AI-Powered Skill Development Platform

-Rajat Burde
-Zainub Fatima

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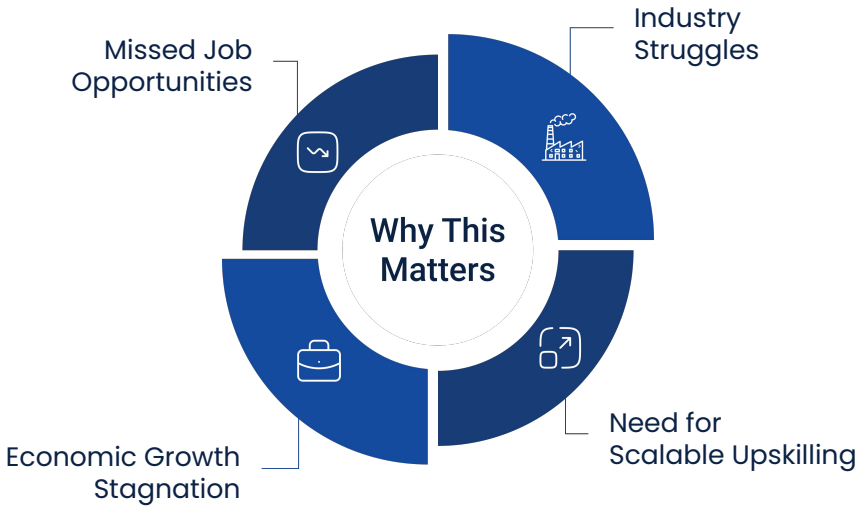
Existing Problem

Chhattisgarh faces a significant **skill gap**, especially in **digital** and **technical skills**. Despite investments in sectors like **textile**, **IT**, and **manufacturing**, many workers remain **unskilled**, leading to **unfilled job positions** and high **unemployment**. An efficient, scalable **skill development solution** is essential for bridging this gap.



Research Findings & Root Causes

Employment & Skill Gaps

- Rural youth face **job shortages, skill mismatches**, and lack of decent employment opportunities.
- Most service sector jobs are **informal, low-paying, and without job security or benefits.**
- Across India, **over 50% of graduates** and **44% of postgraduates are underemployed;** only 4% have formal vocational training.

Gender Disparities

- Rural women in Chhattisgarh have **fewer educational opportunities than men** and urban women.
- Nationally, women's labor force participation is just **37%**.
- In STEM fields, **43% of graduates are women**, but only 14% secure jobs due to cultural, mobility, and childcare barriers.

Research Findings & Root Causes

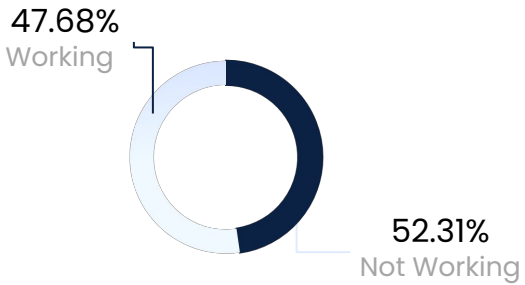
System Challenges in Skilling

- Many training programs still teach **outdated trades**, while demand is rising for **automation, green jobs, and digital skills**.
- **Apprenticeships are rare**, companies often avoid them due to cost and fear of losing trained staff.
- Multiple government schemes work separately, leading to **low awareness** and **job placement rates**(for example, PMKVY trained **13.7 million people** but placed only **18%** in jobs.)

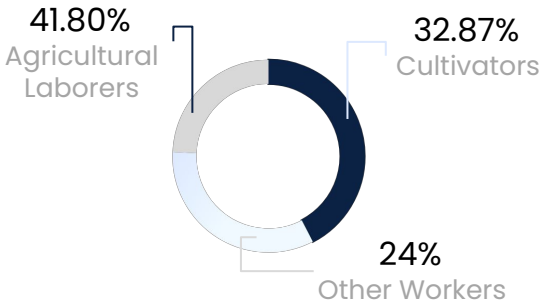
Rural & Informal Sector Gaps

- Only **10% of rural workers** in India have formal training.
- The informal sector makes up **90% of the workforce**, but is mostly **left out of structured skilling programs**.
- Many people with informal skills **don't get certificates**, making it hard for them to prove their abilities to employers.

