

**Online Labour Markets and the Persistence of Personal Networks:
Evidence From Workers in Southeast Asia**

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Abstract: Changes to the nature of work and employment relations in the past few decades have in large part been driven by value chain restructuring, or the outsourcing and offshoring of work. The material basis for these changes is in many cases provided by digital information and communication technologies (ICTs). We examine an extreme example of ICT-enabled service value chain restructuring: online labour markets, or sites that bring together buyers and sellers of digitally mediated service work around the world. We ask in what ways the Internet and online labour markets specifically are reconfiguring service trade value chains, and with what effects on the nature of work. We report initial results from a 3-month period of fieldwork among online workers in locations in Southeast Asia, one of the prime destinations of offshored service work. Results are presented in the form of a typology of five patterns: *bridging*, *disintermediation*, *reintermediation*, *local lengthening*, and *horizontal collaboration*. As expected in the policy discourse, online labour markets function as bridges that allow workers in low-income countries to obtain work from clients in high-income countries. But contrary to expectations, they also give rise to new intermediaries and hierarchies, suggesting that there are non-technological limits to marketization and that personal networks continue to matter, even in digital work mediated through digital marketplaces.

During the past few decades, the nature of work and employment relations has been heavily shaped by value chain restructuring (Flecker & Meil 2010). In many industries this restructuring has been characterized by the outsourcing of work to contractors and subcontractors, and the offshoring of work to low-wage countries (Dicken 2010). This has resulted in the growth of flexible, market-based, and precarious labour (Hollister 2011). At the same time, it has created new earning opportunities, however precarious, for workers in various low-income countries (Lehdonvirta & Ernkvist 2011). The material basis that makes such restructuring possible is in many cases provided by new information and communication technologies (ICTs), which lower the costs of codifying and coordinating work remotely (Gereffi 2005).

As ICT adoption around the world continues to grow, it becomes materially possible to drive the geographic dispersion and marketization of work even further. According to some visions, “the Internet creates a ‘borderless’ virtual business platform on which suppliers, customers, competitors and network partners can freely interact without going through the pre-defined channels on the value chain” (Poon and Jevons 1997: 34). In recent years, development policy actors such as the World Bank (2012) have started to imagine a new wave of service value chain restructuring, where work is sourced directly from individual worker-entrepreneurs, logging in to a global contract labour marketplace from their homes and cybercafés.

To some extent, and for some people, these visions are now becoming reality. Dozens of websites have appeared in recent years that act as “online labour markets” for services and knowledge work delivered via the Internet (Horton 2010). For example, Elance.com advertises that “there’s a world of talented people now freelancing on Elance”, whilst oDesk.com promises that their platform can be used to “find, hire, and pay the world’s best freelancers.” Types of work bought and sold on these sites range from high-skill graphic design and programming projects to low-skill data entry and categorization tasks.

In this paper, we report initial results from a 3-month period of fieldwork among online workers in locations in Southeast Asia, one of the prime destinations of offshored service work. We ask in what ways the Internet and online labour markets specifically are reconfiguring service trade value chains, and with what effects on the nature of work.

Background

Changing Employment Relationship: A Global View

Work and employment relations are shaped not only by individual firms and their interactions with the market and institutional environment, but also by inter-firm relations. During the past few decades, the nature of work and employment relations has been heavily influenced by value chain restructuring, that is, the reorganizing of functions and activities across firm boundaries (Davis-Blake & Broschak 2009, Flecker & Meil 2010). In many industries, this value chain restructuring has been characterized by vertical disintegration, geographic dispersion and specialization, and the overall lengthening of supply chains to include ever more contractors and subcontractors (Gereffi 1994, Henderson et al. 2002). According to a large and growing body of sociological literature, these changes are having the effect of eroding standard employment relationships in industrialized countries. Employment relationships are becoming increasingly unstable, job tenures are becoming shorter, and the number of self-employed people is increasing in many industries (Hollister 2011). Corporate career ladders are breaking down, changing occupations mid-career is becoming more common, and careers are becoming increasingly boundaryless (Arthur 1994, Arthur & Rousseau 1996). Temporary, part-time, remote, mobile, “networked”, and other nonstandard work arrangements are increasing (Connelly & Gallagher 2004, Huws 2013, Rainie & Wellman 2012), and the boundaries between work and leisure time are becoming increasingly blurred (Gregg 2011). According to the most pessimistic interpretations, the entire purpose of value chain restructuring is to push the risks and uncertainties of business down to the individual worker as far as possible (Frade and Darmon 2005).

