



Mobile for  
Development Impact

**REPORT**

# Creating Sustainable Mobile Employment Solutions to Address Youth Unemployment

June 2014



## About

GSMA Mobile for Development Impact supports the digital empowerment of people in emerging markets through its Mobile for Development resource. It is a central platform of data, analysis and insight used to inform investment and design decisions for mobile services. Our work is freely accessible through support from Omidyar Network and in partnership with The MasterCard Foundation at [gsmaintelligence.com/m4d](http://gsmaintelligence.com/m4d)



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# Executive Summary

Youth unemployment is a major symptom of economic stagnation in the developing world. There are a number of causes of unemployment and additionally underemployment. These include a fundamental lack of jobs, limited access to information on the type and location of jobs available, inability on the employers' part to verify and validate qualifications and skills, and on the part of inexperienced applicants, a lack of knowledge on how to apply. Mobile is increasingly being deployed to help address youth unemployment. This report has elected to address job connection solutions as a core service, around which other value-added services can be added, to alleviate some of the structural issues that can be barriers to employment in emerging markets. Chief among these are improving market information and helping to address the skills gap.

## Technology and business factors affecting Job Connecting Companies

The use of SMS, voice recognition, call centres and/or web-based models is dependent upon the access applicants have to communication channels. While web-based solutions are the most flexible, SMS is the most accessible for many of the unemployed. To have a strong impact on the labour market, job connection companies need to be sustainable which means having strong operating and financial models. Some of the key features are outlined below.

**Operating Models:** there are a number of operating models being used based on the underlying three market players of operator, platform provider and content provider. Currently, the platform provider and content provider are typically in partnership, with the operator acting as either a partner or a supplier. There is currently no clear evidence as to which particular partnership format work best.

**Financing Models:** the companies operating in the mobile job connection market can be split into those operating commercially and those operating with the support of donor funding or ongoing grants. Subsidised funding can be used as companies begin, functioning as social enterprises that can eventually become self-sustaining. Regardless of the source of start-up and pilot funds, the financial model needs to be strong enough for the company to survive in the long-term and have an ongoing impact on the job market.

**Charging is varied:** B2B, B2C and combination. The charging model depends on the target market and service combination. In the majority of cases, the hiring businesses pay for the job connection service and the value-added services are charged to the hiring business or to the applicant depending on who is benefiting from them.

Sustainability comes through driving costs down, increasing the volume of activity transacted through the service, and adding further services. Costs can be split into static and dynamic costs for this purpose:

- **Static costs** include the platform and content, e.g. interview tips or training materials. Industries similar to mobile for employment, such as mAgri (mobile agriculture services), have seen the development of common platforms that can provide different levels of service, and a drive towards commonality of content which can be bought and supplied in appropriate modules. There are signs of common platforms being developed, e.g. Souktel, which should make the market easier to enter.
- **Dynamic costs** refer to the update of CVs and jobs availability. These costs are market dependent. For example, models that require agents going to the field to collect CV data will be relatively high. Similarly, where there are a few businesses employing large numbers of people, the transaction costs of increasing the number of jobs available to applicants is relatively high. This is due to the amount of resource involved in engaging with businesses to gain access to their job vacancies. It is more difficult to drive these costs down than driving down static costs.

Increasing volume is dependent on providing a service that is both valuable to users and that is well promoted. Value to users and employers depends on having adequate CVs and a range of jobs available at a reasonable cost. Many of the providers have used operators' network connections to reach new customers which has worked moderately well.

## Potential for expansion

There are a number of areas where the potential for operators, donors or NGOs to instigate catalytic effects by:

- Encouraging the preparation of effective standardised platforms
- Supporting commercially successful companies to expand their products or geographies. This would be through supporting market assessments or pilots
- Utilising mobile operators' large marketing and distribution networks. There is a need to work job connection companies to develop a business proposition that is reasonable for both parties in order to move to scale

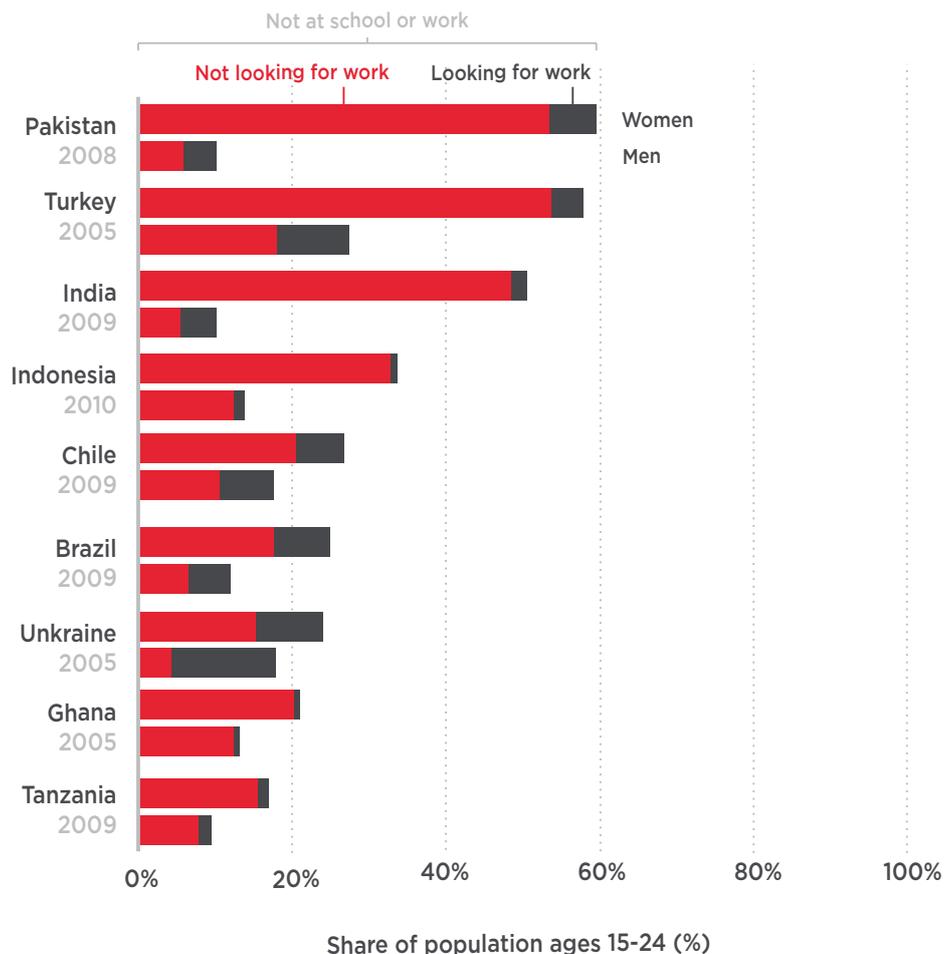
This report has been prepared by the GSMA to promote understanding of these nascent mobile for employment solutions, their operating and financial models, and their impact on the employment market in frontier markets. In this report it is recognised that there is significant potential for mobile to support youths in developing countries to enter the job market.

