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### "To Chat-GPT or not to Chat-GPT"

Navigating the paradoxes of generative AI in the advertising industry

**Citation for published version:** Osadchaya, E, Marder, B, Yule, JA, Yau, A, Lavertu, L, Stylos, N, de Regt, A, Oliver, S, Angell, R, Gao, L, Qi, K, Zhang, WZ, Zhang, Y, Li, J & Alrabiah, S 2024, "To Chat-GPT or not to Chat-GPT": Navigating the paradoxes of generative AI in the advertising industry', *Business Horizons*, pp. 1-11. https://doi.org/10.1016/j.bushor.2024.05.002

### **Digital Object Identifier (DOI):**

10.1016/j.bushor.2024.05.002

#### Link:

Link to publication record in Edinburgh Research Explorer

**Document Version:** Publisher's PDF, also known as Version of record

Published In: **Business Horizons** 

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**ARTICLE IN PRESS** 

Business Horizons (xxxx) xxx, xxx



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## To ChatGPT, or not to ChatGPT: Navigating the paradoxes of generative AI in the advertising industry

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https://doi.org/10.1016/j.bushor.2024.05.002

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#### 1. The new era of advertising

Generative artificial intelligence (GenAI) is a powerful technology capable of almost instantaneously generating new text, images, audio, programming codes, and synthetic data from prompts (Lawton, 2023; Loten, 2023). This capability gives rise to novel opportunities and challenges for advertisers (Cellerin, 2023; Muliyil, 2023). Indeed, many large companies (e.g., Google, Amazon, Meta, and Microsoft) have announced plans to adopt GenAl in their advertising practices (Dischler, 2023; Haggin, 2023; Meta, 2023; Omnicom Group, 2023). Globally, the GenAI market is anticipated to reach more than \$109 billion by 2030, with a compound annual growth rate of 34.6% between 2023–2030 (Grand View Research, 2023), suggesting GenAl is here to stay.

ChatGPT (Chat Generative Pretrained Transformer), the most well-known GenAI technology, is an AI-enabled chatbot that generates text from users' prompts and significantly outperforms older generations of chatbots in terms of its ability to converse in natural language.<sup>1</sup> Text-to-text GenAI tools such as ChatGPT are trained using large volumes of text data from varving sources, including webpages, books, and conversations (Haluza & Jungwirth, 2023). The ChatGPT app reached 100 million monthly users only 2 months after its release in November 2022, becoming "the fastestgrowing consumer application in history" (Hu, 2023). Due to its ability to produce large volumes of guality text guickly and efficiently, ChatGPT has drawn strong interest from advertisers. However, opinions on its ability to disrupt the industry are mixed, with some arguing it will have a colossal impact on advertising and marketing jobs (Fischer, 2023; Kulp, 2023), while others argue it is merely "a word changer, not a world changer" (Clugston, 2023). Although ChatGPT has attracted a mass of advertising industry hype, systematic research providing an understanding of its application from those most impacted (i.e., advertisers) is lacking. Through a paradoxical lens, we investigate the opportunities and challenges that ChatGPT—and similar text-to-text GenAI applications-provide the advertising industry from the voices of advertisers themselves.

Technologies are often argued to be *paradoxical* (Gebauer et al., 2020; Mick & Fournier, 1998; Sirkka & Lang, 2005), meaning they contain "contradictory yet interrelated elements—elements that seem logical in isolation but absurd and irrational when appearing simultaneously" (Lewis, 2000, p. 760). For example, technological products can foster independence but lead to dependence, give feelings of intelligence alongside feelings of ignorance, and unite people vet simultaneously lead to isolation (Mick & Fournier, 1998). Due to their paradoxical nature, new technologies can present both opportunities and challenges for organizations and individual practitioners (Berthon et al., 2024; Ferraro et al., 2024). Left unattended, paradoxes can threaten a firm's performance—or even its survival—but addressing paradoxes effectively may result in competitive advantage (Pedersen, 2023). To gain a competitive advantage from GenAl, advertisers must be aware of its paradoxes and how to navigate them to harness the opportunities and mitigate the challenges. In this article, we present four nonmutually exclusive paradoxes of text-to-text GenAI (Figure 1), which denote categories of contradiction. Three paradoxes reflect operational issues with the final paradox being psychological in nature, pertaining to practitioners' role identities. These paradoxes were derived from 48 interviews with professionals involved in brand communication across a range of industries, with 54% being male and 46% being female. These paradoxes clearly emerged in data as conflicts that needed navigation from these practitioners. The professionals sampled were from 13 different countries, aged 24 to 57 years, and their industry experience varied, ranging from 2 to 30 years. Our sample ranged in their knowledge and experience with text-to-text GenAI, some having not used the technology with only a basic knowledge of the tool, whereas others had an expert understanding and a wealth of usage experience. As we aim to uncover paradoxes linked to adoption through the perceptions of professionals, high- and lowexpertise responses provide important insights for a holistic understanding of the phenomenon. Participant quotes are provided below under pseudonyms.

