# A Qualitative Investigation of Unmet Information-Seeking Needs of Online Workers

*Completed Research*

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## Abstract

This qualitative study investigates socialization to online labor platforms using the information-seeking framework introduced by Miller and Jablin's (1991). As workers adapt to this new work arrangement, they experience ambiguity and uncertainty that triggers seeking out information. Interviews with 29 online workers reveals the unmet information-seeking needs experienced by these workers. The findings extend the theoretical framework of information-seeking to account for the affordances and limitations present in OLPs. Furthermore, our findings suggest practical implications for the design of online labor platforms.

### Keywords

Online labor platforms, online labor markets, information-seeking, freelancer

## Introduction

On-demand gig work constitutes 36% of the US workforce and is expected to grow to over 50% 2027 ("Freelancing in America: 2017 Survey" 2017). Many of these workers find employment through online labor platforms (OLPs) such as Upwork and Fiverr. OLPs act as intermediaries between workers and clients, enabling workers to sell their labor to a pool of buyers. As an alternate work arrangement, these platforms reconfigure traditional aspects of work (Kneese, Rosenblat, boyd, 2014) and can contribute to ambiguity and uncertainty felt by workers (Kalleberg, 2009).

As OLPs supplant traditional organizations as sites of labor, online workers seek information regarding their work, roles, and careers as they enter new forms of employment (Allen, Eby, Chao & Bauser, 2017). A rich literature details employee information-seeking behaviors as they cope with ambiguity in the workplace (Benzinger, 2015). For example, Morrison (1993) found that employee inductions and ongoing on-the-job training make it easier for newcomers to learn the skills required to complete their jobs successfully. This literature is premised on uncertainty reduction theory, which posits that workers desire predictability in their interactions with others and within the organization (Berger & Calabrese, 1975). Uncertainty drives workers to seek different types of information (e.g. skill-related) from different sources (e.g. supervisor) by using different strategies (e.g. observing) (Miller & Jablin, 1991). Successfully finding desired information

leads to positive outcomes, such as increased job satisfaction, productivity, organizational commitment and job tenure (Ashford & Cummings, 1985). Organizations often institute formal and informal socialization programs (e.g., training, onboarding, etc.) and mentorship programs for employees to facilitate information seeking behaviors.

Yet it remains unknown if and how information-seeking behaviors have evolved to account for the shift from organizations to OLPs. While information systems (IS) scholars have considered the information flow of cooperative volunteers in online communities (Faraj, von Krogh, Monteiro & Lakhani, 2016), it is less understood how workers in potentially less cooperative online systems share information in a competitive employment platform. What kind of information online workers need and how they go about finding it emerges as a critical extension of this literature, as noted by a recent call for research investigating the socialization of on-demand workers (Allen, Eby, Chao & Bauser, 2017). Importantly, online platform design may enable and constrain opportunities to engage in information-seeking behaviors, as the absence of co located workers and lack of face-to-face communication can act as barriers to fully observing or comprehending needed information (Olson, Teasley, Covi & Olson, 2002). Therefore, an investigation of how workers find relevant information can inform the design of OLPs to better meet the needs of online workers; thus, facilitating their assimilation into a new kind of employment.

In response to this research gap, this qualitative study uses Miller and Jablin's (1991) classification of information-seeking content and tactics used by organizational newcomers. Our findings reveal that all 29 participants often lacked information regarding client expectations, algorithmic rankings, reasons for rejection or failure, reasons for other freelancers' success and client feedback. Participants also often struggled to find information using observation and overt questions. We share strategies participants deployed to overcome unmet information needs: through third parties (e.g. paid online courses or social media support groups). Consequently, this tactic of "third party socialization" brings to light important social implications of information accessibility. Together, these findings extend the theoretical framework of information-seeking to account for the affordances and limitations present in OLPs. Finally, we suggest practical implications for the design of online labor platforms, regarding information-seeking support

# Literature Review

### *Information Seeking Behaviors*

Entering a new job or organization is characterized by great informational uncertainty as workers figure out their tasks, roles, expectations, and organizational culture (Van Maanen & Schein, 1979). When faced with this uncertainty workers attempt to reduce accompanied stress and anxiety through seeking out information, else experiencing increased turnover, lower performance, dissatisfaction, negative work attitudes, and stress (Ostroff & Kozlowski, 1992). Meeting information-seeking needs are usually achieved through two processes: formal and informal organizational structures or individuals proactively searching for information.

