Understanding Platform-Mediated Work-Life: A Diary Study with Gig Economy Freelancers

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Online freelancing platforms, such as Upwork, hold great promise in enabling flexible work opportunities where freelancers can combine their work with other life responsibilities, hereafter work-life. However, prior research suggests that platform features and self-managing demands of freelance work can jeopardise this apparent flexibility. In this paper, we report findings from a qualitative study, combining a 14-diary and semi-structured interview with 15 Upwork freelancers. We explored online freelancers' work practices, challenges, and the impact of platform features on their everyday lives. Our qualitative data suggest that platform features and individual context shape online freelancers' work-life practices. Freelancers develop strategies to mitigate platforms' constraints and balance their individual preferences and responsibilities. Further, our findings illustrate how platform features challenge freelancers' availability expectations, work autonomy, and work detachment. This paper contributes an empirical understanding of the factors influencing online freelancers' work-life practices by drawing upon Wanda J. Orlikowski's Structuration Model of Technology. This theoretical lens renders the interplay of freelancers, platforms, and instituted norms of freelance work.

CCS Concepts: • Human-centered computing \rightarrow Empirical studies in HCI; • Empirical studies in collaborative and social computing.

Additional Key Words and Phrases: Gig Economy, Online Freelancing, Upwork, Work Practices, Work-Life Balance.

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1 INTRODUCTION

Freelancing platforms, such as Upwork and Fiverr, that connect independent freelancers with clients have started to transform how freelance work is done internationally. These platforms

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bring about a model of work that connects independent freelancers with customers on a service or project basis. While no standard definition exists, this model of work is commonly known as the '*gig economy*' [103]. Freelancing platforms primarily mediate forms of knowledge-based freelance work, such as software development and creative writing, which involves harnessing skills, tools, and collaboration to (re)produce knowledge [55]. One underpinning rhetoric of online freelancing platforms is the ostensible flexibility freelancers have over their schedules, work practices, and even pay rates [12]. Arguably, freelancing platforms can enable flexibility to incorporate non-work responsibilities into freelancers' routines, making it especially appealing for professionals with caring duties, disabilities, and simply those who do not feel welcome in more bureaucratic settings [46, 47, 54, 67]. However, platforms' structures incentivise competition in a global marketplace with an oversupply of workers, which often translates into long working hours, social isolation, and difficulty to switch off [8, 63, 83, 101]. Despite the advertised flexibility and autonomy, research has shown that platforms do not deliver on this promise for all freelancers [6, 13].

Throughout this paper we use the term 'work-life' to highlight the tightly interwoven relationship between freelancers' work and their everyday lives. Petriglieri et al. [73] suggest that this intimate work-life relationship stems from the absence of organisational 'holding environments' (e.g., community support and access to resources). As a result, freelancers embody work as part of their identity as a strategy to cope with precarity and career ambiguity. This embodiment translates into creating strong ties to their routines, workplaces, and even finding a greater purpose in their work [22, 23, 42]. In terms of work practice, such intimate relationships between work and identity can be seen in freelancers' self-promotion strategies through their personal social media accounts, e.g. [36, 37]. For freelancers, the distinction between work and 'non-work' – i.e., activities that do not entail remunerated labour [50] – is not as clear-cut as with workers with stable employment [30, 42]. As more people transition to various forms of freelance work, it is crucial to understand the role platforms play in freelancers' everyday lives and how they might influence this intimate relationship freelancers have with their work.

Prior research has examined the opportunities and challenges freelancing platforms create for freelancers. On the one hand, platforms bring together freelancers and clients that would not have otherwise met [25, 35], build trust between these parties through standardised profiles, rating systems, and mediation of monetary transactions [48, 63]. These features provide convenience for freelancers and clients to arrange and manage work flexibly on a project or task basis. However, on the other hand, these features pose challenges for workers, e.g., by relying on positive client ratings to secure projects [87, 100] or imposing work monitoring tools and evaluation mechanisms that constrain worker agency [55, 69, 74, 78]. Freelancing platforms have transformed how freelance work is done by becoming central intermediaries of working relationships that were previously held between freelancers and clients directly.

As the world of work becomes more entangled with digital technologies [50], scholars have called for a greater focus on practice-centred research questions [72]. Practice theory posits social life as an ongoing production that emerges through people's recurrent actions [32]. Such an approach engages with workers' actions and everyday 'doings' to analyse how technology influences (both positively and negatively) the enactment of their work [71]. Practice theory also considers the broader socio-historical moments that underpin work contexts [32]. Given the increasing research that has problematised freelancing platforms and the need to further understand how these systems impact workers' lives, we focus on the following research questions:

- 1. How do online freelancers manage their work-life practices?
- 2. What challenges do freelancers experience while combining their platform work with other work-life activities?
- 3. What features of freelancing platforms, if any, impact freelancers' management of their work-life practices?

We addressed these questions through an in-depth qualitative approach, combining a 14-day diary and semi-structured interviews with 15 online freelancers using Upwork. Our qualitative findings suggest that online freelancers consider both their individual context and platform features when managing their work-life. We found platform features constrain freelancers' work-life by imposing demands on availability, autonomy, and work detachment. Freelancers develop practices to mitigate these constrains and accommodate individual circumstances and preferences, however, this is at the expense of added work. Our findings highlight the underlying challenges of self-managing an online freelancing work-life. Finally, we make three primary contributions that confirm and extend previous research:

- We contribute an empirical understanding of online freelancers' work-life practices i.e., characterising the practices required to manage online freelancing with other commitments, the constrains and challenges that platform features pose for work-life management, and how diverse contexts can impact online freelance work.
- We foreground the various factors that influence online freelancers' work-life practices drawing upon Orlikoswki's [71] Structuration Model of Technology. This theoretical lens renders the interplay of freelancers, platforms, and instituted norms of freelance work.
- We contribute to the discourse of work power in the gig economy and call for innovative ways to engage freelancers in the design of platforms.

2 RELATED WORK

2.1 The Impact of Gig Economy Platforms on Workers' Lives

The gig economy model has redefined the contemporary world of work. De Stefano [86] characterises the gig economy as the mediation of tasks and services through digital platforms like Uber, Upwork, and TaskRabbit. Woodcock & Graham [103] argue that there are two primary forms of gig economy work: location-based and location-independent. The former requires workers and clients to share the same physical location (e.g., Uber taxi driving services), whereas the latter is conducted entirely online regardless of the client and worker location (e.g., Upwork freelancing services). This distinction has important implications for how platforms allocate, manage, and evaluate workers. By understanding how platforms interact with workers, we can explore the impacts platforms have on workers' work-lives.

2.1.1 Platform Capitalism. To unpack how platforms impact workers' lives, we consider it crucial to note the broader socio-economic conditions that have shaped this emerging form of work. In his book, Srnicek [85] examines the capitalistic conditions that underpin gig economy companies. He characterises these companies as 'asset-less' in that most labour costs are 'hyper-outsourced' to workers who are responsible for their own work materials (e.g., devices), training (e.g., developing skills), and welfare (e.g., insurance and time off). Such traits enable companies to maximise their profit by cutting out workers' benefits, such as sick pay, overtime, maintenance, to mention some. This is an important element to bear in mind because we shall examine how workers consider such conditions in their everyday lives.

Another critical element of platform capitalism is companies' control over data to further generate value. Gig economy companies have established themselves as intermediaries of work relationship by controlling the software and analytics that enable their systems [26]. It is platforms' vested interest to develop features that can further enhance their predictive algorithms to increase profitability [74]. Such practice has been characterised as "dual value production" [26] or "double bottom line" [43] whereby platforms generate revenue from workers and customers' monetary transactions but also from the value of the data produced by these parties' interactions with the system. These institutional properties allow us to understand gig companies' incentives to police, extract data from, and model work interactions. We are interested in studying how such platform conditions impact freelancers' work-life practices.

2.1.2 Algorithmic Management and the Autonomy Paradox. Gig economy platforms operate through a wide range of information-based decision systems that automate work processes, also defined as algorithmic management [62, 66, 77]. Algorithmic management functions have minimised the need for human intervention in managerial processes, thereby enabling a quick, cost-effective, and scalable organisation of an independent and distributed workforce [28]. Gig workers no longer interact with human management but rather with systems that track their behaviour, evaluate their performance, and automate decision-making [66]. Algorithmic management is central to gig economy platforms and how they influence the work experience.

Recent research has indicated the paradoxical nature of gig work and algorithmic management. On the one hand, platforms enable worker flexibility and autonomy, for example, choosing one's working hours and combining work with other non-work activities [7, 12]. On the other hand, workers' autonomy is constrained by algorithmic management features, such as being subject to constant tracking and performance evaluations while working [65, 66, 81]. Anwar et al.'s [7] study with women gig workers in India illustrates such dynamic of platforms enabling opportunities to further exercise work autonomy, while being subject to algorithmic and social forms of control and surveillance. Further, Lee et al. [62] suggest that this autonomy paradox of management algorithms simultaneously enabling and constraining work practice shapes emerging strategies to work with and around platform algorithms. In this paper, we set out to extend this literature in the online freelancing context.

