HOW THE FLEXIBLE FIRM EXPANDS WITH ONLINE LABOR PLATFORMS: THEORIZING ONLINE LABOR PLATFORMS AS A NEW MODEL FOR SOURCING HIGH-SKILLED KNOWLEDGE WORK

Greetje F. Corporaal
University of Oxford
gretta.corporaal@sbs.ox.ac.uk

Vili Lehdonvirta
University of Oxford
vili.lehdonvirta@oii.ox.ac.uk

This is a working paper. Please do not cite or distribute without the authors' permission.

ABSTRACT

Large complex organizations have been externalizing work through labor market intermediaries for a long time. But in the past two decades, their employment externalization practices have gradually changed in two important ways. First, organizations increasingly hire remote independent contractors online rather than engaging them through 'brick and mortar' intermediary organizations such as staffing agencies. Second, they increasingly make use of the algorithmic matching technologies provided by online labor platforms to select and hire contractors from across the globe and who meet their specific skills requirements. We link this recent trend towards 'platform sourcing' to existing organizational research on employment externalization and examine how the changing nature of specialized knowledge work motivates organizations to revisit their employment externalization practices. We conducted a field study of organizations' motivations for using online labor platforms to externalize work. Our findings show that organizations use online labor platforms to source not only low-skilled but particularly high-skilled knowledge work that requires specialized expertise. The findings also show that organizations primarily used platform intermediaries for work that had already been externalized, with the platform allowing them to find better quality matches faster. In particular, and contrary to the common narrative of the vanishing corporation, these findings suggest that, rather than contributing to the disintegration of the traditional corporation, online labor platforms are enabling organizations to seek tighter integration between a firm's internal and external workforces. We discuss the implications of these findings for our understanding of the changing nature of work, employment externalization theory, and for theories of organizations and their boundaries.

INTRODUCTION

When and why do large complex organizations decide to use online labor platforms instead of conventional labor market intermediary organizations to source work externally, outside the boundary of the firm? The employment relationship in virtually every country is undergoing a profound transformation as organizations have abandoned lifetime employment in favor of contingent work. As organizations have increased their use of contingent work – a general term for forms of employment tied to the completion of a specific task and, hence, does not contain any commitment between employee and employer for long-term employment under a system of bureaucratic control (Barley and Kunda, 2004; Pfeffer and Baron, 1988; Polivka & Nardone, 1989, p. 11) – this has fostered the rise of a variety of labor market intermediary organizations such as temporary staffing agencies, professional employer organizations, and outsourcing or offshoring vendors and who mediate between individual workers and client organizations that seek to get work done (Bonet et al., 2013; Davis-Blake and Broschak, 2009). But with the emergence of online labor platforms, organizations revisit their boundaries, processes, and practices for externalizing work.

As a third party in the employment relation, labor market intermediaries shape how workers are matched to organizations, how tasks are performed, and how conflicts are resolved (Autor, 2009). To organizations, they can perform various roles such as information providers, matchmakers, and administrators (Bonet et al., 2013). Whereas conventional intermediary organizations such as temporary staffing agencies tend to employ humans in roles of account managers, recruiters, and sourcing specialists to match workers with job opportunities, novel intermediary organizations such as online labor platforms (Kuhn and Maleki, 2017; Lehdonvirta et al., 2019) increasingly rely on artificial intelligence to provide their clients with matches on-demand. The emergence of these new – and perhaps more 'tech-savvy'– platform labor market intermediaries shape not only supply-side dynamics regarding where, how, and the conditions under which the work is performed by contingent workers that are at the heart of the so-called 'gig economy' (Ashford, Barker Caza and Reid, 2018; Sessions et al., 2020; Wood et al., 2018), but also important demand-side dynamics such as organizations' employment externalization practices and the wider staffing industry (Corporaal and Lehdonvirta, 2017; Kaganer et al., 2013; SIA, 2020).

Although employment externalization and associated reliance on contingent work has been a strategic organizational practice for most of the 20th century (Helfen, 2015; Pfeffer and Baron, 1988), giving rise to a global staffing industry (Peck, Theodore and Ward, 2005), modern

discussions of the phenomenon began in the early 2000s when advances in information and communication technologies made it feasible and attractive for organizations to source work online through online labor platforms. Whereas academics started using Amazon Mechanical Turk, for instance to recruit participants for their experiments, other first-adopters of online labor platforms were start-up organizations and small- or medium-sized enterprises who welcomed the arrival of platform intermediaries such as Upwork, Toptal, and Fiverr for hiring remote independent contractors on-demand (Kuek et al., 2015). In recent years, however, the demand-side of online labor platforms has gradually changed to also comprise larger and more complex organizations (Corporaal and Lehdonvirta, 2017). Today, many of the world's largest organizations such as the Fortune 500 have active profiles on one or several online labor platforms to advertise work opportunities that require specialized expertise, such as software engineering, data science, graphic design, and marketing support (Kässi and Lehdonvirta, 2018; Pofeldt, 2018). This novel trend where large complex organizations use online labor platforms to externalize work is the focus of this paper.

Understanding how work and employment is structured inside organizations but also increasingly outside their boundaries constitutes a key task of scholars of work and organizations (Barley and Kunda, 2004; Pfeffer and Baron, 1988). In particular scholarship on contingent work and employment externalization have addressed the question when and why organizations use labor market intermediaries to source work externally, outside the boundary of the firm. Whereas scholarship on contingent work has documented how a non-standard employment relationship impacts workers and their experience of work, holding important implications for management and organizations (e.g., Barley and Kunda, 2004; Kalleberg et al., 2000; Ashford et al., 2007), employment externalization theory (EET) focuses on demand-side organizational dynamics of work externalization and the motivations and factors that shape which types of work organizations source externally (e.g., Bidwell and Fernandez-Mateo, 2010; Davis-Blake and Broschak, 2009; Davis-Blake and Uzzi, 1993; De Stefano et al., 2019; Pfeffer and Baron, 1988). EET provides rich insight into the reasons why organizations decide to externalize work, the conditions under which they are likely to intensify their externalization practices, and the nature of the work that lends itself to externalization, for instance by using labor market intermediaries. Similarly, the literature on online labor platforms has drawn attention to the potential of these novel labor market intermediary organizations for externalizing specialized knowledge work (e.g., Corporaal and Lehdonvirta, 2017; Kaganer et al., 2013; Valentine et al., 2017).

