
FEASIBILITY STUDY MICROWORK FOR THE PALESTINIAN TERRITORIES

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1. EXECUTIVE SUMMARY

Introduction

1.01 The purpose of this analytical study is to assess the feasibility of microwork for the Palestinian Territories' ("PT", or "Territories") socioeconomic development in general, and for employment opportunities for youth and women in particular. The study provides recommendations for microwork industry development in PT with the objective of increasing microwork businesses and employment of youth and women in the short-term, and building PT's comparative advantage in the microwork industry in the medium- to long-term.

1.02 The path towards Palestinian statehood and economic development remains challenging for PT. It faces comprehensive restrictions on movement and access, and limited economic growth has led to increasing unemployment, particularly among youth and women.

1.03 However the virtual economy could provide an option for mass job creation and income generation. Within the virtual economy microwork appears to be particularly relevant for PT, as it overcomes geographic boundaries to provide earning opportunities for workers with different types of skills and access to relatively basic digital infrastructure.

About Microwork

1.04 Microwork breaks down large pieces of business processes into small and simple tasks that rely on human intelligence, and distributes these "microtasks" to workers via the Internet for greater cost efficiencies across geographic boundaries. Typical microtasks include market research, media tagging, information gathering, data input, data verification, proof-reading, translation, copyediting, and graphic design. Tasks may also be dependent on language, location, classified by type of activity or content, and type of services or activities.

1.05 Although the microwork industry is relatively new, a distinct value chain is emerging from the relationships between these companies (figure below). They include: service providers transforming clients' problems into forms that can be addressed by microworkers; and aggregators collecting and hosting microtasks, and convening the workforce to complete microtasks. There is a wide spectrum of potential business models for microwork aggregators; included therein is an indirect model that has an intermediary sitting between the international aggregator and local workers, and that function as a legal entity (in the country where the workers reside) to hire workers and facilitate micropayments.

1.06 There are no comprehensive studies of the demographics of microworkers (infoDev, 2011). Existing sources suggest that there are hundreds of thousands of people around the world earning income from microwork (World Bank, 2012). Over one million crowdsourced workers have earned \$1 billion to \$2 billion in the past 10 years (Frei, 2009). However studies on Amazon Mechanical Turk (AMT), one of the earliest and most well-known generalized platforms for microwork, found that 47 percent of AMT workers live in the United States, 34 percent in India, and 20 percent in other countries. This shows that that microwork is able to attract workers in countries with relatively high wages, partly due to a "discretionary income" effect. The analysis shows that the highest participation rate for AMT is by microworkers aged 21 to 25. AMT microworkers from India are predominantly single (55 percent), and significantly more of them perform microwork as a primary source of income as compared to those from the United States.

1.07 Microwork's global market size is relatively small, but the microwork industry has the potential to reach multibillion dollar revenues within the next few years. There are limited and varying estimates of the global market size for microwork, as numbers range from \$10 million to \$4.5 billion. Hence this study developed a simplified hypothesis that estimates the current global market size to be \$311 million and is reflected in employment of almost 1 million microworkers. There is no existing information on international experiences on the development of a country-level microwork industry; however there are limited-scale initiatives by the private sector and nongovernmental (NGOs) organizations across numerous countries; such as those by CloudFactory, MobileWorks, and Samasource.

Methodology

1.08 The study's methodology takes a four-step approach that: (a) reviews the global microwork landscape and experience, (b) conducts a competitive analysis, (c) distills key findings and provides recommendations on "go" or "no-go" decision, and (d) proposes next steps. The study uses an analytical framework for the information technologies (IT) and business process outsourcing (BPO) industry; as microwork is similar to IT-BPO except that it is less formal and structured in terms of organization and processes. There are various types of competitive analysis frameworks used by consulting firms to assess the general competitiveness of IT services-based industries, but it's generally agreed that the key factors determining the "location competitiveness" include availability of employable skills, competitive costs, access to relevant infrastructure, and an environment conducive to business investments and operations. However, the analysis will have to take into account that microwork and BPO have distinct differences in their structure and needs; therefore, the assessment adjusts these key factors in terms of their individual relevance and importance.

Competitive Analysis

1.09 The analyses use the compiling of pros and cons, SWOT (strengths weaknesses, opportunities, and threats), and economic analysis as decision making techniques to assess feasibility. The pros of microwork for PT is its significant potential for reducing high unemployment and underemployment of youth and women due to its ease of entry, flexibility in skills requirements, and ability to overcome the movement and access restrictions in PT. Microwork can be a significant channel for youth empowerment through employment by providing a channel to earn and work as they prefer. The generally cons of microwork apply directly to PT. Cloud labor is almost entirely unregulated; workers receive low wages, are given no benefits, have no job security, and risk being dehumanized due to division of labor and mass production.

1.10 The SWOT (strengths weaknesses, opportunities, and threats) analysis' results are as follows:

(a) *Strengths*. PT benefits from demographic characteristics that put it in a favorable position to supply microwork. It has a population of tech-savvy young people, and this is underscored by a 35 percent Facebook penetration. The high number of underemployed and unemployed skilled women in cities outside of Ramallah offers a valuable source of labor, and Palestinians have a regional advantage in the use of the English language. The cost for access to Internet or broadband is relatively competitive from a regional perspective. Palestinian youth and women are familiar with, and have ready access to computers and Internet needed for microwork. The Palestinian labor law has no specific restrictions for microwork, and the laws do not appear to be burdensome to microwork aggregators or service providers.