In traditional organizations, formal socialization and mentorship programs (e.g., training, onboarding, etc.) are often implemented to help newcomers cope with stressors surrounding organizational entry (Ellis *et al.*, 2015), and assist in the acquisition of essential organizational and career knowledge. Such formal programs have been positively associated with job satisfaction, reduced anxiety, and intention to stay (Saks, 1994, 1996). Informal programs and interactions have also been found to help newcomers reduce uncertainty by providing crucial information, including feedback, resources, and social support (Korte and Lin, 2013) and helping newcomers understand an organization's culture and norms (Kammeyer-Mueller *et al.*, 2013).

Uncertainty can also trigger workers to proactively seek out information about the organization or their work (Morrison, 2002; Van Maanen & Schein, 1979; Ostroff & Kozlowski, 1992). In their seminal study on newcomer proactivity, Miller and Jablin (1991) propose a framework for understanding the information-seeking behaviors. When perceiving the need for *information content* (referent, appraisal, and relational), workers turn to available *information sources* (e.g., supervisors, coworkers, written materials, etc.) and employ *information-seeking tactics* (overt questions, indirect questions, third parties, testing limits,

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disguising conversations, observing, and surveillance) to gain desired information. *Referent* information pertains to knowledge required by the workers to function successfully (e.g. task completion, job procedures). *Appraisal* information refers receiving feedback indicating how well a worker is functioning on their job (e.g. performance review). *Relational* information details the state of a worker's relationship with another colleague  (e.g., liked by colleagues) (Miller & Jablin, 1991).

### *Information-Seeking Behaviors in OLPs*

Online labor platforms mediate the relationship between online workers and employers, helping employers find qualified workers, hire them, monitor work and pay for services (OECD, 2016). While platforms like Amazon's Mechanical Turk focused on tasks which did not require specialized skills or training, platforms such as Upwork, Fiverr, and Etsy, increasingly afford employers access to hard-to-find expertise for high-skilled jobs. Similarly, they offer freelancers the opportunity to find clients and a greater flexibility to set working conditions (Kotturi, Blaising & Kulkarni, 2018).

While much is known about socialization and information seeking in traditional organizations, little is known about if and how these practices operate in OLPs. This digital context brings with it different capacities for communication and observing other organizational members. Moreover, new skills are needed to successfully advance careers on these platforms. While some IS research has explored the information sharing potential of cooperative and volunteer-driven online communities (Faraj, von Krogh, Monteiro & Lakhani, 2016), the extent to which these findings apply to OLPs are limited by the more competitive and profit-driven nature of labor platforms.

Thus, research is needed to understand how information-seeking behaviors operate on OLPs, leading to the research question of this study: *what are the unmet informational needs of online workers and what information-seeking tactics are employed to resolve them?* Answering this questions can provide insight into the informational problems experienced by online workers, which can in turn inform the design of OLPs.

## Method

Given the emerging context of OLPs and the exploratory nature of this study, a qualitative investigation of online workers through interviews is appropriate. As a part of a larger project (Kotturi, Blaising & Kulkarni, 2018), we conducted 29 semi-structured interviews (ages 18-60; 17 female) with online workers across three kinds of OLPs: Upwork, Fiverr, and Etsy. Each platform differs in how workers find work. On Upwork, employers (called clients) post a temporary job and invite freelance workers to submit a proposal. In contrast, Fiverr enables freelancers to post tasks they would like to complete-and allows employers to either buy this service or post a job for freelancers to bid on. Finally, Etsy is marketplace for handmade products where sellers can offer products or allow buyers to request custom ones.

Interviews were conducted remotely via Skype or similar platform between June-July 2017. We compensated participants for their time at $10/hr. Targeted and snowball sampling (7% of interviewee participants) was used to recruit a sample that maximized the variation in online work (Lindlof & Taylor, 2011). Specifically, we sought to maximize variation in experience (i.e. duration working online, education, work history), success (i.e. profile rating, jobs completed, profit earned) and demographics (i.e. ethnicity, age, gender). Targeted participants were recruited through job postings on OLPs and through directly messaging workers. Participants recruited via snowball sampling were referred by the platform (in the case of Fiverr) or by prior participants.

