



## Cheap PC for poor kids plan starts a chain reaction

### A project to deliver computers to the Third World touched off the netbook revolution, Charles

CREATING a scheme to supply Third World schoolchildren with free laptops sounds like a philanthropic no-brainer, but Nicholas Negroponte earned the scorn of the entrenched PC industry with his One Laptop per Child program.

The cheap-to-make, rugged, low-power XO-1 laptop that came out of Negroponte's efforts ruffled the feathers of everyone from former Intel chairman Craig Barrett to Dell supremo Michael Dell.

In the end, the distinctive green-and-white educational computer helped spawn the new class of cheap, low-margin notebooks we now know as netbooks, so maybe the PC hardware industry was right to be suspicious.

Negroponte handles the visionary side of the OLPC program and he has a hard-nosed financial ally in the form of Charles Kane, OLPC's full-time but unpaid president and chief operating officer.

Kane made his money and reputation as a tech industry chief executive and chief financial officer, including a stint as financial chief of RSA Security before it was swallowed by EMC.

Kane was in Australia last week to help push along the local OLPC program, which has so far delivered 400 machines to needy communities in Australia.

#### How does OLPC fund itself?

Originally it was by way of corporate sponsorship. We had Google, News Corp, Nortel, AMD and other companies put in venture money, if you would — only it was for a non-profit purpose.

That was the initial capital the project needed to get off the ground. After that we did a couple of things like the give-one-get-one initiative, which involved giving away about 100,000 computers (in exchange for a donation). We used some of that money to fund the internal requirements of the non-profit operation.

We pride ourselves in that well over 90 per cent of donations go towards supply of the computers to the children and we keep it really skinny from an organisational standpoint.

#### So the day-to-day funding now is just from donations?

It's donations and a very, very skinny margin from the computers themselves.

#### What is the US-dollar baseline price of an XO-1 these days?

It depends on the volume. I have to price it on volume and opportunity — if we see a tremendous opportunity to seed a project that could turn into a huge volume project, we price it aggressively. If it's a one-off, the pricing is different.

The price is typically between \$US185 (\$226) and \$US205.

#### Have corporate sponsors become more stingy as a result of the global financial crisis?

Yes. We had a give-one-get-one initiative two years ago that was very successful, and in this past year that approach was not successful.

Not only in the corporate sphere but also with individuals, people are just nervous about their finances.

Contributions have really shrunk across all non-profits in the US and elsewhere. It's about 50 per cent off from the year before.

#### How does the year ahead look?

One of the things we had not done in the past is target individual corporations, because we didn't really have to. We just started doing that and we are having a lot of success because companies really relate to the project as it's to do with children.

A good example is an initiative we call the OLPC Corps, where we sent 33 teams to 18 countries in Africa and each team deployed 100 computers and had \$US10,000 for food, travel and expenses.

That was funded by the banking consortium Swift, and General Mills, a large food conglomerate in the US.

#### Your career in IT was mostly on the finance side. Do you find that helps with running a charitable, not-for-profit tech company?

I find it incredibly helpful. I've been chief executive and finance chief of a number of public companies in the US and I don't find much difference between for-profits and non-profits in terms of sustainability.

Our purpose is not to supply bottom-line

### Kane tells Stuart Kennedy

profit, but in order to keep the operational requirement sustainable the business modelling and project management is very similar.

You still have a supply chain and a financial structure with letters of credit. It's more challenging on the financial side with a non-profit because we get no credit with money.

There's no front-end capital — everything has to be money on the table. As a result, all our business has to be done on letters of credit, which means we need the money ahead of our product. I don't have 90-day collection terms.

It's tight as elastic ready to snap.

**During its genesis, the OLPC program scored some scathing criticism from the entrenched PC industry. Bill Gates said get a real computer, Intel's Craig Barrett mocked it as a gadget and Michael Dell said laptops wouldn't make much difference in the lives of underprivileged kids. Why did it get so many heavyweight detractors. Were they afraid of the OLPC concept eroding hardware and software margins?**

It amazes me. In the hardware industry OLPC was a major threat to margins and I know as a former chief financial officer with all those netbooks now out there I wouldn't be happy with those margins, no matter how successful the volumes are.

On a relative basis, compared with their old models of laptops they are probably making one-third to one-fourth the margin they are used to,



maybe less.

I don't think they wanted the market to go in that direction this quickly.

On the software side I think Bill Gates's comment was an early one and I don't think he would say that today.

After the success and the impact we have had he would take it very seriously now and we have an agreement with Microsoft so we are selling Windows XP as part of our dual-boot offering with the computer.

**How many OLPC machines are out there now?**

Worldwide we have just over 1.2 million computers deployed and a backlog of almost 600,000 and full deployments in two countries — Uruguay and Peru.

