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A STUDY ON THE EFFECTIVENESS TOWARDS RESKILLING AND UPSKILLING INITIATIVE

Ms. K. Priyadharshini 1 Mrs. S. Shireen Fathima2
1. IInd Year MBA Student, Panimalar Engineering College
2. Professor, Department of Master of Business Administration, Panimalar Engineering College

Abstarct -This research aims to explore how reskilling and upskilling programs are effective in preparing workers for future job demands. By analyzing different initiatives, training methods, and their results, the study aims to offer insights into the most effective ways to bridge skill gaps and promote career progression. For conducting this research, data is gathered via a standardized questionnaire from 158 employees of Rane groups. The questions are based on "Skill Acquisition", "Employee engagement and satisfaction", "Adaptability to technological advances" and "Long term career development" used to evaluate the effectiveness towards reskilling and upskilling initiatives. The study surveyed mostly male, married individuals aged 31-35 with 1-5 years of company experience and diploma qualifications. Most found skills moderately challenging and favored online tutorials. Knowledge acquisition phase was deemed useful by 96.2%. Satisfaction with current jobs was moderate. Significant differences were found in skill acquisition between groups, while other areas showed no significant variance. The results provide important understandings of the drivers of employee engagement, skill development, adaptability to technology, and long-term career growth. Using this knowledge, organizations can develop a holistic approach to talent management and strategy, promoting continuous learning, innovation, and adaptability in their culture.

INTRODUCTION

Reskilling refers to the process of acquiring new skills or upgrading existing ones to adapt to changes in job requirements, industry trends, or technological advancements. It involves training and development initiatives aimed at equipping individuals with the capabilities needed to perform effectively in evolving roles or sectors. Upskilling involves enhancing one's existing skill set or acquiring new skills to meet the evolving demands of the job market, industry advancements, or technological innovations. It typically focuses on developing specialized competencies, technical proficiencies, or leadership capabilities that enable individuals to perform their current roles more effectively or qualify for higher-level positions. Upskilling initiatives aim to empower individuals with the knowledge and expertise required to succeed in a rapidly changing professional landscape. In the dynamic landscape of the modern workforce, reskilling and upskilling have emerged as indispensable strategies for organizations and individuals alike to thrive amidst rapid technological advancements and evolving job markets. With automation, artificial intelligence, and other disruptive forces reshaping industries at an unprecedented pace, the need for continuous learning and adaptation has never been more pressing. This study seeks to delve into the effectiveness of reskilling and upskilling initiatives in preparing workers for the demands of tomorrow's jobs. By examining various programs, training methodologies, and their outcomes, this research aims to provide insights into the most efficient approaches to closing skill gaps and fostering career advancement. The need for reskilling and upskilling initiatives stems from the profound transformations underway in the global economy. Technological advancements, automation, and globalization are reshaping industries and job requirements at an unprecedented pace. As traditional job roles evolve or become obsolete, workers must acquire new skills to remain relevant and competitive in the workforce. The rapid pace of innovation necessitates continuous learning to adapt to emerging technologies and evolving job demands. Reskilling and upskilling initiatives not only enable individuals to stay employable but also empower them to pursue career advancement opportunities and higher-paying roles. Moreover, reskilling and upskilling initiatives are crucial for organizations seeking to maintain a skilled workforce capable of driving

innovation and sustaining competitive advantage. By investing in the development of their employees' skills, companies can enhance productivity, foster employee engagement, and future-proof their operations against technological disruptions. Ultimately, reskilling and upskilling initiatives are essential for both individual career growth and organizational success in today's dynamic economy. Key factors such as the alignment of training with industry needs, accessibility of programs, engagement levels of participants, and the impact on organizational performance will be thoroughly analyzed. Additionally, the study will explore challenges faced in implementation and identify best practices for maximizing the benefits of reskilling and upskilling efforts. By shedding light on the effectiveness of these initiatives, this research endeavors to inform policymakers, educators, employers, and individuals on strategies to navigate the evolving workforce landscape successfully. Ultimately, it aspires to contribute to the development of more robust and responsive skill development ecosystems that empower individuals and organizations to thrive in an ever changing world of work. This study employs a mixed-methods approach, combining quantitative analysis of performance metrics and qualitative assessment through interviews and surveys. By leveraging both quantitative and qualitative data, a comprehensive understanding of the multifaceted impacts of reskilling and upskilling initiatives can be attained. Furthermore, this research aims to address gaps in existing literature by focusing not only on the immediate outcomes of training programs but also on the long-term sustainability of skill acquisition and its implications for career progression and job retention. By exploring the factors that contribute to successful skill transfer and application in real-world contexts, this study aims to provide actionable recommendations for stakeholders across industries. In conclusion, this research endeavors to contribute to the ongoing discourse on workforce development by offering evidence-based insights into the effectiveness of reskilling and upskilling initiatives. By
identifying strategies that yield tangible benefits for individuals and organizations alike, this study aims to foster a culture of lifelong learning and adaptation, essential for thriving in the rapidly evolving landscape of the 21st-century economy.

