National Country report for Project "Generation 0101" data research – Turkey

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INTRODUCTION

1) The organization who run the research: Izmir University
2) The information sources you have used: Web sources, survey, f2f meetings
3) How many stakeholders have been interviewed: 6
4) How many youth surveys have been completed and analyzed: 112

DIGITAL AGENDA STRATEGY

So far little has been done to implement Digital Agenda policy and goals in Turkey. The Ministry for EU Affairs has held conferences and meetings since 2012 regarding Digital Agenda; however, in the Ministry publications there is no publication about Digital Agenda.

Some of the stakeholders that have shown interest in DA include Türkiye Bilişim Derneği (Turkish Informatics Association), Türkiye Bilişim Vakfı (Turkish Informatics Foundation), and Information and Communications Technologies Authority (ICTA). The main theme of the 30th Informatics Congress organized by Türkiye Bilişim Derneği was "Digital Agenda 2020".

MAJOR STAKEHOLDERS FOR ICT SKILLS AND YOUTH EMPLOYABILITY

Following stakeholders has been recognized in Turkey:

Stakeholder	Sector	Description	Organizations web page
Çalışma ve Sosyal Güvenlik Bakanlığı (Ministry of Employment and Social Security)	Public	Ministry for Employment and Social Security	http://www.csgb.gov.tr/
Milli Eğitim Bakanlığı (Ministry of National Education)	Public	Ministry for education	http://www.meb.gov.tr/
Halk Eğitim Merkezi	Public	Continuing education and training activities organised outside of formal education institutions are conducted in the Adult Education Centres (Halk Eğitimi Merkezleri-HEMs). Konak Halk Eğitim Merkezi is such a center in Izmir.	http://konakhem.meb.k12.tr
Bilgi ve Iletişim Teknolojileri Kurumu (Information and Communications Technologies Authority)	Public		http://eng.btk.gov.tr

Stakeholder	Sector	Description	Organizations web page
Mesleki Yeterlilik Kurumu (Professional Competencies Authority)	Public	National Authority for professional competency standards	http://www.myk.gov.tr
İŞKUR (Employment Agency)	Public	Turkish Employment Agency (İŞKUR) has been established for aiding activities of protecting, improving, generalizing of employment and preventing unemployment, and for executing unemployment insurance services.	http://www.iskur.gov.tr/
Türkiye Bilişim Derneği (Informatics Association of Turkey)	Non-Governmental Organization	Informatics Association of Turkey, with many members from all layers of society, trying to spread "Culture of Informatics".	http://www.tbd.org.tr/index.php
Türkiye Bilişim Sanayicileri Derneği (TUBİSAD)	Non-Governmental Organization	TUBISAD represents companies operating in Information and Communications Technology (ICT) and New Media sectors.	http://www.tubisad.org.tr/
Türkiye Bilişim Vakfı (TBV)	Non-Governmental Organization	Turkish Informatics Foundation aims to contribute to Turkey's transformation into an information society, and to conduct economic and social studies by carrying out scientific researches.	http://www.tbv.org.tr/

In 2011 TESID (Turkish Electronics Industrialists Association), TUBISAD (Turkish Informatics Industrialists Association), and ECID (Electronics Equipment Manufacturers Association) which are members of DIGITALEUROPE have founded Dijital Türkiye Platformu (Digital Turkey Platform) together with Türkiye Bilişim Vakfı ve Türkiye Bilişim Derneği.

The major goals of Digital Turkey Platform:

1. To create future Digital Turkey;
2. To align Turkey's goals for 2023 with the vision of EU Digital Agenda 2020;
3. To develop proposals for strategies and policies for the development of ICT sector in Turkey and achievement of competitiveness in the world markets;
4. To organize activities for raising awareness in the issues related to ICT development;
5. To inform public institutions and political establishment about ICT problems and priorities;
6. To develop collaboration with international institutions.

