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ARTIFICIAL INTELLIGENCE IN SOCIAL MEDIA: IMPACT ON AUDIOVISUAL PRODUCTION AND DIGITAL METRICS

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ABSTRACT

The advent of artificial intelligence (AI) has precipitated a paradigm shift in the realm of audiovisual content creation for social media, effecting a transformation in processes and redefining communication strategies. The present study examines its integration into social media departments, assessing its impact on the creation of images and videos, as well as key metrics such as engagement, reach, and conversion. The study identifies tools, selection criteria, and challenges such as bias and authenticity through a survey of industry professionals. The findings indicate an increasing adoption of AI-generated content, although concerns regarding public trust and the quality of such content persist.

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1. Introduction

In recent years, the field of Artificial Intelligence (AI) has come to the fore in a number of business sectors, with profound implications for organisational operations and strategic decision-making. A pivotal juncture in this evolution was the advent of generative AI, signified by the debut of ChatGPT by OpenAI in November 2022. In a period of merely three months, this innovative tool surpassed 100 million users, thus establishing itself as the fastest growing software application in history. This represented the democratisation of access to this type of technology.

In 2023, a Boston Consulting Group study (Dell'Acqua et al., 2023) found that the use of ChatGPT significantly increases productivity and quality in tasks compatible with its technological capabilities, enabling 12% more activities to be completed, 25% faster and with a 40% improvement in the quality of results. These applications encompass a wide range of functions, including data analysis, content generation and the automation of operational processes. As stated in the AI at Wharton and GBK Collective (2024) report, the utilisation of generative AI has undergone rapid proliferation. Indeed, the report indicates that 72% of business leaders employ these technologies on a weekly basis, representing a twofold increase in adoption over the course of a year.

It is evident that social media departments have exhibited a high level of receptiveness to this transformation. The utilisation of AI-based tools has the potential to enhance operational efficiency, as evidenced by the automation of processes such as the creation of social media content and the predictive analysis of user behaviour. Furthermore, these tools enable the personalisation of the customer experience to an extent that has not been previously attained. This progress is driven by the potential of AI to enhance efficiency, reduce costs and optimise creativity in digital marketing strategies (De Lara-Gonzalez et al., 2022; AI Forum, 2025; Grewal et al., 2024; SAS & Coleman Parkes Research, 2024).

Nevertheless, the integration process is not without its challenges. It is evident from the reports that concerns regarding data privacy, biases in algorithms and difficulties in measuring return on investment (ROI) persist as significant barriers. Notwithstanding this fact, marketers and social media managers are optimistic about the opportunities that AI can bring, with an increasing focus on expanding their strategic capabilities (Korst et al., 2024).

The present study aims to explore current trends in the utilisation of generative AI within the social media departments of companies, brands and institutions. The investigation will be grounded in the results obtained through a form specifically designed for this research. The questionnaire enables the analysis of the most commonly used tools, the areas of AI integration, and their impact on key metrics such as engagement, reach, conversion rate, customer response time, and lead generation. Furthermore, the programme will examine the professional training needs identified by participants in order to understand the skills required to maximise the use of these technologies. The study goes on to address the challenges associated with the implementation of AI, including privacy concerns, algorithmic biases and ROI measurement. This provides a comprehensive overview of the impact of AI on the digital communications landscape.

2. Theoretical Framework

The advent of AI has transformed numerous sectors, with social media being a prime example of this evolution. The integration of these platforms into digital ecosystems has precipitated profound transformations in content production, audience management and the optimisation of marketing strategies. The theoretical framework under consideration here explores the evolution of AI, its role in social media and audiovisual production, as well as the challenges and risks posed by its use in the digital environment.

2.1. AI Evolution: Origins and Future Directions

Advances in AI have had a profound impact on numerous sectors, with social media being a notable example of this transformation. The integration of these platforms into digital ecosystems has precipitated profound transformations in content production, audience management and marketing strategy optimisation. This theoretical framework explores the evolution of AI, its role in social media and audiovisual production, as well as the challenges and risks posed by its use in the digital environment.

