

Consumer Privacy Concerns and Information Sharing Intention in Omnichannel Retailing: Mediating Role of Online Trust

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Abstract

Objective of this research is to find out the relationship between customers' perceptions of an organization's privacy information practices and their information-sharing intention in the context of omnichannel retailing. The study aimed to address the gap in research regarding privacy concerns and information sharing across integrated online and offline channels. Based on the Stimulus-Organism-Response (SOR) framework, research model of this study is proposed. The data collected from 392 omnichannel customers through an online survey and it was analyzed using Partial Least Squares Structural Equation Modeling. The results pointed out that customers' perceptions of privacy practices (collection, unauthorized secondary use, improper access, and errors) positively influence their online trust and information-sharing intention. Online trust partially mediates the relationship between specific privacy concerns and information-sharing intention. Finally, the study concludes that omnichannel retailers need to prioritize transparency, implement robust data protection measures, as well as build trust to encourage customers to share information across channels.

Keywords: Omnichannel retailing, perceptions of privacy practices, information-sharing intention, online trust, SOR framework, Vietnam.

1. Introduction

In today's digital marketplace, the advent of omnichannel retailing created a profound transformation in electronic commerce (Szozda, 2023). Businesses have combined online and offline channels to provide service and products to customers; hence, it makes customer enjoyable and consistent across all touchpoints (Nhung et al., 2023). When customers interact with physical stores, websites, mobile apps, social media platforms, and email marketing; businesses can collect increased their data easily. This data provides valuable insights into customer behavior; consequently, businesses can easily provide

personalized services and targeted marketing. However, it also raises significant concerns about information privacy as businesses can collect, use customer data for their activities (selling, marketing, customer relationship management...).

In the context of global digital transformation, customers are increasingly concerned about the collection, storage, and use of their personal information by organizations, even government agencies (Gracia & Juliadi, 2019). The heightened awareness of privacy practices by customers has led to concerns about their information provision. At the same time, practices show that there is an increase in unauthorized data collection, unauthorized access, and the potential misuse of personal information. Omnichannel retailing creates the complexity of data collection and use across multiple touchpoints, as well as the potential for extensive profiling; thus, these concerns are increasing (Campbell, 2019). For example, to build a comprehensive customer profile, online businesses will rely on data about customers' online browsing history, receipts from customers purchased at traditional stores, and customers' social media activities. Through this data, businesses personalize services or provide products suitable for each customer; but comprehensive data collection behavior will raise concerns about the extent of data collection and the possibility of privacy violations. Also, privacy worries could get even worse with the growing usage of artificial intelligence and virtual reality in omnichannel retailing (Vinoth & Srivastava, 2024). Retailers can now record clients' emotional states, facial expressions, and speech patterns, among other sensitive data, thanks to these technologies (Andalibi & Buss, 2020). While the above technologies enhance customer service, the processing of user information raised ethical concerns and risks to privacy. Recognizing that privacy issues are important in the digital landscape, governments have also developed and enacted strict data protection regulations; for example, the General Data Protection Regulation in Europe and the California Consumer Privacy Act in the United States. The handling of businesses that violate privacy and misuse customer data has shown that customers have great power to decide on their personal information. To offer individualized services to customers, omnichannel merchants must use customer data in a way that complies with data protection rules, all while navigating this complicated regulatory landscape.

Privacy concern is on the rise as customers learn more about the collection, storage, and use of their personal information (Jai & King, 2016). Business privacy policies affect their propensity to share personal information (Dinev & Hart, 2006). Customers are more inclined to divulge personal information when they have faith in a company's ability to handle their data appropriately and openly (Pavlou et al., 2007); however, consumers stop to trust a business and do not share information due to worries about data misuse and its impact on their privacy (Khoa & Huynh, 2022). In omnichannel retailing, profiling is becoming more prevalent; hence, customer information travels across several touchpoints. If data practices are not always clear, there is customers' growing concerns about their privacy (Cheah et al., 2022). Consumers are most worried about the following data privacy issues as sharing personal information with third parties, targeted advertisements based on past purchases, and the possibility of data breaches.

Szozda (2023) pointed out data collection from many touchpoints increase due to the fast expansion of omnichannel retailing. Based on the collected data, business may better understand customer buying habits, which in turn allows for cross-channel personalization of promotions and services. Many issues raise customer privacy concerns in the omnichannel retail context, such as information flowing between multiple touchpoints, unclear data policies, and increased customer profiling by businesses (Tyrväinen et al., 2020). Despite this being an issue that affects business performance, there is little research on the correlation between perceived privacy and information disclosure in integrated channels. Previous studies have focused on e-commerce and other isolated contexts (Dinev & Hart, 2006; Khoa & Nguyen, 2022; Smith et al., 2011). It can be seen that compared to single sales channels, omnichannel retail environments will collect more data from customers, as customers can use more than one online and offline touchpoint simultaneously in transactions (Nhung et al., 2023). Customers will feel uncertain about sharing information if the security procedures of multi-channel retailers are not clear and transparent. Malhotra et al. (2004) found that existing models, such as the internet user information privacy concerns (IUIPC) framework, cannot fully represent the complexity of multi-channel settings without linking them to other factors. Wiese (2024) presented an extended stimulus-organ-response (SOR) model, which takes into account perceived seamlessness and product information. The study focused primarily on examining how social media attractiveness moderates the relationship between consumer behavior and experience sharing. Furthermore, Hsu et al. (2024) evaluated the relationship between consumer trust and satisfaction, as well as the factors influencing the intention to choose multi-channel businesses and the following factors such as convenience of multi-channel services, shopping value, and channel consistency. Overall, it is easy to see that although customers' perception of privacy policy, trust in online services, and intention to share personal information are all important factors in modern business, previous studies have not been able to establish the relationship between these three factors.

To fill this informational void, our study established a conceptual model focusing on how consumers' perceptions and act upon privacy in the omnichannel retail landscape. This study delved into the relationship between perceptions of an omnichannel retailer's privacy practices; including, collection, unauthorized secondary use, improper access, and errors, and customers' intention to share personal information in omnichannel. This research investigated the perspectives of omnichannel shoppers about privacy, trust, and information sharing intentions by employing the SOR paradigm (Mehrabian & Russell, 1974). According to SOR, an individual's internal assessment is impacted by environmental stimuli, which in turn influence behavioral reactions. In this study, consumers' trust judgments (O) are influenced by concerns about data privacy practice (S), which in turn affects their willingness to share information across channels (R). Using SOR, this research can gain a deeper understanding of the connection between people's confidence in one another, their privacy perceptions, and their actions.

