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The Role of Artificial Intelligence in the Evolution of Brand Voice in Multimedia

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Abstract

Digital automation and artificial intelligence (AI) have transformed over decades as more organizations communicate with audiences utilizing multimedia platforms globally. With digitalization, brand voice has become necessary in brand communication with users, and conversational AI interprets inputs. The aim is to explore how AI has evolved brand voice in multimedia and its interdependencies. Qualitative research design is applied based on content analysis of various multimedia applications. Initially, the role of AI in the evolution of brand voice, AI in multimedia, and the role of brand voice in multimedia were reviewed, highlighting the research gap. By drawing implications from shared study areas, the interdependence of these three notions was determined. This paper finds that AI plays a crucial role in evolving, developing, predicting, and analyzing brand voice in multimedia, resulting in the current life cycle of the brand voice. The interdependence diagram and brand voice life cycle reveal that AI defines brand voice's effectiveness and helps evolve it by offering suggestions. AI-powered engines are crucial to the success of multimedia platforms, and thus the paper introduces AI-powered two-way integration architecture.

Keywords: artificial intelligence, brand voice, multimedia, branding, brand voice life cycle, prediction analysis, brand communication

The Role of Artificial Intelligence in the Evolution of Brand Voice in Multimedia

The current branding and marketing landscape, including that in multimedia platforms, is being transformed by technological advancement (Varsha et al., 2021). The widespread use of the internet has brought product or service marketing online, asserting a brand's acknowledgment and identification in the global market and its brand image (Davenport et al., 2020). Artificial intelligence (AI) is widely used in the current scenario to deploy operational marketing, which also includes risk identification, customer targeting, brand advertising, and pricing to increase profitability (Varsha et al., 2021). Big data analysis, machine learning, social media analysis, algorithm decision making, simulation modeling, prediction analysis, and other techniques used by AI for brand visibility in the global market, according to industry practitioners and academics, are gaining traction (Singh et al., 2019; Syam & Sharma, 2018). As a result, AI significantly alters brand preferences, marketing strategies, and customer attitudes towards the brand (Varsha et al., 2021).

Artificial intelligence (AI) is a collection of algorithm-based machines designed or coded to learn from data to make predictions and perform exceptionally well using artificial neural networks, machine learning, robotic process automation, and text mining (Varsha et al., 2021). Furthermore, AI works intelligently with the integration of businesses and marketers to construct, assemble, and use expertise to sell their brands worldwide (Varsha et al., 2021). In recent years, AI's impact on branding has attracted increasing attention (Varsha et al., 2021). Brands are invented by wrapping ordinary products with emotional and social affiliations and using AI to drive organizational success (Galloway, 2017). Recent AI breakthroughs have completely altered brand search via keywords or voice search (Yoganarasimhan, 2020).

Traditional marketing techniques cannot match the needs of brand interactions with multimedia dissemination, as users connect with brands in a variety of different ways that are frequently uncontrolled by organizations (Edelman, 2010). In today's world, marketing is all about making choices (Keller, 2010). Brands are no longer regarded as static objects but rather as collections of qualities that an organization symbolizes (Delin, 2014). Brands are users' mental interpretations of these projections (Delin, 2014). Due to the distinctive nature of branding, the brand voice, verbal identity, and language or language identity have lately emerged (Delin, 2014). Because of the expanding role of interactive technologies in the digital world, persuasion and marketing are becoming increasingly entwined (Keller, 2010). Thus, marketing communications that leverage brand voice establishes a dialogue with the user and foster brand relationships (Keller, 2010).

Earlier studies explored the recommendations of AI on brand products, but the literature stating the impact of AI on various sectors of branding is still at an infancy stage (Kumar et al., 2021). Thus, it has also created a space for research on effective and efficient branding (Kumar et al., 2021). Many marketers are still unaware of the role of AI in effective brand development (Varsha et al., 2021). Since AI is still in its infancy, there is no single framework for determining how AI should be integrated into branding research (Varsha et al., 2021). Despite the rising reliance of branding on AI, the academic field is still unaware of the importance of brand voice being an integral part of the branding and its association with AI. However, like the Grammarly application, practitioners have used AI to deploy brand voice, stating that one's brand voice is the language and tone they use to influence how their brand looks, sounds, and feels to their client or customer base (Grammarly Business, 2021). Furthermore, there is no evidence of research on the systematic (bibliometric) analysis of brand voice in branding to

date. Besides that, a preliminary study has been performed to deploy AI in multimedia platforms to generate or maintain a brand voice.

