



The role of artificial intelligence in consumers' brand preference for retail banks in Hong Kong

Shirie Pui Shan Ho¹ · Matthew Yau Choi Chow²

Received: 16 May 2022 / Revised: 11 December 2022 / Accepted: 28 December 2022 / Published online: 3 January 2023
© The Author(s), under exclusive licence to Springer Nature Limited 2023

Abstract

Artificial intelligence (AI) technologies are increasingly integral to our world, as they serve as the foundation for new value propositions and distinctive customer experiences. AI is crucial for offering better customer experiences, which strengthen the consumer–brand relationship and brand differentiation. Based on the stimulus–organism–response model, this study examined the influence of AI on brand preference for retail banks in Hong Kong. Structural equation modeling was used to analyze 300 responses collected from a questionnaire survey of Generation Z subjects. The findings indicate that AI marketing efforts affected brand experience, brand preference, and repurchase intention. Among AI marketing efforts, information, accessibility and customization exerted influences on brand experience, while interaction had no significant impact on it. Brand experience also mediated the relationship between AI marketing efforts and brand preference. The study will help retail banks to design AI marketing activities and formulate better marketing and branding strategies for customer acquisition and retention.

Keywords Artificial intelligence · Brand experience · Brand preference

Introduction

Among the many new technologies in recent years, artificial intelligence (AI) has become critical for the banking industry, and many banks around the world are integrating their operations with AI. AI can substantially enhance banks' ability to achieve greater profits, service personalization, distinctive omnichannel experiences, and rapid innovation cycles (Biswas et al. 2020). In line with global trends, the Hong Kong Monetary Authority (HKMA), the de facto central bank of Hong Kong, formulated the FinTech 2025 strategic framework with the goal of assisting the banking industry in fully implementing financial technology by 2025 (HKMA 2021). Achieving the full potential of AI in the

banking industry is one of the main focuses of FinTech 2025 (HKMA 2022).

By incorporating AI into business processes, banks can provide seamless, digitalized financial services to meet customer demand. AI helps banks succeed amidst the keen competition in this sector. However, despite the potential benefits of AI, it has only been partially adopted in Hong Kong's banking sector. According to a survey conducted by the HKMA in 2019, just 48% of the Hong Kong banking sector has adopted or plans to adopt AI applications. Local banks in particular are still hesitant about applying AI technologies. Possible reasons include the costs of resolving customer doubts about AI solutions and insufficient support from top management. Thus, this research aims to provide support for the adoption of AI technologies as the foundation for new value propositions and distinctive customer experiences.

Improving customer experience is one major reason for AI adoption. Currently, banks in Hong Kong use AI to analyze customer data to offer personalized wealth management services, track customer information, and confirm customers' identities to provide remote customer onboarding. As many business processes become digitalized and streamlined, banking customers are developing higher expectations

✉ Shirie Pui Shan Ho
shirie@uow.edu.au

Matthew Yau Choi Chow
matthew.chow@cpce-polyu.edu.hk

¹ UOW College Hong Kong, 1/F Le Billionnaire, Kowloon City, Hong Kong

² Hong Kong Community College, 8 Hung Lok Road, Hung Hom, Kowloon, Hong Kong



of products and services. One survey reported that 70% of banking customers in Hong Kong are interested in obtaining more personalized information and tools (PwC 2019). Thus, consumer preferences are shifting to personalized digital services that can meet all of their product and service needs while adjusting to the customer's different life stages. However, the World Retail Banking Report 2022 suggested that retail banks currently lag behind others in providing a true personalized customer experience; hence, these banks should better leverage AI to provide a tailored experience to create stronger connections and maximize customer value (Capgemini and Efma 2022).

AI is crucial for banks' attempts to improve customer experience, which can strengthen consumer–brand relationships. Customers feel happy and satisfied with the brand's AI offerings if they have the right experience (Trivedi 2019). A pleasurable customer experience will create positive value for the bank in terms of brand preference, which helps banks to achieve differentiation and competitive advantage (Kumar et al. 2019). However, despite the importance of AI for consumer–brand relationships, research on the effects of AI on branding is limited and fragmented. While some studies have suggested that AI has positive effects on branding (Trivedi 2019; West et al. 2018), others have suggested that information technology has become a necessity rather than an option that provides competitive advantages (i.e. the IT paradox) (Hajili et al. 2015; Šeric et al. 2016). Technology can save customers time and effort in transactions, but errors and limited human assistance result in inefficiencies, which cause customer dissatisfaction (Park and Zhang 2022). Therefore, the role of AI in branding still remains unclear. Bock et al. (2020) called for further investigation into the influence of AI on consumers' evaluation of the servicescape and organizations, and Vlačić et al. (2021) recommended further research into how AI-powered marketing tools affect the attitudes, beliefs, and behaviors of consumers, especially in the Covid-19 pandemic. To provide a clearer picture and to respond to these calls for further research, this study investigated the influence of AI on brand preference among Hong Kong retail banks. To the best of our knowledge, no previous empirical study has examined the role of AI in brand preference in the context of Hong Kong's banking industry.

While the use of AI is a global trend, research on the role of AI in branding is rare. Although a few studies have been conducted in the United Kingdom, the United States, and India, their focuses were very different and may not be applicable to Hong Kong because of its differences in financial technology development, customer preferences, and culture. Thus, theoretically, this study can contribute to the AI, marketing, and branding literature by providing an understanding of AI–consumer–brand relationships in the banking context. Practically, the results of this study will

be of interest to marketing practitioners who wish to build strong brands via an AI-related marketing mix. Retail banks will also benefit from the results of this study, as their investments in AI may depend on whether AI can help to create value (brand preference) for stakeholders. This study will also guide bank regulators in handling the barriers to AI adoption, as some local banks are still hesitant about applying AI technologies (HKMA 2019).

Literature review

AI in Hong Kong

AI enables machines to perform business activities that are normally performed by humans. The goal of AI is to enable computers to mimic human intelligence so that they can learn, sense, think, and act, thus achieving automation and gaining analytic insights (Vlačić et al. 2021). AI has been commonly adopted by retail banks in Hong Kong to enhance customer experience. Examples of AI in banking today include chatbots, robo-advisors, facial recognition, voice recognition, and AI-powered mobile apps. Chatbots, virtual conversation agents, and robo-advisors provide 24/7 personalized customer services and recommend suitable financial services and products. With facial recognition and voice recognition technologies, customers can open an account at home, log in to their bank account, and authorize financial transactions anywhere and anytime. AI-powered banking mobile apps give customers convenient access to banking services and provide personalized tips and insights on savings and expenses. In light of the “new normal” following the Covid-19 pandemic and the need for social distancing, AI-powered marketing tools are expected to increase in importance for enhancing customer–brand interactions.

While AI provides positive value creation, it can be the sources of customer dissatisfaction. The technical debt of AI is limited human assistance. As AI can only assist with a restricted range of issues, customers may be frustrated as they either need to repeat the query in alternative ways to get an answer, or need to get the information elsewhere (Castillo et al. 2021). Unlike human, AI lacks empathy. Customers may feel undervalued and detached because of the impersonal interactions. Integration conflicts may occur if there is loss of information when interacting with AI or during handover to a human customer support assistant (Castillo et al. 2021). These dark sides of AI imply the need to further research on AI-brand interactions which is the aim of this study.