NEED OF THE STUDY

The study of reskilling and upskilling initiatives is crucial for manufacturing companies to navigate the ever-evolving landscape of technology and industry demands. In the dynamic field of manufacturing, where advancements in automation and digitalization are prevalent, employees need to continuously acquire new skills to remain relevant. Reskilling ensures that existing workers can adapt to emerging technologies, preventing skill gaps and enhancing overall productivity. Moreover, upskilling initiatives empower employees with advanced skills, fostering innovation within the workforce. As manufacturing processes become more technologically sophisticated, companies that invest in reskilling and upskilling programs cultivate a versatile workforce capable of efficiently operating and maintaining cutting-edge equipment. This not only boosts employee morale but also contributes to a company's competitiveness by ensuring they have a skilled and adaptable workforce.

OBJECTIVE OF THE STUDY

- To Assess the acquisition and mastery of new skills and competencies relevant to the industry.
- To Gauge the level of employee engagement and satisfaction with the initiatives.
- To Evaluate employees' ability to adapt to technological advancements.
- To Support employees in achieving their long-term career goals within the organization.

REVIEW OF LİTERATURE

1.Ling Li, (2022) in his title “Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and beyond”, It is stated that he concentrate on the reskilling and upskilling of the workforce to make them future-ready for Industry 4.0 and beyond. In order to implement Industry 4.0, the industry has identified the top talents that are needed, and we have provided a blueprint that can be used as a guide for learning and gaining new expertise. According to the study's conclusions, an organization's strategic goals ought to include lifelong learning Companies and individuals alike must show a commitment to upskilling and reskilling, and they must see career development as a critical component of the workforce of the future. This paper offers a novel viewpoint on a learning society prepared for the future as a crucial component of the Industry 4, 0 agenda.

2.Siti Norida Wahab, Shalini Rajendran, Swee Pin Yeap, (2021) in their title "Upskilling and reskilling requirement in logistics and supply chain industry for the fourth industrial revolution", It is stated that the study uses inductive reasoning, supported by a review of relevant academic journal articles, to determine Malaysia's upskilling and reskilling needs in the logistics sector during Industry 4.0 from both internal and extrinsic perspectives. The primary significance of upskilling and reskilling, according to the report, is in altering the workplace and workforce and increasing employees' competitiveness and cost-effectiveness over the long run. The findings, in spite of the paper's qualitative methodology, will serve as a basis for further research and a greater understanding of the upskilling and reskilling required for IR 4.0. This study offers a different approach for a developing nation that depends on a non-renewable resource to diversify its economy and enter IR 4.0.

3.Navya John, (2020) in her title "Upskilling Initiatives by IT Companies in the Age of Industry 4.0", It is stated that the purpose of this study was to ascertain the degree of Industry 4.0 knowledge possessed by the top five Indian IT organisations, as well as the strategies they take to address the risk of staff digitization. Other companies in the sector could benefit from this study by learning about the L&D procedures used by the top five companies. The top organisations that have been selected can review the programmes that they now implement and the enhancements that can be made to help their staff members reskill and upskill. All of the study's selected organisations have been implementing learning and development initiatives in addition to upskilling or reskilling projects.

4.Samrat Ray, (2022) is his title "Upskilling and Reskilling for a Greener Global Business Ecosystem: Web 4.0 Perspective", It is stated that employees perform better when they have greener talents. The investigator gained a good understanding of the significance of environmentally conscious capabilities in the automotive sector by examining skill shortages. The car business created the feedback looping system, which is where all the exact data was recorded, to help employees apply greener skills in their work. The forecast's outcomes have proven to be consistent with previous patterns that were inferred from the historical data. The
projection generated by the regression model indicates a positive trend for the upcoming years.

RESEARCH METHODOLOGY

Research methodology explains how a researcher plans to conduct their research, ensuring reliable, valid results that address their aims and objectives. It includes details on what data to collect, from where, and how it will be collected and analyzed. Research design, the framework of methods and techniques chosen, sharpens the research approach for success. This study uses descriptive research, focusing on describing the characteristics of a population or phenomenon without investigating the reasons behind them. The sampling method employed is probability sampling, where members of a population are chosen randomly, giving each an equal chance of selection. Specifically, simple random sampling is used, where each population member has an exactly equal chance of being chosen. The sample size, determined using the Krejcie and Morgan table, is 158.