This necessitates the creation of frameworks for brand voice to be used across AI-powered multimedia platforms. Consequently, understanding how to employ AI systems in branding to accomplish marketing objectives is crucial. Thus, this research is significant because it illuminates the potential of AI to drive multimedia and assist brands in establishing stronger and more appealing brand identities on digital platforms.

This study covers the role of AI in the evolution of brand voice in multimedia, to make academics and professionals aware that brand voice in multimedia plays a critical role in branding these days, with its efficiency relying on AI. The authors derived a brand voice life cycle based on AI simulations in multimedia, which is a novel approach in academia. The novel concept of the four phases of the brand voice life cycle allows for a complete assessment of brand voice and has practical implications in that it enables anyone to address each phase separately and commit to future research. This study then discusses the integration of brand voice using a two-way model developed by the authors based on the brand voice's life cycle. Furthermore, it depicts an interdependence diagram designed by the authors to represent the conclusions between AI, brand voice, and multimedia.

Conceptual Background

Until the mid-1990s, AI development was uneven. However, a new era for AI began during that time, and the AI flourishing epoch has continued as the business received considerable investments. As a result, AI technology and start-ups began to surface in the media (Zhai, 2020).

According to a poll conducted by Ericsson in the 1920s, users were not interested in the technology. Instead, they were interested in the advantages these solutions offered consumers, such as calling on the move, taking a photo,

listening to music, or utilizing it as an entertainment tool (Mathieson, 2005). AI's practical implications were presented before their marketing or branding effects. Many anticipated that digitalization and AI would affect outdoor advertising (Mathieson, 2005).

During George W. Bush's first term, one American dream was to implement a total information awareness system (Mathieson, 2005). In the ensuing decade, AI marketing achieved many advances. Later, Amazon utilized AI in marketing and sales by launching delivery drones in 2014, and Google, Lockheed Martin, Northrop Grumman, and AeroVironment followed suit (Egan, 2014).

A year later, AI became mainstream and a key marketing tool. Einstein by Salesforce provided information on leads to follow and next-product ideas (Hardy, 2016). Oracle AI was launched the same year to evaluate large amounts of data (Hardy, 2016). Deep learning was used to examine the past and forecast the future in marketing. AI started to serve marketing needs but was not employed to evolve the brand voice.

In 2016, AI-based conversational computing appeared. Apple iPhone incorporated AI-based technology and introduced 'Hey Siri,' followed by Amazon's 'Alexa' (Hardy, 2016). Text-to-speech (TTS) technology became computers' new input and output modes (Hardy, 2016). That is when AI got close to brand voices.

McKinsey's Global Survey on AI in 2020 says organizations use AI to generate value, especially in marketing and sales. Advances in marketing technology have brought products online (Davenport et al., 2020). This has enhanced the brand's recognition and image in the market (Davenport et al., 2020). Creating a brand image with branding was first widely explored in the early work of Cherington, who regarded branding as a rising phenomenon effectuated by both salesmanship and advertising (Bastos et al., 2012).

Thus, marketing encompassed the idea of branding and later encouraged the construction of a brand's voice to reach potential customers. Bloomstein Margot's book "Trustworthy: How the Smartest Brands Beat Cynicism and Bridge the Trust Gap" cites brand voice as a foundation for organizations to create trust. She defines brand voice as the consistent way an organization engages users across all media (Bloomstein, 2021). She believes a consistent voice and appropriate content may help an organization stand out.

Brand voice using AI-based technologies has not been studied by academia but rather by practitioners. AI has been widely employed in digital marketing, branding, and pricing (Kumar et al., 2021). Digital marketers use AI modeling and tools to develop advertisements and boost online brand presence. Little research has been done on how a brand should integrate a brand voice in multimedia sectors using AI to enhance branding.

Applied Methodology

AI-generated brand voice lacks a framework for synchronizing brands across digital channels. This study shows how AI evolves brand voice across multiple channels. The subsequent research questions are:

How has brand voice evolved with the use of AI in multimedia?

How are brand voice and AI interrelated in today's multimedia scenario?

