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Dual Pathways to Success: Combining Upskilling and Reskilling for Self-efficacy and Career Development

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Abstract
The traditional linear career trajectory has become all but outdated with the ever-quickening pace of technological progress and the changing market demand. In view of this, this paper advances the "Dual Pathways to Success" concept, through which upskilling and reskilling become complementary strategies in career development. Upskilling enhances the skill set currently possessed by an individual to gain more expertise and adapt to new tools or processes in their current job. In contrast, reskilling provides people with completely different sets of skills, empowering them for role or sectoral change. The dual-pathway approach realizes that in today's very dynamic job market, there needs to be more than a one-size-fits-all strategy. Upskilling and reskilling taken together provide a more holistic framework for career development, which would help employees not only in their immediate roles but also equip them with the versatility to succeed in future roles, avoiding skill obsolescence and preparing the workforce for emerging opportunities. The paper discusses strategic ways in which upskilling and reskilling would benefit the culture of learning by the organization in creating a continuous learning and adaptive workforce. The critical elements addressed in this research are about the aspects that make implementation successful, including the involvement of technology in personalized learning and partnership with educational institutions, together with the role of leadership in driving upskilling and reskilling culture. It further reviews the impacts of such strategies on worker engagement, retention, and overall organizational performance. Case studies from leading companies that have already adopted dual pathways effectively are considered to add real-world insight into best practice and common challenges. It concludes with a roadmap for the implementation of this dual approach in organizations, ensuring alignment of these initiatives with broader business objectives and workforce planning strategies. These two pathways of upskilling and reskilling are a rather robust approach that ensures that not only the employee but also the organization is staying competitive in this ever-changing landscape.
Keywords: *Upskilling, Reskilling, Career development, Employee Engagement.*

1. Introduction
In today's fast-paced and ever-changing job market, e-learning has emerged as a key enabler of professional growth. It facilitates upskilling and reskilling, ensuring individuals can adapt to new roles, embrace emerging technologies, and sustain their competitiveness in the workforce. The concept of self-efficacy plays a crucial role in this process, empowering learners to take ownership of their learning journey and develop the skills necessary for career development. This paper examines how Upskilling and Reskilling supports career growth by fostering a culture of continuous learning, overcoming challenges, and maximizing its benefits for personal and professional advancement.

2. Literature Reviews
In a study to identify the skill gaps in job and training pathways for young people in Australia, it is found that young workers are disproportionately affected

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by skill gaps, by automation and digitalization [4].Explores blockchain-based micro-credentials for upskilling and reskilling in Sweden, emphasizing their potential for validating skills in a digitalized workforce[1].Investigates case studies in advanced manufacturing to understand the role of upskilling in enhancing job prospects and industry output amid technological changes.[2] Proposes a roadmap for reskilling and upskilling in Turkey, focusing on vocational training and the integration of technological skills to meet industry demands [3]. Examines how artificial intelligence impacts workers' skills and the importance of continuous upskilling and reskilling to remain competitive in the digital workplace [4]. Discusses workforce policy strategies for upskilling and reskilling at the state level, focusing on meeting the demands of automation and digital skills [5]. Investigates the evolution of the workforce during the Fourth Industrial Revolution and the necessity of reskilling efforts to help workers adapt to new job roles due to automation [6]. Explores vocational education's role in preparing students for high-quality employment opportunities, advocating for industry-academic collaboration to ensure relevant skill development [7]. Examines the role of online platforms in facilitating upskilling and entrepreneurship through hybrid self-employment, especially in tech, marketing, and business sectors [8]. Analyses how automation and AI are reshaping skill demands, recommending data-driven strategies for businesses to design effective upskilling programs [8]. Highlights the skill obsolescence pressure on low-skilled occupations and stresses the importance of targeted reskilling programs for career advancement [9]. Focuses on smart working initiatives and how e-learning platforms can help upskill operational workers in flexible, task-oriented roles in modern workplaces [10]. Proposes strategies for reskilling and upskilling in Malaysia, emphasizing continuous learning and skill identification to maintain workforce competitiveness [13]. Investigates upskilling strategies to meet the growing demand for cloud computing talent, including education programs, industry-academic collaborations, and certifications [14]. Discusses the role of vocational education and training in the digital transition, advocating for upskilling and reskilling strategies to address the post-pandemic skills gap[15].