Stimulus–organism–response

The stimulus–organism–response (SOR) model was adopted as the fundamental framework in this study. The SOR model elaborates the links between inputs (stimulus), processes (organism), and outputs (response) and explains the impact of environmental cues on individuals' internal states and behavioral responses and the sequence of events. It has been widely used in the marketing literature to understand consumer behavior (Fan et al. 2022). More importantly, the SOR model can broadly predict use behavior in response to innovative technologies. Kim et al. (2020) applied the SOR model to understand consumers' authentic behavior and their responses to virtual reality tourism experiences. Various scholars have applied the SOR framework to understand consumers' online behavior (Islam et al. 2020; Zhu et al. 2019). Guided by the SOR paradigm, Wu et al. (2021) assessed the impact of travel apps' atmospheric cues on tourists' emotional and behavioral responses. In this study, the SOR model was applied to explain the role of AI (stimulus) on brand experience (organism), which affects brand preference and repurchase intention (response).

AI marketing efforts

AI marketing efforts can affect customer response and decision making (Chen et al. 2022; Libai et al. 2020). In customer–employee interactions, bank employees enhance customer trust through customer orientation, information sharing, and response to customer concerns (Roberts-Lombard and Petzer 2021). Such marketing efforts are particularly important for banks that must exchange financial information or updates to provide professional customized services. AI can reduce customers' physical and temporal distance from banks by giving easy access to product or service information (Chung et al. 2020). Chung et al. (2020) and Cheng and Jiang (2021) were pioneers in examining the role of AI marketing efforts on consumer behaviors and customer–firm relationships, but their focus was on chatbots only. To extend the discussion on AI marketing efforts and its components, this study aimed to provide an up-to-date account of AI applications in Hong Kong's banking industry.

According to Cheng and Jiang (2021), AI marketing efforts involve five dimensions: interaction, information, accessibility, customization, and entertainment. Entertainment is not relevant to the banking context. Compared with other business contexts, banking customers are more utilitarian oriented (or transactional) (Rodrigues et al. 2016). They seldom perceive financial activities or transactions as fun and enjoyable; hence, only the other four dimensions were adopted in this study. Interaction refers to communications between customers and the brand's AI agents. Social interaction is an important component of customer experience

when customers interact or talk with AI agents (Godey et al. 2016). Information refers to the AI's provision of information to customers on products or services or the brand itself. Through the analysis of big data, AI can offer relevant marketing communications to customers, which is essential to building brand awareness and loyalty (Sadek et al. 2015). Accessibility refers to assessing and responding to customer information in a timely manner via AI technology. By offering 24/7 customer services, AI can improve service quality, which affects brand image and performance (Sultan and Wong 2019). Customization refers to AI marketing activities offering customers personalized assistance to satisfy their needs. By personalizing AI-assisted services, brands can help customers express their individuality, building stronger brand affinity and loyalty (Godey et al. 2016).

Brand experience

Brand experience involves a series of interactions with people, objects, processes, and environments, resulting in cognitive, emotional, sensorial, and behavioral responses (Trivedi 2019). Brand experience is a multi-dimensional concept which can be measured by four dimensions including sensory, affective, behavioral and intellectual (Brakus et al. 2009). In banking context, brand experience is customers' judgement on their overall service experience (Wasan 2018). It refers to the collective feelings, perceptions, and attitudes formed by consumers during the decision making and consumption process. It is a combination of the consumption, product, service, and shopping experiences originating in customer–brand interaction (Khan et al. 2016). Thus, this study adopted Wasan's definition of brand experience. Customers enjoy brands that provide them with an exceptional experience. For example, if they have a pleasurable online brand experience, they will have a higher level of engagement with the company, which reinforces brand satisfaction and brand loyalty (Khan et al. 2016; Yasin et al. 2020). Therefore, brands can generate more sales and repeated engagement by offering a richer experience. To attract more consumers, businesses must sell an extraordinary brand experience and promote a variety of experiences (Hwang et al. 2021), which is vital to differentiating their brand in a hypercompetitive banking industry. In particular, customer experience is driven by technological advances. AI-powered bank services thus add value to the brand experience of conventional banks.

The literature has suggested that AI marketing efforts affect the customer–brand relationship (Nguyen et al. 2021). When AI quality is high, customers tend to be satisfied with AI services. Trivedi (2019) found that if AI can provide timely, accurate, and relevant information to users, they would continue using the technology because of the good experience. Cheng and Jiang (2021) reported that AI



activities directly affected chatbot communication quality, which positively influenced the customer–brand relationship and induced positive customer responses. In the hospitality and tourism context, Hwang et al. (2021) reported that service robots performed well in delivering functional and emotional value, which contributed to positive customer experience. Kim et al. (2021a, b) found that customers had a higher level of satisfaction if they perceived a purchasing activity as enjoyable. The authors found that robot baristas provided a new non-face-to-face service experience to customers, resulting in greater brand love and brand loyalty. Hence, we proposed the following:

H1 AI marketing efforts—that is, interaction (H1a), information (H1b), accessibility (H1c), and customization (H1d)—are positively related to brand experience.

Brand preference

Brand preference is a notion of recent interest to scholars (Vongurai 2020). It refers to a consumer's predisposition toward certain brands, and it summarizes their cognitive information processing of brand stimuli (Li et al. 2021). Consumers' perceptions of brand attributes shape their preferences, which affect their intentions and brand choices. Thus, brand preference is the behavioral tendency reflecting consumers' attitude toward a brand (Ebrahim et al. 2016). Consumers' perceptions of brand attributes thus result in preferences that affect their intentions and brand choices (Bagozzi 1982). Consumers will prefer a particular brand when they have positive feelings toward it (DAM 2020).

Consumers rely on experience to judge alternatives and make choices. They prefer brands that provide a meaningful experience. Through their interactions with brands, consumers shape their preferences and buying decisions (Yasri et al. 2020). Experiences generated during the consumption process can contribute to consumer preference. Thus, brand experience is fundamental for understanding consumers' preferences and future buying decisions. In a study of the mobile phone market in Egypt, Ebrahim et al. (2016) found that brand experience reflected consumers' responses to brand stimuli and was a source of preferences that generated evaluations or judgments of a brand. Yasri et al. (2020) reported a significantly positive relationship between brand experience and brand preference. Thus, we posited the following:

H2 Brand experience is positively related to brand preference.

Brand preference and re-purchase intention

Repurchase intention is a consumer's intention to repeat the behavioral action of buying the brand. As a subjective probability (Can and Erdil 2018), it is the process by which consumers buy products or services again from the same company (Langga et al. 2020). Unlike purchase intention, repurchase intention is formed once buyers have completed the initial transaction, and it can help them make further purchase decisions (Sullivan and Kim 2018). Thus, repurchase intention can be viewed as a consumer's willingness to revisit the brand, taking into account his or her current situation (Sullivan and Kim 2018). Hellier et al. (2003) suggested that brand preference drives consumers' repurchase behavior. Consumers' decisions to repurchase a brand and repeat their experience will not occur unless they have a good predisposition toward the brand (Kim et al. 2021a, b). Yasri et al. (2020) found that brand preference reflected information processing, which affected consumers' decision to purchase the product. Hellier et al. (2003) suggested that consumer repurchase intentions reflected consumers' intentions toward brand repurchase. Empirically, Ebrahim et al. (2016) showed that brand preference positively affected repurchase intention. Thus, we proposed the following:

H3 Brand preference is positively related to repurchase intention.