This research paper aims to investigate how brand voice has evolved with AI in multimedia. It intends to investigate the interdependencies between AI, brand voice, and multimedia. As part of the preliminary work, it became apparent that there is a lack of prior study on the relationship between brand voice and AI in multimedia. Therefore, this research is exploratory in design and is founded on inductive reasoning and qualitative data analysis techniques. A qualitative research design was applied based on a content analysis of the numerous multimedia applications available to users. Initially, the roles of AI in the

evolution of brand voice, AI in multimedia, and brand voice in multimedia were examined. By imposing the drawn inferences from revealing the common research areas, conclusions were established about interdependence and fusion between these three concepts, and the related area of branding that has led to the evolution of brand voice was defined.

Role of AI in the Evolution of Brand Voice in Multimedia

Brand Analytics using AI

According to a focused bibliometric analysis for the years between 1982 and 2019, 117 publications were published, and there was a sudden surge of AI-based papers in social sciences (Kumar et al., 2021), which gradually crept across disciplines like business and management. The overall assessment could not establish a comprehensive academic study between AI and brand voice, resulting in a research gap.

Using reviews, ratings, and other content-based data analysis, AI is employed to determine a brand's usage analytics, image, positioning, and importance (Colladon, 2020). The semantic Brand Score (SBS) application is used to compute and measure brand visibility (Colladon, 2018) over numerous platforms. Big data analysis is used by this application and other AI-based applications to analyze patterns and modify them depending on the positives and negatives (Colladon, 2020). The marketing managers use the patterns and perceptions of those patterns to monitor and build the report on the brand's progress (Colladon, 2020).

AI Analytics Used to Develop Brand Voice

AI allows organizations to process and analyze big data and draw conclusions about customer preferences and behavior, adapting further actions accordingly. Evolving the brand voice can enhance brand recognition and profitability.

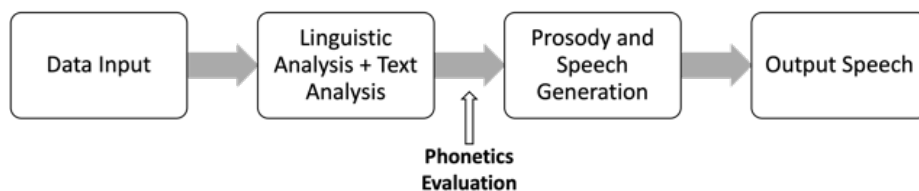
As a set of algorithm-based engines programmed to learn from web traffic data, AI calculates and predicts using artificial neural networks, machine learning, robotic process automation, and text mining (Akter et al., 2021). This technology is constantly being researched and upgraded to address the requirements of organizations. For example, AI uses a system that produces synthetic speech based on user inputs called text to speech synthesis technology (Nwakanma, 2014). When the input data is plain text without phonological information, the system is called a basic text-to-speech system (Nwakanma, 2014).

When the input involves arbitrary phonetic components, the TTS system acquires a string of symbols representing sound units as phonemes and allophones, borders or spaces between words, phrases and sentences, annotations, and patterns, and receives a set of prosody markers representing the input's speed, intonation, and other tone values (Nwakanma, 2014).

The input is matched using big data analysis with this system, and the inventory is searched to provide output signals (Nwakanma, 2014). Such an output signal can be compared to synthesized human speech and to human-expert systems (Nwakanma, 2014). For example, Amazon uses expert systems to create TTS synthetic goods like Alexa (Nwakanma, 2014). Figure 1 shows the basic schematic diagram of a TTS system as proposed by Nwakanma (2014).

Figure 1

The Basic Schematic Diagram of a TTS System



Nowadays, TTS systems are built by AI-based organizations and media channels that utilize deep learning technology, and a computer architecture called a deep neural network (DNN) to get the most accurate outcomes after computing

big data (Klabbers, 2021). These produce human-like voices for brands. Based on input, it determines the tone and modifies output. With additional similar inputs, the system maintains the tone in memory and generates a voice with that tone that can be opted-in by the user. For example, if AI-based output tones are usually hilarious, the user can be categorized to use more of a humorous tone. This sets the user's voice as amusing and friendly. This may be applied to brands that use those applications, thus generating brand voice using AI.

