Engaging Consumers Through Co-Creation in Mobile Ride-Hailing Services: Exploring the Moderating Role of Trust and Perceived Usefulness

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Abstract

This study investigates how passengers' micro brand-related activities (MBA) affect their co-creation experiences with the mobile ride-hailing service provider. It then examines whether co-creation mediates between these activities and key engagement behaviors. The moderating roles of perceived platform usefulness and brand trust are also explored. The survey results indicate that each dimension of passengers' MBA significantly enhances their co-creation experiences which in turn facilitate the transformation of these activities into effective engagement behaviors. Customers who perceive the mobile-hailing platform as more useful are more inclined to participate in co-creation, while brand trust does not moderate the co-creation–engagement relationship.

Keywords: Co-creation, customer engagement, trust, perceived usefulness, ride-hailing, sharing economy

1. Introduction

Ride-hailing services provide transportation through a single web platform or smartphone app (Aarhaug & Olsen, 2018), enabling a more seamless matching of supply and demand with improved efficiency and convenience (Nguyen-Phuoc et al., 2020). Ride-hailing services function as two-way markets, allowing owners of private vehicles to register as drivers (Bimpikis et al., 2019), which forms a sharing economy that consists of community-driven activities involving the peer-to-peer exchange, provision, or collaborative use of goods and services (Hamari et al., 2015).

In recent years, the sharing economy has expanded rapidly in Vietnam, partly due to the emergence of sharing platforms and services. Vietnam's expanding urban population and rising disposable incomes have created a greater need for accessible transportation choices, particularly among urban commuters and young professionals. These characteristics, along with high smartphone penetration, internet access, and a young population, have boosted the entire ride-hailing business in Vietnam (Nhat, 2024). Having a revenue of approximately $2.4 billion USD in 2021 and expecting annual US$4 billion in 2025, the ride-hailing industry in Vietnam has great potential to attract domestic and foreign investors with a 16% compound annual growth rate (CAGR) from 2020 to 2025 (Vy, 2023). According to the Decision Lab report, in the last quarter of 2023, Grab was the most popular ride-hailing app among Vietnamese respondents, with 68 percent using it (Statista, 2024). According to a 2021 research report by the Vietnam Briefing, Vietnamese ride-hailing users are price sensitive and will switch between platforms to find the best bargain (Vietnam Briefing, 2021). Such mindset among Vietnamese consumers has created a unique challenge to all businesses as they attempt to differentiate themselves. Considering brand's long-term sustainable competitiveness, ride-hailing companies that engage in driver training, in-app features, user co-creation and customer service need to seek better positioning to maintain and recruit loyal customers in the long run (Vietnam Briefing, 2021).

To maintain a competitive edge, consumer trust toward ride-hailing platforms is the basis of any successful customer–provider relationship, which depends on whether the platforms can constantly offer reliable and high-quality services, communicate transparently and honestly, and protect consumer data and privacy (Mittendorf, 2017). Perceived usefulness is also key to the ride-hailing service image, which refers to customers' subjective assessment of whether a product or service is valuable to their lives, jobs, or studies after use (Li & Liu, 2014). When customers believe a ride-hailing service platform benefits their usage, they are more inclined to interact and stay loyal to it. Such usefulness may be accomplished by constantly refining the user experience, providing personalized recommendations and promotions, and exploiting consumer data to deliver bespoke solutions. Furthermore, actively engaging clients in co-creating their experience with the service provider is crucial. Co-creation is when a customer works with an

organization to create value (Prebensen et al., 2013). By including consumers in the service design and delivery process, the ride-hailing companies may benefit from the customers' thoughts, preferences, and demands, resulting in a more customized and delightful experience.

Social innovations enable sharing business models to achieve sustainability by facilitating value co-creation between enterprises and consumers (Lan et al., 2017). However, the existing literature has examined factors influencing customer continuance intention toward mobile ride-hailing apps (Weng et al., 2017) and loyalty (Nguyen-Phuoc et al., 2020). A critical gap remains in understanding the impact of the co-creation of experience on customer engagement behaviors within the ride-hailing industry. To fill this void, this study examines the impacts of consumers' micro brand-related activities (MBA) (Keller et al., 2013) on the ways through which customers engage with a brand, taking into consideration the mediating role of the co-creation of experience. Customer trust and perceived usefulness are also investigated if they moderate the relationship between customers' MBA participation and their sustained involvement in co-creating experiences.

2. Theoretical Background and Hypotheses

2.1 Co-Creation of Experience

Prahalad and Ramaswamy (2004) emphasized the significance of co-creating experiences as a crucial factor in establishing value and driving innovation in the future. Co-creation refers to how value is co-produced through the collaborative efforts of the company and the customer, rather than being solely determined by the company. It enables the consumer to engage actively in co-creating the service experience to fit their specific needs. This involves collaborative problem identification and resolution, as well as establishing an atmosphere in which customers can engage in active discussion and co-create personalized experiences.

Closely aligned with this perspective, the service-dominant logic (SDL), as proposed by Vargo and Lusch (2007), places customer co-creation at the heart of business operations. This influential theory asserts that services are the fundamental basis of exchange, and value is jointly created by service providers and customers (Williams & Aitken, 2011). The SDL highlights that for effective service delivery and personalized experiences, customers need to develop the skills to use, maintain, repair, and customize the provided solutions to align with their unique demands and usage contexts.

Co-creation of experience is a complex concept recognized as both a theoretical idea and a fact influenced by various individual factors (Jaakkola & Alexander, 2014). Verleye (2015) broke down the co-creation of experience into four key parts—hedonic, cognitive, social, and economic—and also looked at an overall measure of the co-creation of experience. For instance, passengers may exercise their active co-creation role by requesting drivers to adjust parameters, such as driving speed or temperature settings, to match their preferences. This could involve discussing daily problems or sharing personal interests. Such open dialogue helps the passenger feel heard and understood as an individual, rather than as just another customer.

The DART framework (Prahalad & Ramaswamy, 2004) further explains crucial aspects of the co-creation experience in ride-hailing, including dialogue (communication and sharing of information between the driver and passenger), access (passenger's access to the driver's resources [e.g., vehicle, navigation, local knowledge]), risk assessment (consideration of potential risks and uncertainties [e.g., traffic, safety] during the ride), and transparency (open sharing of information (e.g., driver ratings, estimated arrival time]). For example, if the driver has well prepared his vehicle (it is clean and offers extra services, such as good music, tissues, water, etc.), follows the traffic regulations, and has a polite demeanor during conversations, it creates a sense of trust and comfort for the customer. This will make the customer feel more confident in engaging with the driver. Passengers can also engage in collaborative problem-solving with drivers when unexpected contingencies arise, such as coordinating wait times during refueling stops or negotiating mutually agreeable pick-up and arrival times.

