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# Integrating Brand Identity Into AI-Based Conversational Agents: A Systematic Literature Review

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## Abstract

*A company's brand identity is vital for fostering meaningful interactions with customers in a digital economy. As generative artificial intelligence (GenAI) becomes increasingly integrated into our daily lives, AI-based assistants are evolving into the primary channel for representing a brand's identity. Consequently, brand departments face the challenge of translating their company's brand identity into highly interactive AI-based assistants effectively. While there is diverse research on single cues that influence user perceptions, the literature lacks a comprehensive understanding of conversational cues and their impact on brand-related outcomes. Hence, we conduct a systematic literature review to identify verbal and visual cues in the design of AI-based chatbots and examine how they influence the perceptions of the assistants and the brand. We contribute a conceptual framework that summarizes the independent and dependent variables as well as their interrelationships and provides researchers and practitioners with a basis for designing and studying conversational design in the age of GenAI.*

**Keywords:** Conversational design, brand identity, generative AI, systematic literature review

## 1. Introduction

The usage of digital technologies has revolutionized how brands interact with customers. Companies now leverage the digital landscape to offer distinct brand experiences, crucial for differentiation and customer retention in competitive digital and electronic markets. By integrating brand identity at multiple digital touchpoints, organizations can effectively communicate their core values, enhancing

engagement in a continually evolving digital economy.

The recent advancements in the artificial intelligence (AI) field, particularly the emergence of large language models (LLM), are revolutionizing various industries and businesses and reshaping the way companies interact with their customers through AI-based assistants (Reinhard et al., 2024a). As companies strive to foster meaningful connections with their audience in increasingly competitive markets, digital brand communication has become pivotal (Israfilzade & Sadili, 2024). Currently, GenAI-based assistants not only facilitate seamless interactions but can also serve as brand ambassadors, embodying the identity and values of the companies they represent through their declarative interface (Schmidt et al., 2023). Thus, we aim to understand how brand identity can be integrated into the design of AI-based assistants and can be purposefully steered by brand managers.

The success of chatbots (a subclass of AI-based assistants) in fostering authentic brand experiences relies on conversational design (Kull et al., 2021) and its capability to respond (Schmidt et al., 2021). Recent research by Jason (2023) and Lee & Li (2023) emphasizes that conversational design plays a critical role in human-AI interaction by leveraging design principles and communication strategies to create an engaging and authentic conversational experience through GenAI-based chatbots. Although the benefits of incorporating brand personality into the conversational design of AI chatbots are well established, there is a notable lack of prior literature on the conversational design process and which components can be personalized to reflect brand identity in conversational design (Mariani et al., 2023; Miklosik et al., 2021). Therefore, our research questions are proposed to fill these knowledge gaps:

**RQ1:** Which cues in AI-based assistants affect the alignment of conversational design and brand identity?

**RQ2:** How do these cues in AI-based assistants' design affect user perceptions of the chatbot and the brand identity?

To provide an overview of the literature on brand identity and conversational design and to answer our research questions, we rely on a systematic literature review based on Webster & Watson (2002) and Brocke et al. (2015).

