Realizing the potential of digital job-seeking platforms

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Labor market connectors for the digital age

Digital platforms are increasingly helping connect job seekers—from informal workers to highly skilled professionals—to suitable job opportunities. These platforms, which can aggregate vast amounts of data, accomplish three things. First, they make it easier to learn about available jobs and requirements; second, they reduce the cost of recruiting; and third, they allow individuals to market themselves to a wider audience. Looking forward, digital search platforms can deploy their data aggregation and analytic capacity to reduce labor market inefficiency, including by devising more relevant assessment criteria for specific jobs, educating job seekers on market conditions and demands, and supporting career advancement through credentials and employer endorsements. Digital platforms, employers, and skills developers must collaborate closely to ensure that the workforce is being trained in the most relevant, market-responsive skills and that job platforms are valuable and relevant for both employers and job seekers. To support the continued growth and transformation of digital search platforms in emerging markets, local governments and the private sector (including both employers and investors) have crucial and catalytic roles to play.

Why digital platforms?

Even as unemployment remains high and people are unable to land good jobs, too often employers around the world report are unable find suitable candidates, and many good jobs go unfilled. Digital platforms can help rectify this. The billions of people at—and just slightly above—the base of the labor market pyramid tend to lack the information, networks, and resources to find jobs. To meet their employment needs, we need more effective ways of linking job seekers with the opportunities that best match their skills, needs, and interests. Unemployment and underemployment
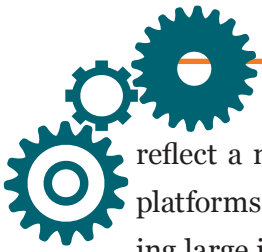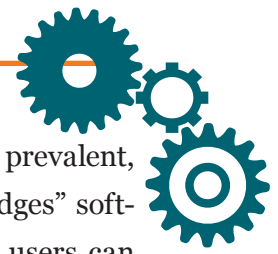
reflect a mismatch in the demand and supply for skilled and unskilled workers; digital search platforms cannot solve this mismatch on their own, but they can contribute significantly to reducing large information gaps, including in emerging markets. Such technology can increase overall productivity by improving the allocation of labor and skills to the most suitable opportunities in the market.

Current offline solutions (such as newspaper postings, job boards, recruitment agencies, or simply knocking on doors) are expensive, slow, and often ineffectual. With more and more people now digitally connected, even those at the base of the pyramid are increasingly using web or mobile connectivity to access job platforms. A key feature of these platforms is their ability to accumulate a large database of job seeker profiles, job positions, and employers. Algorithms and automation enable both job seekers and employers to easily make personalized, sophisticated, and detailed searches. This gives digital job platforms the following advantages over offline services:

Information can be democratized: Open access digital job platforms level the playing field, particularly for those who do not have professional networks or cannot otherwise access relevant sources of information. Companies will be encouraged to manage and maintain their reputations as good employers (due to greater transparency and fluidity of labor markets) to attract and retain the best talent. Closing the gap between applicants "in the know" versus those with fewer connections can lead to more efficient labor markets and to higher wages for workers.

Job search costs are far lower: Relative to offline platforms, digital platforms dramatically reduce time and money spent on the job search for both the job seeker and employer. Digital offers the potential for much faster communication, screening, assessment, and matching. This technology allows both sides to search a much larger range of opportunities or candidates at a fraction of the time when compared with an offline search, thereby increasing the chance of finding a better match. Further, such platforms can help job seekers reduce the stigma associated with unemployment or job searching. In Morocco, for instance, job seekers regularly wait in line—sometimes all day—at a jobs center to initiate the first step in the job search process. Digital platforms allow the job seeker to conduct most of the search and inquiry process in private, online. In regions where there are cultural biases against women actively searching for jobs, online platforms can increase women's labor force participation. For example, women comprise more than one-third of digital job platform Souktel's 15,000 users in the West Bank and Gaza, but only 19 percent of the entire labor force in the same area.[1]

More ways of signaling are possible: Job seekers can showcase their skills, experience, references, and other traits (e.g., soft skills, digital badges that validate a specific skill) to a wide set of potential employers, and freelancers can display their work and provide recom-

mendations. Digital badges, credentialing, and endorsements are becoming more prevalent, accessible, and legitimate, and can facilitate better matching. Mozilla's "Open Badges" software allows organizations to issue verified online learning badges that platform users can earn and in turn advertise to potential employers.

