

Issues and Challenges in Crowdsourcing Platform Implementation in Malaysia

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Abstract: - Advancement in global technology infrastructure and improvements in the user experience of crowdsourcing create an industry where everyone has access to work, and employee can source for the best talent, at the best price, with the shortest turnaround time. Hence, platform plays a major role in crowdsourcing ecosystem. Thus, the objectives of this paper are to investigate the current practices of crowdsourcing industry in Malaysia and the issues and challenges in implementing crowdsourcing platform. Workshop was held to gather information from stakeholders regarding the crowdsourcing practices and ecosystem. Follow up interviews were done with existing Malaysia's platforms. The interviews help to uncover current practices, requirements, issues and challenges in existing Malaysian crowdsourcing platforms. The findings will provide perspective, areas for action and also identify deficiencies in ensuring the credibility and reliability of Malaysian platforms and also local crowdsourcing industry. It also helps in facilitating better planning of the ecosystem and ensuring sustainable growth for the industry.

Key-Words: - Impact Sourcing, Crowd Workers, Job Providers, Crowdsourcing Ecosystem, Micro Sourcing, Market Place, Human Cloud.

1 Introduction

Since its inception in 1996, MSC Malaysia has gone through an evolutionary cycle to cater the changing market demands and needs of the country. The transformation is seen as part and parcel of the aspiration towards becoming a knowledge society and leadership in knowledge based economy by 2020. As Malaysia enters the last stretch in achieving Vision 2020, the strategic thrust are now focused on ICT as an Industry, ICT as an Enabler and ICT for Society [1]. ICT for Society will be focusing on the use of ICT to empower society, bridge the income gap and reduce socio-economic inequalities, enhance the quality of life and improve the quality of human capital.

Under Digital Malaysia [13], crowdsourcing industry has been identified as a potential industry to bridge the income gap, enhance the quality of life and improve the quality of human capital. However, the crowdsourcing also referred as micro sourcing is still at its infancy stage and not properly structured [4,5]. Furthermore, the few crowdsourcing platforms existed play very limited roles. They only act as a mediator between demand and crowd workers, and advertising tasks that are sourced from

demand. Number of demand is also quite limited and concentrated within the private sector [6].

Therefore, to materialise these National Agenda, ICT together with crowdsourcing can be used as one of the mechanism to uplift the low household income group. Through crowdsourcing, workers have the flexibility of doing work 24/7, locations and duration of their own choices. It also provides an additional income to complement existing income.

Another crowdsourcing model which is known as impact sourcing also called social crowdsourcing is based on the premise of creating long-term social impact by utilising global sourcing of services. The concept focuses on employment generation for poor and vulnerable people by providing access to job opportunities in the Business Process Outsourcing (BPO) sector. Impact Sourcing includes BPO tasks such as data management, content editing and low-end transcription. By connecting latent demand for such tasks from large global companies with an untapped pool of sufficiently skilled labor, Impact Sourcing has the potential to change the socioeconomic landscape in developing regions of the world.

A study by Avasant [7] estimates the market size for Impact Sourcing service to be over US\$10.7 billion in 2012 with nearly 561,000 people employed, which is approximately 10% of the total current BPO global employed workforce. Impact Sourcing Service Providers (ISSPs) have a very optimistic expectation of healthy growth with 40% of the ISSPs expect to grow at more than 50%. Even with a conservative compounded annual growth rate (CAGR) of 20%, the Impact Sourcing industry can expect to employ around 2.9 million people by 2020 (roughly 23% of the employment in global BPO sector). This would be subject to implementation of appropriate policy initiatives by the governments to stimulate the Impact Sourcing industry. In terms of revenues, the Impact Sourcing industry can grow to over US\$55.4 billion by 2020 (roughly 17 % of the global BPO services revenue) from around US\$10.7 billion today.

In light of this, crowdsourcing also known as impact sourcing in Malaysian context could help in uplifting the income of the poor. Therefore, the objectives of this paper are to investigate the current practices of crowdsourcing industry in Malaysia and the issues and challenges in implementing crowdsourcing platform. Developing the full awareness of the situation could make the crowdsourcing industry more sustainable in the long run.