Case Study: Amazon's Alexa Detects Humor in Product-related Questions

Amazon's recommendation engine was optimized and updated to identify users' tone in inquiries Carmel (2020). The research department strives to distinguish between creative and genuine inquiries to improve chatbots usability (Carmel, 2020). According to Carmel (2020), humor is often subjective and might be product-, emotion- or sentiment-based. Identifying humor with AI is challenging but necessary to maintain the system's effectiveness. This is done by creating data sets and saving the results for future reference (Carmel, 2020).

Using the aforementioned case study, we may reflect on the fact that if a number of queries about a product are humorous, the product itself may have a humorous and pleasant headline in the product section or description that is generating these questions from the user. If this occurs in other products, the brand may be deploying humor to attract customers. The tone establishes a distinct image of the brand having a humorous brand voice, so users expect the same while dealing with brand updates across multimedia platforms. Hence, AI helps in determining a brand's voice. For example, while Grammarly notes adjustments made in a product description on one platform, it autocorrects the voice tone on others since the AI recognizes the voice in the description unless manually altered. This detection and pattern setting is done by AI involved in the backend of the systems. Though scholars and practitioners question its accuracy, it helps set a brand voice.

Role of Brand Voice in Multimedia

Multimedia has provided professionals exceptional insights into the customer decision journey, while social media has given people reason to trust brands as they must be accountable (Esber et al., 2020). The engagement between brand and customer does not end after the purchase, as multimedia engages customers in brand relationships through multiple digital channels, starting with social media and concluding with e-marketing (Edelman, 2010).

Social media and other multimedia platforms like email marketing, websites, direct mail, etc., have raised user expectations, and they want captivating brand endorsements to make buying decisions (Kumar et al., 2021). This consumer-brand relationship can be established through chatbots, user comments, likes, and preferences. This segment is highly influenced by firm-generated content (FGC) and user-generated content (UGC) (Kumar et al., 2021). When companies use social media as marketing platforms, the content generated is FGC, while when users interact with the content and generate web activity, it is UGC (Kumar et al., 2021).

Brands must make a notable marketing strategy and synchronize it across platforms to maintain equanimity and sustainably in a market. The way organizations communicate before, during, and after the consumer decision process is crucial because FGC and UGC determine a brand's voice based on the enormous volume of content produced by the user interaction with the brand. This may impact the strategic voice of the brand if UGC is higher than FGC.

Brand voice is adopted based on product content analysis. In multimedia, brand voice is essential at every digital touchpoint with potential or existing customers. The voice they use on one platform and maintain in all others during marketing and promotions meets customers' expectations after building a brand personality. This content analysis encourages brands to define their identity, integration, and social collaboration with customers, strengthening brand

sustainability (Smith et al., 2012). Like human tone, brands' social-media tone of voice impacts customers' purchasing inclinations (Barcelos et al., 2018).

Strong and coherent brand voices across multimedia platforms that mastered digital channels and better understand customer preferences generated friendlier digital experiences (Edelman, 2010). They also improved social platforms and gained a competitive technological advantage (Bughun, 2015). Multimedia is more than a platform to communicate and engage new customers (Bommel et al., 2014). They have become platforms for marketing, sales, and market share gains (Bommel et al., 2014). This shift in responsibilities raises brand voices' impact on organizations.

Case Study: How the Tone of Voice Used by Irish Government Agencies and Semi-state Bodies Impacts Their Relationship With the Public (Mullan & Kidney, 2020)

According to Mullan and Kidney (2020), when brands, particularly government organizations, use a humanized brand voice when connecting with the public on social media, they enjoy a higher level of trust, satisfaction, commitment, and control mutuality among their followers. This has a favorable impact on the parties involved (Mullan & Kidney, 2020). In these circumstances, system-generated recommendations, such as those from social media platforms, are beneficial (Mullan & Kidney, 2020).

Thus, a consistent brand voice and humanly-toned interactions help in reaching out to more users. Though, there might be a difference in using general phrases depending upon the platform that one uses. For example, the general phrases used on Twitter may differ from the ones that are used on LinkedIn (Nicholas, 2021). However, the principles and ideas should be consistent. This leads to using brand voice to integrate the branding across platforms.