Current trends

Many digital job platforms have emerged in developing countries in recent years to combat rampant unemployment and underemployment. These platforms typically target either lower-skilled job seekers most suited for work in the informal sector and micro, small, and medium-sized enterprises (MSMEs) or higher-skilled, white-collar workers sought by larger companies, either domestic or multinational. Successful digital platforms have formed a close working relationship with both employers and training institutes. Specifically, they've responded to market priorities to focus on soft skills and work-readiness criteria (e.g., punctuality) and have allowed job seekers to showcase work experience, verifiable credentials, and past employer references. For instance, at Lynk, an on-demand job matching platform serving blue-collar workers, workers receive badges for being punctual, which they can use to unlock skills boosters that will enhance their profile.

Digital platforms are most successful when they demonstrate each of the three advantages identified earlier; however, each advantage is more or less important dependent on which professional niche or sector the platform targets. For instance, in the local construction sector, it might not be crucial to provide *transparency* on wages, because pay levels are well-known. In this case, digital platforms help primarily by improving the efficiency of matching and by more thoroughly vetting workers hired as a result of past employer reviews and references.

What are the opportunities associated with digital job platforms?

We see three main areas of opportunity for the future of digital job platforms:

Opportunity 1: Digital platforms can use their trove of high quality data not only to reveal, but also to actively push and advertise the latest, in-demand skills to job seekers. For instance, LinkedIn can identify actionable trends in regional labor markets, such as which fields are growing and which are waning, making it possible to recommend related and more successful fields to users in waning industries. For developing countries, trends might predict demand for specific language skills, a type of customer service, or business process outsourcing capabilities. Armed with this knowledge, job seekers can tailor their CV and invest in new skill-boosters or "nanodegrees" that will better position them in their job market.

Using web platforms or text messaging, job seekers in rural areas who are considering migrating for economic reasons can query and receive information on the skills needed and corresponding wages of jobs available in various cities. This information would enable individuals to make better
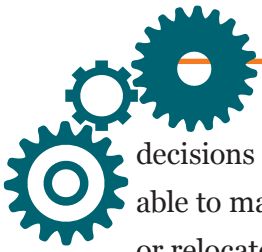
decisions about whether or where to move. From the employer's or investor's perspective, being able to map workers' skills by region can help assess the case for companies to expand, diversify, or relocate.

To help bridge the skills gap, many job matching platforms are also linking up with training programs. Viridis Learning and Andela offer training and corresponding certifications that link closely to employer needs so they can facilitate better matches, which are based on verified knowledge or skills. Viridis allows students to build highly tailored career pathways, accumulate verified work experience and education credentials, and identify suitable employers and positions; meanwhile, Viridis streamlines recruiting by sourcing job seekers who have proven they possess the skills, ability, and interests required by the employer. Lagos-based Andela seeks to close the global gap between the growth in tech jobs and the shortage of people with skills to fill them by offering free world-class training in software development and business, after which the graduates are placed in top tech companies. Kazi Connect, based in Nairobi, is more than just a job platform serving informal, lower-skilled workers; it also offers workers the chance to skill up through training courses and mobile education, and offers certifications that can be uploaded onto their profiles.

