

Crowd employment platforms: The case of Amazon Mechanical Turk

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Summary

Crowd employment platforms allow firms to source cheap labour and expertise using Internet technology. Rather than send jobs to low-cost locations, organisations can outsource functions once performed by internal employees to an undefined pool of digital labour using a virtual network. In 'lean times', this enables firms to shift costs and offload risk, as they access a flexible, scalable workforce with a broad range of skills and experiences. For workers, who sit outside traditional labour laws and regulations, the micro-tasks of 'clickwork' are tedious, repetitive and often fall well below minimum wage. These issues will be illustrated through an analysis of one of the most popular crowdsourcing platforms – Amazon Mechanical Turk.

Introduction

Amazon.com is the world's largest online retailer and is viewed by many as a success story of the new economy. Entering the market in 1995 as a low-cost book seller, the firm evolved to broaden its product range and shifted to a sales and service model. Within this model, Amazon operates as a broker, levying commission charges and licensing use of its digital platform to third-party companies. The platform serves as a coordinating hub facilitating the sourcing and hosting of products and services while providing a seamless interface for consumers.

Mechanical Turk (AMT) sits within Amazon's digital platform, alongside data storage and processing services (Mechanical Turk, 2013a). It is a crowdsourcing system which distributes tasks to a large number of globally distributed

anonymous workers, with Amazon mediating and selling work capacity. It originated as an in-house service to support data processing problems, outsourcing piecemeal tasks to contractors who were required to identify duplicate product web pages, a task that computers were unable to execute successfully. When announcing AMT, Amazon's CEO Jeff Bezos remarked: 'You've heard of software-as-a-service. Now this is human-as-a-service.' (Bezos, 2006). It is based on a cognitive piecework model that breaks down and distributes repetitive, low-paid tasks, and has been described as the 'redistribution of tedium' (Irani, 2013). The Amazon brand offers a robust digital infrastructure with global reach, enabling it to corner the market as a micro-work crowd employment platform.

How does Mechanical Turk operate?

AMT is based on a tripartite structure: Amazon owns and develops the platform, external requesters broadcast tasks (known as human intelligence tasks or HITs) and external contributors (or Turkers) complete and submit the HITs. Regarding governance, all users must consent to the terms and conditions outlined in the Participation Agreement (Mechanical Turk, 2013b), which requires registration using an Amazon account. This provides personal and tax information and positions Amazon as financial intermediaries, reimbursing workers through their online payment service, while extracting a 10% service fee from requesters.

While some of the early adopters of crowd employment platforms were small firms with limited resources, as platforms became more sophisticated, medium and large firms entered the marketplace (Felstiner, 2011). Mechanical Turk is heavily tailed and there is considerable clustering of top requesters, with 0.1% of total requesters accounting for 30% of overall market activity (Ipeirotis, 2010). For many firms using AMT, a key issue is how to manage a workforce completing micro-tasks, so that the benefits of low cost and low commitment are not negated by the effort required to set up tasks, communicate with workers, inspect the quality of their output, and authorise payment. Amazon is keen to stress that they can provide various 'solutions' to assist requesters with projects through the Mechanical Turk Partner Program, which involves a number of firms (approved by Amazon) that offer advice on technology and workforce management. Examples of the services provided include automated HIT creation and workflow routing; random QA checks where clients' staff can log in

as AMT users; a readymade AMT workforce that is managed in-house; assistance in designing a bespoke crowd through a combination of internal employees, outside specialists and crowdsourced workers; and a software tool that divides and labels data into micro-tasks.

In addition to Amazon-approved consultancy firms, there are a range of mediators such as Crowdfunder.com who liaise between the requirements of large companies (e.g. eBay, Unilever and LinkedIn) by streaming task distribution and offering quality assurance services on behalf of their clients, while AMT manages the registration and payment of the workforce. This leads to the creation of long supply chains. Intermediaries provide bespoke consultancy, to help ensure that employing a large-scale workforce to complete microtasks remains viable, particularly for large-scale corporations. They go some way towards offering an 'algorithmically-mediated work environment' (Ipeirotis, 2013) with a more automated approach to the hiring and managing of workers, thereby alleviating some of the problems of scalability.