Brand experience and repurchase intention

Consumers' brand experience is the first step in a purchase as well as in any repurchase because of the vivid experiences and memories associated with the brand purchase. Studies have highlighted the positive relationship between brand experiences and repurchase intention (Amoroso et al. 2021; Safeer et al. 2021). A survey conducted in China about the impact of brand experience on loyalty to global brands suggested that perceived brand experience directly influenced repurchase intention (Safeer et al. 2021). Research on Italian youth indicated that the more satisfying the consumer experience, the more likely consumers were to renew their Netflix subscriptions (i.e. repurchase intention) (Amoroso et al. 2021). Diallo and Siqueira (2017) confirmed that prior positive brand experience directly affected consumer purchase intention. These findings indicate that the outcomes of brand experience could increase consumer behavior intention and that positive brand experience could affect repurchase intention. We therefore proposed the following:

H4 Brand experience is positively related to re-purchase intention.



Mediating role of brand experience

In the banking literature, the mediating effect of brand experience between AI marketing efforts and brand preference has rarely been explored. In a study of the retail industry in the United States, Cheng and Jiang (2021) confirmed that chatbot communication quality enhanced customer experience, which mediated the relationship between AI marketing efforts and customer preference. In a study of luxury brands, Zollo et al. (2020) reported that brand experience played a mediating role in the relationship between digital marketing activities (interaction, trendiness, customization, entertainment) and brand preference among millennials. Chen and Qasim (2021) validated the mediating role of e-brand experience in the relationship between digital marketing efforts and brand preference. These results show that the significantly positive effect of digital marketing efforts on brand preference occurred through brand experience.

There have also been few studies of the mediation effect of brand experience between AI marketing efforts and repurchase intention. Cheng and Jiang (2021) suggested that chatbot marketing efforts enhanced customer experience, which plays a mediating role in the relationship between AI marketing efforts and purchase intention. In an empirical study of the market in China and Hong Kong, Cheung et al. (2021) reported the mediating effect of customer experience on the digital marketing effort–repurchase intention relationship. Wibowo et al. (2020) confirmed that brand experience mediated the link between social media marketing and purchase intention. As brand experience can act as a mediator, we hypothesized the following:

H5a Brand experience mediates the relationship between AI marketing efforts and brand preference.

H5b Brand experience mediates the relationship between AI marketing efforts and repurchase intention.

The proposed research model and hypotheses are presented in Fig. 1.

Research method

As a result of digitalization of banking business, customers are developing higher expectations of products and services. Banking customers prefer more personalized and relevant information and tools (HKMA 2019). As such, banks are using AI which can provide 24/7 personalized customer services (accessibility and customization) and recommend suitable financial services and products (interaction and information). Thus, banking industry in Hong Kong provides a useful backdrop for the examination of AI-branding interactions. The target respondents of this research were Generation Z. Although definitions of Gen Z are not clear, as similar traits may occur at the transitions between two generations, most academics have agreed that Gen Z is the demographic cohort born in the mid- to late 1990s (Vitezić and Perić 2021). Members of this generation have grown up in a digital world and have been exposed to an unprecedented amount of technology in their upbringing. Gen Z are digital natives (Seymour 2019), and they have shown high acceptance and usage of technology, especially AI. The target subjects of this study were 18–30 years old and had AI banking experience.

Fig. 1 A model of artificial intelligence and its effect on brand preference

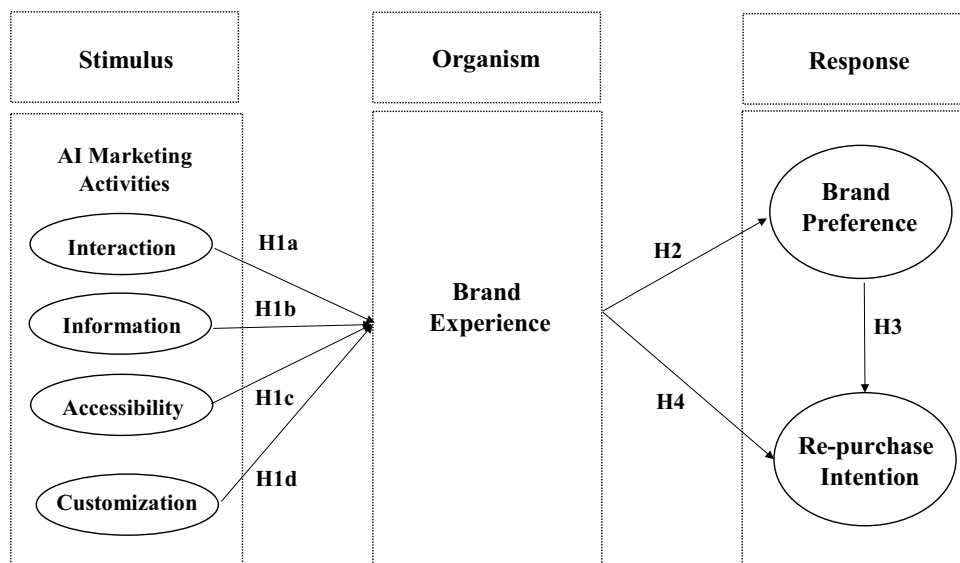


Table 1 Demographic profile of the respondents. ($n = 300$)

Variable	Range	Frequency	Percent
Gender	Male	114	38
	Female	186	62
Age	18–21	53	17.66
	22–25	92	30.67
	26–30	155	51.67
Education	Primary or below	0	0
	Secondary	11	3.67
	Diploma/high diploma/ associate degree/certifi- cates	46	15.34
	Tertiary/University	218	72.67
Occupation	Post-graduate or above	25	8.32
	Professional/consultant	39	13
	Academic	27	9
	Technician/Operator	19	6.33
	Clerical/Administrative	78	26
	Manager/Executive	31	10.34
	Retired	0	0
	Housewife	6	2
	Unemployed	13	4.33
	Student	68	22.67
	Other	19	6.33
Monthly income	HK\$20,000 or below	166	55.34
	HK\$20,001–\$40,000	111	37
	HK\$40,001–\$60,000	19	6.33
	HK\$60,001–\$80,000	4	1.33
	HK\$80,001–\$100,000	0	0
	Over HK\$100,000	0	0

A random sampling method was used in this research. To target the right respondents, a database from a collaborating professional marketing research company was used. The online questionnaire was floated to contacts from this database, and they were told that participation was voluntary. A total of 300 online responses were collected. The IP addresses of each respondent were collected along with their demographic information.

Table 1 shows the demographic information of all of the valid responses received. The sample contained a higher proportion of females (62%) than males. Most of the respondents were 26–30 years old (51.67), 30.67% were 22–25 years old, and 17.66% were 18–21 years old. In terms of education level, 73% of the respondents held an undergraduate degree, and 15% had a diploma/high diploma/associate degree/certificate. The respondents' most common occupations were clerical or administrative (26%), student (23%), and professional/consultant (13%). Over 55% of respondents had a monthly income of HK\$20,000 or below, while 37% had an income between HK\$20,001 and \$40,000.

Measures

The questionnaire consisted of three sections: a screening question, items relating to the constructs, and demographic information. AI marketing efforts, namely interaction, information, accessibility, and customization, were each measured with three to four items adopted from Cheng and Jiang (2021). Brand experience was assessed using five items taken from Trivedi (2019) and Khan et al. (2016). Brand preference was measured with six items adopted from Ebrahim et al. (2016) and Amoako et al. (2017), and repurchase intention was assessed using five items from Herjanto and Amin (2020a, b). To operationalize the constructs, 7-point Likert scales were used, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

A pilot test was conducted with 33 respondents. This test established the reliability of the scales, as the values of Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE) were satisfactory, indicating construct reliability and validity (Fornell and Larcker 1981).