This study is structured as follows. First, a research model was developed based on relevant theories and literature analysis. Next, the method was presented. Results are analyzed in the next part. Finally, discussion, key findings and theoretical and managerial implications are discussed.

2. Literature Review

2.1 Organization's Privacy Information Practices in Online Context

In the contemporary digital landscape, customers routinely share extensive personal information with organizations during transactions and interactions (Riaz et al., 2024). In the age of rapid digital technology development, the collection and use of personal data in commerce is becoming more and more popular; hence, customer concerned about information security and privacy (Yang et al., 2022). Smart consumers in digital agree are more perception of how their data is collected, exploited, stored and distributed internally. Many studies have pointed out that customers perceive a business's privacy protection practices has a significant impact on their decision to share information (Sandhu et al., 2023). As consumers know company's data solutions, and believe that a company handle their data responsibly and openly, they are more willing to disclose personal information; conversely, they hesitate to share as the fear of data abuse increase.

The collection of large amounts of data from customers in both online and offline channels due to the explosion of omnichannel retail (Zhang & Deng, 2024). Although valuable insights data can help retailers to better understand their customers and personalize their offerings, it also raises privacy concerns for consumers. Customer uncertainty was established from the interconnectedness of information across channels, opaque data practices, and ever-expanding data scope.

2.2 SOR Theory and Information Sharing in Omnichannel Retailing

Through the use of stimulus-organism-response (SOR) paradigm (Mehrabian & Russell, 1974), this research investigates omnichannel shoppers' views on privacy, trust, and intents to share information. Environmental stimuli (S) influence an individual's internal appraisal (O), which in turn influences behavioral reactions (R) (Cheah et al., 2022; Jacoby, 2008), according to SOR. Concerns about data privacy (S) impact consumers' trust impressions (O), which in turn affect their willingness to share information across channels (R) in this study. The relationship between privacy perceptions, trust, and behaviors can be better understood through the use of SOR.

It shows that customer behavior, such as information sharing intention, can be increased if customers have trust in a brand, which reduces customer uncertainty (Senali et al., 2024). Customers will be more willing to share information and enjoy personalized services when they perceive empathy and benevolence from the seller in omnichannel. When information is handled appropriately and with integrity, customers will increase subsequent information sharing after purchase (Muliadi et al., 2022). Consumer trust improves omnichannel information sharing by making transactions seem more predictable and reliable.

The development and validation of an instrument that measures the major characteristics of individuals' concerns about organizational information privacy policies is necessary to facilitate future studies in the information privacy research stream (Smith et al., 1996). The end product was a brief 15-item survey measuring people's worries about their companies' data privacy policies and procedures along four dimensions. An organization's privacy practices have a significant impact on how customers share information, according to Smith et al. (2011). Concerns about data gathering, misuse, illegal access, and mistakes in personal information develop in online contexts (Malhotra et al., 2004). Customers are more likely to divulge personal information when they have faith in how businesses manage their data (Pavlou et al., 2007). Lack of transparency in the collection and exploitation of customer data will lead to less trust and less information exchange (Li, 2011). Especially in the multi-channel context, where customers use multiple channels to shop and transact (both online and physical), their privacy concerns are emphasized (Herhausen et al., 2015). To increase customer trust in multi-channel information sharing, retailers must be transparent and communicate how data is collected from different touchpoints, as well as how customer data is used responsibly.

2.2 Hypotheses Development

To reduce uncertainty in information provision, previous studies have shown that customers are only confident in disclosing information when they trust a brand (Pavlou et al., 2007). When customers trust a store's ability and kindness, they are more likely to provide personal information across multiple channels. This is also the basis for businesses to build better-tailored services (Herhausen et al., 2015). If customers believe that a company will handle their data appropriately, they are more likely to share information across multiple channels when they trust the retailer. When people trust their trustees, they are more likely to engage in responsible behavior, which in turn fosters buyer-seller relationships (Jadil et al., 2022). When customers trust, omnichannel merchants benefit from increased cross-channel information exchange. At the same time, trust increases their perception of reliability and predictability of customer behavior (Radulescu, 2018). Trust becomes important in the omnichannel retail landscape due to the ability to aggregate and integrate data across multiple touchpoints, such as websites, mobile apps, brick-and-mortar stores, and social media platforms (Pagani et al., 2022). Customer understand their information is collected, stored, and used for sales activities and to drive purchase behavior. As a result, they become more critical as allowing businesses access to their personal information. Trust is essential because the increased data collecting can lead to privacy problems. According to Mishra et al. (2020), customers are more inclined to divulge information when they have faith in the retailer's data handling practices. They reason that the advantages of tailored services or focused promotions surpass any concerns they may have about privacy invasion. People who do not trust others are more prone to keep information from others out of concern for its misuse or unlawful access. This theory

proposes a positive linear relationship, stating that the intention to reveal personal information rises in tandem with online trust. Hence, hypothesis H1 was proposed:

- H1: Customers' online trust towards an omnichannel retailer positively relates to their personal Information-sharing intention in omnichannel retailing.

These hypotheses are firmly rooted in the established body of privacy literature, which consistently demonstrates that customer concerns regarding data handling practices exert a substantial influence on their trust in organizations (Smith et al., 2011). Positive perceptions of data collection practices, such as transparency about what data is collected, why it is collected, and how it will be used, along with adherence to principles of purpose limitation, will foster and enhance customer trust (Li, 2011). When customers accept with a retailer's data collection practices, they believe that their information will be handled responsibly (Cheah et al., 2022). Moreover, positive perceptions related to unauthorized secondary use (using data for purposes beyond the initial stated purpose), improper access (unauthorized access to personal data by internal or external parties), and errors related to personal data (inaccurate or incomplete data, data breaches) will significantly erode customer trust (Riaz et al., 2024). These positive attitudes can create the confidence about the limitation of potential misuse or compromise of personal information. Hence, customer will trust in the retailer's ability to protect their data (Li et al., 2023). The likelihood that a customer will trust a store increases when they see that the retailer is honest about how they acquire data, uses it responsibly, limits who may access it, and makes sure it is accurate (Anhalt-Depies et al., 2019). By using fair information practices, omnichannel merchants can increase consumers' faith in the company's kindness and honesty (Wiencierz & Lünich, 2020). Credibility, honesty, and kindness are the three pillars upon which trust rests (Mutimukwe et al., 2020). Adhering to fair privacy practices signals a retailer's trustworthiness to customers. In order to gain customers' trust, omnichannel businesses should be transparent about their data policies and offer privacy options. Therefore, this research postulate that customers' feelings of privacy have a favorable impact on their trust in omnichannel shopping experiences.

