

## R&amp;D

# The importance of strategic thinking

THE World Economic Forum's Global Competitiveness report for 2009-2010 paints a dispiriting picture of innovation in the Gulf. Five of the six Gulf Co-operation Council (GCC) countries produced only one or two patents per million people in 2008. In the world's top 10 innovating countries, this figure averaged 175.

There is no doubt that Gulf states have a long way to go to rectify their innovation deficit. However, there are numerous valuable approaches that the Gulf countries are adopting to develop knowledge-based societies. This is commendable as it focuses on the region's most important resource: the human capital of its youthful population.

The Gulf's demographic structure is often regarded as a looming unemployment crisis. Yet viewed another way, it could be a blessing.

Jumping one or more generations in knowledge building becomes possible if sufficient support and resources and well thought-out research and development (R&D) strategies are brought together.

There are a number of promising, but isolated, developments in the region. Firstly, all GCC countries follow strategies for development – for example, Bahrain's Vision 2030 – which underline the importance of long-term planning.

Secondly, countries are using their financial resourc-

es to improve education opportunities. Saudi Arabia, for example, has earmarked 25 per cent (\$36.7 billion) of its 2010 budget for training and education.

Thirdly, institutions, such as the Shaikh Mohammed bin Rashid al Maktoum Foundation, the Qatar Foundation, Young Arab Leaders and Bahrain's Crown Prince's Scholarship Programme, have implemented sophisticated development projects to develop Arab leadership.

Fourthly, enormous efforts are being undertaken to create suitable and sustainable infrastructure, both physically – such as the examples of Qatar Science & Technology Park, and the King Abdulla University of Science and Technology – and strategically through partnerships with international universities, such as MIT.

Operationally, efforts are also being made to overhaul the Gulf's broadband connectivity while entire libraries are being translated into Arabic.

Last but not least, the implementation of intellectual property laws and regulations within the framework of the World Trade Organisation (TRIPS agreement) will greatly enhance legal security and protection for research-intensive companies.

All these developments are



important, and show the GCC's seriousness in developing knowledge-based societies.

But alone they are not sufficient. A dedicated R&D strategy is needed to define the specific areas where GCC countries aim to become leaders.

An R&D strategy is the missing link between the long-term strategic plans for the national economies and the R&D infrastructure. The Masdar initiative in Abu Dhabi is a good example. It has a strong long-term vision and sufficient financial resources, combined with a strategic concept involving the Masdar Institute of Science and Technology in collaboration with MIT.

Masdar provides a useful model for other projects to follow. The current lack of private industrial and R&D activity in the region allows an open discussion to be started from scratch, addressing both education and state-owned basic industries.

It is worth noting that local and foreign universities in the Gulf focus on teaching without significant research.

Once the R&D goals are defined, the development

of related non-university research institutions and specific industries must create an environment of mutually enriching R&D activities.

This works particularly well when focusing on small and medium-size foreign players with strong growth and a strategic interest in the region.

Combining self-motivating private companies with sufficient early-stage financing and support of spin-offs from research centres creates a critical mass of knowledge clusters. It also provides a positive perspective for the companies and the population to embrace knowledge-based societies.

The options for potential R&D goals in the Gulf are numerous: nanotechnology, virtual reality and the 3D film industry, electric vehicles, aerospace and many others could provide the Gulf countries with a head start. ■

*Bernd Hoefer is Chairman and CEO of A9C Capital – Business Consultants & Technology Advisors WLL*