2.1.3 The Added Labour of Gig Work. Emerging research has started to document the added, often invisible, labour that workers must shoulder while working on gig economy platforms. Workers (in multiple platforms and types of gig work) often spend significant time in online communities and forums collectively sensemaking algorithmic evaluations and exchanging knowledge about platforms' features [62, 91, 102]. Workers on Amazon Mechanical Turk (AMT), a location-independent platform, spend about 33% of their workday in activities that go unpaid, such as managing their payments and finding profitable tasks [92]. Drivers of ridesharing apps, such as Uber and Lyft, go 'above and beyond' to ensure their rides are 'pleasurable' for customers resulting in significant emotional labour [19, 39, 75]. Finally, as a product of platform capitalism, gig workers must seek support in developing skills and using their assets (e.g. cars and phones) to conduct work [1, 14, 89]. These examples show that despite the apparent flexibility and autonomy that gig platforms promise, workers usually take on added, unpaid work to have success in the gig economy.

Emerging literature has begun to examine how platform features and the added labour of gig work impact workers' daily lives. Two studies with AMT crowdworkers found that this type of gig work pushes workers to harness a wide range of tools and multitasking behaviours to be more effective in completing tasks, finding reliable task requesters, and increasing their earnings [60, 99]. These working practices come at the expense of blurred boundaries between their work and non-work activities. Sannon & Cosley [79] showed qualitative evidence of how crowdworkers' level of experience with the platform enables them to better asses privacy-related risks and mitigate the added labour of protecting their data to be more efficient. This prior research illustrates how platforms' management features and workers' individual context play a crucial role in shaping work experiences in the gig economy. Much less, however, is known about workers' experiences with online freelancing platforms, which differ from crowdworkers in that it requires longer collaboration with clients, specialised domains of knowledge, and platforms' functionalities in terms of work management are vastly different [48, 64].

2.2 Freelancing Platforms: The Changing Nature of Freelance Work

Freelancing platforms such as Upwork and Fiverr embody an emerging dimension of the gig economy. These platforms have enabled a 'planetary labour market' [41] for freelance work, whereby on-demand talent can be hired around the clock across geographies. Different from other forms of algorithmic management, freelancing platforms enable a more flexible ecology of features and sociotechnical processes to structure work [55]. Jarrahi et al. [48] have referred to this as 'platformic management' that simultaneously enable worker autonomy (e.g., to selfmanage work and wages), while also constraining the work mediation to prevent the platform disintermediation (e.g., through monitoring and account suspension). As such, online freelancing platforms enable greater flexibility to organise one's work, however, they also impose managerial constraints to worker agency.

Freelancing platforms' managerial processes are shaped by the need to mediate knowledgebased services. Knowledge-based freelance services, such as software development and creative writing, require specialised knowledge, frequent collaboration between freelancers and clients, and flexibility to monitor projects that widely vary in scope and duration. Thus, freelancing platforms tap into complex managerial elements that support these processes, for example, detailed profiles that promote freelancers' expertise, different hiring formats (e.g., per hour, per fixed project, or per portfolio item), and on-platform tools that support collaboration, such as transferring files, videoconferencing features, and even project tracking software [55, 88]. Freelancers appreciate platforms' support in finding work, but they advise against relying on platforms because they are designed to favour profit-making over freelancers' preferences, displacing the autonomy and agency that is valued from freelancing [6, 13, 69]. As a result, freelancers develop practices and strategies to work around platforms' management constraints [48, 87].

Prior research has begun examining the competencies and strategies freelancers develop around platforms' algorithms. For example, to compete in this global labour marketplace, freelancers must frequently update their knowledge of platforms' processes, e.g. understanding how clients rate their services, to stand out from the crowd and secure work [49]. Freelancers set their prices by considering multiple factors, such as off-platform experience, time devoted to online freelancing (e.g., part-time), and assessing peers' profiles [34]. Freelancers draw from a robust ecosystem of tools, technologies, and actors to circumvent platforms' stringent control over workflows and collaboration with clients [55]. Freelancing platforms require new and different forms of work practice to more traditional, off-platform forms of freelance work [6].

2.2.1 The Emotional Work Involved in Self-Managing Online Freelancing. Like other forms of gig work, online freelancing also comes with added, emotional work. Blaising et al., [13] found through a longitudinal study that platforms can support career development, e.g. by providing entrepreneurial training. However, this development comes at the expense of "emotional

overhead" that stems from self-managing projects, client relationships, and reconciling frequent financial uncertainty. Further, self-management becomes pronounced in online freelancing because it involves orchestrating various processes to conduct work, such as defining working hours, having adequate infrastructures (e.g. a comfortable workstation), managing finances, and finding new projects [11, 21]. Most of this self-management is done in isolation with little peer support, mentoring, or socialisation, which can lead to increased stress and emotional pressure [10, 14, 15, 101]. There is a need to further understand how freelancers consider these challenges of added work in their everyday routines to inform future platform designs and interventions.

Moreover, a growing body of research has found that the challenges of self-managing online freelancing are more acute for certain groups of people. Freelancers in the Global South, for example, experience exacerbated precarity, such as discrimination and abuse from clients, heightened work uncertainty, and low-paying jobs [7–9, 24]. Women spend more hours than men freelancing online to achieve similar revenue and, particularly women of colour, are more likely to receive negative reviews than white men [27, 33, 44]. Given that platforms operate internationally, it is crucial that researchers consider this emotional work of self-managing an online freelancing work-life in diverse contexts [47].

2.3 The Structuration Model of Technology

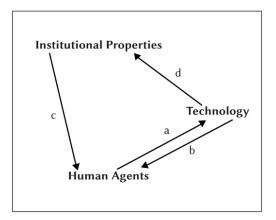


Fig. 1. Orlikowski's [71] Structuration Model of Technology

In this paper we will draw upon Orlikowski's Structuration Model of Technology to discuss and frame our findings. Orlikowski argued that technology provides limits and opportunities for work practices. She explored the interrelationship between information technology, social practice, and institutional contexts in which social practice is articulated and embedded [52]. Orlikowski drew upon Gidden's [38] concept of structuration which regards social structures as 'dual', making them an enabler and outcome of human practice [32, 80]. For Orlikowski, technology holds this duality, enabling but not determining work practices and holding an 'interpretive flexibility'. In Orlikowski's view there is also an institutional context to the use of technology that serves to provide norms, know-how and perspectives on use, and which is itself influenced by technology.

Orlikowski [71] proposed a model with three components (figure 1). The first component is "human agents", which can encompass those involved in the process of developing the technology as well as using it. The second component of the model is "technology" such as information

systems. The final component is "institutional properties" which can encompass culture, ideology, and socio-political conditions.

In the model (figure 1) there are four arrows linking components. Arrow "a" connects "human agents" to "technology", depicting technology as the product of human action. Arrow "b" connects "technology" to "human agents", portraying technology as the mediation of human action and thus an enabler and constrainer of work practices. Arrow "c" connects "institutional properties" to "human agents", representing that human agents are influenced by existing knowledge, resources, and norms. Finally, arrow "d" connects "technology" to "institutional properties", depicting how technology, acts upon, transforms and reinforces social norms.

In discussions of how the model can be applied, Orlikowski differentiated between understanding technology in *design mode* and *use mode*. When technology is being designed, it is far more likely that the human actors will exert a greater influence on the technology (arrow a) than when it is in use, and new technology will likely be more disruptive of institutional properties (arrow d) than during ordinary use. However, as Orlikowski points out, technology never finishes being (re)designed during its lifetime, and users of a system might appropriate, reinterpret, and customise it.

In our usage of the model, the technology in question is freelancing platforms, such as Upwork, and the human agents are freelancers. Other human agents, including clients and platform developers could also be considered in versions of the model but they are not the focus of this study. Given that freelancers typically work independently rather than in teams and organisations, we regard this institutional property as more akin to the established norms of more traditional forms of freelance work, such as client relationships, self-managing work, and cultivating a reputation.

3 METHOD

We took an in-depth qualitative approach to examine the work-life of 15 online freelancers using the platform Upwork. We followed the "elicitation diary" approach described in Carter & Mankoff [20], asking participants to keep daily diary entries for 14 days, followed by semi-structured interviews. Through this approach, we gained a rich understanding of participants' everyday work-life routines, their challenges, and the impact that Upwork's technological elements has on their work-lives.

