## THE TIMES OF ISRAEL | www.timesofisrael.com

## QualComm founder a fan long before 'Start-Up Nation'

Irwin M. Jacobs prides himself on being one of the first US entrepreneurs to discover what Israel could do for multinationals

BY DAVID SHAMAH | January 31, 2014, 2:33 pm |

ome multinationals only became aware of the Start-Up Nation after reading the book of that title — at which point they rushed in, feet first, to grab a piece of Israel's tech magic for their companies. But others — call them the "old-timers" — knew the secret of Israel's success years before the country's technology prowess was in vogue.

Among those veterans is Irwin M. Jacobs, a cofounder and former chairman (now chairman emeritus) of QualComm, by far the world's largest cellphone technology company. "In the same way that QualComm was ahead of its time in cell technology development, I was ahead of my time in seeing Israel's potential," Jacobs told *The Times of Israel* on the sidelines of this year's Innovex event.

Jacobs was in Israel to speak at the event. He remained in an active role with the company until 2007, but he still attends board meetings — and he and his wife visit Israel on a regular basis, where they support various educational projects, especially at the Technion. Last year, the Jacobs' donated \$133 million to establish the Jacobs Technion-Cornell Innovation Institute (JTCII), part of the new Cornell Tech Campus being established in New York in conjunction with the Technion.

A huge corporation, QualComm — with a market cap in excess of \$100 billion — has 157 facilities in dozens of countries around the world, including Israel. Last year, the company celebrated the 20th anniversary of its presence in Israel, where it has developed some of its most innovative technologies.

Among the technologies developed by QualComm Israel are the company's m2m (machine to machine) cellular platform, which is used to track the location of pets, kids, the elderly, and property, a spokesperson said. It's part of QualComm's attempt to create an "Internet of Everything," where objects are intelligently connected through a combination of advanced wireless networks, modules, sensors and software to enable the real-time exchange of information — with key elements developed in QualComm's Haifa facility, the company said. Among the products that have resulted from that technology is Tagg, the pet-tracking device.

In addition, Israeli start-up Wilocity, which received a substantial investment from QualComm Ventures, the company's venture capital group, recently demonstrated multi-gigabit wireless WiGig chipsets, based on chips made by QualComm. The system can transfer high-definition

video at distances of up to 40 meters with speeds more than 10 times faster than current average Wi-Fi transmission rates, according to Wilocity CEO Tal Tamir.

QualComm has also acquired several Israeli companies. In 2010, the company bought iSkoot, which develops social media apps for AT&T, Verizon and T-Mobile, among others. In 2012, the company scooped up DesignArt Networks, which develops small cell (femtocell) technology for cellular base stations and wireless backhaul infrastructure, as well as the assets of EPOS, which specialized in digital ultrasound technology.

Jacobs started his career in telephony and communications in 1968, when he founded Linkabit. The company eventually morphed into QualComm in 1985. By that time, Jacobs was very familiar with Israel — and Israelis. "I come to Israel about twice a year; the first time was right before the Yom Kippur War in 1973," he said. Throughout QualComm's early years, "a number of Israelis came to work with us in the US. Some stayed and some went back, and we kept working with them, until we eventually decided to open an Israeli office in 1993," explained Jacobs.

Among QualComm's great contributions to mobile technology was development of the CDMA (Code Division Multiple Access) standard, which paved the way for fast 3G and 4G communications. Israeli teams helped to develop the standards for those technologies, Jacobs said.

In the early days of cellphone technology (the mid-1990s), few expected that the mobile revolution would reach the proportions of today. And in recent years, bandwidth — the amount of space on the radio bandwidths dedicated to cellular communications — has become very crowded, because of the proliferation of devices and services that consume so much data. Israel, said Jacobs, is an area where QualComm is developing the technology to solve this data-traffic mire.

"Israel's biggest contributions to mobile technology is its ability to design better ways of controlling things, increasing data rates and enabling us to squeeze more out of existing bandwidth, using technology such as femtocells," Jacobs said. "In addition, Israelis are developing some wonderful apps, such as those that can be used for telemedicine, enabling doctors to diagnose and consult with patients remotely."

Israel has always held an important place in his heart, "both because of my background [Jacobs was born to a Jewish family in New Bedford, Massachusetts, in 1933] and for professional reasons. Israel is a very admirable country with great universities," he said. "The kids go to the army and come out very mature, displaying great talent. We're very pleased to be a part of it, and pleased that Israel is an important part of QualComm."

The annual Innovex event bring together some of the leading figures in tech from around the world to discuss new and upcoming technologies, said Shlomo Gradman, chairman of the event. "Innovation to Israeli high tech is like fuel for a vehicle," Gradman said. "Innovation and creativity are our biggest assets, and we have to grow them like any company would do with its key and competitive advantages.

"This is why I initiated Innovex," he added. "I am very proud to see so many companies and

organizations that joined our initiative and worked together to secure the next generation of innovation in Israeli high tech."

© 2014 THE TIMES OF ISRAEL, ALL RIGHTS RESERVED