Opportunity 2: Employers across the spectrum are increasingly focusing on soft skills, and digital job platforms can build innovative criteria and tools to assess these skills. In the future, workers' dynamic career pathways will require assessment systems that gauge competencies and soft skills not evident from a traditional CV. Already, business process outsourcing companies are finding CVs to be less helpful than tests on interpersonal and other soft skills. To meet this change, job platforms are testing and perfecting a different set of tests that calibrate for traits such as critical thinking, grit, and dedication to company/work. Knack uses video games to measure a job seeker's soft skills and behavioral qualities, such as creativity, persistence, extroversion, and leadership abilities. These casual games seek to reveal how creative, cautious, or adept at multitasking a job seeker is and then suggest professions that best match the job seeker's strengths.[2] Similarly, Pymetrics uses neuroscience-based games to more objectively assess a job seeker's cognitive and emotional traits. Pymetrics has been building gender, ethnic, and pedigree bias-free algorithms based on the gameplay of successful employees to determine which traits predict success in over 100 careers. By comparing a job seeker's results to metrics most predictive of success in that career, Pymetrics can then calculate whether the candidate is a good match or not. Using such games to assess skills may also net job seekers from nontraditional pools who might otherwise have been screened out. Alternatively, such tests may be ideal for lower-skilled positions where soft skills are more important than academic credentials or technical skills.
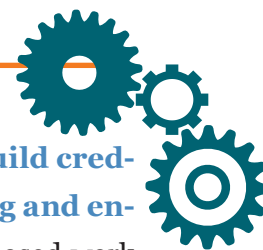
Opportunity 3: Digital platforms can allow job seekers to showcase and build credibility for their technical skills, increasing the value of continuous learning and enabling career advancement. Typically, it is difficult for workers engaged in task-based work to build a career with growth potential that will help them progress up the socioeconomic ladder. Digital platforms can build functions that certify trainings and upgrades in skills, such as digital certification, employer reviews, and peer endorsements, which incentivize workers to improve their skills. Through online courses or local training centers, users can earn digital badges that certify their technical skills, credentials, or even nanodegrees. These badges can help an individual prove her experience and seniority, and support upward mobility. Lynk's platform creates in-depth profiles for all its blue-collar workers, where they can display details of their technical skills, work experience, credentials from training, pictures of their work, customer feedback, and more.