## 2. Conversational agents

Conversational agents, or chatbots, convert human speech and language into information inputs that computers can understand, subsequently processing this data to generate appropriate responses. Throughout the years, chatbots have evolved from basic pattern matching to smart personal voice assistants integrated into devices such as smartphones and speakers, exemplified by Amazon's Alexa and Google's Siri (Adamopoulou & Moussiades, 2020). Based on the algorithms and techniques utilized in chatbot development, chatbots can be categorized into three types: (a) Rule-based chatbots, (b) AI-empowered chatbots (Adamopoulou & Moussiades, 2020), and (c) GenAI-based chatbots (Israfilzade & Sadili, 2024). (a) *Rule-based chatbots* operate on a set of predefined rules and responses. They follow a scripted approach and can only provide responses based on the programmed rules. Their effectiveness depends on the comprehensiveness of their rule databases, with larger databases enabling better user interaction (Adamopoulou & Moussiades, 2020). (b) *AI-empowered chatbots* leverage machine learning algorithms and NLP techniques to understand and respond to user inputs more intelligently. Unlike rule-based chatbots, AI-empowered chatbots can learn from user interactions and improve over time. AI-empowered chatbots utilize natural language understanding (NLU) to extract context from unstructured user input, enabling them to classify intents and extract entities (Adamopoulou & Moussiades, 2020; Pillai & Sivathanu, 2020). However, these chatbots require a significant effort to create and curate training data (Reinhard et al., 2024b). (c) *GenAI-based chatbots* represent the latest evolution in chatbot technology. These chatbots utilize advanced AI models, such as GPT (Generative Pre-trained Transformer) models, to generate human-like responses dynamically. GenAI-based chatbots can engage in more natural and open-ended conversations, simulating human-like interactions more convincingly (Miklosik et al., 2021; Israfilzade & Sadili, 2024). At

the core of GenAI lies the utilization of large language models (LLMs). GenAI-based chatbots are instructed by so-called prompts that define the appearance and the interactions of the chatbot. Such bots do not rely on pre-defined intents and response pairs. This leaves a gap in transferring knowledge from prior research on designing conversational agents toward generative AI-based CAs.

*Conversational design* is a crucial aspect of chatbot development that focuses on creating engaging and intuitive interactions between users and chatbots. It encompasses designing the structure, flow, and content of conversations (Schmidt et al., 2023) between users and conversational interfaces and strategies aimed at enhancing the conversational experience to create seamless, intuitive, and engaging user experiences by leveraging principles from linguistics, psychology, and user experience design (Elshan et al., 2022). For example, the field of *anthropomorphic* assistants examines how conversational agents can be designed to appear more human-like by showing human characteristics or styles of interactions (Diederich et al., 2020; Seeger et al., 2021). In rule-based and intent-based chatbots, the design is predominantly integrated by defining the rules, intents, and responses. However, with the emergence of GenAI-based chatbots, *prompt engineering* has become the main leverage to personalize autonomous agents and enable contextualized conversations. Our results are aimed to especially guide conversational design in times of generative agents based on LLMs.

## 3. Brand identity

Brand identity is a fundamental aspect of marketing and communication strategies that defines how a brand presents itself to its audience. It encompasses various elements, including visual design, messaging, and values, that shape how customers perceive and interact with a brand (Wheeler, 2017; Chernatony, 1999). By integrating brand identity into the chatbot, companies can create a consistent and cohesive brand experience for users, thereby strengthening brand recognition and fostering positive brand associations (Kull et al., 2021). Brand communication encompasses the messages and channels through which a brand interacts with its audience. Brand communication emphasizes the necessity of maintaining a consistent and unified brand voice across all communication channels, ensuring that the message is memorable, identifiable, and customer-centric (Silveira et al., 2013; Chernatony, 1999). The integration of content and design is essential to differentiate the brand effectively, while

key elements such as voice, tone, headline style, punctuation, etc. are intrinsic to successful brand communication (Wheeler, 2017). Brand visual identity encompasses various visual elements such as logos, colors, shapes, and typefaces that consumers encounter when interacting with a brand. These elements collectively form associations and meanings, contributing to the unique identity and personality of the brand (Phillips et al., 2014). These elements play a crucial role in conveying the brand's personality and values to customers. When consumers consistently encounter visually appealing and cohesive brand imagery, they are more likely to develop positive associations and feelings toward the brand, leading to stronger brand relationships and increased brand loyalty (Chernatony, 1999). However, the intersection of brand identity and conversational design remains largely unexplored.