- H2: Customers' Perception of collection positively impacts on their Online trust towards the omnichannel retailer.
- H3: Customers' Perception of unauthorized secondary use positively impacts on their Online trust towards the omnichannel retailer.
- H4: Customers' Perception of improper access positively impacts on their Online trust towards the omnichannel retailer.
- H5: Customers' perception of errors positively impacts on their Online trust towards the omnichannel retailer.

The omnichannel setting combines data from multiple sources, and makes these issues even worse. Integration of in-store and online data collection, storage, and usage, as well as social media tracking, make the common customer concern (Nhung et al., 2023). Although

customer trust the company in general; however, concerns about a store's data processing methods can make customers reluctant to provide information. A customer may have faith in a retailer's commitment to avoid selling their data to third parties, but they may still be wary of sharing their location data for fear of surveillance or profiling (Shi et al., 2020). Directly encouraging information sharing can be the notion of a transparent and controllable data collection procedure. On the flip side, even if a customer trusts the shop in general, negative opinions about data inaccuracies, improper access, and unlawful secondary usage can deter customers from revealing their information (Tseng, 2022). Some customers might be more forthcoming with specific details while they are in-store, but hesitant to do the same when they shop online, and vice versa. To address consumer concerns about privacy and encourage data sharing across channels, retailers must be aware of these immediate implications and adapt their methods of communication and data collection appropriately. To allay these fears, stores must show they value customer information security and privacy. High perceived transparency and fairness around data use assuages privacy concerns, increasing comfort with information disclosure (Liu et al., 2021). Omnichannel retailers must be transparent regarding data collection, usage, and storage from integrated touchpoints to mitigate customers' perceived privacy risks. Hence, this study expected positive relationships between the factors of privacy concern perceptions and cross-channel information-sharing intention as below hypotheses:

- H6: Customers' Perception of collection positively impacts on their personal Information-sharing intention in omnichannel retailing.
- H7: Customers' Perception of unauthorized secondary use positively impact on their personal Information-sharing intention in omnichannel retailing.
- H8: Customers' Perception of improper access positively impact on their personal Information-sharing intention in omnichannel retailing.
- H9: Customers' Perception related to errors positively impact on their personal Information-sharing intention in omnichannel retailing.

Positive perception about organization's privacy practices creates customer willingness to share information; moreover, it enhances trust, leading to greater information disclosure (Pavlou et al., 2007; Smith et al., 2011). If customers believe an organization handles their personal information correctly, they are more likely to trust the organization (Eastlick et al., 2006; Huda, 2023); therefore, higher levels of trust lead to more intention to share information (Pavlou et al., 2007). While privacy concerns can have a direct impact on information sharing behavior, their influence is also channeled through their effect on customers' trust in the retailer. Customers may be less likely to divulge personal information if they are worried about its unauthorized reuse; more significantly, this could damage their faith in the store, which would further dampen their enthusiasm for sharing (Tseng, 2022). This mediating role of trust is important in building and maintaining

customer loyalty the omnichannel environment (Kulangara et al., 2016). If retailers respond to customer privacy concerns and show a dedication to data protection, trust and customers' willingness to disclose information may increase. Trust building improves strategy for promoting information exchange (Hsu et al., 2024) in the uncertainty about privacy data. Retailers should prioritize fostering an environment of trust and openness over merely responding to customers' privacy concerns. Consequently, the premise of this study is that consumers' opinions of a company's privacy procedures influence their intention to share information, and that online trust acts as a mediator between these two variables as hypotheses H10(a) to H10(d).

- H10(a): Online trust is the mediator in the relationship between collection and information-sharing intention in omnichannel retailing.
- H10(b): Online trust is the mediator in the relationship between unauthorized secondary use and information-sharing intention in omnichannel retailing.
- H10(c): Online trust is the mediator in the relationship between improper access and information-sharing intention in omnichannel retailing.
- H10(d): Online trust is the mediator in the relationship between errors and information-sharing intention in omnichannel retailing.

Therefore, the theoretical model is presented in Figure 1:

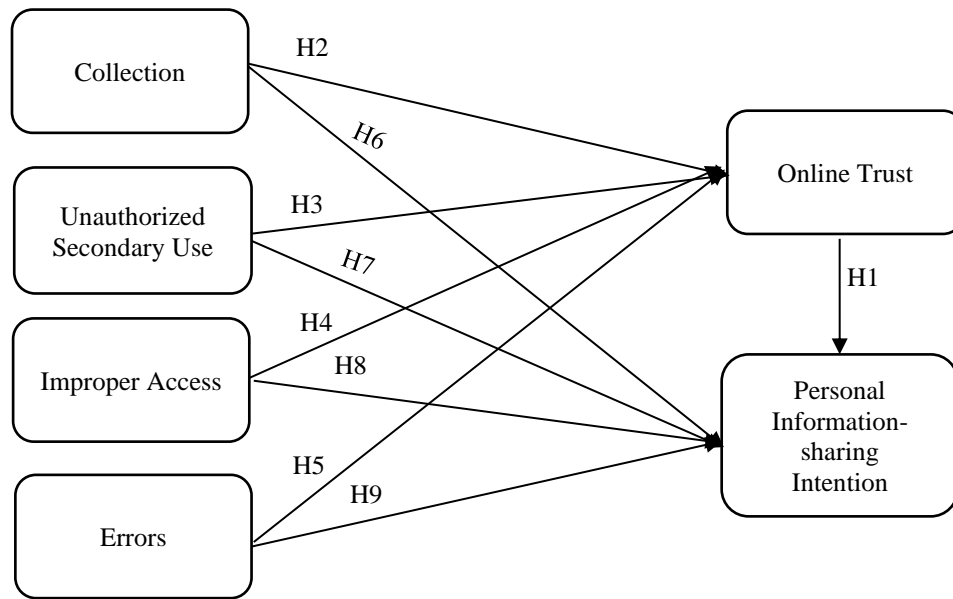


Figure 1: Theoretical Model

3. Research Method

Established multi-item scales were adapted to measure the variables in the conceptual model. Customers' perceptions of privacy practices were measured using four dimensions from the IUIPC framework – collection (CO – 4 items), unauthorized secondary use (US – 4 items), improper access (IA – 3 items), and errors (ER – 4 items) (Malhotra et al., 2004; Smith et al., 1996). Competence, honesty, and kindness are the three pillars upon which online trust (OT) rests (Khoa, 2020). Personal information beyond purchase purposes (preferences, future needs), emotions, and information about shopping habits are determined by three variables that make up information sharing intention (ISI) (Campbell, 2019). Items were measured by five-point Likert scale, ranged from "strongly disagree" to "strongly agree". To guarantee the survey instrument's validity and reliability, it was necessary to perform a pilot study with a small sample of omnichannel shoppers (n = 30) before collecting data on a larger scale. In order to improve the instrument as a whole, the pilot study gave helpful criticism on the readability and clarity of survey items.

Vietnamese omnichannel shoppers, who have purchased both online and offline methods to shop make up the target audience, participated by filling out an online questionnaire. To make sure the sample is representative, this picked it from three big cities in Vietnam: Ho Chi Minh City, Hanoi, and Da Nang. These cities have a lot of people shopping online. To fill out the online poll, researchers used a convenience sampling technique. The distinctive characteristics of Vietnam's multi-channel retail sector are the primary rationale for employing a convenience sampling strategy in this investigation. Online and multi-channel purchasing, particularly on well-known social media sites, is seeing a meteoric rise in customer participation. This makes it easier to reach a huge audience through social media platforms like Instagram, Zalo, and Facebook's shopping groups and forums. Convenience sampling is a time- and money-saving research tool that allows for the rapid collection of data from customers with multi-channel buying experience. This is particularly crucial when researching a dynamic and ever-changing subject like multi-channel purchasing behavior. Furthermore, by zeroing down on social media buying groups, I was able to communicate with audiences that had my interests and traits, which greatly improved my chances of collecting useful and informative data for my study.

We used social media and forums popular by omnichannel shoppers to post the survey, which allowed for convenient sampling. In all, 392 replies were valid for this study, which is a respectable amount for statistical purposes. The sample consisted of an equal fraction of males (43.11 percent) and females (56.19 percent). 35.97% of the participants were between the ages of 18 and 24, 48.98% were between the ages of 25 and 34, and 15.05% were between the ages of 35 and 44. These ages are quite indicative of individuals who purchase through several different channels. Most of participants who took the survey said they shopped at omnichannel stores at least twice or thrice a month, visit both online and physical store. This made sure that the sample was applicable to the study since it largely

included people who really shopped omnichannel. Table 1 showcased the demographic details of the participants and provided a comprehensive overview of the sample profile.

Table 1: Sample Profile

Characteristics		n	%
Gender	Male	169	43.11
	Female	223	56.89
Age group	18-24	141	35.97
	25-34	192	48.98
	35-44	59	15.05
Occupation	Student	106	27.04
	Lecturer	55	14.03
	Businessman	114	29.08
	White-collar worker	117	29.85
Frequency purchasing in omnichannel per month (times)	1 - 2	74	18.88
	3 - 4	220	56.12
	> 4	98	25

This study used partial least squares structural equation modeling (PLS-SEM), to examine the respondents' responses to the online survey. Complex associations between latent variables, like those in the study model, are well-suited to this advanced statistical technique. Online trust served as a mediator in the PLS-SEM study, which enabled a thorough evaluation of the proposed correlations.

4. Analysis and Results

4.1 Measurement Model

For assessing the constructs' reliability, convergent validity, and discriminant validity to see how well the measuring model worked. Table 2 pointed the results of the Cronbach's alpha (CA) reliability examination of the constructs. The CA values of all the constructs are greater than 0.7, indicating their reliability. In order to assess convergent validity, this study utilized composite reliability (CR), average variance extracted (AVE), and outer loadings (OL). No indicator loading falls below the 0.7 threshold; all values are over this threshold. Every single one of the constructions met the necessary criteria, with AVE values greater than 0.5. Composite reliability values also above 0.7, lending credence to the concept of convergent validity (Hair Jr et al., 2022).

Table 2: Reliability and Validity - CA, CR, AVE & OL

Constructs	CA	CR	AVE	OL
CO	0.928	0.933	0.821	0.900 - 0.922
ER	0.928	0.937	0.823	0.873 - 0.923
IA	0.868	0.871	0.791	0.871 - 0.901
ISI	0.807	0.83	0.724	0.748 - 0.905
OT	0.794	0.796	0.711	0.766 - 0.888
US	0.869	0.874	0.722	0.766 - 0.919

To test for discriminant validity, this study calculated the heterotrait-monotrait correlation ratio (HTMT). HTMT values in Table 3 below the 0.9 cutoff, proving the validity of the discriminant analysis (Henseler et al., 2014). Thus, the measurement model demonstrated adequate convergent and discriminant validity.

Table3: Validity – HTMT Ratio

Constructs	CO	ER	IA	ISI	OT	US
CO						
ER	0.076					
IA	0.218	0.263				
ISI	0.365	0.487	0.637			
OT	0.230	0.402	0.571	0.638		
US	0.046	0.269	0.405	0.495	0.621	

4.2 Structural Model

The f^2 effect sizes in Table 4 ranged from 0.03 to 0.199, indicating small but acceptable effects of the exogenous variables on online trust and information-sharing intention. Specifically, collection, errors, and improper access use had negligible effects on online trust ($f^2 = 0.03$ to 0.103) and information-sharing intention ($f^2 = 0.092$ to 0.132). Unauthorized secondary use had medium effects on online trust ($f^2 = 0.199$) and minor effects on information-sharing intention ($f^2 = 0.034$). The online trust had a negligible effect ($f^2 = 0.028$) on information-sharing intention. The f^2 values ranged from 0.030 to 0.199, indicating small to medium effect sizes of the exogenous constructs on the endogenous constructs. All variance inflation factor (VIF) values were below the threshold of 5, showing no issues with multicollinearity among the constructs. Additionally, the endogenous constructs of online trust ($Q^2 = 0.283$) and information-sharing intention ($Q^2 = 0.344$) had Q^2 values larger than zero, demonstrating the model's predictive relevance. In summary, assessing f^2 , VIF, and Q^2 proved the structural model has acceptable predictive capabilities without collinearity problems among the constructs.

