

# Job Opportunities for Young Graduates through Engagement in Crowdsourcing Platforms in Uzbekistan

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## Abstract

In the last decade crowdworking has become a fast-developing source of employment and income for young people all over the world. With the growing portion of young generation in the total population Uzbekistan faces a challenging issue - to create job opportunities and ensure employment for the youth.

Globalization, widespread Internet connectivity and digitalization have created vast opportunities for local companies to replicate international success of crowdsourcing/crowdworking platforms by providing access to digital jobs. On the one hand, by addressing questions to a young talent pool companies can solicit valuable ideas for the new product/service development or fetch innovative solutions to their persistent problems. On the other hand, in addition to earning income the young crowds have the chance to enhance their employability, get a shortcut access to reputable employers and build their careers. This is especially important for younger undergraduates who may have limited access to jobs in traditional economy markets due to their lack of degree and prior experience as well as those residing in rural areas where number of employers is extremely low and high unemployment rates are persistent.

Multiple strands of global literature had focused on collaborative power of crowdsourcing platforms drastically changing the job market landscape and their impact on labor. As this phenomenon is relatively new and has not been widely applied in Uzbekistan, it is imperative to understand possible challenges that companies may face in leveraging this mechanism locally. This study thus aims to fill the literature gap by enhancing understating of the adoption barriers that crowdsourcing platforms could face in Uzbekistan in the framework of providing job opportunities. Identifying these hindrances and the underlying causes behind them can help companies properly design their crowdsourcing platforms and campaigns to ensure greater participation of potential contributors and job seekers.

Drawing on a survey of students and alumni of the international universities in Uzbekistan that aimed to assess the impact of incentives and task design on crowdsourcing participation in this study the authors have specifically focused on participation barriers. The conducted survey findings reveal that lack of trust is the main factor in decreased participation intention. Recommendations for companies, as well as policy makers are presented in the concluding section.

**Keywords:** Crowdsourcing, youth employment, gig economy, open talent, open innovation, Uzbekistan.

**JEL Classification:** E24, O15, O34, O35

## 1. Introduction

In recent years crowdsourcing as a phenomenon has gone through a radical transformation. Fueled by the wider acceptance of internet-based platforms in day-to-day business activities, crowdworking has become a promising source of digital employment and rising income opportunities especially for young people eager to embrace the digital transformation.

For Uzbekistan, Central Asia's most populous country, where young generation aged 18 to 30 years represents almost a third of the population, supporting and empowering young people, creating new jobs, as well as ensuring their legal rights and interests is a key issue on social and economic

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development agenda for the next decade (Government Portal of the Republic of Uzbekistan, 2024). Although in 2023 overall unemployment rate in Uzbekistan was 8%, youth unemployment for the same period reached almost 14% (World Bank, 2023).

Youth unemployment impacts not only individuals' career prospects, but it has a wider adverse effect on the society wellbeing and economic growth. Addressing this issue through educational programs and job creation initiatives through crowdsourcing technologies can empower youth, enhance economic stability, and create a better future. An ever-increasing pace of technological advancement plays a key role in this important process, as the future of work and job creation due to disruptive technologies is already on the verge of significant reinvention.

In particular, this study focuses on the idea that harnessing the potential of crowd working platforms can be a game-changer in addressing the challenge of youth employment. The survey findings demonstrate a substantial number of participants are likely to engage in crowdsourcing participation. However, when presented with a choice of factors that could deter from crowdsourcing participation participants have indicated the Lack of Time (97), Plagiarism/Theft of their ideas (39), Intellectual Property Right (IPR) issues (24) as well as Unwillingness to share their ideas with others (24) as the main reasons that would deter them from participation in crowdsourcing campaigns. The barriers and opportunities in adopting crowdsourcing platforms in Uzbekistan are thoroughly explored providing valuable insights for companies and policymakers.

