International Scientific Journal of Engineering and Management (ISJEM) ISSN: 2583-6129
Volume: 04 Issue: 04 | April – 2025 DOI: 10.55041/ISJEM02945
An International Scholarly || Multidisciplinary || Open Access || Indexing in all major Database & Metadata

AI Revolution in the Creative Industry:

Impact of AI on Content Creators and Celebrity Models in the Digital Marketing and Advertising Area

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Abstract : Professionals in the creative industries are the actors who shoot for the advertisements or the content creators, who put a lot of effort and create original work using their expertise, skills, talent and imaginations. We hear much these days that AI will replace the products of human creativity. There arise many questions to explore such as, what will happen to these professionals and human creators, will companies in Digital marketing and advertisements replace them with AI, will the society and customers accept AI and many more. In this research a total of 30 variables have been analyzed on the available data and this has led to a fruitful conclusion for the study.

Keywords: Artificial Intelligence, Digital Marketing, Advertising, Deepfakes, Influencers

I. INTRODUCTION

Marketing and advertising industry is going through massive changes in this digital age and with the disruptions which is being brought by Artificial Intelligence (AI) it has become very crucial to understand the possible impact of it. There are many real examples of virtual models which are being used by brands in their marketing and advertising campaigns. Such as luxury fashion brand Balenciaga partnered with Lil Miquela to promote its Fall 2021 collection. Similarly, Calvin Klein used Lil Miquela in a campaign. This AI model have more than 3 million followers in Instagram. There are many models like her and many brands have partnered with them. They are not real persons and they don't age also. Many brands invest billions in celebrity endorsements for their products and services. This shift could really disrupt the industry. In India also Boat , Titan and few other brands have partnered with Kyra which is India's First Virtual influencer. They gained lot of impressions and views in social media platforms. Apart from this there are lots of concerns such as deepfake , ethical issue, reliability, data privacy, opportunity and job loss. This research ultimately aims to find out the most influential factor related to AI that will affect the creative professionals.

Research problem statement

1. There is a need to know how AI will have an impact on human professionals working in creative industry like digital marketing and advertising.
2. There is a need to know which are the most important factors related to AI that impact the creative industry.

Research Objectives:

1. To analyze the impact of AI on human professionals in the creative industry, specifically in digital marketing and advertising.
2. To identify the key factors related to AI that significantly influence the creative industry.

Significance of research:

This research will help Digital Marketing and Advertising Industry companies as well as professionals about the various factors related to AI and its impact in transforming the creative landscape. The insights may help in knowing the effect of AI in the roles and responsibilities of content creators and models.

II. LITERATURE REVIEW

Artificial Intelligence is the science of making machines do the thing that would require intelligence if done by man (Lucci et.al, 2022). Digital Marketing is made up with innovative marketing strategies that align with the latest market trends, leveraging information and communication technologies (Veleva et. al, 2020). Advertising means to turn towards. It means to make people turn to products and services and create a long-term positive brand image (Rosenbaum-Elliott 2020). Responsible AI means being responsible for the power that AI brings. This responsibility falls under the corporations and people who built AI for a purpose (Dignum, V. (2019). Generative AI is an expansive Artificial Intelligence that processes vast amount of data to produce new content such as text, video, audio, etc. It also performs various function. It will add trillions of dollars to the economy by increasing the productivity across industries (Chui, et. al, 2023).

AI improves business performance but there is lack of leadership and scarcity of skills and resources to generate actionable insights (Lada et. al, 2023). User acceptance can be defined as the behavioural intention or willingness to use, buy, or try a good or service (Kelly, et. al 2023). AI tools can automatically optimize advertising spending and identify key elements that make up the target group's preferences (Enache, M. C. 2020). Customer engagement encompasses various interactions, communications, and experiences between a company and its customers (Bhattarai, A. 2023). Marketers can quickly gain insights into customer needs and preference which helps in enhancing campaign effectiveness. They can save time and utilise it for other important tasks (Jain, et. al 2020). Originality is closely related with creativity, imagination, talent and genius. Whatever type of AI it still requires human supervision and act as creativity enhancing tools. (Esling, et. al 2020). AI is a software technique that is used for a particular function. It cannot be trusted but be reliable as it does not have any emotion or responsibility of its actions (Ryan, M. 2020).

