Public Perception and Trust in AI for Fake Follower Detection and Fraud Prevention in Influencer Marketing

[1]Ms. B. Akshaya
Research Scholar, PG & Research Department of Commerce

[1]Dr. Sambamurthy Padmavathi
Principal & Research Supervisor
Shri Shankarlal Sundarbai Shasun Jain College for Women,
University of Madras, Chennai

ABSTRACT

In the era of digital marketing, the rise in influencer marketing trends raises the concern about fake followers and engagement fraud, which affects credibility & misdirects the audience. This study examines the awareness of consumer on influencer fraud and their trust in Artificial Intelligence to detect and prevent such practices. A survey was conducted among social media users to know their ability to access fake followers, their perception on AI driven detection systems and their trust in influencers. The findings of the study will reveal the general public awareness of influencer fraud and their trust in Artificial Intelligence for detecting and preventing such deceptive practices. The study emphasizes the need for enhancing AI Reliability and educating users about its role in fraud detection. The insights of the study will help the social media platforms and marketers to adopt AI driven technology to foster authenticity and trust in digital influence.

Keywords: Artificial Intelligence (AI), Influencer Marketing, Social Media Fraud, Digital Trust

Introduction

In today's digital age, influencer marketing has become an eminent tool for brands to connect with consumers. However, with the rise of influencer marketers, fraudulent practices concerns, such as fake followers and artificial engagement have evolved. These kinds of practices not only delude audiences but also have more impact on the influencers' credibility and brands.

Artificial Intelligence has been broadly adopted to identify fraudulent practices by assessing follower authenticity, analyzing engagement trends and assessing behavioral data. While AI-driven fraud detection tools are developing, their effectiveness depends on the trust and awareness by public. Consumer has a big role in identifying fake followers yet their perception of AI's ability to recognize such fraud remains uncertain.

The research aims to explore awareness of public on influencer fraud and their trust in AI-driven detection systems. By conducting a survey among social media users, the study wish to understand their ability to recognize fake engagement, their confidence in solution provided by AI, and the impact of influencer fraud on their trust in digital content. The findings of the study will provide the valuable inputs for social media platforms and marketers to adopt AI driven technology to foster authenticity and trust in digital influence. These impacts contribute to the creation of a more authentic digital marketing ecosystem.

Objectives
➢ To determine public awareness of fake followers and engagement fraud in influencer marketing.
➢ To examine consumer perception on AI-driven fraud detection systems.

Type of Research
The Descriptive research design is adopted for the study

Sampling Techniques
- Sampling Design: Simple random sampling is used
- Sampling Size: The sample size constitutes to 70 respondents
- Data Collection: Both Primary and Secondary data analysis is used for the research

Review of Literature
Multiple studies have explored the role of AI in detecting fake followers and preventing fraud in influencer marketing. Zafar and Chia (2023) explored ethical concerns with regards to AI-powered fraud detection, such as privacy risks, bias in algorithms, and potential misidentifications. It recommended human oversight in AI decision-making and called for increased transparency to enhance public trust in fraud detection systems. Che et al. (2022) analyzed the effect of fake influencers on audience trust and brand credibility. The study found that consumers become more skeptical when they discover influencers using fake followers, leading to reduced engagement. Kumar et al. (2021) examined AI's ability to maintain authenticity on social media by detecting fake engagement. However, it pointed out challenges like false positives and fraudsters adapting to AI systems.

Analysis
The data is collected through the structured questionnaire to know the Public Perception and Trust in AI for Fake Follower Detection and Fraud Prevention in Influencer Marketing.

Demographic Details of the respondent
The below table shows the details of the respondents

Table No 6.1 Demographic Details of the respondent

S. No	Particulars	Category	Count	Percentage
1	Gender	Male	21	30%
		Female	49	70%
2	Age	Below 18	5	7%
		18-25	10	14%
		26-35	36	52%
		36-45	9	13%
		Above 45	10	14%
3	Academic Background	Below XII Standard	6	9%
		UG	19	27%
		PG	30	43%
		Professional Degree	10	14%
		Others	5	7%
4	Usage of Social Media	Daily	63	90%
		A few times a week	4	6%
		Rarely	3	4%
		Never	0	0
5	Social Media Platform used more often	Instagram	43	62%
		Facebook	10	14%
		YouTube	15	21%
		LinkedIn	2	3%

6.2 Public awareness of fake followers and engagement fraud in influencer marketing.
6.2.1 Overall Awareness Levels
The table below represents the respondent's awareness level regarding fake followers on social media.

