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Relationship between the General Attitude and Organizational Commitment of the IT Employees

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Abstract: ***This quantitative study examines the general attitudes of IT employees towards artificial intelligence (AI) and its correlation with organizational commitment within the context of the evolving workplace landscape. Incorporating theories of attitude formation and organizational commitment, the study explores the diverse perspectives of IT professionals towards AI, considering factors such as job impact, training, company culture, and perceived benefits and risks. Through an analysis of attitudes encompassing positive, negative, neutral, and sikken perspectives, as well as organizational behaviour concepts including job satisfaction, job involvement, and organizational commitment, the research aims to elucidate the nuanced relationship between IT employees' attitudes towards AI and their commitment to their organizations. Findings from this study contribute to a deeper understanding of the intricate dynamics between technology adoption, workforce attitudes, and organizational commitment in the era of AI-driven workplaces.***

Keywords: Attitude towards AI (positive and negative), Organizational commitment.

I. INTRODUCTION

Over time, machines, both analogue and digital, have been employed in workplaces to assist in computing work outputs and, more recently, to automate tasks through the integration of artificial intelligence (AI) tools and applications. This integration raises questions about the types of "intelligence" expected from these technologies and how management utilizes the personal data collected by machines to make assumptions about different forms of intelligence.

According to Ajzen and Fishbein (1977) 'general attitudes' are those that are either substantively unrelated to the behaviour or only relate to a single element, e.g. the target or context. Attitude is a mental and neutral state of readiness organized through experience, exerting a directive or dynamic influence upon an individual's response to all objects and situations with which it is related. (G.W. Allport). An employee’s dedication to an organization and wish to remain part of it. Organizational commitment is often described as having both an emotional or moral element (affective commitment) and a more practical element (continuance commitment).(APA) Organizational commitment is characterized as "a psychological state that (a) defines the employee's relationship with the organization and (b) influences the decision to either continue or discontinue membership in the organization" (Meyer & Allen, 1991, p. 67). This definition seeks to establish consensus among diverse research traditions and definitions in the organizational commitment literature.

II. REVIEW OF LITERATURE

A comprehensive study investigated attitudes towards artificial intelligence (AI), introducing the concise and reliable Attitude Towards Artificial Intelligence (ATAI) scale, available in German, Chinese, and English. Participants from Germany, China, and the UK completed the ATAI scale, revealing two negatively correlated factors: acceptance and fear of AI. The consistent factor structure across diverse cultures emphasized the scale's cross-cultural applicability. Additionally, correlations were established between the ATAI scale's acceptance and fear factors and participants' willingness to engage with specific AI products, like self-driving cars and virtual assistants, in both Germany and China. These findings highlight the practical utility of the scale in predicting real-world behaviours related to AI product usage (Sindermann et al., 2021).

Akyazı (2023) conducted a study on the relationship between employees' attitudes towards artificial intelligence (AI) and organizational culture. The paper used a quantitative methodology and correlational survey design to examine the attitudes of white-collar employees towards AI in an organization in Aksaray city, Turkey. The study found that employees' attitudes towards AI differed based on demographic variables and that there was a significant positive relationship between attitudes towards AI and organizational culture, specifically clan culture, market culture, and adhocracy culture. The article contributes to the literature by providing insights into the relationship between employees' attitudes towards AI and organizational culture (Akyazı, 2023).

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The author discusses two types of attitudes: "no-human-interaction attitudes" where employees prefer working with real humans rather than AI, and "intelligent-automation attitudes" where employees have positive attitudes towards AI if they see a benefit in using it. The paper highlights the paradox that employees can have both positive and negative attitudes towards AI depending on the situation. The author emphasizes the importance of addressing these attitudes as the interaction between humans and AI will be crucial for future competitive advantage. (Lichtenthaler, 2019)

A research article titled "Employees' attitudes towards intelligent robots: a dilemma analysis." by Looy (2022). The article explores employees' attitudes towards the use of intelligent robots in the workplace. It presents three dilemma situations related to employees' duties and tasks, asking them to identify tasks that could be fully automated by intelligent robots. The article also asks employees to specify the characteristics of these tasks and explain why they believe intelligent robots would be useful for them. The research includes interviews with respondents from various organizations and analyses their responses to understand their attitudes towards intelligent robots. The article provides tables and appendices with additional information and analysis. Overall, the article aims to shed light on employees' perspectives on the potential use of intelligent robots in the workplace.