3.1 Participants and Recruitment

We recruited participants who had freelanced on Upwork for at least three months, used Upwork as their primary freelancing platform, and had active projects throughout the study period. We aimed to recruit a diverse sample across gender, age, nationality, professional domain, and experience freelancing online. Given that prior research has focused on US-based freelancers in recent CSCW literature, e.g. [13, 15, 34, 68], we considered crucial to expand our sample to encompass freelancers based in different countries. We advertised the study in different online communities, including Reddit subforums (e.g., r/Upwork), Facebook and LinkedIn groups, and freelancing Discord servers, including paid ads during February 2021 on Reddit and LinkedIn linking to our screening survey. 94 people filled in our screening survey, of which only 19 responded to our follow-up message, 16 completed all the stages of the study (see 3.3 Procedure for details), and one person requested their data to be removed from any research outputs several months after the study (this was part of their participation rights). As such, we withdrew their data from the analysis and is not considered in this paper.

The sample reported in this paper comprises of nine participants who self-identified as female and six as male. Participants' ages ranged from 18 to 52. 53.33% of participants had freelanced on Upwork between one and over four years, whereas 46.66% had used it between three and six months. 80% reported Upwork as their primary source of income, while 20% reported using Upwork as a supplementary source of income. Participants were from 11 different nationalities located across 10 countries – all fluent English speakers. See Table 1 for an overview of participants' information.

ID	Gender	Age Range	Nationality	Country of Residence during the Study	Experienc e with Upwork	Income Reliance on Upwork	Types of Services Provided	Self-reported Time Spent on Upwork
1	Female	18-24	Singaporean	Czech Republic	3 months	Supplement ary	Writing	< 20 hours a week
2	Female	25-31	American	United Kingdom	1-2 years	Primary	Market Research	30-40 hours a week
3	Female	32-28	British	United Kingdom	1-2 years	Primary	Academic Editing	< 20 hours a week
4	Male	25-31	Bangladeshi	Bangladesh	1-2 years	Primary	Database Developme nt	> 40 hours a week
5	Male	25-31	Israeli	Israel	3-4 years ^a	Supplement ary	Translation	< 20 hours a week
6	Female	46-52	British	United Kingdom	1-2 years	Primary	Writing	< 20 hours a week
7	Female	25-31	Bruneian	Brunei Darussalam	More than 4 years ^a	Supplement ary	Marketing	< 20 hours a week
8	Female	18-24	American	United States	4-6 months	Primary	Graphic Design	< 20 hours a week
9	Female	32-38	American	United States	4-6 months	Primary	Data Analysis	< 20 hours a week
10	Female	25-31	American	Pakistan	1-2 years	Primary	Writing	20-30 hours a week
11	Female	25-31	Honduran	United States	1-2 years	Primary	Graphic Design	< 20 hours a week
12	Male	25-31	Brazilian	Brazil	4-6 months	Primary	Translation and Writing	20-30 hours a week
13	Male	18-24	Nigerian	Nigeria	4-6 months	Primary	Web Developme nt	30-40 hours a week
14	Male	25-31	Nigerian	Nigeria	4-6 months	Primary	Marketing and translation	> 40 hours a week
15	Male	25-31	Indian	India	4-6 months	Primary	Writing	20-30 hours a week

Table 1. Participant Information

^aUpwork was formerly Elance-oDesk

XX:8

3.2 Diary Design

The diary's primary goal was to prompt participants to capture their work and non-work activities for later discussion in semi-structured interviews. We designed a series of prompts that encouraged participants to reflect and share practices around their online freelance work, non-work activities, everyday routines, transition moments between work and non-work, and productivity. Example diary prompts included: "Briefly describe what you've worked on recently;" "Take a moment to broadly describe a typical day in your life;" "Briefly describe how you finish your workday;" "Take some time to capture a moment when you have found yourself juggling work and non-work activities." We sent a different prompt every day, for 14 days–see 3.3 for a detailed explanation of the diary deployment.

We followed recommendations from the *diary study pipeline* detailed in Carter & Mankoff [20], whereby the diary supported lightweight *in situ* annotations, various multimedia formats (e.g., photos and voice notes), and researcher interaction for structuring post-diary interviews. To cover these recommendations, we deployed our diary using WhatsApp, a popular messaging app available in over 180 countries for Android and iOS [2] and priorly used in other HCI studies, e.g. [58]. Also, by using WhatsApp, participants had the flexibility to capture their entries when convenient and receive daily reminders. Finally, we incorporated Bolger et al.'s [16] recommendations for mitigating the burden of diary studies by limiting the diary period to 14 days. See figure 2 for examples of the diary format.

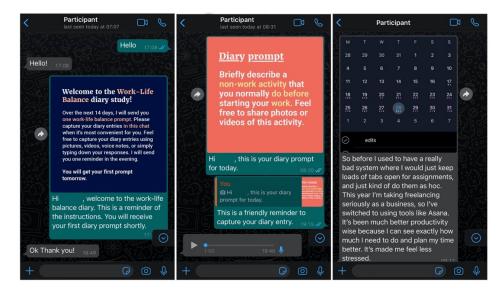


Fig. 2. Diary design examples, participants' names have been removed.

3.3 Procedure

The study consisted of three parts: on-boarding call, diary period, and post-diary interview. Firstly, people interested in the study filled in a screening survey containing all the study details and informed consent agreements. Participants were invited to an individual on-boarding call through Microsoft Teams during which we reiterated the study purpose, duration, and clarified any questions. During this call we exchanged WhatsApp contacts and sent participants an image card with a summary of the diary instructions as showed above in Figure 2. To lessen the burden

of recording diary entries, and as suggested by Carter and Mankoff [20], we emphasised that skipping entries was allowed and we would save our comments on their entries for the post-diary interview.

Secondly, starting the day after the on-boarding call, the diary period consisted of participants receiving one different prompt daily for 14 consecutive days, including weekends. We sent prompts during participants' morning or as early as possible for those who did not share our same time zone as well as an evening reminder. All participants received the prompts in the same order. After 14 days, we sent an image card indicating the end of the diary period and inviting them to the post-diary interview. We exported the chat and thoroughly recreated the responses in a text editor file including audio and video transcriptions for later analysis.

Finally, we invited participants individually for a semi-structured interview conducted through Microsoft Teams. Before each interview, we carefully revised participants' diary entries and prepared questions that related to their diaries. The interview focused on adding nuance and context to participants' entries, discussing their daily work-lives, the role of Upwork in managing their work, and examples of combining their online freelance work with other activities (e.g., other forms of work or family duties). Example questions included: "How do you go about planning your workday?" "How do you organise your online freelancing projects with your other responsibilities?" "Talk me through the process of prioritising your activities for the day." Interviews lasted 43 minutes on average (MIN = 29mins / MAX = 67mins) and were audio-recorded and transcribed by the first author. Upon completion of the post-diary interview, participants received an Amazon Voucher worth £30 (~\$40 at the time of the study) to compensate for their time.

3.4 Data Analysis

To construct a holistic understanding of participants' management of their online freelancing work-lives in their unique contexts, the challenges they encounter, and the impact of that Upwork's features has on their routines, we analysed our data thematically [17, 18]. We compiled diary entries, including the multimedia items (e.g., images), interview transcripts, and notes for the 15 participants in the qualitative software Nvivo (version 12) [70]. The first author gained familiarity with the data and developed initial inductive codes by systematically going through five participants' data. Two authors met regularly to discuss and refine these initial codes and develop a codebook. The first author then applied the codebook to the rest of the participants' data allowing for the identification of new codes and refining existing ones. Once all the data were coded, we sorted codes and data excerpts into a collaborative board for discussion and identifying patterns. We looked at the work practices our participants developed to manage their online freelance work with other personal (e.g., family duties) and work activities (e.g., full-time work or freelancing off-platform). We then focused on how participants considered and leveraged platform's features when managing their various work-life activities and how individual's context also shaped these choices. Throughout, we identified challenges that participants faced and reported.

From our analysis we found it difficult to disentangle the challenges that participants faced from the platform features and/or their work-life management practices. To stay true to how these elements are so interwoven, we will be presenting our findings in section 5 in three stages, following the order with which one interacts with platforms: 1) work-life considerations in finding work 2) work-life considerations in managing work, and 3) work-life considerations in completing work. We recognise that our participants' work routines seldomly followed this linear

structure, but it helps with identifying how the various stages of work can present different practices, challenges, and the impact of platform elements at each stage.

3.5 Ethical Considerations

In compliance with our university's ethics board, all data have been anonymised by removing and blurring identifiable information, such as names, locations, and faces. Preserving our participants' anonymity was critical to prevent any potential retaliation from the platform. Participants were recruited from online communities instead of through Upwork directly because taking communications off the platform (e.g., using WhatsApp) is against their terms of service and can result in freelancers' account suspension [96]. Informed consent for voluntary participation was obtained during the screening survey period, detailed in 3.3. Finally, for the purposes of the diary period, we used a password-protected mobile device provided by our university, deleting all the data after exporting our WhatsApp conversations.