TABLE NO 6.2.1 The overall awareness levels

Category	Number of Respondents	Percentage of Respondents (%)
Yes	37	53%
Not Sure	28	40%
No	5	7%
Total	**70**	**100%**

Source: Primary Data

6.2.2 Frequency of Encountering Fake Engagement
The table below highlights how often respondents encounter such activities.

Table No 6.2.2: The frequency of encountering fake engagement

Category	Number of Respondents	Percentage of Respondents (%)
Very Often	8	11%
Sometimes	39	56%
Rarely	18	26%
Never	5	7%
Total	**70**	**100%**

Source: Primary Data

6.2.3 Impact of Fake followers and engagement fraud affects on the credibility of influencers
The table below shows the impact of Fake followers and engagement fraud affects on the credibility of influencers

Table No 6.2.3: The Impact of Fake Followers and Engagement Fraud Affects on the Credibility of Influencers

Category	Number of Respondents	Percentage of Respondents (%)
Strongly Agree	28	40%
Agree	25	36%
Neutral	14	20%
Disagree	3	4%
Strongly Disagree	0	0
Total	**70**	**100%**

Source: Primary Data

6.3 Consumer Perception of AI-Driven Fraud Detection
6.3.1 Effectiveness of AI in Detecting Fraud

Table No 6.3.1: The Effectiveness of AI in Detecting Fraud

Category	Number of Respondents	Percentage of Respondents (%)
AI is *Somewhat Effective*.	27	39%
Not Sure about AI's effectiveness.	22	31%

AI is *Highly Effective*.	21	30%

Source: Primary Data

6.3.2 Trust in AI for Fraud Detection
- 50% Somewhat Trust AI.
- 37.1% are Neutral.
- Only 8.6% Completely Trust AI.
- 4.3% Distrust AI (2.9% Do Not Trust at All + 1.4% Somewhat Distrust).

6.4 Association between Awareness of fake followers & Age group
In order to test the relationship between awareness of fake followers & age group, chi square test is applied

Null Hypothesis (H₀)	There is no significant association between age group and awareness of fake followers.
Alternative Hypothesis (H₁)	There is a significant association between age group and awareness of fake followers.

<div align="center">TABLE NO 6.4 CHI SQUARE TEST</div>

Age Group	Yes	Not Sure	No	(χ^2)	dof	P Value
18-25	5	4	7			
26-35	18	14	4	26.64	6	0.00082
36-45	5	3	1			
Above 45	3	4	1			

Interpretation
From the above table, it is inferred that since the p-value (0.00082) is less than the significance level of 0.05, we reject the null hypothesis. This indicates a significant association between age group and awareness of fake followers on social media.

Findings of the Study
- **Awareness and Age group -** The analysis reveals the level of awareness of fake followers in social media is significantly influenced by age group.
- **Overall Awareness –** 53% are aware of fake followers, 40% are not sure and 7% are unaware
- **Frequency of fake engagement –** 56% come across fake engagement sometimes, while 11% notice very often.
- **Impact on Influencer Credibility –** 76% of respondents feels fake followers reduce influencer credibility.
- **Trust in AI for Fraud Detection –** 50% of respondents somewhat trust AI and only 8.7% completely trust AI
- **Effectiveness of AI –** 39% of respondents believe AI will be somewhat effective, 30% highly effective and 31% are unsure

Conclusion
The study confirms a substantial association between age group and awareness of fake followers in influencer marketing. It is understood that over half of the respondents recognize fake engagement while the trust in AI-driven fraud detection is moderate. Many users are skeptical towards the effectiveness of AI, transparency and reliability in AI trust and awareness. In the digital era, it is

important to enhance the AI algorithms and educate users about AI driven fraud detection. Improving AI trust and awareness is a step towards development of authentic digital marketing ecosystem.

Reference

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