Interviews were conducted in English, and ranged from 30 minutes to one hour. In our interview protocol we used questions that allowed us to develop an understanding of the experience of being an online freelancer, and develop an understanding of the information-seeking behaviors of online workers. Therefore, we asked questions such as: "Can you walk me through the first time you tried to find online work?", "What are three of the biggest challenges you experience working online?", "Can you describe how socialization as an online worker differs from traditional organizational socialization?".

Each interview was transcribed in its entirety. Interview transcripts were then coded using Saturate.app. Interviews were read multiple times to ensure familiarity with data (Lindlof & Taylor, 2011). Transcripts were deductively coded using Miller and Jablin's (1991) information-seeking *content* and *tactics* as a framework. Deductive content categories included *referent, appraisal and relational* information. Deductive tactic categories included *overt questions*, *surveillance*, *third-party*, *observing, disguising conversations, testing limits*. Additionally, an inductive approach was used to identify unanticipated information-seeking content and tactics in this novel context. Inductive codes were thematically categorized (Lindlof & Taylor, 2011) and situated within the information-seeking framework. At the end of this process, we identified the highest frequency unmet informational needs and tactics of participants.

## Findings

We first present the primary types of referent, appraisal, and relational information content that our participants expressed as lacking. Then, we present two kinds of information-seeking strategies that were limited by platform design, and conclude by highlighting an emergent tactic (i.e. "third party socialization") that potentially limits who can engage in information-seeking.

### *Referent Information Needs*

Referent information refers to information needed by workers to do their job successfully. Participants expressed two categories of unmet referent information: *client expectations* and *algorithmic ranking*.

### Client expectations

Ambiguous client expectations were reported as a challenge by the majority of participants (58%), indicating that participants feel that clients/buyers often omit necessary information about job. Incomplete job descriptions lead long back and forth discussions to clarify expectations, which limits the time a worker can spend working.  For example, participants expressed bad experiences with ambiguous expectations, wishing that clients were "*more straightforward about what they actually want,*" rather than throwing a project at them with seemingly "*no instructions.*" Faced with these unclear expectations, participants expressed the need to "*ask good questions to… clarify what needs to be done" and "really get down on [the clients] level."* Finally, some participants simply reported not applying for the job altogether, such as P1, an IT specialist from a small Mid-western town, said, "*if a job posting is vague, I'll just ignore it because I know they'll be question after question from the client to see what they actually what."* This reaction may make sense as participants felt that clients that are unsure of what they want end up asking workers to complete more than what they originally agreed upon.

### Algorithmic Ranking

OLPs act as an intermediary between clients/buyers and workers/sellers. Just as organizations often evolve and adapt their processes and structures to changing external circumstances, the design of OLPs are also constantly being refined; however, such iterations can consequently create an associated 'black box' element to the OLP, where algorithms and other design choices often remain mysterious to online workers.

Yet acting as a mediator, a platform's design or design changes have a direct impact on online workers' ability to have a successful online career. Although most dominant among our Etsy participants, participants across all platforms discussed lacking "algorithmic knowledge" (i.e. behind the scenes platform information) needed to identify and successfully adjust to platform algorithms. For example, P20, a public speaking trainer in her 30s and P28, an Etsy shop owner, (both located in the U.S.), both explained what emerged as commonly echoed confusion surrounding platform algorithms: *"[I am] curious about how the algorithm works on Fiverr," and "We just don't know what [SEO algorithms] they're going to change and if it will continue."* This finding highlights participants' desire for OLPs to provide  greater transparency.

### *Appraisal Information Needs*

Appraisal information refers to seeking information about how well workers did their job. Participants expressed three categories of unmet appraisal information: *reasons for rejection or failure*, *reasons for other online workers' success* and *client feedback*.

### Reasons for rejection or failure

In a traditional organization, appraisal information is provided to employees through structures like performance reviews or supervisor feedback. While participants would receive feedback from clients or buyers, many frequently expressed wanting to know why their proposals, bids or listings were being rejected or failed to reach their intended audience. For example, P3, a writer and customer service representative in her 30s, said that *"it was really hard sitting there not getting feedback and not knowing 'is there something wrong with my resume? Do I not have enough background in remote work? Is that why I was not getting hired?'"* and P26, a part time Etsy shop owner in her 40s explained that *"you can get discouraged because you put so much time and energy into your shop, but you don't get any sales."* The minimal feedback that participants would sometimes get was along the lines of "*the reason was they choose another freelancer.*"

Here uncertainty and ambiguity clearly emerge from participants lacking appraisal information and contributing to feelings of being unqualified. Moreover, participants had little direction forward as there is no indication as to what they might have done 'wrong' or what they might do differently (e.g. learn new skills, alter proposals, etc.). Unlike traditional organizations, there are currently limited structures on OLPs for providing this essential information, as such, receiving feedback just from accepted jobs emerges as insufficient to fully meet the information-seeking needs of online workers.

