Received: 15 September 2020 | Revised: 13 July 2021 | Accepted: 5 August 2021

DOI: 10.1002/cb.1984

SPECIAL ISSUE ARTICLE

WILEY

Delving into brand anthropomorphisation strategies in the experiential context of name-brand voice assistants

Maria Vernuccio | Michela Patrizi | Alberto Pastore

Department of Management, Sapienza University of Rome, Rome, Italy

Correspondence
Maria Vernuccio, Department of Management, Sapienza University of Rome, Rome, Italy.
Email: maria.vernuccio@uniroma1.it

Abstract

Consumers' increasing use of voice-activated artificial intelligence technologies is stimulating the development of a new line of research in the field of marketing aiming to analyse the branding implications in this innovative experiential context. The spread of so-called name-brand voice assistants (NBVAs) is creating interesting opportunities in terms of brand anthropomorphism. The brand anthropomorphisation strategies adopted by companies are poorly studied in the academic literature, and only one contribution has been made in the experiential field of NBVAs. Therefore, the objective of our work is to begin to fill this gap by investigating the pillars of brand anthropomorphisation strategies (i.e., activities and branding outcomes) in the specific NBVA context by adopting a managerial perspective. Therefore, we followed an exploratory qualitative approach based on in-depth personal interviews with practitioners engaged in these strategies in the automotive sector. The resulting cognitive map reveals the following three levels of strategic pillars: drivers (i.e., designing a human-like brand voice and human-like consumer-brand dialogue), intermediate outcomes (i.e., brand personality and the strength of consumer-brand relationships), and final outcomes (i.e., multidimensional brand loyalty). Our study enriches both the literature concerning brand anthropomorphisation strategies and the nascent stream on NBVAs and provides managerial guidelines in the new in-car NBVA context.

1 | INTRODUCTION

A voice assistant (VA) is an artificial intelligence software that simulates human intelligence through vocal dialogue. Consumers have adopted this technology at a fast rate, especially in cars, smartphones and smart speakers (Voicebot, 2020). The growing importance of VA applications for cars is promoting the diffusion of so-called name-brand voice assistants (NBVAs) (e.g., Mercedes' Mercedes-Benz User Experience – MBUX). NBVAs are in-house developed VAs activated by a user saying the brand name that speak with a specific brand voice instead of the voice of the technology provider's VA (e.g., Alexa – Amazon; Vernuccio et al., 2021).

The previous marketing literature concerning VAs highlighted the opportunities offered by these interfaces in terms of anthropomorphism (Belk & Kniazeva, 2018) and branding (Vernuccio et al., 2021). The initial studies investigated technology providers' VA anthropomorphism consumer perception (e.g., Cho et al., 2019; Moriuchi, 2021), whereas to the best of our knowledge, only Vernuccio et al. (2021) focused on the implications of brand anthropomorphism in the NBVA context. Analysing the case of MBUX by Mercedes, these authors outlined how the brand voice can be designed by managers to build an anthropomorphic brand profile. Regarding the brand anthropomorphism research stream, several studies adopted the consumers' perspective but paid scant attention to the managerial perspective in the design of the brand anthropomorphisation strategy (i.e., Hosany et al., 2013; Portal et al., 2018), which rely on managerial design activities aimed at developing a specific anthropomorphic brand perception in consumers' minds with the ultimate objective of achieving relevant branding outcomes. However,

the managerial practice in the automotive industry is showing remarkable business cases of these branding strategies, which are intended to shape the perception of brands as human entities by including NBVAs in cars. Therefore, this paper aims to investigate the key pillars, that is, activities and objectives pursued by companies, of brand anthropomorphisation strategies in the NBVA experiential context by adopting the managerial perspective. Thus, we respond to the calls by Belk and Kniazeva (2018) for research on anthropomorphism in the field of VAs and by Hosany et al. (2013) for further studies concerning brand anthropomorphisation strategies and, thus, contribute to the brand anthropomorphism literature by adopting a managerial perspective. Moreover, our study can provide managers with innovative guidelines for the design of brand anthropomorphisation strategies developed through NBVAs. Therefore, we adopted an exploratory qualitative approach based on 13 in-depth interviews with practitioners (from the automotive sector) who were involved in brand anthropomorphisation strategies in the NBVA context.

The paper is structured as follows. In the following section, we present a literature review of brand anthropomorphism and the VA field focused on anthropomorphism. Then, we outline the methodology and findings. Finally, the results, theoretical and managerial implications, future research lines and limitations are discussed.

2 | THEORETICAL BACKGROUND

2.1 | Brand anthropomorphism

In the marketing literature, anthropomorphism is defined as consumer perception based on the tendency of imbuing human characteristics, intentions and emotions to non-human objects and agents (e.g., brand; Epley et al., 2008). Specifically, anthropomorphic brands are 'perceived by consumers as actual human beings with various emotional states, mind, soul and conscious behaviours' (Puzakova et al., 2009, p. 413). The perception of brand anthropomorphism arising in the consumer's mind is based on upstream managerial design activities, which are aimed at giving a specific human-like shape to the brand (e.g., physical and cognitive elements) and orienting consistently consumer perceptions to achieve relevant branding outcomes (i.e., cognitive, attitudinal and behavioural). Thus far, the concept of brand anthropomorphism has been connected mainly to physical attributes (Golossenko et al., 2020; Guido & Peluso, 2015) and some cognitive aspects, such as the mind (Epley et al., 2008), free will (Kim & McGill, 2011), intentions (Kim & McGill, 2011) and personality (Epley et al., 2008). Amid 'the set of human characteristics associated with a brand' (Aaker, 1997, p. 347) that constitute brand personality, the warmth and competence (W&C) dimensions are of great relevance. The first dimension refers to traits, such as being amicable, kind and trustworthy, while the latter dimension refers to capability, intelligence and ability (Malone & Fiske, 2013).

