



## The Employment Gap for Blue-Collar Job

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### Abstract

Every human after upgrading themselves with a skill finds difficult to a job and finds different ways to fit into the competitive world, searching for jobs and checking out for the references looking for the competitor's group and up skilling themselves. There is a lot of gap and void among people who is looking for job and the company who wants the right candidates. We don't understand the internal process as it varies but one such process is reaching out the right employee. We have come up with an application that can build the gap between the company and the job seekers for a targeted audience. By understanding the skills and area of interest the Blue-Collar Workers would be assigned to a job with help of our application and help them to get the job.

**Keywords:** Blue-Collar Workers, Application, Employment, Skills.

### Introduction

Wealth Distribution in India. Though it is one of the world's fastest growing economies, India's economy is also one of the most uneven. Over the course of the last three decades, there has been a consistent rise in inequality. The wealthiest have monopolized a large share of the wealth created by crony capitalism and inheritance. The rate of wealth accumulation is much higher than that of the impoverished, who, despite continuous underfunding, find it difficult to make ends meet and access quality healthcare and education.

Underemployment and unemployment have long been major issues in India following independence. Due to our low capital stock and primarily agrarian economy, we have historically had low industrial productivity as well as a monsoon-dependent, mostly non-remunerative agricultural sector. The rates of unemployment and labor force participation

The labor force participation rate (LFPR) and the unemployment rate are crucial measures of the health of the labor market. The former speaks of the percentage of the country's working-age population that is either employed or actively seeking employment. It acts as a gauge for the total

amount of labor available or the potential labor force. On the other hand, the unemployment rate, also referred to as the "open" unemployment rate, is the proportion of people who are seeking for work but are unable to find it. Because of the distinct inclusion criteria for people who are "working" and "seeking" work, it is important to note that these aggregative measures are not exact metrics and are frequently subject to interpretation. Unfortunate consequences of this definitional ambiguity include underemployment or concealed unemployment that can go unnoticed.

These widening gaps and increasing levels of inequality particularly affect women and children.

### 01 Top 1%

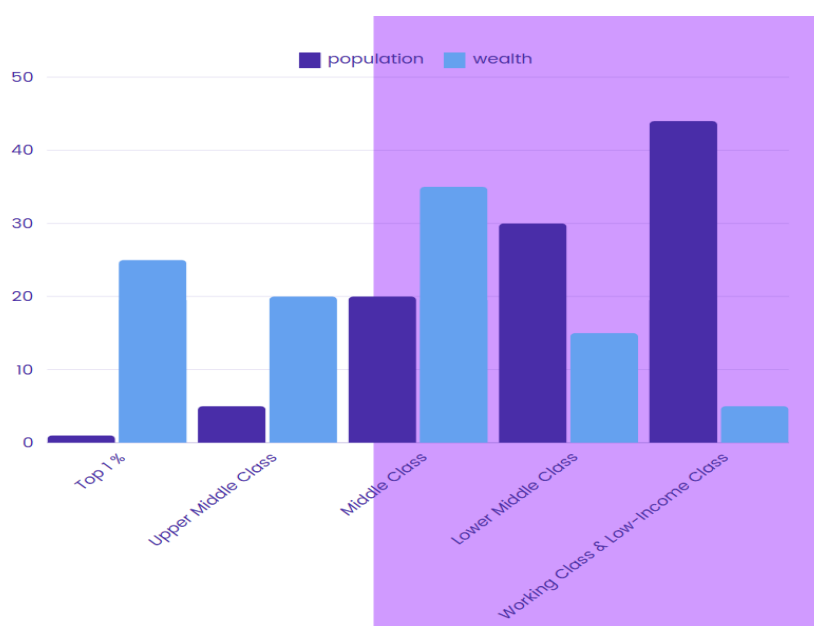
- Controls approximately 70% of the country's wealth.
- The smallest group by population but holds most resources.

### 02 Middle Class

- Expanding but still facing economic challenges and insecurity.
- Represents a growing portion of the population.

### 03 Working Class & Low-Income Groups

- Make up the largest segment of the population.
- Struggle with economic instability and limited access to resources.



## Unemployment and job availability challenges

### 01 Unemployment Rates

- Overall unemployment rate: 7.6% (Source: CMIE).
- Rural unemployment rate: 8.8% (Source: CMIE).
- Urban unemployment rate: 7.1% (Source: CMIE).

## 02 Underemployment

- Around 30% of the workforce in agriculture is underemployed (Source: National Sample Survey Office - NSSO).

## 03 Lack of Access to Job Information

- Limited digital literacy: Only 10% of the rural population is digitally literate (Source: National Digital Literacy Mission - NDLM).
- Internet penetration: Approximately 34% in rural areas compared to 70% in urban areas (Source: Internet and Mobile Association of India - IAMAI).



## Major impact of unemployment

### 1. Low wages and High Cost

Every product's price rises in tandem with the economy's steady expansion, but because there is no adequate profit margin on these higher prices, blue-collar workers receive extremely low pay, making it difficult for them to make ends meet given the high cost of living.

### 2. Few Benefits and High Debt

The worker under this category gets very less benefits for their job and falls into high debt trap and find it difficult to cop up and land up in ending their lives.

