Application Intentions Among Crowd Workers: A Case Study

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ABSTRACT

This study aims to understand the job application intentions of crowd workers utilising an online crowdsourcing platform from the perspective of Signalling Theory. The study involved 66 students enrolled in the Bachelor of Office System Management program at Universiti Teknologi MARA, Pahang, who participated as part-time crowd workers on various online crowdsourcing platforms to fulfil the study's requirements. Partial Least Squares Structural Equation Modelling (PLS-SEM) was employed to examine the relationships between the variables within the proposed model. The study's findings revealed positive and significant relationships between job characteristics and person-job fit as the signal to the crowd worker to be attracted to the job in the online crowdsourcing platform. Thus, job attractiveness failed to navigate the job application intention as the platform involvement is to generate income. The study contributed to understanding the deeper involvement of crowd workers through signal channels by the online crowdsourcing platform, particularly from the new entrants. The right channel portrayed will increase the effectiveness of the online crowdsourcing environment and indirectly satisfy all parties involved.

INTRODUCTION

Crowdsourcing was first introduced in 1999 through platforms like Elance.com, but the term gained wider recognition in 2006 when Jeff Howe coined it and discussed it in a Wired Magazine article (Assemi et al., 2022). Today, the use of online platforms as an alternative source of income in the gig economy is no longer a new phenomenon. In the UK, 1.1 million workers participate in crowdsourcing across various sectors. This number is expected to continue growing, with projections indicating a significant rise in crowd workers by 2025. These platforms, such as

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Amazon Mechanical Turk, 99 Design, and Upwork, often referred to as open calls, offer advantages such as increased job efficiency and opportunities for inactive or part-time workers to generate income (Woodcock & Graham, 2019).

Defined as "intermediaries" (Gramano, 2020; Kässi & Lehdonvirta, 2018; Meijerink & Keegan, 2019), online crowdsourcing platforms connect crowd workers with job providers. Unlike the traditional labour market, work on these platforms is characterised by short-term contracts, flexibility (Williams et al., 2021), and geographic independence (Malik et al., 2021). Additionally, these jobs often require specific skills, particularly digital skills, as the work is performed and delivered through online digital platforms (Malik et al., 2021; Abdul Rahim et al., 2021).

The Malaysian Development Economic Center (MDEC) initiated the development of this gig economy in Malaysia. Named eRezeki, this platform aims to improve households' income in the B40 category, which refers to those with a household income below RM4000. This program profiles, trains, and qualifies participants, matching the crowd worker to suitable tasks or work opportunities on the eRezeki platform (Malaysian Development Economic Center). Like the international platform, eRezeki offers digital micro-tasks, digitally enabled tasks, and digital work. However, as eRezeki is focused on B40, the number of jobs for digital micro tasks and digital work is limited compared to digitally enabled tasks (Zakariah et al., 2018).

Under the same program, MDEC also introduced the eGHI (e-Rezeki Global High-Income) program, currently known as eRezeki Global Online Workforce (GLOW), which aims to train more skilled crowd workers in Malaysia. Unlike the eRezeki program for B40, this program targeted participants: unemployed, fresh graduates, and retrenched workers with the skill set and quality to join the crowdsourcing platform. For the e-GHI program, the crowd workers were trained to apply for jobs on international platforms for broader tasks or jobs offered. Despite Malaysia's growing stage of crowdsourcing development, its exposure is gradually increasing. Through careful planning and strategic initiatives, it is evident that this program has gained acceptance and fostered the growth of successful freelancers on various international online crowdsourcing platforms, such as LinkedIn, with 2651 077 digital talents registered.

Problem Statement

Previous studies (Ahn & Lee, 2019; Liu & Liu, 2019; Wang & Wang, 2019) have emphasised the importance of understanding crowd workers' intentions and behaviours (Gadiraju et al., 2019; Goa et al., 2019). However, many aspects of crowd workers' experiences and perceptions remain underexplored. Sun et al. (2022) noted that understanding how crowd workers perceive and interact with crowdsourcing platforms is still in its early stages. While crowdsourcing platforms may appear to function as simple transactional systems where workers complete tasks in exchange for payment, a deeper investigation is needed. This includes exploring the social, economic, and psychological factors that shape crowd workers' experiences and self-perception.

