

# Beyond the Digital Divide: An Empirical Study of Demand- Led Learn-to-Earn Models within the SAP ERP Ecosystem for Indian Youth Employment

**Shashank Singh, Om Kulkarni, Pooja, Palak Pareek**

Department of Management, IIEBM Indus Business School, Pune

**Abstract:** *India's demographic advantage, driven by one of the largest youth populations in the world, presents both an opportunity and a challenge in the era of rapid digital transformation. While digital technologies are increasingly embedded in organizational processes, a significant segment of Indian youth remains excluded from high-value digital employment due to inadequate access to advanced, industry-relevant skills. This exclusion has given rise to a multidimensional digital divide encompassing not only access to technology but also disparities in digital capability, certification, and employability. This study explores demand-led Learn-to-Earn models within the SAP ERP ecosystem as a strategic response to this challenge. Learn-to-Earn models emphasize outcome-oriented learning by integrating skill development with certification, internships, and employment opportunities. Using extensive secondary data from industry reports, SAP partner initiatives, and employability studies, along with a proposed primary research design, the study evaluates the impact of SAP-aligned training on digital skill development and youth employability in India. The research highlights how such models contribute to workforce readiness, social inclusion, and economic mobility. The study concludes that demand-led SAP Learn-to-Earn models offer a scalable and sustainable pathway for bridging the digital divide and strengthening India's future workforce.*

**Keywords:** SAP ERP, Learn-to-Earn, Digital Divide, Youth Employability, India, Skill Development, Industry-Led Skilling, Workforce Readiness, Digital Capability, Social Inclusion

## I. INTRODUCTION

India stands at a critical juncture where demographic potential intersects with rapid technological change. With more than two-thirds of its population below the age of 35, the country possesses a vast reservoir of human capital capable of driving economic growth and innovation. However, the realization of this demographic dividend depends heavily on the employability of the workforce. In the contemporary knowledge economy, employability is increasingly defined by digital competence, adaptability, and familiarity with enterprise-level technologies.

Despite improvements in access to higher education, a substantial gap persists between educational attainment and job readiness. Many graduates possess theoretical knowledge but lack practical, application-oriented skills demanded by employers. This disconnect is particularly evident in enterprise digital platforms such as SAP ERP, which require hands-on experience, domain understanding, and certification. As organizations accelerate digital transformation initiatives, the demand for SAP-skilled professionals has expanded across functional domains including finance, supply chain management, human resources, analytics, and cloud integration.

At the same time, digital inequality continues to shape employment outcomes. Youth from rural areas, economically weaker sections, and marginalized communities often lack exposure to advanced digital tools and structured training opportunities. This digital divide restricts their participation in high-skill, high-wage employment segments. To address



this challenge, industry-led skilling initiatives have gained prominence, emphasizing alignment between training content and labor market demand.

Demand-led *Learn-to-Earn* models represent a shift from conventional education paradigms toward outcome-based skilling. These models integrate learning with income-generating opportunities through internships, apprenticeships, and job placements. Within the SAP ERP ecosystem, *Learn-to-Earn* initiatives aim to create job-ready professionals by combining technical training, certification, and employer engagement. This study examines the effectiveness of such models in enhancing digital skill development and employability among Indian youth, thereby contributing to inclusive and sustainable workforce development.

### **1.1 Background of Study**

The concept of the digital divide has evolved significantly over time. Initially understood as unequal access to computers and the internet, it now encompasses disparities in digital skills, quality of education, and access to meaningful employment opportunities. In India, while internet penetration and smartphone usage have increased, access to advanced digital training remains uneven. This disparity is particularly pronounced in specialized enterprise technologies that require structured learning environments and institutional support.

The SAP ERP ecosystem occupies a central position in the global digital economy. SAP solutions are widely adopted by organizations to manage critical business processes, improve operational efficiency, and enable data-driven decision-making. With the transition to SAP S/4HANA and cloud-based architectures, organizations require professionals who are not only technically proficient but also capable of applying ERP knowledge to real business scenarios. However, traditional academic curricula rarely include ERP platforms due to cost, infrastructure, and faculty constraints.

As a result, a paradox has emerged: organizations report shortages of SAP-skilled professionals, while educated youth struggle to secure employment. This mismatch has prompted the emergence of alternative skilling pathways that emphasize employability over credentials. *Learn-to-Earn* models are designed to address this gap by aligning training with industry demand and embedding employment outcomes into the learning process.