#### 4. Methodological approach

A systematic literature review was conducted to collect relevant prior research in the theme area between brand identity and conversational design and to investigate the state of the art. This methodology was chosen because of the lack of aggregated knowledge in this area. We argue that systematizing prior research allows others to accelerate research on brand identity and conversational design. The research methodology is structured adhering to the rigorous PRISMA guidelines (Brocke et al., 2015) to ensure transparency, comprehensiveness, and accuracy in the synthesis of prior literature through a systematic literature review (Webster & Watson, 2002).

The initial phase of the research process involved a comprehensive search of reputable online databases, including Web of Science and ScienceDirect. The authors gathered prior literature from the years 2020 to 2024 to ensure that the findings were current and relevant and consider state-of-the-art chatbot technologies. The author used a refined search strategy by using boolean operators and keyword strings to search for related words or phrases in the title, abstract, or keywords corresponding to the research focus: *(brand OR brand identity OR corporate brand OR corporate identity OR brand persona) AND (chatbot OR chatbot OR conversational agent OR virtual assistant)*.

A total of 133 pieces of literature were collected from two primary databases that ensure a large scope of the literature search: 48 from Web of Science and 85 from ScienceDirect. Due to duplicity, two papers were removed. The 131 collected pieces of literature were then subjected to an abstract screening process

and full-text review to ensure the relevance of the studies before the coding process, using MAXQDA. During the abstract screening, the author highlighted relevant keywords to this review. 77 pieces of literature that did not fulfill these criteria were removed from the literature selection. The 54 pieces of literature that passed the initial abstract screening were then subjected to a full-text review.

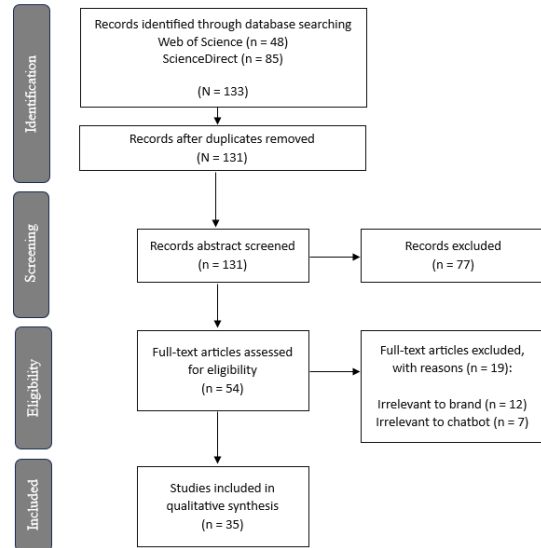


Figure 1. Systematic literature review PRISMA flow diagram

Particular attention was given during this review process to the content of the literature background, experiment setup, and findings on *conversational agents* and *brand identity*, resulting in the exclusion of an additional 19 articles. However, we did not filter on certain types of studies. Among these exclusions, 12 papers were deemed irrelevant to *brand identity* (e.g., in a medical context), while 7 papers were unrelated to designing and applying *conversational agents*. These exclusion criteria allowed us to identify papers at the intersection of AI-based assistants and brand identity. Consequently, 35 relevant pieces of literature were identified for inclusion in the qualitative synthesis process, where we analyzed the dependent and independent variables being examined and discussed in research on conversational design and brand identity. The codes were identified through full-text analysis, in particular concerning the analysis of the experimental setup, the construct model, and the findings presented in these 35 papers. The variables were determined by examining the explanations provided for the terminology utilized throughout the literature.

## 5. Findings

This chapter presents the outcomes of the systematic literature review conducted to investigate the integration of brand identity in a chatbot’s conversational design. First, we dive into the design cues that transfer brand identity in conversational design. Finally, this section summarizes the established dependent variables that represent recurring criteria for assessing the impact of CA’s design on brand identity and its related concepts.

### 5.1. Conversation design and brand identity

In addressing the first research question—namely, the utilization of brand identity attributes in shaping verbal and visual cues of AI chatbot conversational design—the coding results offer valuable insights.