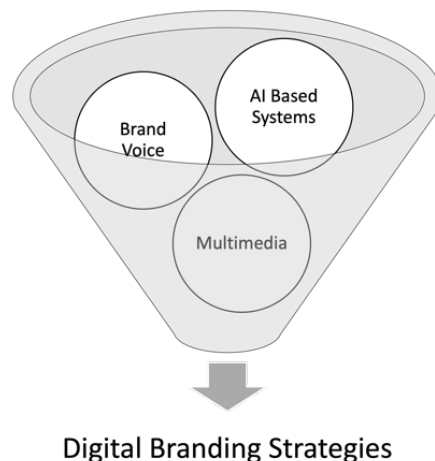
Establishing a solid and consistent brand voice through multimedia is challenging. Multimedia channels make it difficult for marketers to build a

consistent brand voice across both digital and offline channels, such as examining a product online or in a storefront, following posts on Snapchat, or calling customer service (Gandhi et al., 2017). Consumer interaction with a brand begins well before the initial purchase and may persist much longer afterward, developing a strong retention relationship. The strategy of integrating and consolidating multimedia in building a brand voice with the assistance of AI has become a solution and a necessity.

Interdependence between AI, Brand Voice, and Multimedia

Digitalization is approaching a new height as automation gets ingrained. AI is now being used to create user interfaces and data validation tools. AI contributes to knowledge-based marketing through multiple multimedia platforms (Kumar et al., 2021). AI engines these days help digital platforms expand, allowing practitioners to engage target audiences. Thus, AI can analyze the data it obtains from brands and organizations' communication channels, certify the data as credible or inaccurate, and curate ideas depending on brand and customer behaviors (Kumar et al., 2021). This helps design and recommend how branding can be done across various multimedia channels, what customers to target, and what tone of voice is suitable to target those customers (Barcelos, 2018). AI determines the right brand voice across platforms.

Today's multimedia platform uses AI-based technology in the backend to analyze data and create user suggestions. AI has become a practitioner's operational tool to predict risks, target customers, ensure branding campaigns, maximize profit, enhance brand awareness, and strengthen brand relationships (Kumar et al., 2021). AI is a game-changer in marketing since it helps organizations create engaging visuals, text, tone, and voice for digital branding. Thus, branding strategies use a homogenous mix of brand voice, AI-based technology, and multimedia as shown in Figure 2.

Figure 2*Development of Branding Strategies***Defining Brand Voice in the Scope of AI**

To understand the brand voice phenomenon and the role of AI in its evolution, it is worth identifying what brand voice is and what elements it consists of. Thus, it can be identified that the brand voice is a crucial element of brand communication that determines the connotation of a message, its intonation, strength, emotional coloring, and encoded signals for communication transmission. Therefore, brand voice is a set of marketing, linguistic, and stylistic parameters that influence brand communication based on the communication channel, intended receiver, and desired effect.

Development of Brand Voice using AI

Recently, brands have migrated to multimedia brand communication. Brand voices are now digital and cross-platformed. With the rise of digital media platforms, Kotler et al. (2017) note that user retention time has dropped from 90 seconds to 30 seconds in the last five years. Brands must capture users' attention (Benabdelouahed, 2020), and brand voice is the key.

These platforms use AI for predictive data analysis (predictive intelligence) to make the user's experience more intuitive and intelligent each day

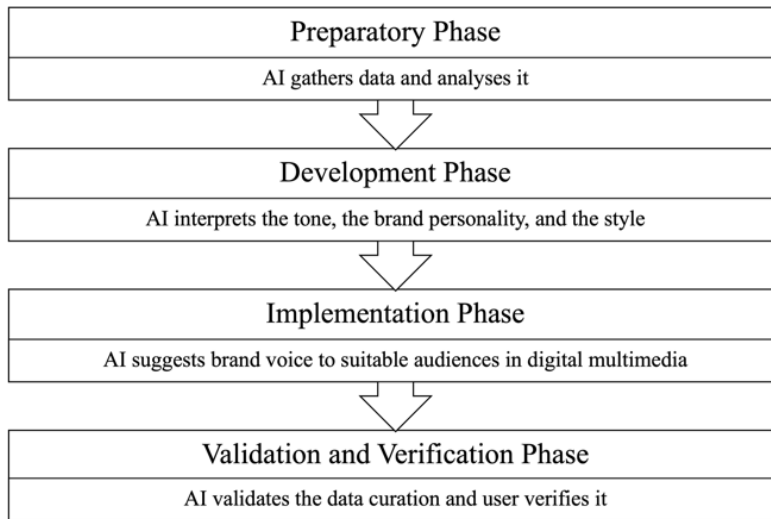
(Benabdelouahed, 2020). AI analyses data in-depth and helps it reach the right users at the right time with the right product (Benabdelouahed, 2020). Branding utilising AI in marketing communications is no longer restricted to dialogues or sales; rather, data develops solutions in real time using AI technology and predictive intelligence (Tjepkema, 2018). AI allows marketers to strategically monitor users (Tjepkema, 2018). This simplifies strategy prediction. In a similar way, AI is used to forecast and analyze brand voice. This analysis helps brands choose a tone and voice that will retain users. Thus, the brand voice goes through several phases before being implemented. These phases are a life cycle of brand voice employing AI analysis.