Findings

Measurement model

Smart-PLS 3.3.3 was used to analyze the data because of its rigorous model assessment and appropriateness for testing small sample sizes (Hair et al. 2022). It is also suitable for evaluating complex predictive models that measure the relationships between latent variables with multiple structural paths (Anderson and Gerbing 1988; Hair et al. 2022). To test the reliability of the scales, Cronbach's alpha and CR were applied. As shown in Table 2, the Cronbach's alphas ranged from 0.79 to 0.91, all above the required 0.70 threshold level (Nunnally 1978), while the CR values ranged from 0.88 to 0.93, exceeding the 0.70 threshold required for reliability (Bagozzi and Yi 1988). In addition, convergent validity was assessed by examining the factor loadings and average variance extracted (AVE). All of the factor loadings were above 0.50 (Hair et al. 2022) and demonstrated statistical significance ($p < .001$). The AVEs for all of the constructs were above 0.5, and all of the items exhibited good internal consistency and a high degree of convergence; thus, the reliability and convergent validity of the measurement scales were supported (Fornell and Larcker 1981).

Discriminant validity was assessed following the Fornell and Larcker (1981) criterion, cross-loading criterion, and heterotrait–monotrait (HTMT) ratio. As shown in Table 3, the AVE for each construct was greater than the squared correlations between them (Fornell and Larcker 1981). Applying the cross-loading criterion (Chin 1998), discriminant validity was demonstrated when an item correlated strongly



Table 2 Reliability and validity of the constructs

Construct	Item	Standardized factor loading	Cronbach's Alpha	Composite reliability	Average variance extracted
Interaction	AI is sensitive to customers' needs at the moment	0.818	0.798	0.881	0.712
	AI has the knowledge to answer customers' questions	0.864			
	AI gives customer individual attention	0.849			
Information	AI helps to understand events happening in the bank	0.825	0.793	0.878	0.707
	AI provides recommendations on the banks' products/services	0.845			
	AI provides information that helps my purchasing decision	0.851			
Accessibility	AI gives a more timely response	0.837	0.882	0.918	0.738
	AI is convenient and efficient	0.900			
	AI can deliver efficient digital assistance or information	0.896			
	AI can offer immediate answers anytime and anywhere	0.800			
Customization	I feel that using AI meets my personal needs	0.853	0.875	0.914	0.726
	When I have a problem, AI shows a sincere interest in solving it	0.831			
	AI can handle customer complaints directly and immediately	0.846			
	I have confidence that AI has the ability to get the job done	0.877			
Brand experience	I enjoy using AI of my bank	0.893	0.908	0.933	0.736
	The experience of using AI of my bank was interesting	0.877			
	I am happy with the experience of using AI of my bank	0.907			
	I feel happy when I do transaction via AI in my bank	0.895			
	My bank offers "interactive" AI process	0.702			
Brand preference	My bank is one of the best in the banking industry	0.798	0.905	0.927	0.679
	I am very content with the services of my bank	0.751			
	My bank is highly professional in serving customer needs	0.807			
	I think this brand is superior to other competing brands	0.881			
	This bank is my preferred brand over any other brand	0.849			
	When it comes to making a purchase, this bank is my first preference	0.852			
Re-purchase Intention	I expect my relationship with my banker to continue for a long time	0.825	0.874	0.909	0.668
	I definitely intend to maintain my current relationship with this bank	0.746			
	I am willing to buy more products and/or services from my bank in the future	0.871			
	If my bank requests it, I will be willing to make further investment in supporting my bank	0.750			
	I will purchase from this bank again	0.885			

with the same item but weakly with another item (Table 4). In addition, all of the HTMT values were below 0.90 (Hair et al. 2022); thus, discriminant validity was achieved.

Common method bias

This study adopted several procedures recommended by Podsakoff et al. (2003) to reduce common method bias. First, the measures for the independent variables (i.e. AI marketing efforts) and the dependent variables (i.e. brand experience, brand preference, and repurchase intention) were taken from different sources. Moreover, the respondents were assured of

confidentiality and any potential risk related to their participation in the study. In addition, to test for common method bias, a common latent construct linking all observed items was added to the measurement model. The outcomes indicated that the fit for the measurement model with a common latent construct ($SRMR = 0.07$) was inferior to the measurement model used in this study ($SRMR = 0.061$). The lack of significant method variance verified the absence of common method effects (Podsakoff et al. 2003).



Table 3 Correlations and square root of average variance extracted (diagonal)

	Mean	Std. Deviation	Interaction	Information	Accessibility	Customization	Brand experience	Brand preference	Re-purchase Intention
Interaction	4.43	1.34	.84*						
Information	4.37	1.25	.72*	.84*					
Accessibility	5.00	1.22	.55*	.66*	.86*				
Customization	4.24	1.41	.73*	.68*	.58*	.85*			
Brand experience	4.39	1.26	.66*	.73*	.62*	.80*	.86*		
Brand preference	4.83	1.03	.58*	.55*	.47*	.63*	.63*	.83*	
Re-purchase Intention	4.74	1.06	.31*	.45*	.44*	.41*	.52*	.73*	.82*

*Bold values indicate $p < .001$ **Table 4** Cross loading criterion

	Interaction	Information	Accessibility	Customization	Brand experience	Brand preference	Repurchase intention
Interaction 1	0.818	0.524	0.432	0.578	0.517	0.480	0.233
Interaction 2	0.864	0.658	0.539	0.607	0.575	0.499	0.342
Interaction 3	0.849	0.628	0.408	0.658	0.567	0.480	0.218
Information 1	0.628	0.825	0.583	0.526	0.590	0.454	0.382
Information 2	0.575	0.845	0.586	0.515	0.565	0.455	0.365
Information 3	0.606	0.851	0.496	0.656	0.669	0.477	0.384
Accessibility 1	0.394	0.530	0.837	0.391	0.447	0.327	0.322
Accessibility 2	0.532	0.614	0.900	0.566	0.601	0.433	0.382
Accessibility 3	0.534	0.617	0.896	0.527	0.578	0.468	0.432
Accessibility 4	0.389	0.478	0.800	0.461	0.469	0.370	0.369
Customization 1	0.710	0.642	0.557	0.853	0.723	0.581	0.344
Customization 2	0.567	0.512	0.436	0.831	0.618	0.457	0.296
Customization 3	0.552	0.529	0.439	0.846	0.613	0.488	0.327
Customization 4	0.640	0.613	0.508	0.877	0.750	0.600	0.419
Brand experience 1	0.636	0.650	0.519	0.786	0.893	0.571	0.417
Brand experience 2	0.566	0.608	0.510	0.672	0.877	0.509	0.433
Brand experience 3	0.575	0.669	0.556	0.733	0.907	0.579	0.493
Brand experience 4	0.549	0.646	0.533	0.713	0.895	0.583	0.477
Brand experience 5	0.481	0.535	0.537	0.493	0.702	0.455	0.388
Brand preference 1	0.507	0.469	0.343	0.564	0.586	0.798	0.534
Brand preference 2	0.530	0.482	0.429	0.522	0.456	0.751	0.464
Brand preference 3	0.452	0.467	0.405	0.510	0.504	0.807	0.532
Brand preference 4	0.481	0.473	0.425	0.516	0.528	0.881	0.655
Brand preference 5	0.417	0.375	0.340	0.443	0.465	0.849	0.687
Brand preference 6	0.483	0.468	0.397	0.565	0.575	0.852	0.706
Repurchase Intention 1	0.236	0.328	0.370	0.333	0.409	0.630	0.825
Repurchase Intention 2	0.121	0.268	0.339	0.219	0.298	0.527	0.746
Repurchase Intention 3	0.292	0.411	0.363	0.365	0.480	0.658	0.871
Repurchase Intention 4	0.313	0.389	0.279	0.390	0.405	0.540	0.750
Repurchase Intention 5	0.302	0.424	0.439	0.355	0.491	0.623	0.885