AI generated content is little different in the effectiveness when compared to the content created by an expert marketing. Although the amount of cost is much less. Effectiveness was measured by impression, clicks, conversion, etc (Somosi, Z. 2022). Marketers and managers should integrate AI generated content into their strategies as it produces content more efficiently for some content types (Arshad, S. 2023). AI can provide insights about content performance, audience engagement, and sentiment analysis. This can be precious for content creators, enabling them to make well-informed decisions regarding future content initiatives (Hicham, et. al 2023).

AI has significant influence on user engagement and click through rate. Device specific optimisation is critical for maximising user engagement and conversion rates. (Shah, A., & Nasnodkar, S. 2021). AI brings tremendous benefits as real time data analysis is done and it bring real time insights. It provides seamless human machine interactions. It also provides instant feedback. (Rane, N. 2023). Automation is necessary for the creative industry. But a fully automated generative deep learning system still requires human intentions. Automated systems achieve targets and provide surprising results in less costs. They use insights from 2 decades of data. (Berns, et. al, 2021). AI and Machine learning are complex to understand. Therefore, there complexity and gap in interactions between designers and engineers in this field. (Hughes, et. al, 2021).

A strategy is formed by a pattern of decisions which are of critical importance for firm performance. AI role is systematically and effectively identifying patterns and signals form as input for strategic marketing manager for value creation (Eriksson, et. al 2020). The accumulation of extensive personal data within AI systems increases the likelihood of privacy breaches. Privacy is acquiring other people information (Elliott, et. al (2022). Deepfakes are hyper-realistic videos that apply artificial intelligence (AI) to depict someone say and do things that never happened. (Westerlund, M. 2019). Ethics is convergence of justice, fairness, privacy and responsibility. It refers to use and societal impact. AI can be a game changer in marketing but cautious views need to be taken care of about risks associated with it (Hermann, E. 2022). Culture conveys opinions, symbols and lifestyles. AI can stimulate the human behaviours and bring unique regional cultural characteristics in the consumers through designs. It can help promote and sustain traditional culture (Li, X., & Lin, B. 2021).

AI increases content creators' productivity. With the use of AI video content creators were able to make a greater number of videos. But they were shorter, quality was not good and lacked novelty. Managers should build a sustainable creator's ecosystem (Zhang, X. 2023). Personalization refers to form of marketing strategy aimed at delivering the right message to the right customer at the right time. AI contributes to highly personalised marketing campaigns (Ifekanandu et. al

2023). By delivering content that is aligned with user interest the customer is engaged and interact more with the brands. But there are concerns related to data privacy and consent (Purnamasari, et. al 2023).

Humans are unique species, they thrive on imagination, creativity, emotions, empathy and entrepreneurship. The future will be of collaborative intelligence (Raich, et. al 2021). AR technology is related to the combination of virtual content with physical world. There is less awareness about AR among the people and irritation and entertainment are important factors for adoption (Li, et. al 2021). Virtual reality (VR) offers an artificial, computer-generated simulation of a real-life environment. Human interaction is deeply involved. It is used for 3D content creation (Wang, et. al 2020). Virtual Influencers are computer generated avatars that have gone live on social media platforms and interacting with users. They post behaviours and reactions similar to human. But they receive lower positive response (Arsenyan, J., & Mirowska, A. 2021). Social media have moved up from just being a platform to network to a platform for marketing. Businesses can gain immense benefits by combining AI with social media (Sadiku, et. al 2021). The growth of Information and communication technologies and creative industries go together. Creative sector should learn how to use and maximise the value of technology (Abbasi et. al 2017).

III. Methodology

Research design : The researcher plans to use exploratory research design to study the overall impact of AI on the human professionals in creative industries.

Data collection methods: Primary data collection method is through questionnaire/Survey method. The researcher approached through social media, and the google form link to approach with the respondents . Face to face approach in questionnaire method , in random manner. Multiple follow ups were required to finally get 257 number of responses. Secondary data was collected using review method. Several journals and books using google scholar were reviewed.

Sample selection: Random sampling technique is used, wherein normal consumers of the digital marketing campaigns and advertisements which is general public were selected as respondents.