When customers actively participate in co-creation activities, it drives them to engage in proactive interactions and establish emotional connections with service employees during service encounters. This increased level of engagement and connection ultimately enhances customers' perception of service quality (Zhao et al., 2018).

2.2 Micro Brand-Related Activities (MBA)

According to Keller et al. (2013), brand engagement involves both behavioral and psychological aspects. To measure engagement effectively, the authors proposed a framework that focuses on three key MBA: collect brand information, participate in brand marketing activities, and interact with other customers. When consumers seek information about a brand, they actively engage in various activities, such as exploring new products or services, visiting the brand's website, and obtaining brand-related knowledge from sources like news articles, television programs, and newspapers (Keller et al., 2013). Furthermore, consumers demonstrate their involvement in a brand's marketing efforts by paying attention to activities, such as sponsorships, advertisements, promotions, billboards, and in-store displays, as well as by sampling products (Keller et al., 2013). Subsequently,

consumers engage in multiple ways when interacting with others, such as having conversations with friends, family, and colleagues about a brand; participating in loyalty programs; and joining online communities that share a liking towards the brand. (Keller et al., 2013).

2.3 Customer Engagement (CE) Behaviors

Extensive research has highlighted that engaged customers contribute to a brand's success by influencing others through positive word of mouth and referrals (Fernandes & Moreira, 2019). Engaged consumers are also more likely to remain loyal to a brand despite competitive activities and price variations, which results in sales growth, profitability, and a strong competitive advantage (Hollebeek et al., 2019). The marketing literature has deeply explored CE and its impacts on business success (Gligor & Bozkurt, 2020).

CE is a complex concept that revolves around customer behavior and has been highlighted by various studies. It includes a customer's brand-related, context-dependent, and motivating mental states, which are defined by their cognitive, emotional, and behavioral activities during brand encounters (Hollebeek, 2011). While prior studies have mostly looked into the cognitive and affective aspects of CE, the behavioral aspect is equally important. This is because CE's behavioral aspect is emphasized both theoretically (Gligor & Bozkurt, 2020) and practically. For marketing campaigns to impact a company's success positively, they must engage consumers and push them to take action. Therefore, this study uses the theoretical framework given by Pansari and Kumar (2016) to expand the management implications. This allows managers to apply more practical marketing techniques. Pansari and Kumar's (2016) definition of CE covers a wide range of customer behaviors, including purchases, referrals, influence, and knowledge, highlighting its function as a mechanism by which customers generate value for businesses directly and indirectly. This comprehensive definition emphasizes the behavioral aspect of CE, which is critical in driving customer actions that align with the brand, ultimately leading to better firm performance (Gligor & Bozkurt, 2020).

2.4 Hypotheses

2.4.1 Micro Brand-Related Activities and Co-creation of Ride-hailing Experience

Nambisan (2002) emphasized the importance of consumers' product/technology knowledge for participating in co-creation activities, stating that consumers may need to possess higher levels of knowledge to play the role of co-creator effectively. To collect brand information, individuals must understand how they receive and understand brand-related data, as highlighted by Masłowska et al. (2016). This includes activities, such as learning about the brand, reading relevant materials, and staying updated on new products or services. Althuizen et al. (2016) suggested that the process of gathering brand knowledge can enhance recall and familiarity with specific brands. For instance, Auh et al. (2007) conducted a study in the financial services industry and highlighted that when customers engage in quality conversations with their financial advisors—discussing brand-associated service details like strategies for investing, performance of portfolios, and monetary concepts, customers are empowered to engage actively as "prosumers," participating in the value co-creation process for their financial solutions. For that reason, the following hypothesis is suggested:

H1a. Collecting brand information is positively related to the co-creation of ride-hailing experiences.

Leckie et al. (2017) proposed that customers invest their monetary, cognitive, and physical assets in a range of brand marketing efforts, like contests, sales promotions, digital billboards, and advertisements. Masłowska et al. (2016) further supported this notion by mentioning that the extent of customer participation in brand-related social media contests is influenced by the alignment of brand incentives with their aspirations. Building on his research, this study focuses on customer participation in Grab marketing activities. It is proposed that customers evaluate their brand experiences based on whether the experiences align with their expectations (Brakus et al., 2009). As a result, customers have a deeper awareness of the brand and its service process, allowing them to play a more active part in co-creating the service experience.

H1b. Participating in brand marketing activities is positively related to the co-creation of ride-hailing experiences.

The widespread use of technology and social media has significantly increased the importance of customer-to-customer interactions, allowing customers to communicate and influence each other regardless of geographical boundaries (Libai et al., 2010). Within the framework of SDL, customer learning is viewed as a social process, where individuals rely on peer groups and community members to exchange experiences and knowledge (Hibbert et al., 2012). When individuals are seeking information, they highly value and perceive the advice of experienced peers as an objective and reliable source of information (Zaglia, 2013). In the digital context, as Eger and Mičík (2017) highlighted, customer-initiated communication, such as writing online reviews, making recommendations, and responding to feedback, plays a crucial role. These efforts potentially influence and mobilize other customers, thereby impacting value creation beyond the traditional firm–customer relationship (Jaakkola and Alexander, 2014). Thus, the following is hypothesized:

H1c. Interacting with other customers is positively related to the co-creation of ride-hailing experiences.

2.4.2 Co-creation of Experience as a Mediator

Studies have indicated that co-creation directly impacts customer satisfaction in various scenarios. For instance, Kumar et al. (2022) found that consumer participation in the design process positively affected e-grocery satisfaction. Palumbo (2016) found that patient involvement increased healthcare happiness. Jiang et al. (2019) found that user interaction on Airbnb positively affected website satisfaction. These findings are significant because satisfied customers engage more with the brand, exhibiting behaviors like repeat purchases, feedback, and positive word-of-mouth (Fan et al., 2022; Marino & Lo Presti, 2018).

Furthermore, research has shown that co-creation experiences positively impact CE behaviors. In the hospitality industry, the co-creation of experiences can have a deeper impact on individuals than the product/service, resulting in higher consumer engagement behaviors (Chathoth et al., 2016). A study by Prahalad and Ramaswamy (2004) highlighted how co-creation experiences drive value creation and innovation. By analyzing customer preferences and behavior, Grab can gain insights to optimize its offerings. For example, they can allocate more drivers to high-demand areas or introduce new features like child-safety seats (Kuswanto et al., 2019). This interactive process allows customers to feel a sense of personalization and control over their ride experience, leading to a higher level of engagement, such as repeat bookings and positive word-of-mouth referrals.

Another theory of consumer engagement, given by Brodie et al. (2013), highlights the role of customer behaviors and interactions in developing engagement. Customers who actively collect brand information and participate in co-creation experiences demonstrate cognitive, emotional, and behavioral actions that contribute to good engagement outcomes like loyalty and advocacy. For example, after reading about Grab's regulations, news, and customer support services, customers will have a cognitive knowledge of the brand's dedication to offering a safe and reliable ride-hailing experience. As a result, loyalty grows and people are more likely to become brand advocates, sharing their great experiences with others.