Life Cycle of The Brand Voice using AI in Multimedia Platforms

The brand voice life cycle consists of four main phases; preparation, development, implementation, and validation and verification phase, wherein AI plays different roles in each phase and enables users to learn from the data. Figure 3 shows the life cycle of brand voice, figure 4 shows two-way integration model and table 1 shows life cycle of brand voice explanation.

Figure 3

Life Cycle of Brand Voice



The explanation of the life cycle of brand voice has also been shown in Table 1 below.

Table 1

Life Cycle of Brand Voice Explanation

AI's engagement at each phase of the brand voice life cycle			
Preparatory Phase	Development Phase	Implementation Phase	Validation and Verification Phase
AI gathers data and analyzes it. It allows various digital marketers and communication experts to better determine factors and choose components to address audiences more effectively.	AI relies on data analysis and conclusions made from its analysis. It analyzes the tone, brand personality, length of sentences, choice of female or male voices, etc., and then suggest an output.	AI allows brand voices to be heard and addressed to target audiences. It allows AI-based applications to show brand voice in multimedia to the target readers.	AI validates the measurable effects of the communication performed, learns from the data what principles succeeded, and stores them for further usage. AI gathered feedback helps users to modify their brand voice.
Analyst	Suggester	Implementer	Validator
AI analyzes the big data that is generated by digital activities	AI applications help produce press releases, prepare media reports, turn	AI unifies content across multimedia and hard-to-track	AI monitors the content around and about the brand and the reaction to

<p>on various multimedia platforms and makes predictions. The existence of big data motivates various AI organizations to develop more advanced AI solutions to extract insights from it based on predictions.</p>	<p>texts into appropriate speech, complement text with visual content, translate audio or written text files into multiple languages for wider coverage, and build chatbots to cater to client support searchers and the like.</p>	<p>ones like call data. It ensures that users get the intended messages and measures their reactions. If it is not adequate, AI changes its patterns to deliver more efficient performance to practitioners.</p>	<p>brand communication in multimedia. By collecting data, AI identifies whether the reaction in digital media is positive, neutral, or negative. It validates and verifies parallelly with the user to optimize the results.</p>
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Examples of AI-based solutions and applications

AI's engagement at each phase of the brand voice life cycle			
Preparatory Phase	Development Phase	Implementation Phase	Validation and Verification Phase
AI gathers data and analyzes it. It allows various digital marketers and communication experts to better determine factors and choose components to address audiences more effectively.	AI relies on data analysis and conclusions made from its analysis. It analyzes the tone, brand personality, length of sentences, choice of female or male voices, etc., and then suggest an output.	AI allows brand voices to be heard and addressed to target audiences. It allows AI-based applications to show brand voice in multimedia to the target readers.	AI validates the measurable effects of the communication performed, learns from the data what principles succeeded, and stores them for further usage. AI gathered feedback helps users to modify their brand voice.
Analyst	Suggester	Implementer	Validator
AI analyzes the big data that is generated by digital activities on various multimedia platforms and makes predictions. The existence of	AI applications help produce press releases, prepare media reports, turn texts into appropriate speech, complement text with visual	AI unifies content across multimedia and hard-to-track ones like call data. It ensures that users get the intended messages and	AI monitors the content around and about the brand and the reaction to brand communication in multimedia. By collecting data, AI identifies whether

big data motivates various AI organizations to develop more advanced AI solutions to extract insights from it based on predictions.	content, translate audio or written text files into multiple languages for wider coverage, and build chatbots to cater to client support searchers and the like.	measures their reactions. If it is not adequate, AI changes its patterns to deliver more efficient performance to practitioners.	the reaction in digital media is positive, neutral, or negative. It validates and verifies parallely with the user to optimize the results.
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Examples of AI-based solutions and applications

