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► **To cite this version:**

Fareesa Malik, Brian Nicholson, Richard Heeks. Understanding the Development Implications of Online Outsourcing. 14th International Conference on Social Implications of Computers in Developing Countries (ICT4D), May 2017, Yogyakarta, Indonesia. pp.425-436, 10.1007/978-3-319-59111-7_35 . hal-01650099

HAL Id: hal-01650099

<https://inria.hal.science/hal-01650099>

Submitted on 28 Nov 2017

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Understanding the Development Implications of Online Outsourcing

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Abstract. Online outsourcing (OO) involves global outsourcing of tasks from clients to freelancers via platforms such as Upwork, Guru, Freelancer and Fiverr. Governments and donor agencies in several developing countries are currently starting OO training initiatives to enable access to digital livelihoods for marginalised groups such as youth and women. However, little is known about the impact of these initiatives and in response this paper reports on empirical research into OO projects in Pakistan. Supported by the sustainable livelihoods framework, the analysis shows a context of politico-economic vulnerability. Many freelancers do not succeed but some entrepreneurial individuals motivated by earnings potential are able to generate sufficient livelihoods. Contrary to an image of deinstitutionalised work, this form of digital labour involves a substantial institutional ecosystem. This implies a broad range of stakeholders including the platforms, formal interventions from policymakers and development agencies and the creation of informal support mechanisms.

Keywords: Online outsourcing; Digital development; Freelancing; Gig economy; Livelihoods

1 Introduction

Online outsourcing (OO) involves outsourcing of tasks from clients to workers all over the world via online platforms such as Upwork, Freelancer and Fiverr. Two of the largest platforms – Upwork and Freelancer – are estimated to have 4.5 and 7.5 million workers worldwide [9]. It is predicted that, by 2020, the OO sector overall will be worth US\$15-25bn [16]. OO freelancers already provide services from several developing countries including India, Pakistan, the Philippines, South Africa and Kenya [16, 24]. Donor agencies such as the World Bank and national policy makers in developing countries, for instance, the Philippines, Malaysia and Pakistan have all seen potential for OO to create livelihoods for marginalised groups: women, youth and those on lowest incomes. OO initiatives involving government- and donor agency-funded training programmes for economic empowerment of these groups are

therefore already underway. However, the novelty of this model for economic growth has created significant knowledge gaps in relation to its development potential. The knowledge gaps include issues of incentives and motivation, infrastructural requirements, financial and non-financial impacts, and impact on longer-term career trajectories [24]. This paper attempts to fill these gaps based on preliminary fieldwork undertaken in 2016 in Pakistan. Specifically, using the sustainable livelihoods framework (SLF) [7] as a sensitising lens, it addresses three questions:

- What drives those in marginalised groups to engage in OO?
- What infrastructural and institutional ecosystems are required, particularly addressing barriers to OO for marginalised groups?
- What are the short- and longer-term impacts of OO?

Our aim is a three-fold contribution: reducing the knowledge gaps via our findings; demonstrating an SLF conceptualisation of OO to marginalised groups; and offering nascent guidance to practitioners and policy-makers in developing countries who wish to make more effective use of OO as a development tool. Following a review of literature on OO, the paper outlines the SLF conceptual framework that was used to shape fieldwork and analysis, details of which are discussed in the methodology section. Following presentation of the findings, some conclusions are drawn.

2 Literature Review

There are two main types of platforms: microwork such as Amazon Mechanical Turk and online freelancing such as Upwork, Freelancer, Guru, Fiverr etc. each targeting different segments of workers and employers. Estimates vary on the number of OO platforms and the marketplace is dynamic but we know there are hundreds of examples that incorporate a wide range of tasks including data entry and transcription; data analytics; web, mobile apps, and software development; legal and accounting services; engineering and architecture services; translation; administrative support; customer service; and sales and marketing. The World Bank estimated OO annual revenues of \$4.8 billion in 2016 and between \$15-\$25 billion by 2020 [16].