However, although the contingent work literature and employment externalization theory in particular have been crucial in explaining *when* and *why* organizations decide to externalize work, scant attention has been paid to how large complex organizations – often maintaining long-term relations with a multitude of labor market intermediary organizations – decide which intermediary to use for externalizing certain work. Or, putting it differently, if the benefits accompanying externalization have existed for some time now, then the question in need of an answer is: *Why are organizations revisiting their employment externalization practices with the rise of online labor platforms?*

Drawing on findings from our field study of 12 Fortune 500 organizations' use of a major online labor platform we demonstrate that, in order to explain why large complex organizations defer from using conventional labor market intermediaries and instead explore the use of a novel – and perhaps a more 'technology savvy' – one, we need to bring an understanding of how intermediary organizations match people with jobs and the particular geography of their contingent workforce into our explanations of organizations' employment externalization practices. Contrary to popular rhetoric and the emerging academic literature on the gig economy suggesting that firms mainly use online labor platforms to externalize low-skilled piecework (e.g., Brawley and Pury, 2016; Kuhn and Malecki, 2017; Lehdonvirta, 2018), we actually find the opposite: that large complex organizations mainly use online labor platforms as a novel way of sourcing specialized knowledge work that previously had already been externalized. The provision of algorithmic matching technologies that allow for almost instant matches, combined with having a global workforce of contract workers available on-demand, makes that online labor platforms are able to provide organizations with better quality matches faster when it concerns highly specialized knowledge work. Rather than bringing about further disintegration of the traditional corporation, we theorize that online labor platforms enable organizations to seek tighter integration between a firm's internal and external workforces.

In what follows, we review the employment externalization literatures on the demand-side motivations of organizations to externalize work to contract workers and describe the research setting and the details of the research design. We then explain the findings by recounting how the delocalization of work on online labor platforms allows organizations to successfully execute more specialized knowledge work to a higher degree than by using conventional brick and mortar labor market intermediaries. We end by discussing the implications of the delocalization of specialized knowledge work for understanding organizational demand for contingent workers.

RELEVANT LITERATURE

Our research draws on and extends scholarship on employment externalization. Compared to previous waves of employment externalization – a general term for externally sourcing specific tasks, pieces of work, or services outside the boundary of the firm, usually through labor market intermediary organizations such as temporary staffing agencies – the novelty of the recent turn to using online labor platforms lies in: 1) a heavier reliance on digital technologies and algorithmic technologies for matching workers with jobs and 2) providing client organizations the ability to access a global pool of contract workers rather than a geographically bounded one. Scholars of work and organizations have examined different aspects of this phenomenon from an organizational perspective. In this section, we review these literatures, after which we identify their shortcomings and limitations.

Organizations Externalizing Employment

Employment externalization theory (EET) deals with when and why organizations execute a piece of work internally or source it externally in the market (Davis-Blake and Uzzi, 1993) through an employment arrangement that departs from the norm of full-time permanent employment (Pfeffer and Baron, 1988). Externalization can occur in variety of ways, including the hiring of temporary workers by firms (e.g., Garsten, 1999; Van Dyne and Ang, 1998), the hiring of contingent workers through labor market intermediaries such as temporary staffing agencies (Bonet et al., 2013; Davis-Blake and Broschak, 2000; Barley and Kunda, 2004) or professional consultancy firms (Nesheim et al., 2997), engaging independent contractors directly (Davis-Blake and Uzzi, 1993; Malone, 2004; Malone and Laubacher, 1998), or establishing partnerships with outsourcing and offshoring vendors (Davis-Blake and Broschak, 2009). Employment externalization arises alongside the stabilizing process of internalization as a way to increase organizational flexibility. Together, internalization and externalization provide firms with mechanisms for developing stable yet adaptive work arrangements (Davis-Blake and Uzzi, 1993). Whereas EET has predominantly focused on explaining the movement of work beyond the boundary of the firm, its focus on organizational demand for contingent work makes that its insights may also be of relevance in understanding the most recent trend whereby large complex organizations use online labor platforms to source certain work over the Internet (Corporaal and Lehdonvirta, 2017).

First, regarding *why* organizations decide to externalize work to contractors sourced through online labor platforms, EET predicts that organizational demand for online labor is part of their

efforts to increase flexibility in the face of competition and uncertainty. Scholars have found that organizations are more likely to externalize employment when they experience changes in their economic circumstances, have to quickly adapt to changes in the market, and thus are pressured to find more flexible ways of organizing work that take into account these new market realities (Atkinson, 1984; Davis-Blake and Uzzi, 1993; Pfeffer and Baron, 1988). For instance, developments in information, communication, and automation technologies, in the second half of the 20th century pressured organizations to increase their *functional* flexibility – the ability to apply the workforce to different tasks as required and necessitating a variety of skills – by externalizing part of the work to contractors (Atkinson, 1984; Kalleberg and Marsden, 2005). Changes in the market may also lead organizations to focus on their core competencies, thereby externalizing functions and work tasks that are considered non-core and more in the periphery (Pfeffer and Baron, 1988). And in dynamic environments, externalization of employment may allow organizations to access specialized skills that are short in supply and to accumulate knowledge that can boost innovation (Barley and Kunda, 2006; Matusik and Hill, 1998; Nesheim et al., 2007).

Other forms of flexibility that organizations seek to increase when dealing with changing market conditions are *numerical* flexibility – the ability to rapidly adjust the size of their workforce – and *financial* flexibility – the ability to adjust employment costs to reflect the state of supply and demand in the labor market (Atkinson, 1984). When confronted with greater competition or uncertainty in the market, organizations will seek a better match between the size of their workforce and the number of workers needed to meet market demand (Mangum et al., 1985). To prevent having to lay-off or alter the contracts of permanent employees, as well as to cover for employee absences, organizations may have to rely on contractors as part of their workforce and with which they have a looser contractual relationship (Ashford et al., 2007; Houseman, 2001; Kalleberg, 2000; Pfeffer and Baron, 1988). Externalizing work to contractors is often seen as a cost saving measure as contractors tend to receive few of the benefits offered to regular employees (Davis-Blake and Uzzi, 1993). Similarly, responsibility for the costs associated with recruitment, selection, and unemployment insurance rests with labor market intermediary organizations (Ashford et al., 2007; Houseman, 2001; Pfeffer and Baron, 1988; Williamson, 1981). Others have problematized these notions about the labor cost benefits of externalization, however (Bidwell and Fernandez-Mateo, 2010; Fernandez-Mateo, 2007).

Next, regarding the *growth in organizational demand* for online labor platforms, EET predicts that organizations' use of online labor platforms to externalize work may be dependent

on several conditions. Specifically, scholars identified feasibility, labor market shortages, and the interplay of political interests inside and outside the organization as important factors shaping organizations' employment externalization practices. Whereas in general technological advances and the emergence of various types of labor market intermediary organizations has made work externalization more feasible (Ashford et al., 2007; Kalleberg, 2000; Kalleberg and Marsden, 2005), such feasibility may be more restricted in large complex organizations where employment practices tend to be oriented towards maintaining workforce stability and bureaucratic control (Davis-Blake and Uzzi, 1993). It may also be that organizations simply are unable to hire sufficient permanent workers to fill unfilled positions, for instance due to labor market shortages and/or greater organizational demand for specialized skills (Barley and Kunda, 2006). In such circumstances, externalizing work to contractors helps to attract people into the workforce who otherwise would not have been available but it also allows for more organizations to access in-demand skills (Davis-Blake and Uzzi, 1993; Pfeffer and Baron, 1988). Pfeffer and Baron (1988) describe how the structuring of work and employment in organizations is further shaped by the political interests of both people inside and outside organizations. For instance, organizations may try to resist unionization among workers through externalization; personnel departments may have budgetary constraints to the hiring of workers as permanent full-time employees but which do not apply to the hiring of contractors; and with performance often being measured against the number of full-time employees, department managers may favor external hires against internal ones. Similarly, the externalization practices of organizations may also be shaped by the interests of workers and their governments (Ashford et al., 2007; Davis-Blake and Uzzi, 1993).