4 RESEARCH CONTEXT: THE UPWORK PLATFORM

To address our research questions, we selected Upwork, a popular online freelancing platform. Upwork has an estimated of three million jobs posted yearly [53, 95] and 18 million registered freelancers in 2020 [29, 94]. In this section, we describe how freelancers interact with the platform and notable platform elements that relate to our findings. Previous studies of freelancing platforms (e.g., [15, 48, 55]) have identified a need to contextualise findings in this way because platform's policies and algorithms can be updated at the company's discretion.

4.1 Hiring Process

Upwork had two main hiring models at the time of our data collection (January to April 2021): requests for proposals and project invites. Request for proposals involves clients posting a project description and hiring candidates from a pool of applications. To apply to this request for proposals, freelancers use '*Connects*', Upwork's virtual currency [93]. Freelancers get 10 free Connects each month and more can be bought at any point.

Project invites consist of clients looking through freelancers' profiles, messaging them privately, and inviting them to take on their proposed project. To help freelancers' profiles stand out to potential clients, they display detailed information about their qualifications and reputation on Upwork (Figure 3a). Noteworthy profile elements include total earnings and number of hours worked through the platform, client-reported ratings (represented on a scale from 1 to 5), client written reviews, and samples of completed projects. After meeting certain requirements (e.g., completing several projects), freelancers get an aggregated '*Job Success Score*' (JSS) that "measures clients' satisfaction with overall work history on Upwork" [51] alongside other badges [97].

Clients' profiles include elements such as location (e.g., city and country), number of jobs posted, hire rate, overall money spent, average payment rate on the platform, and whether their payment method has been verified by Upwork (see an example in Figure 3b). Freelancers can access the client's general information when they get contacted or invited to take on a new project.

Upwork's policy requires all communications between clients and freelancers to remain through the platform's chat and video calling tools all the time, including during the hiring negotiations [96]. Failing to adhere to this policy can result in penalties and even account suspension.

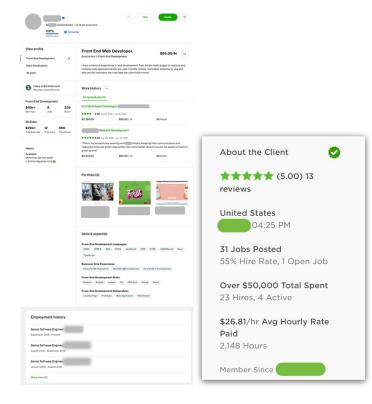


Fig. 3. (a) Anonymised Freelancer Profile (left) and (b) Client Information (right)

4.2 Contract Types and Work Monitoring

Upwork has two types of contracts: fixed-price and hourly [45]. Fixed-price contracts have set deliverables and budget for the entire project. Before initiating a fixed-priced contract, clients and freelancers must negotiate and agree on project milestones, for example, a 1500-word blog post to be delivered in five business days. Once an agreement has been reached, the client logs and funds the milestones on the platform. The funds are held on Upwork's 'Escrow' system and released to the freelancer once the client has reviewed and approved the milestone deliverable. For this type of contract, the work monitoring is achieved through the milestone and Escrow system. Freelancers have greater flexibility to organise their workload leading up to the milestone deadline since the client only reviews the final deliverable (although sending regular updates to the client is considered good practice as has been reported in previous research [55]).

Hourly contracts involve clients and freelancers agreeing on an hourly rate and maximum number of hours freelancers can bill for weekly, for example, up to six hours of proofreading per week at a \$25/hr rate. Upon reaching an agreement, clients set on the platform how freelancers log their hours whether manually or though the Upwork Desktop App. Hours logged through the Upwork Desktop App have payment protection for the freelancer in case of a dispute, whereas hours logged manually are not covered. Work monitoring for hourly contracts occurs through Upwork's "Work Diary", an interface where clients can keep track of the contract and freelancer's activity [51]. For hours logged through the Upwork Desktop App, the software automatically compiles "work in progress snapshots", allocated into six 10-minute billing segments per hour

and include screenshots, total number of mouse clicks, scroll actions, and keystrokes [98]. For hours logged manually, the freelancer adds their work segments into the work diary. Freelancers can review their 'work diary' and delete any segments they do not wish to share with the client; however, this also results in deleting the chunk of time billed on the project.

4.3 Evaluation and Rating

Upon ending a contract, which can be done by either party, both freelancers and clients provide feedback regarding their experience. Clients give private and public feedback by filling in a form (Figure 4). Private feedback is not disclosed to the freelancer and is used to assess the freelancer's 'job success' [61]. Public feedback involves comments and a star rating aggregation that appear on the freelancer's profile. Freelancers give only public feedback, which includes comments and a star rating aggregation on the client's information. The feedback system is double-blind, meaning that feedback is visible only once both parties have given a review for each other or after 14 days if only one party gives feedback.

Private F This feedback			nonymo	ous and	never s	hared o	directly	with th	ne freela	ancer. L	earn m	ore
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AF Public F This feedback to Free Feedback to Free Fortal Score share your expe	k will be elance Availab Commu Adherer Skills Quality Cooper	r ility inication of Wor ation O	in Schedi rk	ule						feedba	ck for y	jou. Learn more
See an example o	f approp	oriate fe	edbac	k						h		
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Fig. 4. Client feedback form at time of data collection (January-April 2021)

5 FINDINGS

Our results are presented in three stages, following the normative order with which one interacts with platforms to find, manage, and complete work. At each stage, we touch on the three recurrent themes we identified through our analysis: (1) work-life practices, (2) challenges online freelancers encounter when self-managing their work-life, and (3) platform elements that impact the management of work-life.

5.1 Work-Life Considerations in Finding Work

In this section, we capture how freelancers consider and leverage platform elements for finding work. As described above (see 4.1), finding work is fundamentally determined by Upwork's

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structures and features, such as the bidding system, profile ratings and badges, and client interactions. These platform elements impact the amount of work freelancers can get and, thus, require competencies to land new projects while attending other responsibilities. We also found that the period of finding work and negotiating contract details is crucial for managing work activities once the project starts.

5.1.1 Availability Expectations. One of the greatest selling points of becoming a freelancer is the ability to be in control of working hours and have greater flexibility. We found that managing one's availability when looking for jobs through the platform poses specific challenges that can jeopardise that apparent flexibility. The pace at which work is arranged on Upwork increases the expectations to remain attentive for potential new work opportunities. The platform design incentivises bidding for work and responding to clients quickly to land jobs. For instance, P2, a market researcher living in the UK, shared that 'timing' to get jobs 'is everything' because some jobs can be gone in a matter of hours; thus, recognising this platform trait eases the process of finding work:

[P2] "I was applying to things previously that were posted weeks ago or days ago. One of the, you know, articles I read said that a job posted in [the past] 24 hours, or even 12 hours, is already taken, which to me is quite terrifying ((laugh)) (...) I mean I knew timing was everything, but I didn't know that the timing of 24 hours made a massive difference."

It is this velocity of work exchanges that dictates availability expectations. Because clients have a wide range of qualified freelancers to choose from on the marketplace, remaining available for potential work opportunities at any point becomes crucial. Remaining available also means adjusting to potential clients' availability and responding when they are more active. P11, a graphic designer in the US working a full-time job alongside freelancing, illustrated the importance of being alert for potential invites when clients are also available and responding before her competitors to land a job:

[P11] "Most customers are available during the day time rather than night time so in Upwork is better to, especially if you get like an invite to a proposal, I wanna be the first one out the gate because that usually lands you the job like quickly and then you talk to them before they're bombarded with lots of people."

Remaining available for potential work opportunities becomes a greater priority for those freelancers that are getting started on the platform and building a reputation. While online freelancing can enable greater flexibility and autonomy to choose *when* work is conducted, it also requires constant monitoring of communications. Thus, setting boundaries becomes more challenging in a marketplace environment where not responding promptly can result in clients choosing another freelancer. Exemplified by P8, a graphic designer in the US who has freelanced for less than six months and has two part-time jobs, she felt compelled to be available for potential new opportunities and respond promptly even during her designated non-work hours:

[P8] (Diary excerpt) "I feel like I always have to be available to potential clients, so even when I decide to be done working for the day so I can spend time with my boyfriend, if I see a message from a potential new client, I feel like I need to answer immediately lest they chose to work with another freelancer. I get anxious every time I get a new message and worry that I won't be able to do the work or do it well enough to satisfy the client."

Also, there are reputation implications for delaying a response. As reviewed in section 4.1 freelancer profiles display robust metrics and percentages that reflect freelancers' history on the platform that can help in securing a project. Beyond clients' evaluation, some participants shared experiences around how other interactions (or lack thereof) impact these algorithmic assessments. In terms, of availability the system can monitor how long one takes to reply to a client and reduce the responsiveness percentage should it go under a certain threshold. For instance, P7, a marketing specialist from Brunei, shared one time when she missed a notification from a potential client and noticed how this delay lowered her responsiveness rate:

[P7] "Upwork do time you on how responsive you are. One time I didn't get a notification, the app was buggy, so I didn't check my email either and I didn't realise that for like one and a half day that this person messaged me even if I'm not interested in the job (...) Upwork kind of flags me as unresponsive so like my responsiveness went from 100% to like 92[%] or was it 89[%] I forgot but yeah it wasn't a perfect 100[%] anymore."