# 1. Introduction

## 1.1 Youth Unemployment

In 2013, an estimated 74.5 million young people around the world were out of work.<sup>1</sup> Two thirds of working age youth, in some developing countries, are either unemployed or trapped in low-quality jobs. The International Labour Organization surveyed 10 countries, and in six of these, over 60 per cent of young people were either unemployed, working in low wage and irregular jobs (often in the informal economy) or neither in the labour force nor in education or training. In Liberia, Malawi and Togo, the figure exceeds 70 per cent. Such low levels of employment have a huge impact on these countries, resulting in fewer opportunities for employment and reduced economic growth.

Tackling youth unemployment is challenging, as it has such varied and complex causes including skills gaps (e.g. illiteracy through to poorly focussed university education), a lack of jobs, a lack of a clear and consistent policy environment, and poor infrastructure. Additionally, there are also issues around transparency and availability of information for both the employee and employer.



**Figure 1: Youth Unemployment Rate**

Source: ILO Global Employment Trends for Youth 2013

1. ILO Global Employment Trends for Youth 2013 report

## 1.2 Rising Access to Mobile

Unique mobile subscriber growth is now largely coming from developing markets, which are forecast to add nearly 880 million subscribers over the next seven years. Increasing access to mobile technology brings with it new opportunities to leverage its ubiquitous reach and innovative ways of delivering services to those who are often excluded.

Sub-Saharan Africa had the lowest penetration rate of all key markets at the end of 2013 (at just under a third of the population), despite having seen the fastest subscriber growth of any region over recent years.<sup>1</sup> Rapid growth is expected to continue in this area, with a sustained demand around access to basic GSM services over 2G Networks. High levels of access to feature phones (rather than laptops or tablets) means that the demand for SMS based services is likely to remain high.

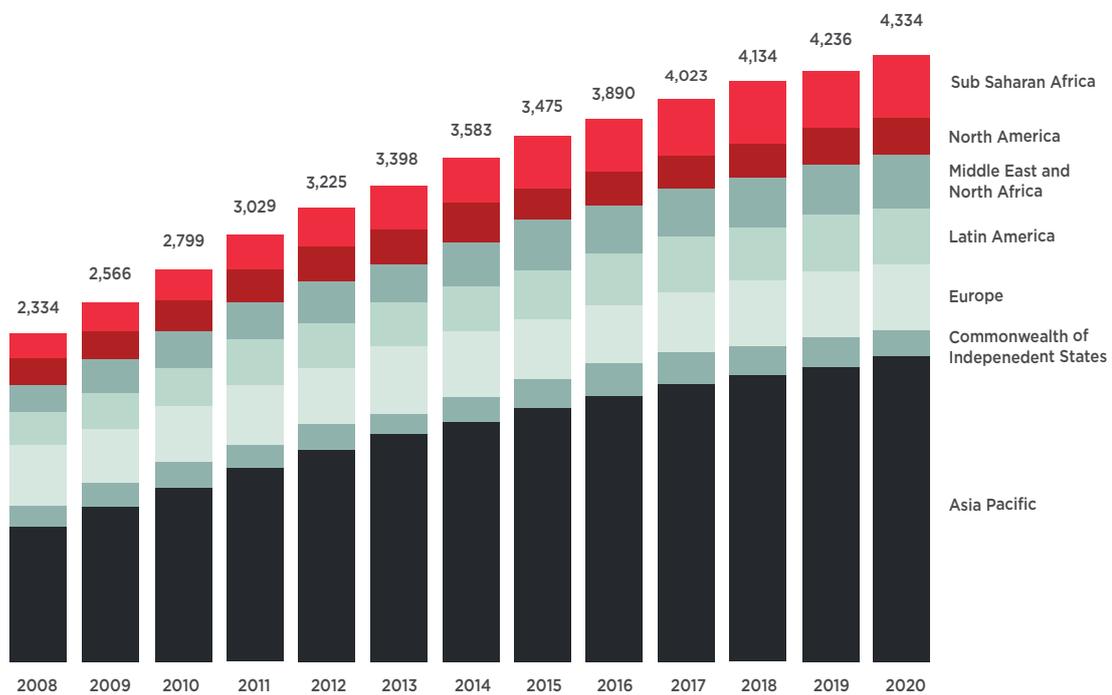


Figure 2: Unique Mobile Subscribers

Source: GSMA Intelligence

## 1.3 Areas of Potential Solutions for Mobile to address Unemployment

Putting aside the absolute lack of jobs, there are a number of areas in which support is needed, and in which mobile can play a role including:

- Addressing the 'skills gap' with relevant mentoring and training
- Building digital credentials to verify skills, experience and identity
- Developing basic infrastructure to grow access to jobs and goods market

<sup>1</sup> 2. The Mobile Economy 2014, GSMA

In this report, the potential for job-connection, together with its potential value added services such as some training and credentialisation (ways to verify workers qualifications, skills and identity) are discussed. Job-connection services have the ability to make a big difference by formalising informal processes and creating a level playing field for youths to access jobs. Analysis shows that these services are already demonstrating a positive impact on the end users, and are becoming commercially successful.

