Google focuses on Sustainable Data Centre

Google is focused on efficiency and content innovation, and that drive extends to its data centres. "We're looking for a better, faster, cheaper way of doing this. At Google it is about data driven innovation. We prefer to buy commercially, but if it doesn't exist, we will build it ourselves," said Joe Kava, Google's VP for Data Centers, of his priorities for Google's data centres.

Google's Asian data centres are in Singapore and Taiwan. "We knew we were going to be in Asia and had to grow in Asia," said Kava. "We're obsessed with delivering a wonderful user experience. It is all about speed. You have to be near a large user population. In Asia, there are large populations and more are coming online. From July to September this year, 60 million new Internet users entered the community in Asia, on mobile, for the first time," he said.

Asked about how Google selects sites for data centres, Kava said that "there is no perfect place on earth for a data centre". Some of the criteria that Google uses in deciding on the site for a data centre, Kava said, include the business climate, stance for net neutrality, cost of power, and how efficient the data centre can be made.

Singapore was an easy decision, he noted, with an excellent business climate, the quality of education in the country, a highly trained workforce being some of the plus points. Singapore
also has an ecosystem that surrounds the data centre, from disk manufacturing to semiconductor manufacturing, making it conducive for working with partners, Kava said.

Dr Pantelis Alexopoulos, Executive Director, Data Storage Institute at A*STAR, added that Singapore is unique in that it is a logistics hub and banking hub, respects intellectual property laws, and doesn't have "political mood swings". "In five hours you can touch 90% of Asia," he said.

While the relatively high temperatures in Singapore were not a problem as some of Google's data centres in parts of the US are already built to withstand hot summers, the challenge in Singapore was one of limited land area, Kava said.

"It's much easier to build if you have a large plot of land. The challenge was physical construction. It's do-able, it's a logistics challenge," said Kava of Google's first multi-storey data centre. Kava said the partners Google worked with in Singapore were very flexible. "They adapted to our requirements which were not what they were used to. The business climate was very receptive," he noted.

The future is all about sustainability for Kava. "Most data centres are nowhere where they should be. We're trying to do the right thing from a sustainability perspective," Kava said. "We would like to build out more with renewable energy, including wind, solar and hydroelectric power. We’re working with our partners to see what we can do; ideally we want to buy 100% renewable energy."

Kava also advised businesses to weigh the costs of running a data centre if it is not their core business. "For Google, it's our primary business but many businesses should not run their own data centre, it's not their core business. Most startups wouldn't have their own IT department, they do everything from the cloud. If legacy companies aren't careful, they will get run over," he said.

If it is not your core business don't do it," agreed Dr Alexopoulos. "It doesn't give you anything but pain."

DCD Intelligence released the results of research which revealed that sustainability is one of the key concerns for data centres in Singapore.

*Posted by Joy Tang, 22 October*

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