Some companies have suggested using organizational operant (human, knowledge) and operand (materials) resources to integrate resources effectively. This approach allows customers to participate in self-directed and regulated learning, which can result in a higher level of engagement (Huotari & Hamari, 2017; Mostafa, 2021). Consequently, it is expected that when customers acquire brand-related knowledge, they become motivated to share their expertise with the brand, leading to product modifications (Blažević & Lievens, 2008; Ya et al., 2022). Thus, we proposed that,

H2. Co-creation of experience mediates the impact of collecting brand information on CE behaviors.

Following Hibbert et al. (2012), customers who engage extensively in brand-related activities have greater control over their resources and learning, resulting in better outcomes. According to the theory of planned behavior, CE behaviors are influenced by individuals' attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). Customers who participate in sales promotions and trials of particular brands learn about them via experience (Fernandes & Remelhe, 2016). This experience enhances their attitudes toward the brand, strengthens their subjective norms by stimulating a sense of community and social influence, and increases their perceived control over their engagement behaviors. Consequently, customers might engage in positive CE behaviors, such as making purchases, referring the brand to others, and influencing through word-of-mouth or social media (Brodie et al., 2011; Hollebeek & Chen, 2014). Therefore, it's postulated that,

H3. Co-creation of experience mediates the effects of participating in brand marketing activities on CE behaviors.

Building on regulatory engagement and self-determination concepts, the rationale for customers joining brand communities is to acquire both functional and pleasurable benefits (Niedermeier et al., 2019). This means that when individuals share useful knowledge and brand advice with other members, they feel more satisfied (Niedermeier et al., 2019). In line with social identity theory, people gain a sense of self and belonging from their social groupings (Tajfel & Turner, 2004). By co-creating their brand experience, customers impact their engagement behaviors. Through interactions with other customers, they receive social validation and influence, resulting in increased purchases, referrals, word-of-mouth, social media influence, and feedback for product improvements. These connections can improve satisfaction with a service platform by clarifying expectations and reducing role ambiguity (Tai et al., 2021). The co-creation of experience serves as a mediating mechanism, as it enhances customers' sense of connection, loyalty, and trust in the brand, ultimately driving their engagement behaviors (Brodie et al., 2013; Hollebeek & Chen, 2014). Thus, we hypothesized that,

H4: Co-creation of experience mediates the influence of interacting with other customers on CE behaviors.

2.4.3 Trust and Perceived Usefulness as Moderators

In social exchange theory, trust is essential in building and maintaining interactions between individuals and organizations (Morgan & Hunt,

1994). When individuals trust a brand, they are more inclined to engage actively in brand-related activities, resulting in a more meaningful co-creation experience (Brodie et al., 2013). Previous studies in the social commerce field have confirmed a positive correlation between relationship quality (including trust, satisfaction, and commitment) and value co-creation intentions (Hajli et al., 2017; Jain et al., 2018). Guenzi and Pelloni (2004) argued that trust is a crucial factor in online contexts, as it is essential for both economic and interpersonal connections.

Consequently, trust positively moderates the effects of interacting with other customers. When individuals trust both the brand and fellow customers, they feel more comfortable sharing ideas, opinions, and experiences with others. This mutual trust creates a supportive environment for co-creation, in which individuals feel valued and respected, resulting in inventive and rewarding experiences (Vargo & Lusch, 2007). Sirdeshmukh et al. (2002) argued that trust creates value through offering relational benefits from interactions with service providers who demonstrate competence and benevolence towards the consumer. This means that when consumers perceive service providers as skilled, caring, and dedicated to resolving problems, it enhances the value of the communication. Second, trust helps to reduce uncertainty by making customers feel more confident and safer in their dealings with service providers, lowering the uncertainty of the exchange process. In the ride-hailing context, co-creation of experience encourages consumers to communicate actively with drivers to express their expectations and preferences for the service. Customers who are comfortable interacting with others, including strangers, tend to engage in extensive conversations with drivers (Amirkiaee & Evangelopoulos, 2018). Hence, we predicted that,

H5. Trust positively moderates the effects of (a) collecting brand information, (b) participating in brand marketing activities, and (c) interacting with other customers on the co-creation of experience.

Perceived usefulness in the context of ride-hailing, as described by Park et al. (2014), refers to consumers' belief in the benefits and advantages associated with using a ride-sharing service. These benefits include achieving various goals, such as reducing costs in commuting, enhancing the ride experience and convenience, expanding travel options, reducing environmental impact in terms of greenhouse gas emissions and energy consumption, and addressing traffic congestion (Wang et al., 2020). According to the authors, consumers are more likely to adopt and embrace new technologies if they perceive them as user-friendly and aligned with their goals. The popularity and preference for ride-sharing services have been driven by features, such as easy booking through mobile apps, real-time tracking, cashless payments, and driver ratings (Lee & Wong, 2021). In addition to these features, gathering information about a brand's products, services, or values can contribute to a more meaningful and personalized experience (Al-Kumaim et al., 2021). When individuals perceive brand marketing activities as useful, they are more likely to engage actively in co-creation and contribute to the overall experience (Alves & Mainardes, 2017).

Hoyer et al. (2010) argued that consumers with a high interest and ability to co-create may not engage in such activities if the perceived benefits are too low or the perceived costs are too high. As a result, increasing perceived advantages is critical to encouraging CE in the co-creation process. Additionally, consumers participating in co-creation activities expect to gain product/service knowledge through interactions with firms and other consumers and in online communities and offline meetings (Hoyer et al., 2010). This gives co-creators a better understanding of the service, its underlying technologies, and its usage, which are essential cognitive benefits (Nambisan & Baron, 2009). Thus, it's hypothesized that,

H6. Perceived usefulness positively moderates the effects of (a) collecting brand information, (b) participating in brand marketing activities, and (c) interacting with other customers on the co-creation of experience.

3. Methods

3.1 Questionnaire Design

This study includes 9 variables. The independent variables are collecting brand information, participating in brand marketing activities, and interacting with other customers. The mediator variable is the co-creation of experience. The dependent variables are consumer engagement behaviors (i.e., loyalty, influence, and knowledge). Table 1 provides the operational definitions for these constructs.