#### 2. Paradoxes

# **2.1.** Paradox 1: Research facilitation vs. research obstruction

Text-to-text GenAI was identified to facilitate research, assisting with searching, retrieving, analyzing, organizing, and summarizing data. The speed with which it can access and process extensive amounts of data supersedes human

<sup>&</sup>lt;sup>1</sup> For a review of chatbot evolution, see Kietzmann and Park (2024).

#### Fig. 1. Text-to-text GenAl paradoxes

	Psychological Paradox		
/ Paradox 1	Paradox 2	Paradox 3	۲۰۰۲ Paradox 4
Research Facilitation vs. Research Obstruction Facilitates research by providing assistance in research tasks but also obstructs by creating extra work (e.g., fact checking) and uncertainty that slows down research.	Creativity vs. Sameness Supports creative endeavors to help brands 'stand out' but also leads to content which is similar (or the same) as the crowd.	Efficiency vs. Inefficiency Improves work efficiency by partially or fully automating some routine tasks but also creates inefficiency due to the resources needed or forgone from rectifying possible issues stemming from its use.	Superiority vs. Inferiority Advertisers perceive themselves as both simultaneously superior and inferior to generative AI.

ability. Due to its ability to identify and extrapolate patterns within extremely large datasets (Campbell et al., 2020; Jarrahi et al., 2023), textto-text GenAI was deemed by the sampled advertising executives to be useful for identifying market trends and customers' needs (see also Cui et al., 2024). It was also perceived that text-totext GenAI not only outperforms humans' ability in information retrieval and analysis but also that of traditional search engines (e.g., Google) due to its specificity. Unlike conventional search engines, GenAI can produce detailed and tailored answers to the user's requests, eliminating the need for manual analysis and summarization. Maja exemplars this sentiment below:

I think analyzing data is going to be massive...organizing data, researching. There is a world of information online. Like [on] Google, you could just go through pages and pages and pages all day. And there's so much information we're not aware of. And I think ChatGPT is going to be really useful to find exactly what we're looking for.

Another research-related application of GenAI is to help with benchmarking and budgeting. Some interviewees found ChatGPT helpful in identifying rough estimates of various advertising costs. This was particularly useful when approximating or estimating a novel project and benchmarking these costs against other campaigns. For example, Frank asked ChatGPT: "How much should I spend in US dollars per month to reach 90% of people with advertising in Indonesia?" and was satisfied with the ballpark answer based on known public information sources (e.g., Marketer). Sundberg and Holmström (2024) provide further discussion of how GenAI contributes to firms' research agendas.

While the above supports GenAI as a facilitator for research, it can also be viewed as an obstructor. This is because it can produce inaccurate or inadequate quality responses due to outdated or limited data the AI is trained upon. This calls into question a firm's choice of GenAI applications, as not all apps are equal in terms of capability, functionality, and cost. For example, the latest free version of ChatGPT has been trained on data that was available in September 2021 and lacks knowledge of events that have subsequently occurred (OpenAI, 2023). However, paid premium versions such as ChatGPT Plus have access to real-time data online (Ortiz, 2023). Some participants expressed a preference for Jasper AI because-in addition to Google Search Data Integration-it can be trained to produce content aligned with a brand's voice (Brown, 2023; Ross, 2023).

Another obstruction raised is the validity of the information that the GenAl applications draw from. Practitioners are concerned that answers may be based on unreliable web sources and datasets, hence Jonathan's statement below:

A huge majority of the information online is actually incorrect. So, how does it know what's correct and not correct? It's not a human. We could look at a web page, or how something is written, and from our own understanding of something, know whether it's correct or incorrect. ChatGPT doesn't necessarily have that ability.

This validity concern extends to the tendency of AI to hallucinate, either by inventing content that may sound plausible (e.g., statistics) but is factually incorrect or by generating fictitious source references (Haluza & Jungwirth, 2023). However, it should be noted that AI developers are taking steps toward resolving these issues. As such, hallucinations that fit with the agenda of branded content (e.g., a hard-hitting statistic) could contribute to so-called work bullshit. This occurs when employees disregard the inaccuracy or falsity of communications that are efficacious in promoting their desired agenda (McCarthy et al., 2020). The problem of chatbot hallucination and the subsequent botshit is more extensively discussed in the present issue by Hannigan et al. (2024).

Overall, GenAI represents a paradox for research. On one hand, its combined scope, speed, and ability to tailor answers are perceived to be better than traditional search engines, thereby reducing the need for human intervention. Yet simultaneously, it can obstruct researchers by creating extra work (e.g., fact-checking) and uncertainty that slows down research generation.

#### 2.2. Paradox 2: Creativity vs. sameness

Creativity is often considered a mission of the advertising industry—its raison d'être. (Koslow et al., 2003). Creative content is key to brand communication success in drawing attention, standing out, and becoming memorable (Lehnert et al., 2013; Smith et al., 2007). However, generating creative ideas can be challenging, especially under time constraints. GenAl was seen to aid in producing creative content by being a source of inspiration, a collaborator to bounce ideas off, a repository of successful cases, a tool for overcoming writer's block, and a means for quick ideation on how to approach a specific task (e.g., how to implement a campaign brief). Robert commented on the potential for efficiency at the ideation stage of the promotion process:

I use ChatGPT to generate ideas, to brainstorm at the initial stage when I want to promote a product...Previously, if I wanted to brainstorm, I might need 10 people sitting around a table and still not come up with a good idea. With the chatbot, I can spend a few minutes and it will give me some good ideas to pick from. While GenAl can help make a brand stand out, it can also intensify the problem of advertising sameness. This is based on the knowledge that GenAl derives its answers from a limited set of training data, which interviewees asserted would likely hinder its ability to generate truly novel ideas and result in merely perpetuating the same old content that already exists. Kate stated:

It just regurgitates stuff that it can find on the web. It doesn't have any opinions. It's just going to give you the best-fit model answer to anything that you ask it...Marketing is supposed to be about difference and USPs, not silver bullets.