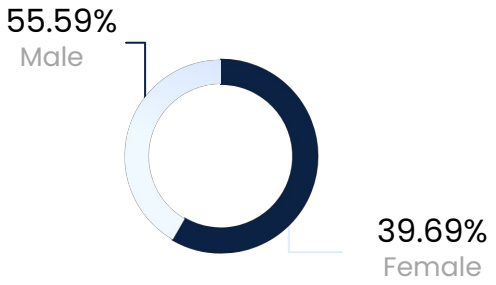
Employment Trends and Workforce Statistics



Work Participation Rate



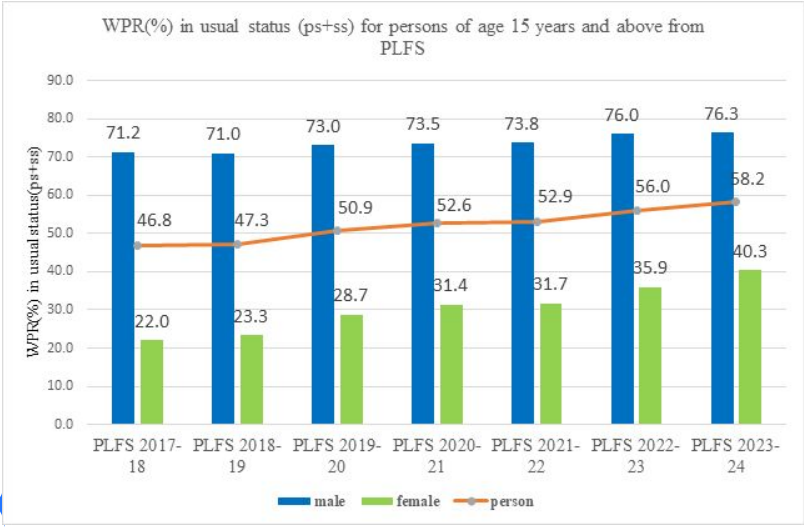
Sectoral Employment Distribution



Gender Disparity in Employment

https://apfstatic.s3.ap-south-1.amazonaws.com/s3fs-public/Chhattisgarh_1.pdf?zvQncZXscwNwqNBWf0qDjBLvmuA_YBUV

Graphs


WPR(%) in usual status (ps+ss) for persons of age 15 years and above from PLFS
WPR(%) in usual status(ps+ss)
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
71.2
71.0
73.0
73.5
73.8
76.0
76.3
46.8
47.3
50.9
52.6
52.9
56.0
58.2
22.0
23.3
28.7
31.4
31.7
35.9
40.3
PLFS 2017-18
PLFS 2018-19
PLFS 2019-20
PLFS 2020-21
PLFS 2021-22
PLFS 2022-23
PLFS 2023-24
male
female
person

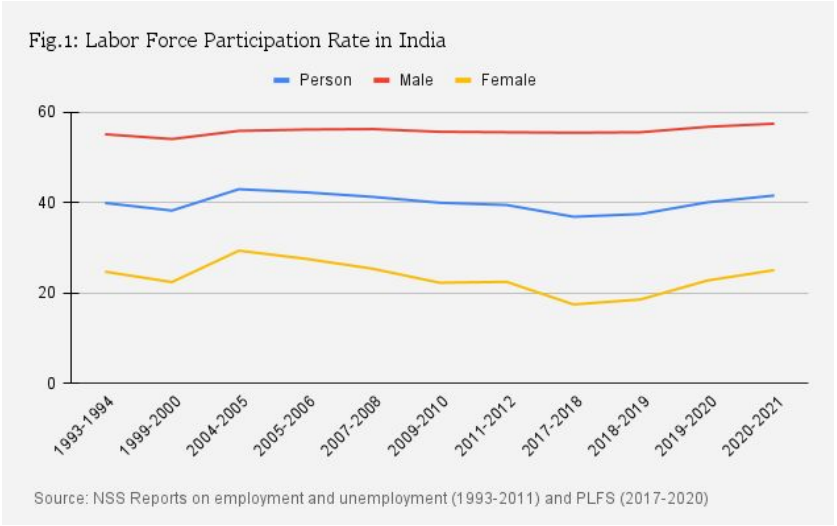


Fig.1: Labor Force Participation Rate in India
Person
Male
Female
60
40
20
0
1993-1994
1999-2000
2004-2005
2005-2006
2007-2008
2009-2010
2011-2012
2017-2018
2018-2019
2019-2020
2020-2021
Source: NSS Reports on employment and unemployment (1993-2011) and PLFS (2017-2020)