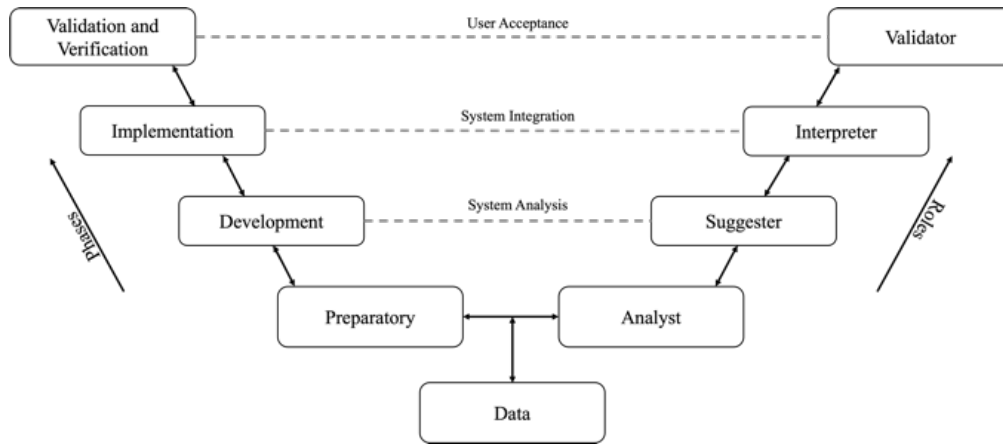
• Google Analytics	• Beautiful.ai	• Chatbots	• Brand24.com
• Facebook Analytics	• Grammarly	• Google AdSense	• Talkwalker
• LinkedIn Insights	• HyperWrite	• Meta Business Suite	• Semantic Brand Score
• Instagram Insights	• Instoried Application	• LinkedIn Campaign Manager	• Diib.com
• Twitter Analytics	• Mnemonic		• Statista

Integration of Brand Voice using AI on Multimedia Platforms

The Figure 4 below shows an instance of a two-way integration model regarding the use of AI on multimedia platforms.

Figure 4

Two-Way Integration Model



Based on the current systems and Table 1, the following two-way integration model of brand voice using AI in multimedia can be constructed. This model indicates that each phase is directly linked, and the next phase commences only after the previous one.

The first phase of this model starts with preparing and analyzing the data received. It moves on to system analysis and development of predictions and suggestions from the same. After then, based on the user’s interaction, it implements its concepts using system integration and interprets the right choice of options. Finally, after post interpreting, it sends its output to the user for verification after validating the options. If the user accepts, then the system marks it as a positive choice; else, it marks it as a negative choice and goes back to the previous phase. If an error or discontinuity is found, then also it gets back to the previous phase. This process continues until the user verifies the validated output generated.

Advantages of this model:

1. It is a disciplined interrelationship model.
2. It can be used when requirements and specifications are clear.

3. With specific requirements, review of the data inserted is easy.

Disadvantages of this model:

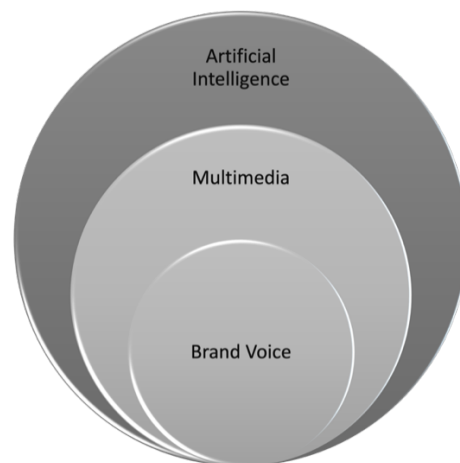
1. The input data is uncertain.
2. It is not suitable where requirements and specifications are not clear.
3. Glitch in technical resources cannot be understood by the end-user.

Interdependence between AI, Brand Voice, and Multimedia

By understanding the brand voice's life cycle in multimedia, it can be deduced that AI, brand voice, and multimedia are interrelated in today's scenario and are dependent on each other, as shown in figure 5.

Figure 5

AI, Brand Voice, and Multimedia Interdependence Diagram



From the above figure, it can be concluded that AI drives multimedia platforms where branding is done using brand voice as the core. Only after combining the three major concepts: AI, brand voice, and multimedia, can one find that success in branding can be achieved. This integration aids digital business transformation since all digital applications rely on AI for data management and analysis.

