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# Strategising with generative AI: Productivity gains in social media marketing

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**ABSTRACT**

This study explores the use of ChatGPT for social media marketing and its potential impact on employment. We take stock of the literature on productivity gain and automation of work to unpack the role of AI in devising marketing strategies. To this end, we carried out in-depth, semi-structured interviews with 20 social media professionals and a follow-up experiment using ChatGPT to generate social media marketing strategies for two companies. The results support the prospect of generative AI leading to increased productivity in the creation of strategies for social media as the experiments yielded high-quality output in terms of brand-fit, appropriate addressing of business challenges, and strategic flexibility. The results, however, also highlight the limitations in using off-the-shelf AI tools for marketing campaigns with intellectual property and data protection requirements. We conclude with an assessment of potential risks associated with data protection, the growing development of in-house AI tools by companies, and ethical considerations about the use of Generative AI.

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Generative AI; ChatGPT; social media marketing; productivity gain; automation

## Introduction

The proliferation of AI-based tools aimed at enhancing workplace productivity has become conspicuous in recent years, with technology firms such as OpenAI, Google, DeepSeek, Atlassian, Anthropic, Adobe, and Baidu launching numerous services based on Large Language Models (LLMs). These services have raised growing concerns about job automation and displacement (Spence, Westerman, and Lin 2018), a development embodied in IBM CEO Arvind Krishna's announcement of a temporary halt in hiring for approximately 7800 internal positions deemed susceptible to automation, including roles within human resources (Bloomberg 2023). Such changes to the workplace are observed across the world, with 80% of executives in retail and consumer industries in the MENA region planning to use AI to support their businesses strategically through consumer analytics in 2025 (Beyari and Hashem 2025), a shift that reinforces OECD's

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recent estimate that 27% of jobs worldwide are at risk of rationalisation through emerging AI technologies (OECD 2023). These developments also echo historical cycles of heightened expectations followed by periods of retrenchment known as 'AI winters' (Natale and Ballatore 2017).

It is against this backdrop that we explore how the potentially innovative yet rationalising practices of composing social media marketing strategies via ChatGPT could lead to macro-diffusion processes and transformation in the creative departments of organisations (Attewell 1992). To this end, we chart how early adopters in the field of social media marketing have sought to increase their productivity in strategy-writing (Rogers 2010). In doing so, our study also demonstrates the reciprocal theoretical relationship between innovation and productivity as postulated in the scholarship (Müller 2012; Van de Ven 1986). In this context, the integration of ChatGPT into social media marketing strategies represents a compelling innovation that leverages frontier technology to maximize productivity. This integration not only reflects current technological advancements but also promises to further enhance efficiency within the field. This proposition hinges on the long-term adoption, successful implementation, and widespread use of these tools by marketing professionals to validate it as a tangible innovation (Rogers 2010; Van de Ven 1986; Vordank 2005).

The research question driving this study is centred on identifying the productivity gains that can be achieved using generative AI to devise social media marketing strategies. In the following, we provide an overview of current research on productivity gains from generative AI and related information and communication technologies (ICT). We subsequently detail the dual-phased approach of our study in which we start with a set of in-depth, semi-structured interviews with 20 social media professionals to delineate the landscape of social media marketing strategies – comprising framework specifics, strategy components (e.g., target demographics, platform selection, and content ideation), creative processes, and benchmarks for effective strategies. We proceed by taking stock of the insights gleaned from the interviews to roll out a follow-up experiment for strategy formulation leveraging ChatGPT-4o. The experiments are based on two companies drawn from the experiences of our interview cohort, the first being a sustainable fashion enterprise and the second a chemical corporation.

## Previous work

The advertising industry has long embraced AI to maximise efficiency, brainstorm ideas, develop campaign drafts, and improve ad targeting and personalisation (Li 2019). The touted productivity gains, however, are likely to be experienced unevenly by professionals across different marketing departments, working at different hierarchical levels, and performing various functions and activities (Hermann, Puntoni, and Erik Hermann 2024), with ensuing asymmetric benefits across the industry. Despite this tension, marketing is projected to be one of the four industries to see the largest amount of value from generative AI (Campbell 2023). This accelerated development led creators across the entertainment and advertising industries to express genuine concern over the widespread adoption of generative AI and the automation of their work (Huh, Nelson, and Russell 2023; Short and Short 2023).

Concerns about work automation in the sector evolved into several lawsuits against OpenAI for copyright infringement (Alter and Harris 2023). Such concerns intersect with the growing apprehension about AI's potential to cause widespread job displacement and disrupt the media sector. The Author's Guild has advocated clear AI usage guidelines to prevent the replacement of human writers by AI systems, citing the potential threat to employment within the industry, and the European Writers Council (2023) called for legal measures to prohibit AI from extracting and reproducing sentences from copyrighted texts without permission (Milliot 2023). More broadly, the OECD estimates that 27% of jobs worldwide are at risk of rationalisation through emerging AI technologies (OECD 2023), a significant uptake from reports issued by the organisation before the public release of generative AI tools when they estimated the risk of job losses due to automation at around 9% (Arntz, Gregory, and Zierahn 2016).

The prospects of AI tools increasing worker productivity sit in opposition to such concerns about job losses, a discussion broadly referred to as automation versus augmentation (Lei et al. 2024). A growing body of research has probed the radical promises of generative AI in marketing productivity, with previous studies finding that consumers expect ads created through AI-human collaboration to be of superior quality compared with those created by humans or AI alone, an expectation driven by the belief in enhanced informational task management, the generation of innovative ideas, improved creative research, and greater efficiency in human-AI collaboration (Ryoo et al. 2025). In the experiments rolled out by van Berlo, Campbell, and Voorveld (2024), the rating of AI-generated content by consumers with respect to quality, appropriateness, and realism was deemed just as high as those created by professionals. Wen, Laporte, and Yingting Wen (2025) conducted a comparative study on the capability of generative AI to emulate human-like experiences in marketing communication and found that these models can present positive emotions and influence purchase intent notwithstanding the limitations in embodied cognition and lexical diversity compared with human-authored content.

