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Workplace Safety for Women in IT Sector

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Abstract: ***Workplace safety has become one of the main priorities for organizations worldwide. A safe workplace for women is one where they feel valued, secure, and liberated from physical harm, harassment, or discrimination. The role of women in the IT sector has grown considerably in recent years. With an increasing number of women joining the workforce, it is crucial for organizations to provide a safe and secure environment. Deloitte's 2024 Women at Work report indicates that 43% of women have encountered non-inclusive behaviors, such as harassment or micro aggressions, and nearly half have voiced concerns about their safety at work or during their commutes. The primary aim of this research is to identify the initiatives that organizations should adopt to ensure the safety of women both in the workplace and while commuting. Additionally, it seeks to explore the various types of abuse that women face in their professional environments. Major challenges include ensuring safe transportation, offering flexible working hours, accommodating night shifts, addressing socio-cultural factors, and preventing sexual harassment. This study employs a quantitative research methodology, utilizing primary data gathered through questionnaires. The data was collected from 40 IT women employees. The findings of these papers contribute to the understanding that women's safety at the workplace is more important and help to improve women's safety at the workplace and identify possible solutions.***

Keywords: Workplace, Safety, WomenEmployees, IT Industry, MicroAggressions, Harassment.

I. INTRODUCTION

When you reach, just send me a message or give me a missed call - is the instruction for all most every women going to work, gets her from her parents, spouse or relatives at home. Workplace safety is determined as one of the core aspects by which various risks, illnesses, or injuries can be mitigated among employees. Workplace safety is considered one of the vital aspects by which their most valuable assets are protected. As women break barriers and rise to influential positions across several sectors, organizations must recognize the challenges surrounding them, mainly catering to their safety. Women in the workplace encounter challenges beyond the typical concerns of physical safety, impacting both their physical and mental well-being. Even in this modern age, women's security remains a significant concern. Sexual harassment, work-place harassment, gender discrimination, gender wage gap, and other forms of discrimination affect women in a variety of settings, including at work and even at home.

It is the most important duty of every person to provide safe environment to women. The country does not rise where the women are not safe and are being harassed. Since the ancient time, women are given most respected place in the society but every day and every minute some women of all walks of life (women, girls and babies) are getting harassed, molested, assaulted and violated at various places all over the world. About 35% of women have faced physical or sexual violence in their life. Women are recognized as the core victim of workplace harassment. In addition, they suffer from various physical assaults that mainly include molestation, intentional physical conduct, rape, sexual verbal communication, and much more. With the boom in the IT and corporate sector, many women are working and even during nightshifts. The employed women feel themselves more in danger because they face harassment during travelling and at workplace also. Sexual harassment is increasing rapidly. Women are continuously harassed by men those are working as their senior. For women safety people tried lots of ways & techniques but still a sophisticated system needs to be developed. The new system should be intelligent enough to sense the dangerous locations in advance and it must help women to protect in worst situations

II. REVIEW OF LITERATURE

Even the technology has advanced a lot in these modern times, women safety is still a huge issue (Mahmud et. al., 2017). Women are not safe anywhere. They face extreme troubles when they are alone, travelling on lonely roads (Alone et. al., 2017).The authors expressed that violence against women is an outcome of gender relations that assume men are superior to women (Uzun and Uzunboylu, 2015). Violence incorporates physical aggression, such as blows, blackmail, attempted hanging, sexual abuse, humiliation, burns, economic or emotional threats and control over speech and conduct.

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Confederation of Indian Industry, 2017 According to a Nimbuzz poll, 47 percent of women feel the top issue at work is sexual harassment and 51 percent of male colleagues feel that their female colleagues have faced sexual harassment in one way or another. The authors (Likhitha and Hemalatha, 2019) and (Latha et. al, 2020) expressed their views regarding women safety and security. Women safety and independence is a major concern in the modern times. They are harassed, molested, violated, assaulted and even raped.