Research concerning brand anthropomorphism has almost exclusively assumed consumers' perspective (e.g., Ali et al., 2021; Golossenko et al., 2020; Guido & Peluso, 2015; Puzakova & Kwak, 2017), and to the best of our knowledge, only two studies have adopted the managerial perspective to understand the brand anthropomorphisation strategies implemented by companies. As marketing strategies are based on some key pillars – that is, activities designed by the company and specific objectives to be pursued (Greenley, 1989) – brand anthropomorphisation strategies can be defined as a set of managerial activities that aim to achieve specific branding outcomes by favouring the perception of brand anthropomorphism in consumers' mind. The first study on brand anthropomorphisation strategies was the empirical contribution by Hosany et al. (2013), who analysed a specific anthropomorphic character's brand (i.e., Hello Kitty) and identified eight key strategic cornerstones, such as simplicity in design. These authors underlined the importance of orienting the strategy towards the support of consumers' interest in the brand to inspire an emotional consumer-brand relationship. In the second conceptual study, Portal et al. (2018) proposed the 'human brand model', which defines the following four strategic activities for building a brand perceived as a human: designing brand traits, brand attributes, brand authenticity and brand benefits. In particular, six types of brand attributes that should be developed were proposed, that is, original, ethical, genuine, warmth, competence, and trust, that is, original, ethical, genuine, warmth, competence, and trust. The brand anthropomorphisation strategy should be oriented towards building a good reputation, thereby strengthening the consumer-brand relationship and behavioural brand loyalty.

Although the extant literature provides indications about some activities (e.g., designing brand traits) and outcomes (e.g., the strength of consumer-brand relationships, brand loyalty) of brand anthropomorphisation strategies implemented by companies, the knowledge appears partial since, on the one hand, the results shown by Hosany et al. (2013) refer to the design activities of brand visual elements (i.e., Hello Kitty character traits) and, on the other hand, Portal et al. (2018) provide conceptual guidelines for practitioners that have not been empirically proved.

2.2 | Voice assistants and anthropomorphism

In light of the growing tendency of consumers to infuse voice-based artificial intelligence technologies with human characteristics (Puntoni et al., 2021), marketing scholars have mostly adopted the consumer perspective to investigate the perception of the VA as a human interlocutor (e.g., Fernandes & Oliveira, 2021; McLean et al., 2021; Patrizi et al., 2021). These studies have been conducted in several experiential contexts (e.g., smartphones, smart speakers) and by adopting different theoretical perspectives (e.g., the service robot acceptance model, para-social relationship theory). In this nascent stream of research, some experimental contributions have highlighted the role of vocal stimuli as determinants of VA human likeness, contrasting voice versus text (Cho, 2019; Cho et al., 2019) and a human-like voice vs. a synthetic voice (Chérif & Lemoine, 2019). In Table 1, we present an overview of studies on perceived VA human likeness, summarising the extant literature in terms of the context, theoretical perspective, methodology, main findings and sample.

TABLE 1 Overview of studies on perceived VA human likeness

Author(s)	VA context	Theoretical perspective	Main findings	Sample
Chérif and Lemoine (2019)	Prosper (website)	N/A	• A human-like (vs. synthetic) voice increases the perception of the VA as a human interlocutor.	Internet users
Cho (2019)	Google Assistant (smartphones vs. smart speakers)	N/A	• Voice (vs. text) improves the perception of the VA as a human interlocutor.	Students
Cho et al. (2019)	Cortana (laptops vs. smartphones)	N/A	• Voice (vs. text) enhances perceived VA human likeness. • Laptops (vs. smartphones) enhance perceived VA human likeness.	Students
Fernandes and Oliveira (2021)	N/A	Service robot acceptance model	• VA humanness does not impact VA acceptance.	Millennials
McLean et al. (2021)	Alexa (smart speakers)	Social response theory and the technology acceptance model	• The perception of the VA as a human interlocutor positively affects consumer brand engagement.	Market research firm panel
Moriuchi (2021)	Google Assistant and Alexa (smart speakers)	Realism maximisation theory and the unified theory of acceptance and use of technology	• VA anthropomorphism has a positive impact on VA engagement.	Prolific respondents
Patrizi et al. (2021)	(smartphone)	N/A	• Users perceive the VA human-like voice and the VA social presence in an integrated way.	Millennials
Pitardi and Marriott (2021)	Alexa (smart speakers)	Human–computer interaction theories and para-social relationship theory	• The perception of the VA as a human interlocutor positively influences trust in technology.	mTurk respondents

Abbreviation: VA, voice assistant.

Considering the specific NBVA field, interesting opportunities in terms of human-like brand arise, as the brand acquires for the first time a property typical of humans, the voice, with which it dialogues directly and dynamically with the consumer (Vernuccio et al., 2021). In this innovative context, only one study has been found (Vernuccio et al., 2021) that aimed to understand the role of brand voice in NBVA design by analysing the Mercedes MBUX case through a managerial perspective. This single case study outlines the relevance of specific voice characteristics for building a human-like voice and the human-like brand personality traits of warmth and competence, with the ultimate aim of developing an anthropomorphic brand profile. Although the design of vocal features has already been shown to be a fundamental activity of the brand anthropomorphisation strategy, it is unclear whether this result could be extended beyond the Mercedes MBUX case. Moreover, further activities and outcomes of brand anthropomorphisation strategies in the NBVA context remain unknown. In light of these considerations, as well as the previously highlighted gap in the brand anthropomorphisation literature, this work aims to identify the key pillars, that is, activities and branding outcomes, of brand anthropomorphisation strategies in the NBVA experiential context by adopting the managerial perspective. Figure 1 shows the contribution and positioning of our study by combining the partial literature on brand anthropomorphisation strategies with the nascent research stream on NBVAs.