Social cues are vital elements in communication, encompassing verbal and non-verbal signals that convey meaning, emotions, and intentions. In conversational design, effectively leveraging social cues is crucial for creating natural and intuitive interactions between users and chatbots (Feine et al., 2019). These cues are categorized into four types: verbal, visual, auditory, and invisible. Verbal cues are expressed through written or spoken words, including language variation and message meaning. Visual cues encompass elements that can be seen aside from words, such as chatbot appearance and visual elements (Elshan et al., 2022). Auditory cues involve elements that can be heard aside from words. Invisible cues include elements that cannot be seen or heard (Feine et al., 2019).

The objective of this analysis is to elucidate the complex interrelationship between brand identity and the design elements of chatbots, thereby providing a more profound comprehension of their combined influence. Table 2 identifies specific verbal cue attributes that can be used by brands to shape the content of CA conversational design. This also answers the knowledge gap on how to define or shape the “warm” and “competent” CA tone of voice by detailing manifestations of these types that allow to stimulate certain brand experiences. Moreover, the attributes complement and extend the taxonomy of social cues from Feine et al. (2019). Verbal cues are not limited to the content output of CAs; they also encompass the content delivery through CAs’ functionality, such as response delay and summarizing user input or CA output.

**Table 2. Verbal cues for brand personalization**

Code	Attributes	Sources
<b><i>Tone of voice:</i></b>		
<i>Warm</i>	Friendly, sincere, kind, honest, thoughtful, generous, good-natured	Mariani et al., 2023; Lee & Li, 2023; Akdim & Casalo, 2023; Lekaviciute et al., 2023; Yang & Hu 2022; Poushneh, 2021
<i>Competent</i>	Capable, competitive, intelligent, skillful, efficient, expert	Mariani et al., 2023; Janson, 2023; Lee & Li, 2023; Nguyen et al., 2023; Li et al., 2023; Kirkby et al., 2023; Poushneh, 2021
<b><i>Interaction</i></b>		
<i>Responsive</i>	Basic interjection, summarizing, inferring, completing information, situational appropriateness	Heppner et al., 2024; Rodrigues et al., 2024; Li et al., 2023; Landim et al., 2022; Tsai et al., 2020
<i>Proactive</i>	Automatic notification, predicting user demand, initiating engagement	Stieglitz et al., 2022; Tsai et al., 2020
<b><i>Others</i></b>		
<i>Output style</i>	Empathy, sympathy, Sentence complexity strength of language, formality, goal-oriented, emotional verbalization, error handling, flexibility, response delay	Heppner et al., 2024; Llanes-Jurado et al., 2024; Rodrigues et al., 2024; Janson, 2023; Kirkby et al., 2023; Li et al., 2023; Lekaviciute et al., 2023; Ischen et al., 2022; Nißen et al., 2022; Stieglitz et al., 2022; Poushneh, 2021; Tsai et al., 2020; Stal et al., 2020
<i>Content</i>	Disclosing AI, emoticons, image output, humor, small talk	Stieglitz et al., 2022; Poushneh, 2021; Tsai et al., 2020; Stal et al., 2020

In contrast, table 3 identifies specific visual cues and attributes that can be employed by a brand to influence the visual representation of CA. These attributes also complement and enhance the social cues taxonomy proposed by Feine et al. (2019) by providing more detailed representations of cues. The visual attributes can be adjusted to align with the needs of the company and the user with whom they wish to interact. Certain attributes can be expanded based on the industry; for example, for technical service CA, the clothing style can either be casual or branded company clothing. This is dependent on the importance of

personalization compatibility for the brand concerning their target group.