5.1.2 Screening Potential Clients. The success of freelancing heavily depends, among other things, on the relationship that is built with a client. We found that screening potential clients and identifying those who are trustworthy is a crucial practice for finding work that eases the process of managing work activities down the line. Freelancers screen potential clients to ensure that working dynamics are compatible, expectations are aligned, and demands are manageable. A calibrating strategy we observed was accessing the client's profile during the hiring process and reading the reviews they were given from previous projects, paying particular attention to how they rated other freelancers. As illustrated by P8, clients' profiles provided her valuable information to assess their work expectations and demands before deciding to work with them:

[P8] "You can read if a freelancer says 'this client was unmanageable, this client had insane expectations, they never answered' then I don't wanna work with this person [client] (...) you can even see how the client writes about the freelancers they hire so maybe the client has all five stars but they're giving out mixed reviews so there's also that guessing game there too where 'why didn't they get a five star if you're only writing something nice about them?' But you can get a sense of who a person is and how they work with others based on both the reviews they get and the reviews they give."

However, as P8 explained, reviews are contingent on other freelancers being candid about clients' work dynamic in their reviews. As previous work has found [6], there is a power imbalance ingrained in the design of freelancing platforms, whereby freelancers might not be open about their reviews because it could hurt potential future work opportunities. Thus, this strategy of assessing clients' work was multifaceted and included other aspects beyond merely looking at clients' profiles. As P1, a writer living in the Czech Republic, mentioned that her main strategies to determine if she wanted to work with a potential new client was reading their proposal and talking to them, rather than trusting other freelancers' reviews:

[P1] "Sometimes the feedback could be a bit like 'I'll give you five stars if you give me five stars' so it's not that accurate (...) cos I've worked with this one client (...) I thought he would be really good but then I was like 'he wasn't that good' I was thinking 'why is everyone giving him five stars if he's not good?' I don't really look at the feedback like that's not my top priority it's mostly the proposal an if they initiate a conversation then I can already tell how they are gonna be like."

Also, these screening strategies were honed over time as freelancers learned more about the platform and client dynamics. Developing this experience allows to identify indicators suggesting a client might not be trustworthy. For instance, P15, a writer from India, stated that elements such as the project description and budget helped him in assessing potential client's professionalism, which informed his 'gut feeling' about the work opportunity:

[P15] "Low paying clients are generally never satisfied with the work. Job descriptions also help me gauge if the client is going to be a professional client or someone who just wants to scrape the bottom of the barrel it's usually harder to gauge on [their] rating so I try to interact with them a few times before I agree on a contract but it's just this gut feeling that develops regarding whether a client will be a good fit or not."

We found that assessing potential clients is a common practice when finding work on Upwork. Freelancers harness a combination of strategies, such as reading client's reviews and analysing prior interactions, to gauge the client's work dynamic. While leveraging platform's affordances was useful, e.g., looking at the client's reviews and budget, freelancers often need to extend these capabilities by interacting with clients and developing their intuition over time. As we will describe below, screening clients was seen as the baseline to mitigates challenges when managing work, such as negotiating priorities and deadlines, which are crucial to one's work routine.

5.1.3 Managing Expectations. Managing clients' expectations emerged as another crucial consideration while finding work to organise one's work-life. While freelancers' profiles typically show their availability and rates (recall 4.1), these are not set in stone. Upwork leaves the negotiation process open for the freelancer and clients to reach mutual agreement on the project details, such as timeline, payrate, and deliverables. This negotiation process is key for freelancers and clients to align their expectations and agree on what is achievable within the project or task timeframe. For example, P3, a writer based in the UK, exemplified the unrealistic expectations clients can have:

[P3] "Although obviously on Upwork your hourly profile rate is very clear a lot of people don't want to do a fixed price and they have absolutely no concept of how much you will get done within an hour. The site says that I charge 45 dollars an hour but they [clients] think I can do 10 thousand words within that hour and obviously you can't."

Managing clients' expectations serves as a strategy to set boundaries with clients from the beginning of the relationship. This practice contributes to effective work management and allows for carving boundaries between work and non-work responsibilities before committing to a project. As exemplified by P8, she makes her working hours very clear from the first point of contact as a strategy to establish work and non-work boundaries and remain in control over her schedule:

[P8] "I make sure to discuss with the client how much time I have per week to work on their project so I don't promise a logo and say 'I'll have it done in a week' I say 'hey, this whole project will take 20 to 30 hours. I have available this week 10 hours to put into this project' so a lot of is managing client expectations as well and making sure they understand that I have other obligations to take care of."

Moreover, managing expectations and timelines gives clients reassurance of competence and professionalism. For example, P10, a US writer, shared the importance of being transparent about how long a project will take: "I'm very clear about that like [I say] 'look a draft is gonna take me

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five to seven days." She continued to reflect that Upwork's highly competed marketplace incentivises freelancers new to the platform to take on projects even with unrealistic expectations. As such, being firm and transparent when communicating expectations leaves a good impression on the potential client:

[P10] "I think a lot of the clients like really appreciate when you're transparent because that's like an unfortunate by-product of Upwork is that everybody is desperate to do work. Whether or not they can deliver is different, but they'll say 'yes' to everything because it's so the way the platform works is like quite hard for you to get jobs especially initially that you just kinda say 'yes' even though it's unreasonable expectations."

Despite Upwork providing a structured processes to arrange work, it is the freelancer and client responsibility to negotiate project expectations. Managing expectations is a common practice to demonstrate professionalism and clarify potential assumptions clients might have. Freelancers use this practice to negotiate timelines and set upfront boundaries that can help them plan their work down the line and carving boundaries for other work-life demands.

5.2 Work-Life Considerations in Doing Work

In this section, we capture the practices required to organise and execute work activities once a contract starts and how online freelancing fits into a wider ecosystem of work and non-work responsibilities. We observed that online freelancers' work-lives are dynamic in that one may be switching between contracts for different clients, or even juggling other jobs and responsibilities outside of Upwork. We describe how platform elements and individual circumstances shape the process of organising and doing work while freelancing online.

5.2.1 Productivity Practices. Managing one's work-life requires harnessing a combination of strategies and digital technologies to support productivity and collaboration. This is true of any knowledge-based job, but it can be especially challenging for freelancers as they have no support or infrastructure to rely on, guide them, or train them. As part of the self-driven nature of freelancing, our participants developed routines and work patterns that helped them in spread out moments of focus, productivity, and collaboration. For example, P6, an experienced marketing writer from the UK, structured her workdays prioritising the tasks that require more focus and creativity for the early hours of her day, while leaving other tasks demanding lesser attention for the afternoons:

[P6] (Diary excerpt) "I go from having total focus in the mornings to needing more frequent breaks as the day wears on. (I usually plan my work around this, so my afternoons are spent on editing and revising copy, rather than on the creative process of generating content.) around 4pm I know that I'm not going to produce anything of quality and it's time to stop. I also like to have structure to my day and not just work indefinitely."

By contrast P13, a web developer based in Nigeria, organised his day around the cost of internet access. He balanced his productivity preferences with the necessity to save valuable financial expenses required in self-managing his online freelance work – something that is not commonly experienced by those in the Global North who generally have constant access to the online world at a flat rate:

[P13] "Purchasing data for internet often is quite expensive here (...) I'm getting it 90% off the price at midnight (...) so at night is when I have more focus and then less

distractions but the basic inspiration behind that [working during the night] is just the lower cost of internet access."

Online freelancing also involves developing self-management abilities to organise projects across various days. Breaking down project tasks was a common practice among our participants, something that echoes the concept of 'microproductivity', which has recently been advocated as a way of supporting better work-life management [90]. Yet, as suggested in previous research [3], knowledge-based work can be difficult to predict and plan for. For instance, P12, a translator and writer from Brazil, shared that this ability to forecast and organise work is something he developed after gaining more experience freelancing:

[P12] "I took a job yesterday that is to write five thousand words (...) I will write like fifteen hundred today, fifteen hundred tomorrow, fifteen hundred in the third day, and in the fourth day I will proofread everything and edit (...) I'm trying to be more aware of that process because sometimes I would get a job like have one week to do it and start on the last two days or something."

Various project management software also featured as enabling productivity and to stay on top of varying work responsibilities. We observed that our participants often had multiple worklife commitments beyond freelancing on Upwork, thus figuring out which tools work best for them was perceived as crucial to stay on top of their various demands. Tools like Notion¹ or Asana² were seen as supporting the practice of tracking multiple deadlines, progress, and project resources for their work holistically rather than merely Upwork projects. P1 noted that these tools were crucial because she was juggling multiple roles and work streams and she needed to keep all the projects organised and unified:

[P1] (Diary excerpt) "My notion helps me visualise all my tasks and ideas. Everything is clear and organised so I know where to find any information I may need when I need it. It has all the due dates, files, links and progress tracker of every assignment. [It's] [e]specially useful in productivity when youre [sic] balancing university, freelance work, tutor, passion projects and other miscellaneous things."

