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PLATFORM LABOUR AND THE MOBILE UNDERCLASS: BARRIERS TO PARTICIPATION IN THE UNITED STATES AND INDIA

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ABSTRACT

Online crowdwork platforms have been praised as powerful vehicles for economic development, particularly for workers traditionally excluded from the labor market. However, there has been insufficient scrutiny as to the feasibility of crowdwork as an income-source among socio-economically deprived populations. This paper examines device requirements and differential access to digital infrastructure, both of which act as potential barriers to not only basic participation but also to economic success. Given the increasing prevalence of mobile-first and mobile-only populations, research on this topic aids in understanding the crowdwork ecosystem among differing socio-economic sectors. Based on a survey of 606 crowd workers in the United States and India, this paper uses both quantitative and qualitative data to explore whether reliance on mobile devices is detrimental for the economic outcomes of crowdwork. The results point to substantial inequalities in device use and received benefits from crowdwork, within each country and between the two contexts.

KEYWORDS

Crowdwork; Mobile; Mobile Underclass; Digital Inequalities; Amazon Mechanical Turk

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A recent typology by Howcroft and Bergvall-Kåreborn (2019) distinguishes four types of crowdwork. One type, namely online task crowdwork or 'microwork', has become the focus of increasing academic attention in recent years, both as a source of data and as a research context (Irani, 2015; Kittur et al., 2013; Martin et al., 2014). Crowdwork platforms have also attracted interest for their potential to provide economic development opportunities among excluded populations (Alkhatib et al., 2017; Bucher & Fieseler, 2017; Kittur et al., 2013; Paolacci et al., 2010). For example, participation on the leading crowdwork platform Amazon Mechanical Turk (AMT) has been presented as an option for mass job creation and income generation in the Palestinian territories (Kuek et al., 2013) and among female Syrian refugees in Jordan (Hunt et al., 2017). In the human-computer interaction (HCI) literature, an increasing amount of research is dedicated to mobile crowdsourcing and the quest to develop user-friendly mobile applications for crowdwork in a global context (Chi et al., 2018; Goncalves et al., 2017; Vaish et al., 2014).

As a countermeasure to these often optimistic accounts, scholars have begun to critique crowdwork from different angles, pointing to power asymmetries, exploitation (Bergvall-Kåreborn & Howcroft, 2014), and access barriers, such as in terms of disability and age (Brewer et al., 2016; Zyskowski et al., 2015).

Adopting a focus on the every-day materialities of work, this article discusses one specific access barrier, namely the device used to participate on crowdwork platforms. Despite the notion of crowdwork being digital and remote, with implications for how it is viewed as a form of disembodied artificial intelligence (Irani, 2015), crowdworkers still require certain infrastructure to carry out such work. Crowdworkers need a laptop, PC, tablet, or smartphone, as well as a stable Internet connection. While seemingly basic, such requirements currently exclude half of the global population and thus the negotiated interplay between worker, device, and platform demand greater academic attention (GSMA, 2018; ITU, 2017).

We are particularly interested in the role of smartphones and tablets in constraining or encouraging participation on crowdworking platforms, thus offering a voice in the discussion around whether crowdwork can be an effective economic opportunity for the mobile-only and mobile-first underclass. To assess the impact of device on crowdworking, we therefore conducted a survey of 606 crowd workers in the United States and India, generating both quantitative and qualitative input around the experiences, materialities of crowdwork, and economic outcomes of crowdwork. The two surveys aim at answering the central research questions of the article: *How mobile-friendly is crowdwork? Does mobile crowdwork result in tangible advantages or disadvantages for workers?*

Our findings indicate that crowdworkers face both opportunities and barriers when using mobile devices, but that using mobile devices overwhelmingly constitutes a minority activity undertaken as a last resort or for their particular mobile affordances such as portability. In particular, mobile devices act as a valuable complement, aiding workflow and for additional task-access. The practice of second screening, in particular, became apparent as a mode of use among the India-based sample. Mobile-first or mobile-only approaches to Internet use, while increasingly common for entertainment and social purposes, are thus not reflected in crowdworking practices where preferences remain firmly attuned towards traditional PC or laptop devices. The function-al constraints of mobile devices acted as significant barriers to adoption. Since efficiency and speed are central to income-generation on crowdworking platforms such as AMT, even minor differentials in speed and efficiency between device choices could result in reduced income over time. Indeed, for the US-based sample, we were able to

show a negative but weak device effect for smartphone use for carrying out HITs, showing that relying on mobile devices too heavily might result in being financially penalized.

One of the most striking factors was the role of the requester as a restricting force. While crowdwork has a connotation of flexibility and mobility, by restricting tasks to a specific device due to requester preference, the flexibility of workers is severely reduced. Without mobile-accessible tasks, discussion around mobile-readiness of crowdworkers is rendered moot.

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