It is also possible to find more optimistic interpretations of the ongoing changes in work and employment. According to one view (which could be termed the ‘neoliberal interpretation’), flexibilization and the increasingly entrepreneurial nature of work will better suit individuals’ diverse life situations and free them to pursue diverse life choices, in contrast to standard employment relationships crafted with a particular model of life in mind (Malone 1998, Malone 2004). Freedom from corporate hierarchies will also allow individual creativity and expression to flourish, and will facilitate societal-level innovation (Howe 2008). According to another view (which

could be termed the ‘globalist interpretation’), the offshoring of work and the associated degradation of employment relationships in Western countries represents a reduction in global inequality. A job lost in America means another gained elsewhere, even if precarious. Moreover, from a global perspective, standard full-time employment was never the standard in the first place, but a peculiar feature of affluent post-Second World War economies (Ashford et al. 2007). In much of the world, subsistence farming and microentrepreneurship remain the norm (World Bank 2012).

Value chain restructuring can thus be a Janus-faced phenomenon with diverse effects around the world. Approaches developed to analyse these effects pay attention to the structure of the chain or network, the spatial distribution of its individual links, and the power relationships between them (Flecker & Meil 2010). For example, Gereffi and colleagues’ (2005) model of global value chain governance types distinguishes between five types of chains, ranging from chains characterized by purely arms-length market transactions in one extreme, to chains characterized by total vertical control and integration in the other. Vertical integration can mean that most of the value and knowledge created in the chain is captured by the transnational corporation dominating the chain, leaving little for the bottom-level producers. Disintegration and arms-length contracts can mean more autonomy and thus learning and upgrading opportunities for the producers. Development literature accordingly takes a more cautiously positive view of vertical disintegration and offshoring than most sociological literature. The ability to codify and simplify transactions are posited as key factors in determining the extent to which vertical disintegration and spatial diffusion are possible (Gereffi et al. 2005).

Online Labour Markets: Leading Edge of Service Trade Restructuring

Analyses of global value chains and their effects on work around the world have for the most part focused on physical commodities. Markets for services have until recently been more locally bounded, and have thus received less attention in this literature. This has changed during the past two decades due to the ‘tradability revolution’ (UNCTAD 2003), in which global value chains have started to relay services performed in one country to buyers in other countries. On the one hand, these service value chains have contributed to global economic development by funnelling billions of dollars in income from high-income countries to low-income countries. On

the other hand, they are associated with similar concerns as global commodity chains: the degradation of work and the fact that much of the income and knowledge capital generated in the chains is captured by the transnational corporations that govern them, rather than by the original producers, contributing to (and reinforcing) global inequality (UNCTAD 2004, Nissanke & Thorbecke 2006).

The tradability revolution was enabled by the adoption of digital information and communication technologies that allowed services to be relayed over distances (UNCTAD 2003, Graham & Mann 2013). However, digital connectivity at this stage only extended as far as corporate offices and contact centres, which became gatekeepers between local service workers and foreign demand. Today, with three billion people online, individuals in low-income countries are increasingly able to connect to the Internet directly, using domestic, mobile, or pay-by-hour connectivity (World Bank 2012). This is expected to provide workers with direct access to global demand, ushering in what various policy actors hope will be a more inclusive era of international service trade (Raja et al. 2013).

At the leading edge of this new era of service value chain restructuring are so-called online labour markets, websites through which individual Internet users can connect with distant firms offering temporary or open-ended contract work. Such marketplaces have been growing rapidly in recent years. The number of hours worked through oDesk.com grew from 2 million hours in the first quarter of 2010 to over 10 million hours in the first quarter of 2013, and in 2012, workers' cumulative earnings on the site reached an estimated \$1 billion. An industry analyst estimates that the whole "online staffing" market grew 60 percent in 2013 (Osborne 2013). The total size of the market was estimated to reach \$3 billion in 2014. In dollar terms, the market thus remains very small compared to, for instance, the conventional business process outsourcing (BPO) industry (Pant & Ramachandran 2012). But a diverse array of actors, from governments to supranational agencies like the World Bank and Rockefeller Foundation, and from lower income regions as diverse as Nigeria and Malaysia are hoping that those dollars can effectively translate into development impact.

Online labour markets have been framed as an intervention that reconfigures service value chain structures in two ways to produce beneficial development effects. First, they are expected to allow workers to circumvent intermediaries such as BPOs to

obtain more direct access to foreign clients (Raja et al. 2013). This could allow workers to capture a larger share of the value created and learn more about the client, potentially opening up various upgrading strategies. Second, online labour markets are expected to create new trade links that previously did not exist at all (Lehdonvirta & Ernkvist 2011, World Bank 2013, Raja et al. 2013). They are expected to act as bridges between unconnected networks, allowing workers who are presently only engaged in the local economy to market their skills to foreign clients and earn foreign wages. The vision for online labour markets is thus underpinned by both the neoliberal as well as globalist interpretations of value chain restructuring.

