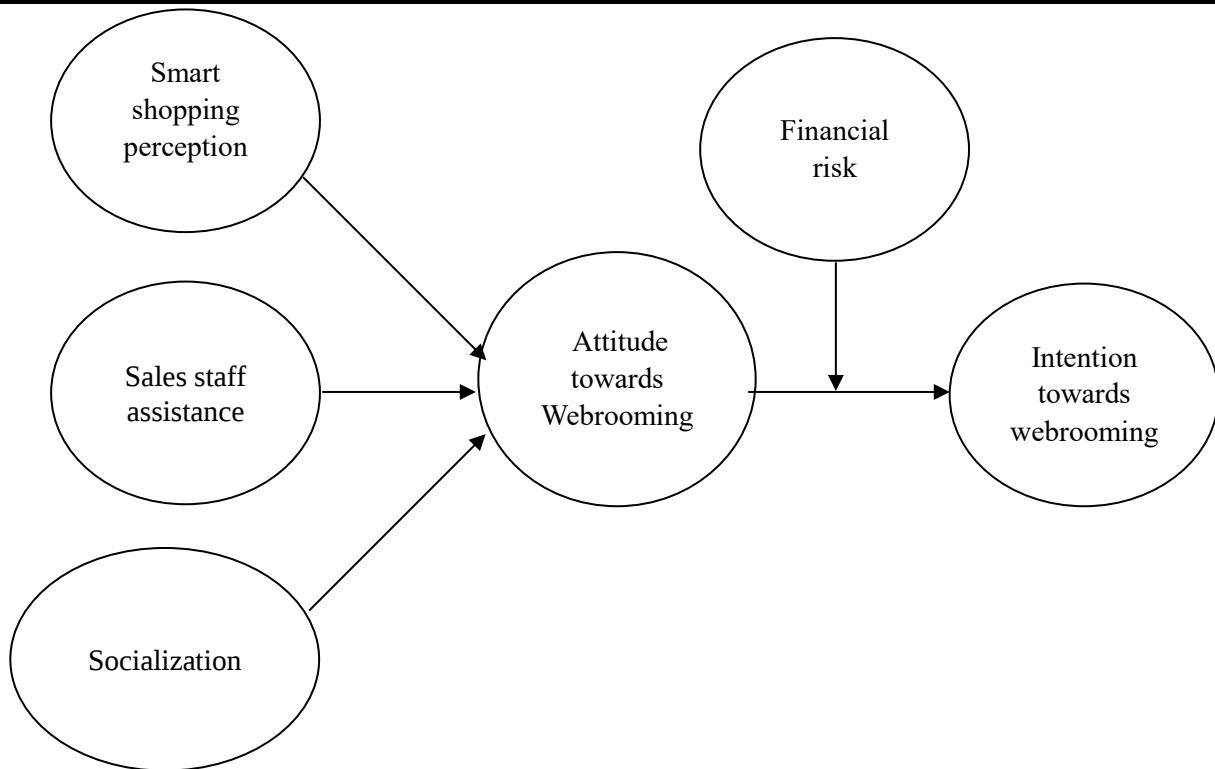
This study offers retail managers guidance for creating a strong omnichannel strategy. By seeing webrooming as a way to minimise financial risk, retailers can use price-match guarantees and clear return policies to connect their online and offline offerings. For high-involvement products, understanding the role of financial risk can help marketers encourage "reserve online, pay in-store" options, lowering psychological and financial barriers to purchase.

Literature Review

Attitude Toward Webrooming Behaviour

Webrooming is among the most common customer behaviours in multichannel retail (Flavián et al., 2016). Customers leverage multiple search and purchase options to gain advantages from both offline and online stores in a single transaction (Verhoef et al., 2007; Chiu et al., 2011; Wang et al., 2015). Studies indicate that channel selection for product search and purchase is primarily driven by perceived benefits and a channel's ability to fulfil customer needs (Verhoef et al., 2007; Wang et al., 2015; Frassetto et al., 2015). Distrust of online purchases (Luarn & Lin, 2005; Kim & Ahmad, 2013; Moody et al., 2014) and heightened perceptions of online risk (Chiu et al., 2011; Chou et al., 2016) further deter online buying, steering customers toward physical stores for final purchases.