## 1.4 Current recruitment methods

Both employer and employee experience costs associated with hiring are summarised in the table below. Mobile can substantially reduce these costs.

Item	Cost to Employer	Cost to Employee
Advertising	Time and expenses	
Preparing and Submitting Application		Time and some expense
Evaluating Applications	Time	Preparing and Submitting Application
Interviewing	Time and candidate expenses	Time and possibly expenses
Training	Time and possibly expenses	Time
Failed recruitment	All of the above expenses again plus lost time for the business	Exclusion from workforce and economy

**Table 1: Costs of Recruitment**

*Source: M4D Impact Analysis*

Job-connection, particularly with additional service offerings such as training and credentialisation, can act to reduce search costs as well as reducing the chances of a failed recruitment, a very large cost for a small company. Improving information and processes has the potential to have a catalytic effect on the employment ecosystem through the removal of uncertainties. Some of the benefits already seen, including higher rates of pay, search time and shorter commuting time, are outlined in the case study below.

### Spotlight

## The Impact of Babajob on the Employment Market

**Babajob** is a job connect company operating in India using SMS, Voice and Internet enabled job matching for low income employees, operating in every state in India in 5 local languages. It has provided job connect services since 2007. Following a slow start and a business model restructuring in 2011, some good results can now be seen.

- 1+ million open positions have been listed from 70,000 registered employers
- 500,000+ job seekers have registered to date and are currently 60,000 active
- Plans to connect over 15m job seekers by 2016
- They are starting to add other services, e.g. verifying National Skills Development Corporation qualifications giving greater security to employers.

**Babajob was recently interviewed for this paper and pointed to the following impacts for service users**

- Users report 20% higher salary (current hourly average wage rate is \$3.43)
- Users report an average reduction of 14 minutes in commuting time minimising job-hunting travel, which reduces the opportunity cost of the commute. The user has more productive time available
- Better living standards for workers due to increased wealth and improved job satisfaction
- Job security improves as employers are able to select candidates based on credentials
- Individuals are incentivised to receive education, as the prospect of obtaining a job afterwards has improved
- Search time for both parties reduced, which results in increased efficiency in the labour market. This results in short term cost reductions, and also leads to a long term productivity improvement due to improved job matches

## 1.5 Improving Employment Prospects for Youth

While the internet provides more functionality around job-connection and other associated services, limited internet access means that mobile can be the key channel in increasing access to market information. This can result in improved job matching, leading to an improved income for employees and a greater level of certainty for employers in developing economies.

## 1.6 Current job connection market suppliers

Mobile job-connection is a growing industry. While the oldest firm identified was established in 2006, it has only recently started to gain the attention that other Mobile for Development (M4D) services, such as mHealth or mAgri, have had to date. While there are some players in developing countries, there is still significant room for growth. Accordingly, this report, with case study examples, illustrates its vast potential.

The 11 surveyed job-connect solutions offer sector agnostic mobile job search services targeting youth in urban and semi-urban areas whilst connecting them to both formal and informal sector jobs (see the appendix for a list and key features of the job-connect vendors interviewed).

## 2. Learning from Current Market Leaders

### 2.1 Mobile Employment Solutions

Mobile solutions that target employment are growing and mobile is now seen as a promising intervention in combatting a range of challenges; from accessing capital via mobile financial service offerings, to the training and upskilling of youth. Within this broad range of offerings, job-connect services have recently emerged as one of the key solutions aimed at empowering the workforce, by connecting them to the opportunities for career development and advancement. The sector comprises various services and solutions catering to the needs of jobseekers and employers. The case studies analysed have a mix of target users: small and large companies, formal and informal workers, to offer a thorough understanding of the way that the market is developing.

#### 2.1.1 Market Relevance

The traditional method of job searching through newspapers, job boards, the internet, and word of mouth can be ineffective for both employers and job seekers, particularly in environments where identity and assuring qualifications, is difficult. Additionally, young people feel constrained by their lack of contacts. In Ghana, 47% of youth cited their biggest barrier to employment as not knowing the right people to seek out in order to find work.<sup>3</sup> With these methods, employers do not have significant choice in (and often information about) who they hire, and job seekers do not have information on what types of jobs are available or how much they should expect to be paid. With a mobile based service, market information is significantly improved, which provides potential improvements for labour market productivity.

#### 2.1.2 Bundled Offerings

There are a number of associated issues that job connect services are starting to address with complementary offerings including:

- Training or upskilling: providing business or entrepreneurial skills and sector-specific training
- Credentialisation: adding previous employer references, or certifying training (certifying is still in the early stages)
- Information or mentoring: providing career or life skills

These broad areas address structural problems in the employment market in many developing countries, particularly employers needing their employees to have more relevant skills, and knowing that the qualifications and employer references are genuine.

3. <http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/07/Mobile-Services-for-Youth-Employment.pdf>

These services can add significant value for job seekers, and in that way build an ongoing demand for services.

## 2.2 Job-Connect Service Overview

### 2.2.1 Operational Model

The operational model consists of three components required to run a job-connect service.