COUNTRY FIGURES IN ICT SKILLS AND YOUTH EMPLOYABILITY

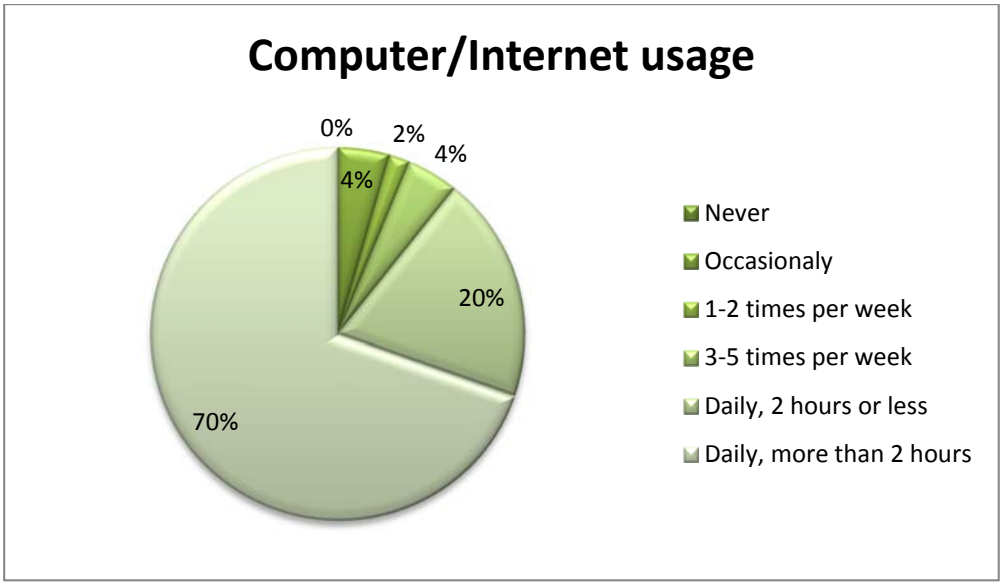
1. What is the unemployment rate of youth in your country: Youth unemployment rate for the age group 15-24 is 17.8%.
2. What is the ICT skills level in your country: The Digital Agenda Scoreboard measures for Turkey are not available. The latest indicators for Turkey reflect 2013 and are currently under validation.
3. What is the percentage of ICT specialists employed: An estimate for the difference between supply and demand for ICT specialists was 40,000 (29.1%) in 2009. The deficit for 2013 was estimated as 200,000.
4. Do young people think their ICT skills are sufficient for the labor market needs: According to Survey data almost half of the respondents (47%) have ICT skills sufficient for job market.