Sample Size : The final study comprises the factor analysis. As a thumb rule of sample size for factor analysis for 30 variables we need to have 300 sample size. However, the actual sample size validity is checked during the study to conduct the factor analysis, like KMO and anti-image value.

Data analysis techniques:

For data analysis "**Exploratory Factor analysis**" is used.
Utmost care is taken to avoid sampling error(taking maximum number of possible sample size) and doing proper and accurate data entry to avoid the "systematic bias". Various tests have been used like KMO value, 'Bartley test of sphericity' value and 'Anti image' values to cross validate the sample size.

'**KMO value'** tells whether the sample size is significant to do overall factor analysis or not. If KMO value is >=0.70 then the sample size is sufficient for factor analysis and inferences.

'Bartlley test of sphericity' tells whether the correlation matrices are identity matrix or not. If the identity matrix, then it will show as many factors, as many indicators'/items/ variables.

'**Anti image'** creates distinct correlation (0 to +1) and covariance matrices (takes any value). It tells, whether, the sample size is sufficient for each and every variable. It should be >+0.5 to include the variable, else we can drop off. **IBM SPSS Statistics** is used for statistical and data analysis purpose throughout.

IV. RESULTS

The researcher formed the conceptual framework. From the available literatures following variables / indicators were identified to start the initial work. These are listed below.

