Examining the role of consumer motivations to use voice assistants for fashion shopping: The mediating role of awe experience and eWOM

Pradeep Kautish [a], Sonal Purohit [b], Raffaele Filieri [c], Yogesh K. Dwivedi [d,e,*]

[a] *Department of Marketing, Institute of Management, Nirma University, Ahmedabad, Gujarat, India*
[b] *Mudra Institute of Communications, Ahmedabad, Gujarat, India*
[c] *Audencia Business School, Department of Marketing, 8 Route de la Jonelière, 44312, Nantes, France*
[d] *Digital Futures for Sustainable Business & Society Research Group, School of Management, Swansea University, Bay Campus, Fabian Bay, Swansea SA1 8EN, Wales, UK*
[e] *Department of Management, Symbiosis Institute of Business Management, Pune & Symbiosis International (Deemed University), Pune, Maharashtra, India*

ARTICLE INFO

ABSTRACT

Artificial intelligence-enabled voice assistant services have received notable scholarly attention. Fashion retailers offer AI-based voice assistants to facilitate online shoppers. However, the consumer motivations to use digital voice assistants and their effect on the purchase intentions of online fashion shoppers are unexplored. To bridge this literature gap, this study presents a unique theoretical model grounded in the consumer innovativeness concept, broaden-and-built theory, and stimulus-organism-response model to explore the effect of motivated consumer innovativeness to use digital voice assistants on purchase intention and awe experience of online shoppers. The study used data collected from 538 users of digital voice assistants for online shopping of fashion products. Structural equation modeling analysis revealed that the functional, hedonic, social, and cognitive motivated consumer innovativeness for using voice assistants affects purchase intention and awe experience. Further, the awe experience mediates the relationship between motivated consumer innovativeness and purchase intention; and electronic word-of-mouth mediates the relationship between awe experience and purchase intention. The study theoretically contributes to the extant literature on consumer innovativeness, AI-based voice assistants, and fashion shopping. The findings offer insights to fashion retailers for improved use of voice assistants by online shoppers.

1. Introduction

Smart speakers are the fastest-growing consumer technology since the smartphone (Simms, 2019), and online shoppers increasingly use artificial intelligence (AI) enabled e-tail services such as voice assistants, augmented, virtual, or mixed reality (Aw et al., 2022; Barhorst et al., 2021; Grewal et al., 2017; Rabassa et al., 2022) to make purchases. The use of VAs in the US is expected to grow up to 130 million users by 2025 (Statista, 2022), presenting an enormous opportunity to many retailers. The use of voice assistants (VA), such as Alexa, Google, and Siri, has substantially evolved to become a common choice for online shopping activities (Brill et al., 2019; Fernandes and Oliveira, 2021; Singh, 2022).

Hoy (2018, p.1) defined VAs as "the software agents that run on purpose-built speaker devices or smartphones". VAs respond to voice-based user requests utilizing natural language processing in real time. In the digital fashion retailing context, several companies have introduced voice-based shopping assistants (Kautish and Rai, 2019). For example, the British retailer ASOS launched virtual assistants to help customers find the right size and choose the right holiday gift, whereas Japanese retail clothing 'Uniqlo' partnered with Google to offer a conversational agent that assists customers in searching for products and recommendations. Many luxury fashion retailers such as Burberry, Louis Vuitton, Prada, and Tommy Hilfiger also offer AI-based shopping assistants (Chung et al., 2020) positing the growing importance of such technologies for fashion shopping.

The intuitive interface, convenient installation, learning, and intelligent capabilities through voice control of AI-enabled technology have made voice assistants a convenient choice for online shoppers. VA can

---

* Corresponding author at: Digital Futures for Sustainable Business & Society Research Group, School of Management, Swansea University, Bay Campus, Fabian Bay, Swansea SA1 8EN, Wales, UK.
E-mail addresses: pradeep.kautish@nirmauni.ac.in (P. Kautish), sonal.purohit@micamail.in (S. Purohit), raffaele.filieri@audencia.com (R. Filieri), y.k.dwivedi@swansea.ac.uk (Y.K. Dwivedi).

handle complex requests and establish interaction with customers (Lucia-Palacios and Pérez-López, 2021; McLean and Osei-Frimpong, 2019), thus gaining popularity among online shoppers. For fashion shoppers, it provides a quick, personalized, and precise shopping experience that is interactive (Kautish et al., 2022). Scholars have posited that the VA technology research is timely and deserves scholarly attention (McLean et al., 2021) and they have adopted technology adoption models to investigate the determinants of users' adoption of VAs in service encounters (Fernandes and Oliveira, 2021), continued use (e.g., Jain et al., 2022), their impact on consumer engagement and loyalty (Moriuchi, 2019), and customer satisfaction (Chung et al., 2020). However, these studies were not specific to fashion shoppers. Few authors confirmed the use of VA for fashion shopping (e.g., Morotti et al., 2022; Speicher, 2018) but their works do not inform about the motivations to use VA technology for fashion shopping.

The use of VAs for purchase activities is slow and limited among consumers (Vlačić et al., 2021). Hence, it is important to understand the motivations for the use of VAs that trigger the purchase of fashion products. Past studies drew a link between innovativeness and adoption. But this link was found to be weak demanding future research (Esfahani and Reynolds, 2021). Several authors recommended probing the motivational goals underlying the adoption of an innovation (e.g., Rogers, 2003) positing it a more powerful explanation of the adoption decisions (Kautish and Sharma, 2018). The role of functional, hedonic, social, and cognitive motivations in using innovative products was established by a few authors (Li et al., 2015; Vandecasteele and Geuens, 2010). Specifically, Vandecasteele and Geuens (2010) developed the motivated consumer innovativeness (MCI) scale to measure consumers' motivation to use innovative products or services. Only a few studies have examined the motivated consumer innovativeness concerning innovative technology use (e.g., Esfahani and Reynolds, 2021). But its effect on the purchase intention of online fashion shoppers is not known. Broadly, despite the importance of examining the underlying motivations for use of AI-enabled technologies for fashion shopping, little is known about this relationship particularly in the VA context (Table 1), positing a research gap.

Furthermore, consumer emotional experiences are important in technology-related fields (Venkatesh, 2000). For instance, scholars have shown that consumers' positive emotional reaction to service robot encounters fosters acceptance (Filieri et al., 2022). The feeling of awe or the so-called 'wow effect' is an advanced emotional state that can inspire individuals to use innovative technologies such as virtual reality (Hinsch et al., 2020; Quesnel and Riecke, 2018). An understanding of positive emotional experiences like awe is important in marketing research (Bagozzi et al., 1999; Xi and Hamari, 2021). Companies such as Apple try hard to induce awe in their products and hence the construct holds major importance among marketers (Guo et al., 2018). Marketers can use the awe experience to develop effective promotion (Kim et al., 2021) and induce behavioral intention (Septianto et al., 2020) for fashion shopping (Kautish et al., 2022). However, the role of awe for VA adoption for shopping in retail settings is yet to be investigated.

Finally, scholars have emphasized the relevance of electronic word-of-mouth (eWOM) on consumer purchase decisions (Filieri, 2015). Consumers increasingly search and use online reviews before purchasing a variety of products; eWOM features like review volume and valence have a significant effect on new product sales (Chung et al., 2020) making it highly relevant from a marketing perspective. Hence, we have added eWOM to our model as an important determinant of new technology adoption (Cheung et al., 2021) for fashion shopping.

As mentioned, the motivations to use AI-enabled VA technology for fashion purchase is now known positing a critical research gap. For this purpose, the current study, grounded in the consumer innovativeness concept, broaden-and-build theory (B&BT), and stimulus-organism-response (SOR) model, examines the influence of motivated consumer innovativeness (MCI) to purchase fashion products through VA technologies considering the mediation of eWOM and awe experience (Fig. 1). The model measures the effect of the four (functional, hedonic, social, and cognitive) MCI factors (stimulus) on awe experience (organism) with eWOM and purchase intention (response). Awe experience is, in turn, proposed to influence eWOM and consumer purchase

Table 1
AI-enabled service research.

| Author(s)	AI-enabled technology	Theoretical support	Contextualization	Findings
Chirico et al. (2018)	Virtual reality	Awe (perceived vastness and need for accommodation)	3D virtual environment	Positive and negative affect
Quesnel and Riecke (2018)	Virtual reality	Awe (perceived vastness and need for accommodation)	Experimentation	Aesthetics, familiarity and personalization
Aeschalimann et al. (2020)	Voice assistants	Pro-social behavior	Smartphone apps	Information and interaction partners
Hinsch et al. (2020)	Augmented reality	Awe and wow effect	Lego Playgrounds app	Nostalgia, wow, inspiration and app/brand congruence
Ameen et al. (2021)	Virtual artist applications	Trust-commitment theory	Skin shade-matching	AI-enabled customer experience
Barhorst et al. (2021)	Augmented reality	Flow theory	Experimental study	Satisfaction with augmented reality
Fernandes and Oliveira (2021)	Digital voice assistants	Service robot acceptance model	Automated service encounters	Acceptance
Hasan et al. (2021)	Voice-controlled artificial intelligence	Technology acceptance model, Unified theory of acceptance and use of technology	Siri with iphone	Brand loyalty
Perez-Vega et al. (2021)	Human-artificial intelligence system	Stimuli-organism-response theory	Sentiment analysis	Automated firm response and manual firm response
Ramadan (2021)	Chatbots and interactive voice assistants	Anthropomorphism and self-expressive benefits	Amazon's Alexa	Artificial intelligence addiction
Soderlund et al. (2021)	AI-powered virtual agents	Affect	Experimental study	Perceived happiness
Balakrishnan et al. (2023)	AI-powered voice assistants	Dual factor theory, technology acceptance model, theory of status quo bias	Psychological commitment, cognitive misperception and rational decision making	Attitude and resistance
Cheng and Jiang (2022)	Chatbots	Customer-brand relationship	Chatbots satisfaction, trust, commitment and loyalty	Brand preference and purchase intention
Jain et al. (2022)	Interactive voice assistants	Uses and gratification, Signaling and prospect theory	Voice assistants adoption	Perceived value and continued usage intention
Marikyan et al. (2022)	Digital assistants	Unified theory of acceptance and use of technology	Satisfaction with digital assistants	Engagement and productivity
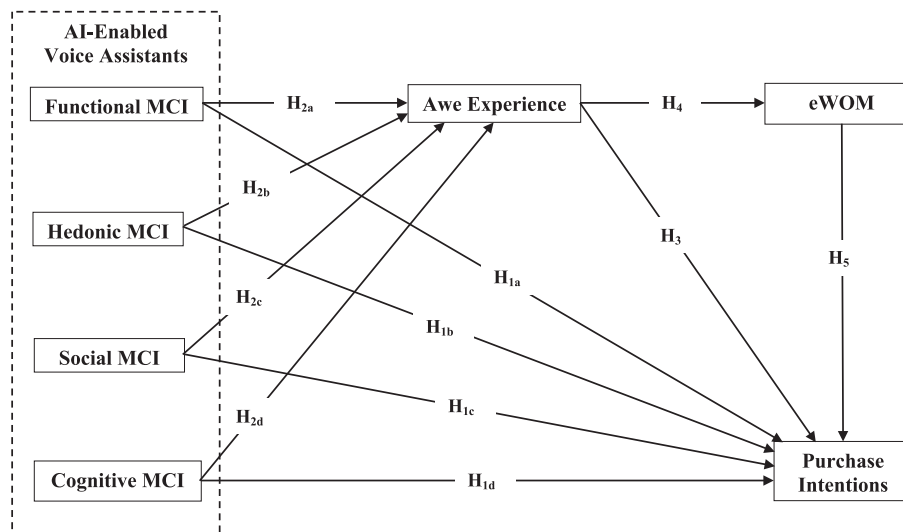
Fig. 1. Hypothesized model.

intention. The proposed research questions (RQs) are as follows: *Do functional, hedonic, social, and cognitive motivations for VA use influence purchase intention through VAs and awe experience? Do awe and eWOM influence online shoppers' intention purchase to through VAs?*

The study makes some important theoretical contributions to the literature. First, we provide an understanding of the consumer motivations to use VA technology for the purchase of fashion shopping products for the first time to our best knowledge. Developing a comprehensive model based on the consumer innovativeness concept and broaden-and-build theory provides insights into the motivated consumer innovativeness for AI-enabled VA use and their effect on purchase intention and awe experience among online shoppers. Thus, we add to the scant literature on VA use in fashion shopping (Morotti et al., 2022; Speicher, 2018). This understanding adds to the consumer behavior theory and assists practitioners in making informed decisions on product design and communication strategy effectiveness (Hinsch et al., 2020; Septianto et al., 2020). Centering on the critical role of consumer innovativeness in technology adoption (Li et al., 2015; Vandecasteele and Geuens, 2010) we apply the concept to the VA and fashion shopping context and thus offer important theoretical insights. Marketers have admitted awe experience as a significant component of their strategy. However, the association of awe with consumer behavior has been scantly established in research (Guo et al., 2018). Considering the importance of emotional experiences in technology-related fields (Venkatesh, 2000), the introduction of awe experience to the VA and fashion shopping literature offers new theoretical insights. Furthermore, the significance of eWOM behaviors as a crucial theoretical construct for innovative technologies cannot be denied (Cheung et al., 2021). Thus, this study provides insights into the eWOM behaviors in the innovative AI-enabled VA technology for fashion shopping. This discussion also responds to the call for research to explore the convergence of artificial intelligence technology and marketing (Vlačić et al., 2021). Fashion marketers can use the findings to provide a positive user experience through VA based on consumer motivations that can trigger purchase intentions, awe experience, and eWOM behaviors among online fashion shoppers.