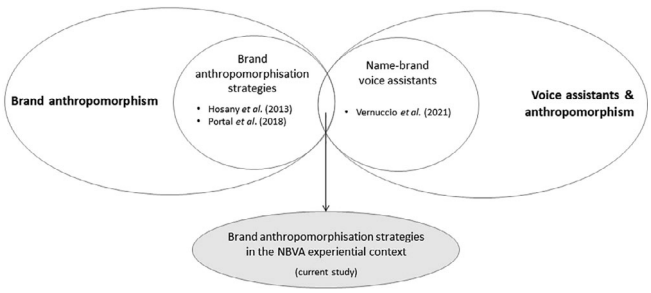

FIGURE 1 Study contribution and positioning

3 | METHODOLOGY

Given the aim of this study and the paucity of previous studies, we adopted a qualitative exploratory approach based on in-depth personal interviews ($N = 13$) with practitioners engaged in brand anthropomorphisation strategies in the NBVA experiential context (Creswell, 1998). A brief interview guide based on open-ended questions (in addition to the fixed data) was used to minimise conditioning due to the researchers' knowledge and elicit spontaneous answers and reasoning based on the perceived key pillars in the development of the brand anthropomorphisation strategy. To understand the concepts that practitioners consider important with respect to our research topic and how these concepts are interconnected, the cognitive mapping

TABLE 2 Overview of the interviewees

Interviewee ID	Area of organisation	Company	Years of experience	Gender
1	Marketing	Company 1	21	Male
2	Marketing	Company 1	16	Female
3	External Relations	Company 1	25	Male
4	R&D	Company 1	20	Female
5	R&D	TTS provider	26	Male
6	R&D	TTS provider	21	Female
7	Corporate Communication	Company 2	24	Female
8	Marketing	Company 2	22	Female
9	R&D	Company 2	18	Male
10	Strategy	TTS provider	25	Male
11	Marketing	Company 2	17	Male
12	Strategy	TTS provider	28	Male
13	Business Development	TTS provider	20	Female

Abbreviation: TTS, text-to-speech.

technique was used (Axelrod, 1976; Chaney, 2010; Huff, 1990; Swan, 1997; Vernuccio & Ceccotti, 2015; Wrightson, 1976).

Given the relevance of NBVAs in the automotive sector, we focused on two international automaker companies (hereinafter referred to as 'Company 1' and 'Company 2') that were the first to develop in-house NBVAs with the support of highly specialised text-to-speech (TTS) providers, who were involved in the design and development of the speed software and who served as voice command and data suppliers. As reported in Table 2, three waves of data collection were conducted.

During the first phase (September–November 2019), six interviewees (four managers and two TTS providers) were selected following the key informant technique (Robson & Foster, 1989). During the second phase (June–July 2020), four additional interviewees (three managers and one TTS provider) were selected using the snowball sampling strategy (Robinson, 2014). During the final phase (December 2020–January 2021), to satisfy the criterion of data saturation (Guest et al., 2006), the third phase was conducted with three further interviews. The respondents, who were from the US and Europe (i.e., Germany and Italy), were classified as Interviewees 1–13, as they requested full anonymity and no disclosure regarding their companies or job titles. However, the area of organisation, company, years of experience (at least 16 years) and gender of each respondent are reported in Table 2.

The interviews, which lasted approximately 90 minutes on average, were recorded and transcribed in full. To identify and favour a cross-reading of the key pillars of brand anthropomorphisation strategies in the NBVA context, we systematised the practitioners' most frequently shared subjective thoughts in a 'collective cognitive map' (Swan, 1997; Vernuccio & Ceccotti, 2015). The data analysis followed the four stages of the documentary coding method (Wrightson, 1976) as follows (Figure 2):

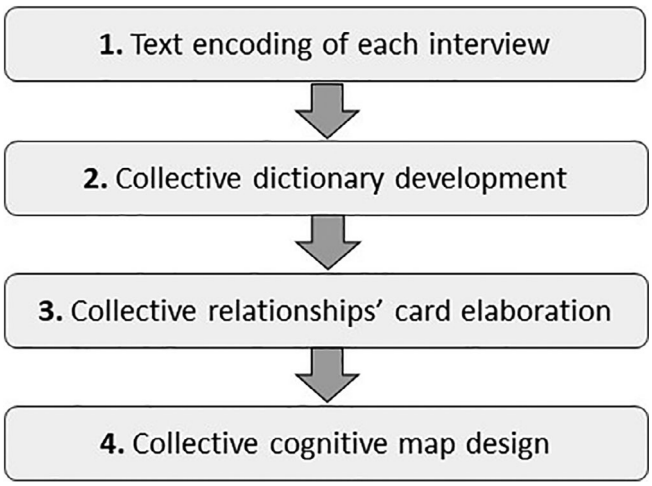

FIGURE 2 The data analysis process

3.1 | Text encoding of each interview

Qualitative content analysis adopting the theme as a criterion for identifying the units of analysis was performed during the encoding phase (King & Horrocks, 2010). After careful and repeated reading of each interview, the so-called descriptive codes were defined, that is, very short codes descriptive of specific portions of text. Based on these descriptive codes, we defined more general interpretative codes (themes), which were identified by a process of abstraction (King & Horrocks, 2010). To ensure the adequate reliability of the results, following the code-confirming approach (King & Horrocks, 2010), two independent coders, who were marketing experts and specifically methodologically trained, were charged with confirming the associations.

The interjudge reliability, which was calculated as the so-called agreement ratio, was 88%, which is above the minimum expected level (Powell, 2007).