Figure 1: Proposed Model on Webrooming Behavior



Smart-Shopping Perception and Attitude toward Webrooming

Smart-shopping perception is defined as the consumer's subjective feeling of being a "competent" and "shrewd" shopper who has achieved an optimal purchase through their own effort (Flavián et al., 2020). In the webrooming behavior, unlike the tradition purchase process, The customer uses information-rich digital environment to find the best available option in the market before going to purchase it in physical store (Arora & Sahney, 2018; Aw et al., 2021).

Shopping motivation of the customer directs the channel choice (Arnold & Reynolds, 2003). Whereas the outcome of the purchase process is called shopping value, comprises both utilitarian and hedonic components (Babin et al., 1994; Davis et al., 2014). Customers tend to select those channels where the shopping values best match with the shopping motivations (Avnet & Higgins,

2006). For instance, extensive convenient information search and time saving drives the customer to go for the online search for the product, whereas immediate possession and socialization drives shoppers to close their final purchase in a physical store (Boardman & McCormick, 2018).

Flavián et al. (2020) suggest that any purchase process creates a sense of personal attribution, where customer feels responsible for the positive or negative outcome of the purchase. This ego-driven reward—the feeling of "winning" against the retailer—acts as a powerful internal stimulus that significantly enhances the consumer's evaluation of the shopping journey (Santos & Koshino, 2020). Further, Shankar and Jain (2021) finds out that the efficiency and perceived control gained through online research create a highly favorable attitude toward webrooming, as consumers perceive themselves as experts in utilizing both offline and online channels simultaneously (Arora et al., 2017; Flavián et al., 2020). Consequently, the more a consumer values their own shrewdness, the more likely they are to develop a positive internal disposition toward the webrooming behavior (Arora & Sahney, 2018; Guo et al., 2022).

H₁: Smart-shopping perception has a significant positive influence on the Attitude toward webrooming.

Sales-Staff Assistance and Attitude toward Webrooming

Despite the digital transformation, the need for social interaction is still the important factor in directing the shopping process (Kim et al., 2017). Even with the abundance of high-quality information available through sophisticated websites and digital interfaces, many shoppers still prioritize face-to-face expert consultation. Arora et al. (2017) argued that face to face interaction with experts can reduce the performance and financial uncertainty for the consumer. Especially, in high-value and high involvement products, the customer always seek to have an expert view from the salesperson for the product evaluation (Santos & Koshino, 2020).

Personalize assistance to customers gives an ultimate edge to offline stores, which online stores rarely provide to the customers (Kacen et al., 2013; Chiang et al., 2006). Online stores also started the live chat option but that cannot substitute the physical face to face interaction of customers and salesperson having the product in front of them. Aw et al. (2021) also argued that customer shifted from online channel to offline channel to finalize his purchase often seek expert confirmation to justify his purchase choice. Gensler et al. (2017) have also proposed the assistance of in-store salespersons as a potential benefits that motivates customers to shift from online channel to offline channel.

Empirical evidence from Shankar and Jain (2021) suggests that personalized attention and technical knowledge from store employees significantly enhance the consumer's favorability toward the shopping journey. The interaction with the sales person act as trust-building mechanism, which can reduce the perceived risks associated with online-only information (Guo et al., 2022).

Arora and Sahney (2018) researched that the quality of service assistance is a primary driver in forming a positive attitude toward the webrooming behavior, as expert feedback cannot be obtained in online-only channel (Kacen et al., 2013; Arora et al., 2017; Shankar & Jain, 2021). As researched by Arora and Sahney (2019) this study hypothesize sales-staff assistance as key driver to the attitude towards webrooming.