Table 1: Operational Definition of Variables

Variables	Definition of constructs	References
Collecting brand information	How customers get and interpret brand-related information	Masłowska et al. (2016)
Participating in brand marketing activities	Customers notice and use personal resources to take part in brand marketing activities such as promotions, ads, digital billboards, and contests	Leckie et al. (2017)
Interacting with other	How customers connect and socialize with others	Keller et al. (2013)

Variables	Definition of constructs	References
customers		
Co-creation of experience	Customers engage with service providers or settings to create their own personalized experience	Mathis et al. (2016)
Trust	a positive emotion that boosts consumers' perceptions of security when using services and builds their confidence in service providers	Wirtz and Lwin (2009)
Perceived Usefulness	The impression of the service benefits: shortening wait times, enhancing travel efficiency, and expanding travel alternatives	Si et al. (2022)
Loyalty	Passengers satisfaction and continuance intention in using the riding service provider	Nguyen-Phuoc et al. (2021)
Influence	Customers use social media platforms to impact others inside and outside their network	Trusov et al. (2009)
Knowledge	Customers contribute constructive comments that help improve the services.	Pansari and Kumar (2016)

The questionnaire is divided into three main sections. The first section provides the survey's purpose, instructions on how to answer, and a filter question for validated respondents. The second section has 40 items for 10 variables that explore the impact of antecedents and moderators of co-creation of experiences on CE behaviors. Demographic information is collected in the final section of the survey. A five-point Likert scale was employed (ranging from 1 = “strongly disagree” to 5 = “strongly agree”). All measures were adapted from existing research, with slight revisions to meet the setting of the study. Since most survey participants were Vietnamese passengers, a back-translation method was utilized. Every English question was translated into Vietnamese to ensure that responders understood it all. The questionnaire was independently translated from English to Vietnamese and from Vietnamese to English by two translators, who then compared the translations to develop the final version and ensure translation validity.

3.2 Data Collection

An online survey was conducted to reach consumers in Vietnam. The survey was created using a Google form and the link to it was shared on various social media platforms, such as Facebook, Instagram, Zalo, and TikTok. For the Vietnamese market, Grab is one of the most popular and significant digital platforms in the ride-hailing industry, which is why it was chosen. To ensure the respondents' eligibility, a filter question was included asking if they had ever used Grab services in Vietnam. Only those who clicked "Yes" could continue with the survey. The questionnaire distribution period ran from January to April 2024. The final dataset had 298 (90.3%) valid respondents in total.

4. Results

The study used a two-step analytic technique suggested by Zhang et al. (2014) to examine the data. First, the measure's reliability and validity were assessed using descriptive statistics and exploratory factor analysis (EFA) in IBM SPSS version 24. The research model was then examined using partial least squares structural equation modeling (PLS-SEM). Given the sample size of less than 300 samples, PLS-SEM was chosen because it has higher statistical power for smaller samples (Hair et al., 2013). The analysis was carried out using SmartPLS version 4.0.

4.1 Respondents’ Profiles and CFA Results

The valid respondents comprised of 108 males (36.2%) and 190 females (63.8%), mainly aged from 25 to 34 (37.2%) and 18 to 24 years old (28.9%). Most participants (54.4%) have or will have an undergraduate degree. Exploratory Factor Analysis (EFA) was first used to determine item factor loading and construct adequacy. The descriptive statistics for the variables are shown in Table 2.

Table 2: Descriptive Statistics for Overall Variables

Item	Scale	Mean	Std. Deviation
Collecting brand information 1	Collecting brand information (CBI)	3.95	0.987
Collecting brand information 2		3.95	0.942
Collecting brand information 3		4.01	0.955
Collecting brand information 4		4.02	0.876
Collecting brand information 5		3.97	0.957
Participating in brand marketing activities 1	Participating in brand marketing activities (PIB)	3.82	1.140
Participating in brand marketing activities 2		3.84	1.128
Participating in brand marketing activities 3		3.91	1.136
Participating in brand marketing activities 4		3.90	1.107
Interacting with other customers 1	Interacting with other customers (IWC)	3.95	1.091
Interacting with other customers 2		3.88	1.125
Interacting with other customers 3		3.91	1.074

Item	Scale	Mean	Std. Deviation
Co-creation of experience 1	Co-creation of experience (CC)	3.43	1.362
Co-creation of experience 2		3.39	1.436
Co-creation of experience 3		3.40	1.392
Co-creation of experience 4		3.38	1.400
Co-creation of experience 5		3.38	1.390
Perceived Usefulness 1	Perceived Usefulness (PU)	3.82	1.105
Perceived Usefulness 2		3.90	1.156
Perceived Usefulness 3		3.88	1.114
Perceived Usefulness 4		3.87	1.101
Trust 1	Trust (TRU)	4.05	0.932
Trust 2		4.05	0.930
Trust 3		3.95	0.938
Loyalty 1	Loyalty (LOY)	3.90	1.127
Loyalty 2		3.91	1.106
Loyalty 3		3.80	1.089
Loyalty 4		3.77	1.124
Loyalty 5		3.66	1.237
Loyalty 6		3.62	1.203
Loyalty 7		3.59	1.203
Influence 1	Influence (INF)	3.69	1.236
Influence 2		3.52	1.240
Influence 3		3.56	1.330
Influence 4		3.49	1.293
Knowledge 1	Knowledge (KNO)	3.11	1.311
Knowledge 2		3.06	1.217
Knowledge 3		3.05	1.184
Knowledge 4		3.04	1.288

SmartPLS 4 was utilized to validate the measurement and structural models. The CFA results showed that all reliability tests for each construct were satisfactory (Cronbach's alpha and CR values all exceeding .7). The convergent validity test results also demonstrated sufficient explanatory power of each construct (AVE values .615~.808).

To assess discriminant validity, the Fornell-Larcker criterion (Bagozzi and Yi, 1988) was applied. The Fornell-Larcker criterion involved comparing the square root of the Average Variance Extracted (AVE) for each construct with the cross-loading values across different constructs. Table 3 displays these values, revealing that the square root of AVE for each construct was the highest among the correlation values, indicating a stronger relationship within its construct. This confirmed the discriminant validity of the constructs.

The fit indices of the structural model all satisfied the suggested levels, indicating a good fit (SRMR=.05<.08 and NFI=.839>.8) (Henseler et al., 2016). The co-creation of experience and influence constructs showed substantial predictive accuracy (R^2=.614, R^2=.53 respectively), while loyalty and knowledge had moderate predictive accuracy (R^2=.479 and R^2=.474 respectively) (Henseler et al., 2009). Also, the co-creation of experience construct demonstrated large predictive relevance (Q^2=.604), while loyalty, influence, and knowledge had medium predictive relevance (Q^2=.423, Q^2=.458, and Q^2=.474, respectively). These findings suggest that the model's predictions are appropriate.