Moreover, crowd workers' behaviour is influenced by a range of factors, such as the trustworthiness of the platform and the nature of the tasks (Gadiraju et al., 2019), which have not been thoroughly examined. While existing research, such as Goa et al. (2021), has explored external signals like online reputation and salary comparison that impact participation behaviour, there is a gap in understanding how internal factors, such as person-job fit, and external factors, like job characteristics, influence crowd workers' job search behaviour and intentions on these platforms.

Research Objective

Therefore, the objective of this study is:

i.   to identify the impact of job characteristics on person-job fit among crowd workers on online crowdsourcing platforms

ii.   to identify the influence of person-job fit on perceived job attractiveness and its subsequent impact on job application intention among crowd workers

iii. to examine the extent to which job attractiveness influences crowd workers' intentions to apply for jobs on online crowdsourcing platforms.

This study will not only shed light on a deeper understanding of crowd worker job applications, but it may also serve as an eye-opener for crowdsourcing platforms and job providers to improve platform features and terms and conditions. As emphasised by Eickhoff et al. (2013), understanding crowd workers is essential as it determines the reliability and authenticity of tasks on the crowdsourcing platform. This could encourage greater engagement and create a fair environment for all parties involved.

This article is structured as follows: The next section explains the literature review related to the independent, dependent, and moderating variables for this study. The subsequent section elaborates on the methodology employed for this study, and the final section discusses the findings and conclusions.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Signalling Theory

Signaling theory is one of the best-known theories in online recruitment studies. It is a theory of communication between two parties with different information (Connelly et al., 2024). Four elements have been discussed in the signaling timeline: the signaler and receiver, the signal and feedback (Yassar et al., 2020). Spence (1973) defines a signaler as coming from an individual, product, or organisation known by someone (executives or managers) but unknown to others. It can be summarised as private information that allows an insider to know the receiver's quality (individual, product, or organisation). Positive and negative are the contents of the signal. However, the usually communicated signal is positive information used to obtain good or positive feedback/attributes (Friske et al., 2022).

However, signaling theory has frequently been applied in the opposite direction (i.e., to explain how applicants interpret organisational signals, such as when determining whether an organisation would be an attractive workplace (Connelly et al., 2011). Therefore, this study adapted this theory to apply the online crowdsourcing platform by highlighting job characteristics and person-job fit in the job advertisements as the signal, job attractiveness as a receiver, and lastly, the feedback is the crowd worker's intention to apply for the job or task offered in an online crowdsourcing platform.

Job Characteristics

When discussing the job design characteristics and motivation of employees, the job characteristics theory is known as the complete theory to describe it (Deng & Joshi, 2016). Explaining the Job Characteristics Model (Hackman & Oldham, 1976), it includes elements such as skill variety, task identity, task significance, autonomy, and feedback, which are essential components of task characteristics within the crowdsourcing environment (McFerran, 2019). Each of these elements has been determined to the various work-related outcomes (Siddiqui, 2024). Skill variety refers to the requirements of the job that require a variety of skills and talents from the workers. Meanwhile, task identity refers to the outcomes that workers need to complete on the job. The impact of the job on someone's life, people, or organisation is known as task significance. The worker's control over how and when the job is performed is known as autonomy, and feedback refers to knowledge the worker received as outcomes from the effectiveness and work that has been performed.

Although all five task characteristic elements have been well-known in studies in the context of traditional work environments, they are still limited in the gig and crowdsourcing work environment (McFerran, 2019). A study by Deng and Joshi (2016) found only three task characteristics related to crowdsourcing platforms: job autonomy, task variety, and task significance. Two new task characteristics emerged: task clarity and microtask payment. Task clarity has defined the instructions and procedures for performing the task. This has been considered important from a crowd-worker perspective as face-to-face communication or physical presence is lacking. The other new task characteristic is a microtask payment, defined as a monetary compensation rate. This has been considered important for the crowd-worker as most tasks usually offer low payment rates, especially for the microtask (Deng & Joshi, 2016).