This literature has provided evidence that AI tools may improve the efficiency of the workforce and provide support to the productivity gain hypothesis. While these studies are largely performed in controlled lab conditions, there is empirical evidence of this effect. Noy and Zhang (2023) ran randomised controlled trials with 444 college-educated professionals in human relations and marketing who performed 20–30-min tasks like writing news releases and brief reports. Participants using ChatGPT completed the tasks 37% faster than those who did not have access to the tool, the reported productivity effect, which also boosted job satisfaction by 20%. Similarly, Peng et al. (2023) conducted an experiment with software developers and found that those using GitHub Copilot performed entry-level tasks 55% faster than those who had no access to the tool. In a cognate study, Bossen and Pine (2023) reported that healthcare providers were successfully streamlining the processing of medical information of patients in real-time using AI.

Despite the increasing integration of AI in marketing, there is surprisingly limited scholarship on the application of these tools for fundamental strategic decision-making. Previous studies have identified AI's strategic potential in areas like data analysis, as it can process vast amounts of consumer data derived from social media interactions and offer professionals strategic advantages through personalized and targeted content (Basu et al. 2024; Bohara, Gupta, and Kumar 2025). A common implementation entails leveraging AI algorithms to analyse engagement data such as shares and likes on social media, with the

tool performing language-based sentiment analysis of posts or comments to predict future consumer behaviour (Beyari and Hashem 2025; Patil et al. 2024). The application of AI in social media strategy, however, remains largely confined to analytics supporting existing strategies rather than devising novel approaches (Bohara, Gupta, and Kumar 2025). As such, the prospect of generative AI driving tangible productivity gains in strategic marketing work remains underexplored in the literature.

There is also critical research on productivity gains via ICT. Blinder (2000) scrutinised the productivity gains associated with the internet and argued that empirical evidence linking the advent of the World Wide Web to increased GDP in the United States remains inconclusive, further noting that the widespread introduction of computers into workplaces during the 1970s and 1980s did not correspond with higher national GDP. This is in line with Robert Solow's assertion that 'we see the computer age everywhere except in the productivity statistics' (Blinder 2000, 4). Rather than dismissing computers as an unproductive innovation, technology advocates attributed the absence of measurable productivity gains either to insufficient diffusion or to the concentration of productivity growth within the computer manufacturing industry itself (Blinder 2000). Van Ark (2016) also argued that despite significant increases in business investments in ICT – including mobile technology, the internet, and cloud computing – the 'New Digital Economy' had yet to yield any discernible improvements in productivity growth. These findings, based on comparative analyses of ICT investments and GDP in the United States, the United Kingdom, and Germany, revealed no clear evidence of a positive correlation between the two factors. Similarly, observers noted that most users in the mid-1990s lacked the required expertise to fully leverage the productivity potential of computers (Holman and Smialek 2024), a hypothesis that is consistent with Blinder's (2000) observation that U.S. productivity levels began to rise around the time of the internet's emergence, thereby suggesting that this ICT may have bridged the gap between computerisation and long-anticipated productivity gains.

In contrast to this relatively contentious debate, the theoretical connection between innovation through automation and productivity gains is well established in the literature. Van de Ven (1986) noted that the decline of productivity in the U.S. led to a loss in innovativeness at national level in the 1980s and advised managers to pursue organisational changes that would establish a culture of innovation through cybernetic principles like negative feedback, double-loop learning, and the preservation of uncertainty. Müller (2012) also posited a reciprocal relationship between these two factors and argued that advancements in automation have historically fostered productivity gains, which in turn have enabled workers to take new jobs. The latter is also encapsulated in Schumpeter's (2013) concept of 'creative destruction' whereby established markets and employment structures are systematically replaced by more productive alternatives. Technological developments that informed this framework are based on innovations in transportation such as the expansion of railroads and air travel, or the development of modern power plants that resulted from and contributed to increased productivity, ultimately supporting the emergence of new markets and complex organisational structures (Schumpeter 2013).

ChatGPT's potential for productivity gains includes the possibility of triggering innovation in strategy development for social media marketing. Innovation, however, has become a 'plastic word' or floating signifier with limited theoretical or empirical import

(Pörksen 2004). This interpretation sits in sharp contrast to the definition employed in the literature on the diffusion of innovation (Rogers 2010). In this definition, neither novel products nor novel processes alone, or their combination, constitute innovation unless they achieve widespread adoption and integration. Organizations, in particular, serve as hubs of innovation as they continuously seek to achieve objectives that require evolving modes of coordinated action (Vordank 2005). This scholarship emphasizes that the organizational diffusion of innovation fundamentally occurs through communication among members (Attewell 1992; Frank, Zhao, and Borman 2004; Van de Ven 1986). A classic illustration of this is the widespread adoption of computers in businesses and public institutions, where technology developers, consultants, and trained educators disseminate their expertise to less-skilled individuals, thereby effectively bridging knowledge gaps that are primary barriers to diffusion (Frank, Zhao, and Borman 2004; Van de Ven 1986).

To be sure, there are no objective benchmarks determining the extent to which the necessary diffusion has been reached to achieve innovation (Rogers 2010). Except for extreme cases where zero diffusion would indicate failure and complete diffusion would constitute a definitive case of innovation, intermediate stages represent an ongoing diffusion process that render the perception of success highly dependent on context and on the initial conditions of the process. Despite these important caveats, we expect social media professionals engaged in crafting marketing strategies to be well positioned to assess the extent to which innovation has been achieved in the field and within their organisations. They should also be able to voice the anxieties of a labour force that is simultaneously at risk of losing job security and spearheading such innovation efforts.

