

## A Study on AI Technology Upgradation for Employees in Web Walk Infosys at Madurai

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### Abstract

This paper presents a comprehensive study on the design and implementation of a hybrid renewable energy system (HRES) tailored for rural electrification. The proposed system integrates solar photovoltaic (PV) and wind energy with battery storage to deliver a reliable and sustainable power supply to off-grid rural areas. The motivation for developing such a hybrid system stems from the intermittent and unpredictable nature of individual renewable sources, which often fall short in meeting consistent energy demands when used independently. By combining solar and wind resources, the system maximizes energy availability and minimizes reliance on fossil fuels, thereby promoting environmental sustainability. The study emphasizes the use of HOMER (Hybrid Optimization of Multiple Energy Resources) software to simulate and optimize the configuration of the system based on specific site data such as solar irradiance, wind speed, load requirements, and economic constraints. Key performance indicators, including cost of energy (COE), net present cost (NPC), and renewable fraction, are analyzed to evaluate system efficiency and economic feasibility. Results indicate that the hybrid system not only improves energy reliability but also significantly reduces carbon emissions compared to conventional diesel-based systems. The paper concludes that HRES offers a promising solution for electrifying remote regions, especially in developing countries, where grid extension is often impractical and uneconomical. Future work may focus on incorporating other renewable sources and smart control systems to further enhance performance and adaptability.

**Keywords:** Artificial Intelligence (AI), Digital Transformation, Employee Adaptability, AI Technology Upgradation, Web Walk Infosys.

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### Introduction

The advancement of Artificial Intelligence (AI) technologies has become a transformative force in modern workplaces. AI upgradation refers to the integration of intelligent systems and the enhancement of employee competencies to align with these innovations. In a rapidly evolving digital economy, organizations must equip their workforce with the necessary skills to collaborate effectively with AI-driven tools. Such integration not only automates routine tasks but also improves analytical capabilities and overall decision-making. Companies like Webwalk Infosys have recognized the strategic value of investing in employee upskilling to adapt to AI systems. This study aims to explore the approaches used for AI implementation, the challenges encountered by employees, and the resulting effects on performance,

satisfaction, and organizational efficiency. A balanced approach to technological and human development is essential for achieving sustained innovation and competitiveness.

### Statement of the Problem

The research problem for AI Technology Upgradation for Employees in Webwalk Infosys revolves around understanding how the integration and upgradation of AI technologies within Webwalk impacts its employees at multiple levels. As AI continues to evolve, businesses like Webwalk must assess how these technological advancements affect employee skills, job roles and overall organizational dynamics. A critical aspect of this study involves identifying whether employees possess the necessary skills to adapt to the

new AI tools and if not, how the company can effectively bridge this gap through targeted training and upskilling initiatives. Additionally, it is essential to explore the perceptions and attitudes of employees towards AI, including their concerns about job security, autonomy and the ethical implications of AI-driven decision-making. The research will also examine the effect of AI upgradation on employee productivity, innovation and overall job satisfaction, while considering potential changes in work culture and organizational structure. In essence, the study aims to identify strategies for optimizing AI implementation to enhance both employee growth and organizational efficiency, ensuring that the integration of AI technologies contributes positively to both individual and collective outcomes within Webwalk.

### Objectives of the Study

- To study the employees' aspirations and concerns about AI upgradation.
- To understand the AI update for employees' job roles, tasks and responsibilities.
- To examine the effectiveness of AI training programs for improving employee capabilities.
- To identify the effect of AI technology implementation strategy by the company.
- To get opinion from the respondents towards the latest AI upgradation and its work effectiveness.
- To find out the employees work efficiency and impact about AI influence and upgradation.

### Need of the Study

This study is essential to assess the impact of AI upgradation on employees at Webwalk Infosys, focusing on technology upgradation and development, job roles and workplace dynamics. The study is significant to identify the traditional and modern technology implementation gaps, evaluate AI training effectiveness and address employee concerns like job security and ethical issues. Analyzing the survey is of major importance to AI's influence on saving time, human energy for the workplace, precise and quick data entry process, job satisfaction, all the needs to enhance the quality, huge number of advertisement opportunities, web development and also create a company goodwill. The research study is to help in various AI adoption strategies, ensuring both employee growth and organizational success.

### Scope of the Study

This study focuses on the integration of Artificial Intelligence (AI) technologies at Webwalk Infosys and their impact on employee roles, skills, and workplace dynamics. It examines the effectiveness of AI training programs, identifies skill gaps, and evaluates how employees adapt to new technologies. The research also explores employee perceptions, including concerns about job security, ethical implications, and changes in job responsibilities. Additionally, it analyzes the influence of AI on productivity, workflow efficiency, and organizational practices. The study aims to provide strategic insights for improving AI implementation while supporting employee development and organizational success.