## 2. Literature Review

The confluence of globalization, widespread internet connectivity, and digitalization has created vast opportunities for companies to leverage crowdsourcing platforms. This has led to the rapid growth of crowdsourcing as a means of accessing a diverse talent pool and generating innovative solutions (Bauer & Gegehuber, 2015; Brabham, 2008; Howe, 2006). Crowdsourcing platforms allow companies to tap into the creative potential of a young, tech-savvy workforce, while also providing job opportunities and skill-building experiences for the participants. This symbiotic relationship has the potential to drive economic growth and development (Taelhagh, 2017; Roth et al., 2013).

With the growing popularity and acceptance among businesses, in developing and emerging economies crowdsourcing has been included in national growth strategies with focus on providing employment for cheaper micro tasks, while skilled crowd workers from these countries also look for jobs that best suit their qualifications (Zakariah et al., 2018).

O'Higgins & Pinedo (2022) suggest, that well-designed and trusted crowdworking platforms can be particularly beneficial for younger individuals, including undergraduates and those in rural areas, who may face limited access to traditional employment opportunities due to their lack of experience or the scarcity of employers in their local markets.

Findings of earlier international studies on crowdworking platforms generally agree on that in developing and transition economies crowdsourcing platforms can offer young people residing in rural areas, where employment opportunities are scarce, a chance to access digital jobs and earn income, thereby bridging the rural-urban divide and promoting inclusive economic growth (Taeihagh, 2017). Participation in crowdsourcing campaigns can also serve as a catalyst for the development of digital skills among the youth, especially in rural and distant areas, preparing them for the demands of the digital economy and enhancing their long-term employability. By bringing together young talent from diverse geographical backgrounds, crowdsourcing platforms can foster cross-pollination of ideas and collaborative problem-solving, further strengthening the innovation ecosystem in Uzbekistan.

A relatively high proportion of studies in the field are concerned with crowdworkers' participation as a key prerequisite for the success and effectiveness of crowdsourcing initiatives (Ellmer et al.,

2019). Crowd workers bring unique perspectives, knowledge, and skills to the table which can lead to innovative solutions and creative problem-solving through collective engagement or “so-called crowd communities” (Gerber, 2020). Among the central issues of the current study are antecedent factors for crowdsourcing participation as it is strongly linked with crowdsourcing adoption and overall success. A substantial body of research focuses on antecedent factors behind participation in the knowledge sharing economy (Ye & Khankanhalil, 2017; Sedighi et al., 2016; Zheng et al., 2011). The studies range from assessing technology-based to non-technology factors related to individual’s perceived benefits and costs (Mazolla et al. 2018; Ye & Kankangalil, 2017; Zhao & Zhu, 2012). Other studies focus on solvers’ potential risks associated with crowdsourcing engagement such as ideas being shared with others (Afuah & Tucci 2012; Feller et al, 2012) or the firms’ opportunistic behaviors (e.g., not paying the solvers or being biased in decision-making).

A number of studies also suggest that trust plays an important role in the crowdsourcing contest as it is positively related to participation (Ye & Kankanhalil, 2017; Kim, 2014). When solvers trust that the platform will reward them fairly and would not misuse their works their participation effort increases (Feller et al., 2012). Perceived Fairness in the crowdsourcing environment and its impact on participation has also been studied by several authors. Their findings reveal that where solvers perceive crowdsourcing platforms as fair their intention to participate in crowdsourcing contests would be enhanced (Faullant, 2017; Franke et al., 2013; Di Gangi & Wasko, 2009). Research works on Intellectual Property Rights (IPR) and their relationship to crowdworkers’ participation by Mazolla et al. (2018) and Ullah et al. (2021) highlight that arrangements with a high level of ownership negatively affect solvers’ motivation to engage in crowdsourcing initiatives.