Table 4: Result of f^2 , Q^2 , and VIF

Construct	f^2		VIF		Q^2
	ISI	OT	ISI	OT	
CO	0.092	0.03	1.076	1.044	
ER	0.116	0.058	1.158	1.094	
IA	0.132	0.103	1.352	1.225	
ISI					0.344
OT	0.028		1.71		0.283
US	0.034	0.199	1.415	1.181	

The PLS-SEM analysis in Table 5 supported all the hypothesized relationships, as all path coefficients were positive and statistically significant. These findings suggest that customers' perceptions of an organization's privacy information practices, as well as their online trust, positively influence their information-sharing intention in omnichannel retailing. Specifically, online trust positively impacted customers' intention to share personal data across online and offline channels ($\beta = 0.157$, $t = 2.641$, $p < 0.01$), supporting H1. This result showed that fostering trust in the retailer's competence, integrity, and benevolence enhances consumers' willingness to share information for personalized omnichannel services. Moreover, customers' perceptions related to collection ($\beta = 0.136$, $t = 3.656$, $p < 0.001$), unauthorized secondary use ($\beta = 0.370$, $t = 6.062$, $p < 0.001$), improper access ($\beta = 0.272$, $t = 4.899$, $p < 0.001$) and errors ($\beta = 0.193$, $t = 4.065$, $p < 0.001$) positively influenced their online trust with the omnichannel retailer, supporting H2-H5. Furthermore, customers' perceptions related to collection ($\beta = 0.224$, $t = 5.508$, $p < 0.001$), unauthorized secondary use ($\beta = 0.156$, $t = 3.053$, $p < 0.01$), improper access ($\beta = 0.302$, $t = 5.187$, $p < 0.001$) and errors ($\beta = 0.261$, $t = 5.606$, $p < 0.001$) positively influenced their intention to share personal information with the omnichannel retailer, supporting H6-H9. This indicated that perceptions of fair information practices mitigate privacy concerns, encouraging more incredible information sharing across channels.

Table 5: Results of Structural Model

Relationship	Beta	Standard Deviation	t-value	P-value
H1: OT -> ISI	0.157	0.06	2.641	0.008
H2: CO -> OT	0.136	0.037	3.656	0.000
H3: US -> OT	0.370	0.061	6.062	0.000
H4: IA -> OT	0.272	0.056	4.899	0.000
H5: ER -> OT	0.193	0.048	4.065	0.000
H6: CO -> ISI	0.224	0.041	5.508	0.000
H7: US -> ISI	0.156	0.051	3.053	0.002
H8: IA -> ISI	0.302	0.058	5.187	0.000
H9: ER -> ISI	0.261	0.047	5.606	0.000

The model explained 41.5% of the variance in online trust and 49.1% in information-sharing intention. Figure 2 summarized the PLS-SEM result.

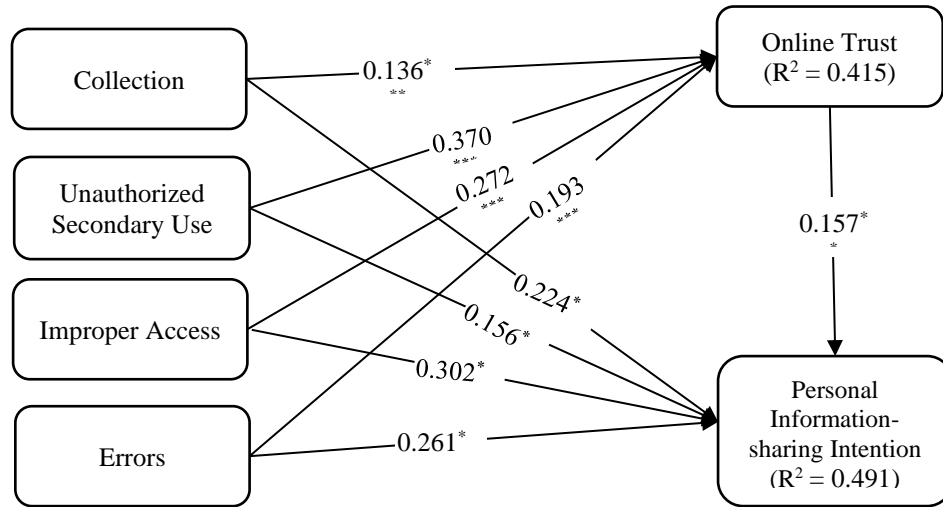


Figure 2: PLS-SEM Structural Model Results

This study used the SmartPLS bootstrapping method with 5,000 subsamples to examine how online trust (OT) mediates the relationship between consumers' views on privacy information practices and their information sharing intention (ISI) (Hayes, 2013). Due to its robustness in estimating indirect and significant effects, this method is highly recommended for examining mediating effects in PLS-SEM models. Examination of the

associations between the three dimensions of perceptions' privacy practices (unauthorized secondary use, improper access, errors) and information sharing intention suggests that online trust partially mediates these interactions. Table 6 displays the mediating results of online trust in the relationship between customers' perception of privacy practices and personal information-sharing intention in omnichannel retailing.