3.2 | Collective dictionary development

A list of all concepts emerging from the previous phase and the related verbalisations was prepared. All statements with the same

meaning were identified and unified (merging). This procedure allowed us to define the main themes that were the most shared concepts across the 13 interviews ('those beliefs that were shared by more than half of the sample', Swan & Newell, 1993, p. 193).

3.3 | Collective relationships' card elaboration

Based on the most shared concepts, the relationships among these nodes were identified. To simplify the analysis based on the objectives, we considered only the following three types of relationships (Swan, 1997): causal (A influences/causes B); category (A is a part of B/is included in B); contiguity (B follows A).

3.4 | Collective cognitive map design

The final collective cognitive map emerged from a systematisation of the main thoughts among the 13 practitioners. The map represents the key pillars of brand anthropomorphisation strategies to develop through NBVAs, that is, drivers, intermediate outcomes and final outcomes. The cognitive map was designed using Decision Explorer software (Eden et al., 1992).

To enhance the credibility of the results, the collective map was presented to and discussed with six interviewees, who validated the obtained findings.

4 | FINDINGS

The map emerging from the analysis (Figure 3) represents the collective cognitive structure shared among the respondents in terms of the most shared concepts and the logic linking these concepts. Specifically, the following three types of relationships emerged (Swan, 1997; Swan & Newell, 1993): causal (A influences B), category (B is a subset of A) and contiguity (B follows A). Figure 3 illustrates the collective map representing the following key pillars of the brand anthropomorphisation strategies developed through NBVAs: drivers, intermediate outcomes, and final outcomes. The arrows represent causal relationships between the concepts, while lines indicate relationships of category, and dotted lines refer to relationships of contiguity. In the following sections, we present the different components of the collective cognitive map.

4.1 | Drivers

There was widespread consensus among the interviewees regarding two fundamental drivers, that is, activities carried out by companies to favour the brand anthropomorphism perception, in the brand anthropomorphisation strategies developed through the NBVA: designing a *human-like brand voice* and *human-like consumer-brand dialogue*.

Human-like brand voice: The meanings associated with the concept of the humanity of voice appear to be linked to the following four sub-themes (category type relationships): (1) *brand voice quality*; (2) *brand voice pitch*; (3) *brand voice prosody*; and (4) *brand voice gender*.

1. The *brand voice quality* is considered by the interviewees one of the main brand voice characteristics and is based on concatenation through algorithms of whole sentences recorded by human speakers with short synthetic speech pieces that are stored in a

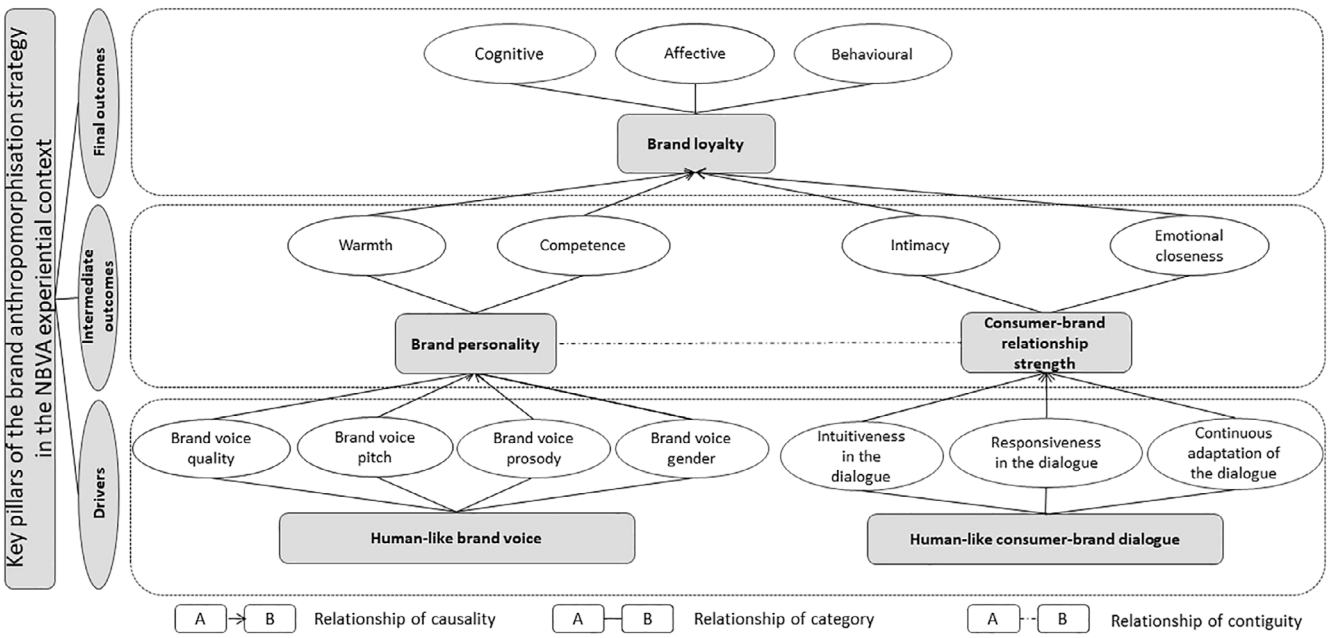

FIGURE 3 The key pillars of the brand anthropomorphisation strategies in the name-brand voice assistants experiential context

database. Specifically, the quality increases by improving the recorded phrases, and as a result, the brand voice becomes closer to a human voice.

> *In this context, the voice quality is related to the number of recorded sentences from a human speaker compared to sentences generated with a voice synthesiser. To achieve a human-like voice, it is necessary to increase the quality and, therefore, the number of recorded sentences. The managers asked us this* (Interviewee 12, Strategy, TTS provider).

2. The second sub-theme is the *brand voice pitch*, which is the melodic height with which a syllable is pronounced. Although the participants felt that some aspects of artificiality remain, the objective is to make the brand voice pitch as similar as possible to a human pitch by creating variations (up and down) during speech.

