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EXPLORING THE HINDERANCE ON IDEA GENERATION DUE TO AI ON GENERATION Z.

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Abstract:

Idea Generation is a creative process that involves the generation, creation, and development of new ideas.Artificial Intelligence (AI) has become integral to our daily lives, from facial recognition unlocking on smartphones to auto-generated emails and targeted social media ads. Natural Language Processing (NLP), a subfield of AI, facilitates human-like understanding of text and spoken words, enabling tasks like drafting emails, conducting research, and brainstorming ideas. This paper focuses on the hindrances on idea generation process amongst Gen-z's. The researcher(s) have studied how AI has influenced the critical thinking and out of the box ideas of the Gen-Z's residing in Central Mumbai. The results of this research has proved that impact of AI on Generation Z has put an hindrance on their creative thought process due to pre - determined solutions generated through generative AI.

Keywords: *Critical Thinking, Reliance On AI, Idea Generation, Natural Language Processing (NLP), Targeted Ads*

Introduction:

The advent of Artificial Intelligence (AI) has revolutionized numerous aspects of our society, reshaped industries and transforming the way we live and work. While AI brings forth remarkable advancements and possibilities, its impact on Gen Z is not without its challenges. The research talks about the following hinderances that are caused due to AI on the idea generation of Gen Z: -

1. **Erosion of Novelty Ideas:** AI can only work with the data it receives. Hence, it cannot think up new styles or patterns and is restricted to given templates (Raji Oluwaniyi). In an era where AI can generate vast amount of data and analyze patterns to identify successful trends, there is a risk of losing the spontaneity and creativity that are inherent to novel ideas. Gen Z, known for their innovative thinking and entrepreneurial spirit, may face the challenge of competing with AI generated solutions that cater to popular demand. This erosion of novelty ideas can limit the potential for unique and groundbreaking concepts, stifling Gen Z's ability to disrupt industries and drive innovation.

2. **Pre Existing Solutions Restrict Out-of-The-Box Ideas:** The widespread use of AI algorithms and pre-existing solutions can unintentionally confine Gen Z's thinking within established frameworks. While AI has the power to offer efficient and optimized solutions based on existing data, it may also limit the exploration of uncharted territories. Gen Z's natural inclination to think outside the box and challenge conventional norms may be hampered if they primarily rely on AI generated solutions, hindering their ability to create groundbreaking innovations and unconventional approaches. AI is designed to be precise, to follow instructions and to achieve specific goals. Because of this, AI is not very good at being creative. The main problem with AI is that its focus is to achieve results you tell it to complete (Devan Leos).

3. Loss of Job Opportunities: AI has undeniably automated many repetitive and routine tasks across various industries, potentially leading to a decline in job opportunities for Gen Z. There certainly will be job disruption because robots will be able to do everything better than us all of us (Elon Musk). As AI systems become increasingly capable of performing tasks that were previously exclusive to humans, there is a legitimate concern about the future of traditional employment. There is no way a human mind can keep up with an artificial intelligence machine by 2035 (Gray Scott). This poses significant challenges for Gen Z, who must navigate a rapidly changing job market and develop skills that complement and leverage AI technology.

Statement of the Problem: This research focuses on the hinderance on idea generation amongst Generation Z and to check whether there has been a positive or negative impact on their creative ability.

Literature Review:

1. Reese. B. The Fourth Age: Smart Robots, Conscious, Computers and the future of humanity: This book discusses the potential consequences of AI advancements on society and human civilization. It covers topics such as impact of AI on creativity and idea generation, addressing concerns about limitations and biases of AI systems.

2. M. Rebecca, T. Victoria and H. Gillian: In this research paper the authors talk about how artificial intelligence does not help in students creative thinking and even though artificial intelligence has great advancements it cannot have its impact like a human mind.

Objectives:

1. To identify how does AI negatively affects the creativity & originality of idea generation amongst Generation-Z.

2. To understand how AI influences the Generation - Z 's thought process

Research Methodology: The researcher would be using Quantitative and Qualitative type of research. This research incorporates both primary and secondary data collection sources.