It is evident that companies that have adopted customised AI solutions have been able to enhance their competitive advantage. However, it should be noted that the process of integration is not without its challenges. Concerns persist regarding issues such as the accuracy of information, the protection of intellectual property, and the security of cyberspace. The implementation of risk mitigation strategies is pivotal in ensuring the sustainable and beneficial utilisation of AI in the long term.

The study on the state of AI in 2024 reveals significant progress in the adoption of generative AI, with 65% of the organisations surveyed using it on a regular basis, almost double the previous year. Its most prominent applications are in marketing and sales, product and service development, and IT, where it has demonstrated a tangible impact on reducing costs and increasing revenue, especially in areas such as inventory management and human resources. While a significant proportion of companies adopt standard tools, leading organisations are allocating resources to customised solutions with the objective of optimising their competitive advantage. However, the process of adoption is not without challenges, with the main concerns being the risks of inaccuracy, intellectual property and cybersecurity. The study, which is based on a global survey of more than 1,300 participants from various industries and regions, shows how these companies are implementing more robust strategies to mitigate risks and extract sustainable value from this disruptive technology.

2.2. AI, Social Media and Digital Environment

The integration of social media as an additional conduit within the dynamic communication ecosystem has exerted a profound influence on the media landscape, rendering it an indispensable instrument for establishing connections with audiences. According to the 2024 Annual Social Media Study by IAB Spain, 86% of Spanish internet users between the ages of 12 and 74 use social media, equivalent to 30.5 million people. These platforms have achieved high penetration in general terms, particularly among women (89%) and young people aged 18 to 24 (94%), who represent a fully digitalised generation. These statistics emphasise the significance of social media not only as a platform for interaction, but also as a strategic conduit for information consumption and corporate communication.

The Digital News Report Spain 2024 indicates that social media platforms such as WhatsApp and Instagram have assumed a pivotal role as sources of information, particularly among individuals under the age of 35. This shift in information consumption dynamics signifies the manner in which the digital habits of younger generations are moulding a more rapid, interactive and segmented media ecosystem. Nevertheless, this growing reliance on social media engenders considerable challenges. Of these, disinformation is considered to be one of the most significant issues, with 70% of respondents expressing concern about the propagation of fake news on these platforms. This context underscores the imperative for the cultivation of trust and transparency as foundational pillars for the formulation of responsible and efficacious communication strategies.

In the context of digital transformation, generative AI has emerged as a pivotal instrument, capable of effecting a paradigm shift in the manner in which content is produced and consumed on social media and in digital environments. The utilisation of advanced AI tools facilitates the automated generation of hyper-realistic images, videos and avatars, thereby optimising processes such as content editing and production. The study posits that this advancement has the potential to liberate creative resources and to furnish brands with the opportunity to formulate more innovative and personalised strategies that are aligned with the interests of their respective audiences. This phenomenon assumes particular significance in scenarios where the 90-9-1 rule exerts a predominant influence on participation dynamics. In these scenarios, only 1% of users function as active creators, while 9% participate on an occasional basis by generating posts. The remaining 90% of users engage in content consumption without interacting. This model underscores the potential of generative AI to democratise content production and promote enhanced participation, particularly within digital communities that are predominantly composed of passive consumers.

Furthermore, companies such as X (formerly Twitter), Snapchat and Meta have identified generative AI as a strategic opportunity to transform the user experience. These platforms are integrating advanced technologies with the aim of simplifying and streamlining content creation, thereby enabling users and brands to generate visually appealing and highly personalised posts with greater ease. This integration has been demonstrated to increase engagement, as well as enhance content diversification, a critical aspect of maintaining relevance in an information-saturated digital environment.

Meta recently removed the AI character profiles that had been introduced in September 2023 for Facebook and Instagram as part of an initial human-managed experiment. Nevertheless, the platform persists in offering users the capacity to create their own AI chatbots, with roles ranging from therapists to tutors to relationship coaches. Despite Meta issuing warnings regarding the potential inaccuracy or inappropriateness of messages generated by these bots, concerns persist regarding the moderation mechanisms employed to ensure safe and ethical usage. Concurrently, the discourse surrounding the liability of chatbot developers and the ethical considerations of their utilisation continues to escalate, propelled by legal proceedings such as those concerning a chatbot that is alleged to have contributed to the suicide of a minor.

