## **Economic and Social Commission for Western Asia**





# **Digital Arabic Content**

Promoting Innovation and Entrepreneurship in the Arab Region

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# Digital Arabic content today

Over the past few years, interest has increased in enriching digital Arabic content (DAC) at the national and regional levels, as decision-makers acknowledge its importance for the public and private sectors. The outcome documents of the World Summit on the Information Society (WSIS)+10 High-level Event¹ stressed the importance of developing appropriate and useful digital local content and necessary policies to enhance cultural and linguistic diversity on the Internet, with a view to advancing the information society and building the knowledge-based economy. It also emphasized the need to create an enabling environment for the development of multilingual digital content, given its major role in closing the digital divide and enabling various segments of society to access the Internet, especially in rural and remote areas.

Growing interest in DAC is reflected in the activities and programmes carried out by several Governments of Arab countries, such as programmes for digitizing Arab cultural heritage content implemented by some ministries of culture, and initiatives by education institutions to promote the use of Arabic. For example, in 2014, Egypt launched a national strategy on DAC. The private sector also plays a major role in enhancing DAC. In Jordan, a national ecosystem is available that promotes innovation and entrepreneurship in the field of information and communications technology (ICT), including DAC. This ecosystem comprises innovation support centres, technology incubators, business accelerators, investors and communication networks with research and development centres in universities. Recently, civil society started playing a role in enhancing DAC by translating articles, books and web pages into Arabic, including Wikipedia pages, mostly by crowdsourcing.

Measuring DAC remains a major challenge, however, given the limited mechanisms and methods to measure Internet content, including social media networks, documents, files and various audio and video media. In 2014, the Partnership on Measuring ICT for Development issued an analytical study to monitor the implementation of the goals of the World Summit on the Information Society.<sup>2</sup> The study highlighted the difficulty of

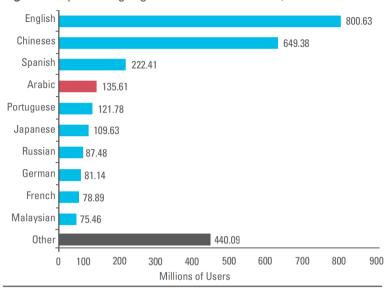


Figure I. Top ten languages used on the Internet, 2013

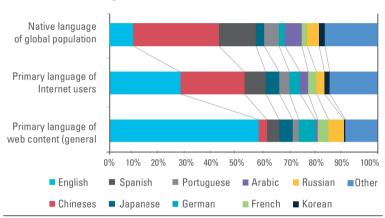
Source: Miniwatts Marketing Group, Internet World Stats. Available from www.internetworldstats.com/ stats7 htm.

Note: The number of Internet users was estimated at 2,802,478,934 as of 31 December 2013.

measuring digital content and linguistic diversity on the Internet and stated that most reports on the subject were based on discretionary or indirect indicators.

DAC is estimated at between 2 and 3 per cent of total Internet content. Figure I shows that Arabic ranked fourth among the languages most used on the Internet. Between 2000 and 2013, the growth rate of Arabic on the Internet overtook that of other languages; the use of Arabic on the Internet grew by 5,200 per cent, while the use of English and Chinese increased by 468 and 1,910 per cent, respectively.

Figure II shows the percentage of the global population with Arabic mother tongue, the percentage of Internet users using Arabic compared to users of other listed languages and the percentage of Arabic content on the Internet. It also indicates that English dominates over 55 per cent of digital content although it is the native language of less than 10 per cent of the world's population.



**Figure II.** Digital content in the top ten languages used on the Internet (Percentage)

**Source:** EURid, World Report on Internationalized Domain Names (2014). Available from www.eurid.eu/files/publ/IDNWorldReport2014\_Interactive.pdf.

## Role of Policies in Enhancing the DAC Industry

Since 2003, the Economic and Social Commission for Western Asia (ESCWA) has focused on promoting and supporting the DAC industry by implementing various activities in this area, including preparing studies, holding meetings and workshops and implementing field projects.

In 2013, ESCWA published a technical paper entitled Policy Note on *Digital Arabic Content*,<sup>3</sup> which proposes policies and strategies to strengthen the DAC industry, as well as various national and regional projects and initiatives to advance the industry. It is aimed at policymakers and stakeholders involved in DAC development. It also highlights activities to stimulate innovation and enrich DAC, support the private sector in developing innovative products and software and encourage entrepreneurs to establish companies that specialize in developing DAC products.





Figure III. ESCWA activities supporting the DAC industry

# ESCWA Project on the Promotion of the DAC Industry through Incubation

#### Goal

The project aims to promote the DAC industry by enhancing cooperation with technology business incubators in the Arab region to support entrepreneurs in building partnerships in this field, thus stimulating youth employment. The first phase of this project was completed over the period 2007-2009 in five Arab countries and the second phase was implemented between 2012 and 2014 in six Arab countries.