This can aggravate the existing problem of *institutional isomorphism* (i.e., the notion that advertising campaigns produced by different agencies can have similarities because advertising professionals undergo similar training, are influenced by the same award ceremonies, and often switch between agencies, causing knowledge and experience exchanges across agency boundaries; Demsar et al., 2021). Some practitioners adopted GenAl to support creative endeavors, as a form of antimodel (i.e., a benchmark to test the novelty and innovativeness of ideas). Frank shared his example:

[I ask ChatGPT] to come up with a tagline for the new [anonymous name brand] shoes and see what it actually comes up with. And if any of my lines are the same as what ChatGPT comes up with, I'm throwing them in the bin, and I'm coming up with something else. You know, I'm a human. As a good copywriter, I would want to make something that stands out better than what ChatGPT can write.

To summarize the paradox, GenAl is viewed as both supportive of creative endeavors to help brands stand out and as a curator of similar-or the same-content as the crowd. Ultimately, it is prudent to view GenAl as a source of indirect inspiration. In other words, rather than directly adopting the ideas in the output, practitioners should use the tool as a prompt for unique and creative ideas, or as a creativity benchmark to ensure that ideas are different from those generated by the GenAI tool. On broader reflection, this paradox highlights the tension between the necessity of new ideas and the dependence on the old ideas used to train AI. If GenAI largely regurgitates the past, then practitioners, industries, and even society as a whole may well be stuck in a form of idea/culture time-warp-or AI-enabled Groundhog Day. Beyond causing sameness in

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content creation, GenAl may also contribute to sustaining outdated ideas and cultural biases (Abdelhalim et al., 2024), thereby hindering progressive societal change.

#### 2.3. Paradox 3: Efficiency vs. inefficiency

It was clear that the sample viewed GenAI as a powerful tool to improve efficiency in their work by partially or fully automating some routine tasks, thereby freeing resources for more important and rewarding work. Among the discussed routine tasks, the most mentioned was content generation. In the age of content-hungry consumers and search engine optimization algorithms, tools that create instant, engaging, and informative text are, unsurprisingly, hugely appealing. Based on the interviews, three approaches to GenAI-enabled content generation were identified: (1) promptbased, (2) template-based, and (3) data-based. In the prompt-based approach, practitioners give the AI a detailed prompt that describes the content they need using clear instructions (e.g., blog, informal, funny, with subtitles). The templatebased approach requires a template to be submitted and used to frame further similar iterations produced by the AI. Lastly, the data-based approach involves feeding the AI data (e.g., a market research report) and asking it to produce content based on it (e.g., summary, blog). Laylah provides an example:

I do all blogs on my own, and writing a blog for me takes too much time...So, I'll just be like 'Can you write me an SEO-worthy blog with good titles and subtitles about compound interest for investors who are just starting?' And you know, it writes your whole thing...Also, I had transcriptions from master classes that were filmed, and I asked ChatGPT to write like a whole article summarizing the transcription.

Beyond content creation, practitioners highlighted that AI can be used to increase efficiency in other tedious tasks, such as creating spreadsheets, payper-click (PPC) headlines and description lines, contracts, emails, social media messages, programming codes, invoice templates, product copywriting, structured query language (SQL) commands, and AB tests. These efficiency-related benefits were hailed by some to be particularly important for smaller organizations that may be light on capital and resources.

While the efficiencies associated with GenAI were clear, it was also apparent that adopting the

tool may cause inefficiencies. These inefficiencies manifested as either direct or indirect. *Direct inefficiencies* are those associated with the shortcomings of GenAI outputs. For example, incorrectly worded content or hallucinated information require human intervention to resolve, which may cancel out the efficiencies gained.

Indirect inefficiencies, on the other hand, are not immediately linked to AI outputs themselves but rather to the broader consequences of GenAI use. First, participants feared problems related to intellectual property and data security, as they could not be certain that protected or sensitive information fed into the AI would not be exposed to others. Indeed, some companies have already fallen victim to this. At Samsung, there have been three separate instances of employees accidentally leaking sensitive data to ChatGPT (Mauran, 2023). In this vein, Sarah was worried: "If we leaked all of this information [through ChatGPT] about like customers or consumers...then it's going to be a PR disaster." Second, participants were concerned with the potential reputational damage associated with communicating incorrect facts presented by the AI. For example, CNET's attempt to publish GenAI-written articles attracted considerable negative attention in the media when it was discovered that the published articles contained errors (Farhi, 2023). Third, practitioners argued that using GenAl for content creation could result in compromised effectiveness of brand communications due to the perceived lack of effort on the part of the advertising organization, which could lead to penalization from consumers or search engine rankings. Indeed, Open AI, Google, and Meta have already made a commitment to watermark AI content (Bartz & Hu, 2023). As such, it will be even easier for consumers and search engines to identify artificially generated content. Together, these indirect issues highlight perceived inefficiencies of GenAI, as using the tool could cost companies significant time and money to rectify issues that would likely not have happened if the Al was not adopted.

