# Digital opportunities: innovative ICT solutions for youth employment and entrepreneurship

Arab Regional Workshop on ICTs for Youth Employment and Entrepreneurship

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#### Youth unemployment – a global and regional challenge

- 74 MILLION YOUTH ARE UNEMPLOYED GLOBALLY WITH 621 MILLION NEETs
- Youth: 17% of the world's population and 40% of the world's unemployed (ILO, 2013)
- YOUTH UNEMPLOYMENT IN THE ARAB REGION IS HIGHEST IN THE WORLD





**Job listings** 

Jobs enabled by the digital world

Digital Opportunities

Most jobs require digital literacy

Microwork Crowdsourcing







### **Job Matching**

### Our award-winning mobile employment platform

In the developing world, it's hard to find good information about jobs: Classified ads and government resources are scarce. Job centers are few in number--or they don't exist at all. Family and social connections are limited.

That's where JobMatch steps in: Through simple text, audio, and web interfaces, the platform connects thousands of job-seekers with employers who are looking for staff. Easily customized for your specific project, JobMatch integrates directly into your program activities—boosting scale and quality at low cost.

#### **RELEVANT SECTORS**



#### **RELATED MEDIA**



### When Text Messages Change Lives

Somali youth use technology to link to jobs and build confidence in their futures. *More*.

EDC and Souktel Launch Mobile Job Service in Rwanda *More* »

In a Market the Internet Forget, Souktel Helps
People Find Jobs via SMS *More* 

#### RESOURCES



# ICTs are creating jobs for youth ICTs are transforming old professions...



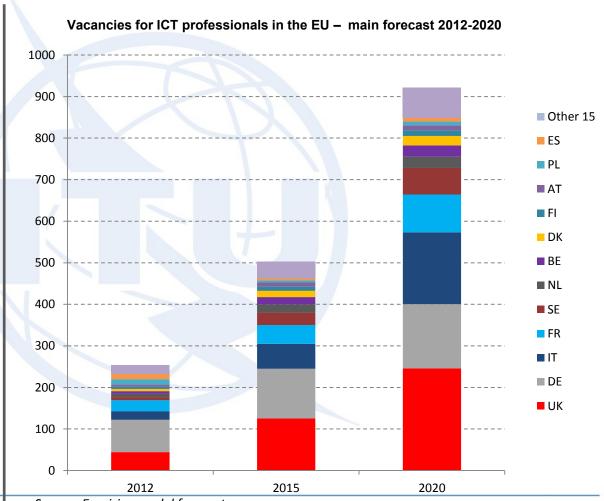


### The EU has a growing deficit of ICT professional skills, forecast to reach 900,000 by 2020.

Despite the strong positive evolution in the employment of ICT professionals in the EU over the past decade, the **employment potential of ICT is underexploited**. Evidence shows that there is a growing gap emerging between the demand and supply of ICT specialists in Europe. This gap has been projected could reach 900 000 by 2020 if not addressed.

It is the purpose of the Commission's **Grand Coalition** for Digital Jobs initiative to address this issue of lacking ICT professional skills.

Currently the largest ICT professional skills gap is to be found in **Germany**. However, latest forecasts suggest that over the period up to 2020 the ICT professionals skills gaps will severely aggravated in the UK and Italy in particular; largely due to the insufficient production of ICT graduates to keep up with strongly increasing demand for professionals in these countries.



Source: Empirica model forecast



### The top 25 professional skills that recruiters searched for on LinkedIn in 2014

- 1) Statistical Analysis and Data Mining
- (2) Middleware and Integration Software
- 3 Storage Systems and Management
- 4 Network and Information Security
- 5 SEO/SEM Marketing
- 6 Business Intelligence
- 7 Mobile Development
- (8) Web Architecture and Development Framework
- 9 Algorithm Design
- (10) Perl/Python/Ruby
- 11) Data Engineering and Data Warehousing
- 12) Marketing Campaign Management
- (13) Mac, Linux and Unix Systems

- (14) User Interface Design
- (15) Recruiting
- (16) Digital and Online Marketing
- (17) Computer Graphics and Animation
- (18) Economics
- (19) Java Development
- (20) Channel Marketing
- (21) SAP ERP Systems
- (22) Integrated Circuit (IC) Design
- 23) Shell Scripting Languages
- (24) Game Development
- (25) Virtualization

Need to close the gender employment gap and ensure women are creators of

20% of European
 women aged 30 with
 ICT-related degrees
 work in ICT sector

 In the US only 20% of women earn computer science degrees







### lenipotentiary Resolution 70

3,500

140

111,000



**ITU Girls in ICT** 



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GirlsinICT

www.girlsinict.org

ernational Girls in ICT Day



# International Girls in ICT Day activities

- Hands-on workshops
- ICT career fairs
- Field trips to ICT companies or institutions
- Meeting and hearing from role models
- Competitions





### How ICTs support youth entrepreneurs

Online mentoring and networking

Skills development- many free or low-cost

Capital - crowdfunding, contests and other sources of capital

Mobile payment and market information





# Co-working spaces, tech hubs, hacker/maker spaces, innovation labs

- Low cost office rental and internet access
- Events and training
- Incubation services, hackathons, mobile app contests
- Links to tech community and universities
- ICT skills development







### **New York experience**

- promoting collaborator spaces linked to mentor networks and incubators
- fostering entrepreneurial funds to attract venture capital into New York start-ups
- attracting engineering schools to develop programs in the city
- providing basic skills training and access to open hardware tools in public spaces like libraries
- energizing the community through competitions and challenges based on city problems.







## NYC tech ecosystem became a job-creation machine- even outside Manhattan!

#### Over 500,000 jobs created

- 291,000 direct tech jobs
  - enabled by, produce or facilitate technology
  - tech industries generated 58,000 tech and 83,000 non-tech jobs
  - non-tech industries generated 150,000 tech jobs
- 250,000 jobs generated through a multiplier effect
- 44 per cent of jobs for people without a Bachelor's degree – "Coalition for Queens" study
- poor and unskilled populations like those living in Queens - obtained skills which led to jobs through training and mentorship
- almost a quarter of the tech start-up founders had no technical background and focus on non-tech sectors by introducing technology-driven innovation into existing businesses and industries







### Does this translate?

Kenya President on 3 March 2015

"Our ICT Masterplan projects that the sector can comfortably generate more than 180,000 jobs between now and 2017. It is also expected to contribute at least 8% of our Gross Domestic Product in the same period. By all accounts, therefore, ICT is a big deal in Kenya. . . . I look forward to greater partnership between Government, the private sector and educational institutions to strengthen Kenya's leadership position in ICT. I urge all stakeholders to contribute to the addition of more ICT incubation hubs into the existing network. This will enable more people engage in innovative activity throughout Kenya."







# DIGITAL INCLUSION Digital opportunities: INNOVATIVE ICT SOLUTIONS FOR YOUTH EMPLOYMENT Report

- ITU conducted extensive research on Digital Opportunities to find "Innovative ICT solutions for Youth Employment"
- Mapping of:
  - ICT-enabled careers for youth
  - New entrepreneurship options
  - New learning opportunities
  - Action by Governments, Private
     Sector, NGOs
- ITU launched a Youth Employment and Entrepreneurship Resources
   Database at <a href="http://www.itu.int/ITU-D/sis/Youth/Resources/">http://www.itu.int/ITU-D/sis/Youth/Resources/</a>







### **Action for Policy Makers**



Skills development for out-of-school youth

Alternative certification models

**Collaborative** innovation spaces

Text-to-speech engines in local languages

App contests and competitions

Government procurement from young entrepreneurs







### Thank You!

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