**Table 3. Visual cues for brand personalization**

Code	Attributes	Sources
<i>Embodiment</i>	Human avatar, robot avatar, avatar species	Heppner et al., 2024; Araujo & Bol, 2024; Llanes-Jurado et al., 2024; Janson, 2023; Denecke & May, 2023; Nguyen et al., 2023; Akdim & Casalo, 2023; Jin & Youn, 2023; Lekaviciute et al., 2023; Nißen et al., 2022; Tsai et al., 2020; Stal et al., 2020
<i>Design elements</i>	Realism degree, dimension, color scheme	Llanes-Jurado et al., 2024; Mariani et al., 2023; Nguyen et al., 2023; Akdim & Casalo, 2023; Lekaviciute et al., 2023; Stal et al., 2020
<i>Socio-demographic</i>	Gender, age, education	Heppner et al., 2024; Mariani et al., 2023; Abdulquadri et al., 2021; Toader, et al., 2020; Stal et al., 2020
<i>Appearance</i>	Clothing style, cultural background, body shape	Janson, 2023; Nguyen et al., 2023; Stal et al., 2020
<i>Kinetics</i>	Facial expression, movement	Heppner et al., 2024; Llanes-Jurado et al., 2024; Janson, 2023; Nguyen et al., 2023; Lekaviciute et al., 2023; Jin & Youn, 2023; Sadek et al., 2023; Poushneh, 2021; Stal et al., 2020

## 5.2. Brand-related outcomes of conversational design

The following section addresses the question of the extent to which the brand's integrated verbal and visual cues in the AI chatbot's conversational design influence the user assessment of the AI chatbot and the brand. The assessment of the AI chatbot has been shown to possess a key mediating effect on brand-related outcomes. Thus, we examined the assessment of CAs explicitly.

The impact of brand social cues on the assessment of CAs is multifaceted (Table 4). Research by Stal et al. (2020) indicates that emotional expression and empathic behavior contribute to increased likeability and believability while also enhancing usability and

user experience. Furthermore, Mariani et al. (2023) and Stal et al. (2020) highlight the significance of empathic behavior and anthropomorphism in enhancing customer satisfaction. As proposed by Mariani et al. (2023), Jin & Youn (2023), and other researchers, continuance intention is positively influenced by anthropomorphism, personalization, emotion, brand presence, and competence. Conversely, visual cues that lack transparency, as proposed by Rodrigues et al. (2024), may negatively impact continuance intention. Moreover, user compliance is enhanced by anthropomorphism (Mariani et al., 2023; Chaturvedi et al., 2023). User trust in CA is positively influenced by addressing privacy concerns and perceived risk, as observed by Araujo & Bol (2024) and other sources. Finally, engagement is increased by personalization, avatar usage, anthropomorphism, and user-chatbot personality compatibility (Rodrigues et al., 2024; Lee & Li, 2023; Mariani et al., 2023).

**Table 4. CA assessment**

Outcome	Influence	Sources
(+) <i>Likeability, believability, usability, user experience</i>	Emotion, empathic behavior, and anthropomorphism	Stal et al., 2020
(+) <i>Customer satisfaction</i>	Empathic behavior and anthropomorphism	Mariani et al., 2023; Stal et al., 2020
(+) <i>Continuance intention</i>	Anthropomorphism, personalization, emotion, brand, social presence, and competence	Mariani et al., 2023; Jin & Youn, 2023; Li et al., 2023; Janson, 2023; Lee & Li, 2023; Tsai et al., 2020
(-) <i>Continuance intention</i>	CAs visual lack of transparency lowers continuance intention.	Rodrigues et al., 2024
(+) <i>User compliance</i>	Anthropomorphism	Mariani et al., 2023; Chaturvedi et al., 2023
(+) <i>User trust</i>	Addressing user privacy concerns and perceived risk	Araujo & Bol, 2024; Mariani et al., 2023; Li et al., 2023; Landim et al., 2022; Abdulquadri et al., 2021
(+) <i>User engagement</i>	Personalization, avatar, Anthropomorphism, and user-chatbot personality compatibility	Rodrigues et al., 2024; Lee & Li, 2023; Mariani et al., 2023