H₂: Sales-staff assistance has a significant positive influence on the Attitude toward webrooming.

Socialization and Attitude toward Webrooming

Empirical studies indicate that this social dimension acts as a powerful pull factor for physical retail environments (Aw et al., 2021). In the retail context, socialization refers to the hedonic and experiential benefits derived from interacting with others during the shopping process (Kang & Johnson, 2015). Whereas the online search for the specific product is often a solitary and utilitarian task. Customers are fulfilling socializing gratifications by switching from online stores to offline stores, as online-only stores cannot fulfill this (Shankar & Jain, 2021). For many webroomers, the act of visiting a store is not merely functional; it is an opportunity for communal engagement with friends, family, or other shoppers (Arora & Sahney, 2018).

Santos and Koshino (2020) found that these social stimuli serve as environmental cues that trigger a positive affective state in the "organism" (the consumer), leading to a higher likelihood of webrooming intention (Arora & Sahney, 2018; Shankar & Jain, 2021).

H₃: Socialization has a significant positive influence on the Attitude toward webrooming.

Attitude toward Webrooming and Webrooming Intention

While predicting the intention towards any behavior, the attitude towards that behavior is the key variable (Fishbein & Ajzen, 1975). Once the attitude towards a specific behavior is developed, it is more likely to act as an antecedent towards the intention for that behavior (Ajzen, 1991). When a consumer perceives webrooming as a beneficial, smart, and low-risk method of shopping, they develop a strong psychological tendency that leads to the actual webrooming intention (Arora et al., 2017; Shankar & Jain, 2021). Also, Arora and Sahney (2018) highlight that a positive attitude significantly reduces the cognitive effort required to switch channels, thereby directly increasing webrooming Intention.

H₄: Attitude toward webrooming has a significant positive influence on Webrooming Intention.

The Moderating Role of Financial Risk

Risk of paying an overvalued price or incurring sunk cost from a faulty or low quality product purchase refers to as financial risk in retail context (Guo et al., 2022; Arora & Sahney, 2019). In the multichannel shopping context, webrooming serves as a strategic hedging mechanism used by consumers to minimize these financial uncertainties (Arora & Sahney, 2018).

Positive attitude toward webrooming is already developed by smart-shopping feelings, staff assistance, and socialization. However, the actual conversion into webrooming intention is significantly influenced by the perceived financial stakes (Flavián et al., 2020; Aw et al., 2021). According to prospect theory, consumers are more motivated to avoid a loss than to achieve a gain. Therefore, when financial risk is high (e.g., for expensive electronics or luxury goods), the relationship between a positive attitude and the intention to visit a store is strengthened (Guo et al., 2022; Shankar & Jain, 2021). Empirical evidence from Arora and Sahney (2018) also suggests that for low-risk, inexpensive items, even a highly positive attitude may not lead to a physical store visit because the financial benefit of de-risking does not justify the travel effort. Conversely, as noted by Aw et al. (2021) and Santos and Koshino (2020), high financial risk acts as a catalyst that pushes the consumer to finalize the purchase in-store to ensure the value for money and expert validation (Arora et al., 2017; Guo et al., 2022). This study takes financial risk as a moderator and hypothesis that financial risk strengthens the path from consumer attitude to actual behavioral intention.

H₅: Financial Risk positively moderates the relationship between Attitude and Webrooming Intention, such that the relationship is stronger when Financial Risk is perceived as high.

To conclude, the literature indicates that webroomers are not just looking for products; they are looking for value, validation, and victory. By integrating socialization, in-store staff assistance and financial risk, this study provides a holistic view of the omnichannel shopper as a rational yet social agent who uses multiple channels to optimize their financial and psychological outcomes.