A study on the relationship between artificial intelligence (AI) and knowledge sharing as contributing factors to organizational performance. The paper used a quantitative methodology and survey design to examine the impact of AI on knowledge sharing and organizational performance. The study found that AI has a positive impact on knowledge sharing and organizational performance, with knowledge sharing mediating the relationship between AI and organizational performance. The authors also highlight the need for organizations to develop a culture of knowledge sharing to fully realize the benefits of AI implementation. The article contributes to the literature by providing insights into the role of AI in knowledge sharing and its impact on organizational performance. (Olan et al., 2022). In a separate study conducted by YouGov in August 2018, notable apprehension among Germans towards artificial intelligence (AI) was revealed. Only 15% believed that the benefits of AI outweighed the risks, with nearly half perceiving them as equal, and one in four viewing the risks as higher. The study highlighted a pronounced reluctance towards AI's involvement in justice-related matters, particularly in job interviews (75%), control of weapon systems in armed conflicts, and AI-driven autonomous cars (52%). Notably, attitudes towards AI in production plants were not explored in this study. Conversely, the Central Association of the Electronics Industry proposed a "human-cantered" approach to AI in industry, offering ten recommendations to promote its responsible use in Europe (Hannover Messe, 2022).

III. METHODOLOGY

A. *Research Design*

A quantitative research methodology aiming at exploring the relationship between variables

B. *Statement Of Problem*

To study the impact of the General attitude of the IT employee towards AI and their organizational commitment with respect to the Attitude they possess towards the AI.

C. *Objectives of the Study*

1) To understand the general attitude towards AI.
2) To understand the negative and positive attitude’s impact towards organizational commitment.
3) To understand the gender difference in the organizational commitment.

D. *Hypothesis*

H1 There will be no significant relationship between positive attitude towards AI and Organizational commitment
H2 There will be no significant relationship between negative attitude towards AI and Organizational commitment
H3 There will have no Gender difference in the organizational commitment
H4 There will be no Gender difference in the positive attitude towards AI
H5 There will be no Gender difference in the negative attitude towards AI

E. *Operational Definition*

1) Attitude towards Artificial Intelligence: In this study, attitude towards artificial intelligence refers to individuals' overall perceptions, beliefs, and sentiments regarding the adoption and use of AI technologies in the workplace. This construct encompasses both positive and negative attitudes towards AI.

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2) Organizational Commitment: Organizational commitment is defined as the degree of dedication, loyalty, and attachment that employees feel towards their organization. It reflects employees' willingness to exert effort on behalf of the organization, as well as their intention to remain with the organization in the long term.

F. Variables

The study was aimed to conduct with the Demographic Variables such as gender the sector in which they are working, independent variable is General attitude towards AI and the dependent variable is organizational commitment.

G. Sample

The study was conducted on adults of age ranging from 20-40 years,

H. Inclusion Criteria

1) Individuals between the age of 20 and 40 were included in the study.
2) People who are working in the IT sector were included.
3) All gender participants were included.