We devised a working definition of social media strategy by drawing from the literature on social media marketing. Hanlon and Tuten (2022) define social media marketing as the utilisation of social media technologies, channels, and software to create, communicate, and deliver value for an organization and its stakeholders. We take stock of this definition in light of Armstrong et al. (2014) observation that marketing has increasingly evolved towards creating sustainable brand-lifecycles that exceed traditional lead generation. This is particularly the case for social media, which fosters community building and aftersales customer care, often adding additional value to marketing toolkits (Hanlon and Tuten 2022). We also take stock of de Certeau (1984) account of strategy as a calculated approach to move from a current state towards an objective executed within complex social spaces. This definition is in line with the literature on the diffusion of innovations in organizations, as discussed above, by emphasizing that strategies are developed within social contexts, particularly within organisations that pursue objectives through coordinated action.

Lastly, de Certeau (1984) also argues that external factors such as competitors or audience must be considered when developing strategies, a definition that accurately describes the increasing competition faced by corporate marketing campaigns (Armstrong et al. 2014). In light of these contributions, we define social media marketing strategy as a set of deliberate actions designed to achieve business objectives by communicating with consumers on social media. In this context, productivity gain can be measured as the ratio of output produced by companies relative to the inputs required to generate that output, with commonly used measures of efficiency including time, budget, and workforce allocation (Corrado and van Ark 2016). This framework allows us to

investigate the potential productivity gains of ChatGPT in social media marketing strategies by assessing the quality of its output.

## Data and methods

We secured approval from the City St George's Ethics Committee on 23 March 2024, with the committee rating the study low risk and in compliance with the institution's framework for good research practice. In addition to securing informed consent from participants, the project ensured the anonymity of all participants and their employers and refrained from explicitly enquiring about proceedings at the interviewee's workplace. For this reason, we assigned pseudonyms to the participants and quoted the interviews only when the content could not be tracked to the author via the use of a search engine (Trevisan and Reilly 2014). The interview protocol was designed to ask participants what they generally perceived as best-practices when creating social media marketing strategies rather than urging them to disclose how they operated at work. This allowed interviewees to disclose information about their workplace, with some referring to well-executed public social media marketing campaigns and others making no explicit references. This flexibility helped participants in producing credible statements about strategy components, the quality criteria of strategies, and their user experiences with ChatGPT without sharing confidential data.

Data collection was based on in-depth, semi-structured interviews conducted on Microsoft Teams with 20 social media professionals recruited via LinkedIn or email. Participants were first approached through their organisations, and the selection criteria was oriented towards achieving demographic representation as well as a balance between business-to-business (B2B) and business-to-consumer (B2C) marketing to observe possible differences in strategising. Interviewees worked for business that ranged from under 10 employees to about 85,000, a diverse set of companies that allowed us to explore how differences in resources might affect approaches to social media marketing. The sample size of 20 interviews resulted from the saturation in the data, chiefly due to the absence of new strategy components or other relevant aspects to social media strategising emerging in the interview data. Table 1 details the demographic composition of our participant cohort (19 of the 20 participants agreed to provide demographic data). All tables and figures featured in this study were created for this research project.

The study recruited a diverse group of in-house marketeers and communications consultants from several industries, including chemistry (3), fashion (2), technology (2), and media (2), with additional representation from packaging (1), automation (1), engineering (1), music (1), beverages (1), and kitchenware (1). Female professionals outnumbered males (13 to 6) and participants averaged 37 years of age (range: 21–54 years) with an average of 14 years of marketing experience (range: 2–36 years). Educational backgrounds were predominantly academic, with individuals holding bachelor's degrees (8), master's degrees (5), MBAs (3), and one participant each with vocational training, A levels, and extra occupational certificates. Most participants were German (11), with representation also from China (2), USA (2), UK (1), Netherlands (1), France (1), and Czechia (1). Thus, while the study achieved balance across industry, age, and work experience, there are tangible disparities with respect to gender and nationality.

**Table 1.** Demographic breakdown of participants.

| ID | Job title | Industry | Gender | Age | Education | Exp. Work | Nationality | Residency | Marital status | Income |
|---|---|---|---|---|---|---|---|---|---|---|
| #001 | Social Media & Influencer Manager | Fashion | Female | 31 | B.Sc. | 4 | German | Germany | Single | 40-60k |
| #002 | Global MarCom Channel Manager SoMe | Chemistry | Female | 40–50 | B.A. | 25 | German | Germany | Single | X |
| #003 | Social Media Strategist | Music | Female | 21 | B.A. | 4 | Czech | Czech Republic + UK | Single | <40K |
| #004 | Social Media Manager | Media | Female | 30 | M.A. | 5 | German | Germany | Single | X |
| #005 | Global Social Media Manager | Chemistry | Male | 31 | B.A. | 7 | German | Germany | Single | X |
| #006 | Corporate Communications Professional | Chemistry | Female | 28 | M.A. | 5 | German | Germany | Single | 40-60k |
| #007 | Head of Comms & ESG | Packaging | Female | 40–50 | MBA | 18 | Chinese | China | X | X |
| #008 | Digital Strategiest | Marketing consulting | Male | 53 | A Levels | 25 | German | Germany | Single | >80k |
| #009A | Senior Product Manager | Beverage | Male | 41 | Diplom-Kaufmann | 15 | German | Germany | X | X |
| #009B | Social Media Manager & Consultant | Marketing consulting | Female | 31 | B.A. | 6 | German | Germany | Single | X |
| #010 | CEO/Founder | Fashion | Female | 39 | B.A. | 15 | German | Germany | Married | >80k |
| #011 | X | X | X | X | X | X | X | X | X | X |
| #012 | Brand & Corporate Comms Lead | Technology | Female | 54 | LV2 Certificate Accounting & Finance | 36 | British | UK | Married | X |
| #013 | CEO/Co-Founder | Kitchen utensils | Male | 26 | B.A. | 8 | German | Germany | Single | <40K |
| #014 | Marketing Head | Automation | Female | 46 | MBA | 23 | Chinese | China | Married | X |
| #015 | General Manager | Consumer electronics | Male | 35 | B. Sc. | 8 | Dutch | Netherlands | X | X |
| #016 | CEO/Founder | Media | Male | 50 | Berufsakademie | 30 | German | Germany | Single | >80k |
| #017 | Creative Strategist & Campaign Manager | Marketing consulting | Female | 24 | M.A. | 2 | United States | United States | Single | 40-60k |
| #018 | PR Accountant Coordinator | PR & Strategic Comms | Female | 24 | M.A. | 4 | United States | United States | Single | X |
| #019 | Marketing Communications Manager | Engineering | Female | 54 | B.A. | 30 | French | Germany | X | X |