Bold values indicate $p < .001$ 

Table 5 Hypotheses testing results

Relationship	Path coefficients β	T Statistics t	P value	Hypothesis testing
H1a Interaction→Brand experience	− 0.013	0.185	0.853	Reject
H1b Information→Brand experience	0.285	4.598	0	Support***
H1c Accessibility→Brand experience	0.125	2.177	0.03	Support*
H1d Customization→Brand experience	0.544	8.543	0	Support***
H2 Brand experience→Brand preference	0.632	16.936	0	Support***
H3 Brand preference→Repurchase Intention	0.676	13.411	0	Support***
H4 Brand experience→Repurchase Intention	0.087	1.45	0.148	Reject
H5a AI marketing efforts→brand experience→brand preference	0.676	13.99	0	Support***
H5b AI marketing efforts→brand experience→repurchase intention				
R ² (Q ²) for brand experience	0.087	1.477	0.14	Reject
R ² (Q ²) for brand preference				
R ² (Q ²) for repurchase intention	0.710 (0.514)			
	0.399 (0.264)			
	0.540 (0.354)			

* $p < .05$; ** $p < .01$; *** $p < .001$

Structural model

The hypothesized paths in the conceptual framework were estimated using a bootstrapping approach with 5000 resamples in Smart-PLS 3.3.3. The structural model had a standardized root mean residual (SRMR) of 0.061, indicating a good fit between the conceptual model and the observed data. The predictive ability of the hypothesized model was examined using three criteria: the coefficient of determination (R^2), cross-validated redundancy (Q^2), and path coefficients (Hair et al. 2022). As shown in Table 5, the endogenous constructs' predictive power showed substantial R^2 values of 0.710 (brand experience), 0.399 (brand preference), and 0.540 (repurchase intention), which validated the strong predictive power of the model (Hair et al. 2022). A blindfolding approach with an omission distance of seven indicated cross-validated (CV) redundancy, and the Q^2 values ranged from 0.264 to 0.514, which far exceeded the threshold value of zero, confirming the significance and relevance of the structural model relationships (Hair et al. 2022).

The structural model displayed the relationships (paths) between constructs in the proposed study model. H1a proposed that interaction was positively related to brand experience. The results revealed that interaction had an insignificant impact on brand experience ($\beta = -0.013$, $t = 0.185$, $p = .853$). H1b, H1c, and H1d predicted positive relationships between information, accessibility, and customization and brand experience, respectively. The results showed a positive link between information and brand

experience ($\beta = 0.285$, $t = 4.598$, $p < .0001$), accessibility and brand experience ($\beta = 0.125$, $t = 2.177$, $p < .01$), and customization and brand experience ($\beta = 0.544$, $t = 8.543$, $p < .0001$). Thus, H1b, H1c, and H1d were supported. H2, which proposed a positive relationship between brand experience and brand preference, was also supported ($\beta = 0.632$, $t = 16.936$, $p < .0001$). There was a positive link between brand preference and repurchase intention ($\beta = 0.676$, $t = 13.411$, $p < .0001$), supporting H3. However, there was a nonsignificant correlation between brand experience and repurchase intention ($\beta = 0.087$, $t = 1.45$, $p = .148$). H4 was therefore not supported.

Mediation analysis

To perform mediation analysis, we followed Preacher and Hayes's (2008) recommendations and estimated the direct and the indirect effects simultaneously using a bootstrapping procedure (with 5000 sub-samples). The mediating effect test results are shown in Table 6. To test H5a, a direct path from AI marketing efforts (accessibility, customizations, information and interaction) to brand preference was specified. Significant direct path indicates the presence of a partial mediation via brand experience. Then, indirect effects of AI marketing efforts on brand preference (via brand experience) were examined. A significant overall standardized indirect effect of 0.239 ($t = 3.455$, $p < .001$) was found. Therefore, H5a was supported. To test AI–repurchase intention linkage (H5b), an examination of the indirect effects of AI marketing efforts on repurchase intention (via brand experience) was



Table 6 Mediation analysis

Path estimates	Effect	SD	t-value	P value	Mediator
Direct effects					
AI→Brand preference	0.414	0.079	43.796	0	H5a AI marketing efforts→brand experience→brand preference
Indirect effects					
AI→Brand experience	0.823	0.019	43.332	0	
Brand experience→Brand preference	0.290	0.084	3.451	0.001	
Total indirect effects	0.239	0.069	3.455	0	
Total effects	0.653	0.032	20.424	0	
Specific indirect effect	0.239	0.069	3.455	0.001	
Direct effects					
AI→Repurchase intention	− 0.136	0.007	1.946	0.052	H5b AI marketing efforts→brand experience→repurchase intention
Indirect effects					
AI→Brand experience	0.823	0.019	43.332	0	
Brand experience→Repurchase intention	0.182	0.073	2.473	0.103	
Total indirect effects	0.609	0.062	9.817	0.133	
Total effects	0.474	0.048	9.934	0	
Specific indirect effect	0.074	0.049	1.497	0.135	

performed. However, an insignificant overall standardized indirect effect of 0.609 ($t=9.817$, $p<.133$) was found. Thus, brand experience did not mediate the relationship between AI marketing efforts and repurchase intention, and hence, H5b was rejected. In addition, specific indirect effects via each mediated pathway were examined. Through using 5000 iterations to derive 95% bias-corrected confidence intervals, two specific indirect effects were examined. The specific indirect effect via brand experience to brand preference was 0.239 ($p<.001$; 95% CI) and that via brand experience to repurchase intention was 0.074 ($p=.135$; 95% CI). Overall, the presence of a partial mediation suggested that brand experience exerted a significant overall indirect effect on brand preference but an insignificant overall indirect effect on repurchase intention.

Discussion and implications

The findings demonstrate the influence of AI marketing efforts on brand experience, brand preference, and repurchase intention and reinforce the importance of AI marketing efforts in customer–brand interactions in the banking context (Cheng and Jiang 2021; Chung et al. 2020).

First, the findings indicate that interaction did not affect brand experience (H1a), which contradicted the findings in the literature (Cheng and Jiang 2021; Godey et al. 2016). Customers feel the brand is helpful and trustworthy if their interactions with the brand are positive. Because they offer

limited social interaction, AI–customer interactions differ from employee–customer interactions (Huang et al. 2021). To customers, interaction with AI agents is simply interaction with technology or a machine, lacking social or emotional elements (Huang et al. 2021), resulting in a poor customer social experience.

Second, information (H1b), accessibility (H1c), and customization (H1d) showed positive relationships with brand experience, which is consistent with previous studies (Chung et al. 2020). In the banking context, customers prefer receiving up-to-date information about financial trends via AI tools. As AI offers relevant and organized information, customers have positive feelings because they can make informed decisions (Ostmann and Dorobantu 2021). As banks increase their digital offerings, AI accessibility is helping to attract new customers and maintain existing customers (Gaul 2022). As AI marketing efforts rely on mobile apps, they can give customers direct access to services anytime and anywhere. In addition, customized service satisfies individual preferences and builds strong customer–brand relationships and customer loyalty (Capgemini and Efma 2022). AI can send personalized communications to introduce customized products or services to targeted customers. Virtual assistants can provide personalized customer services through direct chats (Mishra 2021). As such, AI customized services provide positive brand experience.