The information systems (IS) and business literature on OO has, necessarily because of the global nature of the platforms, encompassed work undertaken in developing countries. However, despite a paucity of research that takes a development orientation two identifiable streams of literature have emerged. The first has tended to focus on organisational or sectoral-level issues, e.g. identifying OO as a new “human cloud” type of business model [14]. Others scholars examine the client end of the value chain: for example identifying the capacity of OO to reduce barriers to offshoring and thus enable a wider range of client organisations (e.g. smaller enterprises) to become involved [10]. Another set has focused more on the “mechanics” of OO platforms looking, for example, at IT-enabled work monitoring systems [18] or use of feedback and profile information [1] that underpin the functions of the platforms. There is also a significant discourse focussing at the worker end of the value chain

adopting a critical lens pessimistically viewing OO as a “digital sweatshop” [26]. [5] and [9] emphasize the lack of typical employment benefits from OO: absence of holiday pay, sickness benefits, health insurance, minimum wage, retirement benefits and compensation in the event of injury. Workers are driven to accept these terms because of a background of economic austerity and uncertainty. Such outcomes are conditioned by the institutional context explained in terms of a de-institutionalisation of work: an absence of legislative oversight for a work process that is invisible, mobile and transcends national borders; and an absence of collective bargaining, collective wage agreements and unionisation [5]. Alternatively it can be explained in terms of the particular institutional rationalities imposed by digital platforms: decentralisation, precarisation and informalisation [9]. In either case, there has been a concern to re-institutionalise; particularly helping to develop fair labour-oriented institutions. Suggested actions include creation of platforms that seek to mitigate information asymmetries between clients and workers; providing reputational information on clients to match the reputational information on workers that main platforms provide [13] and creation of labour unions for OO workers [27]. Because of the novelty of OO, critical research is often based on secondary sources, and primary research has given a somewhat more nuanced view with a picture emerging of differentiation. Study of skill and employment impacts of OO found, that this enables workers “to renew existing skills through practice, to discover and utilise latent skills and to develop specialist skills” and to improve their employability [2, p.28]. However, this was only for workers who could overcome skill and other barriers to entry, and who could employ “continuous marketing, good client management skills and self-promotion” and who operationalised “characteristics of self-efficacy, motivation, self-reliance and adaptability”[2].

Research on financial impact of OO shows most workers use this to supplement other sources of income but many use it as a main source of income [4]. Here also there is a differentiation, but geographic. First, those in developing countries are more likely to use OO as a main source of income: half of Indian workers on Amazon Mechanical Turk stated this [4]. Second, payments differ. OO workers in the global North tend to earn more in absolute terms but workers in the global South earn more in relative terms, i.e. relative to average wages in their country [2, 3]. This promise of relatively good wages and livelihoods has propelled significant interest in OO in developing countries, with particular aspirations that it could provide livelihoods to groups often excluded from the economic mainstream such as women and young people (it is estimated that two-thirds of young people in developing countries are either unemployed or trapped in low-quality, low-skill jobs [16]). As a result, there are a number of OO initiatives underway, e.g. the NaijaCloud initiative in Nigeria, sponsored by the World Bank and supported by the national government, which provides awareness workshops on OO; The Youth Employment Programme (<http://www.youthemp.com>) of Pakistan’s Khyber Pakhtunkhwa (KPK) provincial government which aims to train 40,000 young people; and Malaysia’s eRezeki initiative (<https://erezeki.my/en/home>) which has trained hundreds of freelancers and now uses a “walled garden” approach with US crowdsourcing platform Massolutions: a managed portal for OO work such that the work process is controlled by government.