In sum, GenAI can increase efficiency by reducing the time and money necessary for routine tasks, which frees advertisers to focus on more complex, value-added jobs. However, it simultaneously creates resource inefficiency due to its inability to do tasks without supervision, and the potential for needing resources to rectify possible issues stemming from its use (e.g., reputational damage, repair). Therefore, a cautious approach is required in navigating this paradox.

#### 2.4. Paradox 4: Superiority vs. inferiority

The three aforementioned paradoxes are operational paradoxes based on contradictory implications of GenAl for advertising practice. Here, we present an emergent psychological paradox associated with practitioners' work identity. More specifically, the paradox is linked to how advertisers identify with GenAl. Our sample acknowledged that GenAl is changing the nature of advertising work, the day-to-day responsibilities, and the general roles of advertising practitioners. In grappling with this transitioning landscape, participants exposed conflicted sentiments.

Participants felt that they were inferior to GenAI—a belief founded on the technology's innate ability to carry out work quicker and at a larger scope than humans.<sup>2</sup> This perception resulted in the fear of being replaced by GenAI, which concerns not only individual advertising practitioners but also advertising agencies as a whole. Participants believed that automation could lead to more work being carried out in-house by brands (vs. agencies)—an already growing trend (ANA, 2023).

It was evident that this perceived inferiority led practitioners to call into question their identities and roles as advertisers. In this vein, advertisers guestioned their usefulness to their firms and their identity as content creators given that the AI would be doing the heavy lifting. This aligns with recent media commentary that AI is eroding advertisers' work identity (Brower, 2023), fueling concerns among practitioners regarding their employment and future roles in the advertising process. Some participants suggested that the automation of marketing communications would result in a less attractive work environment, as GenAl commoditizes their work, which reduces their role to mere managers of these tools. These fears reflect automation anxiety that has been present since the 18<sup>th</sup> century when Luddites and others expressed resistance to technological innovation and automation of tasks (Frev. 2019). Kate reflects on work-identity tension related to the perceived inferiority of advertisers in comparison to GenAI:

I think that people who've gone to the expense and effort of studying marketing want a more fulfilling job than just driving the chatbot. And I would hate to see the kinds of young people...being reduced to the kinds of roles where that's all they're doing day in and day out. Because at least when they have to write the content themselves, they have to think about it—they learn something from doing it. They learn how to write effectively, how to elicit a response, how to express the benefits that the company has to offer, how to construct a call to action, and so on and so forth. And so, I think one of the potential downsides is that it commoditizes marketing even more, and makes it a less attractive environment to work in you know if all we're doing is driving these machines.

While advertisers saw themselves as inferior, they also somewhat believed they were superior. First, it was acknowledged that although AI may be fast and broad in scope, it requires humans to check and sign off its work, as it cannot be trusted.<sup>3</sup> Second, for AI to function well, it is completely reliant upon guality prompts and further probing. Without this, it is unlikely to provide instant quality answers to complex questions or produce high-quality, ready-to-use content. Third, humans have superior emotional intelligence, and consumers' reactions to a message largely depend on its emotional tone. While AI-enabled tools become increasingly better at mimicking and recognizing human emotions, they are still unable to understand nuanced emotions, feelings, and perceptions. Lastly, marketing communications operate within a context (e.g., the branding, tone, and positioning of the company, consumer trends, competition, partnerships, and the market climate). Because GenAI is unable to carefully weigh in on important contextual factors, advertisers maintained that they were a step ahead. Aligned with this, William complained that ChatGPT's content is "very salesy in your face, so you need to add that kind of like twist to it to make it actually a bit more [of] an inconspicuous form of marketing."

Overall, advertisers perceive themselves to be simultaneously inferior and superior to GenAI. This gives rise to complexity and tension for their work identity (i.e., what their role and value are) and uncertainty about their future employment and need for certain advertising organizations (e.g., agencies). One participant pondered whether the new commercial reality renders advertisers as mere "machine supervisors." This psychological paradox aligned with Cannon's (1996, p. 110)

 $<sup>^{2}</sup>$  As discussed at an operational level in the paradoxes in Section 2.

<sup>&</sup>lt;sup>3</sup> This is reminiscent of the operational limitations discussed in previous sections.

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assertion that "paradoxes emerge when beliefs or assumptions fail to keep up with external changes." Here, GenAI represents a critical and relatively sudden external change, producing a paradox by challenging the well-established beliefs and assumptions of advertisers. In Section 3, we outline how practitioners can cope and thrive with these paradoxes.

#### 3. Navigating the paradoxes

In an era of business-related paradoxes that span organizational demands (Pina e Cunha et al., 2023), GenAl contributes to the paradoxical nature of contemporary business practice. Here, we identified four paradoxes. Taken together, these paradoxes demonstrate that GenAl holds both promises and perils for the advertising industry. To gain a competitive advantage, advertisers must not only equip themselves with the knowledge of these paradoxes but also the means to navigate them (Pedersen, 2023). The question therefore becomes "What should advertisers do to tackle each paradox?"