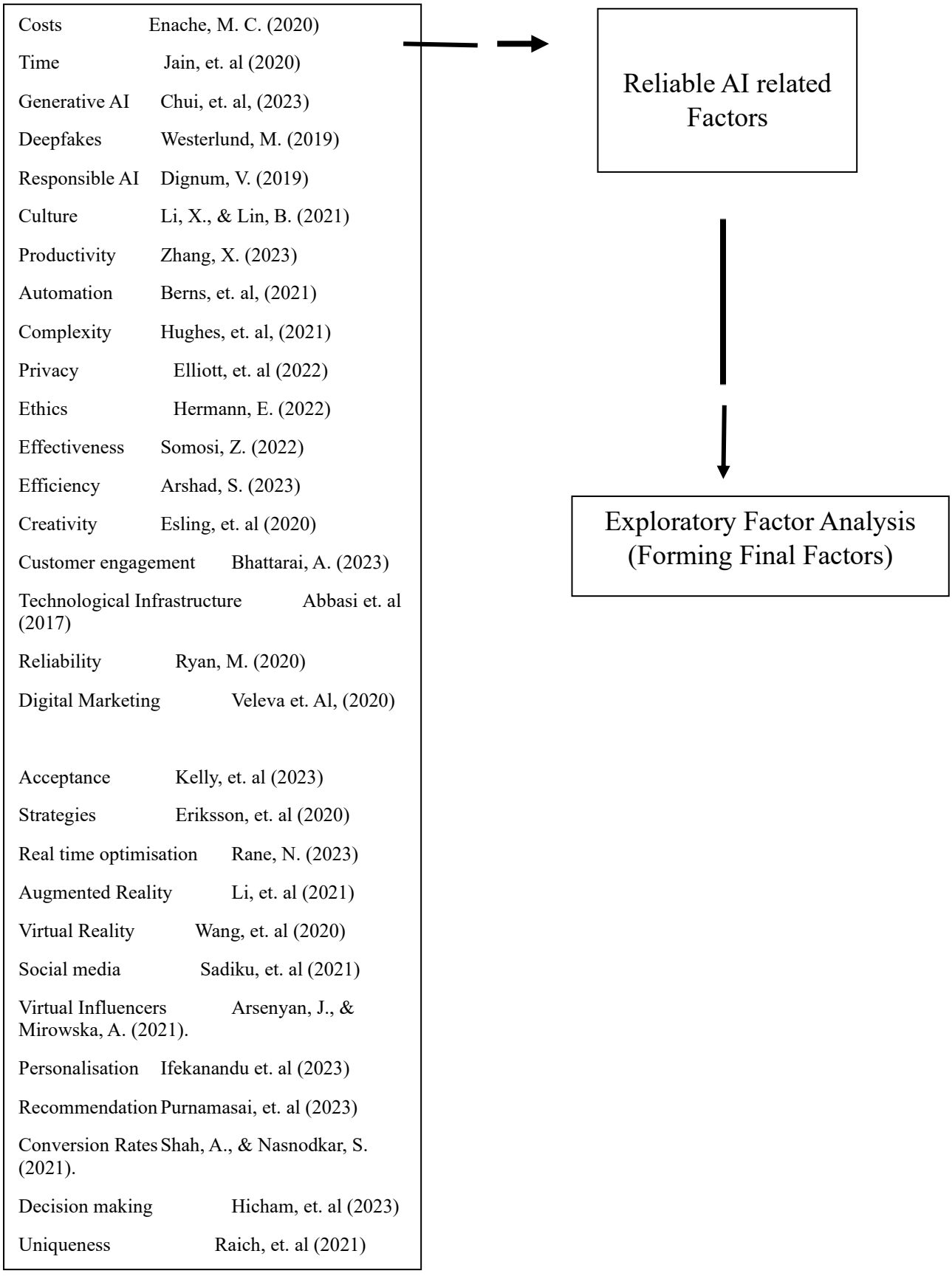

Figure 1: Conceptual framework of secondary data

Presentation of findings

Qualitative findings Based on Exploratory Factor Analysis (EFA) of 30 variables, two main factors—**Performance** and **Ethics**—have emerged as critical determinants in understanding the impact of AI on content creators and models in the digital marketing and advertising industry.

1. **Performance:**
   The findings highlight **performance** as a major factor influencing the adoption of AI in creative industries. Variables such as reliability, creativity, efficiency, customer engagement, and technological infrastructure collectively shape the performance. This suggest that digital marketing and Advertising companies may move towards utilising AI for performance reasons.

2. **Ethics:**
   Ethics emerged as another crucial factor, emphasizing concerns about authenticity, and AI's impact on creative ownership. The use of deepfake technology, AI-generated models raise ethical challenges regarding originality, representation, and misinformation. To maintain trust in AI-driven creative industries, stakeholders must prioritize responsible AI practices.

After the analysis researcher got 2 factors. Researcher gave the suitable names of these factors: Performance and Ethics.

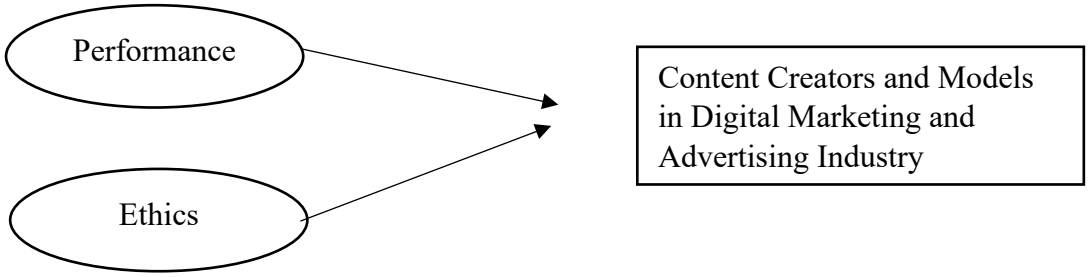

Figure 2: Final Factors

IV. Data analysis and Interpretation

Exploratory factor analysis is a process in which the large number of variables can be reduced to smaller number of sets of identified variables to find out underlying theoretical phenomenon. Various tests have been done which show the suitability of the data.

All tests are done through IBM SPSS

KMO and Bartlett's Test:

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.949
Bartlett's Test of Sphericity	Approx. Chi-Square	4117.454
	df	435
	Sig.	<.001

Table 1:KMO and Bartlett's Test

*KMO>=7.0 is accepted reference value ; KMO value ().949) is > 0.70 therefore sample is adequate. Bartlett's test of Sphericity shows it is significant (0.001).

Anti image test : All anti image value is >0.5 and hence sample size is adequate for each variable for factor analysis. Therefore, data is suitable for analysis and formation of factors is possible.

Reliability Test: For factor analysis we need to do reliability test so we can consider reliable items for factor analysis.

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Item Statistics

Reliability Statistics

Cronbach's Alpha	N of Items
.953	30

Table 2: Reliability Statistics

Cronbach's alpha, a measure of internal consistency, should ideally be 0.7 or higher. From analysis it is .953 therefore it is excellent.