Finally, regarding the *nature of the work* that lends itself to be sourced externally through online labor platforms, EET predicts that the work should meet certain criteria. Studies identified various characteristics that explain why certain work can be externalized more easily, such as when the work falls outside the core workflows of organizations, there are little to no start-up costs, execution does not require any firm-specific learning or skills, and worker performance can easily be measured (Cappelli and Keller, 2013; Kalleberg and Marsden, 2005; Williamson, 1981). Next, the execution of externalized work tends to be of limited duration, does not require the worker to be physically proximate to the organization, and requires little administrative control over the worker (Cappelli and Keller, 2013; Pfeffer and Baron, 1988). And further, traditional bureaucracies tend to be ill-suited for important knowledge and creative work that requires considerable freedom and flexibility (Florida, 2002; Shalley et al., 2004). In contrast, work that requires a substantial amount of firm-specific skills, and whose

execution is characterized by technical, informational, and interpersonal complexity is usually kept in-house (Davis-Blake and Uzzi, 1993; Williamson, 1981), whereas work high in interpersonal complexity but low in technical and informational complexity may be externalized to offshore vendors (Ashford et al., 2007).

Bringing the nature of online work and platforms' algorithmic matching technologies into our understanding of organizations' employment externalization practices

Together, these studies explain why and when organizations externalize certain types of work. Whereas the growing organizational demand for using online labor platforms to externalize work warrants research devoted to understanding this phenomenon in its own right, there are also important theoretical reasons such an investigation is deemed necessary, however. The starting point of our problematization lies in recognizing that the literatures on contingent work and employment externalization have provided important insights into the use of labor market intermediaries by organizations. But we must add to this understanding to explain the outcomes of our study. As we will elaborate in further detail below, the cases included in our study already used a multitude of labor market intermediary organizations but now also started to use a major online labor platform for sourcing certain work externally. To explain why large complex organizations defer from using conventional labor market intermediaries and instead explore the use of another – perhaps more 'technology savvy' – intermediary, we need to bring an understanding of the nature of online work, the way intermediary organizations match workers with jobs, and the geography of their contingent workforce into our explanation of organization's employment externalization practices. Linking studies on employment externalization with studies of online labor platforms, we therefore identify the motivations of large complex organizations to use online labor platforms and the types of work they source externally through them. We further demonstrate how the organizations' motivations for using an online labor platform rather than a conventional intermediary may differ depending on the nature of the work. In what follows, we review the methods used in the study and then report on our findings.

METHODS

Rationale and setting

Because of the absence of any previous systematic research on firm adoption of online labor platforms, we regarded it as essential to adopt a qualitative and inductive approach to our

enquiry. With the aim of theory development (Mantere and Ketokivi, 2013), the research design therefore is a qualitative field study involving 12 Fortune 500 firms.

Early adopters of online labor platforms were mostly startups and small- and medium-sized enterprises (Kuek et al., 2015; Pofeldt, 2013). To such small, resource-constrained firms, online labor platforms may have represented the first viable means of accessing flexible and skilled workers around the world (Bunyaratavej et al., 2011). Recently, however, even large firms with tens of thousands of employees (e.g., multinational corporations and Fortune 500 firms) have started to explore platform-based sourcing models (Corporaal and Lehdonvirta, 2017). In fact, Upwork reports that over 30 percent of Fortune 500 firms used their services in 2017 (Pofeldt, 2018), with firms such as Airbnb, Dropbox, GE and Samsung posting more than 30,000 projects on the platform (Upwork, 2018). Unlike smaller firms, these large business firms tend to already have processes in place for accessing flexible and skilled workforces around the world, such as through vendor management systems, temporary staffing agencies, outsourcing, and independent contractor pools. Empirical insight into the reasons *why* these large firms are now adopting online labor platforms - in view of many of them already having a contingent workforce of freelancers working either independently or through agencies - is scant, yet important to obtain a grounded understanding of how work and organizing is taking shape in the digital platform economy.

To shed light on this matter, we conducted a qualitative field study. One of the largest online labor platforms for knowledge work facilitated access to the case firms. Our original dataset comprised seven Fortune 500 firms and two multinational enterprises, of which preliminary research findings were summarized in a research report (Corporaal and Lehdonvirta, 2017). We subsequently got access to another 42 cases of companies that had explored the platform to subsequently adopt the platform (N=16) or decided not to adopt the platform (N=28). Given our research question what the motivations for large business firms are to explore and adopt online labor platforms, we decided to narrow our analysis and focus on Fortune 500 firms with over 10,000 employees. This resulted in our final dataset of 12 case firms that all adopted the platform. This dataset, comprising a diverse sample of business firms spanning 6 industries, is a significant improvement on previous studies of platform client firms, which have only examined successful adopters (e.g., Kaganer et al., 2013). It allows us to explore how the adoption of platform sourcing is partly a function of the organizational processes and characteristics of the enterprise firm.

Firms explored platform adoption between mid-2015 and late-2017. Informants indicated that the adoption process was usually led by a small set of people inside the firm, usually

working in line departments, such as marketing and sales, technology and innovation, product, or engineering, or in staff departments, such as human resources, finance, legal, strategy and operations, or procurement. All 12 cases (anonymized upon request) comprised firms with over 10,000 employees and with previous experience with contingent work. While some firms explored platform adoption as a new way to source talent, others also explored the platforms' technologies and services as a freelance management system (FMS) that they could also 'bring your own' (BYO) freelancers onto. The dataset includes both firms that were scaling up their use of online labor platforms across the enterprise (enterprise-wide adoption), as well as firms where adoption was more localized (vertical adoption) and limited to one or two specific business units and categories of work.

Data sources

We used several data sources: (1) qualitative data from semistructured interviews with key persons in the platform adoption process, and (2) documentary data, including company websites, companies' and informants' Linkedin profiles, and materials provided by informants, such as videos, example statements of work, and screenshots depicting how they work with online freelancers.

Data collection proceeded in two phases. For the interviews conducted by the first author in early 2017, sales and account managers inside the platform firm provided guidance in identifying case firms and the most influential informants in the platform adoption process. For these interviews, the interview guide included questions on informants' background, their role in the company, and the work their group does. Informants were asked what motivated them to start using the platform and how the adoption process proceeded. After such discussions, we asked informants for what type of projects they hired freelancers on the platform, the advantages of using the platform for engaging freelancers compared to other ways to hire contract workers, and potential risks involved. Thus, the primary focus of the interviews was on the company's motivation for using the platform, the adoption and integration process, actual usage of the platform, and strategic benefits and challenges.

