

QATAR INNOVATOR

News from the frontline of technology business in Doha

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QATAR SCIENCE & TECHNOLOGY PARK  

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VC: A China in the Wraps?

With populations of 1.3 billion and 900,000 respectively, it is rare than comparisons are drawn between China and Qatar. But finance experts are now saying that the venture capital (VC) industry in the Gulf resembles the Asian giant before it started to boom.

What's more, the tantalising growth potential is starting to attract some well-known names into the local VC space.

Rehan Atiq, co-founder of MXV Capital and a nine-year veteran of the VC industry, says the Gulf today is like China in 1994: the companies that get in on the act early can enjoy enormous opportunities. "That the market is underdeveloped makes it harder, but the opportunities are there".

Imagine it and they will come



The VC industry in the Gulf is being compared to China in the 90s

In Qatar a remarkable diversity of organisations, from both the public and private sectors, is getting into VC.

HSBC has been in Qatar since 1954 and has recently established a VC unit, says Kapil Chadda, HSBC Qatar's director of investment banking. Meanwhile Qatar Science & Technology Park is assembling a \$30m New Enterprise Fund and \$100m Technology Venture Fund. And last December MXV Capital, a dedicated VC firm, set up headquarters at the Qatar Financial Centre. It says it has identified start-up companies and will be investing in them over the next 12 months.

It doesn't stop there. Several banks and insurance companies are dabbling in venture capital through HSBC says Chadda. And there have been rumours that Qtel, the national telecoms provider, may start a corporate VC arm to gain exposure to new and diverse businesses.

With so much interest so early in the industry's development, is there a risk that the growth is unsustainable – like Asia's proved to be in 1997?

Plan ahead but act fast

In crucial ways the Gulf's VC industry is very different from Asia's in the previous decade. The stunning growth of the "Asian tigers" was driven by foreign investment, and when investors changed their mind in the late 1990's those economies ground to a halt.

Because much of the money flowing into Gulf funds is from local organisations, investments can happen faster but also with more certainty for the long term says Mikko Suonenlahti, general manager of VC firm Qatar Capital Partners.

Another difference is that investment opportunities in the Gulf are being spawned by fundamental economic development, not just booming asset prices. Qatar Foundation, for example, has been building a national education and research capability that it hopes will underpin long-term growth of knowledge-based companies.

Suonenlahti has spent years as a VC in several countries, and says this is first time in an emerging country he has seen all the major pieces of the puzzle in place. "All we need to do now is to act fast to utilize what Qatar has to offer."

Hurdles on the racetrack

While the fundamentals may be falling into place, the Gulf is not yet Silicon Valley of course. Here, though, the bottlenecks relate to attitudes and customs rather than a lack of cash.

Risk aversion is a big obstacle says Imad Ghandour, principal of private equity at Gulf Capital. He finds that investors in this region prefer traditional sectors such as real estate and the stock market, and have been amply rewarded for doing so.

This has created something of a paradox: High returns from "safe" sectors have made investors rich, but at the same time reduced their interest in riskier sectors like VC.

Rehan Atiq of MXV Capital points to "standards and networks" as being crucial, but lacking, in the Gulf. Standards are what investors and entrepreneurs look at when assessing a deal, and networks are what brings them together in the first place.

Without standards, expectations can get out of line. Atiq says a big problem is that Gulf investors sometimes demand excessive equity for their investment dollars. "Frankly, until that changes I am not sure how the VC sector is going to take off in the region".

Meanwhile good networks and trust between parties involved in a venture proposal—"social capital" as it is called—can tangibly lower the barrier to completing a deal.

This leads to another paradox: Personal relationships are especially important in the Gulf for raising VC (see article on survey results), but at the same connections between entrepreneurs, investors and technologists are not yet widespread.

Exits front and rear

Another area where VC norms differ in the Gulf is in "exits" – the point at which the investor sells his stake in the venture. Imad Ghandour of Gulf Capital says a business plan should outline when and how the VC will exit, but this is hard to achieve in practice.

The geography of the Gulf can be an obstacle. If the start-up is catering for a single country in the region (with the exception of large Egypt and Saudi Arabia) it difficult to build the company to a scale that interests institutional investors, says Rehan Atiq. To deal with that, "investors and entrepreneurs have to build ventures that target a regional market and plan for that from day one."

Mikko Suonenlahti of Qatar Capital Partners points out, tongue in cheek, that bankruptcy is the king of exit options. Second to that would be acquisition by a major company in the same industry, but too often the investor gets "stuck" with a start-up. He points out that with big companies like EADS, GE and Shell setting up technology centres in Qatar, the opportunity to sell a start-up is improving greatly.

Divide and multiply?