### Reasons for other online workers' success

While participants expressed seeking and utilizing tutorials and information supplied by both their OLP and/or third parties, several participants discussed that the referent information provided by these sources failed to provide insider knowledge on how successful online workers' set up their profile or shop, communicate with clients, structure their proposals, gigs, or listings, etc.

In response to this gap, many participants reported independently researching and studying successful online workers' profiles or shops with the hopes of better understanding and emulating their success. For example, P8, a web designer in her 20s located in the U.S., explained this frequently discussed process: *"So I looked at how the profiles were set up that I would want to make a lot of money and kinda just looked at a lot of them and read them and saw what types of jobs they were getting and the prices they were putting themselves at... You can look at a person's entire job history and see how they started out."* Similarly, P26 discussed studying other successful Etsy shops in order to overcome a common mistake that lead many Etsy owners to lose money: *"So it takes a lot of time to research, you have to look at your competitors page, what are they doing, then you have to look at pricing, are you pricing too low, pricing too high?"* Thus, while identification and potential expert emulation appears to provide online workers with critical information they need to be successful, if such information is knowly kept hidden by OLPs, this calls into question the intentions behind such concealment.

### Client feedback

Participants discussed lacking timely information regarding how satisfied their client was with their work or product. While some participants discussed receiving this information through direct "on the job" communication with their clients, others rely on the public reviews provided by clients/buyers on the platform. Participants expressed that there is little opportunity to improve work and by the time workers receive feedback, as they may have a new job with different client expectations and parameters. In other words, the temporal delivery of feedback appears to be too delayed to provide the opportunity for improvement.

Moreover, distinct design features of the OLP also emerged as a barrier to obtaining client feedback. In particular is the so-called "secret rating system" on Upwork that inhibited a participant from learning from her client's negative feedback. P8 explained that, "*what bothered me was the fact that if what I'm seeing,*

*and what they're [clients are] saying, whether they meant or not, they said they liked what I did and gave me a 5 star rating, but somehow secretly disliked me. I don't understand why there is a second, secret system for them to say that and me not [to] know it.*" Interestingly, this "secret" feature appears to create a well-known (yet perhaps poorly understood) back channel that complicates how to receive relational information.

### Information Seeking Tactics

The analysis also revealed that online participants experienced barriers to using overt questions and observation as information-seeking tactics. Notably, these two tactics are the most frequently used by workers in traditional organizations (Miller & Jablin, 1991; Morrison, 1993). Additionally, a new tactic emerged through inductive coding, through which identified an information-seeking tactic called *third party socialization*.

### Overt Questions

Directly asking coworkers or supervisors an overt question is among the most frequent tactics of seeking information in traditional organizations. Yet, it emerged that while some OLPs (such as Upwork) provide discussion forums for workers to communicate, there is not option for workers to directly communicate with each other. For example, P10, a blog writer in her early 20s located in the U.S. at Upwork, explained that, "*I don't have any contact with online workers because uh…I'm not sure how I can get into contact with the online workers…we don't have any options for connecting… If you look at the Upwork site, I guess they don't provide [that].*" Emerging from this theme is the notion that OLP design can constrain the ability of workers to ask overt questions from each other.

While OLPs do often permit workers to post in forums, this approach to asking overt questions is also problematic. As P8 explained, "*Even when you speak on a forum, you kinda just have to hope that someone talks to you because you can't just reach out to one person, and be like 'hey what was your experience, what did you do that worked or didn't work?' Whereas anywhere else you could just walk up and have a conversation.*" While there are outlets to ask overt questions (e.g. online communities, forums, etc.), such outlets require that online workers speak to the void and hope that the right person with the right information answers. For example, P14, a SEO specialist in his 40s living in Serbia, explained that posting his profile on an Upwork forum to get feedback yielded only one (of three) response that provided him with helpful appraisal and referent information. Others, like P1 explained that much of the advice he observed "*was not helpful*" — often leading others astray with irrelevant information or even condoning illegal activities.