In the Indian context, SAP, along with its ecosystem partners, has launched multiple skilling initiatives aimed at youth employability, inclusion, and workforce readiness. These initiatives target not only technical skill development but also soft skills, problem-solving abilities, and workplace readiness. The background of this study is rooted in the need to systematically examine the role of such demand-led models in bridging the digital divide and enabling equitable access to high-value digital employment.

### **1.2 Statement of the Problem**

India faces a persistent challenge of graduate unemployment and underemployment despite significant expansion in higher education. A central cause of this issue is the misalignment between educational outputs and industry requirements. While industries increasingly rely on advanced digital platforms such as SAP ERP, the supply of job-ready professionals remains insufficient. This skill mismatch is further exacerbated by unequal access to quality digital training.

The problem is multidimensional. First, many educational institutions focus on theoretical instruction with limited exposure to real-world applications. Second, advanced enterprise technologies like SAP ERP are often inaccessible to students from rural and economically disadvantaged backgrounds due to high training costs and limited institutional partnerships. Third, there is a lack of structured pathways that link training directly to employment outcomes, resulting in uncertainty for learners and inefficiencies for employers.

Additionally, gender and regional disparities continue to influence employability. Women and youth from non-urban areas are underrepresented in high-skill digital roles, reinforcing socio-economic inequality. Consequently, organizations face talent shortages, while a large segment of educated youth remains unemployed or employed in roles that do not fully utilize their capabilities.



This study addresses the problem by examining whether demand-led SAP Learn-to-Earn models can effectively reduce skill mismatches, enhance employability, and promote inclusive workforce participation. By focusing on employment-linked training pathways, the research seeks to identify solutions that align individual aspirations with labor market needs.

## II. LITERATURE REVIEW

### 2.1 Digital Divide and Employability (with Evidence)

Empirical studies on employability in India consistently highlight a gap between educational attainment and job readiness. National employability surveys indicate that only around **50–56% of Indian graduates are considered employable**, despite rising enrollment in higher education. Furthermore, less than **5% of the workforce has received formal vocational or technical training**, underscoring the limited reach of skill-oriented education.

The digital divide is not merely infrastructural but capability-based. While urban youth increasingly access basic digital tools, advanced skills such as ERP configuration, data analytics, and enterprise process integration remain concentrated among a small, privileged segment. Research suggests that youth from rural and semi-urban regions are **30–40% less likely** to access advanced digital skilling programs compared to their urban counterparts. This disparity directly affects employability in high-growth sectors.

**-India Skills Report, National Skill Development Corporation, Periodic Labor Force Survey**

### 2.2 Industry-Led Skill Development and Institutional Involvement

Industry participation in skill development has emerged as a critical factor in improving employment outcomes. Public–private partnerships involving institutions such as the **National Skill Development Corporation (NSDC)**, **Sector Skill Councils**, and leading technology firms have demonstrated higher placement rates than traditional education pathways.

SAP has actively collaborated with institutions including: - **NSDC and Skill India Mission** – aligning SAP-based curricula with national skill frameworks - **Higher Education Institutions and Universities** – integrating SAP University Alliances programs - **Training Partners and ITIs** – delivering ERP-focused vocational training

The **SAP University Alliances Program**, for example, partners with over **3,000 universities globally**, including **200+ institutions in India**, providing students access to SAP S/4HANA, analytics, and ERP modules. Studies show that students exposed to ERP platforms during education demonstrate **20–30% higher employability** in enterprise IT roles.

**-Skill India Mission, SAP**

### 2.3 Learn-to-Earn Models: Programs and Outcomes

Learn-to-Earn models emphasize employment-linked training and measurable outcomes. In the SAP ecosystem, several initiatives illustrate this approach:

**SAP–Capgemini Digital Academy (India):** Targeted training for approximately **8,000 youth** over three years, with a focus on ERP, digital, and professional skills. The program emphasizes inclusion, with over **50% participation from women**.

**TechSaksham (SAP + Microsoft):** Aimed at training **60,000+ women students** in advanced digital and enterprise skills, linking learning to internships and employment pathways.