Total Variance Explained

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.317	47.961	47.961	4.317	47.961	47.961	3.287	36.520	36.520
2	1.233	13.705	61.666	1.233	13.705	61.666	2.263	25.146	61.666
3	.656	7.290	68.956						
4	.572	6.350	75.306						
5	.568	6.310	81.616						
6	.534	5.929	87.545						
7	.426	4.730	92.275						
8	.368	4.084	96.359						
9	.328	3.641	100.000						

Extraction Method: Principal Component Analysis.

Table 3: Total Variance Explained

Interpretation for Total Variance Explained. From (cumulative %) column it shows variance is 61.66% . Any value > 50 % is good . It also shows total 2 factors have emerged (whose eigen value is >1.0)

Rotated component matrix

Rotated Component Matrix[a]

	Component	
	1	2
Q.17 Reliability	.827	
Q.15 Cutomer Engagement	.827	
Q.16 Technogical infrastructure	.767	
Q.14 Creativity	.740	
Q.13 Efficiant	.701	
Q. 4 Deepfake		.803
Q.5 Responsible AI		.785
Q.6 Culture		.714

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 3 iterations.

Table 4: Rotated Component Matrix

This table shows which set variables form the final factors.

Doing reliability test for final factors Cronbach's Alpha is .859 for first factor and is .705 for second factor. This shows both the final factors named performance and ethics are reliable and consistent

V. DISCUSSION

The results of the preliminary tests, including the KMO and Bartlett's test, anti-image test, and reliability test, confirmed that the dataset was suitable for factor analysis. Exploratory Factor Analysis (EFA) subsequently revealed two significant factors that influence creative professionals in the digital marketing and advertising sectors: Performance and Ethics. Both factors demonstrated high reliability and internal consistency, indicating their robustness in capturing the underlying dimensions of the data. The Performance factor is driven by variables such as enhanced efficiency, creativity, reliability, technological infrastructure, and customer engagement, highlighting how AI contributes to optimizing processes and expanding creative potential. In contrast, the Ethics factor encompasses concerns related to the use of deepfake technology, cultural sensitivity, and the development of responsible AI, underscoring the moral and social implications of AI integration. The study thus brings attention to the dual nature of AI in creative industries—while it facilitates streamlined workflows and unlocks new capabilities, it also raises important questions about authenticity, transparency, and the evolving role of human creativity in an increasingly automated landscape.

VI. CONCLUSION

This research started with the question can we find out what are the factors related to Artificial Intelligence that will influence the people working as content creation artists and celebrity models in creative industries and what will happen to their jobs? Will AI replace them or support them in their work ? Performing the Exploratory Factor analysis gave us clear factors which impact the creative professionals especially in digital marketing and advertising field. Performance and ethics emerged as the two dominant factors shaping AI's impact on the creative industries. Fo the digital marketing and advertising industry, there is a need to balance AI-driven efficiency with ethical responsibility. To ensure Job Security and Fair Compensation: Policymakers should introduce guidelines to protect creative professionals from job displacement due to AI.

Limitations: During research certain limitations existed, such as the exclusion of economic factors (e.g., post-pandemic shifts, recession, terrorism) and potential sampling bias, as most responses were collected from digital content consumers.

Recommendation for Future Research :Future research should expand the scope beyond digital marketing and advertising to examine AI's impact in adjacent creative sectors, entertainment industry such as film production, journalism, and music industries. Additionally, studies could provide deeper insights into how AI adoption evolves over time and its long-term effects on human professionals. Finally, policy-driven research on AI regulations and ethical governance will be crucial in ensuring responsible AI use while safeguarding creative professionals and consumers.

ACKNOWLEDGEMENT

I acknowledge my sincere thanks to all those whose guidance made my efforts Succeed. First of all, I would like to thank Dr. Jyoti Mishra Mam for being my guide and providing me a base to start off with research work. I also owe my heartfelt appreciation to my family and friends whose unwavering support and encouragement helped me stay motivated throughout this endeavour. With immense pleasure and deep appreciation, I again express my sincere gratitude to all those who have contributed to the successful completion of this project.

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