

Implemented by



Employment Promotion 4.0

Information & Communication Technologies (ICT) for a Modern Youth in Iraq

The challenge

Iraq's population is one of the smallest in the world. Almost two-thirds of Iraqis are under 25 years of age. Many of them are internally displaced persons or refugees from neighboring countries. What they all have in common is that they have few job opportunities; 1 in 6 of the total workforces is unemployed.

Employment opportunities are dwindling in the country's two main sources of employment, the oil industry, and the public sector. Oil production generates 99 percent of Iraq's state revenue, but it represents only for only one percent of the country's total workforce. More than half of the employed population are employed in public services. However, despite the recovery in oil prices, these do not offer long-term prospects. On the other hand, there has been no significant development in the private sector.

Young Iraqis are increasingly interested in the field of information and communication technology (ICT) as a possible area of work. The foundations that are in place for this are available: mobile broadband internet is available almost nationwide and therefore enables flexible working. However, neither the available training courses nor the university curricula meet the Iraqi labor market's requirements. The founding of successful



Training in Baghdad to strengthen practical skills in ICT and develop prototypes to use with CNC Router Machine

Project name	ICT – Perspectives for the Modern Youth in Iraq
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Baghdad, Basra, Mosul, Erbil, Sulaymaniyah, and the region of Anbar
Lead executing agency	Ministry of Planning, Iraq
Duration	01.12.2017 — 31.01.2023

startups is still rare due to the lack of government support structures and insufficient access to loans or capital from investors to further support the start-up ecosystem in the country, the ICT project has conducted regional exchange formats. These dialogues aim to provide post-accelerator services for tech-enabled start-ups in Iraq, connect with more developed start-up ecosystems in the MENA region, build start-up capacity and organizational management, and improve knowledge management and medium- to long-term development. These formats will be continued in the future on multiple levels.

Our approach

Access to finance and investments is a major burden for start-ups and their growth prospects. Therefore, the matchmaking process between the supply and demand sides of the ICT market is an integral part of the project. During and after the training programs, attendees and entrepreneurs are paired with suitable investors, potential employers, and customers to create long-term employment opportunities.

Moreover, the project contributes to improving the framework conditions for employment prospects in the digital sector by initiating policy dialogues with public and private stakeholders on digital skills. A national digital skills strategy will provide a road map that spans both employers and education, creating clear objectives, and laying the foundations for a successful local digital-tech workforce.

The benefits

Since 2018, six Innovation Hubs have been set up and expanded in Baghdad, Basra, Mosul, Erbil, and Sulaymaniyah.



The Hubs provide co-working and/or makerspaces, which are equipped with modern machineries, such as 3D printers, laser cutters, and CNC machines. Each Innovation Hub has specific technical expertise that is complementary to the overall tech ecosystem. The training offered focuses on start-up promotion, such as incubator and accelerator programs, and specific tech qualifications in such as Programming, Artificial Intelligence, Electronics, and Computer-aided Design and Manufacturing (CAD/CAM) in addition to Workforce Development programs AWS re/Start. Trainings are also provided outside of the Innovation Hubs, for example during events for entrepreneurship promotion in the region of Anbar, The Bit Bootcamp in Sulaymaniyah, and through a Full-Stack Development Bootcamp in Baghdad. Apart from serving as training facilities, the Hubs provide community spaces for the local youth to exchange with like-minded peers.

They offer a safe environment, and a unique platform for young entrepreneurs in Iraq to network with potential partners and promote their own start-ups. in addition Since 2018, more than 8,000 persons – more than 1/3 of them women – successfully participated in training courses around digital skills, entrepreneurship, and soft skills. Furthermore, more than 365 ICT start-ups were supported in various ways.

An example from the field

As an example of digital skills development, Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally. ranging from infrastructure technologies such as computing, storage, and databases to emerging technologies, Such as machine learning and artificial intelligence, Data Warehouse, and analytics. ICT project has launched The AWS re/Start program in Mosul & Baghdad, 66 trainees were chosen (24 Females) joined the ranks of online training, and started their journey in the field of cloud computing. This program will help fresh graduates and the unemployed to find job opportunities in the field of computing. The program focuses on professional skills such as communication inside the work environment, time management, resumes, and learning how to conduct interviews with employers. It also focuses on learning cloud computing skills and obtaining a certification AWS Certified Cloud Practitioner certification.



AWS re/Start online training covers a wide range of topics related to cloud computing.

Published by Deutsche Gesellschaft für

Internationale Zusammenarbeit (GIZ) GmbH

Registered offices: Bonn and Eschborn, Germany

GIZ Office Iraq

World Trade Center, Erbil, Iraq

Contact person Jochen Zimmermann

jochen.zimmermann@giz.de

As at October 2022 Photo credits GIZ / Mosul Space / IOT Maker

Author Dalya Alrabed

Federal Ministry for Economic Cooperation and Development (BMZ) On behalf of

 $\ensuremath{\mathsf{GIZ}}$ is responsible for the content of

this publication. In cooperation with

Ministry of Planning, Iraq