#### 3.1. Confrontation coping strategy

To deal with the tension, anxiety, and stress that accompanies technology paradoxes, individuals typically enact one of two broad coping strategies—like common threat responses such as fight or flight (Jarvenpaa & Lang, 2005; Mick & Fournier, 1998). First, an avoidance strategy (to flee) aims to minimize interaction with technology to avoid negative issues associated with it. The second, a confrontation strategy (to fight), requires direct negotiation and interaction with the technology to unravel the paradox head-on and best harness the opportunities it affords. Our interviews reflected that advertisers are rather split in their choice to avoid or confront the issue of Al. Adopting an avoidance strategy in response to GenAl is understandable, given the perceptions of its complex nature and worrisome media speculation that it will take jobs (see Frey, 2019). However, we urge practitioners to move away from this knee-jerk reaction as it will not stop the GenAI bandwagon and will only result in them missing or getting run over by it. Instead, we advise advertisers to embrace GenAl and invest time and effort in learning about its features and scope to confront the paradoxes that exist. Indeed, confronting technology paradoxes may facilitate better adjustment compared to avoidance (Mick & Fournier, 1998).

The question then becomes "How should the paradoxes be confronted?" Drawing on paradox management styles within the literature (Clegg et al., 2002), we offer two approaches for confronting GenAl paradoxes in the advertising industry: contingency and ambidexterity.

#### 3.1.1. Contingency approach

A contingency approach involves choosing the right mix of opposites in each paradox (e.g., foregoing some flexibility to obtain more standardization; Pina e Cunha et al., 2023). This approach is commonly applied when both poles of a paradox present some benefits, forcing decision-makers to find a compromise. However, we suggest that this approach is also suitable for addressing the paradoxes in which the poles of a paradox represent clear advantages (e.g., research facilitation) and disadvantages (e.g., research obstruction), as is the case with the identified operational paradoxes 1, 2, and 3. In such paradoxes, the right mix of opposites entails harnessing and maximizing the positive features of each while exercising caution to minimize negative features. By doing this, practitioners can remove the tension between the opposites and thereby "solve" the paradox (Clegg et al., 2002).

Specific contingency tactics can include finding the optimal point of GenAI adoption for a particular organization, as not all organizations are the same. Practitioners need to decide on what would be the appropriate frequency, intensity, and complexity of GenAI use for their organization. The higher the level of GenAI adoption, the more advantages and associated risks the organization will experience. Both need to be carefully evaluated against the organization's needs, priorities, and capabilities.

Another tactic—necessary for maximizing the positive features while minimizing the negative features of each paradox—is staying up-to-date with the rapid development of GenAI. This may require allocating time or creating a role to track GenAI capabilities, limitations, and development forecasts. Investing in workforce development by organizing GenAI education events or one-on-one training is critical for educating employees on how to get the most from GenAI while being mindful of the pitfalls.

Within this education agenda, we encourage a specific focus on training prompt generation, acknowledging that text-to-text GenAl outputs are only as good as the prompts they respond to. Broad advice on prompt engineering includes three suggestions. First, be very specific to achieve greater facilitation of research in Paradox 1 (e.g., "Provide

a 600-word summary of trends in purchasing for X including yearly spend changes. Suggest sources that can be used to produce this type of summary"). Second, provide detailed context by giving Al as much information as appropriate (e.g., examples of creative campaigns for your brand. including an understanding of how your brand is unique). This can help GenAI produce content that is more unique for your brand, reducing the potential for sameness in Paradox 2. Third, clarify your objectives by aligning prompts with the overarching goal (e.g., "To promote X, highlight its best features"). Getting outputs that closely align with the goal helps promote efficiency positively shifting the balance with regard to Paradox 3. For further tips on prompt engineering, see Dowling (2023) and Victor (2023). A further discussion on how practitioners can construct effective AI prompts and validate responses is presented by Robertson et al. (2024).

An additional contingency approach tactic is to actively seek collaborations and partnerships to

access resources, knowledge, and expertise in the area of GenAI, as it can lead to greater opportunities for gaining valuable insights. This could include consulting with specialists on AI-related legal, safety, and technical issues.

Beyond developing GenAI knowledge, organizations need to continuously explore innovative ways to deploy GenAI and remain flexible, which will allow advancement in GenAI to be quickly harnessed. Tasks that are not possible or are ineffective with GenAI today may become possible and effective in 6 months' time. Therefore, organizations may want to set GenAI as a recurring item on the agenda of strategic meetings and put protocols in place to quickly mobilize the technology in line with monitored trends or developments.