- A content provider compiles data on job seekers and job opportunities in the market
- A platform for job-connection is the system that is responsible for matching job seekers with employers. This platform enables additional content to be pushed to the customers, e.g. CV training and job interview hints as a complementary offering
- A mobile network operator facilitates connectivity via SMS, IVR or mobile web

Whilst the industry has adopted manifold variations of the model, the majority of mobile employment providers in developing countries offer both platforms and content

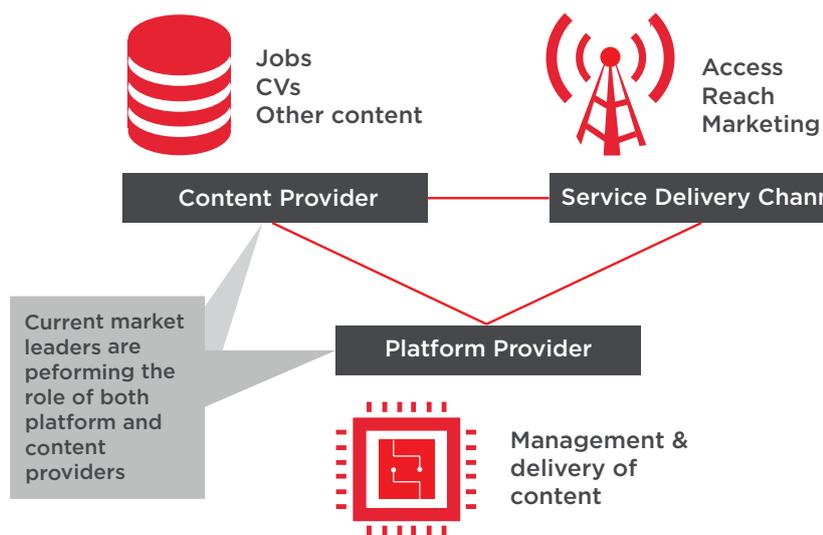
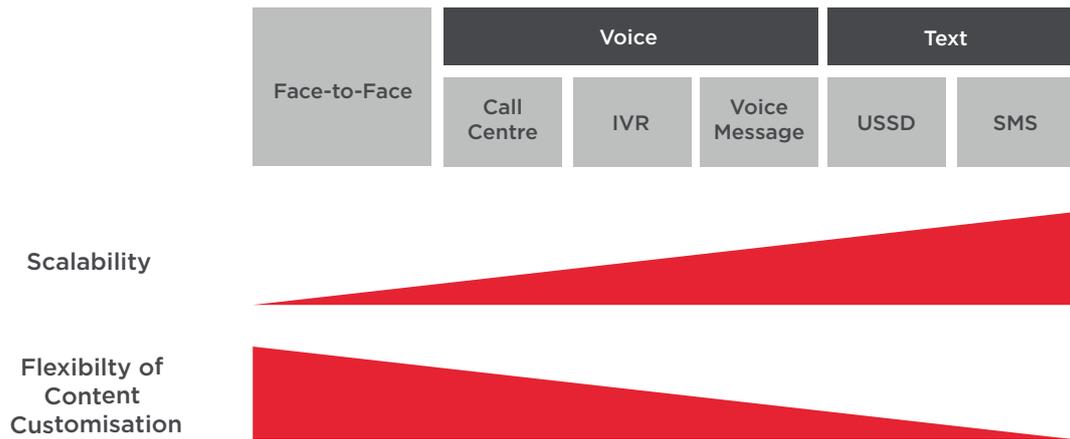


Figure 3: Operational Model

### 2.2.2 Delivery Channel

The communication channels to deliver services are closely linked to technology penetration. In areas with low penetration of web-based technology, mobile employment solutions rely heavily on the use of feature phones. Existing solutions predominantly use SMS to target job seekers; this enables these services to reach scale more effectively, especially in rural areas where there are fewer internet connections. IVR, where content is communicated over the interactive voice protocol, can also be used as a delivery channel, which has the distinct advantage of overcoming literacy barriers for some users. The most flexible approaches, when it comes to content customisation, is the adoption of face-to-face and call-center solutions, but these are more costly than SMS and IVR.



**Figure 4:** Content and Choice of Delivery Channel

In order to cater for a wider range of socio-economic groups, web and feature phone channels can be considered, which are often designed as complementary features. Internet based services are available and job seekers have access at reasonable cost. Where internet connections are few or costs are too high, feature phone services like SMS are mainly used with some supplementary voice options.

Career Planet in South Africa, which is primarily a web based solution, introduced a mobile component in 2012 with mobile web and USSD delivery channels. In this instance, USSD is used primarily for job connect for youth with restricted access to internet, whilst mobile web offers more features like CV guidance, training and ‘ask an expert’.

Babajob, a service operating in India, serves demographics with both high and low internet penetration. The company overcomes the constraints of literacy, language, and technology sophistication by offering a range of solutions through internet, mobile internet, IVR and SMS to suit the needs from base of pyramid (BoP) youth in both urban and rural areas. Approximately 70% of traffic to the service is internet-based and 30% derives from mobile internet, IVR and SMS.

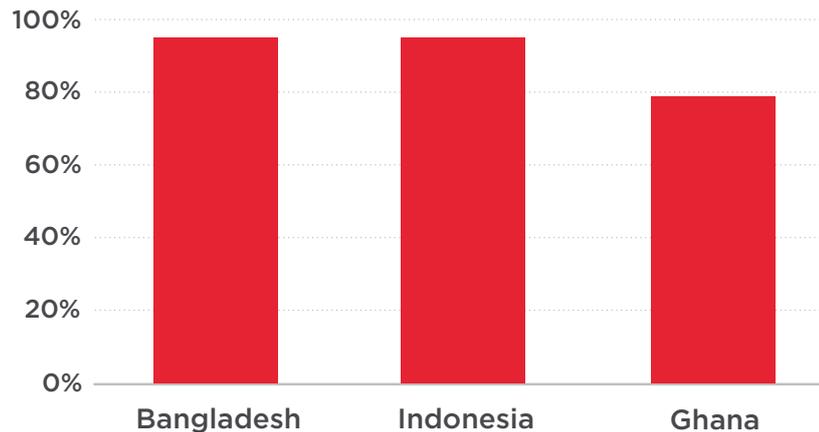
### 2.2.3 Content

Content is amassed from the collection of job seeker profiles, jobs listings and features that can either be collected internally by the business or externally sourced from a partner.