As stated there is a paucity of OO research taking an explicit development approach. But a related stream of academic and practitioner research focuses on global outsourcing practices of social enterprises and outsourcing service providers aiming to create social and economic value [6, 19, 21, 22]. This shows that global outsourcing work opportunities can positively contribute to development of marginalised individuals' capabilities and livelihoods [12, 17, 19, 20]. Other prior literature [3, 4] takes a perspective of OO workers in developing countries. However, to date there has been little if any academic research looking specifically at OO and its development impact that focuses on marginalised groups in developing countries.

3 Conceptual Framework

Work in OO represents a livelihood. Reflecting earlier work analysing outsourcing of IT-based work to marginalised groups [12], we thus decided that our conceptualisation of this activity would be shaped by the sustainable livelihood framework [7]. The SLF (see summary overview in Figure 1 [8]) sees livelihoods as existing within a context of vulnerabilities which drive livelihood strategies, so we use this context to answer our first research question.

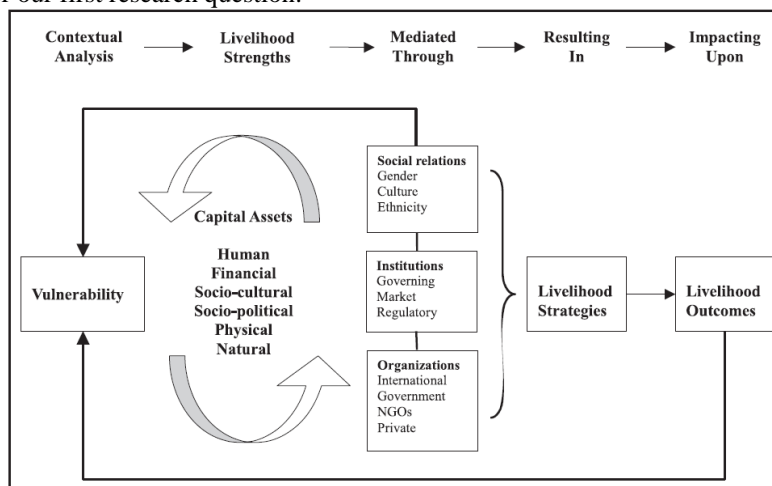


Fig. 1. Sustainable Livelihoods Framework

To create a strategy, individuals draw on a set of capital assets. Here, and following the earlier [12] study, we considered the four that were particularly relevant:

- Human capital: “the skills, knowledge, ability to labour and good health that together enable people to pursue different livelihood strategies” [7, p.7].
- Social capital: “the social resources upon which people draw in pursuit of their livelihood objectives” [7, p.9].
- Physical capital: “the basic infrastructure and producer goods needed to support livelihoods” [7, p.13].

- Financial capital: “the financial resources that people use to achieve their livelihood objectives” [7, p.15]

These assets are accessed and integrated into strategies within a broader environment of relations, institutions and organisations. In answering our second question, we therefore understand barriers and ecosystem in terms of the asset access that the institutional and organisational environment provides. Finally, we understand the impact of a livelihood in terms of the lower reverse arrow in the diagram: improvements or otherwise to the stock of assets that individuals can call upon [12]. We will use this approach to answer our third question.

4 Methodology

The empirical field study, undertaken in 2016, involved interviews with stakeholders at two World Bank-funded OO training organisations in Pakistan: the Karakoram Area Development Organization (KADO) and Empower Pakistan (EP). These organisations have designed and implemented training and support schemes aiming to enable women and unemployed youth in Pakistan to engage in OO. A qualitative exploratory field study method [22] was followed to investigate the context and impact of OO livelihoods, with fieldwork focused on the Northern Pakistan region of Gilgit-Baltistan (GB). A purposive sampling technique was followed to approach different stakeholders: project leads, OO freelancers, trainees who had received training from KADO and EP, trainers and project managers. Data was collected through 29 semi-structured interviews conducted through Skype (1 from Washington DC, 3 from Lahore and 1 from Karachi) or face-to-face during a Pakistan field visit to GB and Islamabad. SLF categories and concepts provided the structure to guide the interviews but allowed the interviewer flexibility to probe into unanticipated areas of interest. Interviews were recorded, translated, transcribed, and coded in computerised qualitative data management software (NVivo 10) using a template analysis approach [15].