Furthermore, to reduce the risks associated with the use of GenAI, organizations can set clear regulations and guidelines on how GenAI should be used within their organizations. They can also invest in in-house developed or co-developed text-to-text

- (	Confrontative Coping Strategies			
	Paradox	Management Strategy	Tactics	
erational Paradoxes	1 Research facilitation vs. Research obstruction 2 Efficiency vs. Inefficiency 3 Creativity vs. Sameness	Contingency approach – harness and maximize the positive pole of the paradox while minimizing the negative.	Optimal point of adoption: Decide on the appropriate frequency, intensity, and complexity of use.     Tracking: Develop a job role or ringfence time to track generative AI capabilities, limitations and development forecasts.     Workforce development: Organize generative AI-focused training to educate employees on how to employ generative AI in advertising practice. Specific focus here should be given to up-skilling in prompt engineering.     Collaboration: Actively seek collaborations and partnerships to access resources, knowledge and expertise in the area of generative AI.     Agility: Remain flexible allowing for advancement in generative AI to be quickly harnessed.     Innovation: Continuously explore innovative ways to deploy generative AI.     Policy: Set clear regulations and guidelines on how generative AI should be used within your organization.     Investment: Use in-house developed (or co-developed) text-to-text generative AI or paid versions of publicly available text-to-text generative AI applications for superior output.	
Psychological Paradox	4 Superiority vs. Inferiority	Ambidexterity approach - adopt a paradox mindset and synthesize both practitioners' and text-to-text generative AI's strengths and weaknesses into a synergistic partnership.	Reconciliation: Help employees understand that synergies exist and they can be beneficial.   Role enhancement: Help employees to develop their existing unique skills as well as new proficiencies in generative Al (e.g., prompt engineering).   Role management: Reconsider work task allocation between practitioners and generative A tools to achieve higher synergy. For example:   • Identify tasks that align with employee strengths, delegating others that they may not excel in to generative AI.   • Isolate generative AI appropriate tasks such as routine or repetitive ones, liberating staff to focus or more satisfactory and meaningful tasks.	

#### Table 1. A summary of text-to-text GenAl paradoxes

#### To ChatGPT, or not to ChatGPT

GenAI, or paid versions of publicly available text-totext GenAI applications for superior output.

#### 3.1.2. Ambidexterity approach

Unlike the contingency approach that typically requires prioritizing one pole of a paradox over another, an *ambidexterity* (synthesis) approach suggests synthesizing both poles. In other words, the thesis and antithesis of a paradox are merged to form a synthesis (Pina e Cunha et al., 2023). Such ambidexterity can offer synergy and competitive advantage if contradictory tensions are turned into complementarities (Pina e Cunha et al., 2023). However, this approach is not appropriate for the operational paradoxes (1, 2, and 3) because they lack synergistic potential due to the direct tensions between their positive and negative poles. Instead, we advise adopting this approach when navigating the psychological, superiority vs. inferiority paradox (Paradox 4).

As is evident, practitioners and GenAl have different strengths and weaknesses. Instead of advertising practitioners asking themselves whether they are better than GenAl, or if GenAl is better than them at doing their job, a more fruitful approach could be asking how the practitioners themselves can collaborate with GenAI to do their job more effectively. Among the tactics that can address the superiority-inferiority paradox, one could be to promote the paradoxical mindset among employees by encouraging them to identify opportunities for value co-creation and emphasizing the importance and benefits of the synergetic approach. Another tactic can be helping employees develop their existing skills as well as new proficiencies in GenAl (e.g., prompt engineering), thereby reducing feelings of inadequacy and reluctance to adopt GenAI tools. It is also advisable to reconsider work task allocation between practitioners and GenAI tools to achieve higher synergy. For example, managers could identify tasks that align with employee strengths and delegate other tasks to GenAI, which enhances self-efficacy. They can isolate GenAI-appropriate tasks such as routine or repetitive ones and liberate staff to focus on more satisfactory and meaningful tasks to improve employee work satisfaction.

### 4. Final thoughts

In this article, we have identified four paradoxes of text-to-text GenAl in the advertising industry— which we suggest should confront rather than

ignore AI. We have also suggested two paradox management approaches and corresponding actionable tactics. The paradoxes, overall coping strategy, management approaches, and tactics are summarized in Table 1. While our recommendations are most applicable for professionals working within marketing communications, the identified paradoxes and their implications likely resonate with other sectors that employ GenAI to support quick text outputs, searches, idea generation, and research (e.g., legal, entertainment, academia). Drawing on this discussion, we conclude with three key takeaways for managers operating across different contexts. First, consider whether our identified paradoxes strike a chord with the adoption of GenAI in their industry and take stock of other potential paradoxes that exist. Second, choose a broad paradox management approach (contingency or ambidexterity) to confront each paradox. Third, develop tactics that are right for your industry to mobilize each paradox management approach.