> *'The brand voice pitch should be very close to a human pitch' […] 'For me, you still feel that it [the brand voice] is artificial; you feel that it does not have the tone of the voice that we can have, but surely, you feel that it has made great strides compared to previous technologies'* (Interviewee 1, Marketing, Company 1).

3. The respondents diffusely considered the *brand voice prosody*, that is, intonation, rhythm and accent, and the consequent melodic movement in each type of sentence (e.g., interrogative) essential vocal attributes favouring the perception of the brand voice as a human voice.

> *We had to work a lot on prosody to create a human voice. For example, in an interrogative sentence, the intonation must rise. In this case, we have some correction tools that we have used to correct all prosody defects* (Interviewee 6, R&D, TTS provider).

4. According to the opinion of the interviewees, the development of a human-like brand voice cannot ignore the strategic choice of the *brand voice gender*, which is conditioned mainly by cultural factors. In this regard, the marketing manager of Company 2 asserts the following:

> *The voices are similar but not the same in every country; the main difference is gender. In the United States and Europe, users tend to prefer female voices, while in some markets, such as Russia and Saudi Arabia, for specific cultural reasons, consumers prefer a male voice as a guide* (Interviewee 8, Marketing, Company 2).

Human-like consumer-brand dialogue: According to the interviewees, users should be able to interact with the brand through the NBVA as if they were interacting with a human. The concept of the humanity of the dialogue emerges from the following three sub-themes connected by category type relationships: (1) *intuitiveness in the dialogue*; (2) *NBVA responsiveness in the dialogue*; and (3) *continuous adaptation of the dialogue*.

1. To make the consumer-brand dialogue as close as possible to human interaction, the participants outlined the importance of *intuitiveness in the dialogue*, which is conceived as simplicity and fluidity. Due to natural language understanding technology, the respondents believed that an NBVA could become a human-like interlocutor able to understand any type of sentence.

> *Company 1 wanted an intuitive vocal interaction that did not require reading manuals to use it. For this reason, they used the Natural Language Understanding, which, unlike grammar recognition, allows the VA to understand any type of sentence even if it is indirectly formulated* (Interviewee 6, R&D, TTS provider).

2. *NBVA responsiveness in the dialogue* was regarded by the participants as a feature necessary to develop human-like consumer-brand interaction. In this regard, the interviewees emphasised how the NBVA reaction time was reduced to simulate pauses in human dialogue and ensure that the user does not have to wait longer than he/she would expect when talking to a person after vocally formulating his/her request.

> *The interface has to be responsive, very responsive, fast with a maximum of two seconds of delays in any type of interaction. […] So, we had to work to optimise the algorithms and make sure that the user does not have to wait any longer than he would expect by talking to a human* (Interviewee 6, R&D, TTS provider).

3. According to the managers' conceptualisation, the *continuous adaptation of the dialogue* is based on both the user's habits and context and individual factors. Regarding the first criterion of adaptation, an NBVA can learn a user's language expressions and behavioural habits (e.g., frequently used routes or people called) and establish a dialogue based on these factors.

> *If you frequently call a person when you leave the office, if she is your girlfriend, [the voice assistant] asks you, 'Do you want to call your girlfriend?'* (Interviewee 10, Strategy, TTS provider).

Concerning the continuous adaptation to the context and individual factors, the participants outlined the importance of an NBVA's ability to capture information regarding both external conditions (e.g., weather and traffic) and the driver (e.g., how long he/she has been driving).

> *The algorithm also takes in information about context-based factors. For example, if you've been driving a lot, it's raining and there's a lot of traffic, the algorithm processes all these data and deduces that you might be stressed; so, it asks you if you want a regenerating program that involves changing the colour of the lights inside the driver's cab and cheerful songs* (Interviewee 8, Marketing, Company 2).

4.2 | Intermediate outcomes

In the context of NBVAs, the respondents argued that the drivers of brand anthropomorphisation strategies should aim to achieve the following two intermediate outcomes (contiguity type relationship): developing the perception of a *brand personality* and improving the strength of *consumer-brand relationships*.

1. The widespread opinion that the human-like brand voice's characteristics (i.e., quality, pitch, prosody and gender) have to favour the perception of a *brand personality* (causal relationships) emerged. The brand personality refers to a multiplicity of human traits that are associated with both the *warmth dimension* and the *competence dimension* (category type relationships). For example, the informal, friendly and trustworthy traits are related to the warmth dimension, while intelligent, brilliant and solution-oriented are related to the competence dimension.

> *Vocal characteristics have to be chosen to enable the perception of specific brand personality traits in the consumer's mind, such as informal, intelligent, brilliant, solution-oriented…* (Interviewee 1, Marketing, Company 1).

> *The choice of vocal characteristics was guided by a very precise objective – our voice assistant had to be perceived by users as friends but, at the same time, trusting and not naive* (Interviewee 7, Corporate Communication, Company 2).

2. Moreover, the participants underlined how the human-like consumer-brand dialogue features have to be designed to improve the *consumer-brand relationship strength* in terms of *intimacy* and *emotional closeness* (category type relationships). According to the conceptualisation provided by the respondents, the ability to understand the consumer's habits and needs enables a more intimate and personal consumer-brand relationship (intimacy). In addition, when the driver's emotions are known, the brand becomes a travel companion that leads the user to perceive the brand as a friend and enjoy a unique feeling. As stated by the Marketing manager of Company 2,

> *Thanks to the dialogue established between the brand and the user through the VA, a stronger relationship is created. Stronger in the sense of more intimate because the brand demonstrates daily that it knows what you need and when you need it. To go back to the example of before, the brand, through the VA, knows that at a specific time you always call the same person, and then, it proposes you to call him/her; so, it knows your habits and your needs, and consequently, the relationship that is created is more personal. All this is accompanied by an emotional closeness because the brand feels that you are stressed and offers you songs to relax. Inevitably, the brand becomes your travel companion, your friend, and as it happens with your friends, you start to have special feelings for him/her [the brand]* (Interviewee 8, Marketing, Company 2).