The authors stated that in reality violence against women in India is much more that it appears to us (Chakraborty et al., 2021). The paper was based on data published by National Crime Record Bureau from 2001-02 to 2014-15. The authors applied panel progression technique in identifying the factors that can control crime against women. Factors like economic growth, parental guidance and education can decrease the crime. A study by Binns et al. (2021), focusing on tech startups, reveals that 45% of women in the tech industry have experienced some form of sexual harassment, with a considerable percentage of cases going unreported due to fear of retaliation or damaging one's career. Moss-Racusin et al. (2018) conducted a comprehensive review of gender discrimination in the workplace and found that women in male-dominated fields, including IT, face higher rates of sexual harassment. Goh et al. (2024) discussed the importance of creating safe spaces that address the unique needs of women from diverse backgrounds, arguing that one-sizefits-all diversity programs often fail to adequately address the intersectional challenges faced by women in IT. Burke (2020) stresses that organizations need not only to enforce anti-harassment policies but to foster a zero-tolerance culture where employees feel safe reporting misconduct.

III. OBJECTIVES

The main objective of the paper is to focus on the Safety of women employees and the problems relating to it. The specific objectives are:

1) To Analyze the diverse challenges encountered by women in the workplace.
2) To examine the prevalence and forms of workplace harassment and violence against women.
3) To enumerate and implement measures aimed at ensuring safety of women both in workplace and during their commute home.

IV. RESEARCH METHODOLOGY

A. Research Design

In this study, both primary and secondary data were used in this study, and primary data collection was prioritized. Descriptive analysis is used in this study. The primary functions of research methodology are to help identify the problem, gather and analyses the necessary data, and offer a different approach to solving the problem. The study includes an analysis of women's workplace safety in the IT industry. 55 IT workers were randomly selected for this study, and their opinions were sought on a variety of topics.

Sample Size - 55
Sampling Technique - Simple Random Sampling
Research Approach - Quantitative Approach

B. Source of Data

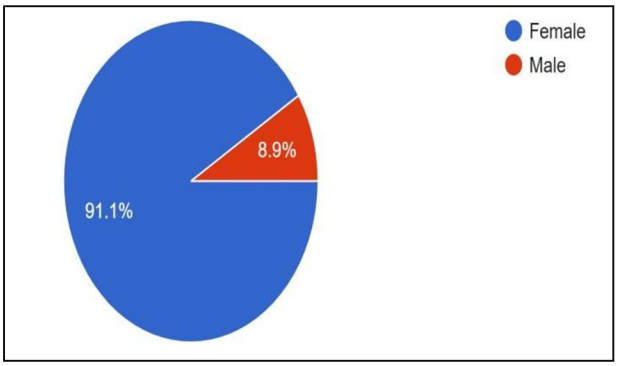
- Primary Data - The primary data is collected directly from the respondents through questionnaire method. It is generally more accurate and reliable than secondary data.
- Secondary Data - The secondary data is the data which is derived from the journals, articles, reports, websites, organizational records etc.

V. DATA ANALYSIS

This study was conducted using a primary data collection method through a questionnaire, involving a total sample of 55 IT professionals.

1) Gender

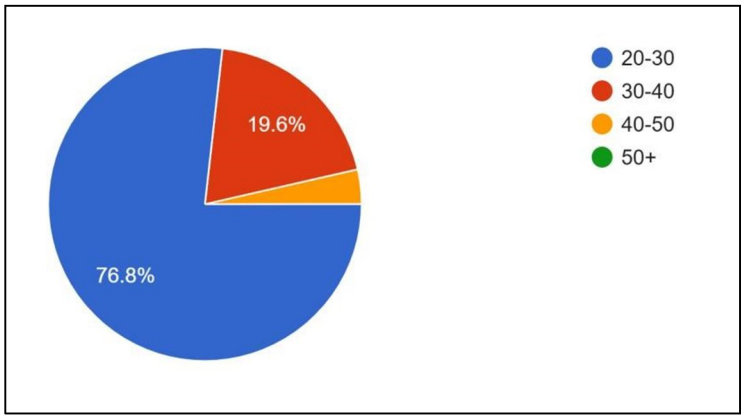
Gender	Percentage
Female	91.10%
Male	8.90%



Interpretation: The above pie chart shows that 91.1% are female and 8.9% are male.

2) Age Group

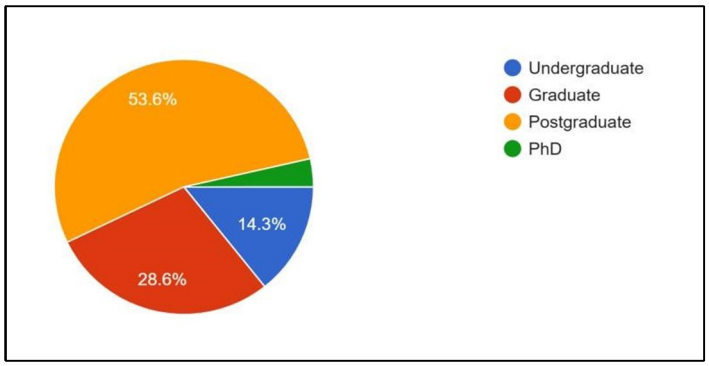
Age	Percentage
20-30	76.80%
30-40	19.60%
40-50	3.60%
50+	-



Interpretation: According to the above pie chart, 76.8% of employees are aged 20-30, 19.6% are aged 30-40, and 3.6% are aged 40-50.