Productivity strategies and tools become a crucial practice to sustain work-life demands. The highly autonomous nature of freelancing requires maximising productive time and learning how to consciously distribute one's workload. Tools like calendars and project management software become the building blocks that support productivity practices. In turn, these tools bring together the multiple roles and responsibilities that make up freelancers' work-lives, which often go beyond freelance work but cover multiple activities.

5.2.2 Balancing Competing Demands. Freelancers have the responsibility to develop working patterns that fit into a broader ecosystem of work-life activities. As a result, work and non-work become intertwined in patterned routines that are carefully crafted [42]. We observed that our participants balanced their competing demands by allowing their routines to adjust when disruptions emerged – in other words, forestalling disruptions by adapting quickly to work and non-work activities. This resonates with Erickson et al.'s [30] concept of *elasticity* whereby independent knowledge workers embrace and learn from the dynamic nature of their work. For instance, P13 described how he adjusted his schedule to meet multiple work-life demands:

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¹ https://www.notion.so

² https://asana.com

PACM on Human-Computer Interaction, Vol. 7, No. CSCW1, Article 106, Publication date: April 2023.

[P13] (Diary excerpt) "I have a milestone of work to deliver to a client on Upwork. I have an outstanding work to deliver to an offline client. The easter Holiday is fast approaching and I needed to shop for groceries and other items. I (...) [will] spend the holidays with my parents. With all these activities piled up, kept my schedule aside, worked overtime and eventually went shopping on Wednesday. Then returned to work another overtime to make up for the coming days I would be offline."

However, competing work-life demands can overlap and create conflict. Echoing Gold & Mustafa's [40] notion of freelance work as 'polychronic', i.e., doing several things at the same time, which erodes the boundaries between work and non-work. We found that our participants' contexts constrained how they adapted their practices to competing demands. For instance, P3 reflected that to balance both her work and caring responsibilities she ended up prioritising work more than she would prefer:

[P3] (Diary excerpt) "I was working early in the morning while the kids ate breakfast and [I] sent it [project] off, job done (...) except when they messaged 10 minutes later sending it back to me because I hadn't edited the appendix (...) so I had to try and do that while the kids were running around and getting into trouble. I also often find myself chatting to potential clients when my kids would rather (...) I was giving them [kids] 100% of my attention."

We also observed that balancing competing demands requires leaving room for unexpected situations to emerge. Because of the dynamic nature of online freelance work, there is a constant reorganisation of work. Thus, freelancers leave room for opportunities to emerge and alter their work routine. P9 shared how she developed the ability to leave room to take on Upwork projects while meeting her retainer client's tasks:

[P9] "I know that [Retainer Client] they're flexible and the projects that I've been given they are more long term projects so I can, you know, if somebody from Upwork emails me and was like 'hey I need this thing turned around in two days' I can put that [Retainer Client]'s stuff on hold obviously if there's a meeting or something I have a deadline I can't but usually I can sort of arrange the [Retainer Client]'s work around the Upwork work."

On the flipside, there is a tension between allowing for dynamic opportunities to emerge and dealing with the unpredictability of the project-based work. Relating back to managing clients' expectations (5.1.3), having clear project timelines enable the ability to craft routines and balance the competing demands. However, this strategy is contingent on having the ability to plan for the work. P6 stated the difficulties adjusting the flow of work with clients who lack project clarity:

[P6] (Diary excerpt) "You get people who mess you around. They have you jump through hoops and say they are going to hire you then delay the project or go silent then eventually give you the work but want it done ASAP [as soon as possible]. If you're busy you need time to schedule work in and can't just finish a big project in 48 hours but many people on Upwork forget you have other clients and aren't just waiting on them."

We observed that to balance competing work-life demands, freelancers develop patterned routines that allow for adapting to dynamic situations. This strategy harnesses the flexible and autonomous nature of freelance work to extend and reorganise work time as necessary. Nonetheless, this strategy can come with the caveat of work permeating non-work responsibilities. Central to balancing competing demands is the ability to map out work-life activities which can be hindered by the unpredictability of freelance work.

5.2.3 Constrained Autonomy. We found that Upwork's work monitoring features for hourly contracts played a role in constraining the autonomy for managing work activities. The Upwork Desktop App software requires freelancers to adhere to constrained work times by tracking activity and taking screenshots to monitor work (recall 4.2). Contrary to the elasticity required to pivot when demands or issues emerge, this feature imposes rigidity to work practices that allow to balance demands. This rigidity was seen as restricting control over work and non-work time. Exemplified by P5, a translator from Israel, he saw the feature as working under pressing surveillance and undermining his productivity:

[P5] "it's like trying to control every minute of your work and it feels like, you know, it stresses you out I don't like working under that programme [Upwork Desktop App]. It feels like I have to be working all the time and that might actually provide worse results because you can't be one hundred percent efficient, you have to, you know, take a minute to breathe every now and then."

Although the feature can be paused and logging time manually is allowed, freelancers have no payment protection should the client dispute the work (see 4.2). The burden of deciding whether to work with Upwork Desktop App or risk not having payment guarantee lies with the freelancer. This power imbalance favours clients and platform's profit, but leaves freelancers open to potential abuse. As mentioned by P10:

[P10] "so you can put in manual time where you just say, 'hey I worked on this for like an hour,' but then Upwork has basically said 'you're on your own when you do that' and if the client says 'I don't wanna pay you for that hour' because they can't prove that you were working, nor can they prove you weren't working, so then Upwork is like 'well, you're on your own."

Moreover, working under this monitoring software constrains work autonomy by creating the sensation that time should be maximised exclusively for work delivery, overlooking the nonlinear nature of knowledge work processes [3]. As in any other form of knowledge work, online freelancers need to engage in creative and problem-solving activities which are hard to capture by metrics such as mouse clicks and keystrokes. The design behind the monitoring software assumes that one's workflow is linear and without disturbances or pauses to work through problems. This was exemplified by P9 who despite recognising that she could bill for the time invested in her thought process, she felt that pausing the programme released pressure of feeling monitored:

[P9] "If I feel like I should know how to do something and I have to look it up I'll pause the time tracker sometimes for like 10 or 20 minutes while I sort of work through something which I definitely probably could be charging for that time but I kind of feel like it loosens the stress on me as well (...) I feel like I have as much time as I need to actually like really sit down and think it through."

This concern over monitoring of the work process also resonated with the experience of P11, who actively avoided hourly contracts. She explained that beyond the intrusiveness of the Upwork Desktop App, she felt that this featured was comparable with clients directly supervising her work, which she perceived as removing the autonomy she valued from freelance work: "I

don't mind screenshots but when you're like on top of me that's a concern (...) I will do good work I just don't need to be supervised" (P11).

Opposite to the promise of autonomy and control over one's work, Upwork's monitoring software for hourly contracts was perceived as imposing a constrained work practice. This constrained work practice clashes with having the flexibility required to attend to multiple responsibilities, choosing one work's preferences, and taking breaks or pausing to think through problems. Finally, the design of the app highlights another form of power imbalance by not protecting payment disputes, should the freelancer choose to log time manually.

5.3 Work-Life Considerations in Completing Work

In this section, we capture how completing a contract impacts freelancers' ability to find and manage future work and can pose challenges for work detachment. We first unpack how getting positive client reviews eases finding future work and enables greater autonomy to set boundaries between work and non-work activities. Then, we follow to describe platform elements and contextual circumstances that influenced our participants' ability to detach from work.

5.3.1 Evaluation Impact. Freelancers develop complex strategies, such as screening potential clients and managing expectations to ensure that, when a contract ends, they receive a positive review. Freelancers know that positive reviews translate into repeated work opportunities and less time looking for projects as their profile stands out for potential clients. On the flipside, negative reviews (or lack thereof in the case of freelancers who just got started on the platform) make it harder to find projects, taking up more time writing proposals and bidding for work. P12 as relatively new to Upwork shared how despite having had positive evaluations, he still experiences anxiety after completing a contract because he is aware of the impact a negative rate can have on finding future work:

[P12] "The anxiety I have to get reviewed like I have five reviews on my profile until now all of them are five stars precisely because of that I get really anxious about it I know that to keep getting more jobs I need good reviews and after I send the work I usually go to sleep because I know I will be like extremely anxious about the feedback even though I haven't got a bad feedback [sic] yet."

Having a high-rated profile also enables autonomy to set harder boundaries and become more selective about the work one chooses. By contrast, freelancers new to the platform are more likely to agree to unrealistic expectations, recall P10 (in 5.1.3) who mentioned that – by design – freelancers with no record on the platform have little leverage to manage expectations. This notion was echoed by P8 who felt that she had less power to push back because she still is developing that reputation that comes from clients' evaluation:

[P8] "I feel like I'm in a very difficult point in my career to be able to set hard boundaries (...) I don't really have the ability to kind of pick and choose as much as someone who's further along in their career might be able to (...) I'm not at the point where people are inviting me to gigs because they know my work or they know my reputation."