Therefore, based on our results, we propose the following tenets:

Tenet 1: In brand anthropomorphisation strategies developed through NBVAs, the design of human-like brand voice characteristics (i.e., quality, pitch, prosody and gender) aims to enable the perception of the brand personality.

Tenet 2: In brand anthropomorphisation strategies developed through NBVAs, the design of consumer-brand dialogue features (i.e., intuitiveness, responsiveness and continuous adaptation) is finalised to strengthen the consumer-brand relationship.

4.3 | Final outcomes

According to the interviewees, the perception of a brand personality (i.e., warmth and competence traits) and the development of a stronger consumer-brand relationship (i.e., intimacy and emotional closeness) should be geared towards increasing *brand loyalty* (causal relationships), which is recognised as the final outcome of brand anthropomorphisation strategies in the NBVA context. According to the respondents' answers, brand loyalty comprises the following three dimensions (category type relationships): (1) *cognitive*; (2) *affective*; and (3) *behavioural*.

1. First, the *cognitive* dimension is interpreted as consumers' positive beliefs and thoughts regarding the brand's dynamic ability to perform better and provide more benefits than other brands.

> *If the brand is perceived as trustworthy and competent and if thanks to the daily voice dialogue the relationship becomes intimate because the brand learns your habits*

> *and, therefore, always satisfies your needs better, the user becomes loyal in the sense that he/she automatically recognises the brand's superior benefits* (Interviewee 7, Corporate Communication, Company 2).

2. Second, the respondents conceived the *affective* dimension of brand loyalty as an emotional attachment to and positive feelings towards the brand.

> *When a strong relationship is created and you see every day that the brand proves to be both friendly and intelligent through the VA, you also become more emotionally loyal to the brand because it makes you feel good. For us, this is an important goal* (Interviewee 8, Marketing, Company 2).

3. Third, the interviewees emphasised that another ultimate goal is to stimulate the *behavioural* dimension of brand loyalty, that is, encouraging repeated purchases of the brand.

> *The final achievement is the reconfirmation of the brand choice in the long run. This is the real point of arrival and departure!* (Interviewee 3, External Relations, Company 1).

Consequently, according to our findings, we propose the following:

Tenet 3: In brand anthropomorphisation strategies developed through NBVAs, the brand personality traits (i.e., warmth and competence) aim to increase brand loyalty.

Tenet 4: In brand anthropomorphisation strategies developed through NBVAs, the consumer-brand relationship dimensions (i.e., intimacy and emotional closeness) are intended to increase brand loyalty.

5 | DISCUSSION

Cognitive mapping allowed us to conceptualise three levels of the key strategic pillars of brand anthropomorphisation strategies in the NBVA experiential context: (1) drivers (i.e., designing a human-like brand voice and human-like consumer-brand dialogue), (2) intermediate outcomes (i.e., developing the perception of brand personality traits and strengthening consumer-brand relationships), and (3) final outcomes (increasing brand loyalty). Moreover, we identified three types of relationships (i.e., category, causal and contiguity) among the aforementioned concepts and formulated four final tenets.

In light of the positioning of this research that combines the nascent stream on NBVAs with the partial literature on brand anthropomorphisation strategies, our results contribute to jointly advancing knowledge in both fields. On the one hand, focusing on brand anthropomorphism from a managerial perspective in the under-researched context of NBVAs, our study enriches the rising strand of studies about VAs, shifting the focus from the consumer perspective, which thus far has been almost exclusively adopted (e.g., Fernandes & Oliveira, 2021; Moriuchi, 2021), to the perspective of practitioners engaged in the management of voice-based branding. Moreover, this work shifted the focus from the humanity of the VA to the humanity of the brand speaking through the in-car NBVA, extending the results of Vernuccio et al. (2021). On the other hand, our research contributes to the poorly investigated brand anthropomorphisation strategy field (Hosany et al., 2013; Portal et al., 2018) by identifying the key pillars (i.e., drivers, intermediate and final outcomes) of this strategic approach in the NBVA experiential context and highlighting how the objectives pursued by companies with these types of strategies can be hierarchically defined (i.e., intermediate and final outcomes).

With respect to the conceptualisation of the strategic 'drivers', that is, a human-like brand voice and human-like consumer-brand dialogue, this study broadens the potential activities aimed at fostering the brand anthropomorphism perception, which thus far were related only to the manipulation of the traditional elements of brand design, that is, facial or physical elements (e.g., Hosany et al., 2013). In particular, the results show that a human-like voice can be built based on specific vocal characteristics (i.e., quality, pitch, prosody and gender), while human-like consumer-brand dialogue can be developed by relying on specific features such as intuitiveness, responsiveness and continuous adaptation. In this way, our study extends the previous knowledge in the field of NBVAs (Vernuccio et al., 2021) by completing the range of drivers to be activated to favour the brand anthropomorphism perception.

Regarding the intermediate outcomes (i.e., developing the perception of brand personality traits and strengthening consumer-brand relationships), we confirm the central role of W&C brand personality traits in the building of an anthropomorphic brand (Vernuccio et al., 2021). In addition, if the extant literature has indirectly indicated that the strength of consumer-brand relationships is an outcome of the brand anthropomorphisation strategy (Hosany et al., 2013; Portal et al., 2018), our findings reveal a new driver that allows this objective to be achieved, that is, designing human-like consumer-brand dialogue features.