3) Education Qualification

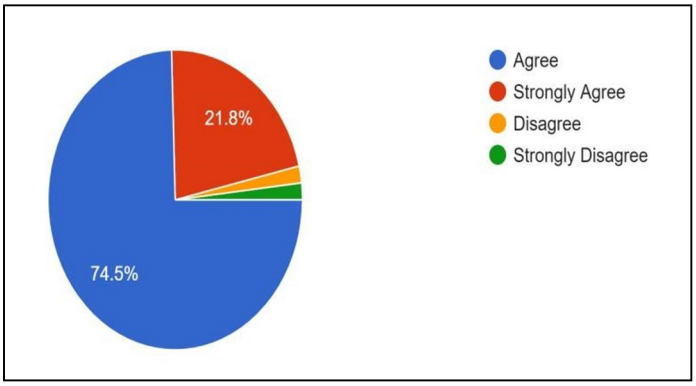
Education	Percentage
Undergraduate	14.30%
Graduate	28.60%
Postgraduate	53.60%
PhD	3.60%



Interpretation: The above pie chart shows 14.3% undergraduates, 28.6% graduates, 53.65% postgraduates, and 3.6% PhDs.

4) Do you feel safe and comfortable working in your current office environment?

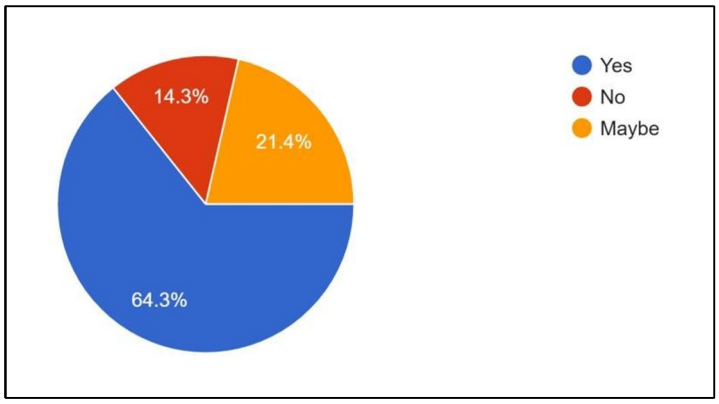
Response	Percentage
Agree	74.50%
Strongly agree	21.80%
Disagree	1.80%
Strongly Disagree	1.80%



Interpretation: The pie chart presented indicates that 74.5% of employees feel secure in their current work environment, while 21.8% express strong agreement with this sentiment. Conversely, 1.8% of employees disagree, suggesting that they perceive their workplace as unsafe.

5) Are there security measures in place for late-night shifts, such as escorted exits or dedicated transportation?

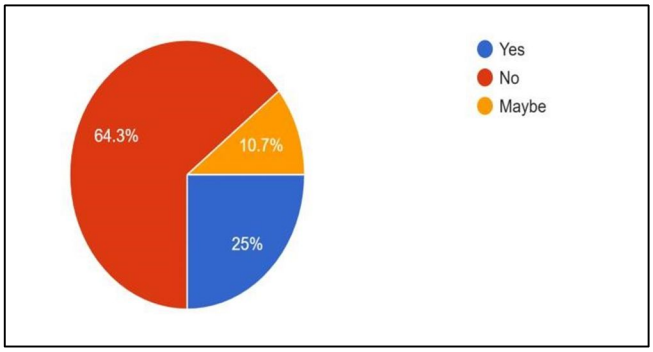
Response	Percentage
Yes	64.30%
No	14.30%
Maybe	21.40%



Interpretation: The pie chart illustrates that 64.3% of respondents reported the implementation of security measures for late-night shifts within their organizations, which may encompass provisions such as escorted exits or specialized transportation. Conversely, 14.3% of respondents indicated that their companies do not have any security measures in place for late-night shifts. Furthermore, 21.4% of respondents expressed uncertainty regarding the existence of such security measures for late-night shifts.