The study on employee performance shows a positive and significant effect of job characteristics, PJ fit, and organisation commitment (Jawad et al., 2013; Hussain et al., 2017; Alla, 2017). The same findings supported (Nurtjahjono et al., 2020) findings that job characteristics were better for PJ fit and organisational commitment. As a result, when the PJ fit is better, the employee's performance improves. As the results confirm, this study tested the same hypothesis of job characteristics and person-job fit from the perspective of a crowd worker in an online crowdsourcing platform. As supported by Montgomery (2017), the changes in person-job fit need to be understood as part of the heterogeneous nature of the labour market itself. Furthermore, current workforce changes make it difficult for employers to hire the right talent for their organisations as it is also influenced by less refinement on the educational side to deal with job sophistication.

H1: Clear job characteristics from job advertisement content in online crowdsourcing platforms have a positive influence on person-job fit

Person Job Fit

Recruitment theory is familiar with the "homogeneity hypothesis" in the ASA (Attraction-Selection-Attrition) framework. Two conditions attract job seekers to apply for a job: person-job fit (PJ-Fit) and person-organization fit (PO-Fit) (Schneider et al., 1995). While this has been proven in traditional work contexts, the theory has also been validated in online crowdsourcing. However, when comparing app work and crowd work, only person-job fit matches the conditions of crowd work (Schmidt et al., 2023).

Table 1. Comparison of App work and Crowd work from ASA Framework

	Apps Work	Crowd Work
Attraction	Attracts underemployed seeking PO-fit	Attracts underemployed seeking PJ-fit
Selection	Platform selects based on proximal availability and ratings (PJ-fit)	Requestor selects based on KSA's and ratings (PJ-fit)
Organising	To find worthwhile gigs and PJ-fit;	
Attrition	To avoid bad employers/requestors and find PO-fit;	

In line with the online crowdsourcing platform environment, crowd workers usually only read the job advertisement before bidding on a task. Once completed, the job provider will submit and evaluate the task. If the job provider is satisfied, the payment will be released through the platform, and the task will be considered completed (Johari et al., 2023). The bidding process is based on the crowd worker's knowledge, skills, and abilities, which align with the task requirements (Toft et al., 2020). Furthermore, the short-term relationship between the job provider and crowd worker eliminates the relevance of person-organization fit (PO-Fit). As Dirks and Ferrin (2001) mentioned, among various types of fit, such as person-team, person-supervisor, and person-organization, person-job fit is more important when working on temporary tasks in the platform.

A study by Cable and Judge (1996) found that PJ fit is unrelated to job intention and organisation attractiveness compared to PO fit. The author stated that PJ fits the outcomes of the job, such as career satisfaction, job satisfaction, and occupational commitment. However, to counter the result, Carless (2005) retested PJ and PO fit on organisation attractiveness and job acceptance intention due to the Theory of Reason Action by positing positive attitudes (attraction to the organisation) will lead to positive outcomes of behavioural intentions (intention to accept the job offer) based on the individual belief.

Furthermore, PJ fit not only increases attraction towards jobs and organisations but also leads to intent to hire, job satisfaction, and organisational commitment while decreasing intentions to turnover (Chapman et al., 2005; Kristof-Brown et al., 2005). This occurs when potential applicants find alignment between the job characteristics and their characteristics regarding person-job fit (Kroustalis, 2009).

H2: The higher the person-job fit on a crowdsourcing platform, the greater its influence on job attractiveness

Job Attractiveness

In discussing organisation attractiveness, Highhouse et al. (2003) stated three dimensions of organisation or company attractiveness: liking the organisation, intention to apply, and prestige. A simple way to describe organisational attractiveness is an appealing place to work through the job seeker. As attraction to organisations is stimulated by the information provided, the job seeker will assess fit with the job and organisation. This has been confirmed by Charles (2005), who found that both fits correlate with organisation attractiveness. The study by Nugroho (2018) further supports the notion that organisational attractiveness influences job pursuit intentions. Therefore, to attract more job seekers, organisations should emphasise both instrumental attributes (such as salary, benefits, working hours, and location) and symbolic attributes (like competence, prestige, sincerity, and ethical image) (Nguyen Ngoc et al., 2022).