2. Theoretical background

2.1. Motivated consumer innovativeness (MCI)

Consumer innovativeness theory proposes that innovative consumers have a higher propensity to use innovative technologies (Midgley and Dowling, 1978). The consumer innovativeness concept has been often applied to the literature on the diffusion of innovation (Roehrich,

2004). Innovative consumers are often attracted by new technologies demonstrating innovative behaviors for a need for uniqueness (Hwang et al., 2019). The term 'motivated consumer innovativeness' originated from two marketing notions, i.e., consumer motivation and innovativeness and indicates the range of consumers' motivation to use innovative products or services. Roger's (2003) diffusion of innovation theory proposed the role of consumer innovativeness in the use of a product. This innovativeness is influenced by the consumer's characteristics such as motivational factors (Esfahani and Reynolds, 2021). Various authors studied motivational factors to comprehend a deeper understanding of consumer behavior (e.g., Guttentag et al., 2018; Rezvani et al., 2018). Vandecasteele and Geuens (2010) pointed out that the consensus among authors agreed that motivational factors serve as a source of consumer innovativeness and developed a multidimensional consumer innovativeness scale that passed content and predictive validity tests. This consumer innovativeness scale (MCIs) considers that individuals are motivated by functional, hedonic, social, and cognitive motivations to adopt a product or service innovation. Vandecasteele and Geuens (2010) claimed that each MCI dimension could predict consumers' buying intentions. AI-enabled VA has emerged as an innovative technology that facilitates voice-based product shopping. AI-enabled voice assistants offer unique perspectives, and consumers may be driven to use them for shopping or purchase activities for functional, hedonic, social, or cognitive reasons. However, this relationship is yet to be explored for VA technology in retail settings.

2.2. Awe experience

The awe or wow effect is positive emotion manifested in the feeling of amazement and wonder (Griskevicius et al., 2010; Kautish and Khare, 2022). Positive emotions (i.e., awe) play an important role in explaining acceptance of various AI-enabled fields, such as virtual reality and augmented reality (Chirico et al., 2018; Chirico and Gaggioli, 2019; Quesnel and Riecke, 2018; Yaden et al., 2018). Virtual technology-driven automation in any form (e.g., artificial intelligence, voice assistant, virtual reality, mixed reality) is assumed to be imbued with the concept of the real mind which is capable of exerting wisdom and emotions. Awe generates the motivation to play, and push the creative limits that are evident not only in social and physical behavior but also in innovative and intellectually motivating behavior (e.g., eWOM). Russell and Norvig (2016) described AI-enabled systems into two dimensions: first, human reasoning-behavior (a system that thinks like humans and acts like humans), and second, human performance-rationality (a system that thinks and acts rationally). With the fine

blend of both dimensions, AI-enabled services are reshaping and transforming customer experiences through emotions (Huang et al., 2019) such as awe.

2.3. Broaden-and-build theory

The broaden-and-build theory (hereafter B&BT) is a fundamental and widely known model to capture the unique properties of positive emotions better (Fredrickson, 2001) because individuals' positive emotions seem to *broaden* momentary thought-action repertoires and *build* continuing personal resources. The B&BT theory asserts that positive emotions forge the social, intellectual, and physical resources that inspire action-taking. According to the B&BT standpoint (Fredrickson, 2001), certain moments in individual's lives are characterized by experiences of positive emotions, e.g., awe, interest, joy, love, and contentment that produce flourishing thoughts not within the contemporary, pleasant moment but over the longer time as well (Fredrickson, 2004). Positive emotions, for instance, awe, generates the motivation to play, and push the creative limits that are evident not only in social and physical behavior but also in innovative and intellectually motivating behavior (e.g., eWOM).

Virtual technology-driven automation in any form (e.g., artificial intelligence, voice assistant, virtual reality, mixed reality) is assumed to be imbued with the concept of the real mind which is capable of exerting wisdom and emotions. Russell and Norvig (2016) described AI-enabled systems into two dimensions: first, human reasoning-behavior (a system that thinks like humans and acts like humans), and second, human performance-rationality (a system that thinks and acts rationally). With the fine blend of both dimensions, AI-enabled services are reshaping and transforming customer experiences through feelings (Huang et al., 2019).

2.4. Stimulus-organism-response model

Mehrabian and Russell (1974) theorized the Stimulus-Organism-Response (S-O-R) model which postulates that environmental signals act as stimuli that lead to numerous emotional and cognitive responses. These responses culminate into innovative consumer behavioral insights and appraisals. The S-O-R model has been widely operationalized in a variety of online environments (Sharma et al., 2021, 2022a, 2022b). In the S-O-R model, environmental cues act as external stimuli and anticipate the organism as an intervening construct between the stimulus and response highlighting its impacts on the consumers' psychological processes (Mehrabian and Russell, 1974). Motivated consumer innovativeness influences consumer expectations, cognition, and emotions. The study adopted the S-O-R model to examine consumer interactions with online fashion portal attributes (stimuli) and its role in generating an awe experience (organism) and influencing eWOM and purchase intentions (response).

3. Hypothesis development

3.1. MCI and purchase intentions

Purchase intentions indicate the possibility that customers will plan or be willing to purchase a product or service soon (Kang et al., 2020). There is sufficient evidence available to assist the relationship of MCI facets with purchase intentions. But this relationship is not known in the VA context. In other words, the motivations for use of VAs that trigger the purchase intentions are not explained in the literature. Scholars have discussed the importance of including psychological motivations to study technology adoption (Lin and Filieri, 2015). For instance, Lin and Filieri (2015) revealed that consumer innovativeness fosters technology continuance intention. According to Cao (2021), consumer innovativeness for new technology-based services directly impacts purchase intentions (Frank et al., 2015; Hong et al., 2017). Jeong et al. (2017) also

evidenced the effect of consumers' innovativeness on purchase intentions. Similar results are present in the extant literature for the effect of MCI facets (functional, hedonic, social, and cognitive) on purchase intentions (Esfahani and Reynolds, 2021; Vandecasteele and Geuens, 2010).

This study aims to examine the effect of functional, hedonic, social, and cognitive motivations to use AI-enabled VA technology on the purchase intentions of online shoppers. Several studies have undermined a significant correlation between AI-enabled retail and voice assistants and consumer motivation (Cao, 2021; Vitezić and Perić, 2021). AI-enabled voice assistants offer unique perspectives on potential drivers related to customer motivations (i.e., functional, hedonic, utilitarian), emotions (e.g., cognitive, feelings), social factors, and service situations (i.e., encounters, failure, dysfunction) (Vitezić and Perić, 2021).

3.1.1. Functional MCI and purchase intentions

The functional MCI refers to "consumer innovativeness motivated by the functional performance of innovations and focuses on task management and accomplishment improvement" (Vandecasteele and Geuens, 2010, p. 310). The functional MCI is reflective of the functional or utilitarian benefits such as improved performance, increased productivity, and risk (Vandecasteele and Geuens, 2010) perceived by the customer that evokes the use of the innovative product (Venkatraman and Price, 1990). VA is integrated into machine learning that enables the performance of tasks without explicit instructions, thus providing functional benefits to the users (McLean and Osei-Frimpong, 2019 2019). Customers buy products online due to these functional benefits offered by the VAs (Moriuchi, 2019). For example, it is faster in terms of both speed, compatibility, and accessibility and saves consumers time for shopping (PwC Report, n.d.). This is because VA technology allows individuals to multi-task with less effort and offers the convenience of task completion, such as product purchase, without requiring them to type or hold the device (McLean and Osei-Frimpong, 2019). Several authors pointed out that functional MCI affects purchase intention (Chopra, 2019; Esfahani and Reynolds, 2021). Such functional benefits offered by VA may increase the purchase intentions among online shoppers. Thus, drawing on the literature, we propose the following hypothesis.

H$_{1a}$. : Functional MCI to use AI-enabled VA significantly influences purchase intentions of fashion products.

3.1.2. Hedonic MCI and purchase intentions

The hedonic MCI refers to "consumer innovativeness motivated by affective or sensory stimulation and gratification" (Vandecasteele and Geuens, 2010, p. 310). The hedonic motivations inspire consumers to use innovative products for enjoyment or joy (Vandecasteele and Geuens, 2010). It is related to sensory arousal among customers and reflects emotions such as pleasure (Hwang et al., 2019). These customers use the product for its newness (Hwang et al., 2019). The use of innovative technologies such as VA for the hedonic aspects was explained in prior studies (McLean and Osei-Frimpong, 2019). Prior studies have abstracted the role of hedonic MCI in determining purchase intentions (Alzayet and Lee, 2021; Hinsch et al., 2020). Sharma et al. (2022b) showed that the perceived enjoyment associated with using smart devices significantly influences behavioral intentions. If consumers derive pleasure from the use of VAs, they will be motivated to use them for various activities such as fashion shopping. Based on this rationale, we argue that hedonic motivations are likely to increase the purchase intention for fashion products as the customers feel excitement, joy, or pleasure. Thus, we argue that.

H$_{1b}$. : Hedonic MCI to use AI-enabled VA significantly influences purchase intentions of fashion products.

3.1.3. Social MCI and purchase intentions

Social MCI, means "consumer innovativeness motivated by the self-assertive social need for differentiation" (Vandecasteele and Geuens, 2010, p. 310). Socially motivated consumer innovativeness (SMCI) explains the use of innovative products to raise social status or impress others (Brown & Venkatesh, 2005). Literature suggests the use of AI-enabled innovative products by customers is determined by social identity motives. Several customers opine that using a particular technology such as VA fosters their social status (McLean and Osei-Frimpong, 2019). Researchers have emphasized the symbolic element in the socially motivated consumer innovativeness manifested in creating social identity through the use of innovative products (Roehrich, 2004) such as VA for shopping activities. These customers desire to attain social relationship goals (Vandecasteele and Geuens, 2010) and appear trendy and sophisticated to obtain social value. For instance, smartwatches are purchased by customers to proclaim their social recognition and this desire for social recognition fosters their purchase intentions (Patel et al., 2023). People's behavior is dependent on their motivations (Hwang et al., 2019) and hence we propose that socially motivated consumer innovativeness is likely to foster the purchase intentions of online fashion shoppers.

H$_{1c}$. : Social MCI to use AI-enabled VA significantly influences the purchase intention of fashion products.

3.1.4. Cognitive MCI and purchase intentions

Cognitively-motivated consumer innovativeness is defined as "the desire for new experiences to stimulate the mind" (Venkatraman and Price, 1990, p. 294). Such consumers are interested in exploring beyond their cognitive boundaries (Vandecasteele and Geuens, 2010). Consumers use new technology to stimulate the mind and attain cognitive goals such as exploration, comprehension, and cerebral creativity (Hwang et al., 2019). For example, for the appropriate commands, individuals must make the right choice of words and sentences for the completion of the task. It should be time specific to control and execute the functions (Sharma et al., 2021). These examples demonstrate the use of cognitive skills for the operation of VAs. Cognitively motivated customers are likely to use AI-enabled VAs for purchase as they are motivated to experience beyond their existing cognitive mental states.