Table 5 lists the examined outcomes and effects related to brand objectives. Anthropomorphism is a significant driver of brand outcomes, positively influencing brand satisfaction, relationship quality, trust, and loyalty (Chaturvedi et al., 2023; Mariani et al., 2023; Lee & Li, 2023). The anthropomorphic elements embedded within chatbots contribute to enhancing user experiences and fostering stronger connections with brands. Moreover, the tone of voice employed in interactions is of great significance, influencing brand satisfaction, and trust, and fostering brand love (Pal et al., 2023; Varsha et al., 2021; Chaturvedi et al., 2023). Social cues incorporated into chatbot interactions enhance brand satisfaction and relationship quality. Research by Janson (2023) and Kirkby et al. (2023) highlighted the creation of an agent design with a diverse cultural background or inclusive approach contributes to the shaping of perceptions of brand ethics. Furthermore, ensuring compatibility between users' personalities and chatbot interactions positively influences relationship quality, loyalty, and psychological ownership of the brand (Lee & Li, 2023; Jin & Youn, 2023). Research by Nguyen et al. (2023) indicates that disclosing the nature of automation contributes to building brand transparency, ethics, and credibility.

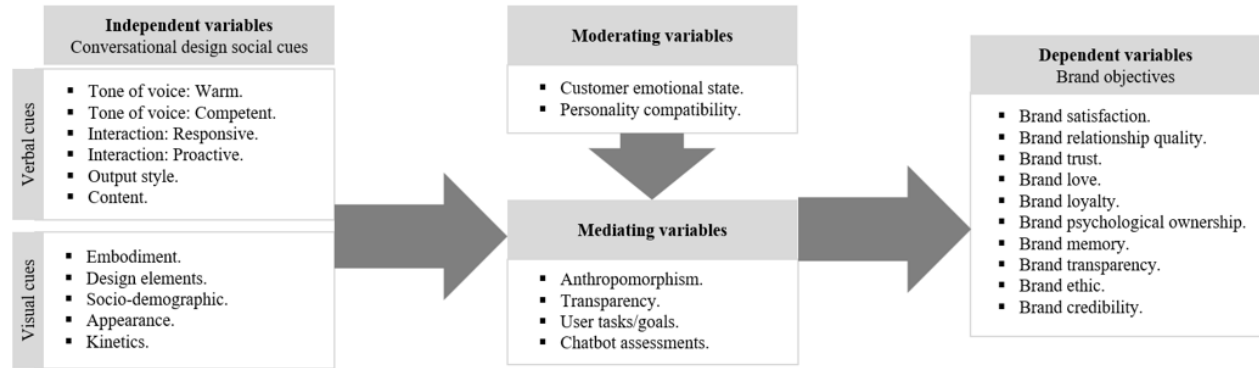
**Table 5. Conversational design on brand objective**

Outcome	Influence	Sources
(+) <i>Brand satisfaction</i>	Anthropomorphism, avatar authenticity, tone of voice, social cues, and utilizing delayed response positively	Chaturvedi et al., 2023; Mariani et al., 2023; Lee & Li, 2023
(+) <i>Brand relationship quality</i>	Social cues, intelligence, personality compatibility, anthropomorphism, and tone of voice	Mariani et al., 2023; Chaturvedi et al., 2023; Magno & Dossena, 2023; Lee & Li, 2023
(+) <i>Brand trust</i>	Anthropomorphism, tone of voice, responsiveness, professionalism, and capability	Lee & Li, 2023; Nguyen et al., 2023; Li et al., 2023; Toader et al., 2020
(+) <i>Brand love</i>	The tone of voice, personality compatibility, and emphatic emotion	Pal et al., 2023; Varsha et al., 2021
(+) <i>Brand loyalty</i>	Anthropomorphism, avatar authenticity, name-brand, and personality compatibility	Mariani et al., 2023; Lee & Li, 2023; Chaturvedi et al., 2023
(+) <i>Brand psychological ownership</i>	Personality compatibility and visual-customer	Lee & Li, 2023; Jin & Youn, 2023

	identification	
(+) <i>Brand memory</i>	Personality, value compatibility and persuasion knowledge.	Lee & Li, 2023; Ischen et al., 2022
(+) <i>Brand transparency and credibility</i>	Competence and disclosing machine interaction	Rodrigues et al., 2024; Nguyen et al., 2023; Kirkby et al., 2023
(+) <i>Brand ethic</i>	Visually diverse, socially inclusive, accessible chatbot interaction, and disclosing machine interaction	Janson, 2023; Kirkby et al., 2023