I. Exclusion Criteria

1) Individuals below the age of 20 and 40 were excluded.
2) Individuals who are not working in the IT sector were excluded

J. Assessment Tools

Descriptive and inferential statistics and Spss

K. Procedure

Data was collected from IT employees from majorly from south India through online forms and purposive sampling will be used

L. Ethical Consideration

The participants were informed that it was voluntary participation and their responses will be kept confidential. They were ensured that the data collected was only used for post-graduation dissertation purpose only

IV. RESULTS AND DISCUSSION

H1 There will be no significant relationship between positive attitude towards AI and Organizational commitment

Table 1 Showing the spearman's corelation value

Variables	N	M	SD	1	2
Positive AI	149	45.84	7.470		1.000**
OC	149	45.84	7.470	1.000**	

The above table shows the significant value of the positive attitude towards the organizational commitment. The significant value was found to be higher than 0f the 0.05 level indicating that there is no significant relationship between positive attitude towards AI and organizational commitment. Hence the null hypothesis is accepted.

H2 There will be no significant relationship between negative attitude towards AI and Organizational commitment

Table 2 Showing the spearman's corelation value

Variables	N	M	SD	1	2
Negative ai	149	19.06	5.127		.668
OC	149	45.84	7.470	.668	

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The above table shows the significant value of the negative attitude towards the organizational commitment. The significant value was found to be higher than 0f the 0.05 level indicating that there is no significant relationship between negative attitude towards AI and organizational commitment. Hence the null hypothesis is accepted.

H3 There will have no Gender difference in the organizational commitment

Table 3 showing the Mann-Whitney U test results

				Male	Female	
	N	Mean	SD	Mean Rank		Asymp. Sig 2 tailed
OC	149	45.84	7.470	73.72	77.26	.630

Table 3 shows the result of mean, standard deviation and Mann-Whitney U test for gender differences for organizational commitment. The results show that there is no significant difference in gender on organizational commitment since the value is greater than 0.05.

H4 There will be no Gender difference in the positive attitude towards AI

Table 4 showing the Mann-Whitney U test results

				Male	Female	
	N	Mean	SD	Mean Rank		Asymp. Sig 2 tailed
Positive	149	45.84	7.470	73.72	77.26	.630

Table 4 shows the result of mean, standard deviation and Mann-Whitney U test for gender differences for organizational commitment. The results show that there is no significant difference in gender on positive attitude towards AI since the value is greater than 0.05.

H5 There will be no Gender difference in the negative attitude towards AI

Table 5 showing the Mann-Whitney U test results

				Male	Female	
	N	Mean	SD	Mean Rank		Asymp. Sig 2 tailed
Negative	149	19.06	5.127	75.95	73.33	.722

Table 5 shows the result of mean, standard deviation and Mann-Whitney U test for gender differences for organizational commitment. The results show that there is no significant difference in gender on negative attitude towards AI since the value is greater than 0.05.

The results of the SPSS correlation study indicate that there is no meaningful connection between organizational commitment and a favourable attitude toward artificial intelligence (AI). Since the obtained significance level above 0.05, the null hypothesis was accepted. These findings are especially significant when considering the modern corporate environments where AI integration is becoming more and more common.

These findings could indicate that higher levels of organizational commitment are not always correlated with employees' attitudes toward AI. Employee commitment to the company may be impacted by other elements such as work satisfaction, organizational culture, or the perception of justice in decision-making procedures, even though they may have positive sentiments regarding AI technologies.

Furthermore, the complexity of human-AI interactions in the workplace may also be reflected in the lack of a substantial association between an optimistic attitude toward AI and organizational commitment. Even though AI systems have the potential to increase production and efficiency, workers may be concerned about losing their jobs, losing their autonomy, or their being ethical ramifications to adopting AI.

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The positive relationship between organizational commitment and attitude toward AI may be compromised by these worries.

The relationship between organizational commitment and Attitude of artificial intelligence (AI). The collected results show that the significant value was greater than the predefined 0.05 threshold, indicating that there is no statistically significant correlation between organizational commitment and negative opinions about AI through the correlation. Based on the study's findings, the null hypothesis which proposed that there was no association between these variables—is thus accepted.

First and foremost, it appears that an individual's commitment to their business may not be innately influenced by their perceptions or attitudes toward AI technologies, as there is no significant correlation found between negative opinions toward AI and organizational commitment. This result defies earlier theories that stated negative opinions about AI could weaken organizational commitment. These theories were supported by certain theoretical frameworks.