6) Have you ever personally experienced or witnessed any form of discrimination or harassment based on your gender in the workplace?

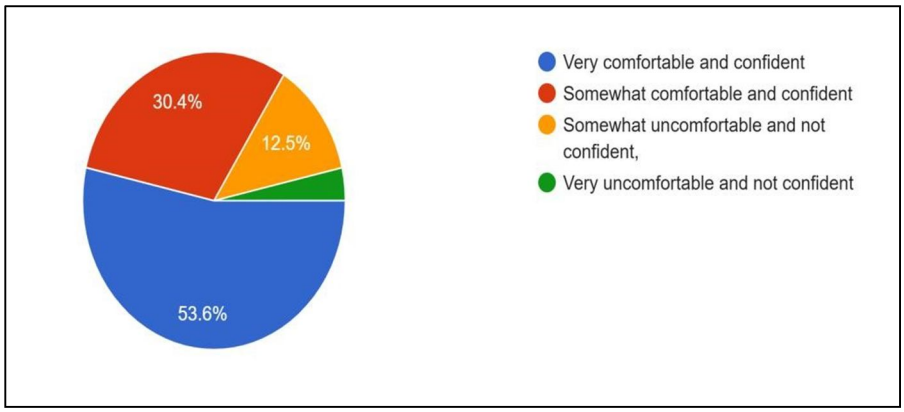
Response	Percentage
Yes	25%
No	84.30%
Maybe	10.70%



Interpretation: According to the pie chart 25% of respondents report experiencing challenges related to discrimination within the organization, while 84.3% assert that they have not encountered such challenges. Additionally, 10% of individuals express uncertainty, suggesting that they may have faced discrimination challenges.

7) How comfortable and confident would you feel approaching a manager, HR representative, or another trusted person within the company to discuss a safety concern?

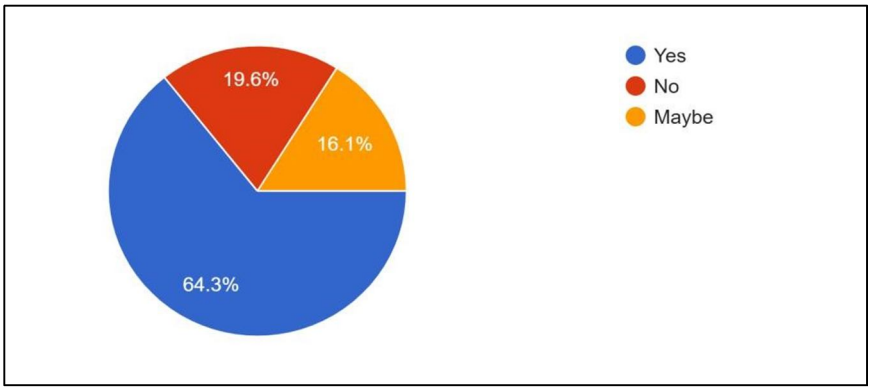
Response	Percentage
Very comfortable and confident	53.60%
Somewhat comfortable and confident	30.40%
Somewhat uncomfortable and not confident	12.50%
Very uncomfortable and not confident	3.60%



Interpretation: The pie chart presented indicates that 53.6% of individuals feel comfortable and confident when communicating with the manager. In contrast, 30.4% report a moderate level of comfort and confidence, while 12.5% express a degree of discomfort despite feeling confident. Lastly, a mere 3.6% of respondents indicate that they are very comfortable and confident in their interactions with the manager.

8) Are there accessible security cameras in common areas?

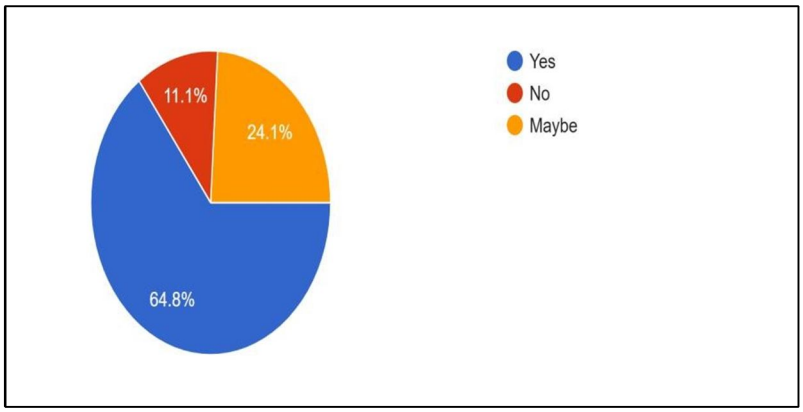
Response	Percentage
Yes	64.30%
No	19.60%
Maybe	16.10%