Competitor’s SWOT Analysis

SWOT	udemy	PLURALSIGHT	coursera
Strength	• Extensive course library across multiple domains. • Affordable pricing with frequent discounts. • Global accessibility in multiple languages.	• Strong focus on technology and IT skills. • High-quality, expert-led content. • Skill assessments and structured learning paths.	• Partnerships with leading universities. • Accredited certificates and degree programs. • Strong brand credibility and trust.
Weakness	• Inconsistent course quality. • Limited recognition of certificates. • Lack of structured learning paths.	• Limited range of non-technical courses. • Higher pricing compared to some competitors. • Less appeal to casual learners.	• Higher cost for premium programs. • Less flexible pricing model. • Longer course durations for some programs.
Opportunity	• Expansion into corporate training. • Development of localized content. • AI-based personalized recommendations.	• Diversification into non-technical domains. • Strategic corporate partnerships. • AI-driven skill gap identification.	• Rising demand for accredited online learning. • Collaboration with governments for skill initiatives. • Expansion into micro-credential programs.
Threats	• Strong competition from accredited platforms. • Market saturation in e-learning. • Price competition from low-cost platforms.	• Dependence on the tech sector’s growth. • Competitive pricing from other platforms. • Growing availability of free tech learning resources.	• Competition from universities and low-cost platforms. • Regulatory changes in online education. • Free educational resources reducing paid enrollments.

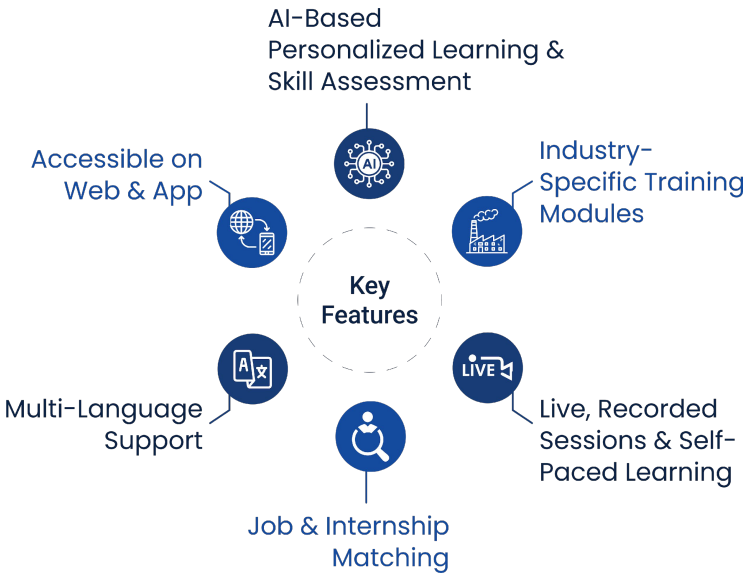
Strategic Insights from Competitor

- **Udemy** dominates in course variety and affordability but struggles with quality consistency and recognition.
- **Pluralsight** excels in tech-focused, structured learning but lacks breadth in non-technical areas and has higher pricing.
- **Coursera** offers strong credibility and accredited programs but is costly and less flexible for casual learners.
- **Opportunities** for all three lie in **localized content**, **AI-driven personalization**, **corporate partnerships**, and expansion into niche skill gaps.
- **Threats** include market saturation, free learning resources, and rising competition from low-cost or accredited institutions.

Solution Overview

What is it?

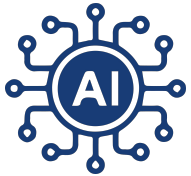
A smart, AI-driven platform that provides **personalized skill training, job matchmaking, and certification** for Chhattisgarh's workforce.



Expected Outcomes

✔10,000+ workers upskilled in the first year.
✔Increase in local job placements by 30%.
✔Higher female workforce participation.
✔Bridging the digital skills gap.

Core Technologies & Its Usage



Artificial Intelligence (AI)

Helps personalize learning paths by analyzing user performance and recommending the right skill courses.

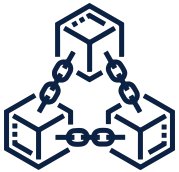
Natural Language Processing (NLP)

Enables voice-based learning and chatbot support in Hindi and Chhattisgarhi for easy access in rural areas.

Cloud Computing

Stores user data, courses, and certification info securely, and allows users to access the platform from anywhere.

Core Technologies & Its Usage



Blockchain

Used for tamper-proof certification — employers can instantly verify if a person's skill certificate is real.

Data Analytics

Tracks progress of users, skill trends, and employment outcomes to make the platform smarter over time.