H$_{1d}$. : Cognitive MCI to use AI-enabled VA significantly influences purchase intentions of fashion products.

3.2. MCI and awe experience

Following the conceptual background mentioned, this research projected the influence of MCI on consumers' awe experience. Awe has been identified as a theoretically important construct in consumer psychology literature (Kautish and Khare, 2022; Rudd et al., 2018) and recent marketing literature (Hinsch et al., 2020; Kim et al., 2021). Innovative technologies can enhance the awe experience among consumers (Hinsch et al., 2020). Because awe is a complex emotion that arises when one is provoked by something vast that exceeds prior information schema, exposure to innovative technology can generate awe (Kim et al., 2021; Shiota et al., 2007). The study posits that AI-enabled VAs may help trigger shoppers' self-transcendent and potentially transformative awe experiences. The underlying motivations (functional, hedonic, social, and cognitive) to use interactive AI-enabled VA technology may elicit an awe experience among consumers (Mishra et al., 2022).

3.2.1. Functional MCI and awe experience

Functional motivation to use innovative products can be explained by the customer's desire for convenience, time-saving, and accuracy (Hwang et al., 2019). Such consumers are attracted by the functional utility and usefulness of the product. Researchers have evinced awe in the need for accommodation and posited that virtual technologies lead

to awe among customers (Quesnel and Riecke, 2018). Moreover, awe is a strong emotion experienced when an individual is challenged by vast stimuli (Hinsch et al., 2020). AI-enabled VA technology provides functional benefits (McLean et al., 2021) that are likely to generate awe among customers. Thus, it is proposed that.

H$_{2a}$. : Functional MCI to use AI-enabled VA significantly influences the awe experience.

3.2.2. Hedonic MCI and awe experience

Individuals who solicit excitement or pleasure try new and innovative technologies (Mishra et al., 2022). Hedonism was characterized as a psychological motivation (Hwang et al., 2019). As acknowledged by prior studies, the psychological motivation or schema provokes the wow effect or awe (Hinsch et al., 2020). Exploring the fashion portals by using AI-enabled technology can also be enjoyable for shoppers (Kautish and Khare, 2022). Exposure to a novel technology can result in excitement or joy (McLean and Osei-Frimpong, 2019) that can trigger awe (Guo et al., 2018). For example, Enki launched by ASOS allows users to search latest products using voice on their smartphones. Customers who use AI-enabled VA for shopping purposes are apparent to the pleasure or excitement experience (McLean and Osei-Frimpong, 2019) and are likely to generate an awe experience among the shoppers. Based on this discussion we argue that when fashion shoppers use VA technology for enjoyment purposes, they are likely to experience awe. Thus, it is proposed:

H$_{2b}$. : Hedonic MCI to use AI-enabled VA significantly influences the awe experience.

3.2.3. Social MCI and awe experience

Quesnel and Riecke (2018) affirm that the awe experience is within the spectrum of self-transcendent experiences with wellness aids and an emotional state of social interconnectivity. The awe experience generated by the social motivations was demonstrated in the prior research. The author outlined awe experience for commercial products was largely triggered by social stimuli. Fashion products are commercial and thus we apply this notion to our study. Awe explains the vastness manifested in the social impact (Hinsch et al., 2020). Moreover, awe can be rooted in the social aspect as an emotion that embarks on the underlying psychology of an individual's social presence or status. The use of AI-enabled VA is considered prestigious, placing the user on a higher social status (Mishra et al., 2022). Thus we argue that, when socially motivated fashion shoppers use VA, it may evoke the awe experience or wow effect among them. Based on the discussions from extant literature, we posit that:

H$_{2c}$. : Social MCI to use AI-enabled VA significantly influence the awe experience.

3.2.4. Cognitive MCI and awe experience

Awe exhibits the need for accommodation elicited in the cognitive model of Keltner and Haidt (2003). People realize the world through the cognitive constitution of experiences and structures (Guo et al., 2018). Exposure to extraordinary vastness can summon the intellectual schemas of an individual, leading to a transposition that demands a conception (Guo et al., 2018). Awe ascends when individuals encounter something beyond their existing knowledge and mental configurations, evoking a need to update their psychological schema. The accommodation of certain products needs adjustment of the mental schemas and results in awe experiences. For example, when fashion shoppers use VA technology to search for products they may apply mental schemas for search results. To cite, Uniqlo offers voice-based personalized recommendations and text chats. Exposure to novel and innovative technologies summons mental adjustments and generates awe among consumers (Hinsch et al., 2020). Thus we argue that fashion shoppers motivated by cognitive factors may experience awe while using VA

technology for product search. Based on these arguments from the literature, we propose the following hypothesis:

H$_{2d}$. : Cognitive MCI to use AI-enabled VA significantly influences the awe experience.

3.3. Awe experience, eWOM, and purchase intentions

3.3.1. Awe experience and purchase intentions

Awe has emerged as a distinct positive emotion (different from happiness, joy, and pride) designated to the feelings of amazement elicited by various objects (Kim et al., 2021; Septianto et al., 2020). Exposure to beautiful objects such as products can trigger awe among customers (Septianto et al., 2020). The awe or wow effect is an outcome of exposure to such products that challenge the existing mental schemas among customers to make sense of new experiences (Hinsch et al., 2020) that evoke the purchase intention for products (Guo et al., 2018). This logic holds for the VA technologies available for fashion products as discussed in the previous quoted examples. Kautish and Khare (2022) posited that VA generates awe among fashion shoppers. The use of AI-enabled technologies requires customers to update their existing mental representations resulting in awe that leads to certain behavioral outcomes (Hinsch et al., 2020) such as purchase intentions (Guo et al., 2018). The effect of the awe experience on consumers' decision-making was validated in the prior research (Guo et al., 2018). Awe triggers curiosity or learning among customers and their willingness to try a product (Septianto et al., 2020). The effect of awe experiences on generating purchase intention was demonstrated in prior studies (Guo et al., 2018). According to Septianto et al. (2020), awe experience reduces the purchase risk and thus can be a significant catalyst for an increased intention to purchase. Thus, we draw the following hypothesis based on the literature discussion:

H$_3$. : Awe experience significantly influences purchase intentions among online shoppers.

3.3.2. Awe experience and eWOM

Instigating emotions such as awe experience evokes sharing of information with others and leads to positive eWOM behaviors (Guo et al., 2018). To cite, if consumers positively gauge the innovative technology (e.g., AI-enabled voice assistants), they will have a higher tendency to use it. Awe is an outcome of feelings of admiration among the customers that provokes them to talk about the product with others (Guo et al., 2018). Scholars have quoted examples to show that the awe experience for products leads to an increase in WoM intention among customers (e. g. Guo et al., 2018). Correspondingly positive emotions such as awe may proliferate customers' willingness to use AI-enabled services, interact with other customers, and recommend and/or eWOM (Huang and Rust, 2018; Patel et al., 2023; Perez-Vega et al., 2021). To restate the defense, the research draws upon literature support on awe experience, purchase intention, and eWOM (Esfahani and Reynolds, 2021; Patel et al., 2023). Based on these arguments, the subsequent hypothesis is suggested.

H$_4$. : Awe experience significantly influences eWOM among online shoppers.

3.3.3. eWOM and purchase intentions

eWOM has long been deliberated as an effective marketing mechanism for internet users (Filieri, 2015). The Internet offers several online platforms for eWOM, e.g., blogs, product/service reviews, discussion forums, shopping portals, and social media avenues (Kautish et al., 2022; Wang et al., 2018). The information posted by previous customers makes other customers comfortable before purchasing products or services. Furthermore, positive eWOM gets channelized based on favorable or unfavorable service appraisals, which have a pivotal influence in shaping purchase intentions (Patel et al., 2023). Previous studies have established the influence of eWOM on consumers' purchase intentions (Chung et al., 2020; Filieri, 2015; Wang et al., 2018). Authors have also quoted that a positive review on voice shopping increases the purchase intentions among customers. Drawing from this evidence in the literature, we argue that when customers' eWOM influence on voice-based fashion shopping is strong it is likely to increase their purchase intention. Deploying this attestation from the extant literature, the next hypothesis is posited as follows:

H$_5$: eWOM significantly influences purchase intentions among online shoppers.

3.3.4. Meditating influence of awe experience and eWOM

Awe corresponds to the psychological transformations that result in specific behavioral outcomes such as valence or WOM behaviors (positive and negative) and consumption-related behaviors (Guo et al., 2018). Generally, awe has been theorized as a positively valenced emotional experience associated with feelings of curiosity and astonishment (Hinsch et al., 2020). Moreover, awe has the prospect of bringing a behavioral change in consumers. Awe typically arises in the presence of grandeur, e.g., panoramic scenery, eye-splinting objects, or artifacts that might evoke an awe experience. Prior research has shown that awe experience can foster a heightened sense of aesthetics, increase individuals' perceptibility towards AI-enabled service quality, and evoke a sense of self-diminishment temporarily amidst online flow dimensions (Kautish and Khare, 2022). Keltner and Haidt (2003) demarcated two distinctive features: first, the awe experience is linked to the perceived vastness that AI-enabled services offer in terms of complexity, size, intensity, number, and ability), this perceived vastness, curiosity, bewilderment or feel of grandeur leads to propagating factors, e.g., eWOM (Hinsch et al., 2020). Second, this emotion elicits a natural need for accommodation in the existing schema of objects that is insufficient to comprehend the awe-eliciting factors (Shiota et al., 2007), this awe feature is germane to the present scholarly work because it alludes to the potential of awe experience in reducing purchase risk, which is in line with research showing how awe boosts curiosity (Septianto et al., 2020), openness to experience (Yaden et al., 2018) and learning abilities (Chirico et al., 2018). Thus, it can be hypothesized that awe fosters WoM behaviors and purchase intentions. Additionally, awe stimulates a sense of accommodation which refers to mental processes towards awe-eliciting objects, challenging existing knowledge or psychological structures to resolve new dimensions (Rudd et al., 2018). In the present study context, AI-enabled services, this is because the shopping experience becomes more memorable and exhilarating in the presence of awe. The customers inspired by awe convey their experience to others and get encouraged to share positive word-of-mouth that enhances the intention to purchase a product. Further, the underlying motivations (functional, hedonic, social, and cognitive) to use interactive AI-enabled VA technology may elicit an awe experience among consumers (Mishra et al., 2022) that fosters purchase intentions. We follow prior studies (e.g. Sharma et al., 2021; Sharma et al., 2022a) to draw our hypothesis on mediation. In their study, the authors posited S-O-R (stimulus organism response) framework as a suitable theoretical context to draw the mediation effects. The S-O-R framework explains that the stimuli (here the MCI facets to use VA) generate certain emotions (here the awe experience) that lead to responses (here purchase intention and eWOM) (Mehrabian and Russell, 1974). The consumers' behavior is not a direct outcome of stimuli but rather routed through a mediation mechanism (Sharma et al., 2021; Sharma et al., 2022a). Drawing from the arguments presented in the discussion of literature and the S-O-R framework, it is proposed that:

H$_6$: Awe experience significantly mediates the influence of MCI facets to use AI-enabled VA on the purchase intentions of online shoppers.

H$_7$. : eWOM significantly mediates the influence of the awe experience on the purchase intentions of online shoppers.

4. Methodology

4.1. Measures

The measurement scales were adapted from previous studies (Jain et al., 2022). The MCI related to AI-enabled voice assistant services construct, e.g., functional MCI (7 items), hedonic MCI (7 items), social MCI (6 items), cognitive MCI (5 items) was adapted from Vandecasteele and Geuens (2010, 2011). Twelve measurement items for awe experience were adapted from Chirico and Gaggioli (2019), Chirico et al. (2018), and Yaden et al. (2018), eWOM (5 items), and purchase intentions (4 items) scales were adapted from Chopra (2019) and Roy et al. (2019) respectively. These items were anchored on a seven-point Likert-type scale [strongly agree (7) – strongly disagree (1)]. Two experts from the e-retail industry and two marketing professors examined the questionnaire, and their suggestions were incorporated into the final questionnaire. The scale items are presented in Table 2.