#### Internally collected content

Internally collected content involves gathering both job seeker and employer details, thereby feeding the service platform. The created content can be advantageous by bringing authenticity and focus in areas where there is little public information. For example, in some markets there might not exist a recruiter or job listing website that is relevant to the service in question. This situation can make internally generated content a necessity.

The majority of mobile employment providers generate content internally. This is often a necessity for the informal sector where jobs tend not to be widely advertised and are predominantly sourced via word of mouth. Sourcing informal job postings is complicated and may necessitate setting up a call centre for employers to register via phone or hiring agents, who can be deployed across different locations. Such a model can be expensive to run, leading many service vendors to build open platforms so that employers can populate job offerings directly.



**Figure 5:** Use of Word of Mouth for Job Search

*Source: GSMA/ALU Mobile for Employment Research based on representative sample of 300 job seekers in every country*

Operating in Kenya, Duma Works have developed an SMS content gathering tool for job seekers with no access to the internet. The tool allows basic content input into the system (name, age, town, job preferences and professional network) whilst employers register via call centre or web page. Usually SMS allows a mini-CV creation that can lack significant details required to do an exact match.

Although internet would be a preferred channel to upload detailed CVs, the low level of internet penetration (less than 30 % in the developing world) means that many services face the challenge of getting a detailed profile of job seekers. Mjobs, primarily a SMS based solution, has partnered with internet cafés to allow job seekers to input applications for jobs online, free of charge. Assured Labor in Mexico and Brazil signs up job seekers in remote areas via tablets provided to their field agents. Whilst many users lack the necessary skills to write a CV independently, field agents use a dedicated app to input detailed information that is compatible with the system. MPawa, a Ghana based service, plans to place kiosks in areas where a pool of job seekers can be found, such as churches and mosques so that they can create their profiles. Njorku and Mjobs have partnered with internet cafés, allowing users to upload their CVs for free.

## Spotlight CV Training

While job seekers provide basic information when creating CVs, they often fail to include points that could enable the platform to help generate more precise job matches. As such **MPawa**, **Career Planet** and **Njorku** raise concern that many of the applicants do not know how to write a CV. These players believe there is a need to train the youth to write mobile-appropriate CVs, which provides a gap for skills training services. Putting youth through a CV training can help them create a more detailed user profile, helping the platform better match youths with available job opportunities.

## Spotlight Sourcing Jobs with the Field Agent

In Rwanda, workers involved in household enterprises learn of relevant job opportunities through their social networks. Those with small social networks have few avenues to find out about job opportunities, which limits their employment options. These dependencies on word-of-mouth networks were identified as a hindrance to both the employers and employees, creating huge inefficiencies and making it difficult to find the right candidates. **Souktel** realised that sourcing these informal jobs is time consuming and difficult unless a field agent is deployed to source jobs.

### Externally sourced content

Some mobile employment providers source job listings by partnering with established and experienced recruiting firms, job search websites and newspaper job boards. For example Njorku has developed a proprietary tool to scout job posting websites like Gumtree in Africa to collect job listings. The externally sourced content needs to undergo quality assurance checks to maintain the integrity of the service.

In many cases, companies use both internally created and externally sourced jobs to have a rich amount of jobs on the system. Career Planet and Mjobs are sourcing jobs both externally from newspapers and other websites, as well as having their own content input channels.

### Additional features

Increasingly, service providers are delivering additional features to boost their value proposition. Duma Works has integrated previous employer references into its service, providing validation of potential employees and building trust and credibility of candidates to potential employers. Babajob has fine-tuned its service to better connect job seekers who have skillsets that match positions being advertised by potential employers.

In Tunisia, Ooredoo's Najja7ni Employment service offers job-connect bundled with skills training, allowing users to enhance their English language skills as well as search for jobs. This bundled approach provides increased value to users and is the model that providers are moving towards to strengthen the sustainability of the service.

## 2.2.4 Platform functionalities

Platform describes the hardware and software solutions that allow content to be collected, managed and distributed efficiently. More advanced features can include matching algorithms used to connect job seekers and potential employers. Such features are developed in-house by the majority of players including Babajob, Assured Labor, MPawa and Duma Works. In order to further scale, several key challenges were identified: a shortage of human capital, experience and funding for growth.

## 2.3 Operational model and partnerships

### 2.3.1 Operational business models

#### Service Delivery Channel

Mobile network operators are often providing the connectivity and support for services, especially at the early stages. Operators can be a strategic partner, with the ability to leverage their strengths in distribution, marketing and existing network agents. Through their partnerships with operators, Mjobs and Najja7ni have successfully created a wider impact and reach. Besides support in marketing to operator's user base, both companies made use of subsidised telecom services.

Babajob formed partnerships with five mobile network operators in its infancy, allowing the company to boost service visibility and to reach more users through the operators' subscriber bases. The extent of MNO support can be distorted by operator bureaucracy, that directly contradicts the fast-moving entrepreneurial nature of job-connect services. Bulk SMS has to be tailored to the job-seekers, in comparison to a one-size-fits-all approach to the operators' entire client base. Whilst operators can bring clear value to the partnership, Duma Works and Career Planet have successfully launched services without establishing an operator relationship. Nevertheless, MNO partnerships are seen as significant for future growth and sustainability.

Major operator partnership considerations include network lock in (networks can demand exclusivity), procedural complexities and revenue share structures, that initially benefit MNOs more from a financial standpoint than it does the mobile employment provider. Entering a typically reported 70%/30% revenue share in favor of operators can limit the commercialisation of the project as a whole.

#### Platform provider – functionality

Souktel sells their easily adaptable platform, to help content providers and donors across developing markets introduce sustainable job-connect services. Using a modular structure, they are able to adapt the platform based on the local market and feature requirements.