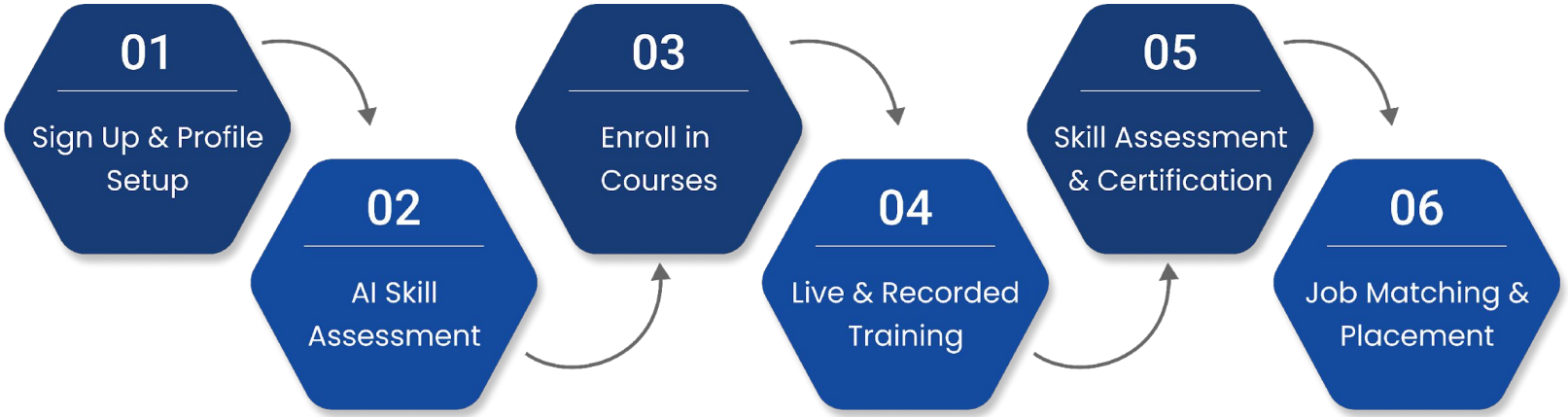
Augmented Reality (AR)

AR will create interactive 3D simulations for vocational training like -

✔Operating machinery
✔Practicing textile work
✔Learning to repair electronics

This helps users practice in real-world scenarios without needing expensive equipment, perfect for rural areas.

How It Works



User Journey

How We Make the Difference

Before	After
Skill–Industry Mismatch Training programs don't match actual job needs.	**AI-Powered Personalized Learning** Courses tailored to each learner's career path.
Low Women Participation Cultural & social barriers reduce female workforce entry.	**Inclusive Training (Women + Rural)** Voice-based, local language access for wider reach.
Fake / Irrelevant Certificates Employers can't trust or verify worker skills.	**Blockchain-Based Verified Certification** Tamper-proof, instantly verifiable skill proof.
Rural & Digital Exclusion Limited access to formal, tech-enabled training.	**Job Matching + AR Skill Simulations** Direct employment linkages & hands-on practice.

Marketing & Branding Strategy

Objective

Create awareness and drive adoption of the platform across **Chhattisgarh** using both **online and offline channels.**

Marketing Channels -

Online

✔Social media campaigns (Instagram, YouTube Shorts, Facebook).
✔Influencer collaboration.
✔Short explainer videos.

Offline

✔Roadshows in villages.
✔Radio jingles, posters & newspapers.
✔Events like "Skill Melas".