#### References

- Abdelhalim, E., Anazodo, K. E., Gali, N., & Robson, K. (2024). A framework of diversity, equity, and inclusion safeguards for chatbots. *Business Horizons*, 67(5), XXX–XXX.
- ANA. (2023, May 2). The continued rise of the in-house agency. Available at <u>https://www.ana.net/miccontent/show/id/rr-</u>2023-05-rise-in-house-agency
- Bartz, D., & Hu, K. (2023, July 21). OpenAI, Google, others pledge to watermark AI content for safety, White House says. *Reuters*. Available at <u>https://www.reuters.com/</u> <u>technology/openai-google-others-pledge-watermark-ai-</u> content-safety-white-house-2023-07-21/
- Berthon, P., Yalcin, T., Pehlivan, E., & Rabinovich, T. (2024). Trajectories of AI technologies: Insights for managers. *Business Horizons*, 67(5), XXX–XXX.
- Brower, T. (2023, May 5). People fear being replaced by AI and ChatGPT: 3 ways to lead well amidst anxiety. *Forbes*. Available at <u>https://www.forbes.com/sites/tracybrower/</u> 2023/03/05/people-fear-being-replaced-by-ai-and-chatgpt-3-ways-to-lead-well-amidst-anxiety/?sh=6d5dc32f7fe6
- Brown, R. (2023, January 24). Welcome to Jasper Al—Quick, easy content creation powered by Al! *Medium*. Available at <u>https://</u> <u>medium.com/data-driven-fiction/welcome-to-jasper-ai-</u> <u>guick-easy-content-creation-powered-by-ai-7e5a4087d0cf</u>
- Campbell, C., Sands, S., Ferraro, C., Tsao, H.-Y., & Mavrommatis, A. (2020). From data to action: How marketers can leverage AI. Business Horizons, 63(2), 227–243.
- Cannon, T. B. (1996). Welcome to the revolution: Managing paradox in the 21<sup>st</sup> century. London, UK: Pitman.
- Cellerin, T. (2023, March 22). How ChatGPT is already disrupting the advertising industry. *LinkedIn*. Available at <u>https://</u><u>www.linkedin.com/pulse/how-chatgpt-already-disrupting-</u> advertising-industry-thierry-cellerin/
- Clegg, S. R., da Cunha, J. V., & Pina e Cunha, M. (2002). Management paradoxes: A relational view. *Human Relations*, 55(5), 483–503.

- Clugston, R. (2023, May 4). Why ChatGPT and AI can't make world-changing, transformative work. *Adhesives Age*. Available at <u>https://adage.com/article/opinion/whychatgpt-and-ai-cant-make-world-changing-transformativework/2491856</u>
- Cui, Y., van Esch, P., & Phelan, S. (2024). How to build a competitive advantage for your brand using generative AI. *Business Horizons*, 67(5), XXX–XXX.
- Demsar, V., Sands, S., Campbell, C., & Pitt, L. (2021). "Unprecedented," "extraordinary," and "we're all in this together": Does advertising really need to be so tedious in challenging times? *Business Horizons, 64*(4), 415–424.
- Dischler, J. (2023, May 23). Introducing a new era of Al-powered ads with Google. *Google*. Available at <u>https://blog.google/ products/ads-commerce/ai-powered-ads-google-marketinglive/</u>
- Dowling, L. (2023, September 8). A marketer's guide to mastering prompt engineering. Pathmonk. Available at <u>https://pathmonk.com/a-marketers-guide-to-mastering-</u> prompt-engineering/
- Farhi, P. (2023, January 17). A news site used AI to write articles. It was a journalistic disaster. Washington Post. Available at <u>https://www.washingtonpost.com/media/2023/01/</u> 17/cnet-ai-articles-journalism-corrections/
- Ferraro, C., Demsar, V., Sands, S., Restrepo, M., & Campbell, C. (2024). The paradoxes of generative AI enabled customer service: A guide for managers. *Business Horizons*, 67(5), XXX-XXX.
- Fischer, S. (2023, May 30). Generative AI comes for advertising. *AXIOS*. Available at <u>https://www.axios.com/2023/05/30/</u> <u>generative-ai-comes-for-advertising</u>
- Frey, C. B. (2019, November 12). Learning from automation anxiety of the past. MIT Sloan Management Review. Available at <u>https://sloanreview.mit.edu/article/learning-fromautomation-anxiety-of-the-past/</u>
- Gebauer, H., Fleisch, E., Lamprecht, C., & Wortmann, F. (2020). Growth paths for overcoming the digitalization paradox. *Business Horizons*, 63(3), 313–323.
- Grand View Research. (2023, September). Generative AI market size to reach \$109.37 billion by 2030. [Press release]. Available at <u>https://www.grandviewresearch.com/pressrelease/global-generative-ai-market</u>
- Haggin, P. (2023, April 16). Microsoft looks to ChatGPT AI to transform its digital ad business. *The Wall Street Journal*. Available at <u>https://www.wsj.com/articles/microsoftchatgpt-ai-advertising-8c5421f8</u>
- Haluza, D., & Jungwirth, D. (2023). Artificial intelligence and ten societal megatrends: An exploratory study using GPT-3. *Systems*, 11(120), 1–18.
- Hannigan, T. R., McCarthy, I. P., & Spicer, A. (2024). Beware of botshit: How to manage the epistemic risks of generative chatbots. *Business Horizons*, 67(5), XXX–XXX.
- Hu, K. (2023, February 2). ChatGPT sets record for fastestgrowing user base—Analyst note. *Reuters*. Available at <u>https://www.reuters.com/technology/chatgpt-sets-record-</u><u>fastest-growing-user-base-analyst-note-2023-02-01/</u></u>
- Jarrahi, M. H., Askay, D., Eshraghi, A., & Smith, P. (2023). Artificial intelligence and knowledge management: A partnership between human and Al. Business Horizons, 66(1), 87–99.
- Jarvenpaa, S. L., & Lang, K. R. (2005). Managing the paradoxes of mobile technology. *Information Systems Management*, 22(4), 7–23.
- Kietzmann, J., & Park, A. (2024). Written by ChatGPT: Large language models, conversational chatbots, and their place in society and business. *Business Horizons*, 67(5), XXX–XXX.