DATA ANALYSIS AND INTERPRETATION

Non parametric tests

1. **U Test**

Ranks

	Gender	N	Mean Rank	Sum of Ranks
V1	Male	7	22.07	154.50
	Female	151	82.16	12406.50
	Total	158		
V2	Male	7	65.57	459.00
	Female	151	80.15	12102.00
	Total	158		
	Female	151	80.95	12224.00
	Total	158		
V4	Male	7	70.93	496.50
	Female	151	79.90	12064.50
	Total	158		
V5	Male	7	87.64	613.50
	Female	151	79.12	11947.50
	Total	158		

Test Statistics[a]

	V1	V2	V3	V4	V5
Mann-Whitney U	126.500	431.000	309.000	468.500	471.500
Wilcoxon W	154.500	459.000	337.000	496.500	1.195E4
Z	-3.478	-.844	-1.900	-.534	-.540
Asymp. Sig. (2-tailed)	.001	.399	.057	.593	.589

a. Grouping Variable: Gender

INFERENCE

It is inferred that there are significant differences in skill acquisition between the groups, while no significant differences were found in employee engagement and satisfaction, adaptability to technological advances, and long-term career development. However, there might be some trends worth exploring further, especially regarding adaptability to technological advances.

2.H test

Ranks

	Age	N	Mean Rank
V1	Below 25 years	9	32.83
	26-30 years	11	97.09
	31-35 years	110	77.36
	36-40 years	27	96.89
	Above 40 years	1	71.50
	Total	158	
V2	Below 25 years	9	71.33
	26-30 years	11	98.05
	31-35 years	110	73.27
	36-40 years	27	99.07
	Above 40 years	1	106.00
	Total	158	
V3	Below 25 years	9	59.28
	26-30 years	11	86.45
	31-35 years	110	77.93
	36-40 years	27	89.41
	Above 40 years	1	90.50
	Total	158	
V4	Below 25 years	9	69.28
	26-30 years	11	50.64
	31-35 years	110	78.17
	36-40 years	27	102.22
	5	1	22.00
	Total	158	
V5	Below 25 years	9	101.39
	26-30 years	11	115.68
	31-35 years	110	78.17
	36-40 years	27	61.39
	Above 40 years	1	119.50

Ranks

	Age	N	Mean Rank
V1	Below 25 years	9	32.83
	26-30 years	11	97.09
	31-35 years	110	77.36
	36-40 years	27	96.89
	Above 40 years	1	71.50
	Total	158	
V2	Below 25 years	9	71.33
	26-30 years	11	98.05
	31-35 years	110	73.27
	36-40 years	27	99.07
	Above 40 years	1	106.00
	Total	158	
V3	Below 25 years	9	59.28
	26-30 years	11	86.45
	31-35 years	110	77.93
	36-40 years	27	89.41
	Above 40 years	1	90.50
	Total	158	
V4	Below 25 years	9	69.28
	26-30 years	11	50.64
	31-35 years	110	78.17
	36-40 years	27	102.22
	5	1	22.00
	Total	158	
V5	Below 25 years	9	101.39
	26-30 years	11	115.68
	31-35 years	110	78.17
	36-40 years	27	61.39
	Above 40 years	1	119.50
	Total	158	

Test Statistics[a,b]

	V1	V2	V3	V4	V5
Chi-Square	15.895	9.876	3.638	14.604	17.644
df	4	4	4	4	4
Asymp. Sig.	.003	.043	.457	.006	.001

a. Kruskal Wallis Test

b. Grouping Variable: Age

INFERENCE

Since P value > 0.05, therefore the test failed to reject the null hypothesis. Thus, there is no significant difference among the mean rank of age groups with respect to "Adaptability to technological advances and employee engagement/satisfaction". Since P value < 0.05, therefore the test rejects the null hypothesis. Thus, there is significant difference among the mean rank of age groups with respect to "Skill acquisition and employee engagement/satisfaction", "Adaptability to technological advances and long term career development".

3.Spearman's correlation

Correlations

			V1	V2	V3	V4	V5
Spearman's rho	V1	Correlation Coefficient	1.000	.412**	.223**	.150	-.050
		Sig. (2-tailed)	.	.000	.005	.059	.534
		N	158	158	158	158	158
	V2	Correlation Coefficient	.412**	1.000	.353**	.276**	.012
		Sig. (2-tailed)	.000	.	.000	.000	.880
		N	158	158	158	158	158
	V3	Correlation Coefficient	.223**	.353**	1.000	.204*	.157*
		Sig. (2-tailed)	.005	.000	.	.010	.049
		N	158	158	158	158	158
	V4	Correlation Coefficient	.150	.276**	.204*	1.000	-.533**
		Sig. (2-tailed)	.059	.000	.010	.	.000
		N	158	158	158	158	158
	V5	Correlation Coefficient	-.050	.012	.157*	-.533**	1.000
		Sig. (2-tailed)	.534	.880	.049	.000	.
		N	158	158	158	158	158