While scholarly interest in online labour markets is growing (e.g., Caraway, 2010; Hong & Pavlou 2013; Leung, 2014; Yoganarasimhan, 2013), there is little empirical research to date on their effects on economic network structures and the nature of digitally-mediated work. Existing studies provide indirect evidence for the idea that online labour markets provide otherwise unconnected workers with access to foreign clients. Studies of worker demographics on Amazon Mechanical Turk, an online labour market for undifferentiated (low-skill) labour, show that approximately half of the workers active on the site hail from low-income countries, especially India (Ipeirotis 2010, Ross et al., 2010). Beerepoot and Lambregts (2014) study a sample of oDesk workers, finding that many of the site's Filipino workers hail from locations that are not established production centres for outsourced services, suggesting that the site is potentially expanding opportunities to previously excluded individuals rather than simply substituting for existing arrangements. However, a significant limitation in all of these studies is that they use data obtained through the marketplace itself: either self-report data obtained via an online survey posted to the marketplace, or observational data obtained from workers' profile pages on the marketplace. They reveal nothing about workers' ties outside the marketplace, and thus conclusions about the marketplace's impact on the workers' overall network context and working conditions are impossible to make. In this paper, we therefore ask, in what ways, if any, do online labour markets reconfigure service trade networks from an individual worker's perspective? Additionally, we ask what effects, if any, these reconfigurations have on the nature of the work itself.

Data and methods

In this paper, we begin to address the research question with recently collected data on online workers in Southeast Asia. The data was collected as part of an ongoing project on the social and economic effects of Internet-mediated work in low-income countries, and in this paper we present the initial findings. Southeast Asia is an especially suitable location to study service value chain restructuring, since countries in the region are among the top destinations for service work offshoring in the world.

The data was collected by the authors during fieldwork in Manila, Kuala Lumpur, and Ho Chi Minh City from September 23 to December 16, 2014. The primary method employed to collect the data was semi-structured interviews. In total, 48 online workers were interviewed in face-to-face settings using an interview guide covering socioeconomic background, educational and employment trajectories, online work history and practices, social networks, technology engagement, and personal aspirations. Interview lasted from 45 minutes to 150 minutes, the majority lasting around 1.5 hours. Follow-up interviews and follow-up online exchanges were conducted with some participants, and digital artefacts such as the workers' online profiles were also consulted.

Participants were recruited through listings on three online labour markets/platforms. The listings were private, and only online workers invited by the researchers could respond. Invited online workers were shortlisted based on a range of predefined sampling criteria, including types of work performed, feedback profiles, platform membership duration, hourly rates, gender, and location. The main sampling goal was to ensure varied representations of (primarily) low-skilled labour experiences in the countries of interest. The recruitment advertisement stated that the research interviews were voluntary and thus not to be considered a job task; just as it was made clear that no feedback would be left on their profiles as an outcome of their engagement with our research project. Participants were compensated \$6.00 (USD) or the equivalent in local currency for their time and transportation costs were reimbursed.

The typology of value chain reconfiguration patterns presented in this paper emerged from initial analyses of the fieldnotes and transcripts of the full sample of online worker interviews. The categories identified are thus representative of the

reconfiguration patterns present in our data, as established through initial stages of qualitative data analysis. In the discussion of the categories, we use thick descriptions of individual cases to illustrate the salient features of each pattern, and their effects on the work relationship. In addition to the primary data sources, our analysis is also informed by 32 additional interviews carried out with individuals forming part of a broader range of online work stakeholders (platform owners, policymakers, industry associations, and stakeholders in related industries and sectors).

Findings

Pattern 1: Bridging: Linking supply and demand

As suggested in the policy discourse, we found that online labour markets were indeed helpful in bridging buyers and suppliers of digitally mediated service and knowledge work around the world. All of the workers whom we interviewed in Southeast Asia used online labour markets to work with faraway clients to whom they had no previous links.

For example, consider the case of 29 year-old Amy from Metro Manila, Philippines. The oldest child of a Filipino family of eight, she has been the household breadwinner since her early twenties. Amy's financial responsibilities made it impossible for her to complete the final year of a university degree in Business management. To provide for her parents and five siblings, Amy instead took up full-time employment in an international BPO company based in Manila, working as a call center agent for five years.

As her siblings grew older, the family needed further income to support their higher education, and Amy decided to go abroad to pursue more lucrative work opportunities. Amy then spent three years in Dubai working as a customer service assistant for a pharmaceutical company. While the salary in Dubai was double the salary she received at the BPO company that she previously worked at, Amy found the experience of living alone in a foreign country, far away from her family and social network, too emotionally difficult to be worth the sacrifice.