5 Findings

In the sections to follow we present the results and analysis of our field data grouped in relation to the categories of the SLF.

5.1 Vulnerability Context

The starting point for any livelihood analysis is an understanding of the vulnerability context. As indicated, the field study was undertaken in GB, the northernmost administrative territory of Pakistan. Geographically, the region is home to the world’s highest mountain ranges including Karakoram, Himalayas and Hindu Kush. The project coordinator related GB’s geography to lack of industries and commented: “...*the problem here is that our job market is very poor. We do not have industries here*” (RE – Project Coordinator, KADO).

Alongside physical vulnerabilities to climate-related disasters, the area has been subject to a negatively reinforcing politico-economic vulnerability context that limits conventional employment routes. First, GB is located in the disputed region of Kashmir the result of which is that it is a separate state in Pakistan but without status of a province eligible for independent provincial government, legislation and budget. GB is not integrated with any of the other provinces of Pakistan. The result is a “no man’s land” position that severely restricts private and public sector investment, infrastructural development and employment opportunities: *“The problem is that we live in GB; which is itself a conflicted area. That is why the government is not doing much investment for prosperity here”* (EJ – Project Manager, KADO).

EP targeted educated youth of middle and lower socio-economic status in Punjab province, which is a highly populated province of Pakistan; and also provided OO training to educated youth of Khyber Pakhtunkhwa (KPK) province, which is the most terrorism-affected province of Pakistan. Lack of investment, lack of opportunities and high unemployment create a fertile environment for growth of radical Islamic extremism which, in turn, serves to further discourage investment and employment: *“The reason is it’s the front line of extremism. The next biggest issue is unemployment. Both of these issues are interrelated because when there is unemployment the chances of frustrated youth to be involved in terrorist activities would be higher.”* (SK – Project Manager, EP).

The absence of alternative livelihoods is a core driver to involvement in OO: *“Everyone wants to get the government job but it is not available... Maybe the condition gets better in the future but currently, there is nothing better here than freelancing and working and earning at home”* (HA – Ex-trainee, KADO). The ability to work at home is an especial driver for women, *“who have to stay at home... who can’t work in offices for various cultural and other reasons.”* (AL– Project Lead, WB).

But alongside this generic socio-economic push are specific pulls into OO. For some of those involved, there is the attraction of a livelihood that offers more freedom than traditional jobs: *“You are your own boss. You don’t have any boss. You can work of your choice at any time you like”* (YA – Trainer and Freelancer, KADO).

Another important pull has been the presence of attractive role models who demonstrate not just the viability but the significant benefits of an OO livelihood. Sometimes these role models are friends, but they can also be presented at formal events. One trainee shared his inspiration: *“...RA (a famous blogger in the region) tells once about his freelancing experience. He opened his account and showed it to us. At that time, his earning was twelve to fifteen lakh Pakistani rupees per month (c.US\$12,000-15,000)”* (HU – Trainee, KADO).

Related to its relatively remote, troubled and under-invested context and notwithstanding a strong emphasis on education in the region Gilgit-Baltistan has important resource constraints that are barriers to engagement of marginalised groups with OO. Respondents mentioned three recurring barriers. First, the state of technological infrastructure: *“We don’t have high speed Internet and full time electricity in this area. So we don’t have basic things for freelancing”* (SA – Trainer, KADO). *“Sometimes there*

is some internet work of web research for which client demands to check your internet speed and asked to send its screenshot. So, when I sent them the screenshot of the low internet speed; they did not give work.” (RE – Project Coordinator, KADO).