4.2. Data collection

To address the objectives of this research, a cross-sectional research design was followed. Before the actual survey, a pilot test was administered using 40 respondents (marketing professors, doctoral candidates, masters/graduate students, and e-tail executives). Minor revisions were incorporated in a few scale items to develop the final questionnaire. The introductory section of the questionnaire discussed the purpose of the research. We ensured the participants' identity and anonymity to reduce bias and did not ask for contact information.

In line with past research on digital interfaces, the sampling procedure for data collection was purposive sampling (Sharma et al., 2022a) as it is considered to be cost-effective and provides a homogenous sample for better managerial insights (Sharma et al., 2022b). The online survey was conducted for the study purpose on weekends from November 2021 to February 2022 with the help of an online independent consumer panel agency with access to the Retailer Association of India database (Kautish et al., 2021b). A professional market research company was appointed to collect data that had trained, informed, and advised before survey execution, this process helped in reaching appropriate respondents for collecting the primary data. The respondents selected were those individuals who were a) adequately conversant with the use of AI-enabled voice assistants for online

shopping and b) were from the database of the Retailer Association of India (Jain et al., 2022). Data were collected over four months period.

To ensure that the sample size was suitably large for study constructs and scale items, a G*Power analysis (minimum sample 465) was conducted with a 0.15 effect size, 80 % statistical power, and a 5 % significance level (Hair et al., 2021). A total of 1200 questionnaire links were administered, and 846 responses were received, but only 538 (63.59 %) were used for data analysis. The analysis revealed that out of 308 rejected responses, 124 questionnaires were either incomplete or bounced back, and 184 responses were found detached as the deviation rate was zero among the answers.

India was chosen as a context for several reasons. First, according to Mobile Marketing Association and Isobar Report, voice-based queries are mounting at 270 % annually in India. Second, the integration of Indian regional languages in voice assistants has been the strongest growth driver (Sharma et al., 2022a). It is estimated that 72 % of internet users in India will prefer to use their regional language rather than English, and voice assistants will help bridge that language gap to augment acceptability (Business Insider, 2021). Third, 28 % of online shoppers use AI-enabled VAs for their search, and 23 million consumers use voice assistants to make purchases, positing enormous opportunities (Balakrishnan et al., 2023).

4.3. Sample description

Table 3 provides the details about sample demographic characteristics. Out of 538 participants, there was a clear female majority ($n = 323$; 60.04 %), and the average age was 33.16 years which means that young consumers utilize AI-enabled voice assistant services (Balakrishnan et al., 2023). The largest category of respondents' education level was postgraduates ($n = 231$; 42.94 %), followed by professionally qualified respondents ($n = 150$; 27.88 %), graduates ($n = 115$; 21.38 %), and doctorates ($n = 42$; 7.80 %). >50 % of the respondents' monthly family income was above INR 95,000, which reveals that high-tech e-tail services get consumed by affluent consumer segments (Jain et al., 2022). Lastly, the majority indicated that they regularly use AI-enabled voice assistant services for more than one year 58.18 % ($n = 313$).

5. Results

5.1. Data analysis

The research conducted two forms of data analysis to meet the study objectives. First, a descriptive statistical analysis was executed as a preliminary investigation. Second, to examine the hypothesized model analysis, the study employed covariance-based structural equation modeling (CB-SEM) to test measurement and structural model analysis. According to Hair et al. (2021), CB-SEM is a comprehensive statistical approach to testing hypotheses about relationships among observed and latent variables (p. 54). CB-SEM is considered to be 'quasi-standard in marketing research when it comes to analyzing the cause-and-effect relations between latent constructs (Hair et al., 2021; p. 137), thus, CB-SEM was suitable for the present study. In addition, the study observed the multivariate normality in terms of Mardia's multivariate skewness, kurtosis, and *p*-value employing the Web Power tool (below the threshold limit of 0.05).

5.2. Common method bias (CMB)

Due to response biases, common method bias (CMB) can be a probable threat to the analysis. To reduce it, we followed both procedural and statistical remedies. To apply the procedural remedy, the existing scales were used, and the anonymity of respondents was ensured (Podsakoff et al., 2003). Harman's single-factor assessment was piloted (Harman, 1976). The results revealed that a single factor accounted for 28.4 % of the total variance, which is less than the threshold value of 50

Table 2
Respondents' profile ($N = 538$).

Variables	Frequency	%
Gender		
Female	323	60.04
Male	215	39.96
Age (in years)		
18–25	86	15.99
26–32	228	42.38
33–40	191	35.50
Above 40	33	6.13
Education		
Graduate	115	21.38
Post Graduate	231	42.94
Doctorate	42	7.80
Professional	150	27.88
Family income (per month)		
INR 50,000–65,000	47	8.74
INR 65,001-80,000	98	18.21
INR 80,001-95,000	119	22.12
Above 95,000	274	50.93
Prior experience with AI-enabled voice assistants		
>6 months	225	41.82
>1 year	313	58.18

Notes: INR = Indian National Rupee; $US1 = INR81.22 (as on December 1, 2022).

Table 3
Constructs, items and descriptive statistics.

Constructs, items and descriptive statistics	Mean	SD	Standardized loading[a]
Functional MCI			
I found AI-enabled VA services such as virtual try-on, styling etc., useful for fashion apparel shopping.	3.22	1.25	0.798
AI-enabled VA services are equally convenient and easy to use on web and mobile interfaces.	3.13	1.16	0.737
AI-enabled services such as personalized voice-based agents are quite compatible with web and mobile interfaces.	3.26	1.25	0.783
AI-enabled VA services seem to be efficient for fashion apparel shopping. (rc)	3.15	1.17	0.754
I felt AI-enabled VA services e.g., 3D and stereoscopic virtual reality etc. are comfortable.	3.16	1.21	0.715
I felt AI-enabled VA services are engaging, entertaining and dynamic for online shoppers.	3.60	1.08	0.736
AI-enabled VA services are reliable. (rc)	2.93	1.13	0.717
Hedonic MCI			
AI-enabled VA services make my fashion apparel shopping experience thrilling and stimulating.	3.18	1.41	0.748
It is fun to use AI-enabled VA services for fashion apparel shopping.	2.88	1.09	0.729
I always find AI-enabled VA services sensation centered.	3.15	1.12	0.773
Using AI-enabled VA services seems to give me a sense of enjoyment.	3.21	1.24	0.795
At times, I feel tension in using AI-enabled VA services. (rc)	3.29	1.23	0.787
I desire to use AI-enabled VA services for fashion apparel shopping.	3.13	1.17	0.755
AI-enabled VA services provide me with an escape from the routine shopping hassles for fashion apparel shopping.	3.19	1.22	0.718
Social MCI			
AI-enabled VA services provide a feel of being different and unique image for others.	3.39	1.27	0.794
AI-enabled VA services provide a feel of status and standing in the society.	3.13	1.18	0.768
According to my opinion, using AI-enabled VA services are a matter of prestige and distinction. (rc)	3.23	1.09	0.705
I love to use AI-enabled VA services that impress others.	3.24	1.12	0.742
AI-enabled VA services symbolize trendiness and demonstrate success.	3.15	1.10	0.726
At times, I feel AI-enabled VA services create sense of belongingness with fashion apparels.			
Cognitive MCI			
I mostly buy fashion apparels through AI-enabled VA services to satisfy my analytical mind.	3.20	1.24	0.797
I find AI-enabled VA services intellectually stimulating and therefore I buy fashion apparels instantly.	3.13	1.16	0.736
I often buy through AI-enabled VA services because it makes me think logically. (rc)	3.26	1.22	0.782
I am a rational thinker who buys fashion apparels through AI-enabled VA services because it set my mind to work.	3.14	1.17	0.754
AI-enabled VA services stimulate intelligence and eagerness to learn.	3.19	1.21	0.735
Awe experience			
	3.59	1.35	0.748

Table 3 (*continued*)

Constructs, items and descriptive statistics	Mean	SD	Standardized loading[a]
While shopping through fashion portal, I have a sense of being connected to its virtual environment.			
While shopping through fashion portal, I feel a sense of communion with its virtual environment.	2.98	1.18	0.726
While shopping through fashion portal, I experience a sense of oneness with its virtual environment.	3.17	1.15	0.758
While shopping through fashion portal, I feel closely connected with its virtual environment.	3.16	1.23	0.786
While shopping through fashion portal, I feel that I am witness to something grand in its virtual environment.	2.81	1.17	0.792
While shopping through fashion portal, I perceive vastness and I feel my jaw drop in its virtual environment.	3.10	1.13	0.719
While shopping through fashion portal, I have goosebumps and gasp because of its virtual environment.	3.24	1.08	0.727
While shopping through fashion portal, I have chills and my eyes get widen due to its virtual environment.	3.16	1.14	0.788
While shopping through fashion portal, I find hard to comprehend the experience in full for its virtual environment. (rc)	3.27	1.39	0.714
While shopping through fashion portal, I feel challenged to understand the experience in full about its virtual environment.	2.84	1.17	0.743
While shopping through fashion portal, I struggle to take in all that I experience in its virtual environment.	3.13	1.20	0.757
While shopping through fashion portal, I try to understand the magnitude of what I experience in its virtual environment.	3.26	1.15	0.786
eWOM			
I would like to familiarize myself about AI-enabled VA services to others.	3.19	1.17	0.768
I would like to talk about my positive experience with AI-enabled VA services.	3.27	1.39	0.714
I will speak favorably about AI-enabled VA services and the benefits of switching to others.	2.83	1.19	0.743
I will like to inform positive things about AI-enabled VA services.	2.80	1.17	0.791
I have shown AI-enabled VA services use to others.	3.26	1.33	0.715
Purchase intentions			
I am more likely to use AI-enabled VA services to purchase fashion apparel.	3.19	1.20	0.787
I am willing to purchase fashion apparel using AI-enabled VA services.	2.80	1.16	0.792
I would recommend purchasing fashion apparel using AI-enabled VA services to others.	3.12	1.13	0.719
I will use these AI-enabled VA services in future as well.	3.25	1.09	0.727

Notes: MCI = Motivated Consumer Innovativeness; SD = Standard Deviation; rc = Reverse Coded.
[a] Significant at $p < 0.001$.

%. Thus, CMB was not an issue (Hair et al., 2021). Additionally, we employed a common latent factor (CLF) test to confirm CMB's non-existence further. The comparison of standardized weights of a regression model with and without CLF suggested minor differences (e.g., below 0.005 on all MCI facets), thus confirming the non-existence of CMB.

5.3. Measurement model

To ascertain the socio-demographic characteristics of the sample, descriptive statistics were calculated using the statistical package SPSS *v.* 26, and AMOS *v.* 26 was used for data exploration in terms of measurement model (reliability and validity) and structural model (hypothesized paths) according to a two-step procedure of structural equation modeling method (Hair et al., 2021). The outcomes of the measurement model revealed an acceptable model fit ($\chi^2 = 403.864$; d$f = 172$; $\chi^2/$ d$f = 2.348$; IFI = 0.965; CFI = 0.962; TLI = 0.959; NFI = 0.960; RMSEA = 0.064). The model was checked for convergent and discriminant validity and internal consistency reliability. The factor loadings were above 0.705 and significant at 0.001 (Table 1). The average variance extracted (AVE) was more than the threshold limit of 0.50 (Hair et al., 2021). The average shared squared variance (ASV) and maximum shared squared variance (MSV) estimates were below their AVE values, thus establishing convergent validity. Furthermore, all of the constructs' squared correlations (R2) were below their AVE values (Fornell and Larcker, 1981). The composite reliability values were more than the recommended score (0.70) for all the constructs, showing satisfactory internal consistency (Hair et al., 2021) (Table 4). Heterotrait-monotrait (HTMT) criterion for discriminant validity is also reported, given the correlations among the constructs were below the suggested threshold estimate of 0.85 (see Table 5) (Henseler et al., 2015).