- Koslow, S., Sasser, S. L., & Riordan, E. A. (2003). What is creative to whom and why? Perceptions in advertising agencies. *Journal of Advertising Research*, 43(1), 96–110.
- Kulp, P. (2023, March 14). ChatGPT upends advertising and marketing jobs. Ad Week. Available at <u>https://www.adweek.com/performance-marketing/chatgpt-is-already-influencing-skills-for-advertising-and-marketing-jobs/</u>
- Lawton, G. (2023). What is generative AI? Everything you need to know. Tech Target. Available at <u>https://www.techtarget.</u> com/searchenterpriseai/definition/generative-Al
- Lehnert, K., Till, B. D., & Carlson, B. D. (2013). Advertising creativity and repetition: Recall, wearout, and wearin effects. *International Journal of Advertising*, 32(2), 211–231.
- Lewis, M. W. (2000). Exploring paradox: Toward a more comprehensive guide. Academy of Management Review, 25(4), 760-776.
- Loten, A. (2023, March 6). Enterprise startups race to cash in on ChatGPT mania. *The Wall Street Journal*. Available at <u>https://www.wsj.com/articles/enterprise-startups-race-</u> to-cash-in-on-chatgpt-mania-c04eeba
- Mauran, C. (2023, April 6). Whoops, Samsung workers accidentally leaked trade secrets via ChatGPT. *Mashable*. Available at <u>https://mashable.com/article/samsung-chatgpt-leakdetails</u>
- McCarthy, I. P., Hannah, D., Pitt, L., & McCarthy, J. (2020). Confronting indifference toward truth: Dealing with workplace bullshit. *Business Horizons*, 63(3), 253–263.
- Meta. (2023, May 11). Introducing the AI sandbox for advertisers and expanding our Meta Advantage suite. [Press release]. Available at <u>https://www.facebook.com/</u> <u>business/news/introducing-ai-sandbox-and-expanding-</u> meta-advantage-suite
- Mick, D. G., & Fournier, S. (1998). Paradoxes of technology: Consumer cognizance, emotions, and coping strategies. *Journal of Consumer Research*, 25(2), 123–143.
- Muliyil, A. (2023, February 14). ChatGPT might just usher in the new era of renaissance for the advertising and media industry. ET Brand Equity. Available at <u>https://brandequity.</u> <u>economictimes.indiatimes.com/news/digital/chatgptmight-just-usher-in-the-new-era-of-renaissance-for-theadvertising-and-media-industry/97887811</u>
- Omnicom Group. (2023). Omnicom collaborates with AWS to transform advertising campaign development with generative AI. [Press release]. Available at <u>https://www. omnicomgroup.com/newsroom/omnicom-collaborates-</u> with-aws-to-transform-advertising-campaign-developmentwith-generative-ai/
- OpenAI. (2023, March 14). GPT-4. Available at <a href="https://openai.com/research/gpt-4">https://openai.com/research/gpt-4</a>
- Ortiz, S. (2023, October 18). ChatGPT's web browsing feature just got a whole lot easier to use. *ZDNET*. Available at <u>https://www.zdnet.com/article/chatgpts-web-browsing-</u> feature-just-got-a-whole-lot-easier-to-use/
- Pedersen, C. L. (2023). The paradoxical marketer: Interpretations, illustrations, and implications. *Business Horizons*, 66(6), 765–776.
- Pina e Cunha, M., Rego, A., Berti, M., & Simpson, A. V. (2023). Understanding pragmatic paradoxes: When contradictions become paralyzing and what to do about it. *Business Hori*zons, 66(4), 453–462.
- Robertson, J., Ferreira, C., Botha, E., & Oosthuizen, K. (2024). Game changers: A generative AI prompt protocol to enhance human-AI knowledge co-construction. *Business Horizons*, 67(5), XXX–XXX.

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- Ross, C. (2023, May 10). Jasper AI brand voice for businesses. *The Medium*. Available at <u>https://medium.com/@</u> <u>charles-ross/introducing-brand-voice-to-jasper-ai-</u> <u>882b6184befa</u>
- Sirkka, L. J., & Lang, K. R. (2005). Managing the paradoxes of mobile technology. *Information Systems Management*, 22(4), 7–23.
- Smith, R. E., MacKenzie, S. B., Yang, X., Buchholz, L. M., & Darley, W. K. (2007). Modeling the determinants and effects

of creativity in advertising. Marketing Science, 26(6), 819-833.

- Sundberg, L., & Holmström, J. (2024). Innovating by prompting: How to facilitate innovation in the age of generative AI. *Business Horizons*, 67(5), XXX–XXX.
- Victor, A. M. (2023, May 16). Marketing: A guide to prompt engineering. *The Medium*. Available at <u>https://medium.com/</u> <u>aimonks/marketing-a-guide-to-prompt-engineering-</u> d9fa226c611<u>b</u>