Nevertheless, the impact of generative AI is not confined to content creation. Furthermore, its capacity to analyse data in real time has the potential to transform the realm of advertising optimisation, as it enables the prediction of campaign performance prior to their launch. AI tools facilitate real-time adjustments and optimise return on investment (ROI) by enhancing the efficiency of digital marketing strategies and directing efforts towards high-potential audiences.

Another pivotal domain in which AI is exerting a substantial influence pertains to conversational advertising. AI-powered chatbots are redefining social media interactions by offering more personalised experiences and generating qualified leads through direct, real-time conversations. The utilisation of these tools has been demonstrated to engender a substantial enhancement in the user experience, thereby fostering a more robust connection between brands and their respective audiences. Moreover, within the domain of SEO (search engine optimisation), AI has been demonstrated to be a pivotal instrument, capable of automating intricate tasks such as keyword identification and trend analysis. This approach has been demonstrated to enhance content visibility, thereby enabling marketers to allocate their resources towards more strategic endeavours. Concurrently, AI is employed to optimise the efficacy of campaigns.

Notwithstanding these opportunities, the integration of generative AI also poses significant challenges, particularly with regard to privacy, bias and the emotional vulnerabilities of users. The growing social awareness of these issues has resulted in regulatory pressure, driving the development of policies aimed at regulating the impact of new forms of AI on privacy. This ethical approach, focused on the avoidance of manipulative practices and the assurance of transparency, serves not only to strengthen consumer trust but also to ensure the sustainable development of these technologies. In order to optimise the value of generative AI while concomitantly mitigating its inherent risks, it is incumbent upon organisations to integrate risk reviews and effective governance processes.

In this context, the development of training programmes in algorithmic literacy has emerged as a pivotal mechanism for narrowing the existing understanding gap and enhancing citizens' capacity for digital decision-making. In addition, organisations must analyse the risks associated with the use of these technologies so that, based on this knowledge, they can develop internal guidelines and policies that enable the ethical and transparent use of this technology.

In summary, the integration of AI into business processes is not only redefining the way organisations operate, but also establishing a new paradigm in which innovation must be accompanied by the responsible and ethical use of technology.

2.3. Key Social Media Metrics

The manner in which social media managers evaluate the impact of their content, identify community members, and manage interactions with them is contingent, to a considerable extent, on the metrics that social platforms provide them with. These tools facilitate not only the identification of audience interests but also the discernment of areas for enhancement, such as customer service and the adaptation of strategies to fortify the bond with users.

Reach is positioned as one of the most relevant of the key metrics, as it is a quantifiable way of measuring the number of people impacted by a piece of content. This indicator enables the evaluation of the visibility of publications, differentiating between organic and paid reach, and determining the level of penetration of a brand in its target audience. It is imperative to ascertain the extent to which a strategy is able to position itself in the eyes of its intended audience.

Conversely, interaction metrics serve to reflect how audiences respond to published content. These include "likes", comments, shares and responses to stories. One of the most widely utilised metrics in this domain is the interaction rate, which calculates the total number of interactions relative to the size

of the community. This information is essential for identifying which content generates the most interest and engagement, thus guiding managers towards creating more effective and relevant posts.

Engagement represents a further progression in this regard, by means of an assessment of the quality of the relationship between the brand and its social media community. The measurement of interactions is not limited to quantifying quantity; it also encompasses the depth of emotional connection between users and the brand. It is evident that high levels of audience engagement are indicative of content that has not only been viewed, but also has a profound impact on the audience, thereby fostering a sense of brand loyalty.

In the realm of business, the measurement of web traffic and the efficacy of online conversion rates are of paramount importance. The focus of traffic metrics is on the analysis of the number of users who arrive at a digital destination, such as a website, via a social media platform. Indicators of this include the number of clicks on links and the conversion rate. Conversion metrics are defined as the measurement of specific actions, including purchases or registrations, enabling social media managers to evaluate the direct impact of their strategies on business objectives and calculate return on investment (ROI).