Finally, although the existing literature has already theorised behavioural brand loyalty as an outcome of the brand anthropomorphisation strategy (Portal et al., 2018), our results both empirically confirm this tenet and highlight that the cognitive and affective dimensions of brand loyalty can also be addressed.

5.1 | Managerial implications

From the managerial perspective, our study provides a useful conceptual guideline for planning a brand anthropomorphisation strategy via NBVAs in the automotive sector. Managers need to design a brand voice with specific characteristics (quality, pitch, prosody and gender) and characterise the consumer-brand dialogue with intuitiveness, rapid NBVA responsiveness and continuous adaptation to individual and contextual factors. Moreover, based on the conceptual map, we can recommend the following three complementary strategic directions to managers: (1) designing a human-like brand voice to favour the perception of warmth and competence; (2) developing a human-like consumer-brand dialogue to strengthen the consumer-

brand relationship in terms of intimacy and emotional closeness; and (3) leveraging the perception of specific brand personality traits and the strength of the consumer-brand relationship to improve the cognitive, affective and behavioural dimensions of brand loyalty.

5.2 | Limitations and future research lines

This study is not exempt from limitations. The first limitation concerns the specific voice experiential context investigated (i.e., in-car NBVA), which opens new extensions to other interaction fields (e.g., smartphones and/or smart speakers), brands/companies and product categories.

Second, the qualitative nature of this study, which was based on in-depth interviews with managers, does not permit the generalisation of the results and needs confirmation from the consumer side. Moreover, we derived tenets to advance the literature concerning the domains and planning of branding anthropomorphisation strategies in the NBVA field. Empirical tests of each tenet are beyond the purpose of this work. To overcome this limitation, future research might test the causal relationships identified in our cognitive map and tenets via experimental research designs by shifting the focus from managers to consumers. In this way, further studies can investigate the antecedents and consequences of the consumer's brand anthropomorphism perception in this innovative experiential context.

Furthermore, unlike the existing literature (e.g., Becheur et al., 2017; Sung & Kim, 2010), the results of our study do not reveal a causal link between brand personality and the strength of consumer-brand relationships. Therefore, we call for further research to investigate this relationship in the NBVA context.

Finally, this study focused on the strategic role of brand voices in brand anthropomorphisation strategies. However, since the empirically validated measurement scales of brand anthropomorphism refer only to physical and cognitive elements (Golossenko et al., 2020; Guido & Peluso, 2015), we call for research to develop a new scale based on the brand voice.

ACKNOWLEDGMENT

Open Access Funding provided by Universita degli Studi di Roma La Sapienza within the CRUI-CARE Agreement. [Correction added on 24 May 2022, after first online publication: CRUI funding statement has been added.]

DATA AVAILABILITY STATEMENT

Research data are not shared, due to privacy restrictions (at the explicit request of the interviewees).

ORCID

Michela Patrizi https://orcid.org/0000-0002-1329-5245

REFERENCES

Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research (JMR)*, *34*(3), 347–356. https://doi.org/10.2307/3151897

Ali, F., Dogan, S., Amin, M., Hussain, K., & Ryu, K. (2021). Brand anthropomorphism, love and defense: Does attitude towards social distancing matter? *The Service Industries Journal*, *41*(1–2), 58–83. https://doi.org/10.1080/02642069.2020.1867542

Axelrod, R. (1976). *Structure of decision: The cognitive maps of political elites*. Princeton University Press.

Becheur, I., Bayarassou, O., & Ghrib, H. (2017). Beyond brand personality: Building consumer–brand emotional relationship. *Global Business Review*, *18*, S128–S144. https://doi.org/10.1177/0972150917693160

Belk, R., & Kniazeva, M. (2018). Morphing anthropomorphism: An update. *Journal of Global Scholars of Marketing Science*, *28*(3), 239–247. https://doi.org/10.1080/21639159.2018.1466659

Chaney, D. (2010). Analyzing mental representations: The contribution of cognitive maps. *Recherche et Applications en Marketing*, *25*(2), 93–115. https://doi.org/10.1177/205157071002500205

Chérif, E., & Lemoine, J.-F. (2019). Anthropomorphic virtual assistants and the reactions of internet users: An experiment on the assistant's voice. *Recherche et Applications En Marketing (English Edition)*, *34*, 28–47. https://doi.org/10.1177/2051570719829432

Cho, E. (2019, May). Hey Google, can I ask you something in private?. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*.

Cho, E., Molina, M. D., & Wang, J. (2019). The effects of modality, device, and task differences on perceived human likeness of voice-activated virtual assistants. *Cyberpsychology, Behavior and Social Networking*, *22*(8), 515–520. https://doi.org/10.1089/cyber.2018.0571

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Sage.

Eden, C., Ackermann, F., & Cropper, S. (1992). THE ANALYSIS OF CAUSE MAPS. *Journal of Management Studies*, *29*(3), 309–324. https://doi.org/10.1111/j.1467-6486.1992.tb00667.x

Epley, N., Waytz, A., Akalis, S., & Cacioppo, J. T. (2008). When we need a human: Motivational determinants of anthropomorphism. *Social Cognition*, *26*(2), 143–155. https://doi.org/10.1521/soco.2008.26.2.143

Fernandes, T., & Oliveira, E. (2021). Understanding consumers' acceptance of automated technologies in service encounters: Drivers of digital voice assistants adoption. *Journal of Business Research*, *122*, 180–191. https://doi.org/10.1016/j.jbusres.2020.08.058

Golossenko, A., Pillai, K. G., & Aroean, L. (2020). Seeing brands as humans: Development and validation of a brand anthropomorphism scale. *International Journal of Research in Marketing*, *37*(4), 737–755. https://doi.org/10.1016/j.ijresmar.2020.02.007

Greenley, G. E. (1989). An understanding of marketing strategy. *European Journal of Marketing*, *23*(8), 45–58. https://doi.org/10.1108/EUM0000000000583

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59–82. https://doi.org/10.1177/1525822X05279903

Guido, G., & Peluso, A. M. (2015). Brand anthropomorphism: Conceptualization, measurement, and impact on brand personality and loyalty. *Journal of Brand Management*, *22*(1), 1–19. https://doi.org/10.1057/bm.2014.40

Hosany, S., Prayag, G., Martin, D., & Lee, W. Y. (2013). Theory and strategies of anthropomorphic brand characters from Peter Rabbit, Mickey Mouse, and Ronald McDonald, to Hello Kitty. *Journal of Marketing Management*, *29*(1–2), 48–68. https://doi.org/10.1080/0267257X.2013.764346

Huff, A. (1990). *Mapping strategic thought*. Wiley.