Interpretation: From the above pie chart we can illustrate that 64.3% of employees report the presence of security cameras in shared spaces, while 19.6% indicate that such cameras are absent. Additionally, 16.1% of employees express uncertainty regarding the existence of security cameras in these common areas.

9) Does the company handle complaints of workplace harassment or discrimination?

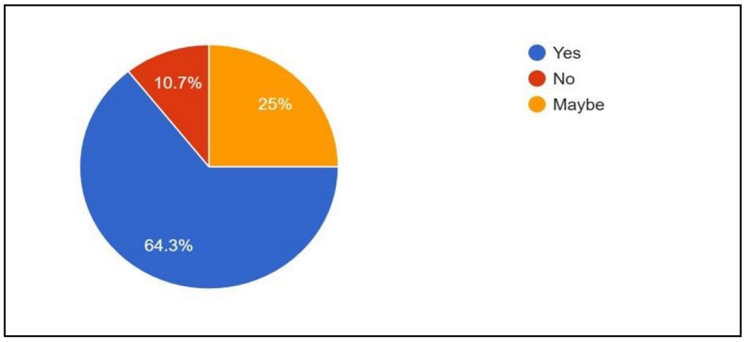
Response	Percentage
Yes	64.80%
No	11.10%
Maybe	24.10%



Interpretation: Above information indicates that 64.8% of employees believe their organization effectively addresses complaints related to workplace harassment or discrimination. In contrast, 11.1% of employees report that their company does not adequately manage such complaints, while 24.1% express uncertainty regarding their company's handling of these issues.

10) Are you aware of the company's policies regarding workplace harassment and how to report incidents?

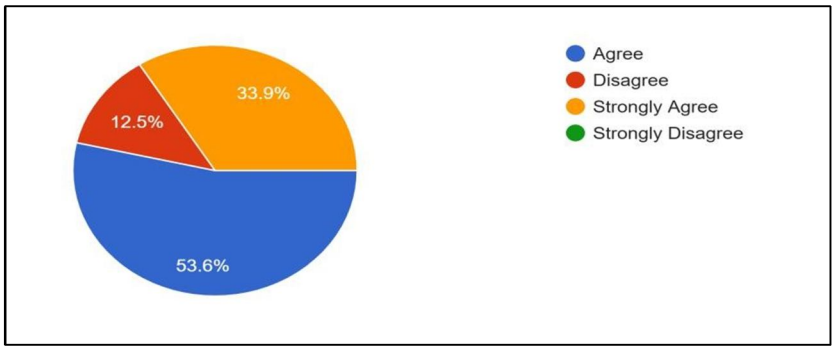
Response	Percentage
Yes	64.30%
No	10.70%
Maybe	25%



Interpretation: This pie chart states that 64.3% of employees possess knowledge of the company's policies related to workplace harassment and the procedures for reporting such incidents. In contrast, 10.7% of employees lack awareness of these policies, while 25% remain uncertain about them.

11) .Are there any policies or procedures you believe should be implemented or improved to enhance women's safety in the workplace?

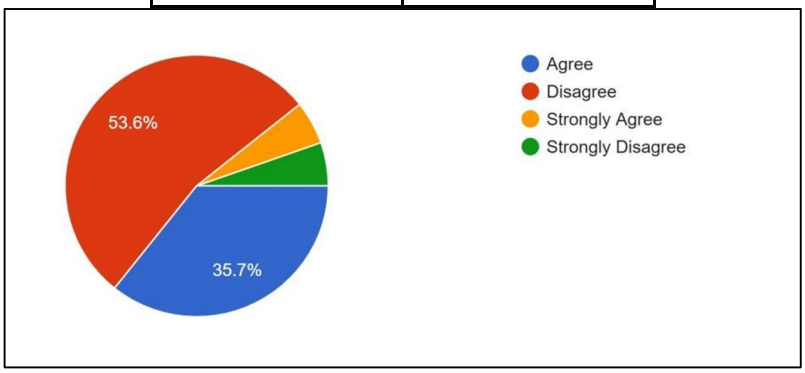
Response	Percentage
Agree	53.60%
Strongly agree	12.50%
Disagree	33.90%
Strongly disagree	-



Interpretation: Based on this pie chart, 53.6% of employees agree that some policies or procedures should be implemented or improved to enhance women's safety in the workplace, 12.5% of employees strongly agree that they want some policies or procedures that should be implemented or improved to enhance women's safety in the workplace, and 33.9% of employees disagree that some policies or procedures should be implemented or improved to enhance women's safety in the workplace.