(b) *Weaknesses*. PT's relatively high labor cost appears to be the key impediment for microwork in the Territories. University undergraduate students have unrealistic expectations of wage levels, and the potential labor force is dwarfed by competitor countries with significantly larger populations. However it is noted that the PA has recently passed a measure that established a wage of 1,450 NIS per month (\$387.41), which is estimated at 8.24 (\$2.20) per hour. PT lacks a cost-effective mechanism to process international micropayments to Palestinians—such as PayPal or mobile banking—which makes it impractical for most Palestinians to perform microwork directly for international aggregators. Moreover it is risky and burdensome for United States-based aggregators to transfer funds to PT as such transfers have to comply with rigid laws designed to prevent the financing of terrorist activities.

(c) *Opportunities*. The high unemployment and under-employment among educated youth and women provides a significant labor pool for microwork. Microwork's ability to add to discretionary incomes can attract the interest of youth and women in the same way it attracted many microworkers from the United States and Europe.

(d) *Threats*. Due to lower labor costs, PT's market niche will have to be defined carefully to ensure global competitiveness. Attracting foreign investment and clients is challenging and is due to the perception of difficulties stemming from the Israeli-Palestinian conflict.

1.11 A simplified economic analysis was conducted to assess microwork's potential to impact employment levels and its benefits to the Territories' economy. It assumes that all employment is for part-time employees (PTEs), and uses the number of direct full-time employees (FTEs) as a benchmark to estimate the number of microwork PTEs. The approach is conservative and does not take into account indirect employment; and it uses four hours per week as the average time that Palestinian youth and women will spend on microwork. The results are summarized in Table 1.

Table 1. Microwork's Potential for Employment

Employment in Five Years (as a percentage of ICT sector employment, in equivalent PTEs)	Number of Microwork PTEs	Total Earnings by Palestinian Microworkers (\$ million)	Industry Value Add (NPV) (\$ million)
20	21,840	9.35	4.57
50	54,600	23.38	11.43

1.12 There are limited studies on the social impact of microwork. A study conducted on India (Sharanappa) using Amartya Sen's approach to capability as the theoretical framework found that microwork can potentially create employment for large numbers of people living in poverty, and make a positive impact on their capabilities and lives.

Findings, Conclusions, and Recommendations

1.13 The analysis shows that the youth of PT comprise a workforce that is readily available, skilled, and accessible to microwork; and that Palestinian youth have adequate access to computers and Internet. However PT has a comparative advantage in only limited types of microtasks, and this is largely due to its relatively high labor costs. The strongest advantage for the Territories is in microtasks that use the English and Arabic language pair because of Palestinian's high-level of English proficiency compared to that of other Arabic speaking countries. However PT may be able to compete in the mass microwork market consisting of simple and lower-paying microtasks. Palestinian youth and women may be willing to accept a lower hourly wage (\$1 to \$2) as microwork has also attracted large numbers of workers from developed countries. PT may also be able to compete in tasks that border the microwork and e-lancing (virtual free-lancing) space, and local microworkers may be able command a premium above the minimal wage for quality outputs.

1.14 Microwork is expected to be more feasible in population centers outside Ramallah, due to differences in wages and standard of living. The Territories should

target specific demographics as potential microworkers. Microwork intermediaries are needed in PT to overcome some of the key challenges, mitigate the business risks in PT and add-value to the industry. This includes facilitation of international micropayments, and acting as trusted entities for United States-based aggregators to comply antiterrorist financing laws, providing localized platform, and improving the quality of outputs. However the intermediary's form, structure, focus segments, location, etc., should be well-defined to ensure the right combination to result in various potential business and operational models. The economic analysis indicates that microwork can have significant impact on employment for Palestinian youth and women, and add much needed value to the industry and PT's economy.

1.15 In conclusion, the feasibility study suggests that microwork has significant potential to improve PT's employment, and earnings of youth and women; but PT will need to take deliberate steps to develop a microwork industry as it will not grow organically. International aggregators are unlikely to consider the Territories for microwork due to the relatively small size of the potential workforce, high labor cost, lack of facilities for cost-effective international micropayments, burdensome due diligence on every microworker for compliance with antiterrorist financing laws, and the perception of poor security conditions.

1.16 The use of local intermediaries can address some of these main challenges for the Territories and add-value to the industry, but microwork needs to be examined further from a practical perspective to address other possible issues; such as the most suitable business and operational models, and Palestinians' willingness to work on tasks that pay below market wages.

1.17 It is recommended that PT explore developing its microwork industry on a cautiously optimistic, limited, and selective basis. Microwork's feasibility in PT's unique context will need to be tested in two pilots (at least) to address the mix of possible issues. The next step is proposed to prepare the ground for well-designed pilots, and to ensure that PT can realistically, comprehensively, and effectively test the mix of possible issues. In addition, in preparing for the pilots, the next step should facilitate the set-up of partnerships between international aggregators and potential local intermediaries, as formalizing such partnerships can take longer than six months.

1.18 A concept-level strategy and implementation plan is developed to provide to a general and mental conception of PT's roadmap and next steps for microwork industry development. Here the immediate strategic goal for PT is to have well-designed pilot programs for microwork, and facilitate networks and partnerships for the pilot intermediaries. The short-term goal for the microwork industry is to confirm the development approach and structure, comparative advantage in the identified microtasks, and the sustainability of microtask work (simple and low-paying) by Palestinian youth and women. In addition, the main strategic focus is to develop both niche and mass market segments. The strategic approach is to use well-designed, selective, and limited piloting to confirm PT's comparative advantage in identified microtasks; to validate Palestinian youth and women's interest in mass and low-paying microtasks (due to the potential to impact development); and to use intermediaries to overcome PT's inherent challenges related to international micropayments.

1.19 The feasibility study also outlines an implementation plan for the short-, medium-, and long-term; and it suggests appropriate roles for various stakeholders in the microwork industry; development processes including the roles of government, donors, private sector, academia, NGOs, and Palestinian youth and women.