Another part of the interviews was conducted by researchers employed by the platform, between 2015 and 2017. Researchers inside the platform had access to account data of the enterprises and so could identify the most influential informants of adopting and non-adopting case companies. Informants typically included department or business unit managers, platform program managers, and hiring managers (active on the platform). In these interviews, the interview guide included questions on informants' background and primary responsibilities,

and how they first heard about the platform. Informants were also asked how common it was for employees to engage independent contractors; what the typical process was for finding external 'talent'; and if there were any barriers that made it difficult to engage independent contractors. Finally, they were asked whether the platform was a good fit for their needs, what other solutions they considered, and who else was involved in the adoption process. Thus, through these interviews, we gathered information about the context and process of exploring the possibility of platform adoption.

Together, the questions from both sets of interviews, along with the documentary data, allowed us to theorize the motivations of case companies to consider platform adoption. We shared and verified preliminary research findings with current and prospective firms using the platform during three workshops, held in August 2017.

Data analysis

Data analysis was iterative and lasted five months. Data analysis was aimed at answering to the question of what the motivations for large business firms are to explore and adopt online labor platforms. This analysis fell into the three stages described below.

Stage 1. In early iterations, and following the principles of inductive research, we developed individual case narratives. For this we synthesized and triangulated the interview transcripts, notes, and documentary data (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). Through this exercise we allowed codes, themes, and relationships to emerge from the data, and which were helpful in identifying similarities and differences between cases. Examples of initial codes are motivation (for platform adoption); type of work (sourced through the platform); platform usage; adoption model; and challenges (encountered during the platform exploration process).

Stage 2. In the next stage of our analysis, we performed detailed within-case analysis, for which we made use of the program NVivo. Analysis focused on expanding and refining our emergent coding scheme to describe patterns and variations in the platform exploration and adoption process experienced by firms. Our final coding scheme comprised codes that described the company, its size, industry, and previous experience with contingent work. Another set of codes described the time of platform exploration/adoption, the people involved in the adoption process, the motivations for adoption, the adoption model, the type of work sourced through the platform, the challenges, concerns and needs encountered, the value provided by the platform, and the outcome - whether or not the company successfully adopted the platform.

Stage 3. Cross-case analysis began after all cases were finished. Our detailed coding scheme and various Excel tables, summarizing codings per case, proofed helpful in identifying patterns across cases. We grouped and compared cases according to different variables of interest, such as industry, the time of adoption, previous experience with contingent work, the type of work the company seeks to contract out, adoption model, locus of adoption, motivations, and their outcomes.

From this analytical process a framework emerged that described the differences in the motivations of companies that decided to adopt the platform and those that decided not to. We found that case companies could be grouped into three groups, based on their previous experience with contingent work. Within these three groups we saw notable differences in motivations for case companies that decided not to adopt the platform and those who successfully adopted the platform. More significantly, these findings point towards platform adoption as a combination of previous experience and explicit needs - and which we will describe in more detail in the findings.

FINDINGS

Transform cost structure of 'talent' sourcing

Seven cases (6 adopters and 1 non-adopter) mentioned costs as a motivation for exploring online labor platforms. Three cases (Echo, Gamma, and Delta) indicated the ability to bring in cost-effective resources as a motivation. For instance, our informant at Delta described how when she joined Delta, the company was already using The platform. They mentioned to her that when she needed to get work done that was not resourced for, and no additional headcount was available, she could get it done through the platform:

> Interviewee: "And particularly because companies aren't giving headcount, they're not giving budget for headcount, so you utilise those sources that are available and The platform has been really good with that . . . The prices are always pretty reasonable, like that's why we work with The platform so much because we can get a lot for a little bit of money. You think, oh Delta, they must have a lot of money, it's not like [that]. We have a lot that we have to get done, so it depends."
> Interviewer: *How do you make the decision, for to use a freelancer and when to use other sources?*
> Interviewee: "Budget, budget is the determining factor, that's it, budget!

Four cases (House, Sierra, Foxtrot and Xi) indicated their organization's initiative to transform the cost structure of contingent work as a motivation. Our informant at Xi came to know about the platform in the context of a company initiative that encouraged employees to search for innovative opportunities to drive costs down for the business. The platform was explored as part of this initiative (see quote in table). The platform offered an exciting

proposition: to deliver 90% of the value at 50% of the cost. According to our informant: "This isn't an opportunity to get incrementally better. This has the potential to be a homerun . . . to completely transform our cost structure with respect to acquiring talent". (From KC interview notes [362] and interview transcript [537]). Similar stories were told by our other informants. At House, platform adoption was explored as part of an initiative disrupt and transform the cost structre of how contingent work was currently done with vendors (see quote in table). Similarly, Sierra explored platforms as part of an initiative to explore how to the efficiency of their business operations in terms of costs.

At Foxtrot, people at procurement have been a bit upfront in getting managers accustomed to hiring freelancers through the platform as compared to conventional external hiring solutions, as our informant [031] stated, and which was confirmed in the interviews with hiring managers (see quotes in table):

> "You know, from a business standpoint we also have challenges from cost pressures and maintaining budgets and things of that sort. Ultimately there's a lot of work that needs to get done. There's always external resources that are needed to get some of these projects done. . . [And] if we want to be cost effective, the message is: Listen, let's really look at this other option or this alternative of finding workers [through platforms] to do some of these projects . . . because I think there's a lot of opportunity. In that sense we're being a little bit upfront and aggressive in adopting the solution and expanding it even greater.

Indeed Foxtrot hiring managers mentioned the company's move towards "efficient spend" ([034]. Whereas inside Foxtrot the culture used to be to rely pretty heavily on agencies, they experienced the recent shift towards efficiency [042]. For instance, two informants heard about the platform when working on a project to design two infographics. They initially scoped out the project with an agency, yet charging a bas-rate of $20,000 the agency was out of budget. They were then faced with the choice of not doing the project or finding another resource. They decided to use the platform, where they got the job done for $871 [037]. Similary, another hiring manager needed help synthesizing and analyzing a big dataset to serve as a foundation for developing a new strategy. She wasn't sure if she could use a freelancers for this project but her boss recommended it. With no in-house expertise or other solutions available, and the budget being limited, she turned to the platform to get the project done [038].