Generally, mobile employment providers develop proprietary platforms in-house. These

platforms are then adapted to a particular business model or market type, while the core functionalities remain the same. This could present an opportunity for mobile employment providers to sub-contract their platforms, something we have already seen demonstrated in both the mobile agricultural and health sectors. Considering the limited number of VAS providers currently, existing players are well-placed to sub-contract their proprietary models.

## Spotlight Learnings From Other Sectors

A similar gap in the market has been identified within mobile agriculture industry. As multiple players are independently setting up platforms with similar or identical functionalities to aggregate and deliver agriculture related content in their respective markets, there is an emerging business opportunity to license successful software solutions. **Esoko** is an example of a white-label solution that allows collection and distribution of market price information in any market. After testing and proving the success of the solution in Ghana, Esoko has successfully licensed the software to mobile agriculture service providers across multiple African markets. This example from the mobile agriculture space points to the possibility of a similar opportunity for mobile employment service providers, like **Babajob**, to further capitalise on the assets they have already developed, both in terms of software and know-how.

Similar dynamics are observed in the mHealth space, with open API solutions like **MOTECH** platform; specifically designed to reduce the barriers to entry for mHealth providers. MOTECH illustrates an opportunity for social impact investors and foundations to further develop the mHealth market instead of providing grants to build redundant platforms.

### Content providers

Having discussed a gap in the job-connect platforms for mobile, there is also an evident lack of content providers that are able to aggregate the content in a mobile-ready format. Content is a common bottleneck to scaling M4D services. In mHealth, MAMA (Mobile Alliance for Maternal Action) have developed a central mobile messages database to help streamline health content across mobile channels. Agricultural content providers develop systems with agriculture content ready for mobile channels - such as Direct2Farm.

While content aggregation at the international level could be a solution for static or rarely changing content (e.g. tips on passing the interview), there is also a need for local providers of dynamic content for mobile channels (i.e., frequently changing, easy to get out of date, e.g. job posting). Until those players emerge, whether independently or as a result of diversification strategy from existing mobile content providers who already format news for mobile channels, mobile employment service providers have to build their own content creation capacity in-house.

Another point for consideration is building trust in employment services and achieving quality assurance. Quality assurance is particularly important for two reasons:

- Ensuring job advertisements are current
- Conducting some validation on the CVs posted

Quality assurance will likely vary for dynamic and static content. For example, for agricultural tips and advice, a recognised university or a local Ministry of Agriculture should approve the final content. On the other hand, dynamic information like market prices will require random checks of a fixed percentage of content, normally performed on a daily or weekly basis. Both are critical to maintain the quality of the service, and build trust

### 2.3.2 Business lead

There are a variety of ways for any of the three players in the operational model to take a lead on a mobile employment service. Currently, content and the platform providers tend to work as partners. MNOs can act either as a strategic partner or as a supplier, providing interconnect and billing. The advantage of having the MNO as a partner is that they can leverage their brand, marketing and distribution capacity. However, in cases where an MNO is required to contribute and invest in marketing, they might necessitate a higher revenue share (down to 70/30 or even 80/20 from standard 50/50 or 60/40). The exact revenue splits vary over geographies and time. There is an opportunity to involve MNOs by demonstrating a value to their brand and benefits to customers' loyalty, especially if the service is provided exclusively via one mobile network. In such cases the MNO might decide to invest in marketing as well as to subsidise the price to consumers.

Operators have an opportunity to become a market leader in a field where competition is still relatively scarce. By doing so, MNOs can kick-start a virtuous circle whereby mobile employment customers increased income can be cycled back through the economy.

There is also an opportunity for existing VAS providers to capitalise on their existing infrastructure and capacity; diversifying their existing portfolio of entertainment services by including a social offering like mobile employment. As previously mentioned, the lack of established content providers for employment-related services, remains the primary barrier to streamlining mobile employment alongside infotainment offerings.

## 2.4 Revenue Models

### 2.4.1 Funding mobile for employment solutions

Partnerships with donors and NGOs has been critical for players such as Duma Works and Career Planet, who have relied on such funding to accrue capital investment for their platform and service launches. These collaborations helped both companies test their product suitability and ability to scale in the initial stages, which is increasingly important to sustainability for mobile employment providers.

Privately funded employment solutions are emerging as commercially viable using investments, from either private or angel investors to kick-start the operations, as well as stimulate demand and initial platform traffic. Assured Labor, Babajob, and Mjobs are commercially successful, privately funded companies that have reached scale and monetized their service. Even if the company is not self-sustainable just yet, the majority of

companies plan to reach sustainability, defined as the ability to fund OPEX in the short term.

Most job connect services can be commercially viable, and sufficient margin can be made both in the B2B and B2C markets as is evidenced by Babajob and Assured Labor, respectively. Additional revenue can be brought through value-added services or advertising. Career Planet sources a third of its revenue from advertisement. The company also uses donor funds for operational support, but has a commitment to be sustainable in five years' time by leveraging B2B and B2C revenue channels.

### 2.4.2 Major sources of cost

In initial stages of developing these services, some companies that target the base of the pyramid (BoP) or the informal workers, may need financial support because their target customer base has little to no disposable income. As a result, there can be poor service uptake and a longer lead time to get to scale, if the appropriate mechanisms are not in place to help reach these consumers.

Start-up funding can target three initial cost categories: platform establishment, content sourcing and marketing. Donors or corporate social responsibility (CSR) programs can help with platform procurement, purchasing/collecting content and promoting the service. Operators can offer marketing to their existing customer base. Alternatively, operators can assist in minimizing OPEX for mobile employment providers by sponsoring the cost of communication channels like SMS or IVR.

In order to achieve the highest impact on the economy, donors can consider providing CAPEX funding at the initial and scaling phases. Donors can also focus on helping create or identify accessible platforms and efficient content sourcing mechanisms, to allow scalability of solutions for different regions and geographies.