### Hypothesis of the Study

**H<sub>0</sub>:** AI Technology upgradation has no significant impact on employee performance at Web Walk Infosys.

**H<sub>1</sub>:** AI Technology upgradation significantly enhances employee performance at Web Walk Infosys.

**H<sub>0</sub>:** There is no significant association between department and awareness of AI technology upgradation.

**H<sub>1</sub>:** There is a significant association between department and awareness of AI technology upgradation.

### Research Design

Research design is a structured framework that outlines the methods and procedures for conducting a research study. It helps in systematically collecting, analyzing and interpreting data to achieve the research objectives. A well-defined research design ensures the accuracy and reliability of findings, contributing to meaningful conclusions. This research follows a descriptive research design to analyze the relationship between AI technology upgradation and employee performance. It involves collecting quantitative and qualitative data through surveys, interviews and opinion.

### Research Methodology

This study adopts a descriptive and analytical approach to explore the influence of AI technology upgradation on employees at Webwalk Infosys. It is designed to evaluate employee experiences, perceptions, and the effectiveness of organizational strategies related to AI integration. The methodology involves systematic data collection and analysis aligned with the research objectives, enabling the identification of trends, challenges, and potential areas for improvement. The findings are interpreted to offer relevant insights and practical recommendations for enhancing both employee engagement and organizational outcomes through effective AI adoption.

### Method of Data Collection

#### Primary Data

Primary data were collected using a structured questionnaire distributed to employees, managers, and executives at Webwalk Infosys. This approach enabled the gathering of direct insights and opinions relevant to the study.

#### Secondary Data

Secondary data were sourced from standard textbooks, published research articles, journals, company reports, magazines, and credible websites related to AI and workforce development.

#### Statistical Tools Employed

- Percentage analysis shows how data is split into percentages.
- Correlation finds the relationship between two variables.
- Chi-Square Test checks if there is a significant association between two categorical variables by comparing observed and expected frequencies.
- ANOVA checks if there are differences between group averages.
- Rank test compares the order or preference of items.

### Period of the Study

The study was conducted over a four-month period from January to April 2025. During this time, primary data was collected to assess the impact of AI technology upgradation on employees at Webwalk Infosys, Madurai. This time frame allowed for a comprehensive analysis of the effects of AI integration on employees' daily work routines.

### Area of the Study

This study focuses on the implementation and integration of Artificial Intelligence (AI) technologies at Web Walk Infosys, Madurai. It investigates the effects of AI on employee skills,

job roles, and overall performance. The research also assesses how employees adapt to AI-driven tools, the effectiveness of related training programs, and the impact of AI on workplace productivity, dynamics, and job satisfaction.

### Limitations of the Study

- The study is limited to a specific group of employees at Web Walk Infosys, which may not represent the entire workforce.
- The findings are based on employee responses and company data, which may not always be fully accurate or comprehensive.

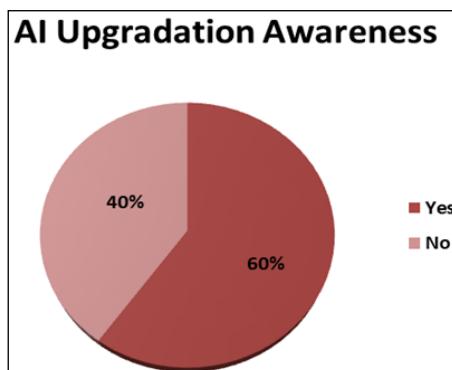
### Company Profile

Web Walk Infosys, founded in 2008 and based in Madurai, is a dynamic media and branding Solutions Company that fuses creativity with technology to offer impactful business results. The company delivers a broad spectrum of services ranging from web design and development to logo creation, professional email setups, and digital advertising through platforms like Google, YouTube, and Facebook. These offerings are tailored to suit the diverse needs of start-ups, mid-sized enterprises, and large corporations, with an emphasis on innovation, quality, and timely execution by a dedicated team of professionals. Beyond its core digital services, Web Walk also excels in creative design and printing solutions. It provides customized brochure, menu card, catalogue, and billboard designs to enhance brand visibility. The company's printing division offers both digital and offset services for a wide array of marketing materials, including business cards, flyers, posters, and magazines. Additionally, Web Walk's branding services encompass in-shop branding, signage, uniforms, umbrellas, tents, balloons, and display systems helping clients strengthen their retail presence and customer engagement. Web Walk Infosys actively participates in national and international promotional events, demonstrating its capabilities in AI-driven innovations, digital transformation, and business strategy. With a strong focus on customer satisfaction and cost-effective solutions, the company continues to evolve with emerging technologies. Its commitment to professionalism, creativity, and long-term client relationships has positioned it as a key contributor to the advertising and IT ecosystem in Tamil Nadu and beyond.

### Data Analysis and Interpretation

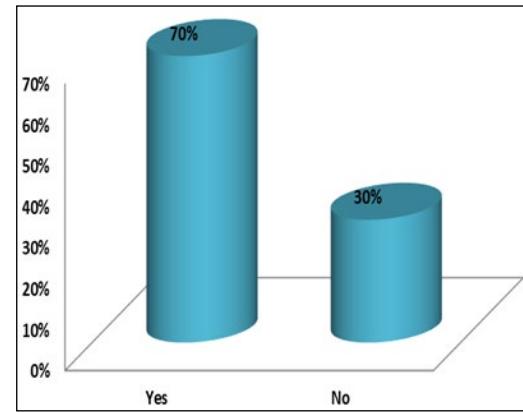
#### Percentage Analysis

#### AI Upgradation Awareness



The data shows that 60% of respondents are aware of AI upgradation, reflecting a moderate level of awareness within the organization. However, the 40% who are unaware highlight the presence of potential gaps in training or communication regarding AI advancements. This suggests the need for further efforts to improve awareness and ensure all employees are adequately informed about AI-related developments in their work environment.

