

Coping with the Invisible Boss: An IPA Study of Technostress and Adaptation among Digital Platform Workers in Oman

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Abstract: The purpose of this paper is to explore the lived experience of gig workers working under algorithm management- the “Invisible Boss” in Oman. This research employs Interpretative Phenomenological Analysis (IPA), a qualitative approach to explore the lived experience through semi-structured in-depth interviews of gig workers in Oman. The findings revealed three superordinate themes, each comprising multiple subthemes that explains lived experience of gig workers working under algorithm management- the “Invisible Boss” in Oman. The superordinate themes include (1) navigating algorithm oversight, (2) experiencing technostress and (3) coping and adaptation strategies. The findings of the study will contribute to creating a sustainable digital labour platform, balancing productivity and the well-being of gig workers in Oman. The study is based on a small sample of gig workers, which limits the generalization of the findings. Future researchers can expand the sample across different platforms and mixed method approach. This research contributes to the gig economy by providing an in-depth understanding of platform workers in Oman. This study uncovers the challenges of algorithm control and develops adaptive coping strategies for the digital environment.

Keywords: *Invisible Boss, Algorithm Management, Technostress, Interpretative Phenomenological Analysis, Gig workers.*

1. INTRODUCTION

Gig economy describes a labor market where autonomous, task-based employment is more common than traditional long-term employment contracts. With its flexible work schedules, freelancing options, and online platforms that link workers to jobs or projects, the gig economy has completely transformed the worldwide labor market. The Gulf Cooperation Council (GCC) has been influenced by the gig economy. In the GCC, the gig economy has grown in popularity recently, bringing with it both advantages and difficulties (Darwish et al. 2025; Rahman & Abey 2025). These platforms have simplified the process of locating employment opportunities, which are initiated by the gig economy and are intended to diversify one's income streams.

Oman, which emphasizes digital transformation as a key driver of economic competitiveness and diversification in the Oman Vision 2040 (Oman Vision 2040, Harrasi et al. 2026; 2020). Oman has recently witnessed a remarkable growth of gig workers on digital labour platforms (Harrasi et al. 2026; Ennis, 2025; Darwish et al. 2025). This platform operates through an algorithm system that allocates tasks, monitors timings, evaluates performance and determines rewards, effectively acting as an “Invisible Boss” (Arcidiacono & Sartori, 2024). Employees feel stress due to constant supervision, unpredictable income, performance surveillance, tracking, maintaining customer satisfaction ratings, exposing new forms of psychological pressure (Basir, 2025). This phenomenon has given rise to technostress, where employees experience pressure and are unable to cope-up with technological demands and algorithm opacity. Moreover, Gig workers heavily rely on mobile applications for any official communication, resolving customer complaints, app glitches and payment delays (George, 2024).

The lack of transparency in algorithms puts gig workers into a “grey zone” of labour, making them vulnerable to technostress, affecting mental health and limiting career mobility. Gig workers often navigate such challenges and stress in isolation without any organizational support (Wu & Huang, 2024). Therefore, it is important to understand how gig workers in Oman perceive, interpret and cope with the stress caused by the “Invisible Boss”. Gig worker also faced challenges over their upskilling as the work is repetitive and not complex which leads to lack of growth in professional life (Purohit et al. 2026). This research has employed an IPA research approach to explore the lived experience of gig workers working under algorithm management- the “Invisible Boss”. The study's findings will contribute to creating a sustainable digital labour platform that balances productivity and the well-being of gig workers in Oman.

2. LITERATURE REVIEW

Gig workers refer to a workforce mediated by a digital platform where task allocation, scheduling, supervision, feedback, and evaluation are controlled by an algorithm. Gig workers suffer from technostress, which include techno-overloaded, techno-invasion, techno complexity, techno uncertainty and techno-insecurity. Several studies reported that technostress is linked with lower job satisfaction, work exhaustion, low productivity, reduced job performance, and negative physical and mental health (Ali et al. 2024;

Umair et al. 2023). Workers also face issues in managing their work-life balance and suffer from social isolation, which gets exacerbated by the absence of labour protection as gig workers are categorized as independent contract workers, leaving them without benefits such as paid leave, insurance, promotion and job security (Indoria, 2025; Sharma et al. 2025). Workers have limited control over algorithms, as they cannot negotiate rates, deadlines, timings, pace of work, time logging or low-wage cycles, leaving them with little autonomy. Gig workers frequently face abusive customer behavior, but their performance depends on ratings, making it difficult to refuse or report, which adds to psychological stress (Liang et al. 2025; Ali & Sivasubramanian, 2024). Workers' profiles, performance dashboards, leaderboards, and rankings generate peer pressure to compete and outperform continuously.

Additionally, weather, traffic, safety hazards, app crashes, GPS failure, mismatches in assignments, delayed updates and physical risk disproportionately affect gig workers (Gupta, 2025; Sangeetha, 2025; Cram et al. 2022). One of the emerging concerns is skill devaluation and deskilling, as many platform tasks are repetitive and low in complexity, leading to a lack of professional and personal growth. Organization mechanisms such as technical support, training literacy facilitation, and top management support can mitigate the negative effects of technostress by helping workers to regulate their emotional response to digital demand (Ali & Sivasubramanian, 2024; Umair et al. 2023; De Stefano, 2020). Moreover, individual strategies such as mindfulness, digital boundary settings, cognitive reappraisal, emotional regulation techniques, social support, seeking resilience-building practices and self-initiated learning and experimentations

3. METHODOLOGY

This research employs Interpretative Phenomenological Analysis (IPA), a qualitative approach to explore the lived experience of gig workers in Oman. This approach allows for an in-depth examination of participants' subjective experiences and how they make sense of those experiences. A purposive sampling strategy has been used to select the participants who can provide rich insights for working under an invisible boss. This study includes 18 participants (Gig workers).