This view resonates with Wood & Lehdonvirta's [100] notion of 'algorithmic insecurity' whereby being evaluated through algorithmic processes shapes new forms of worker vulnerability, in this case reducing autonomy to set boundaries between work and non-work activities. For other participants this vulnerability stemmed from the opacity of the evaluation algorithms that their livelihoods relied on, as described by P15: "see Upwork is making your profile to depend upon a score and it is not even telling you how it's being calculated so I think

that is pretty unfair of them." The sentiment of vulnerability was further exacerbated by another imbalance in the system when clients provide private feedback, making it challenging for freelancers to improve upon their services. Put it in P3's words: "It's just really tough to not know why you may not have got excellent feedback if someone chooses not to tell you."

Clients' evaluation is a crucial element that freelancers consider before accepting a new project. Freelancers are mindful of the implications that ratings have on securing projects regularly on the platform. Hence, strategies such as assessing potential clients, are developed in the process of finding work to minimise the risk of getting a negative review. High-rated freelancers have greater autonomy to push back and be selective about potential clients. This speaks to the implications that evaluation has on the broader management of one's work-life.

5.3.2 Perpetual Work-Lives. Unlike traditional employment, online freelancing rarely has a clear-cut end of the day. As previously detailed, online freelancers flexibly accommodate a wide range of work and non-work responsibilities during the day, manoeuvring when disruptions emerge. On top of these dynamic workdays, freelancers are responsible for carving time off and setting their own work and non-work boundaries. Illustrated by P8, she referred to freelancing as a profession that can be hard to detach from: "It seems like every time I say 'okay I'm done working for the day' I get another message from a client or a new client is, you know, wants to know about 'XYZ.'"

Upwork's international marketplace model can make it tempting to continue looking for work and responding to messages at any point of the day. With project opportunities so easily accessible through the platform, it can become difficult to entirely detach and let work permeate one's recovery time. Particularly through mobile technologies, P1 shared in her diary how she scrolled through her Upwork's job feed and bookmarked potential jobs after catching up with other social media during her downtime: "I'll get ready for bed and watch some YouTube, read a book or scroll on social media. If nothing interests me, I'll check my upwork [sic] app. Reply messages if there are any and look at jobs and save them for the future."

This notion was further echoed by other participants, who remained attentive for work opportunities during their non-work time. Relating back to the necessity of remaining available for new potential clients and the platform incentivising quick responses (recall 5.1.1), some participants struggled to completely detach from work-related activities. For instance, P4, a database developer from Bangladesh, spoke about the difficulty of balancing work detachment with securing future work:

[P4] "I find it very hard to detach. Even when I decide to call it a day my mind is already thinking about where the next project might come from (...) When I'm spending time with my family I can get easily distracted by [my] notifications [I'm like] 'is this a new client messaging?'"

Nevertheless, a few other participants were better at keeping clearer boundaries between their work and non-work time. It was clear that these participants were further advanced in their freelance careers and highlighted that their experience allows them to be in control over setting these harder boundaries. Indeed, an established profile plays a prominent role in enabling higher levels of autonomy. Even when setting these harder boundaries, remaining flexible to attend work responsibilities at different times of day was a feature of working in a global marketplace. Illustrated by P6:

[P6] "I'm not one of these people that has to be constantly checking Upwork at seven o'clock at night and doing all of that, you know, and obviously there are extenuating

circumstances sometimes and a client in a different time zone might need to have conversation with you right now and that's fine but that is scheduled in it's occasional (...) I guess because of where I am in my career and the fact that I'm old enough and wise enough to not just be a very sort of naive freelancer that runs themselves ragged twentyfour seven for their clients I kind of have those boundaries in place for my clients and they respect it."

Online freelancing poses challenges for work detachment. As an international marketplace, there are constant work opportunities emerging and even one might have clients in multiple time zones, making it tempting to continue working for longer hours. Also, freelancers adjust their work schedules accordingly to their multiple work and no-work demands (recall 5.2.2), leading to porous boundaries between these activities. Having an established reputation on the platform and working with trustworthy clients contribute to feeling in control over detaching from work and taking time off.

6 DISCUSSION

In this paper, we have described how online freelancers manage their work-life practices, the challenges they encounter, and how platform features impact their routines. We will now summarise and discuss our findings with reference to the Structuration Model of Technology (introduced in section 2.3). The discussion will centre on what Orlikowski referred to as a 'use mode' (section 6.1) of the model, where we consider how freelancers make use of platforms. Then we will extend to consider the 'design mode' of these platforms (section 6.2).

6.1 Freelance Work-Life as Influenced by Platform Use

We found that elements of personal practice, platform features, and the context in which worklife happens are tightly interwoven. To explore their relationships, we found using Orlikowski's [71] Structuration Model of Technology (figure 1 in 2.3) to be useful to think about the relationship between platforms and freelancers' work-life. Orlikowski's model is particularly well-suited to render the ongoing interactions of technology at work and the study of workers' practices [72]. We depict these interactions in figure 5 and elaborate below.

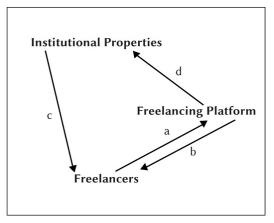


Fig. 5. Structuration Model of Freelancers' Ongoing Interaction with the Upwork Platform, adapted from Orlikowski [71]. Arrow "a" depicts freelancers' appropriation of platform features during use. Arrow "b" depicts freelancing platforms as enabling and constraining freelancers' work-lives. Arrow "c" depicts

freelancer work's institutionalised norms as influencing freelancers' work-lives. Arrow "d" depicts freelancing platforms as influencing institutionalised norms of freelance work.

6.1.1 Freelancers' Appropriation of Platform Features during Use. According to the concept of "duality of technology", technology is socially constructed by actors through the different meanings they attach to it and the various features they emphasise during use – an 'interpretative flexibility' [71]. We observed participants appropriating and emphasising certain platform features, in part, to mitigate platform constraints, but other times to accommodate platform work to their individual circumstances (*arrow a in figure 5*). While a core motivation to develop these practices was to improve their experience freelancing online, they often required additional work, echoing the paradoxical 'overhead' platforms create for freelancers [13, 55]. This mode of interaction during use illustrates that platforms do not determine freelancers' work-life practices, but rather are a product of how freelancers choose – or not – to use certain features.

Freelancers appropriate platform features such as standardised profiles, structured proposals, and ratings to assess potential clients while getting work. Some participants mentioned examining potential clients' profiles, their review history, and comments other freelancers left about them before accepting to discuss a project. Similarly, other participants inferred the potential client work preferences from how they defined their project in Upwork's proposal board or by directly communicating with them. Freelancers clearly emphasised different platform features that could mitigate the risk of working with a problematic client.

Freelancers extended and, in some cases, avoided certain platform features to manage their various work-life demands. For instance, participants used additional productivity tools (e.g., project management software) to extend Upwork's limited milestone tracking (as also suggested in [55]), but also to balance multiple roles and responsibilities that go beyond their platform work, e.g., a full-time job or side projects. Participants developed practices around Upwork's monitoring software for hourly contracts, for instance, pausing the tool whilst thinking through a problem, using their phone to check other notifications to circumvent the screenshot system, echoing prior research [78, 101], or even avoiding hourly contracts entirely.

Freelancers' individual context also contributed to the importance they gave to Upwork. For example, freelancers with caring responsibilities, a full-time job, or other work-life commitments purposely accepted less projects. While most participants chose their working hours or were influenced by their clients' working hours (more on this point below), one participant from Nigeria was constrained to working during the nights to save on internet costs. These examples illustrate how individual context influenced platform use and the features they considered meaningful.

6.1.2 Freelancing Platforms as Enabling and Constraining Freelancers' Work-Life. Drawing from Orlikowski's model [71], we can view Upwork as simultaneously enabling and constraining work-life practices (*arrow b in figure 5*). The platform's structures allow freelance work to have a standardised cycle, regardless of individuals' location. For instance, the platform enables the marketplace for work to be negotiated between freelancers and client [48]. On the one hand, these affordances enable agency for freelancers to choose who to work with as well as how they negotiate the outputs of their work with clients, thus providing greater work-life flexibility. On the other hand, this global marketplace constrains this flexibility, for instance, by incentivising competition with freelancers globally, penalising low levels of availability and responsiveness, and atomising freelancers' competencies to opaque ratings [74].