### Usage of AI-based Tools



The data indicates that a substantial 70% of respondents (119 individuals) are actively utilizing AI-based tools in their daily work, highlighting a significant integration of AI technology into their tasks. This suggests that AI is a key component in the organization's operations. However, the remaining 30% (51 respondents) do not yet use AI-based tools, indicating potential areas for further AI adoption or training.

### Correlation Analysis for Monthly Salary with AI Transformation

Correlations			
		Monthly Salary	AI Transformation
Monthly Salary	Pearson Correlation	1	.651**
	Sig. (2-tailed)		.000
	N	170	170
AI Transformation	Pearson Correlation	.651	1
	Sig. (2-tailed)	.000	
	N	170	170

\*\*.Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation coefficient ( $r = 0.651$ ) indicates a strong positive relationship between monthly salary and AI transformation. With a p-value of 0.000, which is less than the 0.01 significance level, the correlation is statistically significant. This suggests that employees with higher monthly salaries are more likely to be involved in or adapt to AI transformation efforts. As a result, the null hypothesis is rejected, supporting the alternative hypothesis that a significant relationship exists between salary and AI transformation.

### Chi Square test for Department with Employee Awareness of AI Technology Upgradation

		Count		Total	
		AI Technology Upgradation			
		Yes	No.		
Department	Software Development Dept.	102	0	102	
	Customer Support Dept.	0	17	17	
	Data Science/Analytics Dept.	0	34	34	
	Marketing Dept.	0	9	9	
	HR Dept.	0	8	8	
Total		102	68	170	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.700E2 <sup>a</sup>	4	.000
Likelihood Ratio	228.824	4	.000
Linear-by-Linear Association	128.825	1	.000
N of Valid Cases	170		

3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.20.

The Pearson Chi-Square test result (170.002) with a p-value of 0.000 indicates a significant association between the department and employees' awareness of AI upgradation. The distribution of awareness is not independent of the department, suggesting that AI upgradation efforts are more concentrated in the Software Development Department. Other departments may not be as informed or impacted by the upgrade, highlighting a need for improved communication and awareness across all departments.

### ANOVA Analysis for Experience with AI Related Training

ANOVA					
AI Related Training					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	166.024	4	41.5056	51.126	.000
Within Groups	133.953	165	.812		
Total	299.976	169			

The ANOVA results show a significant difference in AI-related training across experience groups, with an F-value of 51.126 and a p-value of 0.000. This indicates that the amount or type of AI training varies based on an individual's experience level.

### Rank test Analysis for Benefits of AI Technology Upgradation among Employees

Ranks		Mean Rank
Reduced Manual Errors		4.08
Faster Decision Making		4.38
Improved Efficiency and Productivity		3.37
Better Data Analysis and Reporting		4.55
Enhanced Customer Service		5.23
Automation of Repetitive Tasks Improved		3.40
Communication and Collaboration		5.04
No Noticeable improve		5.96

Test Statistics <sup>a</sup>	
N	170
Chi-Square	423.013
df	7
Asymp. Sig.	.000

a. Friedman Test

The Friedman Test results indicate a statistically significant difference in the perceived benefits of AI technology upgradation among employees at Web Walk Infosys. With a p-value of 0.000 (less than 0.05), it is evident that employees recognize specific advantages of AI integration. The highest-ranked benefits were "Improved Efficiency and Productivity" (3.37) and "Automation of Repetitive Tasks" (3.40), signifying strong positive perceptions of AI's impact on operational efficiency and task automation. On the other hand, "No Noticeable Improvement" was ranked lowest (5.96), suggesting that some employees did not observe significant benefits from AI upgradation. This highlights the varying levels of perceived effectiveness of AI among employees and underscores areas for further evaluation and improvement.

### Suggestions

- Provide all departments with the necessary AI tools and resources to promote uniform adoption and application across the organization.
- Conduct regular feedback sessions and awareness programs to tackle concerns such as job security, privacy and technological complexity.
- Motivate employees to adopt and apply AI tools by linking performance, innovation and learning with tangible incentives and growth opportunities.
- Support flexible work preferences by investing in AI tools that enhance collaboration and productivity both online and on-site.

### Conclusion

The study concludes that while AI technology upgradation at Web Walk Infosys has led to measurable improvements in certain areas, its implementation remains inconsistent across departments and employee levels. Key barriers such as inadequate training, limited awareness, and a lack of inclusive tools have slowed broader adoption. To fully leverage AI's potential, the organization must prioritize inclusive, role-specific training, promote continuous learning, and establish a unified AI integration strategy. Empowering employees at all levels will be essential for fostering innovation, enhancing productivity, and ensuring long-term success in the digital era.

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