Second, a lack of knowledge and skills: members of marginalised groups lacked an understanding of what OO was and how to link in to OO jobs. They lacked relevant skills: not just technical skills but broader interpersonal and business skills: *“The one-week freelancing training is sufficient for the people in cities who are experts and highly qualified with MCS, MBA, MBBS Degrees. However here, we have to engage the trainees with us for six months so that they can learn how to communicate with the clients”* (EJ – Project Manager, KADO).

Third, there are problems with finance and getting payments from overseas, though that has recently improved for some: *“...when you transfer the money locally, so there are no deductions. I have a Soneri Bank account, so when I received my freelancing payments recently, there was no charges that deducted”* (YA – Trainer, KADO).

More challenging to address are cultural barriers. Gender barriers were one: project managers who said male freelancers were “more serious” further explained the additional domestic workload expectations on women: *“...when the guests come, so being a girl, I have to serve, of course. Boys do not need to do this. They just sit on one side and work”* (SA – Trainer, KADO). Another was the cultural expectations of what constitutes a livelihood which reflected negatively on freelancing. Trainees and freelancers shared their personal experiences: *“My parents are uneducated. So, they won’t understand freelancing. They just want that their son to go to the office, use a big car and work on some important government position, and people can praise them how successful is their son”* (HU – Trainee, KADO). *“My younger brother is a translator of Chinese language. The parents are very happy with him. He is three years younger to me but they have got him married first and in that way, they have given him the family responsibility. People around me don’t think me right. They say that this person wakes up at 10 o’clock in the morning. He keeps awake the whole night. Overall, in the family, my image is bad as I do not do a proper job”* (MU – Trainee, KADO).

5.2 Mediation Effect of Institutions

Contrary to “de-institutionalisation” critiques, at least three observable institutional forces impinged on OO to marginalised groups in Pakistan. First, there are the OO platforms themselves. These constrain the relations between clients and freelancers, particularly the lack of human connection and trust sometimes leading to problems: *“I think the system of Freelancer and Upwork is very tough. ... I cannot work on that level. I made an account on Upwork but we have some difficulties there. We had some problem in creating a profile there. I cannot do work in English correctly. Sometimes, they cancel the jobs. We do not understand what they are talking about. Sometimes, they give us poor rating. That is also a dead block”* (WA – Trainee, KADO). *“It happened with me that I worked with some fake people. I anyhow completed their work, and they got their work, but I did not get any payments”* (YA – Trainer, KADO).

However, in a number of ways the digital platforms are seen as recently improving the institutional context for OO to the relative benefit of freelancers; particularly trying to reduce the moral hazard that arises due to the asymmetry of power and lack of trust between clients and freelancers, and the lack of social costs for “bad behaviour” by clients: *“The freelancing marketplaces are improving their processes. They are blocking accounts for any violation of their terms and conditions. They have introduced different matrix like job success rather than relying on customers’ reviews”* (SK – Project Manager, EP). *“Now Upwork holds advance payment from the clients and transfers it to the freelancer once the job has completed successfully. Which has reduced the fraud and exploitation. Upwork has also introduced easier payment methods”* (YA – Trainer, KADO). *“Upwork has changed its policy of minimum work wage. Previously, they had allowed working for US\$1 per hour. Later they fixed it to minimum US\$3 per hour”* (RE – Project Coordinator, KADO)

Second, there has been the intervention of development agencies, government and NGOs. As described, local NGOs supported by the World Bank have been providing training in a wide variety of skills, guidance, and access to ICTs, etc. Government bodies in Pakistan are also launching freelancing schemes. At the least, this re-institutionalisation is helping to overcome asset deficits that would otherwise exclude marginalised workers from participating in OO. In some cases, the re-institutionalisation goes further: for example the neighbouring government of KPK province will use a “walled garden” approach. This creates a protected area of the online platform into which tasks specifically suitable for the Pakistan freelancers are channelled, sheltering them from bidding activity and the full force of competition.