While previous studies defined the relationship with organisational attractiveness, this study shifts the focus from organisational attractiveness to job attractiveness, aligning with the environment of online crowdsourcing platforms where job advertisements receive greater emphasis. Additionally, the short-term interactions between job providers and crowd workers can diminish both relationships regarding organisational attractiveness.

It is important to note that while the study's description primarily addresses the application process within a traditional job context, information as an attractive factor remains relevant when considering the context of a crowdsourcing platform. This is supported by Williams et al. (2021), who mentioned that crowd workers often find a good fit with jobs on crowdsourcing platforms due to their attraction to the content, descriptions, and terms and conditions provided on a gig platform's website. However, on the other hand, working on a task on a crowdsourcing platform also makes the crowd workers less likely to participate if it involves a cost, which causes a lack of advantages for the crowd worker. As mentioned by Huang et al., 2020 continuing intention participation found that incurred costs incurred in crowd logistics, such as money expenditures, time and mental effort, will exhibit the intention participation.

However, only some negative aspects of online crowdsourcing prevent crowd workers from joining these platforms. A study by D'Cruz and Noronha (2016) found that despite issues such as challenging applying for tasks or jobs that require crowd workers to subscribe to premium accounts, competition among crowd workers, fraud, communication gaps, racism, and interpersonal issues, the positive aspects of being on online crowdsourcing platforms outweigh the negatives. It was found that motivation, such as monetary (e.g., salary or money) and non-monetary rewards (e.g., psychological satisfaction), contributed to the crowd worker's involvement in joining the online crowdsourcing platform (Rai et al., 2017; Horton & Chilton, 2010). Since there are a limited number of specific studies that mention job attractiveness from the perspective of the crowdsourcing platform environment, this study portrays the hypothesis:

H3: Job attractiveness significantly influences crowd worker intention to apply for tasks on online crowdsourcing platforms.

METHODOLOGY

The research design for this study follows a quantitative, cross-sectional approach. Bhandari (2020) states that a quantitative research design is structured and systematic, with clearly stated variables and hypotheses before data collection. An online questionnaire was distributed to fourth-year students pursuing a Bachelor of Office Management System (BA232) at Universiti Teknologi MARA, Pahang Branch Campus Jengka, during the March – September 2023 semester. The justification for using this method is supported by Christensen et al. (2015), who claimed that a survey is one of the best methods to employ when studying individuals' attitudes, activities, opinions, and beliefs.

The questionnaire was divided into five main sections. The first section focused on job characteristics, followed by the second section, which assessed person-job fit. The third section explored job attractiveness, while the fourth section collected demographic information, including questions on respondents' experience as crowd workers. The final section addressed job application intention. The questionnaire was adapted from previous validated studies (as shown in Table 1) to ensure reliability and relevance. The questionnaire was distributed online via Google Forms to 70 students registered as part-time crowd workers on various international crowdsourcing platforms. Thus, only 62 responses were valid for analysis after the data cleaning. A pre-test was conducted with four students in a debriefing group to ensure clarity and ease of

understanding. The pre-test indicated that the questions could be answered within 15 minutes. No major amendments were necessary, as the questions were designed to be concise and easy to comprehend.

In terms of sampling techniques, this study employs nonprobability sampling. Unlike probability sampling, which selects respondents randomly to represent the entire population, non-probability sampling targets specific groups and may not completely reflect the entire population (Zainuddin Awang, 2012, p. 79). Judgment sampling was utilised, as these students are enrolled in the subject of Digital Workforce (UBM599), which requires them to register as part-time crowd workers on international online crowdsourcing platforms. Therefore, as crowd workers, they possess the necessary information required for this study.

The SmartPLS 4.0.9.6 software, known for its robustness, was used to test the relationships between all variables in this study rigorously. Therefore, the selection of PLS-SEM in this study is based on its three attributes, as Hair et al. (2014) mentioned. The first is less stringent of PLS-SEM when working with non-normal data in which the algorithm can transform non-normal data by the central limit theorem (Beebe et al., 1998; Cassel et al., 1999). Additionally, social science research commonly encounters non-multivariate normal data (Hair et al., 2014). Furthermore, PLS-SEM is well-suited for small sample sizes, making it ideal for this study, which involves a population of 70 respondents. This flexibility in handling smaller datasets ensures the reliability and validity of the analysis, even with limited sample sizes.