2 Crowdsourcing

Crowdsourcing activities could be an alternative solution for outsourcing. If before this, an organization will outsource their IT project to a vendor, but now it can be done through a new mechanism known as crowdsourcing [5]. Crowdsourcing is a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task [9]. It can also be defined as “the art of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call” [11]. In another word it is “to outsource a job to a large, anonymous crowd of workers, the so-called human cloud, in the form of an open call” [10].

When a task needs to be completed, it can be done faster and more efficiently with the help of others via crowdsourcing. This is the fundamental understanding of what crowdsourcing is from an employer’s perspective. Crowdsourcing has become a cost effective way for companies to give

opportunities for individuals outside of the companies to use their skills and time for good use and earn additional income. These companies pay people based on the amount of hours of works, and save millions of dollars by doing so. Companies also will be able to tap into a large pool of talents, allowing these talents to choose what works suit them best. Crowdsourcing also allows companies to employ a large group of skilled people to handle projects within a specific time frame for a fixed price.

Crowdsourcing is an effective way to accomplish tedious tasks at a faster rate. Normally, crowdsourcing involves large projects that are broken down into micro tasks. These micro tasks are well-defined and then distributed to a group of workers [4]. Typical micro tasks are translation, data validation, image tagging, research, writing, editing, categorisation and data entry.

The number of platforms in the international market has been growing strongly in the past few years. International platform operators perform much wider role such as providing training to crowd workers and matching crowd workers with the most suitable tasks based on the workers’ skill and competency levels. Table 1 depicted some of crowdsourcing platforms available globally that support crowd-sourced micro tasks include AmazonMechanicalTurk [1], Crowdflower [8], SamaSource[16], Ushahidi [17], Odesk [14] and Microsourcing [12].

Table 1: Well-known international platform operators

PLATFORM OPERATORS	BRIEF DESCRIPTIONS
AmazonMechanical Turk	<ul style="list-style-type: none"> • Launched in November 2005. • Job providers are restricted to US-based entities. • Workers can be sourced globally.
CrowdFlower	<ul style="list-style-type: none"> • Founded in 2007. • Uses the MTurk platform to distribute work, but provides its own interface on which work is completed. • Has sophisticated application public interfaces (APIs) to create and manage works.

SamaSource	<ul style="list-style-type: none"> • Founded in 2008. • Claims to have a dedicated team of remote workers. • Does not post jobs on a public portal like Mturk.
Ushahidi	<ul style="list-style-type: none"> • Founded in 2008. • Provides a platform for information collection, visualization and interactive mapping, especially for crises.
Micro sourcing	<ul style="list-style-type: none"> • Philippines-based company providing traditional outsourcing solutions.
ODesk	<ul style="list-style-type: none"> • Founded in 2003. • Focus more on long-term work through remote staffing than real micro sourcing.

International platform operators can be divided into eight (8) categories [15]. The categories are:

a. Marketplaces

Matching buyer and sellers of services and financing through mechanisms including bidding and competitions (Examples: Service Marketplaces, Competition Markets, Crowdfunding Equity Crowdfunding, Microtasks, Innovation Prizes, Innovation Markets);

b. Platforms

Software and processes to run crowd works and crowd projects for use with internal or external crowd (Crowd Platforms, Idea Management, Prediction Markets);

c. Crowd Processes

Services that provide value-added processes or aggregation to existing crowds or market places;

d. Content and product market

Sale of content or products that are created, developed, or selected by crowds (Content Markets, Crowd Design);

e. Non-profit

Tapping crowds to create non-financial value (Citizen Engagement, Contribution, Science);

f. Crowd services

Services that are delivered fully or partially by crowds (Labor Pools Managed Crowds);

g. Crowd Venture

Ventures that are predominantly driven by crowds, including idea selection, development, and commercialization; and

h. Media and Data

Creation of media, content, and data by crowds (Knowledge Sharing, Data Content).

Platforms are the key players in a crowdsourcing business model. Platforms are software and process applications that run crowd works and crowd projects to be performed and completed by local and international crowd labour or crowd workers, linking job providers with crowd workers.