On her return to Manila in 2011, several of her former BPO colleagues and friends had meanwhile started doing online freelancing, and suggested Amy to do the same. These

former colleagues highlighted that the pay was better, and that working from home meant that Manila's notorious 4-6 hour daily commutes could be avoided. Intrigued by these prospects, Amy signed up to several online labour marketplaces, and quite soon acquired a client who provided enough work to fill her schedule full-time for three months writing and editing blog and forum content. However, for reasons unknown to Amy, the project ended, and she had difficulties getting new clients online, despite applying to as many listings as possible on a daily basis. She therefore felt forced to take a job at a local BPO businesses again, but kept doing small amounts of online freelancing on the side, whenever possible. Amy noticed that as she became more skilled at targeting online clients' briefs in cover letters, she was better able to secure tasks on Elance, oDesk and Freelancer.com

By mid-2014, Amy had developed enough of a relationship with a US-based oDesk client that she quit her BPO job to concentrate on online freelancing on a full-time basis. By the time of our interview with Amy, she had been working exclusively online for four months, primarily serving this client as her virtual assistant (28 hours weekly). The client is a 'one-woman business' selling her husbands' art prints on Etsy.com. Amy continues to be responsible for the US client's Etsy shop's customer service, including order processing/data entry and emailing.

This administrative job requires a trusting relationship between Amy and her client, as Amy is using her client's Etsy and Facebook accounts to communicate with customers ordering prints (for example, if an order submitted is not complete, or if a customer has a question), and to process the orders through Etsy's online management tool. Consequently, Amy and her client communicate quite frequently, and use several communication channels such as email, Skype, and chat. They also sometimes communicate via text messages on their mobile phones if matters are more urgent.

The contract requires of Amy that she works four hours seven days a week, but the understanding is that Amy will be offered additional work as the business grows. More concretely, the informal agreement is that Amy will be offered 45 hours per week, taking on additional responsibilities such as marketing and Photoshop tasks. It remains important for Amy to secure as high an income as possible. Currently, she is making 25,000 PHP (approx. 550 USD) per month from this online contract, which is 100% more than her previous full-time BPO salary.

Before discovering online labour markets, Amy had already been using the Internet for many years. In principle, the potential buyers and suppliers of online work have already been connected to each other for many years by the Internet. What then are online labour markets platforms needed for? The Internet and its basic applications such as email and the web provide only a part of the infrastructure that is needed for trade to be possible. Besides communication, markets also depend on infrastructure such as means of conveying payments and trust (i.e. means for participants to be sufficiently assured that promises will be upheld). Not only are employers wary of buying work from someone to whom they have no prior personal or even cultural links – our interviews are full of examples of how workers are also wary of taking assignments from remote employers. Online labour markets are sociotechnical arrangements designed to bridge these gaps in existing infrastructure, by providing features such as verified profile information, rating systems, work monitoring systems, guaranteed pay for work, and dispute resolution.

Pattern 2: Disintermediation: Cutting out intermediaries

Besides bridging buyers and suppliers with no previous trade links, online labour markets are also expected to reconfigure existing value chains. Specifically, they are expected to cut out intermediaries and allow buyers and workers to contract more directly. There is very little empirical research on such disintermediating effects of online labour markets to date. However, it is apparent from some of our interviews that it is indeed happening at least to some extent. We saw above that Amy switched from working for a local BPO firm to working directly for foreign clients through online labour markets. Disintermediation like this is notable from a development perspective, because it could potentially allow workers to capture a larger share of the value created. More direct links to end customers could allow workers to learn more about the customers' needs and preferences, making it possible for workers to upgrade their processes, services, and skills to provide more added value. The following case illustrates the disintermediating effects of online labour markets in more detail.

Duong is a 30-year old software developer, living with his wife and 6-month old daughter in Ho Chi Minh City. Originally from central Vietnam, his social network primarily consists of local friends he made while studying for a degree in Computer Science; a degree he completed in 2007. Immediately after graduating, Duong got a job

at a Swiss software development company located in Ho Chi Minh City. Realizing that the skills he had acquired through his studies were not fit for software development in practice, he enjoyed the learning opportunities that his employment offered. Working on mobile applications primarily in the domains of finance and banking, Duong was soon promoted to be a team leader.

Nonetheless, Duong quit this job after almost four years. The sole reason was that he was profoundly disappointed with the way the company handled a round of mass layoffs. According to Duong, the business administration was not transparent about the situation, but instead simply ceased to extend contracts, without explaining to their workers that this implied that they were left jobless. Additionally, the company did not provide any redundancy pay. Many of Duong's friends lost their job this way.