Table 2. Construct and Items

Constructs	Number of items	Author
Job Characteristic	Four items	Muruganantham et al., 2021, Truban et al., 1998
Person Job Fit	Four items	Saks & Ashforth, 2002
Job Attractiveness	Five items	Lin (2010) & Ajzen (2002)
Job Application Intention	Four items	Parikh et al., (2021)

FINDINGS

Table 3. Demographic Profile

Respondents' Profile	Frequency (n)	Percentage (%)
Gender		
Male	4	6.1
Female	62	93.9
Number of projects/contests worn		
No Project/Contest	53	80.3
1 Project/Contest	4	6.1
2 Project/Contest	2	3.0
3 Project/Contest	3	4.5
4 Project/Contest	4	6.1
Number of Star Rating Received/Project Completed		
No digital work was completed	49	74.2
1 Digital Work Completed	7	10.6
3 Digital Work Completed	3	4.5
4 Digital Work Completed	7	10.6

The statistics provided indicate that there are sixty-six respondents in the study or survey. Only four are male, while most 62 respondents are female. Most of the 53, or 80.3%, students reported having participated in no projects or contests. This large proportion suggests that most respondents are not interested in or do not have access to projects or contests or that the study environment does not strongly emphasise such extracurricular activities. Only a small fraction of

respondents, 4 or 6.1%, indicated that they had participated in one project or contest. This low percentage could reflect that those who do engage in projects or contests are a small but possibly enthusiastic minority. Even fewer students, 2 or 3.0%, participated in two projects or contests. This may indicate that participation in multiple projects is rare, possibly due to time constraints or other commitments. A slightly higher number, 3 or 4.5%, have participated in three projects or contests. Although still a small fraction, this might suggest a certain level of interest in ongoing involvement in such activities among some respondents. Interestingly, the number rises again slightly to 4 or 6.1% for those participating in four projects or contests. This could be indicative of a subgroup that is highly committed to these kinds of activities.

Most students, 49 out of 66 or 74.2%, still need to complete digital work. This high number is concerning and implies a lack of engagement, understanding, or accessibility. Seven students, or 10.6% of the total, completed just one digital work. While better than completing none, this low number might suggest the students are doing the bare minimum or facing challenges that prevent them from engaging more. A smaller group of 3 students, 4.5% of the cohort, completed three digital works. This shows a moderate level of engagement but is still a low percentage of the total student population. Interestingly, the same number of students (7 or 10.6%) who completed just one digital work also completed four digital works. This suggests that a subset of students is highly engaged and perhaps better equipped or more motivated to complete these assignments. The attitudes of 66 students towards the prospect of freelancing captured various levels of interest and planning.

Assessment for Measurement Model

To investigate the causal relationship between latent (unobserved) and observed variables, structural equation modelling techniques, including confirmatory factor analysis (CFA), have been employed. One notable feature of CFA is its focus on testing the model's fit to the observed data (Mueller [&] Hancock, 2001). Table 1 shows the results of the CFA. In this study, the AVE results score above 0.5, and the composite reliability (CR) value is greater than 0.7, which is considered acceptable, as Hock and Ringle (2006) mentioned. These results indicate that the observed factors in this study can influence the latent variables.

Table 4. Reliability and Validity Analysis

Constructs	CR	AVE
Job Application Intention	0.953	0.836
Job Attraction	0.970	0.868
Job Characteristic	0.901	0.695
Person Job Fit	0.945	0.813

Path Modelling

A correlation between interconstruct and intraconstruct, represented by the HTMT ratio, should be less than 0.9 Franke & Sarstedt (2018). If the threshold exceeds 0.9, it is considered a lack of discriminant validity. As shown in Table 3, the values for all the constructs are less than 1.0, leading to the conclusion that respondents understand the difference between the two constructs.