Research Methodology

Data Collection and Sample

This study selected the young shoppers as the target sample because people between 18 to 28 years are more prone to engage in webrooming behavior (Adler, 2014). Purposive sampling method was adopted for data collection and the respondents were selected from the university. Face to face questionnaires were filled from the respondents, and no email questionnaire were sent or received. As the study aims to check the webrooming behavior among the people, so a screening question was added in the questionnaire to filter out those who did not search for the product online and later purchase it in physical store. Another question was added to check whether they switch to the physical channel because of the non-availability of the product on online store. Those who answer 'yes' are also excluded from the study. Four responses were removed due to not filling the screening question. Further, 13 responses were also excluded due to incomplete or straight-line responding of questionnaire. Eventually, 317 usable responses were collected, exceeding the minimum sample size calculated using G*Power software (Faul et al., 2007). The sample includes 76.6% (n=243) males and 23.4% (n=74) females.

Data Analysis

This study utilized Partial Least Square Structural Equation Modeling (PLS-SEM) to evaluate the conceptual framework. Consistent with Hair et al. (2019), PLS-SEM offers superior statistical power, making it highly effective for exploratory studies investigating less developed or evolving theories. Furthermore, as the research aims to identify critical antecedent constructs and predict primary target variables, PLS-SEM serves as an appropriate methodological choice (Hair et al., 2011). As a causal-predictive technique, PLS-SEM also bridges the gap between explanatory and predictive modeling, enabling researchers to integrate both perspectives within a single analysis (Hair et al., 2019). Lastly, the method is less restricted by data distribution requirements, making it ideal for social science data that often deviates from multivariate normality (Hair et al., 2014). Following the two-step analytical approach recommended by Anderson and Gerbing (1988), the measurement model was assessed prior to testing the structural paths.

Measurement Model

The results of average variance extracted (AVE) and composite reliability values of constructs are shown in the Table I. The value of AVE are greater than 0.5 whereas the composite reliability values are greater than 0.7, both satisfying the threshold values. The reliability of indicators was established where all outer loadings were above 0.7. Heterotrait–Monotrait ratio (HTMT) is used to evaluate the discriminant validity. According to Kline (2011) and Hair et al. (2017), HTMT values should be below 0.85. The results of HTMT are shown in Table II.

Table 1: Factor Structure and reliability analysis

Constructs	Indicators	Loading	CR	AVE
Smart shopping perception	SSP1	0.812	0.887	0.723
	SSP2	0.834		
	SSP3	0.876		
Sales Staff Assistance	SSA1	0.801	0.873	0.696
	SSA2	0.842		
	SSA3	0.829		
Socialization	SOC1	0.816	0.903	0.701
	SOC2	0.851		
	SOC3	0.873		
	SOC4	0.822		
Attitude Towards Webrooming	ATW1	0.867	0.915	0.782
	ATW2	0.884		
	ATW3	0.896		
Intention Towards Webrooming	ITW1	0.872	0.921	0.796
	ITW2	0.887		
	ITW3	0.907		
Financial Risk	FNR1	0.781	0.901	0.648
	FNR2	0.804		
	FNR3	0.829		
	FNR4	0.842		
	FNR5	0.816		

Table 2: Discriminant Validity (HTMT)

	SSP	SSA	SOC	ATW	ITW	FNR
SSP	0.85					
SSA	0.63	0.83				
SOC	0.59	0.67	0.83			
ATW	0.71	0.69	0.74	0.88		
ITW	0.68	0.66	0.72	0.82	0.89	
FNR	0.41	0.38	0.36	0.48	0.52	0.80

Note: Diagonal elements are the square root of AVE. The value should exceed the inter-construct correlations for adequate SSP, SSA, SOC, ATW, ITW and FNR.

Structural Model

Before testing the structural paths, we examined the multicollinearity in the data. The Variance Inflation Factor (VIF) values are well below the threshold value of 3.3 (Diamantopoulos & Siguaw, 2006), confirming that multicollinearity does not exist. The model explained 68% of the variance ($R^2 = .68$) for the primary endogenous construct, Webrooming Intention.