12) Do you feel that any of your coworkers, managers, or supervisors use unnecessarily harsh language or physical gestures, including violence or inappropriate statements while at work?

Response	Percentage
Agree	35.70%
Strongly agree	5.40%
Disagree	53.60%
Strongly disagree	5.40%

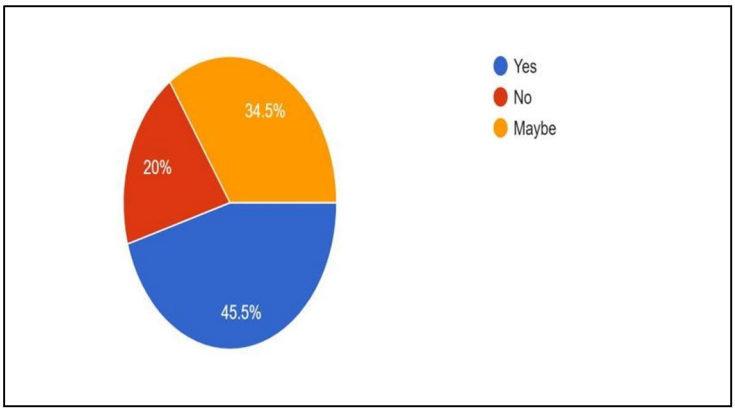


Interpretation: According to the pie chart above, 35.7% of employees believe that their coworkers, managers, or supervisors use unnecessary harsh language or physical gestures, such as violence or inappropriate statements, while at work. 5.4% of employees strongly agree that their coworkers, managers, or supervisors use excessively harsh language or physical gestures, including violence or inappropriate statements while at work.53.6% of employees disagree that their coworkers, managers, or supervisors use excessively harsh language or physical gestures, including violence or inappropriate statements while at work.5.4% of employees strongly disagree that their coworkers, managers, or supervisors use excessively harsh language or physical gestures, including violence or inappropriate statements, while at work.

13) Do you feel comfortable working on projects that require remote access to sensitive data, especially when working late hours?

Response	Percentage
Yes	45.50%
No	20%
Maybe	34.50%

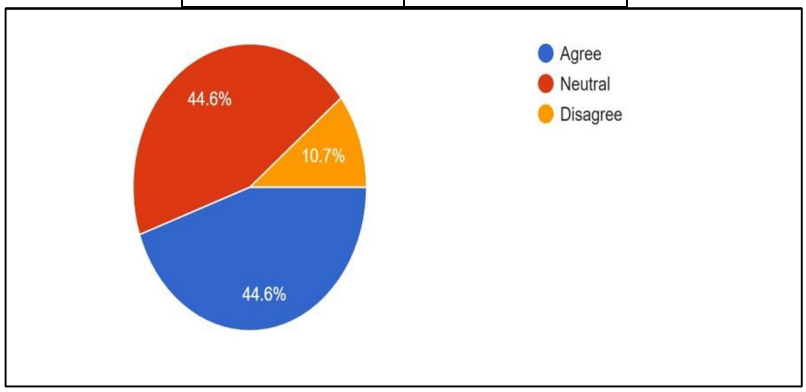
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Interpretation: Based on the pie chart above, 45.5% of employees say they feel comfortable working on projects that require remote access to sensitive data, especially when working late hours. 20% of employees say they are uncomfortable working on projects that require remote access to sensitive data, especially when working late hours; 34.5% say they may or may not feel comfortable working on projects that require remote access to sensitive data, especially when working late hours.

14) Do you believe the company provides adequate training on preventing harassment, bystander intervention, and unconscious bias?