The interview protocol was designed to identify components of social media marketing strategies by professionals, their specific strategic applications, the creative process underpinning the use of Generative AI, and the quality criteria for effective strategies. Emphasis was placed on questions that probed actions of professionals during the creative process rather than individual experiences (Silverman 2015). Interviewees were also asked about their previous use of ChatGPT and what areas of their work they believed to have the most potential for productivity gains. This resulted in heuristics for strategy writing with generative AI that we later employed in the experiment. Responses to the open-ended questions were transcribed in full, deliberately excluding interactional details such as utterances, gestures, or gaze, and ultimately examined for common themes. Due to the amorphous nature of the answers, the qualitative material was coded in thematic areas (Boyatzis 1998), and conclusions were drawn once saturation was reached among the various interviews. Methodologically, the interview database was processed with a combination of thematic and typological interview clustering (Huberman and Miles 1984).

Following the interviews, we conducted an experiment to evaluate the performance of ChatGPT-4o (henceforth ChatGPT) in the generation of social media marketing strategies for two companies from the participant pool, the first being a sustainable fashion company and the second a chemical corporation. The selection of these industries was predicated on the assessment that they operate in fundamentally different commercial settings, with the former directly operating on technological platforms, and therefore likely to adopt and diffuse technological innovations quickly, and the latter entailing a more traditional sector where innovations are expected to take longer to diffuse.

The experiment was designed to inspect the extent to which ChatGPT can be used to create social media marketing strategies based on the quality of the output, most prominently through the best practices listed by participants during the interviews. The experiment relied on multi-shot prompting with detailed prompt engineering to reinvent rather than mimic creative strategies with the assistance of ChatGPT. Prompt engineering was particularly challenging during the experiment, as there is no established approach to developing effective prompts for social media marketing. Given the context-dependent nature of prompt design, we relied on OpenAI's guidelines that informed the prompt sheet, such as conciseness, high information density, and task splitting. The central elements used in the input included an anonymous company introduction, its strategy component rankings, in addition to a preliminary prompt sheet, prompting strategy components, split tests, output evaluations, and an executive summary.

## Results

### *Interviews*

#### *Social media marketing strategies with ChatGPT*

The interviewees highlighted the relative incipience of strategic social media marketing itself, with many companies still relying on intuitive, trial-and-error approaches rather than formalised strategies. Participant 04 noted that, prior to her employment, her company lacked a structured social media strategy, reflecting a broader trend where social media marketing has not yet been effectively professionalised. Similarly, Participant

06 described how her company initially used social media without clear objectives, only later implementing a structured approach based on an internal analysis. These insights suggest that the adoption of ChatGPT for social media strategy development is part of a broader and interconnected diffusion process, as both social media marketing and digital marketing more generally continue to evolve.

Many interviewees objected to using generative AI, particularly ChatGPT, in fundamental decision-making. While all participants were in principle curious about the AI's output for the basic strategic direction of campaigns and business objectives for social media, many would determine the strategic direction before employing AI tools. As such, the process for designing strategy generation had to leave opportunities for a priori decisions as well as accepting or rejecting ChatGPT's output. Participant 06, working in the German chemical industry, puts as follows: 'There were not too many strategies to choose from in the first place. This is because we decided not to do product marketing on our social media channels beforehand. Instead, we have been focusing on telling stories from within the company and on publishing our press releases. This limits the number of possible strategic approaches for us'.

These excerpts of the interviews underscore the situational nature of productivity gains in marketing, as the extent of prior strategic progress influences the degree to which adjustments are required for efficiency optimisation. While verifying the department's social media marketing strategy with ChatGPT may be reasonable, greater productivity gains may be achieved by integrating existing foundations into initial prompts rather than starting anew. This entails a clear plan for the tasks the AI must solve to achieve tangible productivity gains, with the following components emerging from the thematic analyses of the interviews: business objectives, market analysis, target audience, platforms, content, communication style, measurement, promotion, ethical and legal aspects, and resources (see Figure 1).