Therefore, capabilities of local crowdsourcing platforms are important in developing crowdsourcing industry in Malaysia, especially in providing more opportunities for local organizations to enter the industry as job providers. Local platforms' capabilities are also important in providing more opportunities for local crowd workers to participate in the industry.

3 Methodology

A workshop was held to gather information from stakeholders. Participants of the workshop were from government ministries and agencies, NGOs and private sectors. Follow up interviews were done with existing Malaysia's platforms. The interviews help to uncover current practices, requirements, issues and challenges in existing Malaysian crowdsourcing platforms. The information gathered from all these sources was then compiled and analysed as inputs for this paper.

4 Findings and Discussion

Local crowdsourcing platforms need to reach certain standard before the local crowdsourcing industry can be developed and sustained. To understand the local crowdsourcing platforms, we will discuss the current scenarios of crowdsourcing in Malaysia.

4.1 Current Practices of Crowdsourcing

In Malaysia, crowdsourcing can assist in providing additional income to the people of the country. Crowd workers in crowdsourcing activities will provide them opportunities to get paid by completing micro sourcing tasks.

Figure 1 shows existing crowdsourcing business model in Malaysia. The business model involves three (3) groups of role players – Job Providers,

Platforms and Crowd Workers. Descriptions of these role players are described below.

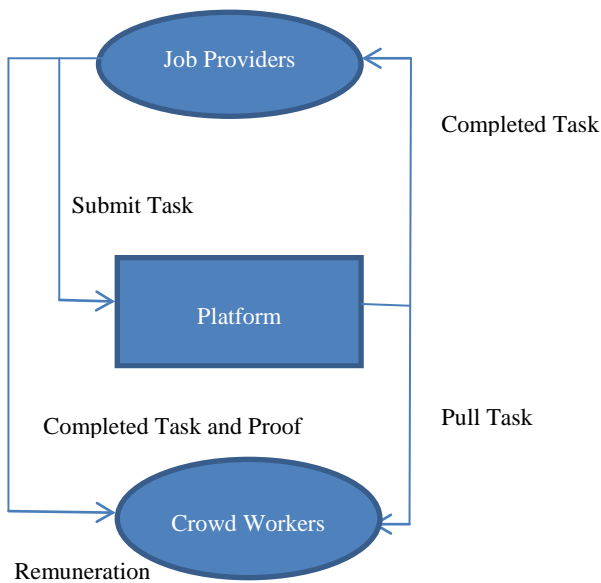


Fig. 1: Existing micro sourcing business model in Malaysia

a. Job Providers

Many organizations, mostly from the private sector, act as job providers by outsourcing their jobs to crowdsourcing platforms. Some of these organizations are Giant, Watson and McDonalds. These jobs consist of both IT-related and IT-enabled tasks. Among the tasks are Facebook page development, data entry and online marketer traffic counter. These tasks are given to crowdsourcing platforms to be advertised to crowd workers. Once tasks are completed, job providers will pay the crowd workers directly without going through platforms.

b. Platforms

Platforms in this context are market place that are run and managed by platform operators. These market place platforms will match buyer and sellers of services and financing. Platform operators will advertise outsourced tasks received from Job Providers on their Platforms for Crowd Workers to pull or to match the tasks in the platforms with the most suitable micro workers available. Details of the advertisement include description of the task, compensation for performing the task and deadline for the task. Once a task is completed by a Crowd Worker, the task will be submitted together with proof through the Platform to platform operator. The platform operator will check and verify the completed task before submitting it to the Job

Provider. The platform is therefore responsible for the entire process including quality control and quality assurance.

c. Crowdsourcing Workers

Crowd Workers can be any individual perform and complete any given task. Crowd Workers will pull the task that interests them from those advertised in Platforms. Once Crowd Workers completed their tasks, they will submit them together with proof to platform operators through Platforms. They will get paid via Platform or Escrow fund after those tasks are verified and submitted.

To implement an effective micro sourcing industry, not only requires Job Providers, Crowd Workers and Platforms but also the enablers [3]. The enablers that can expedite growth of local crowdsourcing industry are governance, business process management, policies, incentives and education [5]. Besides that, critical success factors for crowdsourcing are vision and strategy, human capital, infrastructure and external environment [2].