Brimming with oil revenues and looking to diversify their economies, Gulf states are putting government money into VC funds. Imad Ghandour of Gulf Capital stresses that this needs to be done in a way that helps build the private industry, rather than crowds it out.

He recommends that government VC funds should be divided and run by five to ten private fund managers, rather than as a single state-run fund. Ghandour cites Malaysia and Israel as successful examples of this approach, where government investment funds developed not only start-up companies, but also the VC industry itself.

QSTP is taking a hybrid approach. Two of its three funds are managed by Qatar Capital Partners, a joint venture between Qatar National Bank, Ansbacher, and Oxford Capital Partners of the UK. Mikko Suonenlahti, its general manager, says it is structured and run as a private firm, but splitting the funds among multiple firms would make them unworkably small. Perhaps that portends one more similarity between the Gulf and China: substantial government involvement at the start, and a steady increase in the role of the private sector.

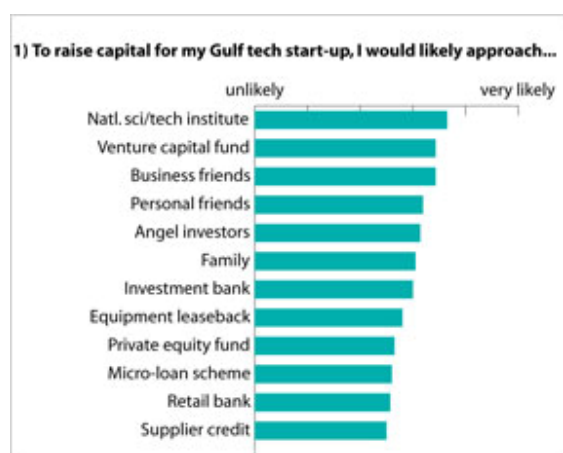
VC Survey Results Are In

In June and July QSTP conducted a survey on how venture capital is practiced in the Gulf. Here are some highlights.

Who would entrepreneurs turn to for start-up capital? Apart from their own savings, the top answer was national science and technology institutions (see chart). Fifty-five percent of respondents said they were likely to pursue this option and only 15% unlikely (the rest neutral).

While flattering to QSTP and its peers, many such funds—including QSTP’s—are yet to become fully active. This suggests that Gulf residents are optimistic and trusting of government support programs.

Other attractive sources were angel investors and dedicated VC funds (each 53% likely to be pursued). At the other end of the scale, mainstream banks in the Gulf are perceived as being unwilling to lend to small young companies. Only 19% of respondents said they would be likely to approach them.



Despite the importance of personal connections in the local culture there were mixed feelings about borrowing from relatives: 43% were likely, but 33% unlikely, to tap their family for start-up money. They were only slightly more willing to approach personal friends.

That’s not to say that the human connections don’t matter. Asked what they would look for in an investor, the key attribute was “good cultural and personal fit” (important to 76% of people and unimportant to only 5%). And the investor’s “wasta” was also seen as critical by a similar number.

While people matter, so do the numbers. Respondents cared much more about how well an investor’s previous projects have performed than the name on the door. Seventy-seven percent said track record was important, while only 43% would seek out a well-known “brand name” partner, and just 24% gave weight to whether the investor was for-profit or philanthropic.

Finally the survey asked: what are the main challenges that Gulf entrepreneurs face when raising VC? Number one was, as indicated above, a reluctance by traditional banks to lend to them. The need for collateral was seen as an obstacle by three quarters of respondents; only 5% thought it wasn’t a problem.

There is little chance of changing banks’ lending policies, but there is scope for lowering another hurdle. A high 76% of people cited “asymmetric information” (the investor having less understanding, and therefore less confidence, about a venture than the entrepreneur) as being a significant obstacle in the Gulf.

Yet the chasm between investor and entrepreneur should narrow as VCs that specialise in technology-based business plans, such as Qatar Capital Partners and MXV Capital, enter the market. Meanwhile groups like the Gulf Venture Capital Association are helping to network, educate, and build mutual understanding between industry participants.

Full survey results are available at QSTP’s website, www.qstp.org.qa

Qatar University Revs its Research Engine



Dr. Hassan Al Derham is linking Qatar University's research with industry

Qatar University's reform project, which profoundly reshaped its courses and administration three years ago, has also breathed new life into its research arm.

"The university should play a role as the think tank of the country" says Dr. Hassan Rashid Al Derham, who became Associate Vice President of Research in September 2006.

Al Derham's position itself is a product of the reform process, which has seen the university's research budget grow to around \$1 million per year—multiples of its previous level. The renewed focus is already paying off, with the university scooping 31 of 61 research grants offered by Qatar National Research Fund for undergraduate projects earlier this year.

Under the reforms, responsibility for setting research priorities and approving budgets shifted from a central university authority to the individual colleges. Now research projects are now better aligned with the expertise of faculty and the demands of industry, says Al Derham.