In Figure 1, we use skill level as a dimension to segment digital job platforms, since workers' skill level will determine the services and offerings that platforms should offer. From the employer's perspective, for instance, a successful digital platform that sources lower-skilled, blue collar workers will need to have low transaction costs, expertise in pre-vetting job seekers for basic technical skills, and experience assessing relevant soft skills (punctuality, attitude, grit). Meanwhile, employers looking for higher-skilled or white-collar workers prioritize finding the right candidate (in terms of fit, experience, and niche talent) who will add value to and stay at the company, and can therefore justify somewhat higher transaction costs. For these employers, digital platforms will need to do less vetting (since workers will have formal education records), but can add value by being able to source qualified candidates across regions and assess a different set of soft skills (leadership, management, persuasion). On the job seeker's end, lower-skilled workers prefer the platform to be easy to use, accessible (often mobile is easier than web interface), free or affordable, and to serve as a place to build their track record. Higher-skilled workers prioritize ease and efficacy of finding suitable jobs and quality of employers and positions listed.
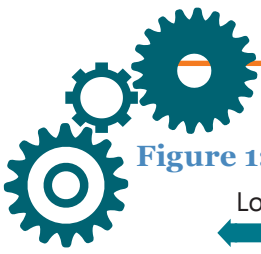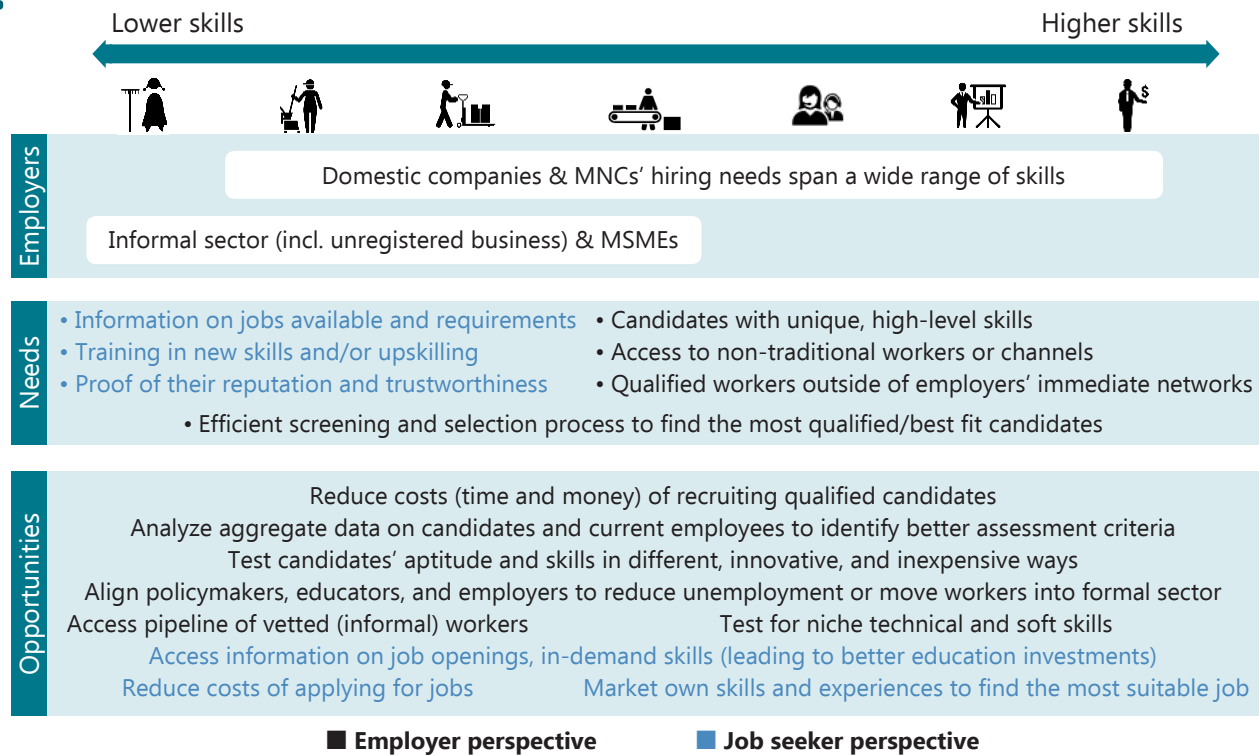
Figure 1: Needs met and opportunities captured by digital search platforms

Lower skills   Higher skills

Employers

Domestic companies & MNCs' hiring needs span a wide range of skills

Informal sector (incl. unregistered business) & MSMEs

Needs

- Information on jobs available and requirements
- Training in new skills and/or upskilling
- Proof of their reputation and trustworthiness
- Candidates with unique, high-level skills
- Access to non-traditional workers or channels
- Qualified workers outside of employers' immediate networks
- Efficient screening and selection process to find the most qualified/best fit candidates

Opportunities

Reduce costs (time and money) of recruiting qualified candidates
Analyze aggregate data on candidates and current employees to identify better assessment criteria
Test candidates' aptitude and skills in different, innovative, and inexpensive ways
Align policymakers, educators, and employers to reduce unemployment or move workers into formal sector
Access pipeline of vetted (informal) workers   Test for niche technical and soft skills
Access information on job openings, in-demand skills (leading to better education investments)
Reduce costs of applying for jobs   Market own skills and experiences to find the most suitable job

■ **Employer perspective**   ■ **Job seeker perspective**

What can stakeholders do?