It is evident that qualitative metrics play a pivotal role in facilitating comprehension of the community's perception of the brand. The metrics encompass the analysis of comment sentiment, which can be categorised as positive, negative or neutral, and the evaluation of customer service response time. This type of metric has two functions. Firstly, it enables the identification of areas for improvement in community management. Secondly, it facilitates the adjustment of the communication strategy to strengthen the relationship with users.

In conclusion, content-related metrics are instrumental in analysing the performance of various formats published on social media. Factors such as the rates at which videos are completed, or the performance of carousel posts can serve as useful indicators to understand which type of content generates the most resonance. The analysis of these metrics provides brands with a framework to create more effective strategies that are aligned with the interests of their audience.

The utilisation of tools such as Metricool, Brandwatch, Talkwlaker, Social Baker, Google Analytics, or the analytical tools of each of the social media platforms facilitates the collection and analysis of this data, offering insights or valuable conclusions to optimise digital strategies. It is imperative for brands to utilise a combination of quantitative and qualitative metrics when evaluating and adjusting their actions on social media. This enables them to achieve their objectives, strengthen their relationship with their audience, and build a community around them.

3. Objectives and Hypotheses

3.1. Objectives and Hypotheses

The overarching objective of the research endeavour is articulated as follows:

To analyse the integration of AI in social media departments, evaluating its implementation, the tools used, the impact on key metrics, and the perceptions of professionals in the sector.

The specific objectives are as follows:

1. Identification of the profile of professionals who use AI in social media departments is required, including their training, experience, and roles within organisations.
2. Determine the functional areas in which AI is integrated within social media departments, including but not limited to content generation, metrics analysis and customer service.
3. Analyses of the most widely used AI-based tools, the criteria used for their selection, and the training strategies adopted by companies are required.
4. Evaluation of the impact of AI on key performance metrics, including engagement, reach, conversion rate, customer response time, and lead generation.
5. Exploration of the utilisation of AI tools in the domain of visual content creation is imperative, encompassing evaluations of outcomes, organisational ramifications, and the perceived influence on the community, including but not limited to trust, authenticity, and bias.
6. Examination of the perceptions of professional experts with regard to the benefits, limitations and challenges of integrating AI into social media.

The following hypotheses are hereby proposed:

1. The integration of AI within social media departments is predominantly centred on operational functions, including content generation and metrics analysis.
2. Training in AI is not sufficient for most professionals, which poses a challenge to its effective integration into social media departments.
3. Professionals who utilise AI in the context of social media are the youngest members of the team.
4. The utilisation of AI tools has been demonstrated to exert a substantial positive influence on pivotal metrics such as engagement, reach and lead generation.
5. The most valued criteria for selecting AI tools are ease of use and cost.
6. The creation of visual content using AI tools has been demonstrated to improve speed and efficiency in processes. However, concerns have been raised about authenticity and bias in user perception.

4. Research Methodology

The present research was developed through the application of a questionnaire distributed organically among professionals in the field of social media. The primary objective of this study was to analyse the integration of AI in departments dedicated to the management of social media. The evaluation encompassed both the implementation of AI and its impact on work dynamics and the results obtained. The study's questionnaire was disseminated between the 10th and 27th of January 2025, yielding a final sample of 87 participants. This sample was deemed to be representative of the sector and suitable for exploring trends and perceptions related to the aforementioned technology.

The collection of data was conducted through an online form that was distributed to professionals within the sector. The invitation to participate was disseminated via email and professional networks, ensuring wide dissemination and diverse representation. The estimated time required to complete the questionnaire was between five and seven minutes.

The questionnaire was structured into different thematic areas, beginning with an analysis of the profile of workers who use AI in their functions. The section in question comprised questions pertaining to the respondents' academic background, professional experience and specific skills developed in the field of AI. The nature of the training received was also investigated, with a view to ascertaining whether this had been acquired through formal academic training, specialised workshops, self-taught initiatives or on-the-job training programmes.