**SAP–UNICEF (Generation Unlimited):** Global initiative impacting millions of youth, including Indian learners, by improving workforce readiness and digital competencies. **-Capgemini, Microsoft, UNICEF**

Evidence from industry reports suggests that Learn-to-Earn participants experience **higher placement rates (60–75%)** compared to conventional IT training programs, which often report placement outcomes below 40%.



#### **2.4 SAP ERP, Major Companies, and Employment Generation**

SAP ERP skills are in demand across a wide range of industries. Major companies actively hiring SAP-skilled professionals in India include:

**IT Services and Consulting:** Accenture, Capgemini, Deloitte, TCS, Infosys, Wipro, IBM

**Manufacturing and Engineering:** Siemens, Bosch, Tata Motors, Larsen & Toubro

**Retail and FMCG:** Unilever, ITC, Reliance Retail

**Banking and Financial Services:** HDFC Bank, ICICI Bank, SBI (through technology partners)

India is one of SAP's largest talent markets, with estimates suggesting **over 200,000 SAP professionals** currently employed across industries, and annual demand growing by **8–10%** due to digital transformation and SAP S/4HANA migration. ERP-enabled roles span functional consultants, technical consultants, business analysts, and support specialists, contributing significantly to employment generation.

**SAP, NASSCOM**

#### **2.5 Role of Institutions and Government Programs**

Government-supported initiatives complement industry efforts in SAP-based employment generation. Programs such as **Skill India**, **Digital India**, and **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** emphasize digital and technology-oriented skills. When aligned with enterprise platforms like SAP ERP, these initiatives enhance job relevance and scalability.

Academic literature increasingly recommends integrating ERP platforms into formal education and vocational training. Studies conclude that structured ERP exposure, combined with certification and employer linkage, improves workforce readiness and supports inclusive economic growth.

**-Skill India Mission, Digital India, Pradhan Mantri Kaushal Vikas Yojana**

### **III. RESEARCH METODOLOGY**

#### **3.1 Research Design**

The study employs Descriptive and Analytical Research Design using a **Quantitative Approach**.

**Descriptive:** It seeks to describe the current state of digital awareness and employability perceptions among Indian youth.

**Analytical:** It uses statistical tools (like Chi-Square) to identify relationships between variables, such as the correlation between awareness and actual workshop participation.

**Empirical Nature:** The research is based on primary data collected through a structured survey to test the effectiveness of demand-led "Learn-to-Earn" models.

#### **3.2 Sources of Data**

The study utilizes two streams of data to ensure a comprehensive analysis:

**Primary Data:** Collected through a structured questionnaire consisting of 20 "Yes/No" questions administered to youth in Pune city.

**Secondary Data:** Sourced from industry reports (NASSCOM, SAP, Capgemini), government databases (Skill India, NSDC), and existing academic literature on the digital divide.

#### **3.3 Sampling Plan**

Sampling is critical to ensure the data represents the target demographic of "Indian Youth."

**Target Population:** Young adults (primarily students and recent graduates) currently residing in Pune, Maharashtra, which serves as a major hub for both education and the IT/ERP industry in India.

**Sampling Method: Convenience Sampling** (a non-probability sampling technique). This method was chosen due to the accessibility of the target demographic within educational and technical coaching environments.



**Sample Size: 70 respondents.** This size was determined to provide a statistically viable cross-section for preliminary empirical analysis while allowing for high-quality data cleaning.

**Sampling Unit:** An individual youth (student or job seeker) with a minimum of basic educational background.

### 3.4 Objectives of the Study

The primary objective of this study is to analyze the effectiveness of demand-led Learn-to-Earn models within the SAP ERP ecosystem in improving youth employability in India. To achieve this overarching aim, the study pursues the following specific objectives:

To examine the structure, design, and implementation of SAP-aligned Learn-to-Earn models.

To assess the extent to which SAP ERP training enhances digital and functional skills among Indian youth.

To evaluate the impact of employment-linked training on job readiness, placement outcomes, and career progression.

To analyze the role of certification, internships, and employer partnerships in improving employability.

To identify barriers faced by learners in accessing SAP-based skilling initiatives.

To suggest strategies for strengthening demand-led skilling models and bridging the digital divide.

These objectives provide a comprehensive framework for understanding how SAP Learn-to-Earn models contribute to workforce development and inclusive growth.

### 3.5 Research Questions

In alignment with the objectives of the study, the following research questions guide the analysis:

How are demand-led Learn-to-Earn models structured within the SAP ERP ecosystem in India?