Correlations

			V1	V2	V3	V4	V5
Spearman's rho	V1	Correlation Coefficient	1.000	.412**	.223**	.150	-.050
		Sig. (2-tailed)	.	.000	.005	.059	.534
		N	158	158	158	158	158
	V2	Correlation Coefficient	.412**	1.000	.353**	.276**	.012
		Sig. (2-tailed)	.000	.	.000	.000	.880
		N	158	158	158	158	158
	V3	Correlation Coefficient	.223**	.353**	1.000	.204*	.157*
		Sig. (2-tailed)	.005	.000	.	.010	.049
		N	158	158	158	158	158
	V4	Correlation Coefficient	.150	.276**	.204*	1.000	-.533**
		Sig. (2-tailed)	.059	.000	.010	.	.000
		N	158	158	158	158	158
	V5	Correlation Coefficient	-.050	.012	.157*	-.533**	1.000
		Sig. (2-tailed)	.534	.880	.049	.000	.
		N	158	158	158	158	158

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

*. Correlation is significant at the 0.05 level (2-tailed).

INFERENCE

From the Spearman's correlation it is founded that all variables show moderate positive correlation with each other, suggesting that they are positively related and tend to increase together.

SUMMARY OF FINDINGS

● There are significant differences in skill acquisition between the groups, while no significant differences were found in employee engagement and satisfaction, adaptability to technological advances, and long-term career development. However, there might be some trends worth exploring further, especially regarding adaptability to technological advances.

● Since P value > 0.05, therefore the test failed to reject the null hypothesis. Thus, there is no significant difference among the mean rank of age groups with respect to "Adaptability to technological advances and employee engagement/satisfaction".

● Since P value < 0.05, therefore the test rejects the null hypothesis. Thus, there is significant difference among the mean rank of age groups with respect to "Skill acquisition and employee engagement/satisfaction"," Adaptability to technological advances and long term career development .

SUGGESTION

● Invest in programs that promote skill acquisition among employees, as it correlates

positively with employee engagement and satisfaction.

● While not statistically significant, there's a trend showing a potential relationship between adaptability to technological advances and long-term career development. Consider initiatives to improve employees' tech adaptability for future career growth.

● Prioritize initiatives aimed at boosting employee engagement and satisfaction, as they have a positive correlation with adaptability to technological changes and long-term career development

● Despite a weak correlation, explore avenues to strengthen the link between skill acquisition and long-term career development for better organizational outcomes.

CONCLUSION

In today's rapidly evolving business landscape, organizations must prioritize employee development and adaptability to remain competitive and ensure long-term success. The findings and inferences derived from our comprehensive analysis shed light on key factors influencing employee engagement, skill acquisition, adaptability to technological advances, and long-term career development. By synthesizing these insights, we can formulate a holistic approach to optimize organizational performance and cultivate a thriving workplace environment.One of the pivotal conclusions drawn from the analysis is the significant correlation between skill acquisition and employee engagement/satisfaction. The research underscores the importance of investing in initiatives aimed at enhancing employees' skill sets, as it not only contributes to their professional growth but also fosters a deeper sense of engagement and satisfaction in their roles. By providing opportunities for continuous learning and development, organizations can empower their workforce to adapt to evolving job requirements and contribute meaningfully to the company's objectives.

Books Referred

• Redefining Reskilling & upskilling by Brandon hall group (2022)

• Reskilling and upskilling future business and industry by Sonal Rai and Ashu UkJain (2022)

• The Upskilling imperative by shelley osborne (2022)

• Statistics for management for management by Richard L Levin

Journal Referred

• Andra-Teodora Gorski, Ilie Gligorea, Hortensia Gorski, Romana Oancea, (2023) in their title "Navigating the Disruptive Challenges and Opportunities of Digital Transformation in the labour market : Upskilling and Reskilling for the fourth industrial Revolution”

• Dr K Samuvel, Gilsha K G, (2023) in their title "A Study on Impact of Upskilling or Reskilling of Employees in IT Services"

• Ling Li, (2022) in his title “Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and beyond”

• Mattia Pedota, Luca Grilli, Lucia Piscitello, (2023) in their title "Technology adoption and upskilling in the wake of Industry 4.0"

• Navya John, (2020) in her title "Upskilling Initiatives by IT Companies in the Age of Industry 4.0"

• Rhea Sawant, Bryan Thomas, (2022) in their title "Reskilling and Upskilling: To Stay Relevant in Today's Industry"