### Observing

In a traditional organization, observing is an information-seeking tactic where workers directly observe another worker perform a behavior or task. Yet, digital separation appears to limit the visibility of such task-related behaviors, thus making observing the desired behaviors difficult for participants. However, the results reveal a unique information-seeking tactic that aided participants in overcoming this limitation: positioning oneself as a client or buyer in order to get gain insider knowledge or the unique perspective needed to reach career goals. While limited in frequency, this finding generates important insights into information-seeking behaviors in OLPs.

First, P10 recalled her proposals initially being rejected on Upwork, despite having impressive credentials. Wanting to observe how others prepared proposals, she posted a fake job post to solicit exemplars. As she explained, "*So I posted a job out, and I was like 'okay. I'm getting this proposals' and I'm like, 'okay who would I actually hire and why'.. And I noticed that all of them [top applicants] would call me by my first name. I was like 'oh that's good'… I just have this on my Google drive and just copy and paste it, and it works. I mean I have 89% job success rate so it works.*" Similarly, P26, an Etsy shop owner located in the U.S., discussed buying items from a successful shop in order to understand what she was not doing well. She discovered that every detail of the order "*tied into one theme*"--the color, the design, the imagery. She attributed her shop's subsequent growth to applying this information.

In both of these examples, P10 and P26 attributed the perspective and unique insight they gained from this tactic as the catalyst for their successful online freelancing career. These examples highlight the effort necessary to engage in observing and crucial function observing can serve.

### Third-Party socialization

In contrast to traditional organizations that often provide extensive on-boarding or training to new employees, participants discussed paying for courses or groups outside the OLP to successfully assimilate into their online workplace. This tactic of being socialized by a third party speaks to the emergence of an industry that supports online labor markets. For example, P26 discussed joining paid groups where online coaches curated and facilitated activities to train new online workers: *"But the Facebook group I was a part of, she [online coach] puts you in teams and each team has about 25 people and you talk with your teammates, give challenges and then she gives us challenges."* Other participants described enrolling in classes on Udemy (typically ranging from $50-100) that offer both psychosocial and career-related support to many online workers: *"I gain all the wisdom from one of the online coaches… I found him in Udemy and it's really fantastic and generous enough to share all of his knowledge about skills" (*P13).

This tactic highlights important issues of accessibility and risk. When OLPs do not to provide access to sufficient information about how to find success, participants seek out and even pay for this information elsewhere. This underscores the extent to which online workers wish to reduce uncertainty regarding their experience. Moreover, it emerges as an example OLPs offloading financial risk (e.g., paying for on-boarding) to individuals, one of the hallmarks of the on-demand economy (Kneese, Rosenblat, boyd, 2014).

## Discussion

We sought to answer the following research question: *what are the unmet informational needs of online workers and what information-seeking tactics are employed to resolve them?* In doing so, we identified that essential referent and appraisal information are frequently sought after by participants, while--in contrast to traditional organizations--relational information was not. Notably, participants ran into barriers when trying to employ the most frequent information-seeking tactics in traditional organizations--overt questions and observation. Finally, we identified novel ways in which participants sought to overcome these barriers: paying for third party socialization and positioning oneself as a client or buyer. Altogether, these findings have implications for OLP design and for theory.

### *Implication for Practice: Barriers to Information-Seeking*

### Implications for Design of OLPs

In a survey with 204 online freelancers across the same three platforms (Upwork, Fiverr, Etsy), 89% of participants reported that the OLP they primarily used did not hinder their progress (Kotturi, Blaising & Kulkarni, 2018). Rather, 98% of survey participants shared how the OLP they primarily used to provide needed flexibility, and by extension control over their working lives. However, such control comes at the cost of uncertainty involved in navigating these new forms of work (Zimmerman, et al. 2013). Therefore, implications for design of OLPs must balance the positive outcomes freelancers report regarding supported needs of control and flexibility, whilst addressing unmet freelancer needs regarding information-seeking. We reflect on several design opportunities below.