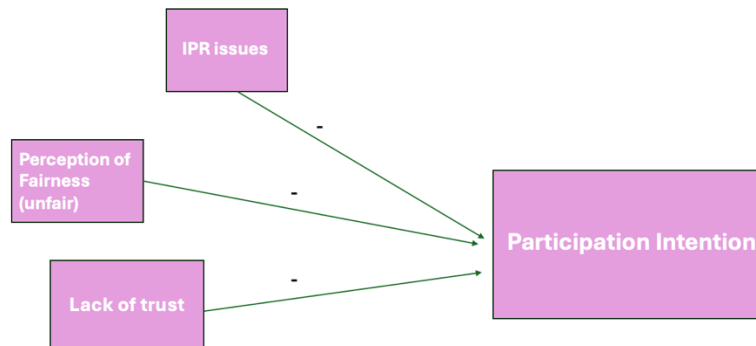
As of today there is a lack of empirical studies on crowdsourcing participation in Uzbekistan as the technology is only being introduced in the country. This research thus aims to fill the gap and contribute to previous studies by assessing the direct and mediating impact of trust, perceived fairness and IPR issues on solvers’ participation intention in the framework of job creation. Thus the research question has been formulated: how can we make crowdsourcing platforms more appealing for wider audience and increase engagement? Research objectives then follow: 1) investigate the impact of issues of Trust, IPR, and Fairness perception on participants’ intention to engage in crowdsourcing contests; 2) provide guidelines for companies and task assigners to design the crowdsourcing contests more effectively as to ensure greater participation of potential contributors and job seekers.

### **3. Methods and Data**

Based on the context-related literature we develop a research model to explain solvers’ participation intention in crowdsourcing. The model suggests that lack of trust, perceived unfairness as well as IPR concerns will decrease solvers’ intention to participate (see Figure 1). The model is tested by surveying the small number of potential solvers using a 5 Likert-point scale questionnaire. Variables related to IPR issues, Trust and Fairness perception the authors have coded as True or False. Purposive sampling method was applied in this study and 147 students of international universities in Uzbekistan have been surveyed as researchers judged them to have the best understanding of the crowdsourcing technology and its application. The majority of the survey participants were Year 1-2 students majoring in information technology, marketing and business and management as they were deemed likely to have the required knowledge and skills for crowdsourcing engagement.

Prior to answering the online questionnaire, the students have been instructed to visit the newly launched crowdsourcing platform [www.crowd.uz](http://www.crowd.uz) and browse through the listed contests to get acquainted with the simulation crowdsourcing contests and their reward structure. Although the number of participants is under representative the descriptive statistics method will be applied to develop basic ideas about the relationship between the variables (participation intention and

antecedent factors such as trust, perception of fairness and IPR issues) and allow us to highlight potential relationship between them for hypotheses development. The hypotheses shall be tested in the second round of tests in the framework of the larger survey of antecedents for crowdsourcing participation intention.



**Figure 1:** Conceptual model and hypotheses development

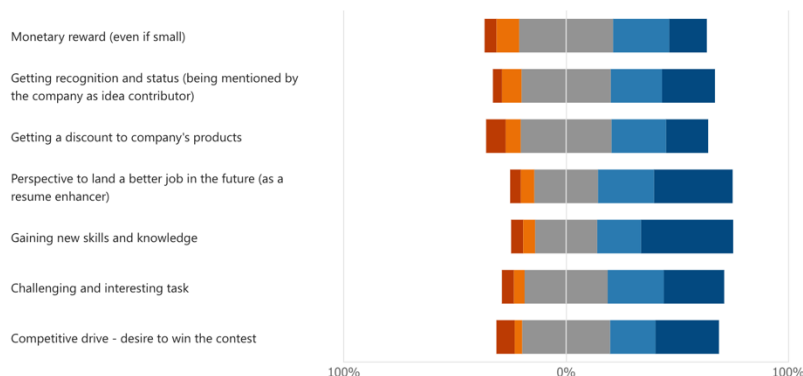
#### 4. Descriptive Analysis

As age was coded by age-groups the findings demonstrate that 86% of participants were aged 17-22. Nearly 50% of respondents did not have any prior work experience, while the rest had 1-3 years of career experience. As regards the participation intention the findings suggest that 19.7% of respondents are likely and 40% are very likely to participate in the crowdsourcing contests. In line with previous research on motivational factors driving participation (Jo & Bang, 2023; Suhada et al., 2021; Bakici, 2020) the results demonstrate that 41% participants are very likely to be driven to participate in crowdsourcing by perspective of gaining new knowledge and skills, while 35% are very likely to participate for career prospects. Peer recognition was chosen by 24% respondents as a driving factor for participation while monetary reward was only chosen by 17% of respondents as a major motivational factor driving participation intention.