Another key focus of the questionnaire addressed the specific areas where AI is integrated within social media departments. The functions analysed included content generation, metrics analysis, trend monitoring, advertising campaign management and customer service using automated tools such as chatbots. Concurrently, a comprehensive identification of the specific tools employed was conducted, encompassing prominent examples such as ChatGPT, MidJourney, and social listening applications. The selection criteria employed in this process included evaluation of factors such as cost, ease of use, level of customisation, and integration with external systems.

Furthermore, a specific section was dedicated to the assessment of the impact of AI on key social media performance metrics. The metrics analysed included engagement, reach, conversion rate, customer response time and lead generation. These variables enable the assessment of the effectiveness of AI integration and its influence on the strategic objectives of departments.

A significant proportion of the questionnaire concentrated on the utilisation of AI tools for the creation of visual content. The present analysis examined the results obtained in terms of quality, creativity and the speed of processes, as well as the organisational implications for audiovisual teams. Finally, the perceived impact on the community was addressed, analysing aspects such as audience trust in AI-generated content, the identification of biases in AI-generated content and user reactions, both positive and negative.

The methodology employed in this study enabled the collation of detailed and accurate information regarding the implementation of AI in social media departments. This provided a solid basis for understanding the opportunities and challenges posed by this technology in a constantly evolving professional environment.

4. Results

The survey provided an overview of the use of AI in social media departments, with particular emphasis on its impact on audiovisual production. The ensuing discourse will be structured in accordance with the key areas identified in the aforementioned dimensions.

4.1. Participants' Profile

The study received a total of 87 valid responses, with a balanced distribution between male (48%) and female (51%) participants. The predominant age group is between 25 and 54 years old (74%), which indicates that the majority of participants are in an active and established stage of their professional careers.

With respect to academic background, a significant proportion of the respondents have attained high levels of education, with 56% of respondents having obtained postgraduate or master's degrees and 32% having a bachelor's degree. The findings of this study serve to reinforce the prevailing notion that the implementation of AI in the domain of social media is chiefly driven by professionals who possess a robust academic foundation.

The predominant fields of training are Communication/Journalism (37%) and Marketing/Advertising (37%), with Design/Visual Arts accounting for 18%. Furthermore, 64% of respondents have accumulated more than six years of experience in the domain of social media, thereby indicating that the adoption of AI is being spearheaded by professionals who have attained a high degree of specialisation.

Regarding roles within social media departments, the most prevalent are those of community/social media managers (62%) and designers or creatives (44%), indicating that AI is being used primarily in operational and content production tasks.

4.2. Implementing AI in Social Media

AI has been implemented in 79% of social media departments, thus establishing itself as a key tool in process optimisation and improving results.

The most prevalent application is in content generation (text, images and videos), with an adoption rate of 88%, thus emphasising its significance in automating repetitive creative tasks. However, lower adoption rates are observed in other strategic areas, including data and metrics analysis (41%) and trend monitoring and social listening (26%). This finding suggests that the potential of AI for data-driven decision-making has not yet been fully realised.

Furthermore, 33% of respondents utilise AI for customer service, employing tools such as chatbots, while 26% employ it for advertising campaign management.

Among the most popular tools, ChatGPT and similar models have a 97% adoption rate, reflecting their relevance in text content generation. Image generation tools such as MidJourney or DALL·E also demonstrate a significant level of utilisation, with a 48% usage rate. To a lesser extent, social listening tools (28%) and customised solutions developed in-house (23%) demonstrate lower integration.

The primary criteria for the selection of AI tools are ease of use, as indicated by 63% of respondents, followed by cost (39%), level of customisation (36%), and integration with other systems (36%). This finding indicates that, in addition to advanced functionalities, practical and economic factors play a pivotal role in the adoption of these technologies, particularly in teams characterised by fast and dynamic workflows.

Furthermore, 49% of respondents assert that AI has exerted a favourable influence on pivotal social media metrics, particularly in the domains of operational and process optimisation. The most significant benefit is evident in customer response time, which has an average score of 3.3 on a scale of 1 to 5. The employment of tools such as chatbots has been demonstrated to be a highly effective strategy for enhancing the speed and quality of interactions, thereby facilitating more rapid and precise responses to user queries. This outcome underscores the potential of AI to enhance the customer experience in real time.