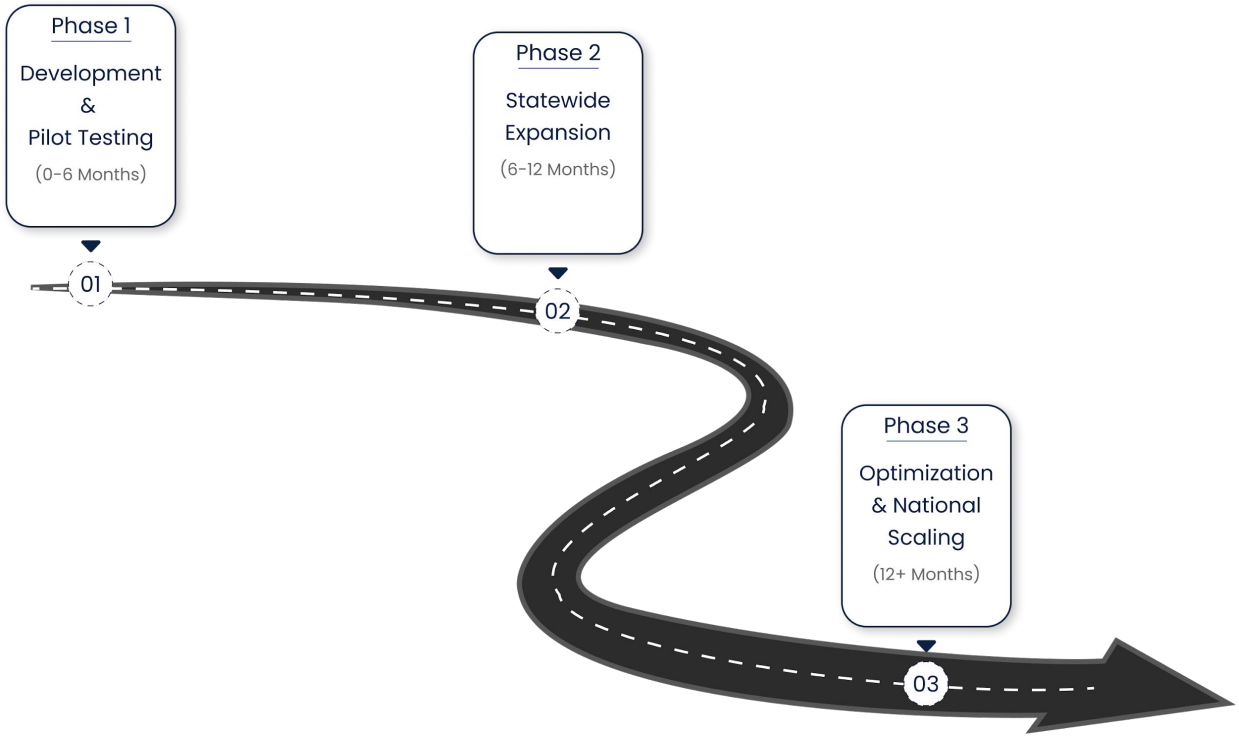
Partnerships

✔Govt schemes (PMKVY, NSDC).
✔Local schools & panchayats.
✔NGOs & CSR programs.

Innovation (USP) in Our Solution

Customer Experience	**Personalized AI** learning paths & **voice-based**, user-friendly platform
Product Functionality	Real-time job matching, skill tracking, and blockchain-certified learning
Corporate Culture	Promotes inclusive, tech-driven upskilling culture within MSMEs
Stakeholder Engagement	Brings together **MSMEs, govt, local institutes & learners** on one unified platform
Product Idea & Concept	Innovative fusion of **AI, AR/VR, and blockchain** for scalable digital skilling
Customer Involvement	Adaptive learning, learner feedback loops, and career mapping
Entrepreneurial Thinking	Empowers users to become **self-employed** or start their own MSMEs
Purpose and Strategy	Aligned with national goals – ***Viksit Bharat 2047, Digital India, Skill India***

Implementation Plan



Financial Overview & Funding Requirements

Budget Head	Total project cost (Rs. in lakh)	Govt. assistance required (Rs. in lakh)	Applicant share (Rs. in lakh)
Platform Development & Technology Setup — Includes AI learning path engine, AR-based vocational simulations, blockchain-based certification system, cloud infrastructure, mobile app development, and quality testing.	**10.00**	**10.00**	**0.00**
Content Creation & Expert Support — Fees for mentors, industry experts, and instructional designers to create localized skill courses in Hindi & Chhattisgarhi, plus trainer support during pilot phase.	**3.00**	**3.00**	**0.00**
Field Deployment & Outreach — Costs for rural pilot testing, awareness events, travel to training centers, stakeholder workshops, and user onboarding activities.	**2.00**	**2.00**	**0.00**
Grand Total Project Cost	**15.00**	**15.00**	**0.00**
Total GOI Assistance Required		**15.00**	
Total Applicant Share			**0.00**

Conclusion

The **AI-Powered Skill Development Platform** presents a **next-generation solution** for bridging the skill gap in Chhattisgarh's workforce. By **leveraging AI**, **AR/VR**, **Blockchain**, and **voice-based learning**, it ensures that **every individual**, **regardless of background**, **gets access to quality upskilling and direct employment opportunities.**

This solution not only **enhances the skill quality & quantity of professionals** but also directly contributes to **economic growth**, **local employment**, and **Chhattisgarh's industrial expansion.**

This is not just a platform; it's a **movement towards a skilled**, **empowered**, and **job-ready workforce for the future.**

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