Primary data: The researcher has used dichotomous question technique to collect the data.

Secondary data: The researcher has collected and compiled the data from articles, books, journals and research papers.

Data Analysis and Findings:

Objective 1: To identify how does Artificial intelligence (AI) negatively affects the creativity & originality of idea generation amongst Generation -Z.

	VARIABLES	YES			NO		
		MALE	FEMALE	%	MALE	FEMALE	%
1.1	pre-determined templates & suggestions restrict the idea generation	16	19	70	9	6	30
1.2	AI play an important role in shaping the idea generation process	19	19	76	6	6	24
1.3	Implementation of AI technology led to significant job losses	19	20	78	6	5	22
1.4	AI has led to loss of unique perspectives and innovative thinking	16	24	80	9	1	20

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Interpretation:

- According to the data collected, out of 50 respondents, 50% of the population are Males and 50% are females.
- 74% of the respondents are from the age group 18-20, 20% are from the age group 21-23, & 6% are from the age group 24-26.
- 70% of the population feel that 'pre-determined templates and suggestions restrict the idea generation'. Whereas 30% of the population do not feel that pre-determined suggestions and templates restrict their idea generation process.
- 'Artificial intelligence (AI) plays an important role in shaping the idea generation process' is positively supported by 76% of population whereas 24% of the population disagree with the statement.
- 78% of the population believe that due to 'The implementation of AI technology it has led to significant job losses in certain sectors like Content Writing. While 22% of the population disagree to the statement in question.
- 'AI has led to loss of unique perspectives and innovative thinking is agreed   by 80% of the population while 20% of them disagree with it.

OBJECTIVE 2: To understand how AI influences the Generation Z's thought process.

				YES			NO		
			VAIABLES	MALE	FEMALE	%	MALE	FEMALE	%
			2.1 AI's speedy solutions can lead to erosion of novelty ideas	25	16	82	0	9	18
			2.2 It diminished the development of skills like problem solving	25	16	82	0	9	18
			2.3 Can influence the thought process of generation Z	25	18	86	0	7	14
			2.4 AI algoithms introduce bias on independent decision making	25	14	78	0	11	22

Interpretation:

- According to the data collected, 82% of the population thinks that AI's speedy solutions can lead to erosion of novelty ideas whereas, the rest of the 18% thinks that it does not lead to erosion of novelty ideas.
- 82% of the population agrees with the statement that AI diminishes the development of skills like problem solving whereas, the rest of the 18% disagree with the statement.
- 86% of the population believes that AI influences the thought process of generation Z while the rest of the 14% believes that it does not influence the thought process of generation Z.
- 78% of the population believe that AI algorithms introduce bias on independent decision making while 22% disagree with the statement.

Suggestions:

- Adapt to Artificial Intelligence (AI) to support your ideas but not as a replacement tool: Generation-Z should make use of AI only to search, find similar patterns and to analyze the data. Most importantly human creativity and premonition remains most powerful as compared to any technology.
- Make more informed decision: Critically evaluate the AI generated responses and its algorithms to understand

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the limitations of AI generated responses.

- Balance screen time & foster a growth mindset.
- Combine AI with creativity.

Therefore, by enfolding AI as a complementary tool to develop and foster essential skills which will act as a leverage while maintaining its creative abilities in the idea generation process of Generation-Z.

Conclusion:

According to the research conducted, it has been found that Artificial Intelligence (AI) surely has its impact on Generation Z. Majority of the population agrees that pre- determined solutions and templates provided by AI restrict their creative thinking ability.AI algorithms does introduce an bias on independent decision making. AI has also influenced the thought process of generation Z by adapting and learning from their preferences. Over reliance on AI chatbot such as ChatGPT has also lead to restriction on creative thinking as they provide pre-determined solutions and generation Z find it more convenient to rely on such solutions because it does not require any critical and creative thinking. So majority of the population agrees that artificial intelligence (AI) does hinder their idea generation process and creative thinking ability. Since, artificial intelligence (AI) is still an emerging topic, therefore there is a need for further research on this topic.

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