Table 1: Result - Mediating Role of Online Trust

Relationship	Indirect effect		Direct effect		Mediation Role	Result
	β	P-values	β	P-values		
US -> OT -> ISI (H10b)	0.058	0.015	0.156	0.002	Partial	Supported
CO -> OT -> ISI (H10a)	0.021	0.063	0.224	0.000	None	Rejected
ER -> OT -> ISI (H10d)	0.03	0.047	0.261	0.000	Partial	Supported
IA -> OT -> ISI (H10c)	0.043	0.037	0.302	0.000	Partial	Supported

Online trust partially mediates the relationship, indicating that customers' perceptions of unauthorized secondary use influence their information-sharing intention both directly and indirectly through their online trust in the retailer. Similar to unauthorized secondary use, online trust partially mediates the relationship between improper access and information-sharing intention. Online trust also plays a partial mediating role in the relationship between customers' perceptions of errors related to personal data and their information-sharing intention. However, the mediating effect of online trust was not observed for the relationship between Collection and Personal Information-sharing intention. This suggests that customers' perceptions of data collection practices have a direct impact on their information-sharing intention, regardless of their level of trust in the retailer. Hence, H10b, H10c, and H10d were accepted; and H10a was rejected. These findings highlight the complex interplay between privacy perceptions, online trust, and information-sharing intention in omnichannel retailing. While online trust plays a crucial role in mediating the impact of certain privacy concerns on information sharing, it is not the sole determinant. Customers' perceptions of data collection practices, in particular, appear to have a direct and independent effect on their willingness to share information.

5. Discussion

This study offers important insights into the effects of customers' privacy practice perceptions on their information-sharing intention in omnichannel retail contexts. The results in Figure 2 reveal several key findings that align with and expand on previous privacy research.

This research results corroborate those of other studies that have examined online privacy and information sharing. This study indicated the negative relationship between customers' desire to share information in omnichannel shopping and privacy concerns (Cheah et al., 2022). Liu et al. (2021) pointed out that transparency and fairness in customer data

processing can reduce customers' privacy concerns and increase information disclosure. These findings impressed to be transparent about their data practices and to provide customers with control over their personal information (Wiese, 2024).

Beside the antecedence of internet users' information privacy concerns (UIPC), the relationship between trust and information sharing adds to the existing literature on the omnichannel context. Pavlou (2014); Smith et al. (2011) proved that trust plays a pivotal role in ease of online exchange behavior. The results of the study confirmed that online trust plays a mediating role in the relationship between privacy perceptions and information sharing intentions in omnichannel retailing. This study adds to the existing body of knowledge in this area. This study provides further evidence that omnichannel retailers must prioritize building trust to promote customer information sharing.

The study found that consumers' attitudes toward data collection practices influenced their intention to provide information, but online trust did not moderate this relationship. Regardless of consumers' level of trust in the store, this result suggests that their attitudes toward data collection practices influence their tendency to disclose personal information. Data collection issues were the main cause of information privacy concerns, consistent with the findings of Malhotra et al. (2004); Riaz et al. (2024).

Through data analysis, this study adds to the growing body of research in the context of the proliferation of omnichannel shopping. The results demonstrate how perceptions of businesses' privacy practices and trust play an important role in influencing consumer behavior in this context. According to Ayaburi and Treku (2020), the results support the idea that in order to be successful, omnichannel stores should take a more holistic view of customer data management. This means that in addition to focusing on building privacy policies and applying data security techniques, businesses must also pay attention to the psychological aspect of customer trust. In addition, the study also sheds light on the specific privacy issues that customers in omnichannel retail contexts find most urgent. According to the study, consumers are particularly concerned about data breaches due to businesses improperly accessing or using their data in a secondary manner. This highlights the need for stores to be open and honest about their data practices and to implement robust security measures to protect consumer information.

In addition, the study results have implications for creating effective privacy practices and communication tactics. Stores should publicize their privacy policies and procedures in a way that is easy for customers to understand and access. Additionally, they should empower consumers to decide and manage the use of their data. In addition to the benefits mentioned above, this study also sheds light on the cultural context of data sharing and privacy concerns. The study was conducted in Vietnam, a developing country with a booming internet industry. As a result, Vietnamese consumers are increasingly aware of privacy concerns and are concerned about how companies use their personal information.

This highlights the importance of companies operating in developing markets being sensitive to cultural norms and tailoring their privacy policies accordingly.

While online trust mediated the impacts of secondary use, access, and errors, it did not mediate the effect of collection perceptions. This diverges from existing trust-privacy models where trust fully or partially mediates relationships between privacy concerns and outcomes (Bansal et al., 2016; Hajli & Lin, 2014). A potential explanation is that collection perceptions reflect customer participation rights, directly affecting information sharing regardless of trust. Nonetheless, unauthorized use, access, and error perceptions operate through trust. Thirdly, unlike most privacy research relying on reported behaviors, the study verifies perceived practices that influence actual sharing intention. The results answer calls to examine actual disclosure beyond stated privacy concerns (Li et al., 2011; Norberg et al., 2007). This realism enhances understanding of how customers' privacy perspectives translate into transparency across omnichannel settings.

6. Conclusion

The results of this study confirm to what is already known about customers' views on privacy and their habits when it comes to sharing personal information.

Omnichannel retailing is an area where online and offline shopping experiences are becoming more convergent, and this study aimed to shed light on the complicated relationship between customers' perceptions of corporate privacy practices and their intention to share personal information within this context. With regard to privacy issues and information sharing behavior across integrated sales channels, this study seeks to bridge the current knowledge vacuum. With the Stimulus-Organism-Response (SOR) model as a theoretical basis, this study offers an analytical framework to investigate the factors that influence consumers' actions, including their views of privacy as stimulus, their level of online trust as organism, and their desire to disclose information as their response. The result is a richer picture of how customers act in omnichannel settings. This study filled a gap in the literature by developing a holistic model of information sharing intention that takes into account both online trust and privacy concerns. While most prior research has approached the topic of information sharing from a privacy or trust standpoint, our model takes a more comprehensive view. In the context of omnichannel commerce, this study confirms that the IUIPC paradigm is applicable. Findings pointed out that consumers' privacy data views handling as part of corporate information security practices (collection, unauthorized secondary use, improper access, and data error) had a positive and substantial impact on their online trust and intentions to share information. The study finding is that customer judgments of online trust play a significant mediating role in the relationship between their perceptions of information security and the amount of information they are willing to share. Transparency in information security processes and strong data protection safeguards are crucial for developing and retaining trust, as these studies demonstrate. The findings show that these dimensions are relevant and significant in influencing how customers perceive and behave in omnichannel settings.