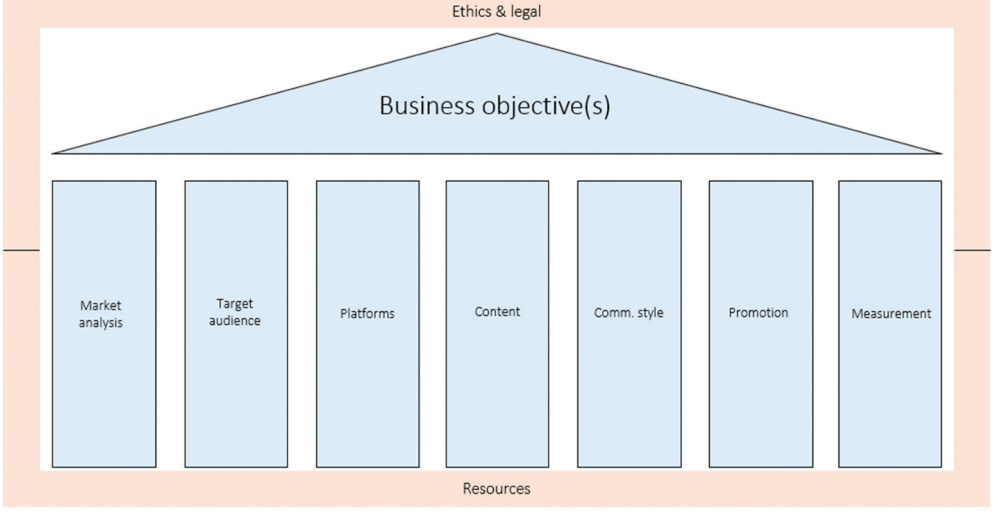


**Figure 1.** Architecture of a social media marketing strategy.

### *Components of social media marketing strategies*

The business objectives component refers to the desired outcomes of social media efforts, such as lead generation, brand recognition, and community building. These objectives guide the alignment of other strategic pillars. Core components like market analyses play a significant role as well, with professionals conducting competitor benchmarking to assess their market position, though many emphasised the importance of maintaining a distinct corporate identity. Target audience identification is critical for strategically engaging the right consumers, with participants describing developing detailed personas based on demographic and behavioural data to tailor their approach accordingly. Platform selection constitutes another important component, as different social media channels cater to specific audiences and content formats. More specifically, B2B strategies predominantly utilise LinkedIn, whereas B2C communication favour Instagram.

The interviewee cohort emphasized several key aspects of social media marketing, including the importance of proactively brainstorming content formats, often drawing upon customer success stories, which then undergo iterative adaptations. This process was deemed crucial for maintaining a consistent content pipeline. The participants also articulated that communication style is central to audience engagement, as it shapes a brand's image through its tone of voice, key messaging, engagement tactics, and the overall aesthetic of its feed. Promotion strategies were noted to vary significantly by industry, with B2C companies frequently utilising paid advertisements and influencer collaborations to enhance visibility, whereas B2B firms focused only occasionally on building influencer networks on LinkedIn, primarily to leverage thought leadership and industry authority. The evaluation of strategy effectiveness was achieved through Key Performance Indicators (KPIs), with a few mentioning sentiment analysis, but most professionals reportedly rely on engagement metrics and indicators that accurately reflect business impact. Participants also described ethical and legal considerations as important, albeit peripheral, components that establish normative boundaries, such as compliance with GDPR and transparency requirements for influencer partnerships. They also noted that resource constraints often shape strategic decisions, requiring marketers to balance ambitious goals with practical feasibility.

Figure 2 illustrates how these components can be categorized along axes of perceived relevance and complexity, with various combinations indicating differing potentials for productivity gains. Participants in the study consistently indicated that generating target audiences is a highly time-consuming task for professionals, despite its critical importance, suggesting a significant potential for productivity gains through AI integration. Interestingly, interviewees identified both low relevance and low complexity tasks – routine or 'cookie-cutter' activities – and low relevance but high complexity tasks as 'nice-to-haves' that could benefit from automation. Finally, for highly relevant yet low-complexity tasks, such as platform selection, participants questioned the extent to which generative AI could yield productivity gains. Given the currently limited number of popular platforms, this choice typically requires minimal time. Consequently, they believed the risk of selecting an inappropriate platform for the wrong audience, a potentially critical error, was deemed too high to warrant AI assistance in this task.

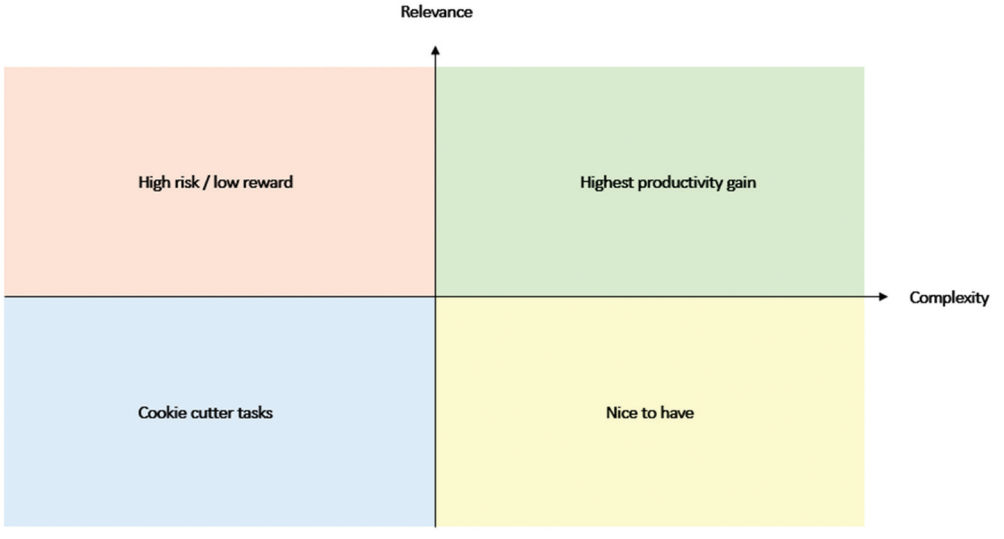


**Figure 2.** Relevance vs. Complexity axis.

### *Productivity gains from generative AI*

Although participants interpreted the above components with some flexibility, there was broad consensus regarding the potential of generative AI to facilitate brainstorming. They identified typical obstacles to brainstorming, such as prolonged periods of solitary reflection, frequent transitions between ideation and research, and interruptions from colleagues. Securing approval for a draft strategy also presents difficulties, as it requires the preparation of persuasive presentations or reports to convince supervisors. Participant 12 underscored the inherent trial-and-error nature of strategic work and highlighted specific workplace challenges that generative AI could mitigate to enhance productivity: 'Let's say I spend a week writing a report on something, physically sitting down and drafting thousands of words, putting them in logical order, getting interrupted, discussing it with the right people – that's a lot of time. I should be doing other things. I could use the power of AI to reduce that to half a day, you don't have to be a rocket scientist to understand what productivity levels come from that'.