Table 3: Discriminant Validity (Fornell-Larcker Criterion)

	LOY	CBI	CC	IWC	INF	KNO	PIB	PU	TRU
LOY	**0.805**								
CBI	0.645	**0.784**							
CC	0.692	0.444	**0.899**						
IWC	0.144	0.214	0.561	**0.88**					
INF	0.619	0.345	0.727	0.473	**0.874**				
KNO	0.474	0.284	0.689	0.385	0.548	**0.835**			
PIB	0.667	0.213	0.562	0.139	0.55	0.398	**0.879**		
PU	0.501	0.275	0.597	0.304	0.448	0.478	0.431	**0.862**	
TRU	0.418	0.332	0.448	0.179	0.386	0.285	0.269	0.159	**0.813**

Notes: CBI= collecting brand information; PIB= participating in brand marketing activities; IWC= interacting with other customers; CC= co-creation of experience; LOY= loyalty; INF= influence; KNO= knowledge.

4.2 Results of Structural Paths and Hypotheses Testing

The results demonstrates that collecting brand information (β=.255, p<.001), participating in brand marketing activities (β=.446, p<.001), and interacting with other customers (β= .445, p<.001) have a positive impact on the co-creation of experiences, which in turn leads to increased customer engagement behavior, including loyalty (β=.692, p<.001), influence (β=.728, p<.001), and knowledge (β=.688, p<.001). Therefore, support was established for H1a, H1b, and H1c. Results of the structural paths as shown in Figure 1.

The non-parametric resampling technique known as bootstrapping is selected, which does not require the sampling distribution to keep to the regularity assumption. For indirect effects to be considered significant, the relationship's p-value must be less than 0.05 at the 95% confidence interval. All mediating effects are supported by the findings. Specifically, co-creation of experience partially mediates the relationship between micro brand-related activities and customer engagement behaviors. Thus, support was found for H2a,b,c ($\beta_{CBI \rightarrow CC \rightarrow LOY}$ = .176, p <.001; $\beta_{CBI \rightarrow CC \rightarrow INF}$ = .185, p< .001; $\beta_{CBI \rightarrow CC \rightarrow KNO}$=.175, p< .001), H3a,b,c ($\beta_{PIB \rightarrow CC \rightarrow LOY}$ = .309, p< .001; $\beta_{PIB \rightarrow CC \rightarrow INF}$ =.325, p<.001; $\beta_{PIB \rightarrow CC \rightarrow KNO}$ = .307, p< .001) and H4a,b,c ($\beta_{IWC \rightarrow CC \rightarrow LOY}$ = .308, p< .001; $\beta_{IWC \rightarrow CC \rightarrow INF}$ = .324, p< .001; $\beta_{IWC \rightarrow CC \rightarrow KNO}$ = .307, p< .001) respectively.

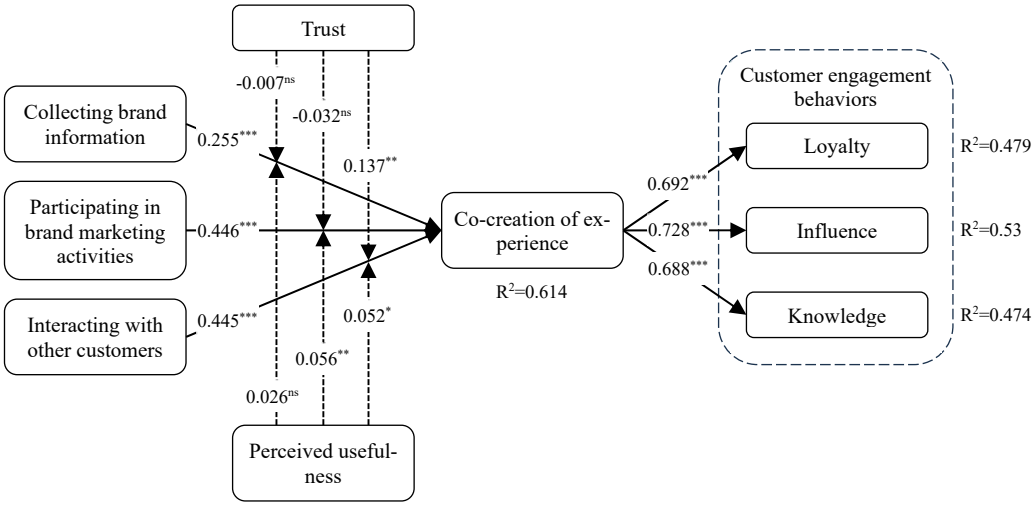

Figure 1: Structural Model Results

Notes: ns non-significant, *p< .1, **p< .05, ***p< .001

Tables 4 and 5 describe the moderating effects results. According to the results, trust has a significant moderating influence on the relationship between interacting with other customers and co-creating an experience. The positive moderating impact shows that consumers who appreciate communicating with other customers and trust their service provider are more likely to take part in the co-creation process. Consequently, support is not obtained for H5a and H5b ($\beta_{TRU \times CBI \rightarrow CC}$ = -.007, p = .835; $\beta_{TRU \times PIB \rightarrow CC}$=.185, p = .263), and H5c is sustained ($\beta_{TRU \times IWC \rightarrow CC}$ = .137, p = .017).

Regarding perceived usefulness, it modifies the link between co-creating an experience and participating in brand marketing activities significantly, while it modifies the relationship between co-creating experiences and interacting with other customers marginally. This indicates that consumers will play a role in the co-creation process if they believe in the service provider's benefits and have actively engaged in brand marketing campaigns or connected to other customers. H6a is therefore unsupported, but H6b and H6c are supported.

Table 4: Results for Moderating Effect of Trust

Path	β	STDEV	T statistics	P-values	Result
H5a: TRU x CBI -> CC	-.007ns	.033	.209	.835	Unsupported
H5b: TRU x PIB -> CC	.032ns	.029	1.119	.263	Unsupported
H5c: TRU x IWC -> CC	.137**	.058	2.387	.017	Supported

Notes: ns non-significant, *p<.1, **p<.05, ***p<.001

Table 5: Results for Moderating Effect of Perceived Usefulness

Path	β	STDEV	T statistics	P-values	Result
H6a: PU x CBI -> CC	.026ns	.03	.852	.394	Unsupported
H6b: PU x PIB -> CC	.056**	.027	2.041	.041	Supported
H6c: PU x IWC -> CC	.052*	.031	1.653	.098	Supported

Notes: ns non-significant, *p<.1, **p<.05, ***p<.001

5. Conclusions and Discussion

5.1 Conclusions

This research mainly was to answer two research questions: first, to establish a theoretical framework that elucidates how MBA can transform into active and engaging consumer behaviors via co-creation experiences; and second, to examine the moderating roles of consumer trust and perceived usefulness in enhancing co-creation experiences.

The study's results supported Hypotheses 1a, 1b, and 1c, indicating that each dimension of MBA significantly influences customers' co-creation experiences. This implies that customers who join all aspects of brand-related activities are more likely to engage in the co-creation process. In addition, the findings showed that the connection between co-created value and customer participation is significant and positive, as mentioned by Jaakkola and Alexander (2014). Moreover, the findings confirmed Hypotheses 2, 3, and 4, providing evidence that passengers who engage in MBA through co-creating experiences with service providers are more likely to exhibit effective engagement behaviors, such as increased loyalty and post-purchasing actions. These results further supported the theoretical relationships posited by Kumar et al. (2022) and Pansari and Kumar (2016), suggesting that co-creation can have a significant impact on CE.