4.2 Issues and Challenges in Platform Implementation

Currently, most local crowdsourcing platforms and their operators perform limited roles. They advertise the tasks outsourced by job providers and then, verify the completed tasks performed by crowd workers before submitting those tasks to job providers. Their roles in the local micro sourcing industry are not as wide as international platforms. Among the main platform operators in the local industry are Human Capital Connection Sdn Bhd, PERNEC Corporation Bhd, Ikrar Potensi Sdn Bhd, and Multimedia Synergy Corporation Sdn Bhd.

In current scenario, local platform operators and their platforms face many issues and challenges in establishing themselves, and therefore creating a barrier to further develop crowdsourcing industry in the country. Some of these issues and challenges identified are:

a. Lack of Credibility

There is no established national minimum standard to ensure quality level of local crowdsourcing platforms, which reduce credibility of local platforms in local and international markets. Certification program for crowdsourcing platforms have yet to be created.

b. Lack of Skilled/ Experienced Talents

Designing multi sourcing platform requires specific skills and experience. There is a lack of skilled/experienced talents for platform operators to support growth of local platforms. Other than design, specialised project management and business development teams are also needed to promote and market crowdsourcing solutions. Currently, there is no structured program to promote human capital development in the industry.

c. Lack of Auto Matching Mechanism

Currently, tasks advertised in platforms are selected directly by crowd workers. There is lack of auto mechanism to match the tasks in the platforms with the most suitable crowd workers available. Lack of auto matching mechanism can be a barrier for job provider to crowd source the internal task to crowd workers.

d. Weak Payment Mechanism

Currently, payments for completed tasks are made directly from job providers to crowd workers. This mechanism can lead to possible non-payment to crowd workers as they deal with different parties for tasks and payments. A better payment mechanism is needed to ensure guaranteed payment to crowd workers for completed tasks.

e. Cyber Psychological Issue

Possibility of cybercrimes in cyber transactions such as those in crowdsourcing activities has instilled reservation among potential job providers and crowd workers from joining the industry. Further, the occurrences of cybercrime have instilled fear and lacked of confidence with crowdsourcing platforms. Perception of complicated transactions involved might also make it unattractive to the crowd workers.

f. Competition from International Platforms

International crowdsourcing platforms are more efficient and have more experience, providing great competition for local platforms. However, international platforms might not be able to cater for different groups of potential crowd workers in local market. Local platform operators can create their own niche market by localising their platforms for example in terms of language, payment method, and targeted crowd workers.

g. Malaysia as a Crowdsourcing Hub

Malaysia has the potential as a crowdsourcing hub in the region due to its diverse population and advanced information and communication technology (ICT) infrastructure. To tap this

potential, local platform operators have to be capable to develop specialised multi sourcing platforms to cater for different niche areas. Local platforms must also obtain specific standards and requirements to collaborate with established international platforms such as Samasource and Crowdfunder.

In existing local environment, a new crowdsourcing platform will be struggling to establish themselves due to limited demand for their services. A new platform has limited budget to invest in a strong sales team and faces credibility issues owing to their relatively small size and limited experience. While the Government is one natural potential source of demand for crowdsourcing jobs through changes in procurement rules, a platform cannot rely solely on jobs from Government. Crowdsourcing jobs should be sourced from local private sector such as finance, telecommunications and other transaction-intensive companies. These demands provide opportunities for platforms to learn different types of micro sourcing jobs, gain sufficient experience and upscale their business operations.

5 Conclusions

Crowdsourcing platforms play an important role in a crowdsourcing ecosystem, linking job providers and crowd workers. Due to their importance, local crowdsourcing platforms need to be credible and reliable, as well as adhering to acceptable standards to develop the local crowdsourcing industry. Some of critical aspects that need to be assessed as a prerequisite for successful crowdsourcing platforms include a complete understanding of business and technical requirements and the understanding implications of the availability, scalability, recovery, and other non-functional and technical requirements.

Furthermore, Malaysia has among the highest internet penetration with 89 % of the population are internet users, based on data as at July 2012. This data shows the potential huge pool of micro workers for local micro sourcing platforms.

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