The way that sentiments toward AI are perceived in the workplace may be one reason for this surprising outcome. It is conceivable that people would view AI technologies as resources or tools rather than as factors that directly affect how committed they are to the company. Furthermore, organizational commitment is a complex concept that is influenced by a range of elements other than attitudes toward technology, including organizational culture, leadership, and work satisfaction. As a result, these other powerful elements may have a greater effect on organizational commitment than the negative opinions towards AI. Instead of concentrating only on reducing unfavourable views toward AI, organizations that incorporate AI technologies into their operations may also need to think about more comprehensive organizational strategies and interventions to encourage employee commitment. One rationale that could be offered. These findings contradict some of the earlier studies discussed in the text, such as the study conducted by Sindermann et al. (2021), which introduced the Attitude Towards Artificial Intelligence (ATAI) scale. The ATAI scale identified two negatively associated factors, acceptance, and fear of AI, across diverse cultures, suggesting that individuals' attitudes towards AI could impact their behavior, including their willingness to interact with AI products. Additionally, the study by YouGov highlighted notable apprehension among Germans towards AI, with a significant proportion perceiving risks associated with AI involvement in various areas, including job interviews and control of weapon systems. Similarly, the study by Akyazı (2023) found significant positive correlations between employees' attitudes towards AI and organizational culture, indicating that organizational culture could influence individuals' perceptions of AI.

Based on mean, standard deviation, and Mann-Whitney U test results, the analysis of gender differences in organizational commitment, as shown in Table 3, produced non-significant results. More specifically, there is no statistically significant difference in organizational commitment between genders, since the resulting p-value met the traditional significance level of 0.05.

These findings have a number of ramifications for organizational context research and practice. First off, the lack of gender differences in organizational commitment refutes earlier theories that suggested male and female employees had different levels of dedication. Although previous studies have frequently indicated gender-based variations in organizational attitudes and actions, the current findings point to a more egalitarian environment with respect to commitment levels within the studied population.

The lack of a statistically significant gender difference in organizational commitment emphasizes how crucial it is to take into account individual characteristics as well as particular organizational dynamics that could influence commitment levels. Organizational culture, leadership philosophies, and work happiness are a few examples of factors that may have a greater impact on commitment than gender alone. As a result, organizational interventions meant to increase commitment ought to take into account a comprehensive strategy that takes into account the various demands and experiences of employees. Furthermore, these results add to the current conversation about workplace gender equality. This study shows that gender differences in organizational commitment are not significant, which emphasizes the possibility of advocating for gender-neutral rules and procedures in organizations. Recognizing and valuing the varied viewpoints and experiences of every employee, regardless of gender, can help to establish inclusive workplaces that encourage dedication and participation.

By using the mean, standard deviation, and Mann-Whitney U test, the analysis shown in Table 4 looked at potential gender differences in positive attitudes about artificial intelligence (AI). The results demonstrated that the computed p-value was greater than the traditional cutoff point of 0.05, indicating a non-significant outcome. As a result, the findings imply that among the population under study, there is no statistically significant difference in the positive sentiments regarding AI between genders. These findings have important ramifications for organizational psychology and technology adoption research as well as practice.

First off, conventional wisdom about how men and women view technology is challenged by the lack of gender differences in favourable sentiments about artificial intelligence. In the past, gender stereotypes have frequently linked men to higher levels of technological competence and passion, while women were thought to be less tech-inclined.

The current data, however, point to a more nuanced perspective, showing that positive attitudes regarding AI are similar across genders.

The necessity of appreciating individual diversity and changing society attitudes toward technology is highlighted by this non-significant gender difference in positive sentiments regarding AI. Given the growing integration of AI in diverse organizational settings, it is imperative to comprehend the aspects influencing attitudes towards these technologies in order to ensure their successful implementation and adoption.