## 6. Discussion

The course of this research led to the development of a conceptual framework designed to facilitate a better understanding of the diverse and complex relationships between conversational design social cues and brand identity attributes and their subsequent impact on brand objectives. The framework is comprised of four main components: (1) conversational design social cues as independent variables, (2) brand objectives as dependent variables, (3) moderating variables and (4) mediating variables are also proposed (see Figure 2). Variables are classified as moderating if empirically proven to moderate social cues and brand objectives, and as mediating if tested as having a mediating effect between these factors. Conversational design social cues are the primary drivers that designers can utilize to shape the user's perception and experience with the chatbot. With our framework, we deepen the understanding of conversational design and brand identity (Feine et al., 2019). However, the influence of these independent variables does not exist in a vacuum. Furthermore, they are subject to the effects of moderating variables, which include the customer's emotional state and personality compatibility. These moderating variables can alter the strength or direction of the relationship between the independent and dependent variables, thus adding another layer of complexity to the framework. In addition, the framework incorporates mediating variables, which serve as the mechanisms through which the independent variables affect the dependent variables. These include anthropomorphism, transparency, user tasks or goals, and chatbot assessment. As anthropomorphism has been discussed in the literature and has been largely recognized as a key aspect of CA



**Figure 2. Conceptual framework on brand integrated conversational design.**

design (Li & Sung, 2021), our results emphasize additional mediators that are crucial for aligning conversational design and brand identity. Interestingly, transparency refers to one of the less frequently researched aspects concerning brand-related outcomes. The findings of our literature review, hence, indicate the relevance of explainable AI (XAI) in effecting the brand identity (Ansari et al., 2023). These variables provide a more comprehensive understanding of how brand identity attributes influence brand outcomes. Finally, the dependent variables in the framework are the brand aspects, which are the outcomes influenced by the cues of the conversational design. They encompass various aspects of the brand: brand satisfaction, brand relationship quality, brand trust, brand loyalty, brand psychological ownership, brand memory, brand transparency, brand ethics, and brand credibility.

### 6.1. Theoretical implications

This research contributes to the existing literature on brand identity and conversational design of AI chatbots by integrating diverse theoretical perspectives and empirical findings into a cohesive conceptual framework. Unlike previous studies that often examine isolated elements, this research offers a comprehensive framework and provides a collective understanding of how different elements influence user perspective on brand objectives. On the one hand, this comprehensiveness is often absent in prior literature. On the other hand, other taxonomies for example provided by Feine et al. (2019) and Elshan et al. (2022) remain on a high level and fall short of describing the underlying instantiations of conversational cues.

Furthermore, the conceptual framework serves as a foundation for future research, offering a structured framework for examining the relationships between brand identity attributes, conversational design social cues, and brand outcomes. Thereby, we delineate from

prior research on customer service chatbots (Rossmann et al., 2020). This framework can assist researchers in developing hypotheses and designing studies that further explore these relationships. Experimental designs that manipulate the independent variables and measure the dependent variables, combined with the selection of a representative sample that reflects the target customer base, ensure comprehensive data collection.

### 6.2. Managerial implications

The research illuminates the influence of anthropomorphism on user perceptions and brand-related experiences with AI chatbots. Anthropomorphism, the attribution of human-like qualities to chatbots, can enhance user engagement and foster stronger brand relationships. For instance, a friendly and sincere tone of voice can enhance user satisfaction and overall brand evaluation. However, this effect can vary based on the context. When customers are angry, a friendly tone may not be as effective and could potentially lead to negative user experiences (Rodrigues et al., 2024). Therefore, companies must carefully consider the tone of voice used by their chatbots and ensure that it aligns with the brand's identity and the specific context of the interaction.

