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# Technological innovation in the Middle East



**When you think of the regions of the world that are pushing ahead with technological innovation, you would not necessarily think of the Middle East straightaway. But according to a recent global innovation index, countries there are starting to make a name for themselves in tech circles.**

INSEAD Professor in Business and Technology, [Soumitra Dutta](#), has just compiled this index, which places the United Arab Emirates in 14th place, with Israel 18th in the world and Kuwait ranked 30th.

Dutta says the UAE, which comprises Dubai, Abu Dhabi and five other emirates, is “booming and is developing human capital and clusters, especially in technology ... and the whole country is geared for future growth.”

## Hubs of innovation

As for the UAE’s strong focus on human capital development, he says the region realises that its competitiveness depends to a large extent on its ability to attract skilled labour from abroad. That means, it is important “to

provide a conducive and a good living environment for knowledge workers from around the world.”

In addition to investing in people, the region is also investing heavily in the development of innovative clusters and is “trying to attract leading companies in various sectors and ... create hubs of innovation,” he says.

He adds that Israel is a good example of another country that has done extremely well. It has a long tradition of innovation in the high-tech sector, helped by its well developed tertiary education system. “Interestingly what you see in Israel are the very strong links people have to the military,” Dutta says. “In fact, (because) a lot of the adult males have to go through military service ... (this) brings in a high degree of knowledge of project management, of business management, which translates well into entrepreneurial ventures later on.”

INSEAD’s global innovation index aims to show the degree to which individual countries and regions are responding to the challenges of innovation. Drawing on data from the World Bank and other sources, it ranks nations in terms of inputs (institutions and policies; human capacity; infrastructure; technological sophistication; and business markets/capital) as well as outputs (knowledge; competitiveness; and wealth.)

## **Score cards**

The UAE and Israel scored well in terms of human capacity, ranking 5th and 6th in the world respectively, but did not fare quite so well with regards to their institutions and infrastructure. The UAE ranked 6th globally for knowledge, while Israel came in 9th for technological sophistication. However in terms of competitiveness, while the UAE ranked 13th globally, Israel came in a poor 41st, partly due to the political situation there.

But while Israel may be struggling regarding competitiveness, it does have the highest per capita number of engineers in the world, twice that of the US and Japan. That said, many Israeli engineers are choosing to move to the US and elsewhere to set up companies.

## **Brain drain or gain?**

Even so, Israel is actively encouraging “the immigration into the country of skilled engineers and ... emigrants from other parts of the world,” in particular Russia and former Eastern European countries, Dutta says. “So Israel is managing this inflow and ... circulation of brain capital very effectively. And even with the United States, a lot of Israelis or people of Israeli origin who go to the US ... often maintain very strong links with the home country and they come back and work very closely with companies in the region.”

The Middle East scored highly in the index in terms of wealth, thanks in no small measure to oil revenues, with Kuwait ranked 8th and the Emirates in 10th place globally. However, while the Middle East has relied on oil for decades, those reserves will run dry one day and so countries in the region are increasingly looking to the technology sector. Consequently, Dutta says the UAE is focusing “very heavily on innovation ... to diversity its economy (and) its base of revenues, because it knows very well that oil will not last forever.”

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