Reach is another metric in which AI has demonstrated a substantial impact, with an average score of 3.1. The advent of automated segmentation tools and the capacity to optimise content has enabled the

expansion of audiences and the enhancement of publication visibility, a development of paramount importance in an increasingly competitive digital landscape. These enhancements are advantageous for brands in terms of increased exposure and facilitated connection with their target audiences.

However, more strategic metrics, such as engagement, conversion rate and lead generation, have a lower impact, with an average of 2.8. This finding indicates that, while AI is advantageous in automating and streamlining operational tasks, it continues to encounter substantial challenges in directly impacting metrics associated with meaningful user interaction and conversion.

A thorough analysis of the impact of AI on key social media metrics reveals significant differences depending on company size. These variations underscore the impact of available resources and implementation strategies on the perception and effectiveness of AI in diverse organisational settings.

In the case of large companies (with a number of employees in excess of 251), a moderate impact is observed across all metrics. The greatest benefits are evident in terms of reach and customer response time, with an average score of 3.1 on a scale of 1 to 5. However, more strategic metrics, such as conversion (2.7) and lead generation (2.6), exhibit lower values. This finding indicates that while large companies are leveraging AI to enhance operational processes, its utilisation in achieving overarching campaign objectives remains constrained.

Conversely, medium-sized companies (51-250 employees) reported the lowest impact across all metrics analysed. The values of 2.4 for conversion and 2.5 for response time reflect a less sophisticated implementation of AI, possibly due to limited resources or partial adoption of these technologies. This finding indicates that these organisations encounter technical or financial constraints that impede their ability to leverage the full potential of AI in their operations.

Conversely, small companies with fewer than 50 employees have been found to exert the greatest influence on key metrics such as engagement (3.3), conversion (3.1) and lead generation (3.0). This finding suggests that small companies are leveraging AI as a competitive advantage to compensate for limited human resources, thereby achieving substantial outcomes in terms of audience interaction and customer conversion.

4.3. Audiovisual production with AI

AI has emerged as an indispensable tool in audiovisual content production, with 67% of departments confirming its use for this purpose. In response to the question of whether the integration of AI into design processes has superseded the conventional responsibilities of the design team, 47% of respondents expressed a negative response, while 32% indicated a positive response and 21% reported uncertainty regarding this impact.

With regard to the impact of AI on the audiovisual design of marketing campaigns in the context of branding, 41% of respondents attest to a discernible impact in enhancing the adaptability of campaigns to network environments, while 18% report an improvement in visual consistency. 26% of respondents reported that the campaign has had 'other types of effects', while 15% indicated that the quality of campaign design has been reduced.

In this regard, when asked about the impact of AI on brand perception, 41% of respondents stated that it has a negative impact, 36% stated that it has no effect on the brand, and 23% stated that it has a positive impact. When asked to provide a specific response regarding the integration of AI and its impact on social media campaigns, 45% of respondents expressed a positive opinion, with 40% considering the impact to be neutral, and the remaining 10% expressing a negative or very negative view.

In this regard, respondents have identified several key concerns regarding the utilisation of AI in audiovisual content. These concerns, ranked in order of importance, include the following: a perceived reduction in authenticity (27%), a rise in mistrust among the community (21%), an absence of originality (17%), difficulties in conveying emotions (17%), inconsistent quality (16%), and other concerns (3%).

In response to inquiries regarding the impact of this particular type of AI-generated content on the community, 40% of respondents expressed uncertainty, 36% asserted that it does have an impact, and 24% concurred with the assertion that its impact is equivalent to that of other content.

The primary objectives of its implementation include the acceleration of content creation (75%), the reduction of costs (52%), and the generation of novel creative ideas (64%). However, 33% of respondents emphasise the significant limitations of AI in addressing complex or highly personalised

creative processes, underscoring the necessity for human intervention to optimise outcomes and ensure originality.