Discussion, Contribution, and Future Scope

Discussions and Theoretical Contributions

This research used AI to examine brand voice recognition and positioning in multimedia. Similarly, the findings focus on brand voice dimensions that apply AI to assess current market scenarios, strategic planning, new product creation, existing user applications, and integrated communications.

AI advances allow multimedia platforms to offer stakeholders tailored brand voices and services based on selected products. Customer interactions reinforce brand reputation. AI assists organizations in identifying customer data through speech recognition, online networking, physical gestures, and facial expressions. Emotional appeal helps organizations comprehend customer needs and wants, strengthening their brand voice to communicate with them. AI promotes customer purchases with tailored user applications. AI applications that leverage brand voice improve customer satisfaction and brand value. AI has created a significant opportunity in integrated marketing communication to improve brand visibility through keyword bidding, ad testing, contextual ad targeting and re-targeting, and product personalization (Campbell et al., 2020). Similarly, AI has played a significant role in developing the brand voice and maintaining the same across multimedia platforms. This has helped enhance the brand's reputation. AI can help predict income, attract new customers, increase brand awareness, and streamline product pricing (De Bruyn et al., 2020). Long-term, this improves consumer engagement, retention, brand values, and perceived value (Kumar et al., 2019).

This paper examines how AI helps evolve brand voice in multimedia and how brand voice and AI are interrelated in today's multimedia scenario using bibliometric and user application analysis. To the best of the authors' knowledge, this is the first attempt to derive an interdependence model diagram, a brand voice

life cycle, a relevant definition of brand voice, and a two-way integration model of brand voice using AI on multimedia platforms.

Thus, AI plays a key role in evolving, developing, predicting, and analyzing brand voice in multimedia. AI currently analyses content and helps with decision-making, sorts content, and predicts and analyses brand voice by maintaining a strategic eye on users. AI enables multimedia platforms and helps brands communicate more effectively through brand voice by offering quantified data.

The analysis of various research papers and current digital applications shows that AI, brand voice, and multimedia have blended in branding and are interdependent. This paper suggests the current life cycle of the brand voice that evolved from merging the three concepts.

Managerial Contributions

Technological breakthroughs are the most interesting and promising branding area, and AI can revolutionize commercial scenarios. The authors emphasized key managerial consequences. AI helps brands flourish by employing the right brand voice, and managers can promote transparency, loyalty, and brand image synchronicity with multimedia interaction. Using the same brand voice across all platforms enables the organisation customise products and provide quality customer experiences. Automation helps managers understand client behavior through brand voice, brand reach, content-based ads, and new product creation. AI can build predictive analytics with big data, and algorithm recommendations help review branding data and brand voice for retargeting and brand sustainability.

Limitations and Directions for Future Research

The future scope of this research is to explore user experience and brand voice functionalities using AI engines in multimedia. Future research can focus on AI intervention in brand voice, brand experience, and customer-brand

relationships. Academics can investigate AI's visual analysis in product differentiation, empathetic advertising, and brand voice-based business models. Several case studies can be utilized to highlight the strategic evolution of an organization's brand voice implementing AI and its consequences on the brand's profitability.

The study was restricted to AI and branding and secondary data from the Scopus database. Academics have not extensively studied brand voice or its AI-based implementation. However, it is relevant to practitioners who seek to make their branding consistent throughout multimedia channels. As a result, the bibliometric analysis was limited.

Conclusion

This research analysis introduces a unique and interesting topic of brand voice for studying the concepts of AI and its applications in branding. New findings in the field of branding that includes brand voice with the interface of AI technology have been found by using a bibliometric study and analyzing technological applications. The derivative of this study has primarily taken the interdependency between AI, brand voice, and multimedia with the interconnection of their individual and collective scopes. Furthermore, this research assists academia and practitioners in remaining aware that in today's scenario, the three intertwined concepts have a significant impact on branding. The novel research thus encourages the organizations to align the technological and theoretical advances according to the strong interrelationship of the same. The brand voice has comprehensively advanced with the evolution of AI, and so does multimedia. Hence, AI has been tangibly instrumental in preceding brand voice on multimedia platforms. This research article intends to bring awareness and urges scholars to initiate exploring the dependence of brand voice on AI in the future across different multimedia platforms.

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