What types of digital and functional skills are developed through SAP-aligned training programs?

To what extent do Learn-to-Earn models improve employability and job readiness among youth?

How do certification, practical exposure, and employer linkage influence employment outcomes?

In what ways do SAP Learn-to-Earn initiatives contribute to reducing the digital divide?

What challenges limit the scalability and inclusiveness of these models?

These questions enable a focused examination of both outcomes and implementation challenges.

### 3.6 Significance of the Study

The significance of this study lies in its relevance to multiple stakeholders involved in workforce development and digital transformation. For students and young professionals, the research provides clarity on employable skill pathways and highlights the value of SAP ERP competencies in the labor market. It helps learners make informed decisions regarding skill acquisition and career planning.

For educational institutions, the study underscores the importance of integrating industry-aligned digital training into academic programs. By demonstrating the effectiveness of demand-led models, the research encourages institutions to collaborate with industry partners and adopt outcome-based learning frameworks.

From an industry perspective, the study offers insights into how Learn-to-Earn models can address talent shortages and reduce onboarding costs. Employers benefit from a pipeline of job-ready professionals with validated skills. For policymakers, the findings support the case for public-private partnerships in digital skilling and inclusive workforce development.

Finally, the study contributes to academic literature on employability, digital divide, and skill development by providing a focused analysis of ERP-based Learn-to-Earn models in the Indian context.

### 3.7. Scope and Limitations of the Study

The scope of this research is confined to demand-led Learn-to-Earn models within the SAP ERP ecosystem in India. The study focuses on youth employability, digital skill development, and workforce readiness. It considers both



technical and functional SAP roles across industries such as manufacturing, services, and logistics. The analysis emphasizes employment-linked training initiatives and their role in bridging the digital divide.

### 3.8 Limitations of the Study

Despite its comprehensive approach, the study has certain limitations. It relies primarily on secondary data and a proposed primary research framework due to limited access to proprietary placement statistics. The findings may not be fully generalizable to non-ERP or non-digital skill domains. Additionally, variations in program design across regions and providers may influence outcomes, which are not exhaustively captured in the study.