YOUTH SURVEY DATA ANALYSIS

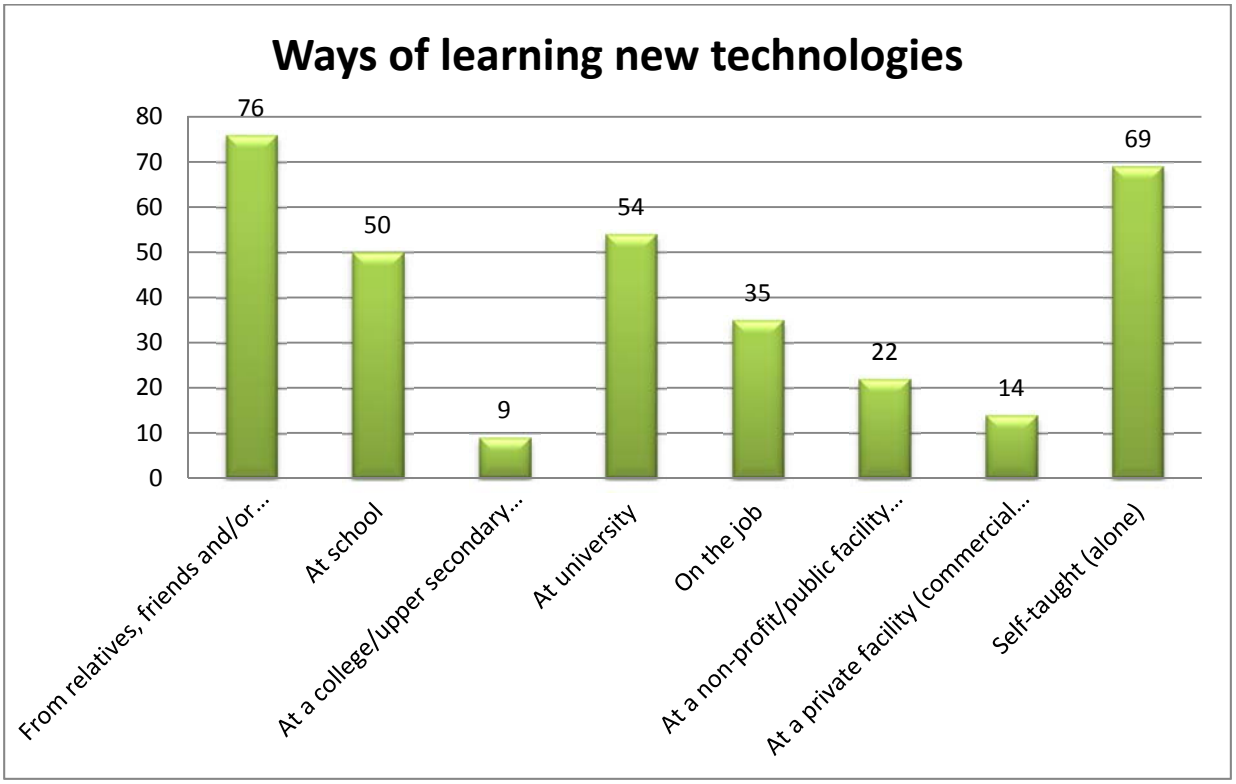
For a total of 112 records, the average age is 23, with 50% in the range 19-24. 44% is female and 56 % is male. The majority is proficient in English (89% intermediate or advanced). 86% is currently studying. 34% is employed.

All respondents use internet. 90% use it daily with 70% using it more than 2 hours a day.

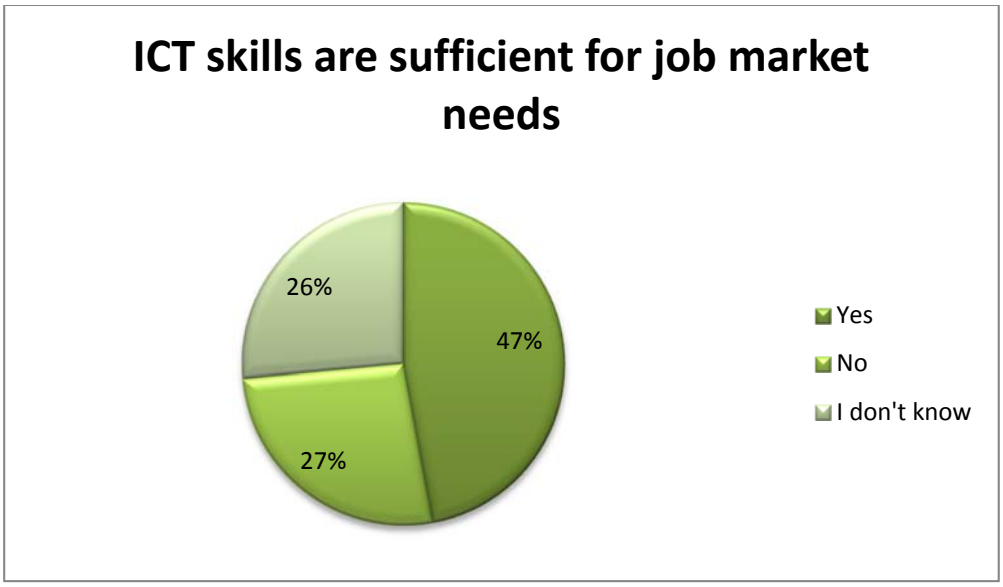
Only 2.7% of the respondents are without any computer skills. 90% can do file management, 84% can use office software, 81% can connect/install new devices, 77% can create creative content and 77% can use security programs. Use of accessibility tools is 67%. While those able to do network administration is 57%, only 46% can write a program.