Third, among the freelancers themselves, there is a range of institutions formed; again to address barriers to OO. These may be individual and social to address knowledge deficits about OO: *“I completed my first online outsourcing project with the help of one or two of my friends”* (MU – Trainee, KADO) and *“I have recently guided my cousin about freelancing”* (NU – Trainee, KADO). And they range up to more formal and economic formations used to help balance workloads, and also to assist more junior freelancers. *“People are working in groups here. Some of the freelancers are getting local small projects and they are working on it for \$300 to \$400 together”* (YA – Trainer, KADO) .

This does not mean that competition and asymmetries of power between clients and freelancers are not an issue, but these institutions do introduce some compensations and protections. Without these it is likely that few, if any, of the freelancers in this relatively remote and resource-constrained area of Pakistan would create successful OO livelihoods.

5.3 Capital Assets and Livelihood Outcomes

All interviewed freelancers who went through the formal training programmes developed their human capital in various ways. They develop ICT-related capabilities: *“the technical skills for freelancing such as e-marketing, blogging, search engine optimi-*

zation, graphic and web-designing” (EJ – Project Manager, KADO) but also broader skills including communication in English: “*They even teach us how to write cover letters. Also, they taught about proposal writing, means they told us everything about how to deal with the clients. I am getting a new skill, which I have not learnt before. There is growth on personal level as well. I won’t be able to talk to you had I not been doing a job. I had very less confident.*” (MK – Trainee, EP).

However, in terms of conversion of this human capital into financial capital via a freelancing livelihood, the trainees divide into four trajectories: sinking, struggling, surviving and swimming. The majority fall into the first camp: one programme manager estimated c.60% of trainees did not take up freelancing livelihoods. Of those that do, a number struggle to find work because of the highly competitive nature of the bidding process and the paradox that it is difficult to win work without a profile of work experience but building such a profile can only be done by obtaining work: “*There is a friend of mine ... When he did not get any order for six months so his family members were also irritated. They said to him to leave this freelancing and work in a factory. He went to the factory as a data entry operator*” (AZ – Trainee, EP).

A number of respondents also echoed concerns in the literature about the lack of employment benefits that OO employment would bring (noting that care must be taken in choice of comparison point: those employed in government jobs in Pakistan have a number of rights and privileges; those employed in informal sector jobs do not). This was mainly framed in terms of illness: “*When a person is healthy, he can do this work. If he gets ill, so he will be unable to work and there would be no chances for any money*” (WA – Trainee, KADO).

Of those that do find work, some are just surviving at a low level of activity; again largely due to the high level of competition: “*I applied for around three to four hundred jobs, and then I got one job. It is not an easy task. On Upwork, there are millions of freelancers. We have to compete with them*” (NU – Trainee, KADO).

Finally, there are those in the “swimming” category who have been able to build up their experience, reputation and contacts to create reasonable earnings, bearing in mind monthly per capita income in Pakistan in 2015 was US\$120 [25]: “*I am earning twenty five thousand to thirty thousand per month (\$250 to \$300). When I will become Level 2 seller and would get more orders in freelancing projects. The one which I did in the morning, it was of \$30 and I did it in three hours. Now, one of \$60 and two of \$90 are left to deliver*” (MK – Trainee, EP). “*If you can check online, please see the profile of our graphics and web trainer, Aslam. He started from \$1 per hour. Now, he is working on \$27 per hour*” (RD – Trainer, KADO). These amounts are sufficient for reinvestment in other forms of capital. Some are seeking to invest in physical capital, for example, saving to buy a home. Others are studying and invest their earnings in development of their own human capital: “*My brother and two other cousins, who are studying Masters, meet their expenses through earning online by designing logos and websites. They also send money to their homes*” (TR – Trainee, KADO). “*My one semester fee is twenty thousand PKR (US\$200) that I earn through freelancing in 15 to 20 days*” (WA – Trainee, KADO).