5.4. Structural model

The hypothesized model with eight constructs was tested using structural equation modeling (SEM). As displayed in Table 6, the model had a satisfactory fit ($\chi^2 = 485.836$; d$f = 189$; $\chi^2/$d$f = 2.570$; IFI = 0.968; CFI = 0.967; TLI = 0.958; NFI = 0.959; RMSEA = 0.067) and provides results from the hypotheses testing. Fig. 2 details the SEM findings with standardized regression weights. The results supported all the hypotheses. The results revealed that functional MCI ($\beta = 0.194$, $p < 0.05$), hedonic MCI ($\beta = 0.211$, $p < 0.05$), social MCI ($\beta = 0.206$, $p < 0.05$), and cognitive MCI ($\beta = 0.181$, $p < 0.05$) positively affects purchase intentions, which supported the hypotheses: H_{1a}, H_{1b}, H_{1c}, and H_{1d}. Awe experience was significantly influenced by functional MCI ($\beta = 0.396$, $p < 0.05$), hedonic MCI ($\beta = 0.215$, $p < 0.05$), social MCI ($\beta = 0.192$, $p < 0.05$), and cognitive MCI ($\beta = 0.237$, $p < 0.05$) thus supporting H_{2a}, H_{2b}, H_{2c}, and H_{2d}. Furthermore, awe experience had a positive impact on purchase intention ($\beta = 0.126$, $p < 0.05$) and eWOM ($\beta = 0.581$, $p < 0.05$), and accordingly H3 and H4 were supported. Therefore, purchase intentions were significantly influenced by eWOM ($\beta = 0.790$, $p < 0.05$), which supports the H_5.

Table 5
HTMT criterion.

Construct	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Functional MCI							
(2) Hedonic MCI	0.352						
(3) Social MCI	0.260	0.416					
(4) Cognitive MCI	0.275	0.283	0.274				
(5) Awe Experience	0.371	0.362	0.310	0.361			
(6) eWOM	0.394	0.427	0.363	0.340	0.292		
(7) Purchase Intentions	0.286	0.295	0.276	0.225	0.273	0.317	

Table 6
Structural model.

					Standardized estimate	t-Value	Support
H_{1a}	Functional MCI	→	Purchase Intentions		0.194	2.945	Yes
H_{1b}	Hedonic MCI	→	Purchase Intentions		0.211	4.514	Yes
H_{1c}	Social MCI	→	Purchase Intentions		0.206	2.836	Yes
H_{1d}	Cognitive MCI	→	Purchase Intentions		0.181	3.278	Yes
H_{2a}	Functional MCI	→	Awe Experience		0.396	5.642	Yes
H_{2b}	Hedonic MCI	→	Awe Experience		0.215	3.169	Yes
H_{2c}	Social MCI	→	Awe Experience		0.192	2.498	Yes
H_{2d}	Cognitive MCI	→	Awe Experience		0.237	3.453	Yes
H3	Awe Experience	→	Purchase Intentions		0.126	2.532	Yes
H4	Awe Experience	→	eWOM		0.581	16.857	Yes
H_5	eWOM	→	Purchase Intentions		0.790	17.035	Yes
H_6	MCI Facets → Awe Experience → eWOM				0.179	6.134	Yes
H7	Awe Experience → eWOM → Purchase Intentions				0.184	12.262	Yes

Goodness-of-fit: $\chi^2 = 485.836$; d$f = 189$; $\chi^2/$ d$f = 2.570$; RMSEA = 0.067; IFI = 0.968; CFI = 0.967; NFI = 0.959; TLI = 0.958.
Notes: *$p < 0.05$; RMSEA = Root Mean Square Error of Approximation; IFI = Incremental Fit Index; CFI = Comparative Fit Index; NFI = Normed Fit Index; TLI = Tucker-Lewis Index.

5.5. Mediation

To test the mediation effect, the study used the percentile bootstrapping method with 10,000 subsamples (Hair et al., 2021; Sharma et al., 2022a) and regression analysis (Alalwan et al., 2022), the research
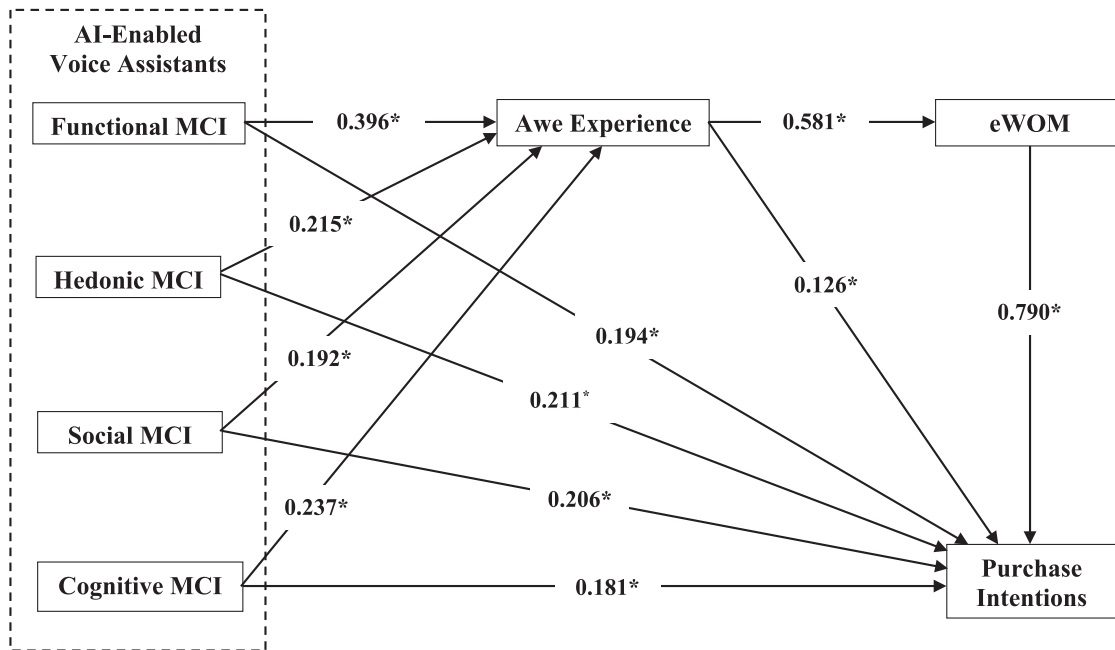
Table 4
Reliability, validity and other estimates.

Construct	No. of items	VIF	AVE	MSV	ASV	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Functional MCI	7	2.371	0.865	0.434	0.250	**0.950**[a]	0.592[b]	0.632	0.588	0.557	0.542	0.571
(2) Hedonic MCI	7	2.162	0.910	0.463	0.272	0.351[c]	**0.964**	0.475	0.716	0.645	0.668	0.642
(3) Social MCI	6	1.232	0.824	0.452	0.196	0.402	0.224	**0.897**	0.432	0.424	0.370	0.391
(4) Cognitive MCI	6	2.480	0.862	0.467	0.285	0.348	0.515	0.186	**0.883**	0.598	0.521	0.536
(5) Awe Experience	12	2.595	0.876	0.452	0.238	0.310	0.416	0.178	0.359	**0.941**	0.765	0.767
(6) eWOM	5	2.481	0.865	0.456	0.280	0.296	0.444	0.137	0.271	0.583	**0.978**	0.725
(7) Purchase Intentions	4	1.362	0.833	0.450	0.194	0.327	0.413	0.155	0.285	0.587	0.526	**0.951**

Goodness-of-fit: $\chi^2 = 403.864$; d$f = 172$; $\chi^2/$ d$f = 2.348$; CFI = 0.962; IFI = 0.965; TLI = 0.959; NFI = 0.960; RMSEA = 0.064

Notes: MCI = Motivated Consumer Innovativeness; AVE = Average Variance Extracted; MSV = Maximum Shared Squared Variance; ASV = Average Shared Squared Variance.
[a] Composite reliabilities are along the diagonal.
[b] Correlations (above diagonal).
[c] Squared correlations (below diagonal).

Fig. 2. Standardized path coefficients.

considers mediating awe experience and eWOM to link the MCI facets, e. g., functional ($\beta = 0.275$; $t = 4.921$; SE = 0.056; $p < 0.001$; 95 % CI = 0.272–0.475), hedonic ($\beta = 0.223$; $t = 5.136$; SE = 0.048; $p < 0.001$; 95 % CI = 0.344–0.483), social ($\beta = 0.252$; $t = 4.614$; SE = 0.051; $p < 0.001$; 95 % CI = 0.320–0.553), and cognitive ($\beta = 0.218$; $t = 4.823$; SE = 0.053; $p < 0.001$; 95 % CI = 0.284–0.472) and purchase intentions. In addition, as per the suggestions related to the practical significance and conceptual relevance (Sharma et al., 2022a), the variance accounted for estimates were in the range of 31.6 % to 34.1 %. Furthermore, The findings of the study confirm that awe experience ($\beta = 0.179$, $p < 0.05$) has a statistically significant relationship between motivated consumer innovativeness facets and purchase intentions. Likewise, it was found that eWOM ($\beta = 0.184$, $p < 0.05$) has a significantly positive link between awe experience and purchase intentions (see Table 6). These results support the mediating hypotheses (H_6 and H7).

6. Discussion

The study intended to explore the motivational consumer innovativeness facets for use of AI-enabled voice assistants that influence the purchase intention and awe experience of online fashion shoppers. For this purpose, a theoretical model grounded in the consumer innovativeness concept and broaden-and-build theory was developed and operationalized. Using structural equation modeling, the model was tested using data collected from Indian shoppers. Results provided support for all seven proposed hypotheses.

Results supported H_1 ($_{a, b, c, d}$), providing empirical evidence for the effect of MCI (functional, hedonic, social, and cognitive) for VA use on purchase intention. A handful of studies established the MCI and purchase intention relationship (e.g., Jain et al., 2022; Esfahani and Reynolds, 2021). But it was not tested in the context of AI-enabled VAs. As there is increasing use of VA for shopping activities (PwC Report, n.d), our findings extend the existing literature knowledge and present new knowledge about this relationship, particularly for the online fashion shopping context. The VA uses for fashion shopping literature (e.g., Morotti et al., 2022; Speicher, 2018) did not identify the motivations for VA use that affect purchase intentions. This study provides insights into the effect of MCI for use of VA technology on the purchase intention among fashion shoppers. Thus, we extend the literature to the AI-

enabled VA use for the fashion shopping context. Past studies have emphasized the significance of functional or utilitarian and hedonic aspects for innovative technology interfaces (e.g., Rese et al., 2020). Our findings support this notion and establish that functional MCI (Chopra, 2019; Esfahani and Reynolds, 2021) and hedonic MCI (Alzayet and Lee, 2021; Hinsch et al., 2020; Im et al., 2007) for VA use have a direct impact on new products' purchase intentions. This means that if the use of VA is inspired by functional or hedonic motivations, the purchase intention of online shoppers will be increased. However, our findings apply to the fashion shopping context. The findings further establish that social MCI affects purchase intention (Rhee and Choi, 2020). Our study supports this relationship and establishes the influence of social MCI for VA use on the purchase intention of online fashion shoppers. Adhering to the assertions of previous researchers (Brown & Venkatesh, 2005; Roehrich, 2004), our findings indicate that if the use of VA is inspired by the desire for social identity and impressions, it is likely to trigger the online fashion shoppers' purchase intention. This is a novel finding in the literature on consumer behavior regarding VA use as also the consumer innovativeness angle. The findings further established that the cognitive motivation behind the use of VA enhances the purchase intention among online fashion shoppers. This means that if the customers' use of VA is backed by the motivation to experience beyond existing cognitive mental states, the purchase intention is likely to trigger. If the fashion shopper's use of VA is cognitively motivated, then the purchase intention is likely to increase. A close observation of the findings suggests that cognitive MCI has the highest effect on purchase intention, followed by social and hedonic MCI. Our respondents were from the age group 26 to 40, were highly educated, and belonged to the higher income group. The results can be attributed to the respondent's background. Thus, our findings add new knowledge to the extant understanding of consumer innovativeness and its relationship with purchase intentions.