Furthermore, these results add to the larger conversations about workplace technological innovation and gender equality. This study emphasizes the possibility of advancing gender-neutral methods for adopting and using technology. Prioritizing inclusion and diversity in the pursuit of a technologically savvy workforce will allow employers to acknowledge and benefit from the varied experiences and viewpoints of their staff.

By looking on the mean, standard deviation, and Mann-Whitney U test statistics, the investigation of gender differences in negative attitudes toward Artificial Intelligence (AI), as shown in Table 5, produced non-significant results. In particular, the p-value that was found was higher than the traditional cutoff point of 0.05, suggesting that there is no statistically significant variation in the negative opinions that people have against AI based on their gender. These results have important ramifications for organizational settings research as well as real-world applications. First off, the lack of gender differences in unfavourable sentiments about AI calls into question long-held beliefs about how women view technology. Previous studies have frequently indicated that males and females have different degrees of comfort, acceptance, or scepticism regarding AI technologies. Nonetheless, the current results point to a more gender-neutral view of AI among the sampled population.

Attitudes toward technology may be more influenced by factors other than gender alone, such as employment roles, prior experiences with AI, and technological literacy. As a result, organizational tactics meant to promote favourable views toward AI ought to take into account a nuanced strategy that takes into account the varied experiences and backgrounds of employees. Furthermore, these results add to the larger conversation on workplace technology usage and gender equality. This study shows that there are similar degrees of unfavourable sentiments regarding AI amongst genders, which suggests that gender-neutral approaches to technology installation and training might be promoted. All employees, regardless of gender, have different needs and views, and acknowledging and meeting these requirements can help improve AI literacy and acceptance.

Moreover, the absence of gender differences in attitudes towards AI and organizational commitment, as indicated by the Mann-Whitney U test results, aligns with findings from other studies discussed in the text. For instance, the study by Bankins et al. (2023) emphasized the need for a balanced approach to AI adoption in organizations, considering both the opportunities and risks associated with AI implementation. Similarly, the study by Dabbous et al. (2022) highlighted the potential impact of AI adoption on employee attitudes and behaviors. Overall, while the results of the SPSS correlation study support the notion that organizational commitment may not be directly influenced by attitudes towards AI, it is essential to consider the broader context and existing literature to gain a comprehensive understanding of the complex relationship between individuals, organizations, and emerging technologies like AI. Future research could benefit from exploring additional factors that may mediate or moderate the relationship between organizational commitment and attitudes towards AI, such as organizational culture, leadership styles, or job characteristics. Additionally, cross-cultural studies could provide valuable insights into how cultural differences shape individuals' perceptions and behaviours regarding AI in the workplace.

V. CONCLUSION

The research aimed to explore the connection between employees' attitudes towards Artificial Intelligence (AI) and their organizational commitment, as well as potential gender differences in these attitudes. Utilizing quantitative methods and SPSS analysis, data was gathered from professionals working in the IT sector primarily located in South India through online surveys.

The results revealed no significant correlation between employees' positive or negative attitudes towards AI and their organizational commitment. Furthermore, gender did not exhibit a significant influence on either attitude towards AI or organizational commitment within the studied population.

In conclusion, the findings suggest that employees' commitment to their organizations may not be significantly impacted by their attitudes towards AI. Other factors, such as job satisfaction, organizational culture, and perceptions of decision-making processes, may play a more substantial role in influencing organizational commitment. Additionally, the gender-neutral nature of attitudes towards AI challenges stereotypes about gender differences in technology perceptions.

Overall, the research underscores the importance of taking a comprehensive approach to understanding and promoting organizational commitment in modern corporate settings.

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VI. LIMITATIONS

1) The study's sample was limited to IT employees primarily from South India, which may restrict the generalizability of the findings to other industries or geographic regions.
2) The age range of participants (20-40 years) may not fully represent the diversity of age groups in the workforce, potentially limiting the study's applicability to older or younger populations.
3) The reliance on self-report measures and online data collection methods may introduce response bias and limit the depth of data collected.
4) The study's cross-sectional design restricts the ability to establish causal relationships between variables.