The study also offered some management implications that companies might use when implementing omnichannel strategies. Building consumer confidence and managing privacy issues should be omnichannel retailers' top priorities in order to enable cross-channel information exchange. A primary area of emphasis should be the adoption of open data practices that respect privacy. One way to reduce concerns about privacy is to be transparent about the data collection, merging, storage, and use processes across all channels. To influence omnichannel consumers' views of privacy for the better, it is important to have fair information policies addressing data purpose boundaries, access control, and correctness. This makes customers more confident in the kindness of the store. Businesses need to increase transparency in customer information management by giving customers the ability to track how their data moves across different platforms. Achieving privacy audit certifications will also contribute to increasing customer trust in a store that values privacy. By conducting privacy audits, implementing security measures, and training employees; businesses will increase customer trust, and the intention to provide personal information to omnichannel retail systems. With the help of omnichannel experiences, businesses can easily build online customer profiles, which in turn allows them to tailor their services to each individual and inspire trust-based sharing. Data leveraging should take a back seat to protecting privacy and sustaining trustworthy customer relationships. Differentiating businesses who are dedicated to consumers' informational self-determination can be achieved by increasing transparency beyond what is required by law. Gaining trust in the long run is more valuable than collecting data in the short term.

Future research can expand our understanding of omnichannel consumer experience due to the study's limitations. This study recognizes that other important elements such as perceived risk, customer involvement, and channel integration quality may have been overlooked while using the SOR paradigm to examine important concepts like information visibility and seamlessness. To give a more complete picture of the omnichannel experience, future studies could include these missing components. Furthermore, it is not possible to determine cause and effect because the study is cross-sectional. To draw stronger causal conclusions, future research can analyze longitudinal data to track how consumer attitudes and actions evolve over time. Additionally, online survey methods in convenience sampling also acknowledge potential drawbacks, such as self-selection bias and the shortcomings of convenience sampling. Future researchers could use probability sampling and combine data collection techniques with other approaches, including interviews and observations, to overcome these methodological limitations. Additionally, the results were not applicable to other developing countries because the study focused narrowly on Vietnam. To determine whether the results are applicable globally, future research could compare results from other countries or expand the scope to include other developing countries. Last but not least, the impact of socio-demographic variables and new technologies on the omnichannel consumer experience could be the subject of further

investigation in the future. In an omnichannel context, this would shed light on the complex interplay between customer journey factors, technological developments, and individual characteristics.

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REFERENCES

- Andalibi, N., & Buss, J. (2020). *The human in emotion recognition on social media: Attitudes, outcomes, risks* Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems, New York, NY, United States.
- Anhalt-Depies, C., Stenglein, J. L., Zuckerberg, B., Townsend, P. A., & Rissman, A. R. (2019). Tradeoffs and tools for data quality, privacy, transparency, and trust in citizen science. *Biological Conservation*, 238, 108195.
- Bansal, G., Zahedi, F. M., & Gefen, D. (2016). Do context and personality matter? Trust and privacy concerns in disclosing private information online. *Information & Management*, 53(1), 1-21.
- Campbell, D. (2019). A Relational Build-up Model of Consumer Intention to Self-disclose Personal Information in E-commerce B2C Relationships. *AIS Transactions on Human-Computer Interaction*, 11(1), 33-53.
- Cheah, J.-H., Lim, X.-J., Ting, H., Liu, Y., & Quach, S. (2022). Are privacy concerns still relevant? Revisiting consumer behaviour in omnichannel retailing. *Journal of Retailing and Consumer Services*, 65, 102242.
- Dinev, T., & Hart, P. (2006). An Extended Privacy Calculus Model for E-Commerce Transactions. *Information Systems Research*, 17(1), 61-80.
- Eastlick, M. A., Lotz, S. L., & Warrington, P. (2006). Understanding online B-to-C relationships: An integrated model of privacy concerns, trust, and commitment. *Journal of Business Research*, 59(8), 877-886.
- Gracia, E., & Juliadi, R. (2019). The Threat of Personal Information Trading in the Online Network and Information Technology. *International Journal of Multicultural and Multireligious Understanding*, 6(9), 49-55.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications, Inc., Thousand Oaks, California.
- Hajli, N., & Lin, X. (2014). Exploring the Security of Information Sharing on Social Networking Sites: The Role of Perceived Control of Information. *Journal of Business Ethics*, 133(1), 111-123.

- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press, New York, NY, US.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Herhausen, D., Binder, J., Schoegel, M., & Herrmann, A. (2015). Integrating Bricks with Clicks: Retailer-Level and Channel-Level Outcomes of Online–Offline Channel Integration. *Journal of Retailing*, 91(2), 309-325.
- Hsu, C.-L., Yu, L.-C., Tung, W.-F., & Chen, K.-W. (2024). Unlocking the omnichannel shopping myth: can service convenience, shopping value and channel congruence strengthen perceived trust and satisfaction? *Marketing Intelligence & Planning*, 42(8), 1633-1650.
- Huda, M. (2023). Trust as a key element for quality communication and information management: insights into developing safe cyber-organisational sustainability. *International Journal of Organizational Analysis*, 32(8), 1539-1558.
- Jacoby, J. (2008). Stimulus-Organism-Response Reconsidered: An Evolutionary Step in Modeling (Consumer) Behavior. *Journal of Consumer Psychology*, 12(1), 51-57.
- Jadil, Y., Rana, N. P., & Dwivedi, Y. K. (2022). Understanding the drivers of online trust and intention to buy on a website: An emerging market perspective. *International Journal of Information Management Data Insights*, 2(1), 100065.
- Jai, T.-M., & King, N. J. (2016). Privacy versus reward: Do loyalty programs increase consumers' willingness to share personal information with third-party advertisers and data brokers? *Journal of Retailing and Consumer Services*, 28, 296-303.
- Khoa, B. T. (2020). The Impact of the Personal Data Disclosure's Tradeoff on the Trust and Attitude Loyalty in Mobile Banking Services. *Journal of Promotion Management*, 27(4), 585-608.
- Khoa, B. T., & Huynh, T. T. (2022). The Influence of Individuals' Concerns about Organization's Privacy Information Practices on Customers' Online Purchase Intentions: The Mediating Role of Online Trust. *Journal of Logistics, Informatics and Service Science*, 9(3), 31-44.
- Khoa, B. T., & Nguyen, M. H. (2022). The Moderating Role of Anxiety in the Relationship between the Perceived Benefits, Online Trust and Personal Information Disclosure in Online Shopping. *International Journal of Business and Society*, 23(1), 444-460.
- Kulangara, N. P., Jackson, S. A., & Prater, E. (2016). Examining the impact of socialization and information sharing and the mediating effect of trust on innovation capability. *International Journal of Operations & Production Management*, 36(11), 1601-1624.