The use of ChatGPT, however, involves a high degree of caution regarding data entry due to the company's requirement of protecting intellectual property, which is at odds with OpenAI's data processing and storage practices. This concern was highlighted by Participant 15 whose company had thoroughly restricted access to ChatGPT on work devices: 'For us it's always a no-go to share information about the company with ChatGPT because there is no input that we can give it without explaining parts of our business strategy. We have very, very strict guidelines to the point that all our work laptops and phones cannot access it. And we are confident enough that we can use our own tool for this'.

Concerns regarding data security were shared by several participants who similarly noted that even publicly available information, such as website links or previous social media posts, could enable OpenAI to infer a company's business strategies when names

were included in prompts. To mitigate this risk, our experiment employed only vague prompts without explicit identifiers, reducing the likelihood of data exposure but increasing the risk of generic outputs. Additionally, several interviewees from larger corporations reported that their employers were developing internal Large Language Models based on ChatGPT's mechanics to prevent potential data breaches. This was a crucial insight to our study as it may have restricted our experiment's output but also laid the groundwork for future trials using in-house AI tools, with studies on ChatGPT serving as a prototype.

Lastly, participants also detailed five quality criteria to guide social media marketing with generative AI: pragmatism, idiosyncrasy, agility, realism, and validity. Pragmatism ensured that strategies addressed concrete business challenges such as sales performance and brand reputation or awareness, while idiosyncrasy emphasised alignment with corporate identity to enhance brand recognition and differentiation. Agility allowed strategies to adapt to market trends through data monitoring and feedback mechanisms. Realism ensured that goals remained achievable and actionable, particularly with respect to follower growth and content formats, to prevent unrealistic expectations. Finally, validity required empirical support, as data-driven justification was essential for strategic approval and effectiveness.

## Experiment

### Experimental design

Our experiment involved generating strategies for two distinct companies: a sustainable fashion company (B2C-focused) and a chemical company (B2B-focused), both of which were derived from our interview cohort. ChatGPT-4o was tasked with developing strategies for these companies based on a procedure detailed in Figure 3. The process starts with compiling relevant company data, including business strategy documents, historical social media marketing materials, and key strategic priorities. Due to the anonymisation requirements, we refrained from including explicit company data and paraphrased mission and vision statements. This information is fed into a structured prompt sheet with concise instructions to guide AI interactions. Our experiment specifically tested both StratGPT for strategic tasks and MyGPT for leveraging the prompt library (OpenAI 2024), with minimal variation in the results. The last step of this process entails supplying the AI system with company-specific information through direct file uploads, URL parsing, or initial prompts that establish corporate identity and articulate business objectives. While ChatGPT can generate entire strategies with zero-shot prompting, we perform several queries to ensure no strategy component is missed. Finally, we evaluated an executive summary of the output using the quality criteria derived from the interviews.

### Strategising with generative AI

For the sustainable fashion company, ChatGPT suggested targeting 10 business objectives, including increased brand awareness, sales, and community building. It developed three distinct customer personas, each reflecting different demographics and psychographics, and anticipated challenges in convincing these personas to purchase the products due to concerns regarding affordability or the difficulty of finding clothing that is both practical for everyday use and stylish. For market analysis, ChatGPT evaluated competitors' social media strategies and identified key tactics, such as influencer