Looking for new opportunities in 2010, Duong successfully applied for a similar job with a Norwegian company that had an office in the city. During this time period, one of Duong's friends started sharing his experiences with online freelancing, emphasizing the earning potential, and strongly encouraging Duong to pursue similar opportunities through online labour markets. However, Duong was skeptical: Why would someone you have never met pay for your work – online?! It was only when Duong was unable to secure a satisfying work/life balance while not making enough to provide a suitable home for himself and his wife that he really began considering online freelancing more seriously. After six months in the Norwegian company, he began doing online freelancing on the side, developing mobile applications for clients abroad. In 2011, after one year of part-time freelancing, Duong quit his job and focused exclusively on online freelancing.

Duong's online freelancing trajectory has been shaped by three principles: only work for good clients; do not accept a low salary; and only take on jobs that interest you. These principles were informed by Duong's friend's experiences, but also shaped by Duong's confidence in his own professional skills, developed during his years of formal employment.

Good clients, according to Duong, are start-up companies, or SMEs that are able to clearly articulate technical requirements, thus allowing Duong to deliver mobile applications that meet expectations within short deadlines. Duong has clients based in

the US, Canada, India and New Zealand, and most of the clients are themselves intermediaries, serving clients of their own, making the specifications of requirements even more important. With repeated interaction, these relationships have developed into business friendships building on trust. Not only do increased levels of trust result in bigger, more complex projects, it also means that Duong and his clients now do business together outside of online platforms: the majority of business is now done directly. While Duong is happy to circumvent online platforms, he would never try to directly access the clients of his clients. This is because of the social relationship they have built up over the years. The strength of these relationships has as additional consequence that Duong does not perceive of online freelancing as precarious: yes, other people may have the same technical skills, but not the same clients.

Online freelancing has allowed Duong to significantly increase his income while achieving a work/life balance that suits him better: When formally employed as a software developer, Duong made a maximum of \$25,000 per year; in 2014, doing online freelancing, he brought in \$40,000 (charging \$22 per hour, or on average, \$5,000 per mobile app). Duong says he works only eight hours per day, five days per week, and can work from home or in cafés; he has also limited his availability on oDesk to 10 hours weekly, reducing the number of clients that can invite him to apply for their projects.

Duong has experienced online freelancing as having a positive impact on his everyday life. Equally, through this disintermediation afforded by the online labour markets, he considers himself detached from any unfair practices enacted by foreign companies operating in Vietnam. He only wishes that more Vietnamese would pursue online freelancing as a career – this would incentivize multinationals to improve the working conditions for their local employees, knowing that their talent might otherwise leave to take advantage of a perceived “flat world” enabled by the Internet.

On the other hand, disintermediation could mean that workers are exposed to more uncertainty and tougher competition, as there are fewer intermediaries to absorb fluctuations in demand and to use their relationships to drive work to the supply chain. Amy’s case illustrates some of these potential negative effects. In her first ever online job, Amy was paid \$8 per hour. Using this rate as her benchmark, she has difficulties understanding why she is unable to secure such rates now, three years on, given her

increased experience, new skills and general aptitude for learning. Amy has had to continuously lower her hourly rate in order to get jobs online; she is currently asking for \$3.5 per hour. Unless Amy is able to increase her pay, she will not be able to afford health insurance for her family, or save up for old age. The contrasting experiences of Duong and Amy highlight how online labour markets can result in significantly different experiences for different workers due to fundamentally different relationships between labour supply and demand in different segments of service and knowledge work.

Even though online labour markets can help workers cut out intermediaries, the online labour market can itself be seen as a new intermediary. The fees charged by the platforms and their payment processors tend to exceed 10 percent of total transaction value. From this perspective, disintermediation via online labour markets is more accurately described as the replacement of older territorial intermediaries such as BPOs with delocalized online intermediaries that are every bit as interested in rent-seeking. However, online rent-seekers may be less powerful than their territorial predecessors. Duong's case illustrates how workers and clients sometimes move long-running relationships out of the online work platform, starting to transact with simpler tools such as email and PayPal instead. This becomes possible once working together successfully for a while has generated enough mutual trust that the platform's sophisticated assurance infrastructures are no longer required. In this way, online labour markets seem to have true disintermediating effects, shortening value chains and flattening hierarchies.

Pattern 3: Reintermediation: Emergence of hierarchies within the worker pool

Now we reach the more unexpected parts of our findings. Our interviews suggest that in many cases, the relatively direct connection between the client and the worker is only temporary. Some successful online workers become intermediaries themselves, taking on more work than a single person can handle, and hiring other workers on the platform to carry out the work for them. The following case illustrates this.