2. Adapting to the future of work

Six cases (1 adopter and 5 non-adopters) explained their exploration of the opportunities that platforms had to offer to them by the need to adapt to the future of work. At Pi our informant [542] got asked by one of the vice presidents to look into the platform and see what it could offer and how to leverage it. Our informant worked at digital marketing and recognized

that “it could be a whole lot easier for us to have more freelancers we could leverage”. Our informant at Kappa [545] also mentioned that one of the vice presidents requested the company to look into the platform (see table). At Beta the request came to our informant in procurement [427; 492] from their marketing department, where one of the managers wanted to explore the platform for some creative design work instead of using their conventional agencies. This pushed procurement to look into the best way to get work done (see table). Further, while at Xi the main driver for exploring platforms was cost savings, they also felt that they should make adaptations by augmenting their traditional employment model with platforms:

> “I would say that what triggered my decision to do that [exploring platforms] was not just that we’ve got this relationship now with the platform . . . but there are other platforms, servicing different niches that are focused on the freelance movement that are kind of a similar concepts but different underlying models. I really think we’ve got - like the ecosystem of these talent markets - to be thinking more proactively about how we start to augment our traditional overhead model with this kind of platforms . . . I think that is becoming, from my organisation, more the way that work is being conducted, like the days of having these fixed, like these are your responsibilities and you do them every year. I don’t know, I kind of operate more like in three month segments.” (From Xi interview transcript [537])

Similar reasons were given by Upsilon and Epsilon, referencing that a one-stop shop for freelance talent is now ‘the model’ [543] and “the future workforce” [415], (see table).

3. Need for a freelancer management system for independent contract work

Six cases indicated (2 adopters, 4 non-adopters) the need for having some kind of system to manage and pay contingent work. While firms often have systems in place to manage their different vendors and agencies (e.g., VMS, MSP systems), not all companies have a similar system for managing independent contract work. To address associated challenges, such as not having insight into the volume and availability of independent contractors, payments often being delayed or not coming through at al, and people having to manually keep track of and manage freelance work, firms are looking into The platform as a Freelancer Management System (FMS) that they can also bring their existing freelancer base onto.

Related to tracking the progress of freelance work, our informant at Sigma [535] mentioned the difficulty in getting the workflow correct. For his team it’s important and very common to engage independent contractors. However, at the moment it’s also very difficult since a lot of administrative time is being spent on things like budget allocation and managing the work. What drew him to the platform was the promise to be able to provide a company-wide solution where he can watch, keep track of, and see the progress of freelance work: “You’ve got a system in place to manage this. If I go with some agency then what am I doing? I’m back to Google spreadsheets and emails.”

Related to payments, our informant at Epsilon [415], people adopted the platform with the aim of having one platform to process various contractors in different continents. At Pi, our informant at Pi [162] explained how getting people paid in a timely manner was a huge problem. Often, he couldn't get finance to approve purchase orders in a timely manner, which delayed paying a contractor (see table). This problem of getting independent contractors paid was also referenced by Echo [349] (also see table):

> "The platform does make a lot of things easier, which for example like, we have a lot of restrictions internally. We have restrictions around freelancers and contractors. . . . The layers of approval you need to get through is just absolutely insane! . . . If you go through certain vendors and you have different systems, you've got to get them onboarded. And we have a Net 65 like pay, that means that, it's just you know, going through procurement and going through all those things. It's pretty much impossible if you want to do work with a lot of different people and they're not even willing because they've had some bad experiences of working with big companies and then that person that hired them moves onto a different role and then they don't know who to reach out to and they end up not getting paid or they got paid six months later. They're like, that risk is almost too much for them a lot of times. But we take that away now."

Related to the visibility of freelance talent, our informant at Sigma described his challenge that talent isn't visible to the entire group or company. As a procurement manager he sources talent for mostly design and creative work for a variety of divisions. Sigma worked with a lot of independent contractors. At the time, the majority of freelancers were found through personal connections, which resulted in a lot of admin time for managing, onboarding, and transacting with individual freelancers. As our informant [544] put it:

> "Currently the talent we procure is for a variety of divisions throughout the company. We have similar freelancers that are being procured but they're not necessarily visible to the whole group. That's one of the challenges we have: making those freelancers more available, as far as a pool. And being able to take advantage of the best of the best. And be able to maybe consolidate, reduce the number of different freelancers we may use."

4. Addressing local talent and skill shortages

[under construction]

5. Being able to bring in specialized talent/expertise

[under construction]

6. Adapting to shifting demographics

Another motivation for platform adoption mentioned by informants of one of our case is the shift in demographics - with younger generations having different assumptions about their careers and where and how to do work - that push organizations to change their strategy and rethink their talent supply. At House, our informants mention to have learned about the shifting

demographics in society and how that got them started to think about online labor platforms (referred to as the human cloud) and on-demand work. In a video of an industry talk [011], informants from House address this matter and how they introduced a view of their organization as an open ecosystem where people can use platforms to bring outside talent in:

> Informant 1: "We recognised this a big learning, this shift in demographics [that] is forcing us to shift our strategy [and] how we need to start thinking about our talent supply strategy differently because of playing in this space . . What we've recognised, because of the shift in demographics, you think about this human cloud portion . . . You've got these demographics pushing this new area of on-demand work that comes in at a higher level of knowledge than what we might typically think about more typical temp labor."
>
> Informant 2: "House's talent will always be at the heart of what we do but we're expanding people's thinking to suggest that you can do work differently, you create value differently and you can think about it strategically differently."

7. Adapting to the changing pace of work

Five cases (all adopters) mentioned the slowness of existing sourcing channels and how they did not fit anymore with the pace of work today. Within the part of the business of our informant at Sigma [432, 535], it is common for employees to engage independent contractors. This is very important to his organization, he explained. But at the same time it's been very difficult and challenging the way things work today. This is why they're now working with the platform. Especially challenging in the process were "the mechanics of how do you establish a piece of work that needs to be done, how do you communicate that to the people that work on it? And then it's all of the approval process, the people involved in actually selecting and then find a freelancer to execute. That is a problem for us internally because it's slow and it's challenging to get the workflow correct." Our informant was looking for a solution that has speed: He needed "the kind of thing that can happen for $200 and in two days" while hiring through procurement was measured in weeks or months. Procurement would recommend him to find an agency and go through that agency for the work requested. Tal supports a global organization where "literally the sun never sets" and what he wanted was a resource "that follows the sun". The slowness of existing sourcing channels, such as vendor management systems (VMS) and managed service providers (MSP), also motivated our informant at Zeta [404] to explore new "talent sourcing solutions". Similar reasons were mentioned by informants at Foxtrot [034] and Echo [084] (see table). Yet, this 'changing pace of work' was illustrated most vividly by our informant at Sierra when asked to tell a bit bit about why they decided to platform adoption:

> "Internally I observed [that] there are a lot of issues with our project leaders. When they tried to engage with external freelancers or temp contractors, it took a long time for the agency working with us to engage [one]. So we did an internal study last year, on average it took six weeks from the time the project leader requested

the temp contractor to engage with our project until the process started . . . So sometimes it could take up to eight weeks or sometimes it was faster and only took four weeks. But our average is six weeks which was not able to support our project needs.