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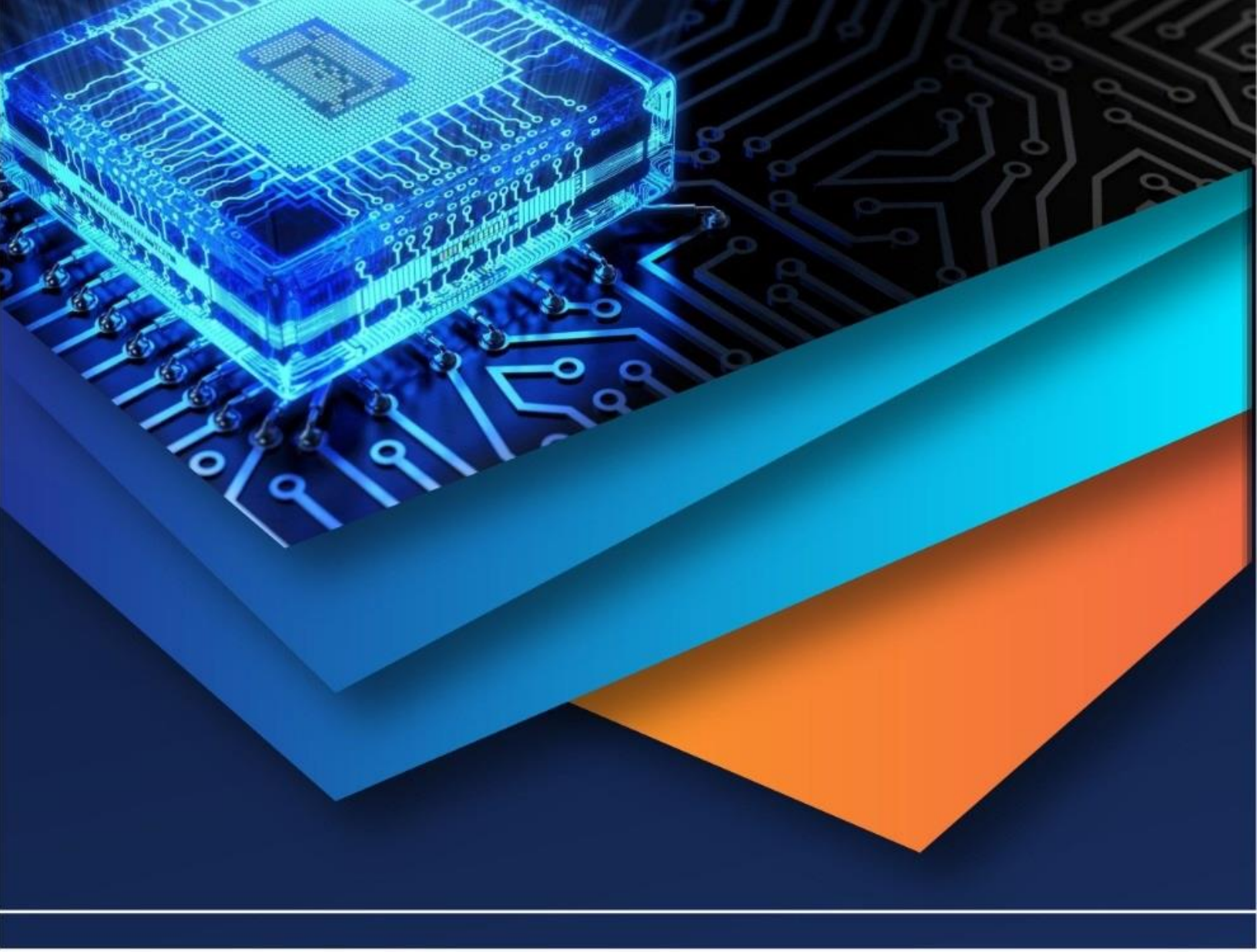

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