It is noteworthy that Hypotheses 5a, 5b, and 6a were invalidated. This implies that consumers who have acquired sufficient knowledge about a brand are inclined to participate in co-creation processes, exhibit engaging behaviors, and conduct post-purchase activities, regardless of their level of trust in the brand or their perception of its usefulness. This phenomenon is evident in Grab, the most widely used ride-hailing service in Vietnam (Statista, 2024), which has effectively established brand awareness. Consequently, even occasional users are likely to consider Grab as their first choice when they require such a service and engage in co-creation to enhance their personal experiences. As Bearden and Etzel (1982) discovered, the behavior and perceptions of others may influence people's behaviors and decisions. Customers may feel compelled to choose a brand that is widely utilized or has a strong social reputation, even if their own opinion is less positive. Furthermore, Hogarth and Kunreuther (1992) observed that people are more influenced by the desire to prevent losses than to make gains. As a result, they may be ready to accept a less-than-ideal brand if it represents a recognized risk, rather than risking an unknown alternative. While Hypotheses 5a, 5b, and 6a were rejected, Hypothesis 5c was accepted. This suggests that customers who place their trust in a ride-hailing platform and value social interaction are more inclined to take part in co-creation experiences. Engaging in conversations with fellow passengers and learning about their positive experiences makes consumers more likely to view the service as dependable. Researchers have demonstrated that when a platform has garnered favorable word-of-mouth from prior transactions, customers are more inclined to perceive the platform as honest, attentive to their needs, and capable of providing quality service (Zhao et al., 2018).

Finally, Hypotheses 6b and 6c were sustained, indicating that customers who perceive the platform as useful during brand marketing activities or interactions with other customers are more inclined to participate in co-creation experiences. The underlying rationale is supported by social exchange theory, which suggests that customers are willing to provide input and effort in exchange for enhanced experiences or a sense of influence (Chen et al., 2018). Moreover, the research by Sweeney and Soutar (2001) revealed that when customers perceive a brand as useful and valuable, they become more motivated to invest time and effort into co-creating with that brand. This is because they recognize the potential for mutual benefit.

5.2 Key Contributions to Academe and Practitioners

This study contributes to a better understanding of co-creation in the context of the sharing economy and facilitates the knowledge about the MBA determinants of the co-creation of ride-hailing experience. The study's results indeed evidenced that customers who join all aspects of brand-related activities (namely, information gathering, marketing participation, and social interaction) are more likely to co-create, through which customer engagement (CE) is more intended. The study's investigation bridges the existing gap in the service marketing field, where limited attention has been given to understanding the driving forces behind the co-creation of ride-hailing experience and the mediating role of co-creation in transforming MBA participants to becoming loyal and supportive.

Given the widespread popularity of companies in the mobile ride-hailing industry, it is crucial for managers to take note of the findings from this study to develop effective strategies that encourage consumer co-creation and enhance CE. One effective approach that businesses can adopt to encourage customer-to-customer interaction is the establishment of a positive brand community. Another important factor for firms to consider is how consumers perceive service quality. Notably, drivers who serve as frontline representatives and brand ambassadors have the most direct and frequent contact with consumers. Therefore, companies must prioritize the selection and training of drivers to ensure an enjoyable riding experience. While

achieving technological differentiation may be challenging given the competitive landscape of the market, it remains crucial for firms to maintain a high-quality mobile booking app so that customers' demand for platform usefulness is fulfilled.

5.3 Limitations and Suggestions for Future Research

There are some limitations associated with this study. First, our focus was on Vietnam's prosumers, whose uncertainty avoidance level is considered medium according to Hofstede's cultural dimensions (2001). This characteristic trait may hinder knowledge sharing among Vietnam prosumers due to fear of making mistakes, potentially limiting the full development of co-creation. To enhance the generalizability of our findings, future studies could replicate our research model in countries with a lower level of uncertainty avoidance to allow for meaningful comparisons. Second, the legislative environment for ride-hailing services in Vietnam is rather tight, leaving little flexibility for platforms to experiment with new customer-centric features or service models. The regulations often prioritize standardization and compliance over encouraging innovation and customization in the ride-hailing industry. Scholars may compare the ride-hailing scene in Vietnam with those in other Asian economies to understand how operational, legal, and cultural differences affect co-creation viability and methodologies. Third, the survey mainly attracted participants within the age range of 18 to 44. This demographic bias indicated that the older population may not be frequent users of ride-hailing services. The presence of such demographic differences in the findings emphasizes the importance of future studies that explore how a person's demographic characteristics may affect the co-creation process. Thus, to gain a more comprehensive understanding of the co-creation process and its influencing factors, future research should consider expanding the scope to different cultural contexts and age groups.

Besides trust, several personal attributes can affect customers' motivation to co-create the riding experience. Factors, such as commitment to the community, reciprocity, and altruism, may play a key role (Amirkiaee & Evangelopoulos, 2018). Customers' enjoyment of being social and their concern for sustainability could also impact co-creation (Amirkiaee & Evangelopoulos, 2018). Individuals who derive pleasure from collaborative activities and interactions may be more eager to engage in co-creation. Those with a strong sustainability mindset may be particularly drawn to opportunities to shape products and services in more eco-friendly ways (Amirkiaee & Evangelopoulos, 2018). Further research can discover whether these components have a more outstanding impact on co-creation.

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References

Aarhaug, J., & Olsen, S. (2018). Implications of ride-sourcing and self-driving vehicles on the need for regulation in unscheduled passenger transport. *Research in Transportation Economics*, *69*, 573–582.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.

Al-Kumaim, N. H., Alhazmi, A. K., Ramayah, T., Shabbir, M. S., & Gazem, N. A. (2021). Sustaining continuous engagement in value co-creation among individuals in universities using online platforms: Role of knowledge self-efficacy, commitment and perceived benefits. *Frontiers in Psychology*, *12*, Article 637808.

Althuizen, N., Wierenga, B., & Chen, B. (2016). Managerial decision-making in marketing: Matching the demand and supply side of creativity. *Journal of Marketing Behavior*, *2*(2–3), 129–176.

Alves, H., & Wagner Mainardes, E. (2017). Self-efficacy, trust, and perceived benefits in the co-creation of value by consumers. *International Journal of Retail & Distribution Management*, *45*(11), 1159–1180.

Amirkiaee, S. Y., & Evangelopoulos, N. (2018). Why do people rideshare? An experimental study. *Transportation Research Part F: Traffic Psychology and Behavior*, *55*, 9–24.