For instance, often if we receive a request from our headquarters saying: 'We want this project, we want ABC, can you deliver this in two weeks?' Most times, people [at the headquarters] give you two weeks or maximum three weeks. But then, it takes the agency six weeks to resource, not to mention to do the work after that! So basically that becomes a huge problem internally. We have lots of complaints from the different project leaders, so we have a lot of projects delayed.

When the Presidency asked the project leader: 'Can you explain to me what's the reason the project is delayed?' Most [project leaders] answered: 'Because our outsource window cannot engage on time. I'm sorry, because we don't have resources internally.' [Presidency:] 'But this is urgent - for two weeks! [Project leader:] 'We cannot even get it started in six weeks to support a project.' That has fundamentally become a broken model because internally we do not operate [like] that. On the other hand it's not possible for a company to find a fulltime employee every time there's a new project. It's not sustainable because you cannot find FTE to come here just for a short term project, for a three-week project or a one-month project and then fire that person. It makes no sense.

This problem triggered us into trying to figure out a solution. how can we resolve this? I [experienced] the problem from first-hand. I've definitely felt the pain, a lot of project leaders have the pain and then so I started to basically reach out to find a solution."

8. Augmenting full-time employees with freelance talent

Nine cases (7 adopters and 2 non-adopters) mentioned the ability to alleviate the workload of full-time employees as a motivation for platform adoption. Five cases (3 adopters and 2 non-adopters) indicated the ability to hire freelancers to offload work from full-time employees and bringing them into teams with limited bandwidth. Iota had been using the platform to offload software development tasks (see table). Similarly at Foxtrot, people had adopted the platform to cope with recent increases in digital content work (see table). At Delta, our informant's content marketing team had been using online freelancers for a variety of tasks, and in different parts of the world, in the absence of being given extra headcount to get the work done:

"In Europe we've been using them for various tasks. Some of it has been QA testing . . . different types of research [activities] and things like that. But literally any task you have you can rely on the platform, and particularly because companies aren't giving headcount, they're not giving budget for headcount, so you utilise those sources that are available [to you] and the platform has been really good with that." (Delta interview transcript [222]

Also Omicron and Psi explored using the platform to be able to offload work from FTE. At Omicron, platform adoption was considered in the context of an organizational restructuring process [398]. With people moving into different departments, our informant expected that this would create a few talent gaps with no full-timers were available to fill them. In teams with limited bandwith to tackle additional responsibilities, the platform would offer the opportunity to bring in freelancers, he believed. Similarly, our informant at Psi [279] described how they were looking into freelancers as a way to reduce the significant amount of administrative work

employees had to complete on a daily basis (see table). However, in the end both companies decided against platform adoption.

Two cases (2 adopters) in particular mentioned platform adoption to address challenges related to hiring freezes (Echo) and barriers to hiring in-office contract workers (Charlie). In the case of Echo, our informant [349] mentioned that the reason they turned to the platform for contracting four managing editors inside their marketing department was because they had a complete hiring freeze. With the platform, he explained: "at least we were able to get the talent versus not being able to get the talent at all." At Charlie, there were a lot of options for engaging contractors, for instance for producing marketing content. However, teams had to pay a premium for using those options and also ran into trouble when trying to bring in a new agency or contractor. It could take four to twelve months in order for the contractor to get paid and many small agencies couldn't afford to wait that long. Our informant [136] and his team had therefore made it part of their process to turn to the platform, whenever they had to engage a freelancer.

9. Need for an on-demand speedy hiring solution

In some cases, such as Alpha [305] and Omicron [398], people considered the broader need to structurally augment their current staffing model with on-demand hiring solutions (see table). In two cases (2 adopters) in particular, people realized the need for an 'on-demand and speedy hiring solution' to deal with seasonal surges and changes in the volume of work. One informant at Foxtrot [034], shared how she often received last minute requests and the criticality of having an agency alternative to get the work done quickly. Similarly, at Charlie, our informant [128] who evaluated the platform for initial use described the need to be able to engage on-demand talent for their internal digital marketing agency. His team comprised of data analysis, SEO and social media specialists and other "best in class marketing experts" that other groups in the organization tap into for support. With the number and volume of requests increasing, and the internal team having limited bandwidth, he felt the platform offered a smart way of doing things in a way that was best for the company. His team enjoyed the flexibility they had to define projects and find the right resources on the platform. One scenario he mentioned was how a group came to his team with the wish of wanting a dashboard that was built on a specific technology platform. Developing the dashboard asked for very specific skills . The team was able to find those skills on the (online labor) platform and the job was done in a couple of days. However, while reaping the benefits of on-demand hiring, people at Charlie [128, 134], kept their use of the platform secret, viewing it as a "secret weapon to get work

done". Also at Echo, informants [084, 086] mentioned to actively hide it. They didn't want people to know how much they used the platform, how much work they were able to get done quickly, and how much power they had with it in terms of being able to hire at will. Exposure of their platform usage, they assumed would put their business unit "under the microscope" with the risk of shutting down the access and instead being forced to use existing company resources for contingent work.

Contrary to Charlie and Echo, four cases (all adopters) initiated formal programs to experiment with new ways of working with platforms. For instance, at Foxtrot, one of our informants [031] was in charge of exploring how they could expand their usage and try to harness more online labor platform solutions across the business (see table). At Golf, our informant [021] was leading a program to experiment with platforms ans see of they could organize their customer support services differently. Instead of relying on their standard support solutions that relied on agents at dedicated offshore locations, they experimented with a program relying completely on online freelancers. Our informant managed 10 customer support teams, consisting of a total of 150 freelancers all working remotely. Further, our informant at Sierra [066] shared how her company just finished a pilot experiment with using platforms and was about to kick-off the new on-demand talent program.

As mentioned earlier, at House, established a dedicated "black ops" group to explore new ways of working and disrupt how the company was getting things done internally. In this context the group was exploring online labor platforms and on-demand talent, as an alternative to existing services. Our informant [016] took over this initiative and was tasked to develop it into an on-demand talent program that could be rolled out across the organization. The bigger vision of the program was to develop an "mall", or kind of "Macy's" for talent supply:

> Josh: "If you start talking to us you're going to hear about us building a mall, we're using a talent supply mall. But the metaphor works well because what we know is that up until now we have multiple ways in which we can source work. Whether it be an initiative team or going project, a manager comes in and says: How am I going to get work done? Either I'm going to use HOUSE talent or maybe I'm going to use one of my current vendors." [Fragment from 016 video]
>
> "Now we say they go to the mall and they're going to select the talent for their team. I'm going to take HOUSE talent and I'm going to take this vendor. I'm going to take [indicating a few brands] and I'm going to take my design program and I'm going to create a team and I'm going to go deliver this work." [From 002 interview transcript]

This program to develop a "talent supply mall" should replace House's existing model with over 160 vendors, agencies and other less efficient resources and processes, that tend to be based on "antiquated technology and organizational models" [155]. Realizing this vision,

for which a 10- to 15-year timeframe was anticipated, should make the organization more strategic in augmenting in-house staff for seasonal surges and eventually transform teams. One wing of this mall would be dedicated to on-demand talent supply:

> Informant 1: "What we recognised was there are a handful of different types of platforms that we as an enterprise can do business with [and] that can introduce us to talent, untapped talent that could drive value at House . . . And what we're contending and we've been testing is there's a new wing to this mall that has a handful of vendors that play in each of those disciplines, that allow us to do work differently and at a different value than those more traditional vendors . . .That's our view of the world right now and my view of the world right now. And people within House share this - some do, some don't - that work is going to be done very differently in the next ten years. It's going to be. It not necessarily means that the 50 000 House employees today aren't going to be 50 000 House employees in ten years. It could mean that they're leveraging an additional 20 000 folks to do work differently. The point is we're going to have the ability to tap into this pool of very skilled talent in a way we never could before and it's going to drive value. It's either going to be because it could potentially do work on the team's differently, it could be work that vendors are doing, it could give us the ability to scale and ramp up and ramp down differently, it's going to provide an avenue to do work that didn't exist before " (From [002] interview transcript]

DISCUSSION

In this section we further analyse our empirical findings and identify contributions to the literature on technology and the future of work and organizing. The rise of platform sourcing has led scholars to posit a shift towards increasingly on-demand and market-based models of organizing (Malone et al., 1987; Sundararajan, 2016), some going as far as speculating about the vanishing of the hierarchical model of organizing characteristic of the American corporation (Barley, 2016; Davis, 2016). Our findings offer support to the notion that platforms are associated with more on-demand and ad-hoc forms of organizing, as some of the key motivations for platform adoption were related to flexibility and speed. But our findings contradict the notion that this necessarily leads to a disintegration or even a diminishing of the hierarchically organized core workforce. The findings show that large firms approach platforms primarily as an alternative to other contingent work providers, not as an alternative to their core workforces. They seek contingent work solutions that can provide more speed, flexibility, and other benefits; they do not seek to overthrow the core-periphery model as such.

> "[Platform sourcing] doesn't necessarily mean that the 10,000+ House employees today aren't going to be 10,000+ House employees in ten years. It could mean that they're leveraging an additional 10% of folks [online] to do work differently."

At the same time, our findings suggest that the platform sourcing model does involve some important organizational differences to established sources of contingent labour. Namely, the sourcing happens at the organization's grassroots level: team managers hire and evaluate online freelancers themselves directly, instead of going through the firm's procurement department,

HR department, or resident agency representative. This takes the HR process closer to where the work is being done, cutting through complex layers of processes and IT systems that large firms are liable to accumulate over time. We posit that this is a key reason why platform sourcing may be able to deliver advantages in speed and flexibility without compromising staff quality and organizational culture at the team level. The flipside is the potentially increased HR workload at the team level; for this reason, conventional outsourcing providers and staffing agencies are likely to retain their position as strategic sourcing solutions for sourcing larger projects and entire business processes. Rather than seeing platform sourcing as a perfect substitute to either the core or the contingent workforce, we thus conceptualize it as a third layer between the two, expanding and contracting according to just-in-time requirements at the firm's grassroots level. This empirically grounded three-layer model of a contemporary firm's workforce, which challenges ideas about the vanishing of the corporation (Barley, 2016; Davis, 2016), is our paper's first contribution.

Our paper's second contribution is identifying the motivations that lead firms to adopt this three-layer model. In the literature on contingent work, several motivations have been identified for why firms make use of conventional sources of contingent labour. The major motivations are cost savings, varying employment needs due to e.g. cyclicality, and access to highly specialized skills that are not needed constantly (Atkinson, 1984; Davis-Blake & Uzzi, 1993). To some extent we find that platform sourcing is used for the same reasons, but with some differences of degree, so that in some situations platform sourcing may be preferable due to e.g. lower overhead costs.

More importantly, we identified motivations for platform adoption that have not been identified in previous research conventional sourcing solutions. One is the need to adapt to a changing pace of work. Many firms today operate in hypercompetitive environments in which they must react to rapidly changing circumstances. Organizational scholars have long suggested that this implies a need for organizational fluidity or flexibility, implemented in part through contingent labour solutions that allow workforce size and skill composition to be adjusted (Atkinson, 1984). However, our findings speak to another, simpler implication: compressed time frames. To react rapidly, firms must operate on shorter cycles, and all processes must take less time from start to finish. Consequently, a key motivation for platform adoption was slashing the lead times involved in using contingent work.

Another novel motivation for platform adoption was the need to adapt to changing worker demographics. Contingent workers are often portrayed as second-class citizens, with poorer pay, benefits, and career prospects, and in many cases this is accurate. But there are also many,

especially highly skilled experts, who strictly prefer freelancing over a corporate career (Barley & Kunda, 2006). In particular, some of our informants believed that younger cohorts and especially "millennials" were less likely to be attracted to a traditional career that involved working one's way up a corporate ladder. To continue to secure the best workers in the future, these managers therefore felt that they had to reach out to novel hiring solutions. To them, platform sourcing was not necessarily something that the firm did for its own sake, but for its future workers' sake. Other research has similarly pointed to platforms as a means for older people to achieve a smooth transition out of the workforce (Brewer, Morris, & Piper, 2016).

REFERENCES

Ashford, S. J., Caza, B. B., & Reid, E. M. (2018). From surviving to thriving in the gig economy: A research agenda for individuals in the new world of work. *Research in Organizational Behavior*, *38*, 23-41.

Ashford, S. J., George, E., & Blatt, R. (2007). 2 old assumptions, new work: The opportunities and challenges of research on nonstandard employment. *Academy of management annals*, *1*(1), 65-117.

Atkinson, J. (1984). Manpower strategies for flexible organisations. *Personnel management*, *16*(8), 28-31.

Autor, D.H. (2009). Studies of labor market intermediation: Introduction. Studies of labor market intermediation, pp.1-26.

Barley, S. R. (2016). 60th anniversary essay: Ruminations on how we became a mystery house and how we might get out. *Administrative Science Quarterly*, *61*(1), 1-8.

Barley, S. R., & Kunda, G. (2006). Contracting: A new form of professional practice. *Academy of Management Perspectives*, *20*(1), 45-66.

Bidwell, M., & Fernandez-Mateo, I. (2010). Relationship duration and returns to brokerage in the staffing sector. *Organization Science*, *21*(6), 1141-1158.

Bonet, R., Cappelli, P., & Hamori, M. (2013). Labor market intermediaries and the new paradigm for human resources. *The Academy of Management Annals*, *7*(1), 341-392.

Brawley, A. M., & Pury, C. L. (2016). Work experiences on MTurk: Job satisfaction, turnover, and information sharing. *Computers in Human Behavior*, *54*, 531-546.

Brewer, R., Morris, M. R., & Piper, A. M. (2016, May). " Why would anybody do this?" Understanding Older Adults' Motivations and Challenges in Crowd Work. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 2246-2257).