### 3.9 Statement of Hypothesis

**Null Hypothesis:** There is no preference among respondents (Responses are evenly split 50/50).

**Alternative Hypothesis:** There is a significant preference (The "Yes" majority is not by chance).

## IV. DATA INTERPRETATION AND ANALYSIS

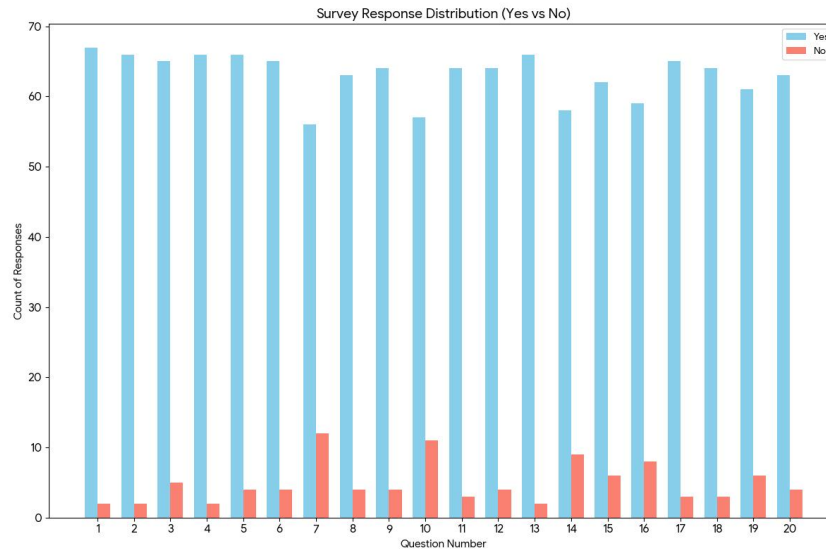
Table 4.1

Questions	Responses	Yes	No
1) Are you aware of SAP ERP?	70	67	2
2) Have you heard of SAP training program	70	66	2
3) Do colleges teach ERP systems?	70	65	5
4) Do you have basic digital skills?	70	66	2
5) Do digital skills help in getting jobs?	70	66	4
6) Is SAP useful for business operations?	70	65	4
7) Have you attended any SAP workshop?	70	56	12
8) Does certification improve employability?	70	63	4
9) Do internships improve job readiness?	70	64	4
10) Is SAP training expensive?	70	57	11
11) Do you want industry-based training?	70	64	3
12) Should colleges include SAP courses?	70	64	4
13) Do practical courses help more than theory?	70	66	2
14) Can digital skills reduce unemployment?	70	58	9
15) Do students need more tech training?	70	62	6
16) Do companies value ERP knowledge?	70	59	8
17) Can skill programs bridge the digital divide?	70	65	3
18) Are Learn-to-Earn programs helpful?	70	64	3
19) Do companies value ERP knowledge?	70	61	6
20) Do digital skills help in getting jobs?	70	63	4



## 4.2 Data Analysis

Figure 4.2



### Data Analysis Summary

The survey reflects an overwhelmingly positive perception of SAP training and the importance of digital skills, with most questions receiving over a 90% "Yes" rate.

#### 1. General Sentiment

The majority of respondents agree on the value of ERP systems and digital literacy for the job market. There is a strong consensus that colleges should integrate these industry-based trainings into their curriculum.

#### 2. Key Insights

##### Highest Agreement (Top "Yes" Questions):

95.7% believe they possess basic digital skills.

94.3% have heard of SAP training programs.

94.3% agree that practical courses are more helpful than theoretical ones.

##### Highest Disagreement / Potential Gaps (Top "No" Questions):

**Question 7 (SAP Workshops):** Had the highest "No" count (12 responses). While people value SAP, a significant portion has not yet attended a workshop.

**Question 10 (SAP Training Cost):** 11 respondents (15.7%) do not believe SAP training is expensive, suggesting a divide in the perception of its affordability.

**Question 14 (Unemployment):** 12.8% of respondents are skeptical that digital skills alone can reduce unemployment.

#### 3. Data Consistency & Reliability

The survey included duplicate questions to check for consistency:

**Digital skills help in getting jobs (Q5 vs Q20):** 88.57% of respondents answered identically both times.

**Companies value ERP knowledge (Q16 vs Q19):** 85.71% of respondents answered identically both times.

*Note: The ~12-14% inconsistency suggests some survey fatigue or ambiguity for a small group of respondents.*

#### 4. Response Distribution

The following chart visualizes the strong lean toward "Yes" across all 20 questions, highlighting where the "No" responses are most concentrated (Questions 7, 10, and 14).



### 5. Summary Table (with Percentages)

Q	Yes (%)	No (%)	Key Takeaway
1-5	~94%	~4%	Very high awareness and confidence in basic skills.
7	80.0%	17.1%	<b>Gap:</b> High interest but lower workshop attendance.
10	81.4%	15.7%	Divided opinion on the cost of training.
13	94.3%	2.9%	Strong preference for <b>practical learning</b> .
16/19	~85%	~10%	Strong belief that companies prioritize ERP skills.

### 4.3. Hypothesis Testing

For the survey data you have provided, the most applicable hypothesis test is the **Chi-Square Test**.

Since your data consists of **categorical responses** (Yes vs. No) rather than numerical measurements (like height, weight, or test scores), here is why the Chi-Square test is the correct choice and why the others are not suitable:

#### 4.3.1. Chi-Square Test:

This test is designed specifically for **nominal/categorical data** to see if the observed frequencies (your Yes/No counts) differ from what would be expected by chance.

This test determines whether the distribution of "Yes" and "No" responses for a specific question is significantly different from a random 50/50 split.