3. Methodology

3.1.Research Question

How will upskilling and reskilling courses help IT and ITES workers gain confidence in their skills as well as in better career prospects?

3.2.Objectives

- To examine the upskilling and reskilling initiatives undertaken by both employees and organizations.
- To assess the effectiveness of upskilling and reskilling programs that have been implemented.
- To analyse the perception of employees regarding the value of career development opportunities offered by their employers.
- To understand the impact of upskilling and reskilling programs on the self-efficacy of employees.
- To investigate whether upskilling and reskilling initiatives affect the perceived value of career development opportunities for employees

Sampling Techniques: Primary Data is collected using a structured questionnaire from 131 IT employees; Secondary Data is collected from Published sources such as academic articles and industry reports. Convenience sampling Method is used to collect the data. Descriptive statistics, T-test, ANOVA, Mediation Analysis to analyse the data, to understand the effect of self-efficacy on the relationship between e-learning and career development [11].

3.3.Findings

Interpretation: The data shows that employees, are strongly motivated to upskill due to external pressures like employer expectations (mean = 4.44), fear of layoffs (4.34), company incentives (4.34), and rapid tech changes (4.36) (Table 1).

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Table 1 Reasons for Upskilling and Reskilling

Reason	Mean	Std. Deviation
As my employer asked to fill the skill gap needed to do higher jobs.	4.44	714
I have my personalised plan for future career prospects.	3.63	1.003
My company rewards for learning new skills.	4.34	.848
To keep pace with the rapidly evolving technologies.	4.36	.842
These initiatives help me to be productive.	3.74	1.206
Due to Fear of layoff	4.34	.721

Table 2 Advantages for Upskilling & Reskilling

Advantages	Mean	Std. Deviation
Improved my job performance.	4.34	.699
I feel more confident	4.25	.880
Enhanced my career development opportunities within the organization.	4.28	.816
The skills gained from these programs are highly relevant to my current job responsibilities.	2.60	1.311

Interpretation: Upskilling and reskilling not only enhance job performance (mean=4.34), but also boost self-confidence (mean=4.25) and improve chances for career development (mean=4.28). However, in terms of relevance of skills gained in training toward current job tasks, ex-Biz morale had a low mean rating of 2.60, indicating a possible disconnect between learned skills and job performance (Table 2).

Table 3 Difficulties Faced in Upskilling and Reskilling

Difficulties	Mean	Std. Deviation
I find it challenging to balance my regular work duties with the time required for upskilling and reskilling programs.	2.65	1.189
The content of the training programs is not always applicable to my specific job role.	2.66	1.269
There is a lack of support from management in facilitating my participation in these programs.	2.59	1.300
The upskilling and reskilling initiatives are not well-structured or organized.	4.15	.596

Interpretation: A major challenge is balancing regular work duties with the time required for these programs (Mean = 2.65). Participants also find that the content isn't always applicable to their specific roles (Mean = 2.66) and that the initiatives are not well-structured or organized (Mean = 4.15). A lack of management support is also a concern (Mean = 2.59) (Table 3).

3.4.Reliability

Reliability testing is the evaluation of how consistently and stably a measuring tool or system works. It tests whether a test or instrument can give consistent results at different points in time, as it is necessary for determining the dependability of data or measurements. In research or data analysis, a reliable tool reduces the proportion of random errors to assure that influence resulting from external variables or chance minimized in the results. The reliability of an instrument largely allows the researchers to make verifiable claims with respect to

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their findings being replicable or trusted through various situations or timeframes (Table 4).