Bunyaratavej, K., Doh, J., Hahn, E. D., Lewin, A. Y., & Massini, S. (2011). Conceptual issues in services offshoring research: a multidisciplinary review. *Group & Organization Management*, *36*(1), 70-102.

Cappelli, P. H., & Keller, J. R. (2013). A study of the extent and potential causes of alternative employment arrangements. *ILR Review*, *66*(4), 874-901.

Corporaal, G. F., & Lehdonvirta, V. (2017). Platform sourcing: how Fortune 500 firms are adopting online freelancing platforms. University of Oxford

Davis, G. F. (2016). *The vanishing American corporation: Navigating the hazards of a new economy*. Berrett-Koehler Publishers.

Davis-Blake, A., & Broschak, J. P. (2000). Speed bumps or stepping stones: The effects of labor market intermediaries on relational wealth. *Relational wealth: A new model for employment in the 21st century*, 91-115.

Davis-Blake, A., & Broschak, J. P. (2009). Outsourcing and the changing nature of work. *Annual Review of Sociology*, *35*, 321-340.

Davis-Blake, A., & Uzzi, B. (1993). Determinants of employment externalization: A study of temporary workers and independent contractors. *Administrative science quarterly*, 195-223.

De Stefano, F., Bonet, R., & Camuffo, A. (2019). Does losing temporary workers matter? The effects of planned turnover on replacements and unit performance. *Academy of Management Journal*, *62*(4), 979-1002.

Fernandez-Mateo, I. (2007). Who pays the price of brokerage? Transferring constraint through price setting in the staffing sector. *American Sociological Review*, *72*(2), 291-317.

Florida, R. (2002). The rise of the creative class. New York: Basic Books.

Garsten, C. (1999). Betwixt and between: Temporary employees as liminal subjects in flexible organizations. *Organization studies*, *20*(4), 601-617.
Helfen, M. (2015). Institutionalizing precariousness? The politics of boundary work in legalizing agency work in Germany, 1949–2004. *Organization Studies*, *36*(10), 1387-1422.
Houseman, S. N. (2001). Why employers use flexible staffing arrangements: Evidence from an establishment survey. *Ilr Review*, *55*(1), 149-170.
Kaganer, E., Carmel, E., Hirschheim, R., & Olsen, T. (2013). Managing the human cloud. *MIT Sloan Management Review*, *54*(2), 23.
Kalleberg, A. L. (2000). Nonstandard employment relations: Part-time, temporary and contract work. *Annual review of sociology*, *26*(1), 341-365.
Kalleberg, A. L., & Marsden, P. V. (2005). Externalizing organizational activities: where and how US establishments use employment intermediaries. *Socio-Economic Review*, *3*(3), 389-416.
Kässi, O., & Lehdonvirta, V. (2018). Online labour index: Measuring the online gig economy for policy and research. *Technological forecasting and social change*, *137*, 241-248.
Kuek, S. C., Paradi-Guilford, C., Fayomi, T., Imaizumi, S., Ipeirotis, P., Pina, P., & Singh, M. (2015). The global opportunity in online outsourcing.
Kuhn, K. M., & Maleki, A. (2017). Micro-entrepreneurs, dependent contractors, and instaserfs: Understanding online labor platform workforces. *Academy of Management Perspectives*, *31*(3), 183-200.
Kunda, G., & Barley, S. R. (2004). *Gurus, Hired Guns, and Warm Bodies: Itinerant Experts in a Knowledge Economy*. Princeton, NJ: Princeton University Press.
Lehdonvirta, V. (2018). Flexibility in the gig economy: managing time on three online piecework platforms. *New Technology, Work and Employment*, *33*(1), 13-29.
Lehdonvirta, V., Kässi, O., Hjorth, I., Barnard, H., & Graham, M. (2019). The global platform economy: A new offshoring institution enabling emerging-economy microproviders. *Journal of Management*, *45*(2), 567-599.
Malone, T.W. (2004). *The Future of Work: How the New Order of Business Will Shape Your Organization, Your Management Style and Your Life*. Harvard Business School Press.
Malone, T., & Laubacher, J. (1998). The Dawn of The The E-Lance. *Harvard Business REVIEW*.
Malone, T. W., Yates, J., & Benjamin, R. I. (1987). Electronic markets and electronic hierarchies. *Communications of the ACM*, *30*(6), 484-497.
Mangum, G., Mayall, D., & Nelson, K. (1985). The temporary help industry: A response to the dual internal labor market. *ILR Review*, *38*(4), 599-611.
Mantere, S., & Ketokivi, M. (2013). Reasoning in organization science. *Academy of management review*, *38*(1), 70-89.
Matusik, S. F., & Hill, C. W. (1998). The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of management review*, *23*(4), 680-697.
Nesheim, T., Olsen, K. M., & Kalleberg, A. L. (2007). Externalizing the core: Firms' use of employment intermediaries in the information and communication technology industries. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, *46*(2), 247-264.
Peck, J., Theodore, N., & Ward, K. (2005). Constructing markets for temporary labour: employment liberalization and the internationalization of the staffing industry. *Global Networks*, *5*(1), 3-26.
Pfeffer, J., & Baron, J. N. (1988). Taking the workers back out: Recent trends in the structuring of employment. *Research in organizational behavior*, *10*(1988), 257-303.
Pofeldt, 2018
Pofeldt, E. (2013). The rise of the million dollar one-person business. *Forbes*. Accessed May 2018 at https://www.forbes.com/sites/elainepofeldt/2013/06/29/the-rise-of-the-million-dollar-one-person-business/#269128543c99
Polivka, A. E., & Nardone, T. (1989). On the definition of contingent work. *Monthly Lab. Rev.*, *112*, 9.
Sessions, H., Nahrgang, J. D., Vaulont, M., Williams, R., & Bartels, A. L. (2020). Do the Hustle! Empowerment from Side-hustles and Its Effects on Full-time Work Performance. *Academy of Management Journal*, (ja).
Shalley, C. E., Zhou, J., & Oldham G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? Journal of Manage- ment, 30, 933–958.
SIA 2020
Sundararajan, A. (2016). *The sharing economy: The end of employment and the rise of crowd-based capitalism*. Mit Press.
Upwork (2018). *Fortune 500 enterprises shift their contingent workforce to Upwork platform saving both time and money*. Accessed May 2018 at: https://www.upwork.com/press/2018/02/06/fortune-500-enterprises/
Valentine, M.A., Retelny, D., To, A., Rahmati, N., Doshi, T., & Bernstein, M. (2017). Flash Organizations: Crowdsourcing comlex work by structuring crowds as organizations. Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, p. 3523–3537https://doi.org/10.1145/3025453.3025811

Van Dyne, L., & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of management Journal*, *41*(6), 692-703.
Williamson, O. E. (1981). The economics of organization: The transaction cost approach. *American journal of sociology*, *87*(3), 548-577.