The College of Engineering, for example, is focusing on "lifeline projects"—infrastructure such as roads, power and sewerage that is critical to Qatar's continued industrial growth.

While the university transfers power to its colleges, it is also promoting collaboration between them. "We tried as much as possible to focus on multi-disciplinary areas for our new research complex" says Al Derham.

The \$60 million complex, due to open in 2009, will have four major centres: gas processing, materials science, environmental studies, and a central lab.

"It is important that the research efforts we are making integrate with Qatar's economy and society" he continues. The gas processing centre, for example, will have both research and teaching roles, providing vital training for workers in Qatar's oil & gas industry.

How can companies in Qatar partner with the university? The main ways this happens is through students' final-year research projects and summer internships. Some companies also sponsor faculty-lead investigations. The Office of Research, which Al Derham heads, helps establish and oversee such relationships.

More than 90 research projects are now underway at Qatar University, "a large amount of which are with industry" says the vice president. With 8000 students and 640 faculty at the university there are opportunities—and the intent—for plenty more.

ConocoPhillips Plans Water Technology Centre



ConocoPhillips' QSTP centre will focus on water production and usage

In July ConocoPhillips announced plans to establish a Water Sustainability Centre at QSTP.

The centre will examine ways of treating and using by-product water from oil production and refining operations, as well as other projects relating to industrial and municipal water sustainability.

When companies produce oil and gas, water often is produced along with the oil. The global average is roughly three barrels of water for every barrel of oil, estimates ConocoPhillips.

Impurities usually make the by-product water unusable without costly treatment. ConocoPhillips aims to develop more efficient and cost effective treatment technologies at its Qatar Water Sustainability Center.

Proposed uses for treated water could include crop irrigation, livestock watering, wildlife habitats, and industrial cooling, potentially leaving more fresh-water available for domestic use.

ConocoPhillips plans to invest \$25 million in the center over its first five to seven years. The center will conduct research on and develop and test technologies relating to water production and management.

Further, the center will be designated as ConocoPhillips' worldwide center for water technologies, disseminating findings to the company's global operations as well as to local government and industry partners.

Oil Companies or Water Companies?

"Produced water" is water that is trapped in underground formations and brought to the surface along with oil or gas.

It is estimated that on average the oil industry worldwide produces three barrels of water for every barrel of oil. But as oil and gas fields mature the water multiple tends to increase.

The US has relatively mature wells. The industry there produces around 1.9 billion barrels of oil and 14 billion barrels of water a year. In small old "stripper" wells—which account for 75 percent of US wells—the water to oil ratio can be as high as forty to one.

Polish Your Plan and Attract Investors

QSTP has a launched new initiative that helps technology entrepreneurs turn their ideas into winning business plans.

The Investor Readiness Program provides coaching, workshops and seminars for Qatar residents that have a business concept in mind and want to turn it into reality, or simply want to learn how to go about designing a company.

For applicants who intend to start a new technology company within the next year, QSTP can allocate a one-to-one coach to help the entrepreneur become "investor ready". The ultimate step in this process is meeting with and pitching to investors.

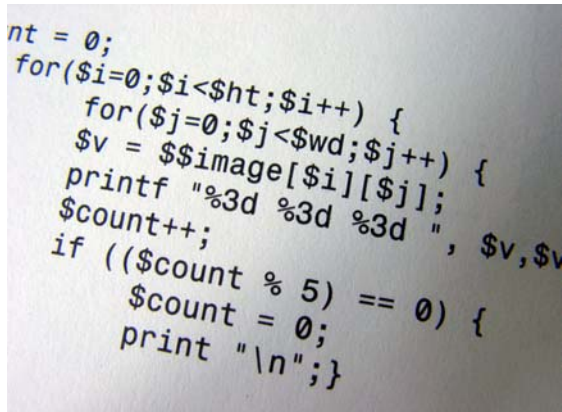
If you are not ready to start a company yet, but want to pick up skills for planning one, you are invited to attend free seminars and workshops hosted by QSTP.

"It's pretty hard to grow a successful technology business without planning it thoroughly from the start" explains Des Ryan, manager of the Investor Readiness Program.

"This new program helps Qatar entrepreneurs to not only think about how to build their company, but also to share their vision with others. A credible business plan is absolutely essential for getting investors and key staff on board".

More information on the Investor Readiness Program, including a schedule of seminars, is available on QSTP's website: www.qstp.org.qa

Open Sourcerers Come to Town



```
nt = 0;
for($i=0;$i<$ht;$i++) {
  for($j=0;$j<$wd;$j++) {
    $v = $$image[$i][$j];
    printf "%3d %3d %3d ", $v,$v,$v;
    $count++;
    if (($count % 5) == 0) {
      $count = 0;
      print "\n";
    }
  }
}
```

Qatar Perl Mongers brings together Doha's open-source aficionados

Open-source software can be obscure for the tech savvy, let alone the average computer user, but Qatar Perl Mongers is working to change that.