Kim, S., & McGill, A. L. (2011). Gaming with Mr. Slot or gaming the slot machine? Power, anthropomorphism, and risk perception. *Journal of Consumer Research*, *38*(1), 94–107. https://doi.org/10.1086/658148

King, N., & Horrocks, C. (2010). *Interviews in Qualitative Research*. London, UK: Sage.

Malone, C., & Fiske, S. T. (2013). *The human brand: How we relate to people, products, and companies*. Wiley.

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. *Journal of Business Research*, *124*, 312–328. https://doi.org/10.1016/j.jbusres.2020.11.045

Moriuchi, E. (2021). An empirical study on anthropomorphism and engagement with disembodied AIs and consumers' re-use behavior. *Psychology & Marketing*, *38*(1), 21–42. https://doi.org/10.1002/mar.21407

Patrizi, M., Vernuccio, M., & Pastore, A. (2021). "Hey, voice assistant!" How do users perceive you? An exploratory study. *Sinergie Italian Journal of Management*, *39*(1), 173–192. https://doi.org/10.7433/s114.2021.10

Pitardi, V., & Marriott, H. R. (2021). Alexa, she's not human but… Unveiling the drivers of consumers' trust in voice-based artificial intelligence. *Psychology & Marketing [Advance online publication].*, *38*, 626–642. https://doi.org/10.1002/mar.21457

Portal, S., Abratt, R., & Bendixen, M. (2018). Building a human brand: Brand anthropomorphism unravelled. *Business Horizons*, *61*(3), 367–374. https://doi.org/10.1016/j.bushor.2018.01.003

Powell, S. (2007). Organisational marketing, identity and the creative brand. *Journal of Brand Management*, *15*(1), 41–56. https://doi.org/10.1057/palgrave.bm.2550109

Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and artificial intelligence: An experiential perspective. *Journal of Marketing*, *85*(1), 131–151. https://doi.org/10.1177/0022242920953847

Puzakova, M., & Kwak, H. (2017). Should anthropomorphized brands engage customers? The impact of social crowding on brand preferences. *Journal of Marketing*, *81*(6), 99–115. https://doi.org/10.1509/jm.16.0211

Puzakova, M., Kwak, H., & Rocereto, J. (2009). Pushing the envelope of brand and personality: Antecedents and moderators of anthropomorphized brands. *Advances in Consumer Research*, *36*, 413–420.

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, *11*(1), 25–41. https://doi.org/10.1080/14780887.2013.801543

Robson, S., & Foster, A. (1989). *Qualitative research in action*. Edward Arnold.

Sung, Y., & Kim, J. (2010). Effects of brand personality on brand trust and brand affect. *Psychology & Marketing*, *27*(7), 639–661. https://doi.org/10.1002/mar.20349

Swan, J. (1997). Using cognitive mapping in management research: Decisions about technical innovation. *British Journal of Management*, *8*(2), 183–198. https://doi.org/10.1111/1467-8551.0050

Swan, J. A., & Newell, S. (1993). Managers' beliefs about factors affecting the adoption of technological innovation: A study using cognitive maps. *Journals of Managerial Psychology*, *9*(2), 3–11. https://doi.org/10.1108/02683949410059244

Vernuccio, M., & Ceccotti, F. (2015). Strategic and organisational challenges in the integrated marketing communication paradigm shift: A holistic vision. *European Management Journal*, *33*(6), 438–449. https://doi.org/10.1016/j.emj.2015.09.001

Vernuccio, M., Patrizi, M., & Pastore, A. (2021). Developing voice-based branding: Insights from the Mercedes case. *Journal of Product & Brand Management*, *30*(5), 726–739. https://doi.org/10.1108/JPBM-08-2019-2490

Voicebot. (2020). *In-car Voice Assistant Consumer Adoption Report*. Retrieved from https://voicebot.ai/in-car-voice-assistant-consumer-adoption-report-2020/.

Wrightson, M. T. (1976). The documentary coding method. In R. M. Axelrod (Ed.), *The structure of decision: Cognitive maps of political elites*. (291–332). Princeton University Press.

AUTHOR BIOGRAPHIES

Maria Vernuccio is full professor of Management at the Department of Management, Sapienza University of Rome (Italy), where she earned her PhD in Management. Her current research interests involve issues in digital marketing, brand management, and integrated marketing communication.

Michela Patrizi is a PhD candidate in Management at the Department of Management, Sapienza University of Rome (Italy). Her research interests involve issues in digital marketing and brand management.

Alberto Pastore is full professor of Management at the Department of Management, Sapienza University of Rome (Italy). He is Director of the Master in Marketing Management of Sapienza University of Rome, former President of the Italian Society of Management and former Director of the Department of Management of Sapienza University of Rome.

How to cite this article: Vernuccio, M., Patrizi, M., & Pastore, A. (2023). Delving into brand anthropomorphisation strategies in the experiential context of name-brand voice assistants. *Journal of Consumer Behaviour*, *22*(5), 1074–1083. https://doi.org/10.1002/cb.1984