Auh, S., Bell, S. J., McLeod, C. S., & Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing*, *83*(3), 359–370.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94.

Bearden, W. O., & Etzel, M. J. (1982). Reference group influence on product and brand purchase decisions. *Journal of Consumer Research*, *9*(2), 183–194.

Bimpikis, K., Candogan, O., & Sabán, D. (2019). Spatial pricing in ride-sharing networks. *Operations Research*, *67*(3), 744–769.

Blažević, V., & Lievens, A. (2008). Managing innovation through customer co-produced knowledge in electronic services: An exploratory study. *Journal of the Academy of Marketing Science*, *36*(1), 138–151.

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, *73*(3), 52–68.

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement. *Journal of Service Research*, *14*(3), 252–271.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *66*(1), 105–114.

Chathoth, P. K., Ungson, G. R., Harrington, R. J., & Chan, E. S. (2016). Co-creation and higher order customer engagement in hospitality and tourism services. *International Journal of Contemporary Hospitality Management*, *28*(2), 222–245.

Chen, T., Drennan, J., Andrews, L., & Hollebeek, L. D. (2018). User experience sharing: Understanding customer initiation of value co-creation in online communities. *European Journal of Marketing*, *52*(5/6), 1154–1184.

Eger, L., & Mičík, M. (2017). Customer-oriented communication in retail and Net Promoter Score. *Journal of Retailing and Consumer Services*, *35*, 142–149.

Fan, W., Shao, B., & Dong, X. (2022). Effect of e-service quality on customer engagement behavior in community e-commerce. *Frontiers in Psychology*, *13*, Article 965998.

Fernandes, T., & Moreira, M. (2019). Consumer brand engagement, satisfaction and brand loyalty: A comparative study between functional and emotional brand relationships. *Journal of Product & Brand Management*, *28*(2), 274–286.

Fernandes, T., & Remelhe, P. (2016). How to engage customers in co-creation: Customers' motivations for collaborative innovation. *Journal of Strategic Marketing*, *24*(3–4), 311–326.

Gligor, D., & Bozkurt, S. (2020). FsQCA versus regression: The context of customer engagement. *Journal of Retailing and Consumer Services*, *52*, Article 101929.

Guenzi, P., & Pelloni, O. (2004). The impact of interpersonal relationships on customer satisfaction and loyalty to the service provider. *International Journal of Service Industry Management*, *15*(4), 365–384.

Hair, J. F., Jr., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance [Editorial]. *Long Range Planning*, *46*(1-2), 1–12. https://doi.org/10.1016/j.lrp.2013.01.001

Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D., & Richard, M. O. (2017). Branding co-creation with members of online brand communities. *Journal of Business Research*, *70*, 136–144.

Hamari, J., Sjöklint, M., & Ukkonen, A. (2015). The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, *67*(9), 2047–2059.

Henseler, J., Hubona, G. S., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, *116*(1), 2–20. https://doi.org/10.1108/IMDS-09-2015-0382

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *New challenges to international marketing* (*Advances in International Marketing*, Vol. 20, pp. 277–319). Emerald Group Publishing Limited. https://doi.org/10.1101/S1474-7979(09)20014-3

Hibbert, S., Winklhofer, H., & Temerak, M. S. (2012). Customers as resource integrators. *Journal of Service Research*, *15*(3), 247–261.

Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations* (2nd ed.). Sage Publications.

Hogarth, R. M., & Kunreuther, H. (1992). Pricing insurance and warranties: Ambiguity and correlated risks. *The Geneva Papers on Risk and Insurance Theory*, *17*, 35–60.

Hollebeek, L. (2011). Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*, *19*(7), 555–573.

Hollebeek, L. D., & Chen, T. (2014). Exploring positively-versus negatively-valenced brand engagement: A conceptual model. *Journal of Product & Brand Management*, *23*(1), 62–74.

Hollebeek, L. D., Sprott, D. E., Andreassen, T. W., Costley, C., Klaus, P., Kuppelwieser, V., & Rather, R. A. (2019). Customer engagement in evolving technological environments: Synopsis and guiding propositions. *European Journal of Marketing*, *53*(9), 2018–2023.

Hoyer, W. D., Chandy, R., Dorotić, M., Krafft, M., & Singh, S. S. (2010). Consumer cocreation in new product development. *Journal of Service Research*, *13*(3), 283–296.

Huotari, K., & Hamari, J. (2017). A definition for gamification: Anchoring gamification in the service marketing literature. *Electronic Markets*, *27*(1), 21–31. https://doi.org/10.1007/s12525-015-0212-z

Jaakkola, E., & Alexander, M. (2014). The role of customer engagement behavior in value co-creation. *Journal of Service Research*, *17*(3), 247–261.

Jain, N. K., Kamboj, S., Kumar, V., & Rahman, Z. (2018). Examining consumer-brand relationships on social media platforms. *Marketing Intelligence & Planning*, *36*(1), 63–78.

Jiang, Y., Balaji, M. S., & Jha, S. (2019). Together we tango: Value facilitation and customer participation in Airbnb. *International Journal of Hospitality Management*, *82*, 169–180.

Keller, K. L., Parameswaran, M., & Jacob, I. (2013). *Strategic brand management: Building, measuring, and managing brand equity*. Pearson Education.

Kumar, A., Sikdar, P., Gupta, M., Singh, P., & Sinha, N. (2022). Drivers of satisfaction and usage continuance in e-grocery retailing: A collaborative design supported perspective. *Journal of Research in Interactive Marketing*, *17*(2), 176–194.

Kuswanto, A., Sundari, S., Harmadi, A., & Hariyanti, D. A. (2019). The determinants of customer loyalty in the Indonesian ride-sharing services: Offline vs. online. *Innovation & Management Review*, *17*(1), 75–85.

Lan, J., Ma, Y., Zhu, D., Mangalagiu, D., & Thornton, T. F. (2017). Enabling value co-creation in the sharing economy: The case of Mobike. *Sustainability*, *9*(9), Article 1504.

Leckie, C., Nyadzayo, M. W., & Johnson, L. W. (2017). Promoting brand engagement behaviors and loyalty through perceived service value and innovativeness. *Journal of Services Marketing*, *32*(1), 70–82.

Lee, C. K. H., & Wong, A. O. M. (2021). Antecedents of consumer loyalty in ride-hailing. *Transportation Research Part F: Traffic Psychology and Behaviour*, *80*, 14–33.

Li, D. Y., & Liu, J. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. *Journal of Business Research*, *67*(1), 2793–2799.

Libai, B., Bolton, R., Bügel, M. S., De Ruyter, K., Götz, O., Risselada, H., & Stephen, A. T. (2010). Customer-to-customer interactions: Broadening the scope of word of mouth research. *Journal of Service Research*, *13*(3), 267–282. https://doi.org/10.1177/1094670510375608

Marino, V., & Lo Presti, L. (2018). Engagement, satisfaction and customer behavior-based CRM performance: An empirical study of mobile instant messaging. *Journal of Service Theory and Practice*, *28*(5), 682–707.