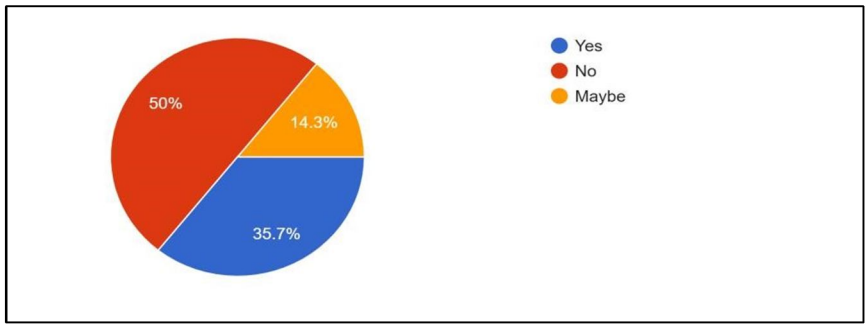
Response	Percentage
Agree	44.60%
Disagree	10.70%
Neutral	44.60%



Interpretation: This pie chart indicates that, 44.6% of employees believe that the company provides adequate training on harassment prevention, bystander intervention, and unconscious bias. 10.7% of employees believe the company does not provide adequate training on harassment, bystander intervention, and unconscious bias, while 44.6% say they are unsure.

15) Have you ever observed any behavior, jokes, or comments in the workplace that you considered inappropriate or discriminatory based on gender?

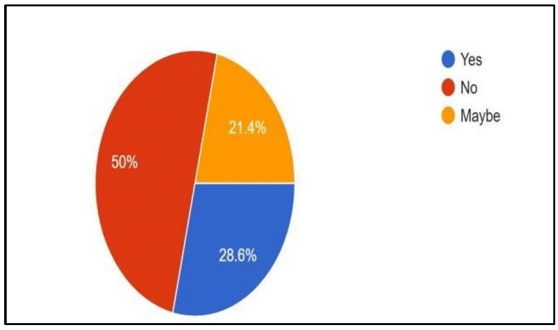
Response	Percentage
Yes	35.70%
No	50%
Maybe	14.30%



Interpretation: According to the pie chart above, 35.7% of employees say they have observed behaviour, jokes, or comments in the workplace that they consider inappropriate or discriminatory based on gender, 50% say they did not observe behaviour, jokes, or comments in the workplace that they considered inappropriate or discriminatory based on gender, and 14.3% say they may or may not have observed behaviour, jokes, or comments in the workplace that they considered inappropriate or discriminatory based on gender.

16) Have you experienced any instances of microaggressions in the workplace?

Response	Percentage
Yes	28.60%
No	50%
Maybe	21.40%



Interpretation: Based on the above pie chart , 28.6% of employees have experienced instances of micro aggressions in the workplace, 50% have not, and 21.4% may or may not have.

IV. FINDINGS

1) Most of respondents feel safe and comfortable at their current workplace.
2) The respondents reported that the implementation of security measures for late-night shifts within their organizations, which may encompass provisions such as escorted exits or specialized transportation.
3) The majority of respondents are confident in approaching a manager, HR representative, or another trusted person within the company to discuss safety concerns.
4) The majority of respondents reported that their company handles workplace harassment and discrimination complaints.
5) Most respondents support implementing policies or procedures to improve workplace safety for women.
6) The respondents disagreed that their coworkers, managers, or supervisors use of harsh language, physical gestures, violence, or inappropriate statements at work.

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7) Most of the respondents agreed that the company provides adequate training for preventing harassment, bystander intervention, and unconscious bias.
8) The majority of respondents reported no inappropriate or discriminatory gender-based workplace behavior, jokes, or comments. However, some of them claim that they observed.

V. SUGGESTIONS

1) Provide safe commuting options like company cabs with GPS tracking and verified drivers for women working late shifts.
2) Install cameras in common areas, parking lots, and less frequented spots to deter potential misconduct.
3) Encourage use of apps that allow employees to share real-time locations or send alerts during emergencies.
4) Educate women on safeguarding their personal information from phishing, online harassment, or data breaches.
5) Deploy technology to identify and prevent inappropriate communication on official channels.
6) Create and enforce zero-tolerance policies for sexual harassment.
7) Establish Internal Complaints Committees (ICCs) under the Prevention of Sexual Harassment (POSH) Act, along with regular training sessions.