IPA study typically uses small homogenous samples to allow detailed case-by-case analysis. All the participants were required to sign the ethical consent form to participate in the study. Data was collected through semi-structured, in-depth interviews while maintaining the research focus. The interviews were conducted in-person as well as online. The duration of the interview ranged between 35-110 minutes per participant. Data analysis followed the six-step IPA process proposed by Smith et al. (2009)

4. RESULTS AND FINDINGS

The findings revealed three superordinate themes, each comprising multiple subthemes that explains lived experience of gig workers working under algorithm management- the "Invisible Boss" in Oman. The superordinate themes include (1) navigating algorithm oversight, (2) experiencing technostress and (3) coping and adaptation strategies.

4.1. Theme 1 – Navigating Algorithm Oversight

Invisible boss assign tasks and conduct performance evaluation therefore they feel pressure as they of being constantly under supervision. Workers have concerns about transparency and fairness as they did not understand how exactly the task allocations or ratings are done. They don't have much autonomy over task selections. Once they are active on the platform, the task keeps coming as they are dependent on these platforms for income. They need to comply with algorithms rules even though they are unfair and exhausting. Workers are sceptical that the algorithm favoured certain workers, expressing concerns about potential bias in task allocation and ratings.

"Every day starts with the app, and from that moment, it feels like my day is already planned by something I can't see. It instructs me where to go, which order to take and I just follow. Sometimes I wonder who is actually in control - me or the system." (Respondent-3)

"The rating system feels like a mentimeter. Even a small drop makes me anxious because I know it can affect my future work. I try to be extra careful with customers, even when situations are not in my control, because I feel like the app is always watching and deciding my value" (Respondent-14)

"There are days when I get good orders back-to-back, and then suddenly, without any reason, it just stops. No explanation, no warning. It makes me feel like I'm being evaluated all the time, but I don't know on what basis. I keep thinking - did I do something wrong? Is my rating low? But there's no one to clarify, so I just keep guessing." (Respondent-10)

4.2. Theme 2 – Experiencing Technostress

Algorithms, pressure and performance anxiety were common with workers reporting stress over ratings and income fluctuations. Workers reported stress related to techno-overload as they feel pressured to complete multiple tasks to maintain ratings, client feedback and earnings. Techno-invasions have obscured work-life balance as they work extended hours. Techno complexity arises from frequent updates on the platform, requiring constant adaptation. Workers feel significant emotional and physical impact causing to fatigue, anxiety and sleep disruption.

"Once I get an order, the clock starts ticking and instantly this pressure to finish everything fast. If there's traffic, or if I'm delayed in any way, then I start panicking because I know it can impact the numbers and how much money I make." It's not only physical pressure, it's mental tension that accumulates through the day." (Respondent-6)

“So I feel like I’m plugged into the app all the time, whether I want to be or not. My brain doesn’t really shut down; I’m continually thinking about the next order, the next notification, the next target. Like I’m always ‘on’ even in my rest time.” (Respondent-2)

“Technical issues make it worse. When the app freezes or there is a network drop, I feel utterly helpless because my income relies on something beyond my control.” I get frustrated and anxious at the same time in those moments.” (Respondent-14)

4.3. Theme 3 – Strategies for Adjustment and Coping

Workers are attempting some strategies to cope with stress. In other words, a problem-focused coping strategy focuses only on task prioritization from your schedule (strategically scheduled), and you plan to work with multiple platforms. Such emotion-focused coping strategy involves seeking advice, peer support, formal support and online communities. Adaptive agency allowed workers to establish a routine, and task-selection helped optimize the workload with respect to earnings.

“With time, I have begun to identify patterns — what hours are good and what location gives more work. I used to panic every time I get an order, but now I try to orient my day as per my convenience,” she says. That doesn’t relieve all the pressure, but it makes me feel a bit more in control.” (Respondent-18)

“At a certain point, I thought I’m not going to control the system entirely. So I focus on what is in my control, my attitude, my timing and how I respond to situations. This acceptance has made things a bit easier mentally.” (Respondent-7)

“Talking to other workers helps a lot. We talk about how things go, what works and what doesn’t work, and that provides me with some clarity. It just makes me feel like I’m not alone in this.” (Respondent-3)

5. CONCLUSION

The study finds that gig workers encounter significant difficulty dealing with the “invisible boss” of algorithm management. Workers are in huge trouble, also concerning guaranteeing non-biasness and independence of platforms w.r.t algorithms. Fairness and transparency become the major concerns of workers to provide income digitally. These pressures manifest into technostress via factors such performance anxiety, techno-overload and techno-invasion and techno-complexity which can negatively affect physical, emotional and mental health. Workers face significant challenges but are still attempting to adapt through strategies such as problem-focused coping strategy, emotional focuses coping strategy and adaptive agency to maintain income generation and manage stress even within highly constrained environment.

6. PRACTICAL IMPLICATIONS

While digital platforms provide peer to peer income sources they put forth distinct psychosocial challenges which can only be addressed through combined technological, organizational and social measures ensuring a sustainable economy. The production of algorithm transparency from the digital platforms should decrease uncertainty and perception of bias. It is the Responsibility of policymakers to facilitate a formal support mechanism for gig workers in terms of training, dispute resolutions and addressal of concern by including formal definition of gig workers into the existing labour framework.

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