12. How likely are you to participate/contribute to a crowdsourcing contest based on the proposed incentives.

Дополнительные сведения

Very unlikely Unlikely Neutral Likely Very likely



**Figure 2:** Participation incentives

The descriptive analysis was run for the variables related to IPR issues, Fairness perception, Lack

of Time and Trust concerns. Lack of Time was chosen by 67% of respondents as the factor they would choose not to participate in crowdsourcing campaigns. Plagiarism/Theft variable results demonstrate a substantial concern on the side of potential solvers (26,5%). Unwillingness to share their ideas is another factor chosen by 16.3% of respondents as a reason for non-participation. Combined these two factors demonstrate that 42.86% of potential contributors could be deterred from participation on the grounds of unclear or inadequate protection of their ideas or works submitted to the task assigners. Lack of trust i.e. concern for whether the solvers will be rewarded for their work (13.6%) and their unwillingness to share ideas with others (16.4%) negatively impact participation intention. This concern is further intensified by the lack of understanding how the platforms work as this technology has not yet been adopted in Uzbekistan.

**Table 1:** Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
age	146	1.157534	.3655578	1	2
workexperience	146	.609589	.7083082	0	4
wouldparticipate	146	1.719178	1.613491	0	4
rewardparticipate	146	2.780822	.7473461	1	4
lackoftime	146	.609589	.4895218	0	1
lackoftrust	146	.2534247	.4364693	0	1
protection	146	.3630137	.4825241	0	1
fairnessparticipate	146	2.828767	1.272302	1	5

## 5. Conclusion and Recommendations

The above analysis enables researchers to develop hypotheses for future tests to verify effects of multiple antecedents on crowdsourcing participation intention. From a pragmatic standpoint the findings of this study offer insights to organizations representing crowdsourcing platforms as well as task assigners on how to encourage solvers' participation in crowdsourcing contests. Specifically, this study contributes to practice in two ways. Firstly, it enables researchers to provide suggestions for encouraging participation in crowdsourcing through reducing the identified barriers. Secondly, this study provides insights for recommendations to policy makers on how they could support the adoption of crowdsourcing technology in Uzbekistan by developing the required infrastructure (IPR laws and regulations, Education and Awareness, Technological infrastructure development)

Recommendations to companies, willing to run crowdsourcing platforms, and potential task assigners can be drawn based on the above data. The findings strongly suggest that to ensure wider and faster adoption the crowdsourcing platforms need to carefully design their tasks, provide clear and explicit guidelines on IPR protection and ownership, as well as equip the contests with adequate and fair incentives. Additionally, to reduce the lack of trust towards crowdsourcing environment (as the technology is new the uncertainty levels regarding its performance are high) the platforms should engage to educate potential contributors and job seekers on how crowdsourcing participation could help them not only earn money, but also enhance their knowledge and skills through practice and help build their portfolio for future career development. The platforms should also aim to convey trust in potential solvers by establishing clear and comprehensive guidelines for reward structure and ensure that rewards are distributed fairly and timely. In addition to that, the government should develop stringent laws on intellectual property protection to ensure that solvers' works are adequately protected which may in turn positively drive participation. The governmental agencies should introduce a country-wide free educational programs to educate potential solvers on crowdsourcing technology and its relevance for young population. These initiatives should have a positive effect on reducing the uncertainty levels. As

crowdsourcing technology enables to provide equal opportunities for all by allowing youth from rural areas to participate in the contests, the government should consider developing necessary infrastructure in the rural areas which in turn shall help reduce inequalities for participation.

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