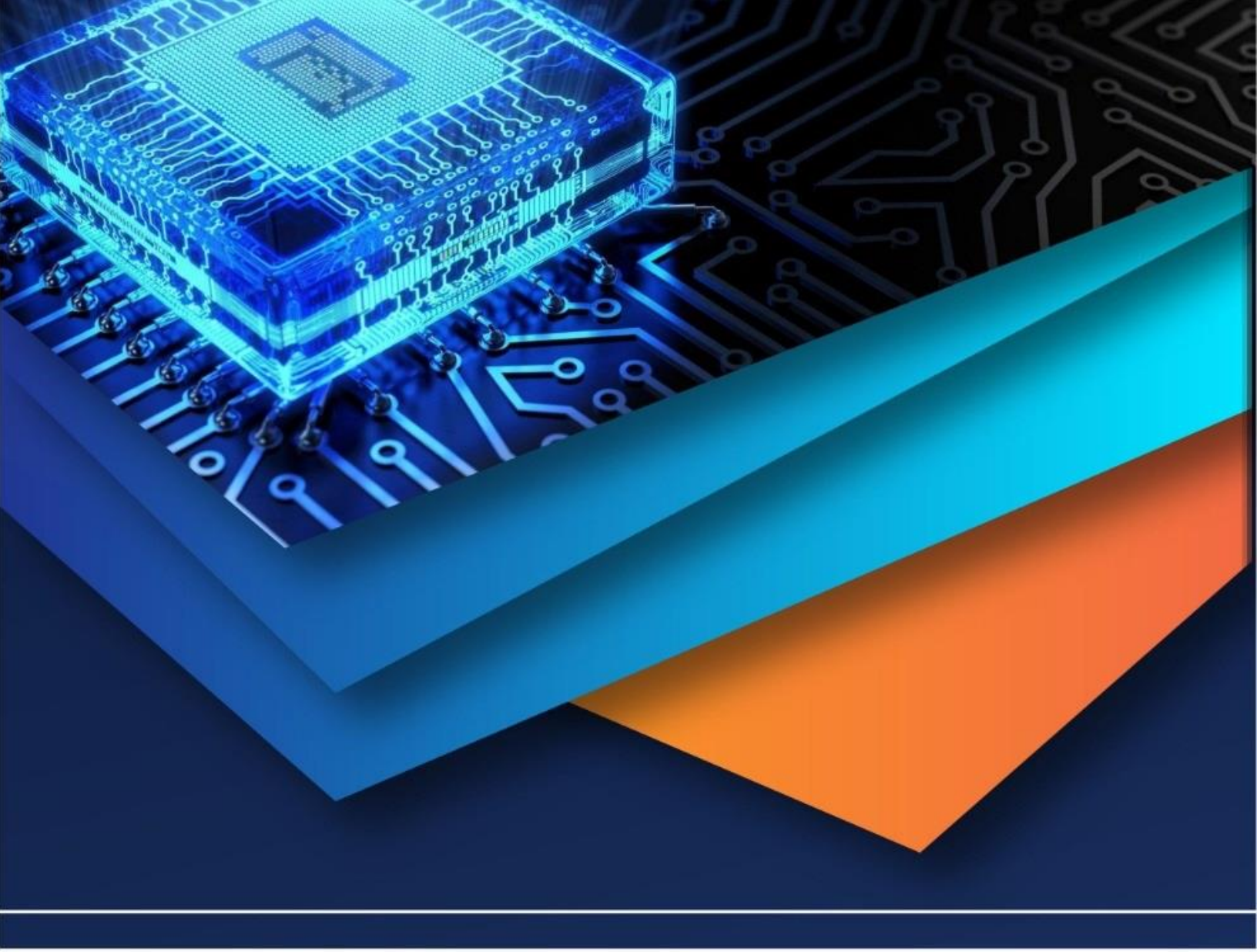
VI. CONCLUSION

Workplace safety for women in the IT industry is an essential component of creating inclusive and productive workplaces. While corporate policies and awareness initiatives have improved conditions, ongoing challenges remain, such as harassment, insufficient reporting mechanisms, and unconscious bias. A safe and supportive work environment is critical for women's professional and personal success. To accomplish this, IT companies must priorities the implementation of strong safety measures, such as stringent anti-harassment policies, effective grievance redresses systems, and regular training on gender sensitivity and workplace conduct. Furthermore, fostering an egalitarian and respectful culture can significantly reduce barriers for women in the workplace. To address these challenges, intelligent safety solutions must integrate new features and techniques. Such systems should empower women to preemptively assess safe routes and record evidence through audio-video recordings on their mobile devices. Ultimately, this seeks to create a secure environment where women feel protected and empowered.

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