Masłowska, E., Malthouse, E. C., & Collinger, T. (2016). The customer engagement ecosystem. *Journal of Marketing Management*, *32*(5-6), 469–501. https://doi.org/10.1080/0267257X.2015.1134652

Mathis, E. F., Kim, H., Uysal, M., Sirgy, J., & Prebensen, N. K. (2016). The effect of co-creation experience on outcome variables. *Annals of Tourism Research*, *57*, 62–75.

Mittendorf, C. (2017). The implications of trust in the sharing economy: An empirical analysis of Uber. *Proceedings of the 50th Hawaii International Conference on System Sciences*, 5012–5021. https://hdl.handle.net/10125/41766

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, *58*(3), 20–38.

Mostafa, R. B. (2021). From social capital to consumer engagement: The mediating role of consumer e-empowerment. *Journal of Research in Interactive Marketing*, *15*(2), 316–335.

Nambisan, S. (2002). Designing virtual customer environments for new product development: Toward a theory. *The Academy of Management Review*, *27*(3), 392–413.

Nambisan, S., & Baron, R. A. (2009). Virtual customer environments: Testing a model of voluntary participation in value co-creation activities. *Journal of Product Innovation Management*, *26*(4), 388–406.

Nguyen-Phuoc, D. Q., Su, D. N., Tran, P. T. K., Le, D., & Johnson, L. W. (2020). Factors influencing customer's loyalty towards ride-hailing taxi services – A case study of Vietnam. *Transportation Research Part A: Policy and Practice*, *134*, 96–112.

Nguyen-Phuoc, D. Q., Vo, N. S., Su, D. N., Nguyen, V. H., & Oviedo-Trespalacios, Ó. (2021). What makes passengers continue using and talking positively about ride-hailing services? The role of the booking app and post-booking service quality. *Transportation Research Part A: Policy and Practice*, *150*, 367–384.

Nhat, P. (2024, March 17). *Vietnam's ride-hailing market to reach US$2.16 billion by 2029: Mordor Intelligence*. Hanoi Times. https://hanoitimes.vn/vietnams-ride-hailing-market-to-reach-us216-billion-by-2029-mordor-intelligence-326344.html

Niedermeier, A., Albrecht, L., & Jahn, B. (2019). "Happy together": Effects of brand community engagement on customer happiness. *Journal of Relationship Marketing*, *18*(1), 54–76.

Palumbo, R. (2016). Contextualizing co-production of health care: A systematic literature review. *International Journal of Public Sector Management*, *29*(1), 72–90.

Pansari, A., & Kumar, V. (2016). Customer engagement: The construct, antecedents, and consequences. *Journal of the Academy of Marketing Science*, *45*(3), 294–311.

Park, C., Kim, H., & Kim, Y. (2014). A study of factors enhancing smart grid consumer engagement. *Energy Policy*, *72*, 211–218.

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *18*(3), 5–14.

Prebensen, N. K., Vittersø, J., & Dahl, T. I. (2013). Value co-creation significance of tourist resources. *Annals of Tourism Research*, *42*, 240–261.

Si, H., Duan, X., Cheng, L., & Zhang, Z. Y. (2022). Determinants of consumers' continuance intention to use dynamic ride-sharing services. *Transportation Research Part D: Transport and Environment*, *104*, Article 103201.

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, *66*(1), 15–37.

Statista. (2024, June 12). *Most popular ride-hailing apps Vietnam Q4 2023*. https://www.statista.com/statistics/1369239/vietnam-most-popular-ride-hailing-apps/

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, *77*(2), 203–220.

Tai, Y., Wang, Y., & Luo, C. (2021). Technology- or human-related service innovation? Enhancing customer satisfaction, delight, and loyalty in the hospitality industry. *Service Business*, *15*(4), 667–694.

Tajfel, H., & Turner, J. (2004). An integrative theory of intergroup conflict. In J. T. Jost & J. Sidanius (Eds.), *Political psychology: Key readings* (pp. 56–65). Psychology Press. (Original work published 1979). https://doi.org/10.4324/9780203505984-16

Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing*, *73*(5), 90–102.

Vargo, S. L., & Lusch, R. F. (2007). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, *36*(1), 1–10.

Verleye, K. (2015). The co-creation experience from the customer perspective: Its measurement and determinants. *Journal of Service Management*, *26*(2), 321–342.

Vietnam Briefing. (2021, January 27). *Vietnam's ride-hailing industry: Trends, opportunities and risks*. Vietnam Briefing News. https://www.vietnam-briefing.com/news/vietnams-ride-hailing-industry-trends-opportunities-risks.html/

Vy, K. (2023, March 29). *"Miếng bánh" gọi xe công nghệ rơi vào tay ông lớn ngoại, công ty của ông Phạm Nhật Vượng hợp sức với Be liệu có vẽ lại thị trường?* [The tech ride-hailing "pie" falls into foreign giants' hands, will Mr. Pham Nhat Vuong's company teaming up with Be redraw the market?]. CafeF. https://cafef.vn/mieng-banh-goi-xe-cong-nghe-roi-vao-tay-ong-lon-ngoai-cong-ty-cua-ong-pham-nhat-vuong-hop-suc-voi-be-lieu-co-ve-lai-thi-truong-188230329091535389.chn

Wang, Y., Wang, S., Wang, J., Wei, J., & Chen, Z. (2020). An empirical study of consumers' intention to use ride-sharing services: Using an extended technology acceptance model. *Transportation*, *47*(1), 397–415.

Weng, G. S., Zailani, S., Iranmanesh, M., & Hyun, S. S. (2017). Mobile taxi booking application service's continuance usage intention by users. *Transportation Research Part D: Transport and Environment*, *57*, 207–216.

Williams, J., & Aitken, R. (2011). The service-dominant logic of marketing and marketing ethics. *Journal of Business Ethics*, *102*(3), 439–454.

Wirtz, J., & Lwin, M. O. (2009). Regulatory focus theory, trust, and privacy concern. *Journal of Service Research*, *12*(2), 190–207.

Ya, Z., Zhang, J., & Liu, C. (2022). Motives for employees to communicate positive electronic word-of-mouth (eWOM) on social network sites: Exploring moderating mechanisms. *Australasian Marketing Journal*, *30*(1), 60–73.

Zaglia, M. E. (2013). Brand communities embedded in social networks. *Journal of Business Research*, *66*(2), 216–223.

Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014). What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Information & Management*, *51*(8), 1017–1030.

Zhao, Y., Yan, L., & Keh, H. T. (2018). The effects of employee behaviors on customer participation in the service encounter. *European Journal of Marketing*, *52*(5/6), 1203–1222.

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