Table 4 Cronbach's Alpha Reliability for reasons for upskilling and reskilling and Perception of Value of Career Development

Cronbach's Alpa	No. of Items
0.6106	14

The Likert scale is coded as follows:

- SA (Strongly Agree) = 5
- A (Agree) = 4
- N (Neutral) = 3
- D (Disagree) = 2
- SD (Strongly Disagree) = 1

Interpretation: The 14-item scale measuring career development and upskilling shows moderate internal consistency (Cronbach's Alpha = 0.6106). This suggests the items are somewhat related, reflecting aspects like motivation, employer influence, skill relevance, and tech adaptation. While suitable for exploratory use, refining items or creating subscales could improve reliability (Table 5).

Table 5 Cronbach's Alpha Reliability for Advantages and difficulties

Cronbach's Alpa	No. of Items
0.7554	8

Interpretation: The scale measuring job performance, career development, training relevance, and support for upskilling shows moderate internal consistency (Cronbach's Alpha = 0.7554), indicating reasonable reliability. It uses a 5-point Likert scale (1 = Not at all, 5 = To a great extent) to assess perceptions of both benefits and challenges of upskilling. The items capture areas like confidence, career growth, work balance, and support, helping gauge respondents' experiences with training programs (Table 6).

Table 6 Cronbach's Alpha Reliability for General Self-Efficacy Scale

Cronbach's Alpa	No. of Items
0.9441	10

Interpretation:
The 10-item scale shows excellent internal consistency (Cronbach's Alpha = 0.9441), indicating high reliability in measuring self-efficacy and coping ability. Using a 5-point Likert scale ("Not at all true" to "Exactly true"), it assesses confidence in problem solving, handling unexpected events, and personal resilience (Table 7). The strong alpha value suggests the items consistently reflect the same underlying construct of General self-efficacy.

Table 7 Descriptive Statistics for Self-Efficacy

Statement	Mean	Std. Deviation
I can always manage to solve difficult problems if I try hard enough	3.00	.992
If someone opposes me, I can find the means and ways to get what I want.	3.11	.971
It is easy for me to stick to my aims and accomplish my goals.	3.08	.961
I am confident that I could deal efficiently with unexpected events.	2.92	.929
Thanks to my resourcefulness, I know how to handle unforeseen situations.	3.06	.990
I can solve most problems if I invest the necessary effort.	3.05	1.014
I can remain calm when facing difficulties because I can rely on my coping abilities.	3.05	1.002
When I am confronted with a problem, I can usually find several solutions.	3.08	1.023
If I am in trouble, I can usually think of a solution	3.11	1.076
I can usually handle whatever comes my way.	3.11	1.076

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Interpretation: From various statements related to self-efficacy, with mean scores reflecting employees' confidence in their problem-solving abilities and coping skills. The highest mean score is for "If someone opposes me, I can find the means and ways to get what I want" (Mean:3.11), indicating a moderate level of self-efficacy among employees. The overall scores suggest that while employees feel somewhat capable, there is room for improvement in their self-efficacy levels.

Conclusion

The study concludes that upskilling and reskilling have become critical strategies in navigating modern workforce demands, driven largely by the rapid evolution of technology, organizational expectations, and concerns around job security. The findings strongly indicate that employees perceive clear advantages from participating in such programs, particularly in terms of enhanced job performance, increased confidence, and improved career prospects within their organizations. Despite these perceived benefits, the study also uncovers notable challenges. A major concern is the lack of alignment between the training content and actual job roles, compounded by structural and organizational issues in program delivery. The perception that upskilling initiatives are not well structured undermines their potential effectiveness, even when motivation among employees is high. The role of career development was found to be significant in influencing the perceived benefits of upskilling, reinforcing the idea that well-integrated career development initiatives can amplify the impact of reskilling programs. In contrast, general self-efficacy did not significantly affect these perceptions and did not serve as a mediating factor, suggesting that individual belief in one's capability alone does not drive the perceived value of training unless supported by organizational structure and development culture. Furthermore, demographic factors such as experience and education level showed no significant influence on attitudes toward upskilling, suggesting a broadly shared understanding and valuation of reskilling across workforce segments. In summary, while employees recognize the importance and benefits of upskilling, its success is heavily dependent on how well these programs are properly aligned with job roles, organizational support, and strategic career development planning.

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