H_2 was supported, offering validations for the influence of MCI facets on the awe experience. The result proposes a significant awe or wow effect for the AI-enabled technologies (Javornik, 2016). Hinsch et al. (2020) propounded the increase in awe experience by using innovative technologies. The previously detailed theoretical framework (broaden-and-build theory) supported (Fredrickson, 2001) the interactive effects of positive emotion (e.g., awe) in the context of AI-enabled VAs (Hinsch et al., 2020; Septianto et al., 2020). Our findings offer validations for the

same. It can be said that online shoppers driven by the functional superiority of VA use are more likely to experience awe. This means that when the consumers are motivated by functional factors, the use of VA for fashion shopping is likely to generate awe experience.

Further, when online shoppers perceive AI-enabled voice assistants to offer a fun, exciting, and stimulating environment, they are more likely to experience awe while using voice assistants. The influence of social MCI on the awe experience entails that when online fashion shoppers feel that using AI-enabled voice assistants could impress others, they are more likely to have a higher awe experience. As previously explained, social MCI is an essential element of MCI (Demirel and Payne, 2018; Roberts et al., 2014; Yang et al., 2021), and the current research findings also support the assertion. Further, it can be concluded that cognitive MCI influences awe experience owing to higher-order cognitive stimulation and perceived intelligence. This finding aligns with (Keltner and Haidt, 2003) and applies to AI-enabled VA technology (Kautish and Khare, 2022). It can be said that when consumers are motivated by hedonic, social, or cognitive factors, the use of VA for fashion shopping is likely to generate an awe experience.

The significant effect of awe experience on eWOM and purchase intention (H3 and H4) supports the arguments that awe influences consumer behaviors (Guo et al., 2018). Our findings provide empirical evidence to validate this relationship in the context of AI-enabled VA use for fashion shopping. Yang and Hu (2021) affirm that eWOM denotes effects (positive or negative emotions) and firm-relevant outcomes (favorable or unfavorable word-of-mouth), and awe have self-diminishing properties on consumer forgiveness in service encounters. Further, it was proved that eWOM influences purchase intention. The findings align with past studies (Chung et al., 2020; Filieri, 2015; Wang et al., 2018) and validate the AI-enabled VA use for fashion shopping. This means that a positive eWOM about the VA uses for fashion shopping will likely trigger the purchase intentions of shoppers. Finally, it was found that the awe experience mediates the relationship between MCI and eWOM for VA use and online fashion purchase intentions (H6 and H7). Awe is linked to the perceived vastness that AI-enabled services offer in terms of complexity, size, intensity, number, and ability that leads to outcomes such as purchase intention or eWOM (Guo et al., 2018). Aligning with the prior claims that awe boosts curiosity (Septianto et al., 2020), openness to experience (Yaden et al., 2018), and learning abilities (Chirico et al., 2018) it can be said that if VA uses motivations can trigger the awe experience of online fashion shoppers their purchase intention and eWOM behavior is likely to increase.

6.1. Theoretical contributions

The study has important theoretical contributions. First, this study responds to the call for research to explore the convergence of artificial intelligence and marketing (Vlačić et al., 2021). By evaluating the purchase intention, awe experience, and WoM as an outcome of AI-enabled VA use motivation, we provide theoretical insights into the marketing and consumer behavior literature. Second, the study applies the consumer innovativeness theory to the use of VA in the fashion shopping context. The study advances the current knowledge of the consumer motivations for the use of innovative technology (Vandecasteele and Geuens, 2010) particularly AI-enabled VAs. Only a handful of studies explored the consumer motivations to use AI-enabled technologies (e.g., Lalicic and Weismayer, 2021) but their effect on the purchase intention of online fashion shoppers was not known. The few studies on VA use in fashion shopping (e.g., Morotti et al., 2022; Speicher, 2018) did not identify the motivations for VA use that affect purchase intentions. Scholars have recognized the importance of VA use for fashion shopping (Kautish and Khare, 2022; Chung et al., 2020) and the motivations to use innovative technology (e.g., Rogers, 2003). Thus, our study makes a significant theoretical contribution to the extant literature. Moreover, this study examined the impact of motivational innovativeness elements on purchase intention, and awe experience in the VA context for the first

time. For this purpose, we used the MCI scale developed by Vandecasteele and Geuens (2010) and applied it to the AI-enabled VA context. Centered on the consumer innovativeness theory, B&BT theory, and S-O-R model, the hypothesized framework explains the association of MCI for VA with purchase intention, awe experience, and eWOM behaviors. Thus, the study advances the consumer innovativeness theory, B&BT theory, and S-O-R model to the AI-enabled VA technology for the fashion shopping context. We show that the MCI facets (functional, hedonic, social, and cognitive) shape online fashion shoppers' purchase intention and awe experiences, and these constructs deserve further investigation. Third, we comprehend Roger's (2003) diffusion of innovation theory to show the importance of consumer innovativeness for use of AI-enabled VA that influences the online fashion shopper's behavior thus adding to the innovativeness literature and consumer behavior theory. This study demonstrates that consumer innovativeness is inspired by motivational goals (functional, hedonic, social, cognitive) for use of VA technology by fashion shoppers.

Fourth, grounded in the consumer innovativeness theory, B&BT theory, and S-O-R model we show the importance of MCI-inspired awe experience as a positive emotion in enhancing the purchase intention among online shoppers. The findings provide evidence to theoretically establish the importance of awe experience in influencing online shoppers' behavior concerning AI-enabled VAs. Given this and the limited studies on AI-enabled technology that focus on the awe experience as a theoretical construct, it deserves more scholarly attention (Guo et al., 2018). Guo et al. (2018) claimed that commercial products also induce an awe experience and our study theoretically supports this notion by demonstrating that the VA use triggers awe among fashion shoppers. Considering the importance of emotional experiences in technology-related fields (Venkatesh, 2000), the introduction of awe experience to the VA and fashion shopping literature offers new theoretical insights. Finally, we show that eWOM behavior increases the purchase intention of online shoppers using VA technology. While the relationship is well established in the literature (Chung et al., 2020; Filieri, 2015; Wang et al., 2018), our study theoretically implies it to the AI technology context for fashion shopping. Authors have posited eWOM behaviors as critical to technology-related research (Cheung et al., 2021). Our study shows that eWOM behaviors affect the purchase intentions of fashion shoppers who use VA technology for shopping purposes.

6.2. Managerial implications

The study provides some applications for the developers of AI-enabled VA interfaces for e-retailers. We also make suggestions to the marketing managers of e-retail stores. The results suggested that the functional MCI, hedonic MCI, social MCI, and cognitive MCI are the precursors to online shoppers' purchase intention and awe experience. These factors should be central to the mind of VA interface developers for e-retail stores. Also, the marketing managers of e-retail stores must emphasize the use of VAs for a superior online shopping experience (Kang et al., 2020; Xi and Hamari, 2021). The AI-enabled VA's service on e-retail stores should be designed to be agile, personalized, enjoyable, appealing, and efficient (Alzayet and Lee, 2021). The marketing managers should closely work with the product team to develop the product design and promotion strategy. Thus, if the e-retail stores stress the user-friendliness, coolness, customization, and personalized aspects of AI-enabled services, it will help to induce customers' functional MCI (Lin, 2015), hedonic MCI (Kim et al., 2015), social MCI (Cao, 2021), and cognitive MCI (Hoffmann and Soyez, 2010). Since the hedonic MCI has the highest impact on PI, followed by the cognitive MCI, the AI-enabled voice assistant services should be exciting, enthralling, and captivating for online shoppers who use voice assistant services (Flavián and Casaló, 2021).

Moreover, the awe experience mediates the MCI facets and purchase intention, and therefore, the promotional strategy such as advertisement must communicate the awe experience. For instance, uploading demo

videos demonstrating the shopper's recent use of AI-enabled VAs through website or smartphone apps, portraying it as convenient and enjoyable. It is further suggested that the shoppers must use small (smartphone), medium (tablet), and big size (computer) screens to see and navigate easily at any point in time and place. The development of a human-like interface is also recommended. Humanized AI can potentially combine functional MCI, hedonic MCI, and cognitive MCI in emotional and social intelligence (Kaplan and Haenlein, 2019). For instance, AI-enabled intelligent agents can provide valuable insights about online shopper behavior, customer journey, experience, satisfaction, and loyalty by offering superior customized products and services (Kumar et al., 2016). The study findings further proposed the influence of social MCI on purchase intention and awe experience, so the e-retail stores should emphasize that using AI-enabled voice assistants is socially accepted. Moreover, the current research provides empirical evidence that AI-enabled VAs can generate an awe experience through one of the online shopping contexts, e.g., fashion apparel. These kinds of awe-inducing scenarios are a promising starting point for online interface designers to integrate themes of assessment to exhibit emotional states (combining physiological, behavioral, and self-induced aspects).

The results further exposed that the awe experience is crucial for eWOM and purchase intentions. Thus, e-retail companies should work towards the enhancement of the awe experience through AI-enabled VAs. For instance, humanizing the VAs can give consumers an awe experience. Further, eWOM mediates the relationship between awe experience and purchase intention. By focusing on eWOM mechanisms in terms of community, competence, content, and consensus firm-generated communications may replicate the tone and enthusiasm among online fashion customers. As more user-generated content gets shared by online customers and e-tail fashion brands interact with 'fans' or 'online communities', these interactions get noticed by other social networks that build credibility and customer engagement. Therefore, retailers must encourage online shoppers to share experiences through various platforms. They can ask the users to rate their experience and write reviews about their product search experiences with the VAs. Development of an interface that allows sharing of the VA app would be beneficial to the e-retailers. Thus, marketers should be active in utilizing eWOM as a marketing strategy to trigger mutually engaging communication with online fashion customers and to integrate emotional and informational content concerning opinions, and experiences about fashion apparel. By these means, customers will be able to access more credible information about fashion brands, stylists, fashion designers, and private label brands. The informational and emotional content-oriented promotion can evoke interest and encourage positive word-of-mouth resulting in a favorable attitude, strong attachment, and higher purchase intentions.

6.3. Limitations and future research directions

The present research offers meaningful theoretical and practical inferences, but it has a few limitations that should be considered carefully. First, data were collected only from India, so the scope of the generalizability of the outcomes is limited. Future studies may explore the implication of the proposed theoretical model geographies and regions may increase the generalizability. Moreover, we employed a single survey data collection approach for this study. A multi-study or mixed-method approach is recommended for future studies for a better understanding. Second, the study concentrated only on AI-enabled services for e-retailers. The application of the theoretical model to other AI-enabled technologies such as chatbots, augmented, virtual or mixed reality is suggested to the scholars. In particular, as a construct, MCI has the deficiency of not possessing a high external validity because it is not as extensively used in the extant literature as TAM or UTAUT theories, so the future study must apply the concept to other relevant conditions, which may help to improve external face validity of the MCI construct. Therefore, it would be significant to observe the key applications of the

TAM or UTAUT theories to the AI-enabled voice assistants' context. AI technology changes fast and consumer behavior; therefore, a longitudinal survey may provide an advanced understanding of the constructed relationships.

Further, the broaden-and-build theory is not a widely explored theory to ascertain e-tail paradigms. Hence, it would be worthwhile to observe the pertinence of the broaden-and-build theory concerning AI-enabled voice assistant services and another online shopping environment. Though extant studies support the notion that awe is an entirely positive emotion in nature, according to Keltner and Haidt (2003), awe can be 'profoundly positive' and 'terrifyingly negative' (p. 303). Therefore, future research may attempt to understand the negative and thread-centered variant of the awe experience (Gordon et al., 2017).

7. Conclusion

This study summarizes how AI-enabled voice assistant services can stimulate the awe experience among online shoppers and how positive emotions (e.g., awe) can drive eWOM and purchase intentions. To understand awe experience as a granular process, the researchers hypothesized the facets of motivated consumer innovativeness (i.e., functional, hedonic, social, and cognitive) in AI-enabled voice assistant services. The awe experience centers on the idea that positive emotions coincide with a need to create dominant perceptual schemas to accommodate favorable psychological changes owing to AI-enabled voice assistant services (Kautish et al., 2021a). Suppose AI-enabled voice assistant services consider psychological accommodation, the more awesomeness a stimulus, the better the accommodation and the more awe experience. Correspondingly, motivated consumer innovativeness mainly revitalizes and galvanizes latent meaningful connotations to experiment with novelty. Instead of experimenting with something novel for the first time, awe experience is associated with something innovative in a relatively acquainted manner (e.g., AI-enabled voice assistant). Both eWOM and purchase intentions are significantly associated with the awe experience. However, if the conclusive goal is to drive consumer behavior, eWOM mediates the link to purchase intentions. This study shows that though awe experience can directly lead to eWOM and purchase intentions, the concomitant restructuring of awe experience to eWOM and eWOM to purchase intentions is more robust. These findings can be utilized by fashion e-tail managers for AI-enabled service marketing strategy creation and promotion techniques to foster eWOM and purchase intention among online shoppers.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

position of notable researcher. We acknowledge the void his untimely and sudden demise has created in our personal and professional lives and we pray to God for his noble soul to rest in peace.

