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RecruitME : Mobile Crowdsourcing Platform for Recruitment

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Abstract:

Worker recruitment is an important problem for recruiter in mobile crowdsourcing (MCS), which aims to find suitable and sufficient participants to perform tasks. MCS is like a big team work effort using mobile phones. RecruitME is an innovative Android application designed to serve as a crowdsourcing platform connecting recruiters and job seekers. Using NLP, the platform carefully analyses job post requirements and job seekers' skills. If there is a match, the enrollment is accepted, ensuring that candidates are well-suited for the positions. Recruiters have the opportunity to post tasks, and workers can complete these tasks to earn rewards. RecruitME not only streamlines the recruitment process but also promotes task-based work, providing flexibility and opportunities for job seekers. The platform rewards the best performers, and they may even secure full-time employment with recruiters. Using Flutter and Dart, the Android application offers a user-friendly and efficient interface, making it an ideal solution for both job seekers and recruiters, enhancing the recruitment experience and providing valuable opportunities for workers.

Keywords **— MCS platform, dynamic incentives, NLP,worker selection.**

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I. INTRODUCTION

In recent years, mobile crowdsourcing has emerged as a powerful paradigm for harnessing the collective intelligence and capabilities of a distributed workforce to accomplish various tasks and services. However, the efficient recruitment and sustained motivation of mobile crowdsourcing workers present formidable challenges. Existing recruitment methods and incentive mechanisms often fail to adapt to the dynamic nature of crowdsourcing tasks and worker preferences. The current reliance on static incentives and disconnected recruitment channels has led to a situation where task matching is often imprecise. This research project aims to address this problem by developing and implementing a RecruitME that leverages users to recruit and motivate mobile crowdsourcing workers effectively. We can improve worker selection process, optimize resource utilization, and enhance the overall efficiency of mobile crowdsourcing initiatives.

II.LITERATURESURVEY

Social Recruiter: Dynamic Incentive Mechanism for Mobile Crowdsourcing (MCS) Worker Recruitment with Social Networks, by Zhibo Wang, Yuting Huang, Xinkai Wang, Ju Ren, Qian Wang, Senior Member, and Libing Wu. In this paper, they focused on the insufficient participation problem of MCS, and proposed a

dynamic incentive mechanism leveraging propagation through social networks to recruit workers for the MCS platform to complete tasks as well as expanding worker pool. A novel task-specific epidemic model was proposed to characterize the status change of users for task propagation and completion through social networks. They proposed a multi cycle based reward update mechanism that dynamically updates the propagating and completing rewards according to the real-time worker participation to tasks. The experimental results on two real-world datasets demonstrate that Social Recruiter outperforms the state-of-the-art approaches in terms of worker recruitment and task completion.

Crowdsourcing to Smartphones: Incentive Mechanism Design for Mobile Phone Sensing, by D. Yang, G. Xue, X. Fang, and J. Tang In this paper, Author have designed incentive mechanisms that can be used to motivate smartphone users to participate in mobile phone sensing, which a new sensing paradigm is allowing us to collect and analyse sensed data far beyond the scale of what was previously possible. They considered two different models from different perspectives: the platform-centric model where the platform provides a reward shared by participating users, and the user-centric model where each user can ask for a reserve price for its sensing service.

III. OBJECTIVE

The system is to develop and implement an innovative approach that optimizes worker recruitment and motivation in mobile crowdsourcing environments. Specifically, the system aims to:

1.The main goal is dynamic Incentive Mechanism for RecruitME is to come up with a better way to hire people for tasks through mobile apps.

2.The primary objective of recruitment is to identify, attract, and hire qualified candidates who possess the skills, experience, and qualities necessary to meet the needs of an organization and contribute to its success.

3.In simple terms, they're trying to make it easier to find the right people for jobs using mobile apps by using rewards to motivate them.

IV. ARCHITECTURE

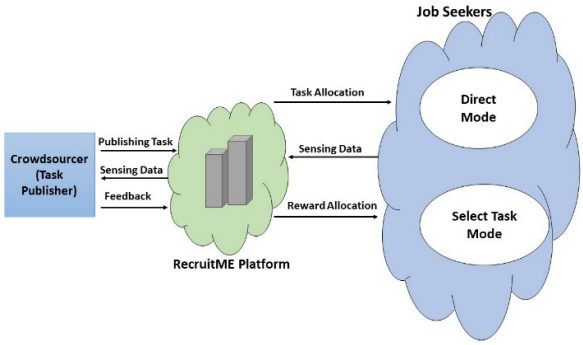

Fig.1. Architecture of RecruitME

V.PROPOSED SYSTEM

The proposed work for the ”RecruitME” project we are going to work on several key components. First, we will design and develop the RecruitME, leveraging real-time data analysis and worker profiling to adaptively adjust incentives based on task complexity, task completion. This RecruitME aims to significantly improve worker selection processthrough task completion points.

The proposed work for the "RecruitME" project we are going to work on several key components.

First, we will design and develop the RecruitME, benefit for real-time data analysis and worker profiling to adaptively adjust incentives based on task complexity.

This RecruitME aims to significantly improve worker engagement and task performance while optimizing costs.

Second, we will focus on the integration of social media user and company HR into the recruitment process. We aim to foster trust and reliability among participants, leading to improved recruitment outcomes.

This aspect of the project will involve the development of algorithms and tools to identify and connect with potential workers, creating a

sense of community within the crowdsourcing platform.

This aspect of the project will involve the development of algorithms and tools to identify and connect with potential workers through their profiles, creating a sense of community within the crowdsourcing platform. The proposed work will culminate in the implementation and comprehensive testing of the integrated system, ensuring that it will function effectively, efficiently, and securely in real-world mobile crowdsourcing scenarios. Through these efforts, we will aim to advance the most recent stages in mobile crowdsourcing worker recruitment and contribute valuable insights to the broader fields of crowdsourcing and incentive mechanisms.

VI.EXPECTEDRESULT

The expected output of RecruitME is a streamlined recruitment process in mobile crowdsourcing, where job post requirements are carefully matched with job seekers' skills using NLP. This results in suitable candidates being enrolled for positions. The platform also allows workers to complete tasks and earn rewards, with the potential for high performers to secure full-time employment with recruiters.

VII.CONCLUSIONS

RecruitME is an innovative Android application that offers a win-win solution for both recruiters and job seekers in the mobile crowdsourcing domain. It simplifies and enhances the recruitment process while providing flexible work opportunities. Overall, RecruitME aims to improve the recruitment experience and create valuable opportunities for workers in the mobile crowdsourcing space.

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REFERENCE

[1] Social Recruiter: Dynamic Incentive Mechanism for Mobile Crowdsourcing Worker Recruitment with Social Networks, Zhibo Wang, Senior Member, IEEE, Yuting Huang, Xinkai Wang, Ju Ren, Member, IEEE, Qian Wang, Senior Member, IEEE, and Libing Wu, Member, IEEE, IEEE 2020

[2] D. Yang, G. Xue, X. Fang, and J. Tang, "Crowdsourcing to smart- phones: incentive mechanism design for mobile phone sensing," in Proceedings of ACM InternationalConference on Mobile Computing and Networking, 2012, pp. 173–184

[3] Sajid Hussain Awan Nazia Habib Chaudhry Shoaib Akhtar Shaheryar Naveed Effectiveness of Performance Management System for Employee Performance Through Engagement, October Sage Journals,2020

[4] Article by Department of Business Organization and Marketing and Market Research, University of Valladolid,The Project-Based Firm: A Theoretical Framework for Building Dynamic Capabilities, August 2020