Table 5. Discriminant Validity

Constructs	Job App Int	Job Attractiveness	Job Characteristic	Person Job Fit
Job Application Intention				
Job Attraction	0.056			
Job Characteristic	0.115	0.861		
Person Job Fit	0.135	0.881	0.893	0.219

Table 6. Result of path analysis

Relationship	Std Beta	Std Error	t-value	p-value	BCI LL	BCI UL	R^2	Decision
Job Attractiveness à Job Application Intention	-0.01	0.1	0.155	0.438	-0.173	0.156	0.836	Not supported
Job Characteristic à Person Job Fit	0.783	0.079	10.11	0	0.634	0.888	0.813	supported
Person Job Fit Job Attractiveness	0.821	0.068	12.293	0	0.689	0.909	0.868	supported

There are three structural weighting schemes in PLS-SEM: centroid, factor, and path weighting schemes. However, the most recommended scheme is the path weighting scheme, as it provides higher R-values for endogenous latent variables and is generally applicable to all types of path model specifications and estimations (Hair et al.,2014). From the results above, the value of R2 is more than 0.67, which indicates a substantial relationship (Chin, 1998). Therefore, this shows that this model is a good explanatory ability for the constructed research model (Ahmad & Wan, 2014).

This study reports path coefficients, standard errors, t-values, and p-values to analyse the structural model, following the recommendations of Becker et al. (2023). Hypothesis testing was carried out by running 10,000 bootstrapping iterations using a consistent algorithm, as this model consists entirely of reflective indicators. Table 4 presents the t-values for H1 and H2, all of which passed the hypothesis test with p-values less than 0.05 (Huang et al., 2017). The only exception was the relationship between job attractiveness and job application intention (H3), where the t-value was 0.155, and the p-value was 0.438, indicating a lack of statistical significance. The hypothesis results were further supported by confidence intervals bias-corrected for upper and lower limits, which indicated that only one exogenous variable did not significantly affect the endogenous variables, showing a negative (-0.173) and a positive (0.156) influence.
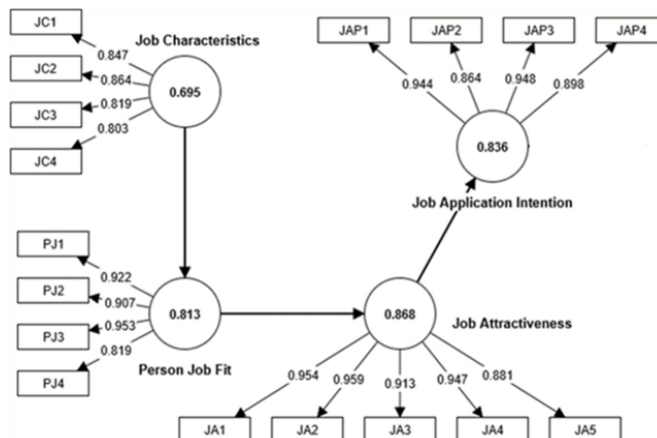

Figure 1. Structural Model

DISCUSSION

This study aims to understand crowd workers' job applications using an online crowdsourcing platform through the lens of signalling theory. While previous studies have explored various aspects of crowd worker intentions and participation, there is a lack of in-depth research on crowd worker behaviour. This study employs Partial Least Squares Structural Equation Modelling (PLS-SEM) to investigate signaling elements, precisely job characteristics and person-job fit, as signals, with job attractiveness as the receiver, to comprehend crowd worker intentions. A total of 66 part-time crowd workers participated in this study. To construct the model, researchers assessed the reliability and validity of the data through confirmatory factor analysis. Discriminant validity was also examined using HTMT values. After confirming the outer model, we proceeded to assess the inner model.

Upon model assessment, it was confirmed that only two hypotheses (H1 and H2) yielded positive and significant results. These findings emphasise the importance of job providers understanding crowd workers' intentions more effectively. Specifically, clear job characteristics and a strong person-job fit emerged as key factors that attract crowd workers. Crowd workers are drawn to jobs that align with their self-assessment of their skills and abilities, making detailed job requirements and necessary skills essential for job postings. A lack of clarity regarding job expectations and required skills can diminish the attractiveness of a job posting for potential crowd workers. This finding aligns with the study by Deng and Joshi (2016), which identified job autonomy, task variety, task significance, task clarity, and microtask payment as crucial job characteristics that crowd workers consider when evaluating jobs on online crowdsourcing platforms. Given the absence of face-to-face communication between crowd workers and job providers, providing clear and comprehensive job information is critical. In terms of person-job fit, detailed descriptions of job characteristics allow crowd workers to assess their own knowledge, skills, and abilities, helping them make informed decisions about whether to bid for a job (Schmidt et al., 2023).