The Uruguay deployment will be completed in two months, meaning that every child in public primary schools in that country will have an XO-1. In Peru over the next nine months we will roll out 900,000 computers in public primary schools.

**How many people work for OLPC?**

Some of us, like myself, are pro-bono, so I work full-time but don't get paid for it — as does Nicholas Negroponte.

If you count our engineers, both consultants and full-timers, we have about 15 engineers worldwide.

We also have a community, particularly in software, where people contribute to various applications as well as various drivers.

We also use the Sugar software, which is also a community.

**How many people would you say were in the wider OLPC community?**

If you did a headcount as if we were a corporation I would say we had access to between 50 and 75 engineers worldwide.

**Does the advent of cheap netbooks have the potential to make the OLPC program redundant?**

I wish it would, actually. We never wanted to be in the computer business and Nicholas and I tried very hard to get other computer companies to build our product. But imagine what the margins would be for a non-profit — we are not

trying to make money on this computer, so our role in the market is very different from what shareholders expect of their companies. That means there is a conflict of interest right away.

As much as I would love to see them build a computer that's made for children at a very inexpensive price, they are looking on the commercial side of how they could make money on this technology — as they should.

**So we will have two streams of cheap notebooks — the netbooks and the OLPC-type machines?**

The features that our computer has are not attractive to the commercial world, whereas there are things they do — such as having a hard drive with an open fan — that would last about 30 seconds in Africa.

The ruggedisation is something we would love to see them do, but from

a commercial standpoint they are not willing to.

**Nicholas Negroponte recently said tying the Sugar application software so tightly to the BIOS in the XO-1 was a mistake.**

I saw the comment from Nicholas and I'm not sure what he meant by that. Sugar has been important for us and it's a tremendous application for the school systems.

When you talk about Sugar being offered to the general public with Sugar on a Stick (the Sugar application on a USB memory stick) we are happy to see that happen.

The more ubiquitous it becomes as a school application the more it drives the educational use of netbooks, and that's a good thing. It would have been nice for Sugar to have been available from the beginning with many computers and not just the XO1.

**When are we likely to see the updated Gen 1.5 machine in the field? I believe prototypes become available for testing at the end of August.**

It will be generally available in late November and we are pretty excited about that machine.

**How is the development going for the XO-2?**

It's ongoing. Nicholas is getting together more sponsor groups and more or less a consortium, but he would be better to talk about that. I'm most focussed on the 1.5 machine and Nicholas is the visionary working on the next generation.

**The design of the XO-2 looks like it could serve as a commercial consumer device as well as a Third World educational device. Is there any chance of that happening?**

That's not the purpose of it, but if it drives prices down from an e-book perspective as well as an application perspective it has served its purpose in the educational world.

One of the reasons for the dual screens is to make it more like a book and to have the effect on a child of having a book in his or her hand.

**Could you do a commercial version?**

We struggled with this with the first machine. There were a lot of people pressuring us to sell it commercially — put it in Wal-Mart, put it in an online catalogue.

We resisted that because it wasn't the purpose of the mission and I don't believe the purpose of the 2.0 mission is any different. It's about education and the technology is only a tool, not a means to an end.

**Why does a rich country like Australia need OLPC?**

I believe every country could use this initiative to supplement educational delivery.

Our initial focus was Africa because of the desperate situation of their education systems.

What has happened over time is an emergence of this type of technology being used anywhere. We had a lot of success in Uruguay, which is not by any measure a poor country.



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What they point out is how important it can be for their education system when every child has the same delivery vehicle.

**Given the original nature of the program, wouldn't you be disappointed with the pro-**

**gress of deployments in Africa?**

No question. We had promises from a number of African nations, they reneged on their promises. Unfortunately, politics took away from what could be done for education. It's too bad.



### THE WORLD ACCORDING TO CHARLES KANE

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**The crisis:** Contributions have really shrunk across all non-profits in the US and elsewhere. It's about 50 per cent off from the year before

**Business model:** You still have a supply chain and a financial structure with letters of credit

**Industry resistance:** In the hardware industry, OLPC was a major threat to margins and I know as a former chief financial officer with all those netbooks now out there I wouldn't be happy with those margins, no matter how successful the volumes are

**Progress:** Worldwide we have just over 1.2 million computers deployed and a backlog of almost 600,000 and full deployments in two countries — Uruguay and Peru

**Commercialisation:** We resisted that because it wasn't the purpose of the mission and I don't believe the purpose of the 2.0 mission is any different. It's about education and the technology is only a tool, not a means to an end

**Application:** I believe every country could use this initiative to supplement educational delivery

**Sugar software:** The more ubiquitous it becomes as a school application, the more it drives the educational use of netbooks, and that's a good thing. It would have been nice for Sugar to have been available from the beginning with many computers and not just the XO1