### 2.4.3 Charging models

In conjunction with the operational organisation of the job connect solutions, it is important to consider charging models. Mobile employment providers can adopt B2C (job seeker-paying) or B2B (employer or government-paying) models.

#### B2C

Relying on revenue generation from consumers looking for work can present a challenge in some countries. By testing two pricing models in Rwanda, Souktel found that traffic was considerably higher when offered to job seekers for free, versus a paid service.

Whilst a considerable proportion of sample providers use the B2C model, there must be a strong proposition for job seekers to pay for such a service, such as an efficient and effective job matching algorithm and/or a database continuously stocked with job opportunities.

#### B2B

Businesses are more likely to have the ability to pay, in order to source appropriate candidates for jobs they have available. However, job seeker platforms must first be devel-

oped to scale and have a positive track record, so that businesses feel confident to post jobs and source candidates through the mobile channel. It is also important to bear in mind, that prospective employers have a choice between several existent job-connect platforms such as job billboards, newspapers, and word of mouth. Because of this, mobile employment providers also need to sell the benefits that mobile can bring to the job recruitment process to potential B2B customers.

**Paid service versus free service**

B2B (employers) or B2C (job seekers) job connect services can either offer a free or paid service. An early model that has achieved notable success is the ‘freemium’ model that permits a user to access limited content for free with full content available at a cost. Companies adopting B2B freemium models have seen the highest commercial success rate amongst the sample job connect services. Businesses are attracted by free postings and are required to pay for additional content like extra job listings, promotions, CV database searches, as well as CV job matching.

The model is used by Babajob in India, where services are free to the job seekers and employers for the basic package, however they must subscribe for the premium package. Premium packages have three levels of access depending on job postings, applicant screening quota and validity of the subscription.

Duma Works offers three B2B freemium models when upgrading from the free content to subscription. The cheapest subscription allows basic job seeker screening and sourcing. The next subscription level brings access to candidate testing results. The premium package allows an employer to narrow down the pool of users via sector specific testing and voice interviews.

Similarly, Souktel offer ‘freemium’ model to B2C (job seekers) in selected territories, where youth receive a set number of free, localised SMS each day, with interview tips, career advice or language training. Access to jobs is a paid service. Souktel uses the proceeds from premium services (pull) to offset some of the costs of free services (push).

B2B and B2C freemium are dominating the charging models, however, mobile employment solution providers are in a strong position to diversify and source revenues from multiple sources. For examples Babajob is operating a B2B and B2C charging model that has freemium features. Career Planet sources a third of the revenue from advertising and two thirds from B2B.

	Free	Freemium	Paid	Advertising
<b>B2B</b>		Assured Labor Career Planet Duma Works MPawa		Career Planet
<b>B2C</b>	Njorku	Souktel Najja7ni Mjobs Orange		
<b>B2B &amp; B2C</b>		Babajob		

**Table 2: Charging models**  
*Source: GSMA Interviews with service providers*

## 3. Opportunities for Growth

Sustainability can be defined as the ability to maintain commercial viability over time. In the case of mobile employment, it involves driving costs down and expanding the offerings to include additional services on top of the core service.

### Scaling the volume

Jobs and job information content are crucial in reaching a critical mass of customers, both from the employer and jobseeker side, to ensure the balance between supply and demand is met. Building out the amount of content, will mean moving beyond the digital and instead, achieving growth through extensive marketing and expansion through new partnerships, for example with recruitment agencies, local businesses and governments.

Additionally, platforms can be expanded to allow additional features in existing offerings like interview and CV tips over SMS. An upscale in the existing or feature content is expected to present a better customer offering and hence, attract more customers.

### Adding new markets and special customer groups

Many existing job-connect services are keen to expand by unlocking new customer bases. There are at least two ways to do this: scaling services in new geographies or targeting special customer groups.

When expanding to new geographies it is important to consider the market context. Markets favourable for mobile employment solutions tend to have a large number of unemployed/ underemployed youth, extensive reach of mobile technology, large informal sector and high job candidate search costs. It is also important to consider the adaptability of the technical platform and methods that can be used to gather content.

Another route to reach new customers, is to target special customer groups like bulk hiring companies, universities or schools and local businesses.

Bulk hiring companies specialise in sourcing multiple employees at the same time. Due to the volume of hiring needs, such companies prefer to recruit from a selective pool of candidates with matching qualification, location and timing requirements to narrow down the search. Mobile employment services can be designed to optimise such process.

### Upscale volume by adding new service lines

Adding new services can increase value for mobile employment customers. This can create a mechanism whereby employers and/or potential employees are compelled to pay more for useful services. Currently, the majority of the mobile employment services on offer are standalone with the exception of Najja7ni which offers both skills training and job-connection services. Opportunities exist to complement this bundled service with interview tips, advisory services, quizzes, etc. to further increase stickiness among consumers.

Bundling can also promote sustainable companies by evening out income flows and increasing the average value of each transaction.

## Spotlight

### Mobile Training Tools

**gMaarifa**, a Kenya based start-up, has seen success in its service by offering mobile training tools that provide a practical and effective alternative to both in-person and online training courses. Via SMS, mobile web and an Android app, gMaarifa is able to reach its users and provide job training and financial literacy. Their SMS based job training service found that 32% of students who passed the course, were able to find jobs and received a 98% approval rating from users regarding the relevancy and accessibility of the content.

## 4. Recommendations

The market is evolving, but based on experiences in similar markets (e.g. mAgri and mobile money), and increasing knowledge of the job-connect market, there is clear potential for further market development.

To help youth achieve greater access to job opportunities via mobile, each component of the mobile employment system must function together in a complementary way, to provide the greatest benefit to end users.

### 4.1 Platform

There are several technological options for mobile-based employment services. These include the technology used to collect content, i.e. SMS, mobile Internet (where smartphone handset penetration is high), and voice. Given the limited variability in the type of offerings that can be made available via mobile phones, platforms should be able to work across economies and continents.