- Li, H., Sarathy, R., & Xu, H. (2011). The role of affect and cognition on online consumers' decision to disclose personal information to unfamiliar online vendors. *Decision Support Systems*, 51(3), 434-445.
- Li, Y. (2011). Empirical Studies on Online Information Privacy Concerns: Literature Review and an Integrative Framework. *Communications of the Association for Information Systems*, 28(1), 453-496.
- Li, Y., Fang, J., Yuan, S., & Cai, Z. (2023). Disentangling the relationship between omnichannel integration and customer trust: a response surface analysis. *Internet Research*, 34(3), 1077-1103.
- Liu, F., Fang, M., Cai, L., Su, M., & Wang, X. (2021). Consumer Motivations for Adopting Omnichannel Retailing: A Safety-Driven Perspective in the Context of COVID-19. *Front Public Health*, 9, 708199.
- Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet Users' Information Privacy Concerns (IUIPC): The Construct, the Scale, and a Causal Model. *Information Systems Research*, 15(4), 336-355.
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. M.I.T. Press, Cambridge, Mass., London.
- Mishra, R., Singh, R. K., & Koles, B. (2020). Consumer decision-making in omnichannel retailing: Literature review and future research agenda. *International Journal of Consumer Studies*, 45(2), 147-174.
- Muliadi, M., Muhammadiyah, M. u., Amin, K. F., Kaharuddin, K., Junaidi, J., Pratiwi, B. I., & Fitriani, F. (2022). The information sharing among students on social media: the role of social capital and trust. *VINE Journal of Information and Knowledge Management Systems*, 54(4), 823-840.
- Mutumukwe, C., Kolkowska, E., & Grönlund, Å. (2020). Information privacy in e-service: Effect of organizational privacy assurances on individual privacy concerns, perceptions, trust and self-disclosure behavior. *Government Information Quarterly*, 37(1), 101413.
- Nhung, N. T. T., Nguyen, V. T.-T., Huynh, N. T. A., & Khoa, B. T. (2023). Enhancing the Customer's Information-sharing Intention Through Omnichannel Strategies. *Journal of Distribution Science*, 21(3), 83-92.
- Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The Privacy Paradox: Personal Information Disclosure Intentions versus Behaviors. *Journal of Consumer Affairs*, 41(1), 100-126.
- Pagani, M., Racat, M., & Hofacker, C. F. (2022). Adding Voice to the Omnichannel and How that Affects Brand Trust. *Journal of Interactive Marketing*, 48(1), 89-105.
- Pavlou, Liang, & Xue. (2007). Understanding and Mitigating Uncertainty in Online Exchange Relationships: A Principal-Agent Perspective. *MIS Quarterly*, 31(1), 105-136.

- Pavlou, P. A. (2014). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, 7(3), 101-134.
- Radulescu, A. (2018). Users' Social Trust of Sharing Data with Companies: Online Privacy Protection Behavior, Customer Perceived Value, and Continuous Usage Intention. *Contemporary Readings in Law and Social Justice*, 10(1), 137.
- Riaz, H., Ahmed, H., & Jibril, A. B. (2024). Reassessing customer trust and privacy concerns in omnichannel customer experience. *Cogent Business & Management*, 11(1), 2410405.
- Sandhu, R. K., Vasconcelos-Gomes, J., Thomas, M. A., & Oliveira, T. (2023). Unfolding the popularity of video conferencing apps – A privacy calculus perspective. *International Journal of Information Management*, 68, 102569.
- Senali, M. G., Iranmanesh, M., Ghobakhloo, M., Foroughi, B., Asadi, S., & Rejeb, A. (2024). Determinants of trust and purchase intention in social commerce: Perceived price fairness and trust disposition as moderators. *Electronic Commerce Research and Applications*, 64, 101370.
- Shi, S., Wang, Y., Chen, X., & Zhang, Q. (2020). Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach. *International Journal of Information Management*, 50, 325-336.
- Smith, H.J., Dinev, T., & Xu, H., (2011). Information Privacy Research: An Interdisciplinary Review. *MIS Quarterly*, 35(4), 989-1016.
- Smith, H. J., Milberg, S. J., & Burke, S. J. (1996). Information Privacy: Measuring Individuals' Concerns about Organizational Practices. *MIS Quarterly*, 20(2), 167-196.
- Szozda, N. (2023). Omnichannel as a driver of digitalization: evidence from the emerging market in the fashion industry. *Journal of Fashion Marketing and Management: An International Journal*, 27(5), 905-923.
- Tseng, H.-T. (2022). Shaping path of trust: the role of information credibility, social support, information sharing and perceived privacy risk in social commerce. *Information Technology & People*, 36(2), 683-700.
- Tyrväinen, O., Karjaluoto, H., & Saarijärvi, H. (2020). Personalization and hedonic motivation in creating customer experiences and loyalty in omnichannel retail. *Journal of Retailing and Consumer Services*, 57, 102233.
- Vinoth, S., & Srivastava, N. (2024). Unveiling the Power of Omni-channel Retail Strategies. In *Augmenting Retail Reality, Part B: Blockchain, AR, VR, and AI* (pp. 85-112). Emerald Publishing Limited.

Wiencierz, C., & Lünich, M. (2020). Trust in open data applications through transparency. *New Media & Society, 24*(8), 1751-1770.

Wiese, M. (2024). Omni-channel shopping experiences—to share or not to share? *Cogent Business & Management, 11*(1), 2330664.

Yang, Q., Al Mamun, A., Hayat, N., Jingzu, G., Hoque, M. E., & Salameh, A. A. (2022). Modeling the Intention and Adoption of Wearable Fitness Devices: A Study Using SEM-PLS Analysis. *Front Public Health, 10*, 918989.

Zhang, Y., & Deng, B. (2024). Exploring the nexus of smart technologies and sustainable ecotourism: A systematic review. *Heliyon, 10*(11), e31996.