### 3. Job Insecurity and Bad Schedules.

Every Job under Blue Collar category doesn't have security, rules or regulations built they fall in the trap of Bad Schedules that lead to bad situation in clearing their debts.

#### **4. Limited Advancement and Hard to Up skill**

Up skilling needs time and money for any individual to both become so dependent as they're unable to do so and get skilled and move forward to higher levels.

#### **5. Stress, Health issues and Limited well-being**

Over thinking fitting themselves to the economy is very difficult for them which doesn't allow them to sleep or have good healthy food and land up in lot of health issues and that leads to limited well-being.

### **Advantages**

The proposed application would build great benefits to people around and bring efficiency in getting a job. There will be a main target of White-Collar jobs that help people in building better solutions. It improves the employment rates and economic growth. Provides easy access to various job opportunities.

### **Feasibility study**

An investigation into the viability of the suggested system is necessary to make sure the business won't be burdened by it. A well-designed study should include the following: financial information, legal and tax obligations, accounting statements, a description of the product or service, a history of the business or project, operational and managerial details, marketing research and policies, and accounting data.

Usually, technical development and project implementation are preceded by feasibility studies. The perceived objectivity of the study is crucial in determining its creditworthiness to prospective investors and lending institutions, thereby impacting the project's success potential. As a result, it needs to be carried out in a methodical, objective manner to provide information that allows decisions to be made.

### **Objective**

The Application would make a user friendly interface which help the consumer to work and understand the application easily, It includes voice commands and audio instructions that help the consumer instruct easily all through the application and update the moto of the application in their minds also it includes the major technique of job matching algorithm using the search key words and suggest them the job that suitable for the consumer profile. We also provide localization that improves the technique of upgrading themselves and up skilling their skills. We also provide a minimal payment transaction system for the application to work in ease and help the consumers to have a connect with the application.

### **Module description**

An essential multidisciplinary subfield within computer science and computational linguistics is the job portal, which creates the tools and processes necessary to facilitate job searching in the complicated world.

## Implementation steps-1

- Gather comprehensive candidate data and store it on block chain for transparency.
- Re process data using classical techniques before quantum analysis.

### Data collection and preprocessing

- Apply qsvms for candidate classification.
- Use qnns for deeper analysis and prediction.
- Reduce data complexity with qpca, focusing on key features.

### Data analysis with machine learning

- Optimize candidate-job matching.
- Enhance search efficiency with grover's algorithm.

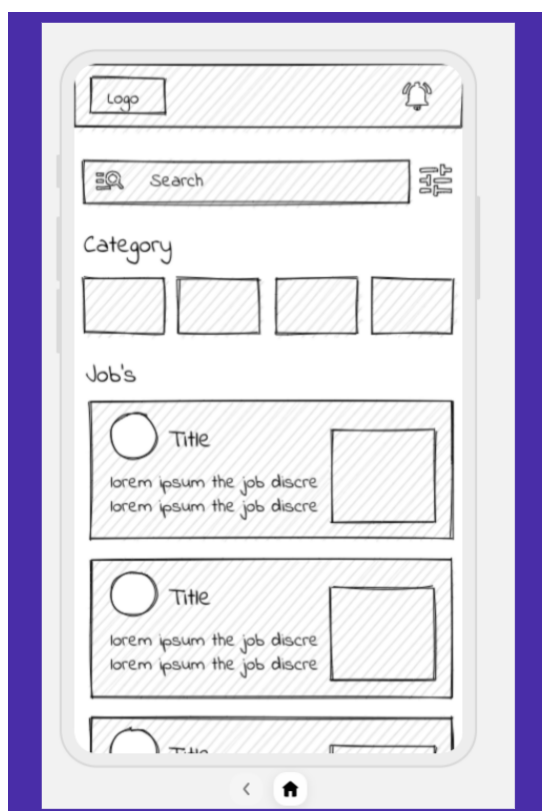
## Implementation Steps-2

### Continuous Learning and Improvement

- Implement feedback loops to monitor and update algorithms.
- Refine algorithms regularly for improved accuracy and efficiency.

### Integration with Block chain (for security)

- Verify candidate data authenticity through block chain.
- Share verified profiles with employers for a streamlined hiring process.



An Handy application structure for the ease of using and making sure the reach of using the application would normalize the situation of finding job among the Blue-collar workers.

## **Conclusion**

With the use of the modules like finding job, have made easier to the entire blue-collar workers. It helps them to find job easily through our application and maintains the history of their application and generates the outcomes. Our application entirely focuses on the unemployment crises in people and paves way for easy access to find job. We also made the application ease for the people which is an innovation to all the blue-collar workers. Finally, we made the application available for the people around.

## **References**

- Analysis of Blue-Collar Workers' Intention to Use a Job-Seeking Application Feature using Unified Theory of Acceptance and Use of Technology Model. In international Journal of technology Vol 15, No 2 (2024).
- Blue-Collar Workers: Study on Physically Demanding Jobs, In an International Journal, Volume: 18 Issue 3 Pages: 264-276 Document ID: 2024PEMJ1660.
- Managerial versus Blue-Collar Unemployment, published on International Journals, International Review of Modern Sociology, Vol. 21, No. 2 (Autumn 1991).
- Blue-Collar Work, Career, and Success: Occupational Narratives of Sisu</I,journal of Applied Communication Research 32(4):273-292, October 2004,32(4):273-292.