With regard to particular applications, the most prevalent use case is image editing, with 54% of respondents emphasising its role in optimising and refining visual processes. This is followed by the creation of custom illustrations or graphics (47%) and the generation of advertising images (37%), reflecting a majority focus on static content. Conversely, more complex tasks, such as the production of promotional videos (15%) and animations (14%), have significantly lower adoption rates. This phenomenon may be attributable to the technical challenges inherent in these activities, as well as the necessity for enhanced customisation and creative control.

Furthermore, 32% of respondents selected the 'Other' category, thereby indicating the existence of hitherto unidentified applications of AI in audiovisual production that do not conform to conventional classifications. These could include advanced personalisation, immersive content or post-production process automation. The findings of this study demonstrate both the current impact and future potential of AI in the creative field, especially if technical limitations are overcome and its capabilities are maximised.

The integration of AI within audiovisual production has precipitated a transformation in the internal processes of social media departments, concomitantly giving rise to a plethora of audience responses. In response to inquiries regarding the community's perception of AI-generated content, the predominant response among respondents was one of indifference, with 40% of respondents expressing this sentiment. This finding suggests that for a considerable segment of the population, technological considerations do not play a significant role in their consumption of digital content.

However, a significant proportion of the participants, specifically 25%, expressed that AI has the capacity to evoke curiosity and admiration for innovation. This observation suggests that, under certain circumstances, the utilisation of automation and advanced tools can be perceived as an added value in the realm of content creation. Conversely, 19% of respondents highlighted that this content elicits criticism due to its perceived lack of authenticity, thereby indicating that a segment of the audience continues to place significant value on manual production as a fundamental aspect of brand communication.

Conversely, when analysing the types of audiovisual media that engender the most mistrust among the public, promotional videos emerged as the predominant category (32%), followed by advertising images (29%) and, to a lesser extent, infographics or graphics (14%). This suggests that the more elaborate and narrative the content, the greater the audience's demand for authenticity and quality, reinforcing the need to integrate AI with supervised creative processes to ensure a positive perception by the audience.

4.4. Impact on Community Perception

The integration of AI within the domain of audiovisual production has precipitated a multifaceted response from audiences, whilst concomitantly effecting a profound transformation in the operational processes of social media departments. In response to inquiries regarding the community's stance on AI-generated content, most respondents expressed a state of ambivalence (40%), indicating that for a considerable segment of the population, technological considerations do not significantly influence their engagement with digital content.

However, a significant proportion of the participants, specifically 25%, expressed that AI has the capacity to evoke curiosity and admiration for innovation. This observation suggests that, under certain circumstances, the utilisation of automation and advanced tools can be perceived as an added value in the realm of content creation. Conversely, 19% of respondents highlighted that this content elicits criticism due to its perceived lack of authenticity, thereby indicating that a segment of the audience continues to place significant value on manual production as a fundamental aspect of brand communication.

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reinforcing the need to integrate AI with supervised creative processes to ensure a positive perception by the audience.

4.5. Biases in AI-Generated Audiovisual Content

One of the most significant challenges in the domain of AI-powered audiovisual production is the presence of bias in the content generated. Twenty-two per cent of respondents identified this problem, noting that the most common biases are related to stereotypes in social roles (23%), preference for certain visual or aesthetic styles (21%), ethnic and cultural representation (20%) and gender representation (17%). Furthermore, 20% of respondents allude to other forms of bias that do not fall within the purview of the aforementioned categories. The findings of this study indicate that AI tools, by relying on pre-existing patterns, have the capacity to reproduce inequalities and reinforce partial representations of reality.

Indeed, 41% of respondents believe that AI tools do not offer sufficient options to avoid such biases in content creation. This finding underscores a significant limitation of AI applied to the audiovisual domain: its reliance on the data sets used for training, and the absence of effective mechanisms to guarantee more diverse and inclusive representation.

When analysing the impact of these biases on the community, the results show a divided perception. Eighteen per cent of respondents assert that they have not discerned any substantial effects, while 12% hypothesise that these biases may evade the audience's perception. However, 28% of respondents expressed concerns that AI could reinforce existing stereotypes, potentially perpetuating biased narratives in visual communication. Furthermore, 26% of respondents cautioned that the presence of these biases could result in negative criticism from the community. This finding suggests that, although a proportion of the public does not immediately perceive these problems, a significant percentage does identify biases and associates them with a limited or distorted representation of reality.