Most common ways of obtaining knowledge of new technologies are from relatives friends and/or acquaintances (68%) and self-taught (62%). At school (45%) and at university (48%) are also common.



Almost half of the respondents (47%) have ICT skills sufficient for job market. One quarter of the respondents (26%) do not have sufficient skills while another quarter (26%) do not know whether their skills are sufficient or not.



MAIN CONCLUSIONS AND RECOMMENDATIONS

Although there is a Digital Turkey Platform consisting of five large NGOs, Digital Agenda goals are not priority and state initiatives remain limited. Regional policies and strategic plans emphasize information society but digital agenda goals are not explicitly discussed.

e-skills have recently received attention and several projects have been initiated in Turkey. The establishment of Professional Competencies Authority is likely to have some impact on raising ICT skills as well as other skills.

Although there are large national projects such as Fatih Project, which aim at increasing digital literacy at the elementary schools, they have not yet created any major impact.

Most projects that aim at acquisition of ICT skills by youth feel the need for standards for e-competencies. Both employers and people looking for employment have difficulties in defining and evaluating knowledge, skills and abilities a job requires. Relevant EU standards for ICT jobs have found little acceptance so far.

The demand for employment in the ICT sector in Turkey is related to the size and level of industrialization of a city. ICT skills development is likely to have practical impact on youth employment in large industrialized cities.

The following programming skills have been indicated by job seekers as most common: SQL, Java, HTML, C++, C#, ASP, and .NET. Employers have generally sought for software, hardware and network skills. In software, most demand is for experienced .NET, C++, C#, Java and PHP programmers. In Istanbul and Ankara, mobile programming is demanded more, while in the rest of the country web design and programming is demanded more. Skills related to security technologies have recently become important.

Recommendations:

1. Achievement of more effective public-private partnership has to be met in order to implement DA goals.
2. Student project competitions organized by the industry and academia motivate students to gain awareness of digital skills and apply them in innovative ways. In disadvantaged neighborhoods access to ICT is limited. Learning spaces in their neighborhood with ICT will motivate young people to find out about ICT tools.
3. Although all of the training areas are relevant and needed, the following areas are most needed:
    - Easy coding (game development)
    - Community web radio (audio editing, uploads, web site management)

- Mobile app development (app programming, GUI programming)
- Web design (graphical and technical design and development of web pages)

Additionally:

1. Employers generally think that education and training students receive do not contain adequate practice of skills. Summer practices and apprenticeships are not long enough. There should be arrangements for students to spend longer time with firms.
2. Digital knowledge is mostly generated and disseminated in English. In order to follow developments and acquire the skills needed, an adequate level of English is necessary. According to The EF English Proficiency Index Turkey ranks 47th in 63 countries, with Very Low Proficiency.
3. Contribution of data to Digital Agenda Scoreboard for all indicators.
4. The goal of reducing non-users of internet to 15% by 2015 is not realistic for Turkey with the current level of 51%. Also there are big differences between the regions and women and men. Disabled people are particularly excluded from the digital world (computer usage %7.7, internet access 7.1% in 2013).
5. To support digital literacy, the curricula need to be changed starting from elementary school. Also life-long learning needs to be encouraged with proper certification
6. The goal of 50% of the citizens using e-government applications requires increased digital literacy and awareness as well as broadband access.
7. Professional competencies for ICT need to be completed by National Professional Competencies Authority. Curricula for all levels of education need to be updated.
8. We need to develop a national digital literacy strategy and policy.
9. We need to develop a national e-learning strategy and policy.
10. Digital literacy should include ICT usage as well as internet users' rights and responsibilities, data security, internet economy, e-government and e-commerce applications and social media.
11. Turkey needs to collaborate with the Grand Coalition for Digital Jobs network.
12. Universities and municipalities need to organize free digital literacy training particulary for the disadvantaged groups.
13. We need studies to determine short and long-term ICT skills needed in various sectors.
14. We need to do research to determine appropriate e-learning approaches and methodologies including serious games and social media.
15. Programming should be included in elementary education curriculum.