

SUCCESS STORY

Layth Hamad

A Young Jordanian Engineer Solves a Familiar Development Problem



By the time he won first place in Jordan's first-ever Maker Competition, hosted in December 2015 by the USAID Jordan Competitiveness Program (JCP), Layth Hamad had already set his sights on a new kind of engineering, one that was just gaining attention in the Kingdom's universities. A fourth-year student at the Jordan University of Science and Technology, he was officially a Computer Engineering major. But his passion was the Internet of Things (IoT), a catch-all phrase for "smart" devices that could be monitored and controlled remotely through easy-to-use apps.

"During my last year at university," explains Layth, "I began work on my own IoT device, an app-connected mechanism for detecting when gas cylinders are getting close to empty." The idea, which seemed simple enough, aimed to solve a familiar problem for families reliant on the single-valve containers for everything from cooking to heating. With no way to predict when the gas would run out, these households ran the risk of being left in the cold—literally.

Anyone who's used this low-tech fuel source knows the predicament. Connected to a mobile space heater, the cylinders can warm a room in mere minutes. They can sputter out just as suddenly, though, and depending on the time of day, a replacement can be hard to find. In some developing countries, where the nearest gas vendor may be a day's trek away, anticipating when a gas cylinder needs to be replaced can mean the difference between eating or going hungry for the day.

That's why Layth's invention, which he called Clev-G, was a hit, not just at Jordan's Maker Competition, but worldwide. Since earning the JCP accolade in 2015, this young engineer has pocketed top prizes from Intel, the Arab Innovation Network, and the American Association for the Advancement of Science. Judges have cited Clev-G's clear development value and, since the app allows users to order gas refills directly from local vendors, it also is poised to have a positive impact on the local economy.

Layth credits his USAID-supported training, conducted in conjunction with Intel, with giving him the skills to succeed as an inventor and entrepreneur.

"The training was a very rich experience given by an expert team," he said. "It gave me the knowledge and the opportunity to learn more about entrepreneurship, how to convert my innovative idea to a company, and how I can lead and grow my business."

Layth now leads his own company, Libra Smart Home. Specialists in "designing smart home solutions," Layth and his team are putting the final touches on their two signature products— a smart detector modeled on his Clev-G prototype and a similar device to monitor water tank levels.

"We are in a stage where we are seeking investment to move the company to the next level," he adds. Brimming with optimism, this young Jordanian entrepreneur thinks cutting-edge technologies like IoT, blockchain, virtual reality, and 3D printing "will change the world in the very near future." And he is intent on being a part of the change.