When AMT was initially launched, payments were only available to workers with a US bank account. Consequently, the workforce was largely representative of US Internet users, who were participating as a means of supplementing their income e.g. women with caring responsibilities, students, the underemployed and unemployed (Ipeirotis, 2010). In 2010 AMT changed the payment structure, allowing workers to be paid in Indian rupees. The workforce internationalised accordingly, with increasing numbers of young, highly educated, male workers from India,

many of whom rely on AMT work as a source of full-time income (Ross et al., 2010). In relation to payments, survey research has shown that 25% of the HITs are valued at \$0.01, 70% offer \$0.05 or less, and 90% pay less than \$0.10 – this equates to an hourly rate of around \$2 (Irani and Silberman, 2013). If workers do not wish to be paid in American or Indian currencies, Amazon offers global currency technologies with its own website gift certificates.

When workers sign in to the online system a list of tasks is displayed, which consists of a short description, the name the requester uses, and the price set for the task. There is a feature of the system called 'HITs available to you' which automatically filters tasks based on the workers' personal score based on their past performance. AMT operates like an online labour auction, with workers bidding for tasks which must be completed within the timeframe specified by the requester. However, there is no time limit for task evaluation or reimbursement. The 'mandatory satisfaction' clause ensures the balance of power lies with the requester who has the authority to reject a HIT without any justification, without payment, and without forfeiting their ownership

of the work carried out. Amazon has the right to cancel an account at any time for violation of the Participation Agreement and the worker may be deprived of any remaining earnings.

Amazon specifies that workers perform services as an independent contractor and not as an employee of the requester. Amazon declines all responsibility related to the transactions between requesters and workers in terms of screening or verification, quality, safety, or the ability of requesters to pay, and they stipulate that 'you use the site at your own risk'. The Participation Agreement clearly states that workers are not entitled to any of the benefits that a requester or AMT make available to their own employees, which includes holiday pay, sick leave, health insurance or compensation benefits in the event of injury. In relation to conflict management, contracts are exclusively between users and consequently any disputes lie outside Amazon's area of responsibility. The terms and conditions offer no social protection for workers, which alleviates the regulatory requirements of paying minimum wage (Felstiner, 2011).

Key issues

In Europe, the working conditions within Amazon's 'fulfilment centres' or factories have been widely reported in the media, resulting in public hostility. There is far less awareness of the working conditions within AMT, despite it being one of the most successful examples of crowd employment platforms. The scale of operation is significant and entails a global base of workers and requesters, yet the operational practices and processes are determined entirely by Amazon as the platform owner.

Although Amazon is keen to stress that it is a mere facilitator of digital outsourcing services ('payment processors'), its brand and market position means that AMT plays a critical role in establishing the market conditions for crowd employment. The platform makes possible the exercise of control over employment relationships, enabling the bypassing of traditional routes and regulatory procedures when procuring labour supply. The digital nature of crowd employment platforms further exacerbates the lack of transparency and the footloose nature of labour laws and standards. Yet, as crowdsourcing becomes normalised, it increases the likelihood of existing industries (such as data entry, audio transcription, technical

support, and software development) becoming subsumed by crowdsourcing platforms.

At the policy level, there is a notable absence of regulation with limited knowledge and understanding of the operation of crowd employment platforms. Social protection is deficient and the absence of a formal contract means that issues of personal and financial responsibility remain ambiguous, with a lack of income security.

This has significant implications as issues of fairness and decency have been raised in numerous quarters. Some responses suggest that workers are choosing to participate, but choice has to be understood within the wider context of job insecurity, rising unemployment and underemployment, and a decline in living standards. Inequalities in society mean that some people face little option other than working well below the minimum wage. As shown by Massolutions (2013), nearly 77% of all crowd employment workers have a primary job and look towards crowdsourcing to supplement their income. The current economic climate may well lead others to follow suit.

Recommendations

The modus operandi of AMT is potentially skewed in favour of requesters and evidence points to exploitative conduct and instances of malpractice. One response to this has been the development of an online system that allows workers to anonymously post reviews and document the behaviour of requesters. This embedded system, named Turkopticon, can be used to assess the employment practices of requesters, exposing unscrupulous employers (Irani and Silberman, 2013). Turkopticon has attracted a growing base of workers to share information and has been successful in drawing attention to ethical questions surrounding crowd employment platforms. In the absence of decent regulatory frameworks, this form of collective resistance is to be encouraged.

Further materials, links and references

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