



Enlightening Hope: AI-Driven Empowerment of Unorganized Labour in Developing Nations

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Abstract: We live in a time when technology can do anything. This is a unique chance to accept not only new ideas but also the thing that makes us all human. To make a change in people's lives and make sure no one is left behind, we need to celebrate the wide range of differences that make up our global community. This paper is more than statistics and algorithms. It's about lives modified, human capacity realised, and the continual notion that through embracing AI and data technology, we can empower the unorganised people who serve as the muse of our societies and promote inclusive monetary growth. Creating a world where everyone may succeed through inclusive economic growth is moral and ethical as well as economic. As we set out on this path, allow us to no longer forget that the lives of people who work so tough to broaden our society are just as important as any set of rules. The lives of millions of people in developing nations could be completely changed if AI is used to organise unorganised labour. This way of thinking sees AI's promise not only as a technology tool but also as a way to give people more power and help the economy grow for everyone.

Index Terms - Federated Learning, Machine Learning, Distributed Learning, Inclusion of diversity

I. INTRODUCTION

Unorganised labour continues to suffer major issues in developing nations in various industries. The use of Artificial Intelligence to organise unorganised labour in developing countries involves utilising technical tools and data-driven techniques to address the issues that they face.

Considering India as an example, the construction industry employs almost 71 million people. This makes it the second-largest employer in the nation. Within the framework of emerging countries, unorganised labour accounts for approximately 25% of employed labour. These people frequently deal with unstable employment, erratic finances, and restricted access to social assistance. The figure of 25% unorganized labour is based on registered labourers and may not capture the full extent of unorganized labour in developing countries.

The difference between organised and unorganised labour industry is of our concern. Organised labour frequently has job security, decent wages, and social services. They receive regular salaries and labour law protection. Unorganised labourers have unpredictable incomes, terrible working conditions, and restricted access to healthcare and education. They generally lack organised workers' safety nets. Technology and AI can help close this gap and give deserving people the things they want, so they can live strong, useful lives.

Through the usage of artificial intelligence and statistics analytics, we will see the strategies to empower human beings. Artificial intelligence doesn't try to dampen our abilities, but rather to amplify them. We link unorganised labour to life-changing assets like healthcare, training, and government programmes, changing the course of their lives and the world at large. It is not only about data and code but about regaining faith in AI's ability to promote equitable economic development that matches humanity's noblest goals.

II.METHODOLOGY

Data Collection

- Segment the city into districts or subsections according to elements like labour market characteristics, industry, or topography.
- Within each subsection, encourage local labourers and organisations to freely engage by sharing information about their work history, skill set, family details, location, pay scale and preferred jobs.
- Privacy laws and moral precepts are followed during the gathering and preservation of data.

Model Training

- While maintaining the decentralised nature of the actual data, implement a centralised model architecture that can be applied to all subsections.
- Local Machine Learning models would be trained on locally available data.
- With federated learning, private data from each subpart may be used to train the model.
- Perform model aggregation periodically. This involves integrating local models into a global model.
- Frequently combine the model updates from several subsections to enhance the overall model.
- All the suggestions will be made by a recommendation system.

Implementation

- This could be made into a mobile application but in this case, accessibility would be an issue. To overcome this, kiosks could be set in the subsections working on voice commands. Workers could access information or give their data at these kiosks.
- Content-based filtering would involve comparing each policy's coverage, eligibility requirements, and type of coverage to each worker's needs and preferences when advising unorganised construction workers about policies and benefits.
- If a worker has a family, for example, the system might suggest insurance that provides family-friendly benefits, attending to healthcare and educational needs, thereby customising recommendations to each worker's particular situation and needs.
- Content-based filtering can help in increasing labourers' support by ensuring that policy recommendations match their profile.

III.COMMUNITY ENGAGEMENT

Hospitals and healthcare units

- Through the established order of a complete healthcare statistics device, we might also connect neighbouring public hospitals to the scientific community, growing a necessary link between the two. Through this connection, hospitals can also simultaneously provide healthcare programmes and services and hold an eye on every affected person's fitness.
- Telehealth services, appointment scheduling, timely health updates, and access to essential health education are all advantageous to patients.
- Additionally, the system guarantees that qualified people may easily apply for government healthcare programmes, which makes access to affordable healthcare possible for everyone, improves health outcomes, and builds a better-informed and healthier community.
- After the COVID-19 pandemic, global vaccination coverage is crucial. With vaccination services in our healthcare information system, unorganised labourers and their families can easily receive vital immunisations. These immunisations cover more aspects.

Educational Institutions or Training Hubs

- By putting unorganised labourers in contact with local schools and government training facilities, we can help them gain. Their children would also have access to education.
- By imparting them with access to training and talent development possibilities, we enable them to enhance their employability and income potential.
- At the same time, parents who make sure their kids get a good education are paving the way for the following generation to escape the poverty cycle.
- Encouraging skill development, lifelong learning, and educational opportunities, will foster socioeconomic development.

Government Schemes Office

- Unorganised labourers need access to local government offices to use government initiatives, rebates, and incentives to improve their socioeconomic well-being.
- Through providing individualised counselling, help with applications, and a link to government resources, we enable these workers to obtain the social welfare, health care, and financial benefits they are legally entitled to.
- By doing this, we help to build a society that is more inclusive and in which every individual may prosper and live a life of dignity.
- This will even significantly contribute to reducing illiteracy rates.

IV. ENSURING JOB SECURITY

- This interface allows labour-intensive sectors to post job openings on government websites, which our kiosk-based technology makes available to unorganised labourers. These kiosks allow workers to browse for jobs, apply, and get important employment information.
- This sector involves the employment of labourers via subcontractors and this does not guarantee job security and regular payment. With this invention, they could employ themselves in various industries.
- In addition to improving job security, this invention gives workers the freedom to look into opportunities in other areas or sectors of the economy. We efficiently match labour supply with demand, which fosters economic growth, while also promoting inclusivity by enabling this link between labour and industry.
- Through this strategy, unorganised labourers are guaranteed access to basic services and long-term employment, which promotes dignity and community empowerment.

V. CONCLUSION

As we set out on the path towards "Unleashing Hope: Empowering and Organising Unorganised Labour in Developing Countries Through AI," we realised we were embarking on something bigger than data and algorithms alone. Unorganised workers are the hidden heroes of our society; they are not numbers or abstractions, but real people with hopes, desires, and the right to a living wage. By welcoming AI, we have rewritten the story, moving attention from worries about automation to hopes for greater human potential. Artificial intelligence is not a threat, but rather a valued companion that helps us achieve more and go further than we ever could on our own.

We have made it possible for unorganised workers to receive personalised recommendations by using methods such as federated learning, data collection, and model training. Inclusion is ensured through the use of voice-activated and touch-screen kiosks, and the use of content-based filtering provides individualised policy suggestions that serve as a bridge to essential services and aid.

In summary, the journey we have taken together is a legacy of our common humanity rather than just a technological one. As we consider this next step, let's not forget that the hope and dignity we bring back to the lives of individuals who toil ceaselessly to construct our societies, rather than just algorithms - is how we will truly know whether we have made progress. Unleashing hope is a commitment to creating a society in which each person may flourish, and discover their true place.

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