References

Aeschalimann, S., Bleiker, M., Wechner, M., Gampe, A., 2020. Communicative and social consequences of interactions with voice assistants. Comput. Hum. Behav. 112, 106466.

Alalwan, A.A., Baabdullah, A.M., Mahfod, J.O., Jones, P., Sharma, A., Dwivedi, Y.K., 2022. Entrepreneurial e-equity crowdfunding platforms: antecedents of knowledge acquisition and innovation performance. Eur. J. Innov. Manag. https://doi.org/10.1108/EJIM-03-2022-0167 (in press).

Alzayet, A., Lee, S.H.M., 2021. Virtual products as an extension of my body: exploring hedonic and utilitarian shopping value in a virtual reality retail environment. J. Bus. Res. 130, 348–363.

Ameen, N., Tarhini, A., Reppel, A., Anand, A., 2021. Customer experiences in the age of artificial intelligence. Comput. Hum. Behav. 114, 106548.

Aw, E.C.X., Tan, G.W.H., Cham, T.H., Raman, R., Ooi, K.B., 2022. Alexa, what's on my shopping list? Transforming customer experience with digital voice assistants. Technol. Forecast. Soc. Chang. 180, 121711.

Bagozzi, R.P., Gopinath, M., Nyer, P.U., 1999. The role of emotions in marketing. J. Acad. Mark. Sci. 27 (2), 184–206.

Balakrishnan, J., Dwivedi, Y.K., Hughes, L., Roy, F., 2023. Enablers and inhibitors of AI-powered voice assistants: a dual-factor approach by integrating the status quo bias and technology acceptance model. Inf. Syst. Front. https://doi.org/10.1007/s10796-021-10203-y (in press).

Barhorst, J.B., McLean, G., Shah, E., Mack, R., 2021. Blending the real world and the virtual world: exploring the role of flow in augmented reality experiences. J. Bus. Res. 122, 423–436.

Brill, T.M., Munoz, L., Miller, R.J., 2019. SIRI, Alexa, and other digital assistants: a study of customer satisfaction with artificial intelligence applications. J. Mark. Manag. 35 (15–16), 1401–1436.

Brown, S.A., Venkatesh, V., 2005. Model of adoption of technology in households: A baseline model test and extension incorporating household life cycle. MIS Quart. 29 (3), 399–426.

Business Insider, 2021. Voice search queries in India are growing at 270% per year: MMA and Isobar Report. https://www.businessinsider.in/advertising/ad-agencies/article/voice-search-queries-in-india-are-growing-at-270-per-year-mma-and-isobar-report/articleshow/82212039.cms (accessed on November 30, 2022).

Cao, L., 2021. Artificial intelligence in retail: applications and value creation logics. Int. J. Retail Distrib. Manag. 49 (7), 958–976.

Cheng, Y., Jiang, H., 2022. Customer-brand relationship in the era of artificial intelligence: understanding the role of chatbot marketing efforts. J. Prod. Brand Manag. 31 (2), 252–264.

Cheung, M.L., Leung, W.K.S., Chan, H., 2021. Driving healthcare wearable technology adoption for generation Z consumers in Hong Kong. Young Consum. 22 (1), 10–27.

Chung, M., Ko, E., Joung, H., Kim, S.J., 2020. Chatbot e-service and customer satisfaction regarding luxury brands. J. Bus. Res. 117, 587–595.

Chirico, A., Ferrise, F., Cordella, L., Gaggioli, A., 2018. Designing awe in virtual reality: an experimental study. Front. Psychol. 8, 1–14. Article 2351.

Chirico, A., Gaggioli, A., 2019. When virtual feels real: comparing emotional responses and presence in virtual and natural environments. Cyberpsychol. Behav. Soc. Netw. 22 (3), 220–226.

Chopra, K., 2019. Indian shopper motivation to use artificial intelligence. Int.J.Retail Distrib.Manag. 47 (3), 331–347.

Demirel, B., Payne, A.K.H., 2018. Social innovation adoption behavior: the case of Zumbara. Int. J. Innov. Technol. Manag. 15 (2), 1–19.

Esfahani, M.S., Reynolds, N., 2021. Impact of consumer innovativeness on really new product adoption. Mark. Intell. Plan. 39 (4), 589–612.

Fernandes, T., Oliveira, E., 2021. Understanding consumers'acceptance of automated technologies in service encounters: drivers of digital voice assistants'adoption. J. Bus. Res. 122, 180–191.

Filieri, R., 2015. What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM. J. Bus. Res. 68 (6), 1261–1270.

Filieri, R., Lin, Z., Li, Y., Lu, X., Yang, X., 2022. Customer emotions in service robot encounters: a hybrid machine-human intelligence approach. J. Serv. Res. 10946705221103937.

Flavián, C., Casaló, L.V., 2021. Artificial intelligence in services: current trends, benefits and challenges. Serv. Ind. J. 41 (13–14), 853–859.

Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. J. Mark. Res. 18 (1), 39–50.

Frank, B., Enkawa, T., Schvaneveldt, S.J., Torrico, B.H., 2015. Antecedents and consequences of innate willingness to pay for innovations: understanding motivations and consumer preferences of prospective early adopters. Technol. Forecast. Soc. Chang. 99, 252–266.

Fredrickson, B.L., 2001. The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions. Am. Psychol. 56 (3), 218–226.

Fredrickson, B.L., 2004. The broaden-and-build theory of positive emotions. Philos. Trans. R. Soc. B 359 (1449), 1367–1377.

Gordon, A.M., Steller, J.E., Anderson, C.L., McNeil, G.D., Loew, D., Keltner, D., 2017. The dark side of the sublime: distinguishing a threat-based variant of awe. J. Pers. Soc. Psychol. 113 (2), 310–328.

Grewal, D., Roggeveen, A.L., Nordfält, J., 2017. The future of retailing. J. Retail. 93 (1), 1–6.

Griskevicius, V., Tybur, J.M., Van den Bergh, B., 2010. Going green to be seen: Status, reputation, and conspicuous conservation. J. Pers. Soc. Psychol. 98 (3), 392–404.

Guo, S., Jiang, L., Huang, R., Ye, W., Zhou, X., 2018. Inspiring awe in consumers: relevance, triggers, and consequences. Asian J. Soc. Psychol. 21 (3), 129–142.

Guttentag, D., Smith, S., Potwarka, L., Havitz, M., 2018. Why tourists choose airbnb: A motivation-based segmentation study. J. Travel Res. 57 (3), 342–359.

Hair Jr., J.F., Black, W.C., Babin, B.J., Anderson, B.J., 2021. Multivariate Data Analysis, 8th edition. Cengage Learning, New Delhi.

Harman, H.H., 1976. Modern Factor Analysis. The University of Chicago Press, Chicago IL.

Hasan, R., Shams, R., Rahman, M., 2021. Consumer trust and perceived risk for voice-controlled artificial intelligence: the case of Siri. J. Bus. Res. 131, 591–597.

Henseler, J., Ringle, C.M., Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. J. Acad. Mark. Sci. 43 (1), 115–135.

Hinsch, C., Felix, R., Rauschnabel, P.A., 2020. Nostalgia bets the wow-effect: inspiration, awe and meaningful associations in augmenting reality marketing. J. Retail. Consum. Serv. 53, 101987.

Hoffmann, S., Soyez, K., 2010. A cognitive model to predict domain-specific consumer innovativeness. J. Bus. Res. 63 (7), 778–785.

Hong, J.-C., Lin, P.-H., Hsieh, P.-C., 2017. The effect of consumer innovativeness on perceived value and continuance intention to use smartwatch. Comput. Hum. Behav. 67, 264–272.

Hoy, M.B., 2018. Alexa, Siri, Cortana, and more: an introduction to voice assistants. Med. Ref. Serv. Q. 37 (1), 81–88.

Huang, M.H., Rust, R., 2018. Artificial intelligence in service. J. Serv. Res. 21 (2), 155–172.

Huang, M.H., Rust, R.T., Maksimovic, V., 2019. The feeling economy: managing in the next generation of artificial intelligence (AI). Calif. Manag. Rev. 61 (4), 43–65.

Hwang, J., Kim, H., Kim, W., 2019. Investigating motivated consumer innovativeness in the context of drone food delivery services. J. Hosp. Tour. Manag. 38, 102–110.

Im, S., Mason, C.H., Houston, M.B., 2007. Does innate consumer innovativeness relate to new product/service adoption behavior? The intervening role of social learning via vicarious innovativeness. J. Acad. Mark. Sci. 35 (1), 63–75.

Jain, S., Basu, S., Dwivedi, Y.K., Kaur, S., 2022. Interactive voice assistants – does brand credibility assuage privacy risks? J. Bus. Res. 139, 701–717.

Javornik, A., 2016. 'It's an illusion, but it looks real!' Consumers affective, cognitive and behavioral responses to augmented reality applications. J. Mark. Manag. 32 (9–10), 987–1011.

Jeong, S.C., Kim, S.-H., Park, J.Y., Choi, B., 2017. Domain-specific innovativeness and new product adoption: a case of wearable devices. Telematics Inform. 34 (5), 399–412.

Kang, H.J., Shin, J.H., Ponto, K., 2020. How 3D virtual reality stores can shape consumer purchase decisions: the roles of informativeness and playfulness. J. Interact. Mark. 49, 70–85.

Kaplan, A., Haenlein, M., 2019. Siri, Siri, in my hand: who's fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. Bus.Horiz. 62 (1), 15–25.

Kautish, P., Guru, S., Sinha, A., 2022. Values, satisfaction and intentions: online innovation perspective for fashion apparels. Int.J.Innov.Sci. 14 (3/4), 608–629.

Kautish, P., Khare, A., 2022. Investigating the moderating role of AI-enabled services on flow and awe experience. Int. J. Inf. Manag. 66, 102519.

Kautish, P., Paul, J., Sharma, R., 2021a. The effect of assortment and fulfillment on shopping assistance and efficiency: an e-tail servicescape perspective. J. Retail. Consum. Serv. 59, 102393.

Kautish, P., Sharma, R., Khare, A., 2021b. Multi-item scale development for online consumption emotion construct and psychometric evaluation for relationship marketing. J.Relationsh.Market. 20 (2), 91–134.

Kautish, P., Rai, S.K., 2019. Fashion portals and Indian consumers: an exploratory study on online apparel retail marketing. Int.J.Electron.Market.Retail. 10 (3), 309–331.

Kautish, P., Sharma, R., 2018. Consumer values, fashion consciousness and behavioural intentions in the online fashion retail sector. Int.J.Retail Distrib.Manag. 46 (10), 894–914.

Keltner, D., Haidt, J., 2003. Approaching awe, a moral, spiritual, and aesthetic emotion. Cognit. Emot. 17 (2), 297–314.

Kim, K.J., Shin, D.H., Park, E., 2015. Can coolness predict technology adoption? Effects of perceived coolness on user acceptance of smartphones with curved screens. Cyberpsychol. Behav. Soc. Netw. 18 (9), 528–533.

Kim, J., Bang, H., Campbell, W.K., 2021. Brand awe: a key concept for understanding consumer response to luxury and premium brands. J. Soc. Psychol. 161 (2), 245–260.

Kumar, V., Dixit, A., Javalgi, B.R.G., Dass, M., 2016. Research framework, strategies, and applications of intelligent agent technologies (IATs) in marketing. J. Acad. Mark. Sci. 44 (1), 24–45.