While digital search platforms present a tremendous opportunity to tackle information asymmetry in the labor market, their development remains nascent. To capitalize on the opportunities that digital platforms present and enable these platforms to fulfill their potential, stakeholders need to take coordinated action. Each category of stakeholder will have a different role to play in advancing digital search platforms and ensuring that the enabling environment can accommodate the emergence and growth of these platforms (see Figure 2).
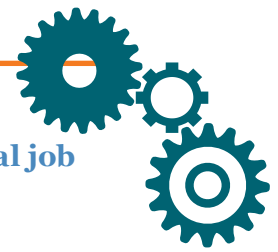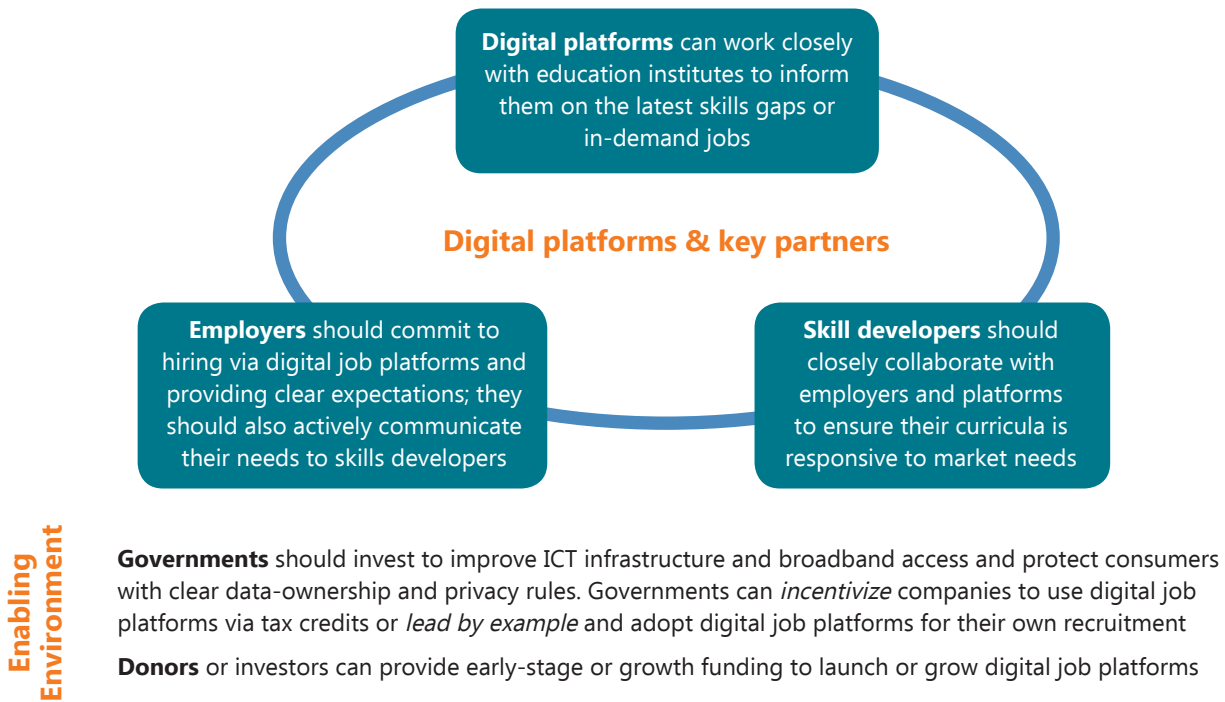
Figure 2: Recommendations for key partners and players within the digital job platforms ecosystem

Digital platforms can work closely with education institutes to inform them on the latest skills gaps or in-demand jobs

Digital platforms & key partners

Employers should commit to hiring via digital job platforms and providing clear expectations; they should also actively communicate their needs to skills developers

Skill developers should closely collaborate with employers and platforms to ensure their curricula is responsive to market needs

Enabling Environment

Governments should invest to improve ICT infrastructure and broadband access and protect consumers with clear data-ownership and privacy rules. Governments can *incentivize* companies to use digital job platforms via tax credits or *lead by example* and adopt digital job platforms for their own recruitment

Donors or investors can provide early-stage or growth funding to launch or grow digital job platforms

By working together, investors, donors, innovators, and others can help ensure that digital search platforms lead to more efficient labor markets and, through them, to inclusive economic growth and more equitable societies.

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1 World Bank blog, Let's Talk Development. *Narrowing gender gaps through online job matching: How does Souktel do it?*

2 *The New York Times*, "Your next job application could involve a video game," January 26, 2014; Corner Stone Rework, "Spotlight on recruiting tech: what works—and what doesn't—with game-based evaluation," January 30, 2014.