Third, the results indicate the predictive power of brand experience on brand preference (H2), consistent with previous studies (Ebrahim et al. 2016; Yasri et al. 2020). Thus, positive brand experience can strengthen consumers' brand preference. Customers choose a brand mainly based on their experience. A pleasurable experience results in a vivid memory, which induces a preference for the brand and further purchases from it (Ebrahim et al. 2016). In line with the literature (Amoroso et al. 2021; Safeer et al. 2021), the findings also supported the positive relationship between brand preference and repurchase intention (H3). Thus, if consumers like the brand, they will repurchase it. Ultimately, consumers will desire to purchase the brand without thinking rationally about it (Yasri et al. 2020).

Finally, the results do not indicate a relationship between brand experience and repurchase intention (H4) which contradicted the findings in the literature (Anshu et al. 2022; Wasan 2018). Customers having positive experience may not result in repurchase which implies repeat purchase, continuing engagement and relationship with the same suppliers (Curtis et al. 2011). Perhaps customers may buy the product once and use it for a long time without intention to build relationship with the bank, which cannot be considered as repurchase. Amoroso et al. (2021) suggested that positive brand experience might not necessarily induce repurchase intention, as consumers may not feel loyalty toward the brand. As banking services might include investment advisory services, with highly volatile investment performance outcomes, the nature of the services might easily affect trust in the brand (Ho and Wong 2022). A low sense of trust could interfere with a customer's repurchase intention (Amoroso et al. 2021). As such, brand experience did not mediate the relationship between AI marketing efforts and repurchase intention (5b). On the contrary, the findings show that brand experience partially mediated the relationship between AI marketing efforts and brand preference (H5a). This is not surprising, as AI provides a novel customer experience, leading to customer satisfaction and brand preference (Huang et al. 2021).

Theoretical Implications

This study confirms the overall performance of AI as it can successfully create brand preference of retail consumers, which in turn can lead to buying commitment. Thus, this research contributes to marketing and branding literature by providing a holistic framework that demonstrates AI-branding relationships. The findings of this study will be the interest of marketing scholars who can extend this framework to other fields.

This study clarifies the IT paradox, which holds that AI activities are a necessity but may not create a competitive advantage (Hajili et al. 2015; Šeric et al. 2016). Our study

confirms the significant impact of AI marketing efforts (information, accessibility, and customization) on brand experience and brand preference, in addition to the effect of brand preference on repurchase intention. Studies of AI–brand preference are rare; this study sought to fill this gap by explaining the role of AI in customer–brand interactions in the banking services context. Representing 40% of the world population, Gen Z members are different from the general population (Mahmoudabadi and Mollaahmadi 2021), yet little is known about the customer–brand interaction of Gen Z. Thus, this study adds value to the literature related to Gen Z. In addition, this study contributes to the service research by clarifying the predictive power of AI marketing efforts on brand preference (Nguyen et al. 2021) and pinpointing the dimensions of AI marketing efforts that affect brand experience and brand preference. It also provides insights to academics who are interested in understanding the role of AI in consumer behavior and decision making.

In addition, the confirmation of the partial mediation effect of brand experience between AI marketing efforts and brand preference sheds light on how AI marketing efforts predict brand preference and repurchase intention in the banking context, both through their direct effect on brand preference and their indirect effect via brand experience.

Practical implications

This study found that AI marketing efforts had a significant positive effect on brand preference, which in turn induced customer repurchase intention. This result means that AI marketing efforts should not only be thought of as a means to improve customer experience but also as an important brand image building tool (Godey et al. 2016). Banks should prioritize AI brand-building activities to enhance brand attractiveness and boost long-term business performance.

In the era of Banking 4.0, banks should invest more in AI and FinTech (Ho and Wong 2022), not only to attract new customers but also to improve long-term customer relationships. The first-mover advantage is still strong, and banks that hesitate to adopt AI may need to reconsider their investment strategies. The validation of AI marketing efforts is an important indicator of the value of this investment, as this study suggests that customers appreciate AI activities after experiencing their values. It is thus necessary for managers to ensure that AI can deliver efficient, reliable, and accurate banking services (Lin and Mattila 2021). During the global pandemic, when social distancing became a norm, banking policies evolved toward digitalization (Shahid et al. 2022).

Among the four dimensions of AI marketing efforts, only three—information, accessibility, and customization—were found to be relevant to bank consumers. Based on these



findings, AI marketing strategies focus on these three dimensions. Managers can utilize AI to provide tailor-made marketing communications about products or services and bank information to customers in a timely manner. AI agents and assistants should be designed to provide professional customer service and financial advice to fulfill customers' needs. Banking practitioners may also consider improving the interactivity of AI, as this study suggests that the interactive dimensions of AI marketing efforts cannot affect brand preference and repurchase intention. It is therefore necessary to improve the communication skills of AI agents to facilitate human–AI interactions. Social, emotional, empathic, and sympathetic elements can be added to enhance customer experience (Velkowska 2019).

Banks should not just regard AI marketing as a way to reach consumers, but as a cost-effective brand-building tool (Liu and Chen 2021). Big data on customer consumption behaviors can be collected and analyzed efficiently, and personalized service offerings and communications can be delivered. These add value to brand reputation and brand preference.

AI activities influence brand preference through brand experience, but their role is more relevant to brand preference than to repurchase intention. This information means that banks can use AI to improve their relationships with customers, but they should focus on building brand preference before attempting to convince customers to repurchase products or services.

Limitations and future research

This study has several limitations. First, it relies on 300 valid samples collected via online surveys, which may limit our understanding of AI–brand interactions. Future studies can use a larger sample size to improve the generalizability of the findings. Second, this study focuses on the banking sector in Hong Kong. While the results are likely to be useful in the banking context, they can also be applicable to other fields or industries. Future studies could replicate and extend this study to other industries or countries. Third, this study targets Gen Z, so its findings may not reflect the banking behavior of other segments/populations. Future research might target the general banking population. Fourth, this study finds brand experience cannot induce repurchase intention which contradicts the previous literature. Therefore, caution is warranted when replicating this study in other geographical contexts. Further, when AI penetrates the mainstream banking industry, customer experience may change substantially; this suggests the need for longitudinal investigation. Additionally, this research is quantitative in nature; future studies can adopt qualitative or mixed methods for triangulation

purposes. Finally, while generating high response rate (over 31%), the research incentive (US\$1.28) may attract reward seekers who may not take the study honestly and thoughtfully. Future research should pay attention on measures to minimize this risk.

Funding The funding was provided by UOW College Hong Kong.

Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Anderson, J.C., and D.W. Gerbing. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin* 103 (3): 411–423.
- Anshu, K., L. Gaur, and G. Singh. 2022. Impact of customer experience on attitude and repurchase intention in online grocery retailing: A moderation mechanism of value Co-creation. *Journal of Retailing and Consumer Services* 64: 102798.
- Amoako, G.K., P. Anabila, E.A. Effah, and D.K. Kumi. 2017. Mediation role of brand preference on bank advertising and customer loyalty: A developing country perspective. *International Journal of Bank Marketing* 35 (6): 983–996.
- Amoroso, S., S. Pattuglia, and I. Khan. 2021. Do Millennials share similar perceptions of brand experience? A clusterization based on brand experience and other brand-related constructs: The case of Netflix. *Journal of Marketing Analytics* 9 (1): 33–43.
- Bagozzi, R.P. 1982. A field investigation of causal relations among cognitions, affect, intentions, and behavior. *Journal of Marketing Research* 19 (4): 562–583.
- Bagozzi, R.P., and Y. Yi. 1988. On the evaluation of structural equation models. *Journal of Academy of Marketing Science* 16 (1): 74–79.
- Biswas, S., Carson, B., and Chung, V. 2020. AI-bank of the future: Can banks meet AI challenge. <https://www.mckinsey.com/industries/financial-services/our-insights/ai-bank-of-the-future-can-banks-meet-the-ai-challenge>
- Bock, D.E., J.S. Wolter, and O. Ferrell. 2020. Artificial intelligence: Disrupting what we know about services. *The Journal of Services Marketing* 34 (3): 317–334.
- Brakus, J.J., B.H. Schmitt, and L. Zarantonello. 2009. Brand experience: what is it? How is it measured? Does it affect loyalty? *Journal of Marketing* 73 (3): 52–68.
- Can, Y., and O. Erdil. 2018. Determining antecedent of re-purchase intention: The role of perceived value and consumer's interest factor. *International Business Research* 11 (4): 17–31.
- Capgemini and Efma (2022). World Retail Banking Report 2022. www.worldretailbankingreport.com
- Castillo, D., A.I. Canhoto, and E. Said. 2021. The dark side of AI-powered service interactions: Exploring the process of co-destruction from the customer perspective. *The Service Industries Journal* 41 (13–14): 900–925. <https://doi.org/10.1080/02642069.2020.1787993>.
- Chen, H., S. Chan-Olmsted, J. Kim, and I. Mayor Sanabria. 2022. Consumers' perception on artificial intelligence applications in marketing communication. *Qualitative Market Research* 25 (1): 125–142.
- Chen, X., and H. Qasim. 2021. Does E-Brand experience matter in the consumer market? Explaining the impact of social media



- marketing activities on consumer-based brand equity and love. *Journal of Consumer Behavior* 20 (5): 1065–1077.
- Cheng, Y., and Jiang, H. (2021). Customer–brand relationship in the era of artificial intelligence: understanding the role of chatbot marketing efforts. *The Journal of Product & Brand Management*, ahead-of-print (ahead-of-print).
- Cheung, M.L., G.D. Pires, P.J. Rosenberger III., W.K. Leung, and H. Ting. 2021. Investigating the role of social media marketing on value co-creation and engagement: An empirical study in China and Hong Kong. *Australasian Marketing Journal* 29 (2): 118–131.
- Chin, W.W. 1998. The partial least squares approach to structural equation modelling. In *Modern methods for business research*. G.A. Marcoulides ed. M. L. Erlbaum: pp. 295–358.
- Chung, M., E. Ko, H. Joung, and S.J. Kim. 2020. Chatbot e-service and customer satisfaction regarding luxury brands. *Journal of Business Research* 117: 587–595.
- Curtis, T., R. Abratt, D. Rhoades, and P. Dion. 2011. Customer loyalty, repurchase and satisfaction: A meta-analytical review. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior* 24: 1–26.
- DAM, T. C. 2020. Influence of brand trust, perceived value on brand preference and purchase intention. *The Journal of Asian Finance, Economics, and Business*, 7(10): 939–947.
- Diallo, M. F., and Siqueira Jr, J. R. 2017. How previous positive experiences with store brands affect purchase intention in emerging countries: A comparison between Brazil and Colombia. *International Marketing Review*.
- Ebrahim, R., A. Ghoneim, Z. Irani, and Y. Fan. 2016. A brand preference and repurchase intention model: The role of consumer experience. *Journal of Marketing Management* 32 (13–14): 1230–1259.
- Fan, H., B. Han, and W. Gao. 2022. (Im) Balanced customer-oriented behaviors and AI chatbots' Efficiency-Flexibility performance: The moderating role of customers' rational choices. *Journal of Retailing and Consumer Services* 66: 102937.
- Fornell, C., and D.F. Larcker. 1981. Evaluation structural equality models with unobserved variables and measurement error. *Journal of Marketing Research* 18 (1): 39–50.
- Gaul, J. 2022. Digital accessibility: Moving from the compliance checklist to an inclusive user experience. *American Bankers Association. ABA Banking Journal* 114 (2): 37–38.
- Godey, B., A. Manthiou, D. Pederzoli, J. Rokka, G. Aiello, R. Donvito, and R. Singh. 2016. Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of Business Research* 69 (12): 5833–5841.
- Hajli, M., Sims, J. M., and Ibragimov, V. 2015. Information technology (IT) productivity paradox in the 21st century. *International Journal of Productivity and Performance Management*.
- Hair, J.F., G.T.M. Hult, C.M. Ringle, and M. Sarstedt. 2022. *A primer on partial least squares structural equation modeling (PLS-SEM)*, 3rd ed. Thousand Oaks, CA.: Sage Publications Inc.
- Herjanto, H., and M. Amin. 2020a. Repurchase intention: The effect of similarity and client knowledge. *International Journal of Bank Marketing* 38 (6): 1351–1371.
- Hellier, P.K., G.M. Geursen, R.A. Carr, and J.A. Rickard. 2003. Customer repurchase intention: A general structural equation model. *European Journal of Marketing* 37 (11/12): 1762–1800.
- Herjanto, H., & Amin, M. 2020b. Repurchase intention: the effect of similarity and client knowledge. *International Journal of Bank Marketing*.
- Ho, S. P. S., and Wong, A. 2022. The role of customer personality in premium banking services. *Journal of Financial Services Marketing*, 1–21.
- Hong Kong Monetary Authority 2019. Reshaping Banking with Artificial Intelligence. https://www.hkma.gov.hk/media/eng/doc/key-functions/financial-infrastructure/Whitepaper_on_AI.pdf
- Hong Kong Monetary Authority 2021. The HKMA unveils “Fintech 2025” Strategy. <https://www.hkma.gov.hk/eng/news-and-media/speeches/2021/06/20210608-3/>
- Hong Kong Monetary Authority 2022. Hong Kong Economic Summit 2022, <https://www.hkma.gov.hk/chi/news-and-media/speeches/2021/12/20211206-1/>
- Hwang, J., J.Y.J. Choe, H.M. Kim, and J.J. Kim. 2021. Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty? *International Journal of Hospitality Management* 99: 103050.
- Huang, D., Q. Chen, J. Huang, S. Kong, and Z. Li. 2021. Customer-robot interactions: Understanding customer experience with service robots. *International Journal of Hospitality Management* 99: 103078.
- Islam, J. U., Shahid, S., Rasool, A., Rahman, Z., Khan, I., and Rather, R. A. 2020. Impact of website attributes on customer engagement in banking: a solicitation of stimulus-organism-response theory. *International Journal of Bank Marketing*.
- Kim, J., H. Ji, S. Oh, S. Hwang, E. Park, and A.P. del Pobil. 2021a. A deep hybrid learning model for customer repurchase behavior. *Journal of Retailing and Consumer Services* 59: 102381.
- Kim, M.J., C.K. Lee, and T. Jung. 2020. Exploring consumer behavior in virtual reality tourism using an extended stimulus-organism-response model. *Journal of Travel Research* 59 (1): 69–89.
- Kim, Y.J., J.S. Park, and H.M. Jeon. 2021b. Experiential value, satisfaction, brand love, and brand loyalty toward robot barista coffee shop: The moderating effect of generation. *Sustainability* 13 (21): 12029.
- Khan, I., Z. Rahman, and M. Fatma. 2016. The concept of online corporate brand experience: An empirical assessment. *Marketing Intelligence & Planning* 34 (5): 711–730.
- Kumar, Rajan B., R. Venkatesan, and J. Lecinski. 2019. Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review* 61 (4): 135–155.
- Langga, A., Kusumawati, A., and Alhabsji, T. 2020. Intensive distribution and sales promotion for improving customer-based brand equity (CBBE), re-purchase intention and word-of-mouth (WOM). *Journal of Economic and Administrative Sciences*.
- Li, M., Y. Hua, and J. Zhu. 2021. From interactivity to brand preference: The role of social comparison and perceived value in a virtual brand community. *Sustainability* 13 (2): 625.
- Libai, B., Y. Bart, S. Gensler, C.F. Hofacker, A. Kaplan, K. Kösterheinh, and E.B. Kroll. 2020. Brave new world? On AI and the management of customer relationships. *Journal of Interactive Marketing* 51: 44–56.
- Lin, I.Y., and A.S. Mattila. 2021. The value of service robots from the hotel guest's perspective: A mixed-method approach. *International Journal of Hospitality Management* 94: 102876.
- Liu, Y., and Chen, W. 2021. Optimization of brand marketing strategy of intelligent technology under the background of artificial intelligence. *Mobile Information Systems*, 2021.
- Mahmoudabadi, E., and Mollaahmadi, E. 2021. Investigating the Behavior of Generation Z Customers in Online Banking Services (Case Study of a Bank of Iran). *Proceedings of International Conference on Computer Engineering and Knowledge (ICCKE); October 2021. IEEE.*
- Mishra, A. S. 2021. Exploring COBRAs, its antecedents and consequences in the context of banking brands. *International Journal of Bank Marketing*.
- Nguyen, T., S. Quach, and P. Thaichon. 2021. The effect of AI quality on customer experience and brand relationship. *Journal of Consumer Behavior*. <https://doi.org/10.1002/cb.1974>.
- Nunnally, J.C. 1978 *Assessment of Reliability*. In: *Psychometric Theory*. 2nd ed. New York: McGraw-Hill.
- Ostmann, F., and Dorobantu, C. 2021. AI in financial services. *Alan Turing Institute*. 10.