Dalale is a 26-old Mauritian woman, studying for a master's degree in English Literature at a university in Kuala Lumpur, Malaysia. Her seven siblings are all living in Mauritius, most of them still at home with her parents. Dalale has studied in Kuala

Lumpur for six years, completing a BA and now working on her MA dissertation on representations of Muslim women in literary works. While her parents financially support her education and living fees, Dalale wishes to achieve further independence, particularly economically, which is why she started doing online work a year ago. As an international student, she cannot get a work permit, but online freelancing is a way of circumventing those kinds of regulatory restrictions.

Dalale does not really need the additional income to survive, so it is not a problem if there are months when she is unable to win online contracts. Whatever she earns online is additional pocket money, typically spent on makeup, clothing and cinema outings. Moreover, Dalale's online work activities are very much driven by her passion for writing. She loves writing, regardless of subject matter – and she only applies for writing-related jobs on all five platforms she is signed up with. She has written more than 74 articles, and has had more than 15 different clients on the largest online platforms.

Initially, it was difficult for Dalale to find suitable writing jobs online, but that was only until she learnt what Search Engine Optimization (SEO) was. Observing the amount of SEO jobs offered on the various online platforms, she started researching. She gradually began to understand that these tasks were writing tasks, but rather than being articles targeted at humans, they were texts intended to be read by computers in order to increase the ranking of websites. Given her writing passion, she did not care much about the end-audience, and started applying widely for SEO tasks.

For example, Dalale has been working over a period of six months for a South African-based SEO company serving small clients in the UK. Her work for this client involves writing SEO-friendly blog posts for, for example, gardeners in Buckinghamshire promoting their tree pruning services; or specialty builders promoting a particular brand of double-glazed windows. Dalale's client will email her the website of the UK company and the search terms that are to be included in the blog texts.

Dalale does similar SEO writing tasks for a range of other online clients. These clients are often online contractors who have developed very strong online profiles, characterised by high numbers of positive feedback ratings, making them able to attract a much larger number of tasks at much higher rates than Dalale herself is able to.

Dalale knows this because she often finds that jobs she has unsuccessfully applied for are often reintroduced to the market by another online freelancer. For example, once she applied for a SEO writing task, suggesting a price of \$25 rather than the listed suggestion of \$50. But the job went to another contractor (who had many positive feedback scores) requesting a price of \$75. This contractor then offered the job to Dalale for just \$7.50.

While Dalale does accept tasks from these “reintermediators”, she thinks that this is too unfair a setup: Her opinion is that the last link in the chain is the one to do all the actual work, so the commission that reintermediators charge should reflect this. The lack of direct contact with the client also makes it very difficult for Dalale to understand what the end client is after, which makes the writing process more challenging. Additionally, Dalale is genuinely curious to know where her texts are ultimately ending up. She sometimes performs Google searches for her own opening paragraphs to identify their online locations.

Because of these experiences with underpaying reintermediators, Dalale does not expect to continue her online freelancing once she has completed her degree. She does, however, aspire to start up her own SEO company home in Mauritius; which she assumes would be the first of its kind there. She plans to exclusively hire local staff though, no online workers, to ensure better morale and work ethics.

There are two ways to approach this reintermediation behaviour. It can be viewed as rent-seeking behaviour, where contractors who have a competitive advantage in attracting clients use that advantage to position themselves between the client and the person who actually delivers the work. Our interviews suggest that the greatest source of such competitive advantage on online labour markets is the official track record automatically displayed in each contractor’s profile: reputation score and list of previous projects completed. Given the limited means to evaluate candidates over the Internet, clients are very likely to pick a candidate with the most impressive track record. That candidate can then forward the task to a lesser competitor, adding no value to the process, but gaining yet another entry into their own track record. This creates a positive reinforcement loop that greatly favours the first mover.

It is also possible that the new intermediary adds value to the process. At the very least, they may have to perform some sort of quality control over the subcontractors' deliverables, to retain a good reputation rating. They may also have to break larger tasks into smaller pieces, find subcontractors for each piece, and manage the schedule. This is an example of functional upgrading: a supplier taking on new roles in the chain at higher added value. From a development perspective, functional upgrading is desirable inasmuch as it allows low-income workers to capture more value. However, if only a small number of functionally upgraded suppliers are able to establish themselves as chokepoints in the chain, the development effects can be highly uneven.