There is a divergence of opinion regarding the feasibility of correcting these biases. The survey results indicate that 54% of respondents believe that these issues can be mitigated through adjustments and supervision, while 23% believe that these issues are inherent to the tool and therefore difficult to eliminate completely. The remaining participants expressed uncertainty regarding the feasibility of rectifying these issues, thereby reflecting a paucity of consensus on the capacity of AI to generate content that is unbiased without the necessity of active intervention.

The most frequently mentioned measure to mitigate these biases is manual content monitoring, with 41% of respondents highlighting it as the most effective strategy. Other proposed measures include customising tool settings (19%), employing more inclusive visual references (16%), and training the team on diversity and inclusion (16%). The findings suggest that, while strategies to mitigate bias are in existence, their implementation is not yet widespread, indicating potential for enhancement in audiovisual production processes through the integration of technology and human oversight.

5. Research Conclusions

The research has facilitated an in-depth analysis of the integration of AI in social media departments, with a particular focus on its impact on audiovisual production. The results obtained have been used to compare the objectives set and evaluate the hypotheses formulated at the beginning of the study.

The findings confirm that the adoption of AI in social media is highly concentrated in operational functions, especially in content generation, which validates the hypothesis that AI is mainly used to optimise repetitive creative processes. However, other strategic areas, such as data analysis and trend monitoring, demonstrate a significantly lower level of integration. This suggests that AI is not yet being used optimally for data-driven decision-making.

With regard to the profile of professionals who use AI in social media, the results indicate that the adoption of these tools is not exclusively linked to younger professionals, but that the majority of users have accumulated more than six years of experience in the sector. This finding stands in opposition to the hypothesis that the utilisation of AI is spearheaded by junior team members, as extant evidence suggests that its implementation is in the hands of professionals with a proven track record.

The impact of AI on key social media metrics is one of the most relevant dimensions of the study. The data indicates that the most significant impact is observed in the reduction of customer response times and the enhancement of post reach. However, in more strategic metrics such as engagement, conversion

rate and lead generation, the impact is less significant. This suggests that AI still has limitations when it comes to generating deeper interactions and effective conversions at the community level. Furthermore, an analysis of company size reveals that small businesses are achieving a greater impact on key metrics. This suggests that AI is serving as a resource to compensate for staff shortages and optimise their social media performance.

The selection of AI tools is consistent with the initial hypotheses. The ease of use of the product was identified as the most valued aspect, followed by price. This suggests that the adoption of AI is contingent not only on its functionality, but also on practical and economic factors, particularly within agile work teams that require intuitive and accessible tools.

The research also addressed the role of AI in audiovisual production and its impact on community perception. The findings indicate that AI has facilitated enhanced speed and efficiency in the creation of visual content, thereby validating the initial hypotheses. Nevertheless, this use also gives rise to concerns, especially with regard to the authenticity of content. The perception of the audience is subject to variation. Whilst a proportion of the community values the innovation and creativity driven by AI, a significant percentage is distrustful and considers automatically generated content to lack authenticity.

Another salient issue pertains to the presence of bias in AI-generated content. A significant proportion of respondents identified bias in the representation of gender, social roles, and ethnic and cultural diversity, thereby confirming the propensity of AI to reproduce and reinforce pre-existing patterns in the data with which it has been trained. While the majority of respondents subscribe to the view that these biases can be rectified through manual adjustments and supervision, in practice, the strategies implemented to mitigate them are still limited, thus highlighting the need for more effective measures.

In conclusion, the study confirms that AI has transformed social media departments, facilitating the automation of creative and operational processes. However, it also highlights the challenges involved in its integration, particularly with regard to the perception of authenticity, influence on strategic metrics and the reproduction of biases in generated content. In order to enhance the outcomes achieved through the integration of AI, it is imperative to integrate its capabilities with human supervision and creativity. This ensures that its utilisation optimises processes and contributes to authentic communication that resonates with communities on social media, while being completely unbiased.

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