The platform provides the technological infrastructure to arrange projects flexibly, e.g., per milestone or per hour. This platform structure enables flexibility and autonomy for freelancers to

organise their workload, choose their preferred productivity tools, and integrate other responsibilities into their routines. At the same time, however, this structure constrains freelancers to platform norms and tools. For instance, monitoring hourly work constrains work autonomy by imposing a rigid structure to the work process, going against the flexibility that freelancers appreciate from this type of work. Further, work arrangements and project tracking must remain on the platform, risking retaliation should freelancers and clients move collaboration off-platform [55, 87].

Further, the platform simplifies the evaluation process by using algorithmic models to measure clients and freelancers' work satisfaction. This structure enables a standardisation of work relationships, enabling trust among platform users at a great scale. High rated profiles unlock greater opportunities to find projects and, in turn, enable greater control over one's work boundaries. On the flipside, low ratings constrain freelancers' ability to find quality work. This issue can permeate the ability to balance work-life demands, for instance, by taking on work with unfeasible expectations or difficulties detaching from work. Indeed, platforms become a mediator of freelance work with implications that pervade onto freelancers' work-life off-platform.

6.1.3 Institutionalised Norms of Freelance Work Influencing Freelancers' Work-Life Practices. Orlikowski [71] argued that the use of technology in organisational contexts is also influenced by institutional conditions (*arrow c in figure 5*). While Orlikowski specifically referred to situated organisational norms, here we make a distinction to argue that freelancers are influenced by the institutional properties and norms comprising their individual freelance practice. In other words, freelancers are influenced by the various factors that unfold by *doing* freelance work. For example, freelance work entails developing client relationships whether on- or off-platforms. Our findings illustrate this relationship is crucial to set expectations, demonstrate professionalism, and negotiate project details. When platforms impose technical constraints on such practice, freelancers seek ways to build these relationships anyway.

Self-managing productivity and demands is another example of instituted norms of freelance work that shape interactions with platforms. When crafting work routines, various work-life demands factor in the process of allocating work time, such as considering internet costs, other client commitments, and caring responsibilities (e.g., P13, P9, and P3 in 5.2.1). These demands constrain the amount of time freelancers can allocate to platform work and has implications for the types of projects they accept. Freelancers regularly consider their multiple demands and workloads, leaving room to manoeuvre should disruptions emerge, a form of 'elastic' practice akin to more traditional forms of freelance knowledge work [30]. Likewise, carving time off and non-work boundaries enabled control over the routines of some (usually more experienced) participants, as reported in prior research [42]. Such self-management practices shed light on how individualised freelance work influences interactions with platforms.

6.1.4 Freelancing Platforms Influencing the Institutionalised Norms of Freelance Practice. Finally, our findings elucidate how freelancing platforms are transforming the instituted norms of freelance practice (*arrow d in figure 5*), what Orlikowski referred to as the "institutional consequences of interaction with technology" [71]. Freelancing platforms are transforming freelancers' availability expectations where talented professionals are available around the clock and across geographies, unlike more traditional freelance work that is constrained to local labour markets and personal relationships [41, 84]. Our findings illustrate how freelancers adapt their work-life schedules to match these fast-paced market conditions, extending prior research on platform time allocation control [82, 83]. This pressure on availability was more pronounced for participants located in Asia as most of their clients were based in North America and Europe, requiring them to work late nights. Further, the platform is designed to keep freelancers attentive to notifications and new project opportunities by timing responses and punishing inactivity with rating downgrades. These conditions present challenges for a future of freelancing that promises work flexibility but commodifies workers' time availability as part of their services. Indeed, prior research [4, 39, 59, 103] has criticised how the gig economy has transformed clients and customers' expectations towards on-demand, low-cost services.

Freelance work is being transformed by platforms' automated systems that structure work processes. For instance, freelance work has been characterised by enabling people to work under their own terms, however, platforms have introduced monitoring technologies that resemble a managerial role, resulting in constrained autonomy and flexibility [5, 6]. Reputation has been transformed by rating systems that have serious consequences for how freelancers secure work [68, 87, 100]. Our findings extend this prior research by showing how freelancers deploy various practices from the moment they apply for projects to ensure a positive rating. Platforms have transformed how reputation is built through algorithmic measures and standardised ratings [68]. Whereas traditionally freelancers' reputation has been constrained to a tight-knit network of clients and managed independently, reputation is now globally available and managed by a platform third party.

6.1 Freelance Work-Life as Influenced by Platform Design

This study has mainly focused on the interpretive flexibility that unfolds during freelancers' use of freelancing platforms, a '*use mode* of interaction' [71]. However, Orlikowski's [71] model also considers a '*design mode* of interaction' where human agents build into technology institutional assumptions, rules, and norms. In the case of our study, these human agents would be Upwork's developers and decision-makers. This paper raises awareness of platform design implications for freelancers' work-lives and, more broadly, for the future of freelance work.

There seems to be a disconnection between those who develop the platform and those who use it. Gig economy companies sit in a strategic position to capitalise on mediating labour relations through their technology platforms [26, 85]. Platform design choices appear to prioritise profit generation and client satisfaction over freelancers' work preferences and wellbeing. For example, our findings have shown how platforms commodify freelancers' time by incentivising regular availability and quick responsiveness. These norms put emotional pressure on freelancers to keep up with rapid work exchanges in highly competitive markets and remain responsive to client demands. Further, some platform work monitoring features (e.g., Upwork's hourly monitoring software) seem to prioritise worker data extraction and surveillance over freelancers' preferences to exercise their flexibility and autonomy when conducting their work. Although, freelancers might extend and even circumvent these features to enhance their experience, as argued above, in practice they have little agency to fundamentally influence these platform designs underpinned by capitalistic values.

Therefore, it is imperative to envision new ways for freelancers to influence the design process of platform designs. Our findings highlight the importance of making workers feel valued and in charge of their job, and not merely subjected to unclear algorithmic decision-making. For example, recent research has engaged location-based gig workers in re-imagining platforms' algorithmic management features [56, 104]. Researchers have used speculative design to explore worker-centred interventions with freelancers [5], have reflected upon the embedded valued that different stakeholders have when designing gig platforms' features [76], and have pushed for researching new forms of worker-centred platforms as alternatives to mainstream, capitalistic gig economy companies [4, 57]. Despite these emerging efforts, big tech companies continue to dominate most of the gig economy market and have little incentives to change their model. When it comes to pushing freelancing platforms to implement changes to support workers, the Oxford Internet Institute 'Fairwork' project is a successful example of holding gig economy companies accountable and advocating for workers' wellbeing [31]. We acknowledge a broader systemic change is necessary at the policy level to mitigate the negative effects of platform capitalism on workers. However, policies only apply to local or country-specific legislations.

Ultimately, it is important for researchers and designers to acknowledge how the design of these platforms is re-configuring the norms of freelance work, internationally (both positively and negatively). For instance, traditionally relationships and arrangements have remained between clients and freelancers, whereas now platforms are central intermediaries of this relationship. Usually freelancers have had sole control over their work processes and boundaries, now platforms influence these decisions. Platform mediation has started to become part of freelance work-life, introducing unprecedented challenges for availability expectations, work autonomy, and work detachment. Because platforms have transformed the instituted norms of freelance practice, more research is needed to ensure freelancers' voices from all over the world are reflected in platforms' designs.

7 LIMITATIONS AND FUTURE WORK

Although our sample consists of a small group of international participants with diverse backgrounds and occupations and it was never meant to be representative, our findings highlight impact that context plays in the use of online freelancing platforms that operate internationally. These findings open the floor to future work with participants from more diverse geographies when studying platforms that operate internationally, as other disciplines outside of CSCW have done [8, 9, 101, 102]. While our findings are not exhaustive when it comes to work-life management practices, they provide in-depth insight into impacts freelancers' platform labour lived experiences. Future work should compare work-life practices in different geographies at a greater scale to inform more equitable platform design and policies. Finally, our study focused on freelancers using the platform Upwork, future work should examine how platforms with a different structure model (e.g., locally owned platforms) might impact work-life practices, as it has been researched in the food delivery contexts [57].

8 CONCLUSION

Online freelancing platforms embody an emerging form of gig economy work that poses opportunities and challenges for freelancers' work-lives. In this paper, we have expanded the empirical understanding of how online freelancers manage their work-life activities, the challenges they encounter, and the impact of platform's features in this management process. We took an in-depth qualitative approach, combining diary entries with semi-structured interviews, with 15 freelancers. This approach brings a rich narration of freelancers' lived experiences of conducting online labour. Our qualitative findings suggest that both platform features and individual context shape online freelancers' work-life practices. To balance platform and worklife activities, freelancers develop practices that mitigate platforms' constraints but are also shaped by their individual preferences and contexts. We draw from Orlikowski's [71] Structuration Model of Technology to foreground the various factors that influence freelancers' work-life practices. We conclude with a discussion of how platform designs are not transforming freelancers' work-lives but also the instituted norms of freelance work. Therefore, we call for innovative approaches to include freelancers' input in platform designs and regulate a model of work that lives up to its promises.

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APPENDIX

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