In contrast to volunteer online communities where information transfer between participants is encouraged (e.g., Faraj, von Krogh, Monteiro & Lakhani, 2016), the findings of this study reveal how the design of OLPs may do more to constrain the information-seeking tactics afforded to online workers. In learning the kinds of information (referent and appraisal) being sought by workers, additional affordances or resources can be designed into OLPs to better meet the informational needs of these workers. For example, the majority of our highest earning participants studied successful online workers' profiles or shops, and/or found novel ways to engage in observation of experts. One way to expedient this information transfer could be to pair a newcomer with a veteran freelancer during the on-boarding process, as experts seek and organize

information more effectively than novices do, and highlight deeper features that are relevant to success, where novices are misled by salient but superficial features (Marianne LaFrance, 1989 & Novick 1988).

Another approach is to facilitate the process by which online workers learn best practices from successful experts, such as through allowing overt questions to be asked or building affordances that allow workers to observe the work of experts. In addition, underscoring the extent to which information-seeking behaviors are important to online workers is that some are willing to pay for third party socialization. However, this can act as a barrier between those workers who are aware of and can pay for this socialization and those who cannot. Therefore, we suggest that OLPs might explore ways to make the information provided by these sources more accessible to a diverse audience by designing free courses and/or groups for online workers. Finally, participants inferred the presence of the private ranking algorithm via discontinuity of ratings received and expressed confusion about why it was necessary. This presents an interesting challenge for platform design as private reputation scores do help employers hire more successful freelancers (Horton & Golden 2015). How might platform design equip workers with the information and feedback required to be able to successfully improve their work performance across tasks, whilst still enabling employers to hire successfully?

**Implications for OLP clients and workers**

Our findings have important implications for clients. In learning that ambiguous client job posting and expectations constrain the type of critical task or job related information available to online workers, clients be provided with a process or structure for better standardizing and clarifying instructions. Our findings have important implications for online workers. While off-platform paid experts or coaches may support acquisition of information needed to be successful, there is the potential for off-platform experts or coaches to lie about their credentials or experience, OLP designers might consider ways of validating the expertise and utility of third-party socialization programs.

*Implications for Theory*

**Client Socialization**

As OLPs continue to grow, the evolution from supervisor-employee, to client-independent freelancer relationship has important implications for clients, online workers and platforms. Our research highlights that participants experience novel barriers to obtaining the referent information they need from clients due to both ambiguous client expectations and platform design limitations. One area of scholarly interest is how online workers are socialized with client(s) (i.e. how visible is client information, and how do online workers use this information to adapt to ambiguous client expectations?). Similarly, an emerging area of research could better understand how clients are onboarded to a platform, and the information (or lack of) they receive on how to be a successful client.

**Knowledge Sharing**

Knowledge sharing among online workers is predominated through observing discussions in forums and online communities, where information is presented. While this is useful, the pace of changes in OLPs suggests that information may become out of date. Faced with permanence of digital communication, the temporal relevance of this information used to satisfy information-seeking behaviors emerges as an area in need of future research.

**Information Asymmetry**

Past research on information asymmetry has focused on information asymmetries between buyers and sellers in the context of reducing uncertainty in transactions (Mavlanova, Benbunan-Fich & Koufaris, 2012) or how information asymmetries can be used as a source of control of workers (Rosenblat & Stark, 2016). Future research could integrate the literatures of information asymmetry and information-seeking behaviors to study how information asymmetry between and among client, platform and freelancer impacts information seeking behavior and tactics.

**Unmet Information Needs Across Different Platforms**

As revealed in this study, OLP design can shape freelancer careers. Thus, while many themes remained constant across the three platforms sampled, notable differences in information-seeking behavior and tactics emerged. Future research should consider a comparative analysis of information seeking behavior and tactics across platforms.

# Limitations

Despite our systematic efforts to recruit a diverse group of online workers, it is important to acknowledge the limitations of our recruiting methods. The primary recruitment limitation is nonresponse. It is possible that our findings do not represent the perspectives of online workers who did not apply to our job posting or respond to our targeted outreach. Despite our pursuit of a diverse participant representation, we conducted all interviews in English, so this severely restricted our population. In addition, we conducted all interviews remotely, so we could not see workplaces for ourselves. In addition, much of our data is self-reported thus encapsulating perceived self-reflections and needs, and may not be representative of actual freelancer behavior

# Conclusion

By taking information-seeking behaviors into account in OLPs, designers of these platforms might be able to help make online work less precarious by supporting the information-seeking behaviors of workers that that reduces uncertainty and ambiguity.

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