There is an observable chronology: those struggling and surviving are typically in the early days of freelancing, and they either give up or work their way up to better work and better rates of pay. There is some differentiation that was interpreted in terms of personality type or characteristics, echoing the findings of [2] reported earlier: *“Not everybody can be a freelancer and it takes some characteristics and some drives to do the kinds of jobs there would be through technology or leveraging the tech sector for people who are entrepreneurially freelancing”* (AL – Project Lead, World Bank).

For those that do persevere, progression often relates to the changing profile of work they undertake: where data entry jobs pay at most US\$4 per hour, web / graphics / programming work can attract rates of US\$30 per hour. All freelancers are at a relatively early stage as few of them have been involved in OO for more than a year. A number see it as a short-term livelihood e.g. to pay college fees: *“People do not make this as a career. You cannot go with this for the long term”* (KM – Trainee, KADO). Others recognised the longer-term potential: *“I have left everything else and choose to do this only because I know that its future is expanding further. Even I think that I bring people from my family, friends, relatives, siblings in this and convince them to work in this very field”* (MU – Trainee, KADO).

However, whether that long-term potential means continuing with freelancing work is unclear. Some were trying to trade the reputation and client contacts they had made via the platforms into direct, off-platform working which would pay more and potentially be less volatile: *“I have been working with different clients and we have communicated now and then so it happens that once your profile is built on Upwork so you can work outside it as well as clients and companies know you now. Even leaving from there, you can work directly with those companies or you can become their online employee”* (YA – Trainer, KADO). But it remains to be seen what the longer-term career trajectories will be in practice.

Conclusions

The answer to the first research question “What drives those in marginalised groups to engage in online outsourcing?” lies particularly in the context of significant vulnerability: physical, political, economic. It means the main driving force is necessity of earning a living and absence of other livelihood strategies. For a sub-set, this “push” driving force is set alongside a “pull” of opportunity: the perception that OO offers an entrepreneurial work- and life-style.

In addressing the second question – “What infrastructural and institutional ecosystems are required, particularly to address barriers to OO for marginalised groups?” – we found a number of important barriers relating to capital assets and institutions. Physical and human capitals were especially lacking and there were also institutional barriers, for example around payment systems, gender roles, and cultural constructions of what constituted meaningful work. The cultural barriers are deep-rooted and addressing them lies beyond the scope of main OO stakeholders. Overcoming asset-

based barriers is more straightforward but still requires the creation of a broad-based ecosystem: an infrastructure of electricity, telecommunications and ICT; and a set of institutions that were helping to level the playing field – raising individuals and locations up from their asset-deficit status to a situation where they were able to participate in OO. The range of institutions involved was substantial and slightly confounds the negative portrayals of OO in one stream of the extant literature. There were instances in which the digital platforms made concessions and improvements that benefited the workers though of course done in order to maximise activity on the platform. There were also examples of re-institutionalisation: of interventions by donors, governments and NGOs that were mainly beneficial to the freelancers; and less-formal institution-formation by workers themselves, creating social networks of assistance.

Finally, in answering the third question – “What are the short- and longer-term impacts of OO for those involved?” – there were universal gains in human capital. This was entirely expected given we focused on those who had been trained. There was a differentiated financial impact: many trainees “failed to launch” while others struggled to make minor amounts. A significant number were able to generate earnings and build themselves up to earn a reasonable living from OO enabling them, for example, to invest in their own property or education. There was limited evidence on impacts on social and physical capital and, similarly, the relative novelty of OO makes it difficult to assess longer-term impacts such as those on career trajectories.

In practical terms, the research shows OO interventions can be successful in assisting those from marginalised groups into forms of digital employment. These interventions were also shown to be necessary: the barriers to entry into OO are too high for most individuals in resource-constrained environments. One concern could be the high drop-out rate though this may be countered by numbers who do move into OO work. Future work may identify if the psychological or other differences between those who succeed in OO and those who do not might have a practical value. In conceptual terms, we have shown the sustainable livelihoods framework to be viable and useful in structuring evidence and ideas relating to online outsourcing.

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