Although job characteristics and person-job fit were significant in attracting crowd workers, they did not yield significant results for the intention to apply for jobs on online crowdsourcing platforms, as indicated by the findings of H3. This outcome can be attributed to the nature of the online crowdsourcing environment, where many crowd workers join primarily to supplement their income. In this context, whether a job is perceived as attractive or not, crowd workers are often willing to bid for it because compensation is tied to job completion. This behaviour aligns with the findings of Huws et al. (2016), who noted that crowd workers frequently join multiple platforms and accept various job offers as a means to generate income. Therefore, the attractiveness of an individual job may not play a significant role in influencing crowd workers' application intentions on these platforms.

In conclusion, when it comes to understanding crowd workers' intentions, job providers and platforms should emphasise two crucial signalers: job characteristics and person-job fit in the jobs posted on online crowdsourcing platforms. These two signalers have been proven to influence job attractiveness for crowd workers, providing a solid foundation for future research and industry practices.

However, the design of job attractiveness does not significantly impact crowd worker job application intentions, given the nature of the crowdsourcing environment and the motives of crowd workers when joining the platform. Therefore, it is crucial for future studies to test this model in different contexts and with various elements to further our understanding of crowd worker job

application intentions. This will enhance our understanding and provide valuable insights for job providers and platforms in the online crowdsourcing industry.

Theoretical Contribution

While the exploration of signalling theory in an online crowdsourcing environment has been previously addressed (Goa et al., 2021; Chen et al., 2023), the comprehensive perspective offered by examining the roles of signal, receiver and feedback within this theory contributes to a deeper understanding of online crowd workers on crowdsourcing platforms. In this study, the identified signal arises from the job characteristics in the job advertisement content. This signal aims to portray the person's alignment with the job and the overall attractiveness of the job to potential crowd workers. Subsequently, in this case, the receiver evaluates and determines whether the conveyed intention to apply for the job.

The results affirm the significance of job characteristics and person-job fit as critical attributes influencing the attraction of crowd workers to a job. Given the entirely online communication between job providers and crowd workers (Schmidt et al., 2023), the clarity of job advertisements becomes pivotal in initiating a pre-assessment by the crowd worker regarding the job fit. The importance of attracting crowd workers lies in these two elements due to the nature of the online crowdsourcing environment. Once a crowd worker is engaged, they become contractually obligated to complete the assigned task—failure to do so results in non-payment and potential penalties imposed by the platform.

This study takes a novel approach by extending the traditional work context to explore the concept of organisational attractiveness, which has been adapted to job attractiveness. The researcher aims to investigate whether job attractiveness holds significance from the perspective of online crowd workers. Given the absence of specific studies delving into job attractiveness in online crowdsourcing environments, this research provides valuable insights into the unique characteristics of such platforms, potentially paving the way for improved practices and policies in online crowdsourcing.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The present study acknowledges several limitations, presenting opportunities for improvement in future research endeavours within similar or different contexts. Firstly, this study is confined to part-time crowd workers, specifically students enrolled in the Digital Workforce subject who must register as crowd workers for online crowdsourcing platforms. Consequently, the generalizability of findings, particularly in the context of job attractiveness, is limited. It is recommended that subsequent studies consider applying the same model to full-time crowd workers, such as those on platforms like Amazon Mechanical Turk, which employs a distinct selection process for crowd workers.

Secondly, while this study underscores the significance of job characteristics as a crucial indicator for crowd workers, future research is proposed to explore additional elements. Specifically, investigating two new task characteristics—task clarity and microtask payment—as a signal within the proposed conceptual framework could provide a more comprehensive understanding of crowd workers' behaviour dynamics.

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CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

AUTHOR'S CONTRIBUTIONS

Author 1 carried out the research and wrote and revised the article. Author 2 and Author 3 supervised the research progress and reviewed and revised the manuscript. Author 4 performed data collection and analysed the result.

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