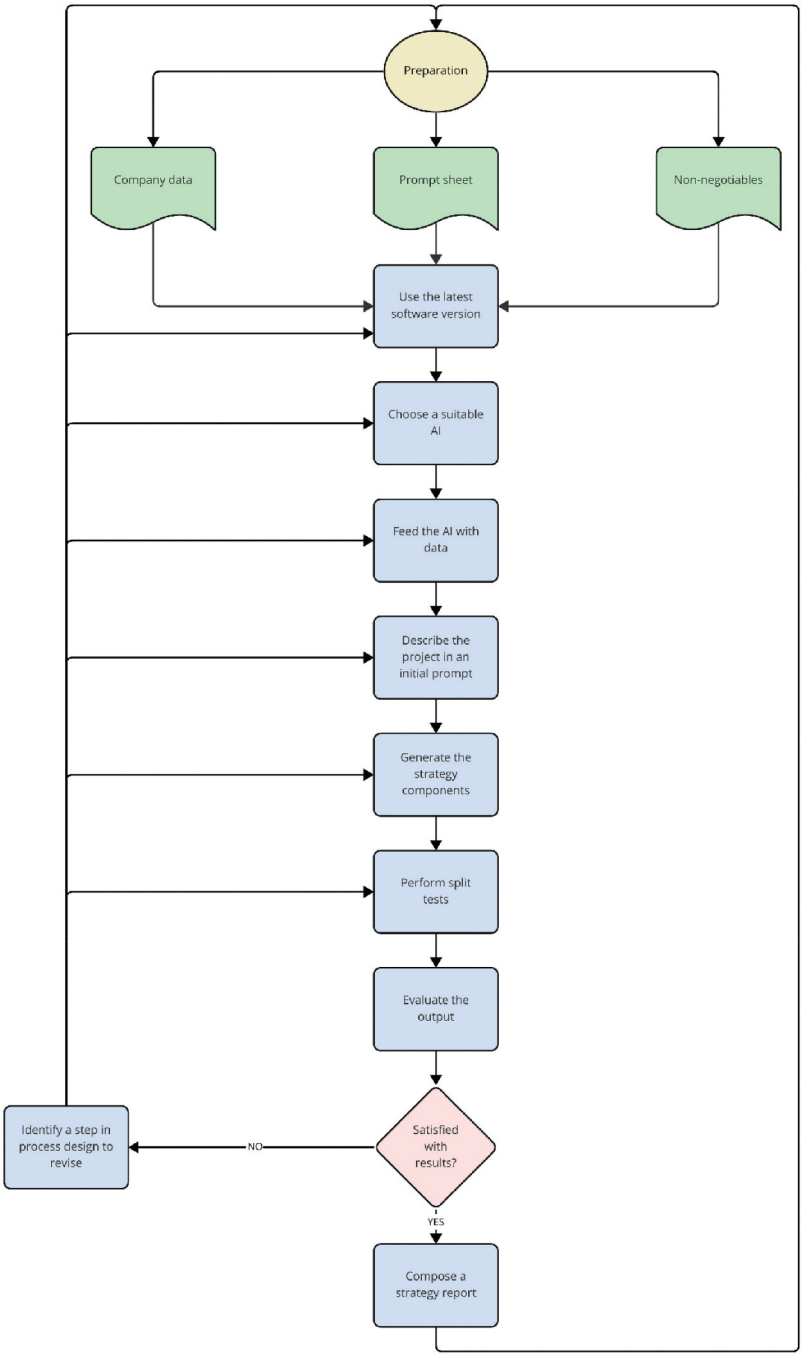


**Figure 3.** Blueprint for drafting social media marketing strategies with generative AI.

engagement and user-generated content. The AI also proposed 38 detailed content formats for multiple platforms, including Instagram, Pinterest, and TikTok, with a structured editorial calendar that included evolving content priorities and promotional tactics. ChatGPT also suggested implementation instructions leveraging consistency, engagement, visuals, education, and storytelling as heuristic guidelines for a communication style. For promotion, it generated a comprehensive list of actions, including influencer collaborations, hashtag campaigns, email marketing, and nine other distinct strategies, each accompanied by an execution plan. Finally, ChatGPT identified 13 ethical and legal considerations, including transparency, GDPR compliance, and the fair treatment of influencers, with action plans for legal, HR, marketing, and IT departments. The estimated cost of the project over 6 months amounted to €101,460 inclusive of labour costs.

The strategy generated by ChatGPT was highly pragmatic, as it addressed measurable business objectives and was aligned with the company's eco-conscious brand identity. The flexibility and agility of the approach were also noteworthy, with real-time analytics allowing for spontaneous tactical adjustments. However, there were areas for improvement, particularly in terms of practical implementation. The proposed budget of €100,000 for 6 months was deemed excessive for the company, and the workload suggested by the content plan was unrealistic for a single social media manager (up to four weekly posts per platform and work from Monday to Sunday). Additionally, the validity of the output remained uncertain, as the sources of information were unclear, though some aspects of the strategy, such as the identification of competitors and content formats, were consistent with the company's existing approach. Indeed, ChatGPT correctly identified five competitors and enumerated nearly all existing content formats, such as DIY guides for product care, behind-the-scenes content, and seasonal inspiration boards. Overall, the strategy generated by the AI shows high potential for productive gains, though further refinement regarding data integration would be required.

For the chemical corporation, our second case study, ChatGPT also proposed 10 business objectives such as relative increases in brand awareness, leads, and stakeholder engagement. It further suggested new objectives like showcasing innovation, thought leadership, and reputation management, which align with public relations but contribute positively to social media marketing. Distinct personas for targeted marketing were also identified, including 'John Miller', a 45-year-old Chief Procurement Officer at an American manufacturing company; 'Maria Sanchez', a 50-year-old Environmental Policy Advisor based in Brussels; 'Alex Tran', a 28-year-old Singaporean tech blogger and influencer; and 'David Kim', a 40-year-old Business Development Manager at a construction company in Seoul. Market analysis was to be conducted using five peer companies and focused on content strategies and engagement effectiveness. It proposed content strategies for each social media platform with posting frequencies established in content calendars. Emphasis was placed on LinkedIn for central content, with Instagram, X (formerly Twitter), YouTube, and Facebook serving other niche roles. The communication style was designed to be professional and informative with clear messaging, consistency, and storytelling. Campaign promotion was devised through influencer partnerships for thought leadership, virtual events, and collaborations with environmental organisations. Social media monitoring would be conducted through analytics tools and social listening platforms, with findings discussed on a weekly to monthly basis. Ethical and legal

compliance was also ensured and the proposed six-month budget ranged from €151,800 to €292,200.

Compared to the first experiment, the strategy devised for the chemical company reflected a more pragmatic approach, with well-aligned business objectives and audience targeting, such as industry professionals and EU policymakers. However, its recommendations for agility, including monthly strategic adjustments, were deemed impractical for larger companies, which typically adopted longer evaluation phases of 6 to 12 months. The practicality of the proposed strategies is also questionable, especially regarding budget and resource allocation, as the suggested measures appeared unrealistic given the company's structure and the relatively small marketing team and budget. While the output provided by generative AI remained speculative in terms of feasibility, it was again deemed valid in terms of identifying competitors and aligning with existing platform and content priorities.