- Avoid market saturation at the early stage. As seen in adjacent M4D sectors, the constant redevelopment of individual platforms can slow down the deployment of services and content produced for it.
- Develop robust, easily adaptable “off-the-shelf” solutions and make them widely available. Such platforms can help decrease start-up costs substantially, enabling mobile employment providers to reach sustainability more quickly.
- Build in capacity to offer bundled solutions from the development stage
- Ensure search mechanisms have the ability to be targeted from both an employee and employer perspective to narrow down search results making the system more user-friendly and time efficient.

### 4.2 Content

The way in which content is collected and the types of data collected, vary somewhat with the target employers and employees. However, there is a need to remain consistent across contexts to ensure that the content is locally relevant, clear, credible, timely and perhaps most importantly, able to be acted upon by end users is key.

- Reduce the costs associated with obtaining content through strategic partnerships with content developers and/or working with governments and NGOs that already have content that is suitable for adaptation to mobile channels.
- Limited partnerships exist between recruitment agencies and further models of collaboration should be explored.
- Target informal labour supply to boost number of accessible jobs in the system and as a key way to help formalise and streamline processes for the informal labour market.

### 4.3 Bundled Offerings

Once a basic mobile employment offering has been established, layering additional service offerings can create additional revenue opportunities. Moreover, it can help mobile employment providers distinguish themselves in a competitive market and promote stickiness, if end users can access services that they cannot get anywhere else.

Key suggested offerings designed to create a more holistic offering for youths include:

- Training or upskilling: providing business or entrepreneurial skills and sector-specific training
- Credentialisation: adding previous employer references, or certifying training (certifying is still in the early stages)
- Information or mentoring: providing career or life skills

Early stage pioneers are exploring the use of mobile identity solutions to help build in the mechanisms to verify and validate users and employers. By incorporating this into the solution, it not only strengthens the core offering, but opens up opportunities across a range of M4D sectors where verification of the end user may be critical (eg. mHealth records).

### 4.4 MNO

A gap exists in the market, with just a handful of countries currently having more than one mobile employment service available on the market. This represents a prime opportunity for the mobile industry to lead, in an area proven to have an impact on the local economy, by providing an increasingly important service to their customers.

- Collaborate and partner with content and platform providers
- Play the key role in the marketing and promoting of services
- Consider branding as a way to attract youth to the service and build industry reputation
- Explore fair revenue share models to encourage stronger partnerships and a more active role in the sector

### 4.5 Donors

Donors play a catalytic role in many M4D services which often have a longer period before reaching sustainability. Their investment helps to provide a safety net in the nascent stages of development that can help to understand market dynamics while solutions grow to scale. Key roles for donors are:

- Support the development of standardised platforms and content provision
- Invest in existing early stage market successes rather than the constant launch of new platforms
- Support pilots for commercially successful job connection services moving from one geography to another

# Appendix

## Service Provider Information

Service Name	Geography	Organisation Type	Additional Service Features	Notes on Progress so Far
<b>Babajob</b>	India	Entrepreneurial/ Start-up	Background Verification	2.2 million cumulative job listings 150,000 active job listings 2 million registered job seekers
<b>Souktel</b>	Palestine African Countries Middle East	Third party VAS Provider	Interview tips Quizzes	500,000 mobile users across projects, Moved into 30 countries
<b>Career Planet</b>	South Africa	Third party VAS Provider	CV writing Ask an expert Career advice (all via web/mobile web)	Over 44,000 registered members and over 70,000 monthly visits from young people looking for work, training and career-related information
<b>Najja7ni Employment</b>	Tunisia	Third party VAS Provider	career guidance, financial literacy, career search strategies, links to local training opportunities tips on how to start a business	Over 300,000 Tunisiana customers have already utilized Najja7ni's services as of June 2013
<b>Duma Works</b>	Kenya	Entrepreneurial/ Start-up	Monitoring and Evaluation	2,750 matched in jobs Established partnership with 100 employers
<b>Njorku</b>	Cameroon, Nigeria, Egypt, Ghana, Kenya, South Africa and Uganda.	Entrepreneurial/ Start-up	(Plans to offer training)	1.2 million registered job seekers 3,000 unique users every day 600,000 jobs in South Africa
<b>Assured Labor (EmpleoListo, TrabalhoJá)</b>	Mexico, Brazil	Entrepreneurial/ Start-up	Voice Prescreening	1.2 million registered job seekers across two markets 40,000 employers
<b>Mjobs/Msira</b>	Ethiopia	Third party VAS Provider	(Plans to offer CV writing training via SMS)	20,000 users 20 active employers
<b>MPawa</b>	Ghana	Entrepreneurial/ Start-up	(Plans to offer skills training)	8,000 fully completed job seeker profiles
<b>Orange</b>	African markets	MNO Led VAS service	A range of services for youth using SMS, IVR, apps, web and mobile web	Many services in trial and pilot phase
<b>Ummeli</b>	South Africa	Entrepreneurial/ Start-up	A social networking tool for young people to connect, learn and connect to jobs	200,000 users since 2011
<b>Rozgar Sewa</b>	India	Third party VAS Provider		
<b>InfoMatch, (Shaqoodoon)</b>	Somalia	NGO	Quizzes Interview tips	
<b>Job Xpress</b>	Nigeria	MNO Led VAS service		
<b>Mkazi</b>	Kenya	Entrepreneurial/ Start-up		
<b>Saral Rozgar</b>	India	Third party VAS Provider	Job fairs	
<b>Career Jet</b>	Various countries			

## Acknowledgements

The GSMA would like to thank the many people who gave up their time for the development of this report including those from Assured Labor, Babajob, Career Planet, Duma Works, gMaarifa, Mjobs, mPawa, Najja7ni Employment, Njorku, Orange and Souktel.

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