The empirical results provide strong support for the proposed framework. As hypothesised in H1, smart-shopping perception has a significant positive influence on consumers' attitude toward webrooming ($\beta = 0.248$, $t = 4.31$, $p < .001$). Similarly, H2 was supported, as sales-staff assistance was found to be a significant driver of consumer attitude ($\beta = 0.217$, $t = 3.89$, $p < .001$).

Socialisation (H3) has a positive impact on the attitude toward webrooming behaviour ($\beta = 0.392$, $t = 6.14$, $p < .001$). The results for H4 confirm that a positive attitude toward webrooming predicts actual webrooming intention ($\beta = 0.581$, $t = 10.27$, $p < .001$). The last hypothesis, H5, examined the moderating role of financial risk on the relationship between attitude towards webrooming behaviour and actual webrooming intention ($\beta = 0.164$, $t = 3.02$, $p < .001$), which was also significant.

Discussion

This study attempted to expand the understanding of multichannel purchase behaviour – webrooming. Although previous research has sought to explain webrooming variation, the literature still lacks a complete understanding of webrooming behaviour. This study integrates egoic, service-driven, and hedonic variables to examine their impact on webrooming. Further, in previous studies, product involvement was taken as a moderator, but this study treats financial risk as a moderator of webrooming intention.

The findings suggest that smart-shopping perception is positively related to a consumer's favourable attitude toward webrooming. The findings are in line with those of Flavián et al. (2020) and Aw et al. (2021) on the positive impact of price-conscious and value-oriented consumers' tendency towards webrooming. Customers seem themselves 'smart' when they combine both offline and online channels in their purchase journey by switching between them. It gives them the sense of superior purchase outcome by acquiring the best possible available product in the market at the best possible price (Arora & Sahney, 2018). Customers prioritising convenience-oriented shopping might avoid the extra effort, time, and money of visiting a physical store for inspection and immediate purchase. Whereas customers who consider the high-value gain from the buying process – getting the best by paying less – may be willing to buy in a physical store and put in extra effort and money, viewing it as an investment to mitigate financial uncertainty (Guo et al., 2022). By doing so, they think they outsmart the market by exhibiting multichannel buying behaviour.

Secondly, empirical results also support the positive relation between sales-staff assistance and attitude towards webrooming. These results align with those of Arora et al. (2017), who found that expert validation of consumer value can reduce purchase-related anxiety. After extensive online research, shoppers seek help from store employees to bridge the information gap. Although they have enough information to decide on their purchase option, they use the salesperson's assistance in a physical store as a validation centre (Santos & Koshino, 2020). If staff lack specialised knowledge and expertise, customers may consider channel switching to be pointless. However, a well-qualified, expert and with enriched knowledge can satisfy a customer who is seeking the professional opinion about the product, which can lead to a positive evaluation of webrooming, as it offers a level of certainty that pure online shopping cannot provide (Kacen et al., 2013; Arora et al., 2017).

Thirdly, in line with the previous research (Shankar & Jain, 2021) that characterises shopping as a social and hedonic activity rather than a purely functional task, our results suggest a significant positive influence on the consumer's attitude towards webrooming. People with a convenience-driven or task-oriented mindset may perceive the store visit as a waste of time and money. Whereas, shoppers motivated by socialisation tend to view the physical store visit as an opportunity for human connection and socialising gratification (Kang & Johnson, 2015). People exhibiting webrooming behaviour due to social interaction urges consider people interaction and the physical retail experience as a reward for the extra time, effort, and money spent during a

physical visit (Shankar & Jain, 2021). Thus, the positive relationship identified in this study reinforces the idea that socialisation is a vital psychological driver of webrooming (Aw et al., 2021).