#### Main outcomes

ESCWA launched several DAC competitions under the slogan "Thinking digital? Let's innovate in Arabic" in six Arab countries, namely Egypt, Lebanon, Palestine, Tunisia, the United Arab Emirates and Yemen, to select the best and most innovative ideas in the DAC field. Competitions were held in 2013 and 2014 in cooperation with national technology incubators. They targeted university graduates and ambitious young entrepreneurs



Source: apinan - Fotolia 74362160.

aspiring to build novel DAC applications and create specialized companies in the field. The competitions included awareness-raising workshops, lectures and discussions on the importance of the DAC industry, and its opportunities and market. At these events, presentations were given on new business models for DAC applications and on the most promising areas in the industry. The workshops built on ESCWA studies on Business Models for Digital Arabic Content<sup>4</sup> and the Status of the DAC Industry in the Arab Region.<sup>5</sup>

#### **Partners**

**Technology, Innovation and Entrepreneruship Center (TIEC), Egypt:** is an affilate of the Egyptian Ministry of Communications and Information Technology. It was established in the Smart Village in Cairo in 2010 (http://tiec.gov.eg).

**Berytech, Lebanon:** has more than 14 years of experience in incubating health and technology companies. It is the first incubator in the region to receive the Business Innovation Center (BIC) accreditation by the European Union (http://berytech.org).

Business and Innovation Centre (PICTI), Palestine: is an independent Palestinian organization with headquarter in Ramallah and a branch in Gaza. The Centre supports technology entrepreneurs in developing and marketing their products (http://www.picti.ps).



Source: ESCWA

**Elgazala Technopark, Tunisia:** is the first technology park established in Tunisia under the national strategy to develop the ICT sector (http://www.elgazala.tn).

Abu Dhabi University, United Arab Emirates: ESCWA collaborated with the Innovation and Entrepreneurship Center established at Abu Dhabi University to develop a support system for innovation and entrepreneurship (http://aduenterprise.com).

Science and Technology Center at Aden University, Yemen: conducts scientific research and technical studies and provides incubation services to innovators (http://www.stcau-ti.net).

ESCWA also cooperated with the following:

**Taghreedat:** is an Arab initiative launched in 2011 to enrich written and audiovisual DAC. It is a crowdsourcing initiative that collaborates with international institutions and companies to implement specific projects in this field (www. taghreedat.com).

## Wining Applications: Overview

## **Egypt**

"Arfny Shokran" is a platform designed by BM Engineering and Technology SAE, aimed at





Source: ESCWA

enhancing DAC by publishing more than 150,000 articles that respond to frequently asked questions on various issues. The platform resembles an Arabic encyclopaedia targeting Arabic speakers across the world. It answers questions on numerous issues, including automobiles, education, ICT, health care, personal care, sports and art. Articles are checked and edited before publishing, and are enriched with multimedia tools, such as pictures and videos. The platform is easy to use on desktop computers and mobile devices.



http://shourathemes.com

"Shoura Theme" is an online market for buying and selling multimedia, such as pictures, HTML templates, PSD files and models for content management systems such as Word Press and Joomla. Its content is in Arabic with right-to-left text direction, thus helping website designers tackle the problems of Arabic text direction. "Shoura Theme" offers a platform for designers and developers to communicate, share experiences and questions and leave comments on products. Products are priced according to quality, complexity and purpose. "Shoura Theme" is the first application developed by "Digital Arts", a limited liability company created in November 2014.

#### **Palestine**

"Hope System for the Deaf" is a social project that has developed a platform for deaf and mute persons to facilitate interaction and communication. It also provides services for those in contact with deaf persons and those who wish to learn sign language. For example, the application includes a sign language dictionary and translates words into signs. The application is available from the Android store.



#### **United Arab Emirates**

"Iqra`" is a mobile application aimed at teaching various subjects in Arabic using innovative methods, including lessons, exercises, questions and a set of tools to monitor and follow user progress. It allows teachers to design and develop courses using novel tools, such as a multimedia library including pictures, videos and Arabic voice and handwriting recognition technologies. However, these tools face some challenges and need to be improved, although such difficulties are not exclusive to this application as they are also encountered by global companies.

"Panorama" is an educational and touristic project. It essentially provides virtual tours to historical locations in Palestine. It offers a 360 degree panoramic view with detailed descriptions that are easily accessible over the Internet.



#### Yemen

"G Softly" is a mobile application that uses augmented reality in areas such as the press, media and education. The application allows institutions from different sectors to interactively display their content (books and newspapers, for example) in augmented reality. Mobile device cameras or other sensors can be used to access



the content or materials provided by the company producing the application.



"Tech Light" is an innovative application in the field of Arab tourism, providing comprehensive information to tourists on how to navigate the streets of Arab cities without a tourist guide. The application uses web maps and geographic information systems available for cities that signpost streets, public areas, key tourist sites, parks, hotels and tourist companies.

## **Endnotes**

- <sup>1</sup> www.itu.int/wsis/implementation/2014/forum/dam/documents.html#high-level.
- Partnership on Measuring ICT for Development, Final WSIS Target Review Achievements, Challenges, and the Way Forward (Geneva, 2014). Available from www.itu.int/en/ITU-D/ Statistics/Documents/ publications/wsisreview2014/WSIS2014review.pdf.
- <sup>3</sup> http://www.escwa.un.org/information/pubaction.asp?PubID=1570.
- <sup>4</sup>ESCWA, Business Models for Digital Arabic Content (2013). Available from www.escwa. un.org/information/pubaction.asp?PubID=1319.
- <sup>5</sup> ESCWA, Status of the Digital Arabic Content Industry in the Arab Region (2013). Available from www.escwa.un.org/information/pubaction.asp?PubID=1236.