The use of the chatbot's interaction style based on user needs is also crucial. The chatbot's interaction style should be responsive to the user's needs and preferences. Therefore, chatbot developers must understand the customers' preferences and make the chatbot's interaction style adaptive. Connecting to this, an important strategy is personalizing conversations based on user personality. As proposed by Roy & Naidoo (2021), chatbots can be designed to adjust their conversational style based on the user's personality. For instance, *present-oriented* users may prefer a chatbot with a warm tone of voice, while *future-oriented* users may prefer a chatbot that exhibits



competence and professionalism. Personalization can enhance user satisfaction and foster stronger brand relationships. The potential for chatbots to act as additional channels of communication, with the dual objective of positioning a brand in a favorable light, while simultaneously promoting the brand itself, should not be underestimated. While chatbots are designed with the primary aim of assisting consumers with queries and facilitating sales, they may equally be deployed as marketing tools for the brand and the company. A visually appealing chatbot can enhance user engagement and contribute to a positive brand image.

## 7. Conclusion

Our systematic literature review examined the interrelationship between the conversational design of CAs and brand objectives thoroughly. We provided a conceptual framework that guides future research on AI-based chatbot design by answering the two research questions. First, we analyzed the brand-related cues that conversational designers can influence to shape the brand experience. Second, we investigated the outcomes that such CAs produce. The resulting framework represents a starting point for research on the intersection of prompt engineering, conversational design, and brand experience. It is important to acknowledge the limitations of this research. Firstly, due to the novelty of GenAI, there is a lack of publications and knowledge on this topic. Secondly, the research is limited to the period from 2020 to 2024, which may not capture the most recent developments in the field or significant work conducted before this period. Thirdly, the study relies heavily on literature reviews and could benefit from more empirical methods, such as surveys or experiments, to validate the findings. Furthermore, the research is limited to English-language sources, which may result in the overlook of valuable insights from non-English literature. Additionally, the study does not consider the impact of cultural differences on the effectiveness of AI chatbots, which could be a significant factor due to the global nature of digital brand communication.

Our results indicate **potential avenues for future research**. Guiding research questions for further studies are: *How do cultural differences and localization affect the performance of branded AI chatbots? What role does user co-creation play in enhancing brand identity through chatbots? How can brand identity be maintained consistently across different GenAI chatbot use cases?* Future research could focus on developing a more granular taxonomy regarding brand identity attributes that are essential to

conversational design. This would require a comprehensive examination of numerous brand identity attributes and the methods for their efficient integration into the conversational design of AI chatbots. Currently, an exploration of the conceptual framework for prompt engineering in GenAI could be conducted. This would require a comprehensive understanding of the limitations of GenAI and the customization of the model to enhance the performance of AI chatbots and its impact on the brand. Moreover, the research could examine the cultural aspects of conversational design, examining how cultural nuances can impact the effectiveness of branded AI chatbots across diverse cultural contexts. Future studies may also seek to empirically test the conceptual framework proposed in this study. This could be achieved through the use of surveys or experiments. Investigations could also be conducted regarding the co-creation of value with the user and its subsequent influence on the brand. This investigation entails an exploration of methods for involving users in the design process of AI chatbots, with a focus on how user engagement can enhance brand value. Further research could be conducted on the practical strategies for implementing brand identity in conversational design, presenting tangible examples and case studies. This would provide valuable insights for businesses seeking to utilize AI chatbots to enhance their digital brand communication. Conducting a specialized literature review on conversational design and brand identity concerning GenAI-based chatbots such as research including ChatGPT. This would allow us to better understand how the outlined cues are incorporated into prompts.

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