Pattern 4: Local lengthening: Subcontracting global work to local networks

We also discovered another mechanism through which successful online workers become intermediaries themselves. Many informants had used their local networks to recruit subcontractors to carry out the work for them. These local networks could be friends and family members, or strangers enrolled through established local recruitment channels. For example, consider the case of Sheila, who has been doing online work since 2007, when she first started looking for alternatives to her full-time jobs in the Philippine BPO industry. With a degree in Broadcasting, but without the needed connections to secure a job in a production company, Sheila had worked in different call centers for more than five years, continuously struggling with tyranny of metrics and the scripted and timed customer service and support she was required to provide. Shifting between BPO companies in Metro Manila every six months or so when she was burnt out, Sheila was determined to find a way to provide for herself and her husband that would allow her to do work that was more in line with her own ethical standards, while also being flexible enough for Sheila to be able to further prioritize her church activities.

Sheila began offering transcription services on several different online platforms, but she had a difficult time getting clients, and therefore, over a longer period of time, had to underbid other online contractors in order to get any jobs. It took several years for Sheila to build up a strong enough online profile for her to be able to secure enough transcription tasks to pay her their living expenses, and make online transcription her sole source of income. The situation began changing in early 2013, as more clients invited Sheila to apply for their contracts, and she was consequently able to slightly

increase her rate to \$30 per audio hour (one audio hour taking her between 8-14 hours to transcribe, depending on audio quality and subject matter).

This new situation also meant that Sheila would sometimes get more transcription jobs than she was able to complete within the deadlines set by the clients. She therefore started seeking transcription apprentices by posting job advertisements on local job listing websites. The purpose of subcontracting transcription tasks to others was two-fold: to ensure that she got as many transcription jobs as possible, thus further strengthening her online profile, leading to more frequent invitations from clients; but Sheila also saw this subcontracting as a opportunity to spread her Christian values, and increase general awareness of possible alternative means of combating poverty. And in particular, the kinds of immoral activities that she perceived extreme poverty might lead people to do. Having watched a documentary reporting on Philippine families prostituting their children by selling digitally mediated sexual services to foreigners online, Sheila produced a YouTube video explaining in vernacular what online transcription is, what it affords, and the know-how needed to carry out such work.

Currently, Sheila is subcontracting approximately half of her transcription work to five workers, primarily based in the provinces. The subcontractors are each given a 20-minute snippet of the complete recording. They then return the results to Sheila for proofreading, editing, formatting, and general quality assurance. In general, training and providing feedback to her subcontractors requires patience and dedication. For a \$30 transcription job, Sheila distributes between \$12-15 to her subcontractors. Sheila's clients are not aware that she has other transcribers contributing to the work. She is in charge of all client communications, using email and the messaging systems provided by the online platforms.

Despite subcontracting work to local networks, Sheila still has to work long hours to make ends meet. In an average week, she says she spends approximately 68 hours on online activities relating to her online transcription work. In a good month, she can take home \$500, but often her earnings are closer to \$250-300. This means that she often makes only half of what she made when last employed by a local BPO. However, to Sheila, online contracting is still a much preferred choice, for reasons previously mentioned. Equally importantly, she is slowly building a client base that might allow her to establish her own transcription firm, once she has sufficient savings to cover

start-up costs. The biggest hindrance to this entrepreneurial aspiration, and Sheila's biggest day-to-day concern, is the precariousness of online work. Sheila still experiences periods without work, despite applying for transcription tasks through four different platforms.

As with the new intermediaries who subcontract to other workers on the platform, we can ask how intermediaries that subcontract to local networks maintain their advantageous positions, and how they potentially add value to the process. Our findings suggest that their advantageous position is based on straddling the gap between the online labour market and local networks. This gap may be due to a lack of awareness about online work opportunities in the local network, in which case the intermediary is simply exploiting their asymmetric information. But more likely, the gap is due to a lack of trust or suitable competences in the local network: language skills, communication skills, and also self-management skills required to successfully engage with online labour markets. If the intermediary is able to bridge this trust and competency gap, they are functionally distinct from the end workers and add value to the process. Intermediaries like Sheila are thus "salespeople" who have the necessary competences to win projects, and "project managers" who have the competences to see that sufficient quality is delivered on time. Earnings are shared, but the salesperson/manager clearly has more bargaining power in the relationship. From a development perspective, intermediaries who subcontract work from global marketplaces to local networks are valuable, because they facilitate local workers' indirect access to global demand. However, strong intermediaries can engage in rent-seeking behaviours, leading to significantly uneven outcomes.

In some cases, clients managed their online workers closely and prevented both reintermediation and subcontracting to local networks from happening. This way the client retained more control over quality, but from a development perspective, potentially retarded the development of higher value-added functions in Southeast Asia. Such closely controlled contracting can be more like employment in disguise and rather less like entrepreneurship.