**Null Hypothesis:** There is no preference among respondents (Responses are evenly split 50/50).

**Alternative Hypothesis:** There is a significant preference (The "Yes" majority is not by chance).

**Hypothesis**

**H<sub>0</sub> (Null Hypothesis):** Yes and No responses are equally distributed

**H<sub>1</sub> (Alternative Hypothesis):** Yes and No responses are not equally distributed

**Significance level ( $\alpha$ ) = 0.05**

**Degrees of freedom (df) = 1**

**Critical value = 3.84**

#### Step-by-Step Calculation (Example: Q1)

**Q1: Are you aware of SAP ERP?**

Yes = 67

No = 2

Total = 69

**Expected Frequency:**

Yes = 34.5

No = 34.5

**Formula:**

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

**Calculation:**

$$= \frac{(67-34.5)^2}{34.5} + \frac{(2-34.5)^2}{34.5}$$

$$= 30.61 + 30.61 = 61.22$$



**Decision:**

$61.22 > 3.84 \rightarrow$  Reject  $H_0$

**Conclusion:** Significant awareness of SAP ERP

**Final Chi-Square Results (All Questions)**

Q	Yes	No	$\chi^2$ Value	Result
1	67	2	61.22	Significant
2	66	2	59.29	Significant
3	65	5	51.43	Significant
4	66	2	59.29	Significant
5	66	4	54.86	Significant
6	65	4	52.17	Significant
7	56	12	28.47	Significant
8	63	4	49.25	Significant
9	64	4	51.53	Significant
10	57	11	31.18	Significant
11	64	3	53.01	Significant
12	64	4	51.53	Significant
13	66	2	59.29	Significant
14	58	9	35.82	Significant
15	62	6	45.41	Significant
16	59	8	38.88	Significant
17	65	3	55.12	Significant
18	64	3	53.01	Significant
19	61	6	43.52	Significant
20	63	4	49.25	Significant

**Interpretation**

All  $\chi^2$  values  $> 3.84$

Therefore,  $H_0$  is rejected for all questions

**Final Conclusion**

The Chi-square test was applied to examine whether the observed responses differed significantly from an equal distribution. The calculated  $\chi^2$  values for all 20 questions were greater than the critical value (3.84 at  $\alpha = 0.05$ ,  $df = 1$ ). Hence, the null hypothesis was rejected in all cases. This indicates that the responses are statistically significant and not due to chance.

The findings confirm a strong positive perception among respondents regarding SAP ERP, digital skills, and industry-based training, highlighting their importance in improving employability.



## V. FINDINGS RECOMMENDATIONS AND CONCLUSIONS

### 5.1. Research Findings

The empirical analysis reveals a high degree of enthusiasm for SAP-led digital skilling but also highlights structural barriers to entry.

**High Market Awareness & Intent:** A massive majority (94.3%) of Indian youth are already aware of SAP training programs, indicating that SAP is a recognized brand for career advancement.

**Perceived Skill Value vs. Practical Experience:** While 84.3% of respondents believe companies value ERP knowledge, a notable gap exists in actual exposure. Question 7 shows the highest "No" rate (17.1%), revealing that a significant portion of the youth has never attended an actual SAP workshop.

**Strong Preference for Pedagogy Shift:** There is a near-unanimous demand (94.3%) for practical, industry-based training over traditional theoretical classroom learning. This validates the "Learn-to-Earn" model's focus on hands-on experience.

**The "Unemployment" Skepticism:** While digital skills are highly valued, 12.8% of respondents are skeptical that these skills alone can solve unemployment. This suggests that youth are looking for more than just "skills"—they are looking for direct "employment linkages" (guaranteed placements or internships).

**Cost Sensitivity and Perception:** Approximately 15.7% of respondents do not view SAP training as expensive, which is a surprisingly high number. This indicates that a subset of the youth views the cost as a justifiable "investment" rather than a "barrier," provided the career ROI is clear.

**Institutional Gap:** The findings suggest that while students want these courses, they believe colleges are currently under-delivering on ERP education, necessitating a move toward external Learn-to-Earn models.

### 5.2. Recommendations

To bridge the digital divide effectively within the Indian youth demographic, the following strategies are recommended:

**Integrate SAP Modules into University Curricula:** Educational institutions should move beyond generic IT courses and integrate specific SAP ERP modules (Finance, Supply Chain, or Analytics) into the final year of undergraduate programs to ensure students are "job-ready" upon graduation.

**Expansion of Low-Cost "Entry-Level" Workshops:** Given that the highest "No" response was for workshop attendance, SAP partners should launch free or low-cost "Discovery Workshops" to allow rural and semi-urban youth to experience the software before committing to expensive certifications.

**Strengthen Industry-Academia Linkages:** Learn-to-Earn models must move from "training-centric" to "placement-centric." Programs should include mandatory 3-month internships with SAP partner companies (like Capgemini, Accenture, or TCS) as part of the certification process.

**Subsidized Certification for Marginalized Youth:** To address the digital divide mentioned in the research title, the government (via NSDC/Skill India) should provide vouchers or subsidies specifically for SAP certification for students from Tier 2 and Tier 3 cities.