## Discussion

This study offers a working definition of social media marketing strategies, a component architecture, and a quality criteria framework. Taken together, this research design allowed us to identify substantive productivity gains by using generative AI to devise social media marketing strategies. Contrary to concerns raised in previous research (Huh, Nelson, and Russell 2023; Short and Short 2023), our findings identified that marketing professionals display a tangible appetite for using generative AI in their work. Most interviewees indicated that they were actively incorporating AI into creative tasks within their workplaces, though the extent of the implementation varied. While some organizations had only begun exploring AI applications, others had already deployed internal AI systems based on ChatGPT's interactive interface.

The use of AI tools at work, however, was primarily limited to caption writing and photo or video editing (Noy and Zhang 2023; Peng et al. 2023), with its application in strategic planning and beyond mere analytics remaining incipient (Bohara, Gupta, and Kumar 2025). Despite the relative incipience of Generative AI application in the area, our results suggest it has considerable potential to increase productivity in creating social media marketing strategies. This is primarily due to its capacity to accelerate brainstorming processes, which can then serve as blueprints for comprehensive strategies or for individual strategic elements. The latter potential is particularly relevant for addressing knowledge deficits, which often act as key obstacles in the technological diffusion of innovations (Attewell 1992; Frank, Zhao, and Borman 2004; Rogers 2010).

The performance of the AI was assessed across five key categories. First, the generated output was deemed tangible, reasonable, and measurable. Second, ChatGPT exhibited a notable capacity to provide output that was tailored for the specific corporate identities of the two case companies (fashion and chemistry), aligning with their respective tones, goals, and values. Third, the tool facilitated iterative tactical and strategic adjustments, incorporating mechanisms for regular monitoring and feedback loops between organizations and stakeholders (Van de Ven 1986; Vordank 2005). Fourth, the output was not always actionable, as ChatGPT demonstrated a propensity to propose content calendars with overly optimistic posting frequencies and unrealistic budget assumptions. Finally, the validity of the generated strategies remained largely uncertain, although many

suggested elements, such as competitors and content formats, corresponded with the test subjects' actual approaches.

### *Limitations of the study*

An important limitation of our study lies in the input data of the experiment, which was restricted to anonymised company information due to data protection considerations. This could be improved by using in-house AI tools. Indeed, concerns about off-the-shelf generative AI tools were repeatedly highlighted by our interviewees, who also noted the ongoing development of proprietary generative AI systems based on ChatGPT's interface to handle sensitive information in the companies where they work. In view of that, future research should examine the effectiveness of custom-built in-house applications, which we could not perform in this research.

Future research should also explore how productivity gains may vary geographically and over time, as generative AI models become increasingly more sophisticated. Our results are also limited in that they cannot be generalised to the larger population of models. As such, further studies should benchmark the performance of different models, particularly large reasoning models, as our study was restricted to the generative pre-trained transformer GPT-4o. While doing so, we also encourage scholars to further develop frameworks for 'social media marketing strategy', for which we developed a working definition in this study. Similarly, the application of generative AI in cognate areas, including marketing strategies and specialized marketing sub-disciplines, public relations, and internal communications (e.g., employee engagement) offers an important avenue of research to benchmark the strategic capabilities of these tools.

Despite these shortcomings, our findings illustrate the relationship between innovation, automation, and productivity, with the ChatGPT experiment showing how automation and innovation in the workplace can reinforce each other and yield tangible productivity gains in social media marketing (Müller 2012; Rogers 2010; Van de Ven 1986). The successful implementation of generative AI is therefore likely to lead to macro-level diffusion in creative strategy writing, although the precise speed of this diffusion remains difficult to estimate.

## Conclusion

### *Implications for theory and research*

The results reported in this study offer evidence that the incorporation of generative AI tools like ChatGPT for composing social media marketing strategies can accelerate the brainstorming processes and it is likely to become pivotal for the creative industry. While ChatGPT-4o did not perform well across all components of our evaluation criteria, particularly in the implementation of the strategy, it nonetheless performed well in devising a pragmatic and flexible brand fit strategy. Indeed, opportunities for productivity gains were identified primarily in the accelerated brainstorming processes, which yielded good quality output. The potential for productivity gains is particularly salient if the use of these tools is supported by in-house applications that can overcome concerns with GDPR compliance regarding commercial and closed-source LLMs like those offered by OpenAI.

### *Implications for management and practice*

For marketing professionals, the findings suggest that current iterations of ChatGPT serve as a valuable tool for accelerating and structuring social media strategies, even if its immediate effectiveness remains contingent upon human oversight, the quality of input data, and iterative refinement. Practitioners can reap the benefits of augmentation over automation (Lei et al. 2024) by mastering the pitfalls of generative AI, particularly the opaqueness, factual inaccuracy, and disregard for critical contexts that are inherent to these tools. In this scenario, the implications for management and practice are promising, as the tacit knowledge, domain expertise, and autonomy of marketing practitioners to override generative AI assessments can shield professions that lack protection by professional or trade associations from job losses.

In the long term, nevertheless, we expect organisations developing in-house AI tools and capabilities to gain a significant competitive advantage by leveraging the increased productivity and innovation these tools can offer. The expert selection of inputs, editing of phrases and paragraphs, and the ability to make stylistic choices based on previous knowledge of what resonates with clients and customers is poised to become a core skill in developing marketing products and strategies. In the end, we expect marketing professionals to be well positioned to leverage these tools to design, more than write, effective marketing strategies and content. In doing so, marketing practitioners can benefit from streamlining their work and outcompeting generative AI by focusing on hard-to-automate aspects of their jobs, including tasks requiring tacit knowledge or flexibility, but most prominently in work situated at the boundaries between tasks.

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## Ethical statement

This study was approved by the Human Research Ethics Committee of a research-intensive university in the UK.

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