Pattern 5: Horizontal coordination: Online workers collaborate

As a final category, our interviewees told us about ways in which they collaborated with other workers in ways that did not constitute hierarchical relationships. Such horizontal coordination took place along existing family and friendship networks. Within this category, we find the Vietnamese siblings Nina and Vivienne, both in their late 20s. Working full-time as data entry workers and software testers in local BPOs since graduating from university (Vivienne graduated in 2002 with a degree in Business English; Nina in 2005 with a degree in Information Technologies), they started doing online freelancing in their spare time in July 2011. It was a US-based client with whom Nina interacted with in the context of her formal employment who suggested online contracting as a means to increase earnings. Initially, both Nina and Vivienne created profiles on Odesk, however, it soon became clear that they were not equally able to source work from international clients. Particularly, Vivienne struggled with securing contracts following shortlisting interviews with potential Odesk clients (facilitated via Skype). Nina thus began sourcing additional jobs that would allow her to share contracts informally with Vivienne. While not explicitly accounting for these arrangements to their clients, they have thus divided tasks between them for the past two years. For example, for their most recent client, a Thai-based owner of a travel website promoting hotels in Ho Chi Minh City, they carry out online research to identify promotional campaigns of local hotels, and subsequently publish these details on their client's website. The division of labour is decided in accordance with their individual strengths: Nina is responsible for communicating with the client and completing the research on hotel deals; Vivienne is responsible for writing the blog posts and uploading these to the website. They are paid \$1 per blog post, are collaboratively able to produce three posts per hour. In contrast to practices associated with local lengthening, Nina and Vivienne's collaboration did not rely on any contractual specifications: they perceived of their earnings as communal to their household, regardless of potential differences in hours worked and skills required.

Horizontal coordination equally happens without economic benefits all parties involved. For example, Dalale, whom we met in the section reporting on Reintermediation patterns, sometimes found herself getting so many writing tasks that she was unable to complete them herself. In those instances, she handed jobs over to

one of her close friends, thus giving this friend an opportunity to earn money. There were two particular reasons that Dalale shared these writing jobs with this particular friend. First, she was familiar with her writing style, and knew that the friend was able to deliver high quality writing. Less specifically related to the actual task at hand, Dalale wanted this friend to achieve her goal of becoming less financially dependent of her husband. This is was one of the reasons gave as to why she did not take any commission, despite being involved in the communication with the client and the facilitation of handing over the work.

Conclusions and discussion

Value chain restructuring has diverse effects on firms, individuals, and geographic areas, which can often be traced to power relations between the chain members. In this study, we examined an extreme example of value chain restructuring in service trade, namely online labour markets. We examined how the Internet and online labour markets specifically reconfigure value chain structures from the perspective of the individual service worker, presenting a typology of five patterns: *bridging*, *disintermediation*, *reintermediation*, *local lengthening*, and *horizontal collaboration*.

As expected in the policy discourse, online labour markets functioned as bridges that allowed workers in low-income countries to obtain work from foreign clients. They also acted as disintermediators, in many cases providing contractors with more direct contact with their end-clients. However, the effects on earnings and working conditions were complex and varied, with workers reporting increased as well as reduced earnings compared to the local job market. Workers gained increased autonomy and prospects for upgrading, but also had to possess skills and resources to manage the complexity of entrepreneurial work. It is likely that different social groups possess different endowments of such skills and resources, and that the marketization of service work through online labour markets thus has different impacts on different social groups. This merits attention in further analyses of this and subsequent data.

Contrary to expectations, however, online labour markets also gave rise to dynamics that resulted in a range of reintermediations, and the rise of new intermediaries that stand between the contractor and the client. These dynamics resulted from the way online labour markets record and disseminate information on contractors' track record,

which clients use in their decision making. The marketplace assumes that the contractor under whose name the work is delivered actually performed the work themselves, which was often not the case. This finding also exposes a significant methodological shortcoming in much of the research on online labour markets and online freelancing, as most of it relies only on online data to make inferences about workers and their behaviour. What is seen online is in some cases only the public face of the network structure – hierarchical or collaborative – involved in the delivery of the work.

We also found that entrepreneurial individuals use online labour markets to funnel foreign demand into their local job market, acting as boundary spanners. These individuals typically already possess some kind of foreign ties, as suggested by the language and cultural competences they employ to obtain work from the marketplaces. In this regard, online labour markets may not do much to alter existing network structures, where internationally connected individuals belonging to local elites act as boundary spanners between local and foreign networks, and are in a position to capture most of the benefits. The Internet does create new affordances for the flexibilization, marketization, and global distribution of work, but it does not go as far as enabling a neoliberal “borderless” labour market. Besides new flexibilities, new hierarchies were also observed, potentially giving rise to new employment relationships. It is therefore apparent that much more needs to be done to critically understand these emerging hierarchies.

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