- Park, H.J., and Y. Zhang. 2022. Technology readiness and technology paradox of unmanned convenience store users. *Journal of Retailing and Consumer Services* 65: 102523.
- Podsakoff, P.M., S.B. MacKenzie, J.Y. Lee, and N.P. Podsakoff. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88 (5): 879–903.
- Preacher, K.J., and A.F. Hayes. 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods* 40: 879–891.
- PwC 2019. Virtual Banking: Customers Take Charge – Are You Ready? <https://www.pwchk.com/en/financial-services/publications/2019-digital-banking-customer-survey.pdf>
- Roberts-Lombard, M., and Petzer, D. J. 2021. Relationship marketing: an S–O–R perspective emphasising the importance of trust in retail banking. *International Journal of Bank Marketing*.
- Rodrigues, L.F., A. Oliveira, and C.J. Costa. 2016. Does ease-of-use contributes to the perception of enjoyment? A case of gamification in e-banking. *Computers in Human Behavior* 61: 114–126.
- Sadek, H., Redding, P., and Tantawi, P. 2015. Investigating the major marketing communication tools and their impact on building bank brand equity in the Egyptian context A customer perspective. *Journal of Business and Retail Management Research*, 10(1).
- Safeer, A.A., H. Yuanqiong, M. Abrar, R. Shabbir, and H.M.W. Rasheed. 2021. Role of brand experience in predicting consumer loyalty. *Marketing Intelligence & Planning* 39 (8): 1042–1057.
- Šeric, M., Gil-Saura, I., and Mollá-Descals, A. 2016. Can advanced technology affect customer-based brand equity in service firms? An empirical study in upscale hotels. *Journal of Service Theory and Practice*.
- Seymour, E. 2019. Gen Z: Born to be digital. https://www.voanews.com/a/student-union_gen-z-born-be-digital/6174519.html
- Shahid, S., J.U. Islam, S. Malik, and U. Hasan. 2022. Examining consumer experience in using m-banking apps: A study of its antecedents and outcomes. *Journal of Retailing and Consumer Services* 65: 102870.
- Sultan, P., and H.Y. Wong. 2019. How service quality affects university brand performance, university brand image and behavioural intention: The mediating effects of satisfaction and trust and moderating roles of gender and study mode. *Journal of Brand Management* 26 (3): 332–347.
- Sullivan, Y.W., and D.J. Kim. 2018. Assessing the effects of consumers' product evaluations and trust on repurchase intention in e-commerce environments. *International Journal of Information Management* 39: 199–219.
- Trivedi, J. 2019. Examining the customer experience of using banking chatbots and its impact on brand love: The moderating role of perceived risk. *Journal of Internet Commerce* 18 (1): 91–111.
- Velkovska, J. 2019. When an emotional robot meets real customers Exploring HRI in a customer relationship setting. *Mensch und Computer 2019-Workshopband*.
- Vlačić, B., L. Corbo, S.C. Silva, and M. Dabić. 2021. The evolving role of artificial intelligence in marketing: A review and research agenda. *Journal of Business Research* 128: 187–203.
- Vitezić, V., and M. Perić. 2021. Artificial intelligence acceptance in services: Connecting with Generation Z. *The Service Industries Journal* 41 (13–14): 926–946.
- Vongurai, R. 2020. Factors affecting customer brand preference toward electric vehicle in Bangkok, Thailand. *Journal of Asian Finance, Economics and Business* 7 (8): 383–393.
- Wasan, P. 2018. Predicting customer experience and discretionary behaviors of bank customers in India. *International Journal of Bank Marketing* 36 (4): 701–725.
- West, A., J. Clifford, and D. Atkinson. 2018. “Alexa, build me a brand” An Investigation into the impact of Artificial Intelligence on Branding. *The Business & Management Review* 9 (3): 321–330.
- Wibowo, A., S.C. Chen, U. Wiangin, Y. Ma, and A. Ruangkanjanases. 2020. Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience. *Sustainability* 13 (1): 189.
- Wu, S., I.A. Wong, and Z.C. Lin. 2021. Understanding the role of atmospheric cues of travel apps: A synthesis between media richness and stimulus–organism–response theory. *Journal of Hospitality and Tourism Management* 49: 226–234.
- Yasin, M., F. Liébana-Cabanillas, L. Porcu, and R.N. Kayed. 2020. The role of customer online brand experience in customers' intention to forward online company-generated content: The case of the Islamic online banking sector in Palestine. *Journal of Retailing and Consumer Services* 52: 101902.
- Yasri, Y., P. Susanto, M.E. Hoque, and M.A. Gusti. 2020. Price perception and price appearance on repurchase intention of Gen Y: Do brand experience and brand preference mediate? *Heliyon* 6 (11): 05532.
- Zollo, L., R. Filieri, R. Rialti, and S. Yoon. 2020. Unpacking the relationship between social media marketing and brand equity: The mediating role of consumers' benefits and experience. *Journal of Business Research* 117: 256–267.
- Zhu, B., Kowatthanakul, S., and Satanasavapak, P. 2019. Generation Y consumer online repurchase intention in Bangkok: Based on Stimulus-Organism-Response (SOR) model. *International Journal of Retail & Distribution Management*.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.

Dr. Shirie Pui Shan Ho is an Assistant Professor at the UOW College Hong Kong, part of the global network of the University of Wollongong (UOW), Australia. She holds a Master of Financial Management from University of London and a DBA from GlobalNxt University, Malaysia. Her research interests include bank marketing, relationship management and financial markets.

Dr. Matthew Yau Choi Chow is Lecturer at Hong Kong Community College. He obtained Doctor of Business Administration from the University of Newcastle, Australia. He has written academic articles, and his research findings have been published in books, conference proceedings and journals. His current research interests include knowledge management, business strategy and finance, etc.