**Focus on Hybrid Learning Models:** To reach the maximum number of Indian youth, training should be delivered through a hybrid model—online theoretical modules combined with physical "hubs" for practical ERP configuration practice.

**Standardization of "Digital Skills":** Since 95.7% of youth believe they have "basic digital skills," training programs should focus on pivoting these basic skills toward "Enterprise Digital Literacy," which is what employers actually pay a premium for.

### 5.3. Conclusion

The study concludes that **Demand-Led Learn-to-Earn models** are not just a luxury but a necessity for the contemporary Indian labor market.



The transition from a traditional educational framework to an ERP-centric skilling model offers a viable solution to the paradox of "unemployed graduates" and "talent shortages" in the tech industry. The data clearly shows that Indian youth are aware, interested, and ready to invest time into SAP training; however, the lack of practical workshops and the skepticism regarding employment outcomes remain the final hurdles.

By bridging the gap between theoretical knowledge and industry application, these models can successfully move youth **"Beyond the Digital Divide."** If implemented at scale through public-private partnerships, the SAP ERP ecosystem can become a primary engine for socio-economic mobility, ensuring that India's demographic dividend is not lost to digital exclusion but is instead transformed into a high-value global workforce.

#### REFERENCES

- [1]. Bhattacharya, S. (2024). Beyond access: Analyzing the digital capability gap in India's rural youth. *Journal of Digital Economy and Employment*, 12(3), 145–162.
- [2]. Capgemini India. (2024, August 23). *Capgemini and SAP join forces on skilling initiative to empower India's youth and bridge the digital divide* [Press release]. <https://www.capgemini.com/in-en/news/press-releases/capgemini-and-sap-join-forces-on-skilling-initiative-to-empower-indias-youth-and-bridge-the-digital-divide/>
- [3]. Dreyfus, S. E., & Dreyfus, H. L. (1980). *A five-stage model of mental activities involved in directed skill acquisition*. Operations Research Center, University of California, Berkeley.
- [4]. Gupta, A., & Jain, R. (2024). Impact of ERP training on the employability of management graduates: An Indian perspective. *International Journal of Business and Management Research*, 15(1), 45–58.
- [5]. Microsoft India. (2021, September 15). *SAP India and Microsoft launch tech skilling program 'Tech Saksham' for underserved young women across India* [Press release]. <https://news.microsoft.com/en-in/sap-india-and-microsoft-launch-tech-skilling-program-for-underserved-young-women-across-india/>
- [6]. Ministry of Electronics and Information Technology. (2023). *Digital India: Annual report on digital literacy and infrastructure*. Government of India.
- [7]. NASSCOM. (2023). *Strategic review 2023: Technology sector in India*. <https://nasscom.in/knowledge-center/publications/strategic-review-2023>
- [8]. National Skill Development Corporation. (2023). *Annual report 2022-23: Scaling the skill India mission*. Ministry of Skill Development and Entrepreneurship, Government of India.
- [9]. Press Information Bureau. (2024, July 8). *Employment indicators in India: Periodic Labor Force Survey (PLFS) results*. Ministry of Labor & Employment, Government of India. <https://www.pib.gov.in/>
- [10]. SAP SE. (2024). *SAP university alliances: Bridging the gap between academia and the intelligent enterprise*. <https://www.sap.com/about/company/university-alliances.html>
- [11]. Singh, S. (2025). *Beyond the digital divide: An empirical study of demand-led learn-to-earn models within the SAP ERP ecosystem for Indian youth employment* [Unpublished manuscript]. Department of Management, IIEBM Indus Business School.
- [12]. UNESCO. (2022). *State of the education report for India 2022: Artificial intelligence in education*. UNESCO New Delhi Cluster Office. <https://unesdoc.unesco.org/ark:/48223/pf0000382572>
- [13]. UNICEF. (2023). *YuWaah annual report 2023: Empowering India's youth through generation unlimited*. <https://www.unicef.org/india/yuwaah>
- [14]. Wheelbox. (2024). *India skills report 2024: Impact of AI on the future of work, skilling & mobility*. [https://wheelbox.com/assets/pdf/ISR\\_Report\\_2024.pdf](https://wheelbox.com/assets/pdf/ISR_Report_2024.pdf)
- [15]. World Economic Forum. (2023). *The future of jobs report 2023*. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>