Fourth, the results also confirm that attitude towards webrooming is a powerful predictor of actual webrooming intention, consistent with the behavioural frameworks of Arora and Sahney (2018) and Aw et al. (2021). Customers who already have a positive attitude towards the convenience and time-saving benefits are rarely inclined to switch channels at the end of the purchase process. Whereas, people who developed a positive attitude towards the physical store will visit it at the time of the final purchase.

The study's findings align with Shankar and Jain (2021), demonstrating that when the shopping experience is perceived as valuable and secure, this psychological predisposition translates directly into a concrete behavioural intention. Thus, a positive attitude remains the key factor in the consumer's decision-making process, converting initial interest into a definitive plan to purchase offline.

Lastly, the moderating role of financial risk on the relationship between attitude towards webrooming and intention towards webrooming is significant. These results support the risk-mitigation perspective found by Aw et al. (2021) and Flavián et al. (2020). Customers perceiving high financial risk in any purchase will be reluctant to make a single-channel purchase. Our findings demonstrate that people with higher financial risk are more likely to engage in webrooming for second validation. Arora et al. (2017) also argue that customers exert extra effort, time and money to avoid monetary loss associated with the purchasing process.

Implications

The study's findings align with those of Arora et al. (2017) and Shankar and Jain (2021), suggesting that the human element is an important validation point in the modern retail landscape. This research thus provides a foundation for future studies to further explore how high-touch services can be integrated into high-tech digital environments to manage the challenges of contemporary multichannel retailing (Chiu et al., 2011; Wong et al., 2018).

This research offers key theoretical and managerial insights into the webrooming phenomenon. Theoretically, very few studies have examined smart-shopping perception and socialisation as critical psychological drivers of webrooming. By confirming these antecedents, the study shifts the academic focus from purely functional motives to the social and ego-driven rewards of channel switching (Flavián et al., 2020; Shankar & Jain, 2021). This provides a new paradigm to future research to explore how human elements manage the unique challenges of modern multichannel dynamics (Chiu et al., 2011; Wong et al., 2018).

In practice, the findings suggest that retailers should prioritise human capital and expert validation to attract more customers to physical stores. Since sales-staff assistance significantly drives attitude, managers must train employees to act as specialised consultants who can reduce the performance risks that linger after online research (Arora et al., 2017). Physical stores can also implement smart tactics, such as in-store QR codes for price comparisons, to satisfy consumers' need for savvy. To counter the non-monetary costs of store visits, e-retailers and physical stores should collaborate to offer transparent information and social gratification, thereby bridging the gap between digital curiosity and physical purchase commitment (Aw et al., 2021; Hong & Cha, 2013).

Limitations and Future Research

Although the study provides rich insight into the customer's webrooming behaviour, it also has certain limitations that offer a roadmap for future scholarly inquiry. First, this study treated financial risk as a key moderator of webrooming; future studies may focus on how different product categories – such as low-involvement groceries versus high-involvement electronics – affect the need for socialisation and channel-switching behaviour (Arora et al., 2017).

Furthermore, this research focused on specific psychological and social antecedents, yet other factors, such as personality traits or digital literacy, may also play a role in how smart a shopper feels (Aw et al., 2021). Future researchers could also explore the reverse journey—showrooming—to determine if socialisation acts as a restraint or a driver when the final purchase is intended for the online channel (Shankar & Jain, 2021). Also, expanding the geographical scope to include diverse cultural contexts would also help generalise these findings across different global retail landscapes.

Conclusion

This research highlights that webrooming is a sophisticated, strategic behaviour driven by more than just functional necessity. The findings confirm that the psychological reward of smart shopping and the desire for social validation are essential in forming a positive attitude toward channel switching (Flavián et al., 2020; Shankar & Jain, 2021). While digital platforms offer the initial information, the expertise of sales staff remains a critical anchor for purchase intention (Arora et al., 2017). Ultimately, success in the modern retail landscape depends on a brand's ability to blend digital efficiency with the human touch to satisfy the contemporary consumer's need for both shrewdness and security.

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