Universities in the West were the original breeding grounds of collaboratively-written free software, like the Linux operating system, in the 1980s and 90s. Although open-source users and developers have tended to be skilled IT "geeks", user groups are becoming an important part of the movement.

Perl Mongers is a loose international association of open-source software users. Qatar Perl Mongers is one of only three chapters in the Middle East. One of its members is Nigel Gourlay.

"For many IT professionals and enthusiasts open-source software is used because it is free in two senses of the word. Free software is attractive because it is usually cost-free, but it also gives users freedom to modify the application to their specific needs" explains Gourlay.

Qatar Perl Mongers provides a professional and social network for free software enthusiasts through their mailing list, informal social events and peer support group. Gord Cumming, a Canadian IT consultant living in Doha says, "I've been involved in software development for over 30 years, but I know that I can turn up to a Perl Mongers meeting anywhere in the world and learn something new."

"There are a lot of free software applications out there that users aren't aware of" says Gourlay. "To tackle this for the local IT community Qatar Perl Mongers operates a peer support group through our notice board, to point users in the right direction and collectively answer questions about accessing the right software for a particular purpose."

More information on Qatar Perl Mongers is available on their website, www.qatar.pm.org

Learning on the Rocks

By Qatar Shell Research and Technology Centre.



Shell has installed a subsurface modelling cluster at its temporary QSTP office

Shell is supporting its Gas To Liquids (GTL) and Liquefied Natural Gas (LNG) projects and its relationship with Qatar through the establishment of the Qatar Shell Research and Technology Centre (QSRTC). The activities of the Centre will initially focus on Exploration and Production (EP) and GTL technologies, as well as on related training programs to enable sharing of technology and best practices.

The QSRTC EP team is part of Shell EP Technology (EPT), the technology division of Shell's EP business, located in Rijswijk and Houston. An eight people strong multi-disciplinary team of geoscientists and reservoir engineers has commenced operation in 2005 from its start-up location at Education City (see photo) and continues to mobilise resources for the move to QSTP later in 2007.

The team will serve as a Shell Carbonate Centre of Expertise in the Middle East by concentrating on the development and research of new technologies and the application of integrated carbonate-specific research to projects in Qatar and the region.

Porous and permeable limestone rock formations form carbonate hydrocarbon reservoirs that hold about 55% of global oil reserves and 45% of global gas reserves. They are the dominant productive intervals in the giant fields of the Middle East and North Africa.

The natural gas for Shell's GTL and LNG projects in Qatar comes from such a giant carbonate reservoir. The offshore North Field is situated off the northeast shore of the Qatar peninsula and contains huge gas reserves in a carbonate rock formation called the Khuff at a depth of more than 2.5 kilometres.

Given the complexity and uniqueness of carbonate reservoirs, an integrated approach to carbonate reservoir management is essential. The multi-disciplinary approach is focused on the synthesis and integration of subsurface data (eg. seismic, rock, and reservoir engineering) with leading-edge technology and research into internally consistent 3D reservoir models.

Yet, it is often difficult for the geologists in such integrated teams to share some of the concepts relating to the setting in which the reservoirs formed, inter-well correlation, connectivity and reservoir heterogeneities with their colleagues.

One of the biggest challenges is trying to get an appreciation of the scale of the reservoir. How can non-geologists gain a better understanding of the various aspects of reservoir geology?

By exposing them to geology in outcrop, multidisciplinary teams can share knowledge and expertise and can overcome potential behavioural barriers to effective collaboration. Hence, the QSRTC EP Team decided to put together a field workshop on outcrops in the Oman Mountains (see photo), allowing the participants to get hands-on experience of geology.

Exercises were designed with the aim of fostering collaboration. A total of 43 delegates participated from Qatar Shell operating units, ConocoPhillips and Petroleum Development Oman. Feedback illustrated that these were highly successful events.

More Khuff workshops, both technical and non-technical, are planned in the future, so watch this space!



QSRTC EP team went 'learning on the rocks' in Oman

About and contact

Qatar Science & Technology Park provides premises, services and support programs that help companies to develop and commercialise their technology. It is located with top-ranked universities at Education City, connecting Qatar's students and faculty with innovative companies. It fosters start-up technology ventures through a business incubator and investment funds. Members include EADS, ExxonMobil, GE, Microsoft, Shell and Total, as well as Qatari companies like iHorizons and Q-CERT. Its first buildings open late 2007. <http://www.qstp.org.qa/>

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