Lalicic, L., Weismayer, C., 2021. Consumers'reasons and perceived value co-creation of using artificial intelligence-enabled travel service agents. J. Bus. Res. 129, 891–901.

Li, G., Zhang, R., Wang, C., 2015. The role of product originality, usefulness and motivated consumer innovativeness in new product adoption intentions. J. Prod. Innov. Manag. 32 (2), 214–223.

Lin, C.-Y., 2015. Conceptualizing and measuring consumer perceptions of retailer innovativeness in Taiwan. J. Retail. Consum. Serv. 24, 33–41.

Lin, Z., Filieri, R., 2015. Airline passengers'continuance intention towards online check-in services: the role of personal innovativeness and subjective knowledge. Transp. Res.Part E: Log.Transp.Rev. 81, 158–168.

Lucia-Palacios, L., Pérez-López, R., 2021. Effects of home voice assistants' autonomy on intrusiveness and usefulness: direct, indirect, and moderating effects of interactivity. J. Interact. Mark. 56, 41–54.

Marikyan, D., Papagiannidis, S., Rana, O.F., Ranjan, R., Morgan, G., 2022. "Alexa, let's talk about my productivity": the impact of digital assistants on work productivity. J. Bus. Res. 142, 572–584.

McLean, G., Osei-Frimpong, K., Barhorst, J., 2021. Alexa, do voice assistants influence consumer brand engagement?–Examining the role of AI powered voice assistants in influencing consumer brand engagement. J. Bus. Res. 124, 312–328.

McLean, G., Osei-Frimpong, K., 2019. Hey Alexa…examine the variables influencing the use of artificial intelligent in-home voice assistants. Comput. Hum. Behav. 99, 28–37.

Mehrabian, A., Russell, J.A., 1974. An Approach to Environmental Psychology. The MIT Press, Cambridge, MA.

Midgley, D.F., Dowling, G.R., 1978. Innovativeness: The concept and its measurement. J. Consum. Res. 4 (4), 229–242.

Mishra, A., Shukla, A., Sharma, S.K., 2022. Psychological determinants of users'adoption and word-of-mouth recommendations of smart voice assistants. Int. J. Inf. Manag. 67, 102413.

Moriuchi, E., 2019. Okay, Google! An empirical study on voice assistants on consumer engagement and loyalty. Psychol. Market. 36 (5), 489–501.

Morotti, E., Stacchio, L., Donatiello, L., Roccetti, M., Tarabelli, J., Marfia, G., 2022. Exploiting fashion x-commerce through the empowerment of voice in the fashion virtual reality arena. Virtual Reality 26 (3), 871–884.

Patel, V., Kautish, P., Patel, N., 2023. AR apps'quality dimensions, customer brand engagement, WoM and purchase intention: moderating role of perceived brand value. Int.J.Electron.Market.Retail. https://doi.org/10.1504/IJEMR.2022.10048850 in press.

Perez-Vega, R., Kaartemo, V., Lages, C.R., Razavi, N.B., Männistö, J., 2021. Reshaping the contexts of online customer engagement behavior via artificial intelligence: a conceptual framework. J. Bus. Res. 129, 902–910.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. J. Appl. Psychol. 88 (5), 879–903.

PwC Report, n.d.PwC Report, (n.d). Consumer intelligence series: Prepare for the voice revolution, available at https://www.pwc.com/us/en/advisory-services/publications/consumer-intelligence-series/voice-assistants.pdf.

Quesnel, D., Riecke, B.E., 2018. Are you awed yet? How virtual reality gives us awe and goose bumps. Front. Psychol. 8, 1–22. Article 2158.

Rabassa, V., Sabri, O., Spaletta, C., 2022. Conversational commerce: do biased choices offered by voice assistants'technology constrain its appropriation? Technol. Forecast. Soc. Chang. 174, 121292.

Ramadan, Z.B., 2021. Alexafying shoppers: the examination of Amazon's captive relationship strategy. J. Retail. Consum. Serv. 62, 102610.

Rese, A., Genster, L., Baier, D., 2020. Chatbots in retailers' customer communication: How to measure their acceptance? J. Retail. Consum. Serv. 56, 102176.

Rezvani, Z., Jansson, J., Bengtsson, M., 2018. Consumer motivations for sustainable consumption: The interaction of gain, normative and hedonic motivations on electric vehicle adoption. Bus. Strategy Environ. 27 (8), 1272–1283.

Rhee, C.E., Choi, J., 2020. Effects of personalization and social role in voice shopping: an experimental study on product recommendation by a conversational voice agent. Comput. Hum. Behav. 109, 106359.

Roberts, D., Hughes, M., Kertbo, K., 2014. Exploring consumers'motivations to engage in innovation through co-creation activities. Eur. J. Mark. 48 (1/2), 147–169.

Roehrich, G., 2004. Consumer innovativeness: concepts and measurements. J. Bus. Res. 57 (6), 671–677.

Rogers, E.M., 2003. Diffusion of Innovations, 5th ed. Free Press, New York.

Roy, S.K., Singh, G., Hope, M., Nguyen, B., Harrigan, P., 2019. The rise of smart consumers: role of smart servicescape and smart consumer experience co-creation. J. Mark. Manag. 35 (15/16), 1480–1513.

Rudd, M., Hilderbrand, C., Vohs, K.D., 2018. Inspired to create: awe enhances openness to learning and the desire for experiential creation. J. Mark. Res. 55 (5), 766–781.

Russell, S.J., Norvig, P., 2016. Artificial Intelligence: A Modern Approach, 3rd edition. Pearson, Essex.

Septianto, F., Kemper, J.A., Choi, J.J., 2020. The power of beauty? The interactive effects of awe and online reviews on purchase intentions. J. Retail. Consum. Serv. 54, 102066.

Sharma, A., Dwivedi, Y.K., Arya, V., Siddiqui, M.Q., 2021. Does SMS advertising still have relevance to increase consumer purchase intention? A hybrid PLS-SEM-neural network modelling approach. Comput. Hum. Behav. 124, 106919.

Sharma, A., Fadahunsi, A., Abbas, H., Pathak, V.K., 2022a. A multi-analytic approach to predict social media marketing influence on consumer purchase intention. J.Indian Bus.Res. 14 (2), 125–149.

Sharma, A., Dwivedi, R., Mariani, M.M., Islam, T., 2022b. Investigating the effect of advertising irritation on digital advertising effectiveness: a moderated mediation model. Technol. Forecast. Soc. Chang. 180, 121731.

Shiota, M.N., Keltner, D., Mossman, A., 2007. The nature of awe: elicitors, appraisals, and effects on self-concept. Cognit. Emot. 21 (5), 944–963.

Simms, K., 2019. How Voice Assistants Could Change the Way We Shop. May 15, 2019. Available at:. Harvard Business Review https://hbr.org/2019/05/how-voice-assistants-could-change-the-way-we-shop.

Singh, R., 2022. "Hey Alexa-order groceries for me"-the effect of consumer-VAI emotional attachment on satisfaction and repurchase intention. Eur. J. Mark. 56 (6), 1684–1720.

Soderlund, M., Oikarinen, E.L., Tan, T.M., 2021. The happy virtual agent and its impact on the human customer in the service encounter. J. Retail. Consum. Serv. 59, 102401.

Speicher, M., 2018. Shopping in virtual reality. March. In: 2018 IEEE Conference on Virtual Reality and 3D User Interfaces (VR). IEEE, pp. 1–2.

Statista, 2022. Number of voice assistant users in the United States from 2021 to 2025. https://www.statista.com/statistics/1299985/voice-assistant-users-us/. (Accessed 21 December 2022).

Vandecasteele, B., Geuens, M., 2010. Motivated consumer innovativeness: concept, measurement, and validation. Int. J. Res. Mark. 27 (4), 308–318.

Vandecasteele, B., Geuens, M., 2011. Motivated consumer innovativeness: concept, measurement, and validation. In: Dahl, D.W., Johar, G.V., van Osselaer, S.M.J. (Eds.), NA - Advances in Consumer Research, volume 38. Association for Consumer Research, Duluth, MN.

Venkatraman, M.P., Price, L.L., 1990. Differentiating between cognitive and sensory innovativeness; concepts, measurement and implications. J. Bus. Res. 20 (4), 293–315.

Venkatesh, V., 2000. Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. Inform. Sys. Res. 11 (4), 342–365.

Vitezić, V., Perić, M., 2021. Artificial intelligence acceptance in services: connecting with generation Z. Serv. Ind. J. 41 (13–14), 926–946.

Vlačić, B., Corbo, L., e Silva, S.C., Dabić, M., 2021. The evolving role of artificial intelligence in marketing: a review and research agenda. J. Bus. Res. 128, 187–203.

Wang, J.-J., Wang, L.-Y., Wang, M.-M., 2018. Understanding the effects of eWOM social ties on purchase intentions: a moderated mediation investigation. Electron. Commer. Res. Appl. 28, 54–62.

Xi, N., Hamari, J., 2021. Shopping in virtual reality: a literature review and future agenda. J. Bus. Res. 134, 37–58.

Yaden, D.B., Kaufman, S.B., Hyde, E., Chirico, A., Gaggioli, A., Zhang, J.W., Keltner, D., 2018. The development of the Awe Experience Scale (AWE-S): a multifactorial measure for a complex emotion. J. Posit. Psychol. 14 (4), 474–488.

Yang, Y., Hu, J., 2021. Self-diminishing effects of awe on consumer forgiveness in service encounters. J. Retail. Consum. Serv. 60, 102491.

Yang, Y., Hu, J., Nguyen, B., 2021. Awe, consumer conformity and social connectedness. Mark. Intell. Plan. 39 (7), 893–908.

Pradeep Kautish is an Associate Professor of Marketing at Institute of Management, Nirma University, Ahmedabad, Gujarat, India. Dr. Kautish has >20 years of academic experience and >3 years of industry experience. He has published research papers in reputed journals like International Journal of Information Management, Journal of Retailing and Consumer Services, Resources, Conservation & Recycling, Marketing Intelligence & Planning, Journal of Product & Brand Management, Journal of Consumer Marketing, Asia Pacific Journal of Marketing and Logistics, Journal of Travel & Tourism Marketing, International Journal of Retail & Distribution Management, Young Consumers.

Sonal Purohit is a Post Doctoral Fellow at MICA, Ahmadabad, India. She has served in several prestigious institutions in India for more than twelve years and taught consumer behavior. She has research publications and cases in Journals including Harvard Business Review, Journal of Business Research, Journal of Retailing and Consumer Services, Journal of Consumer Behavior. Her research interests include consumer behavior, services marketing, Bottom of the pyramid (BoP), technology adoption, and social entrepreneurship.

Raffaele Filieri is a Professor of Digital Marketing in the Marketing Department at Audencia Business School, Nantes, France. Raffaele has published 60+ research papers in 33 different journals spanning different areas, including Tourism Management, Annals of Tourism Research, Journal of Travel Research, Journal of Interactive Marketing, Marketing Letters, International Marketing Review, Journal of Business Research, Information & Management, Computers in Human Behavior, IEEE Transactions on Engineering Management and many more.

Yogesh K. Dwivedi is a Professor of Digital Marketing and Innovation and Founding Director of the Emerging Markets Research Centre (EMaRC) at the School of Management, Swansea University, Wales, UK. In addition, he holds a Distinguished Research Professorship at the Symbiosis Institute of Business Management (SIBM), Pune, India. Professor Dwivedi is also currently leading the International Journal of Information Management as its Editor-in-Chief. His research interests are at the interface of Information Systems (IS) and Marketing, focusing on issues related to consumer adoption and diffusion of emerging digital innovations, digital government, and digital and social media marketing particularly in the context of emerging markets. Professor Dwivedi has published >500 articles in a range of leading academic journals and conferences that are widely cited (>35 thousand times as per Google Scholar). He has been named on the annual Highly Cited Researchers™ 2020 and 2021 lists from Clarivate Analytics. Professor Dwivedi is an Associate Editor of the Journal of Business Research, European Journal of Marketing, Government Information Quarterly and International Journal of Electronic Government Research, and Senior Editor of the Journal of Electronic Commerce Research. More information about Professor Dwivedi can be found at: http://www.swansea.ac.uk/staff/som/academic-staff/y.k.dwivedi/.