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Is India's $ 35 laptop really Indian?

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"In 2011, the Sun, will rise for the children of India" - HRD Minister Kapil Sibal. July 23, 2010.

Give every university student in the country an Apple iPAD like tablet computer. It's one of those breathtakingly ambitious schemes that Minister Sibal has a penchant for. But the real stunner was the price he'd fixed for the device. Rs 1500. A pocket computer, cheaper than a rickshaw wala's cell phone.

All thanks to a bunch of scientists handpicked from IISC Bangalore and IIT's from around the country. A technological marvel. India's gift to the world of computing.

But strangely, none of the venerable scientists who where present at the press conference that day, would talk about the project in any detail. One pointedly handed back the visiting card I'd offered him. "Speak to the minister", they all chanted as if they'd all been warned not to blab too much.

"What patents have been filed for this stunning product?" asked one of the reporters at the conference. After all, the cut throat computing industry the world over hasn't managed to make a reliable computer below Rs 5000, in all these years.

"Whatever patents are necessary, will be filed and protected", Mr N K Sinha, Joint Secretary at the HRD Ministry announced. But the industry today is such, that most of the parts necessary, are available straight off the shelf."

"The govt will subsidize the cost of the machine, upto 50%", chimed in Mr Sibal. And with time, we're hoping so many pieces of this will be sold, that in a few years, the cost of the device, will come down to just $ 10 or Rs 500.

The $ 10 claim bought back old memories. Last year, in February, N K Sinha's team invited the world to Tirupati. To witness what they claimed, was the cheapest computer ever made. It turned out to be a small box, with less memory than the thumb drives we use everyday. And no display screen. Made by a bunch of kids still in college. The world fell over itself, laughing. No one's heard of it since.

The new $ 35 gizmo met with the same sort of derision. "Over the years, I've been less blunt about cheap-PC efforts," wrote Prasanto Roy, Chief Editor at tech magazine Dataquest, in the Economic Times. "But now I am angry. The government is wasting its efforts, my tax money and making a laughing stock of Indian technological prowess."

In a private message, Charles Assisi, Editor at Forbes Magazine told me "I think the government should

stop bull shitting. They haven't done anything, but express their intentions. If only our govt stopped making an ass of themselves, we'd be better off!"

Indian manufacturers I spoke to suggest it's impossible to get a tablet to the customer at $35. Go shopping for a computer's individual components alone, and the cheapest bill you could get comes to around $50.

An article by Javed Anwer in the *Sunday Times of India* quoted Andrew Rassweiler, director at iSuppli, an international research firm that monitors the market for computer components.

"The main components, even if one takes the cheapest options, will cost around $ 29. Case, components for Wi-Fi, charger and manufacturing will cost another $ 18 to $ 25. The cheapest 7 inch display screen was available in June for $ 9.50. A resistive touch screen would add another $ 3 to $ 4 to the bill. The cheapest processor would cost $ 8 and the battery, at least $ 4.

But put that stuff into steady production and costs begin to add up. "Labour, transportation, distribution - all the standard costs of business come into play. It's a thumb rule in the industry - the final cost to a customer is roughly three times the original bill of materials that a manufacturer comes up with."

That's from Swami Manohar, one of the seven founder members of the "Simputer", one of the very few hand-held computers ever designed, made and sold by Indians, in India, for India.

Ten years ago, that project was hailed as path breaking by the world media. Politicians latched on and claimed it as their own. Yet, as soon as the limelight faded, government backing vanished and the company was left high and dry. Today, they're seeing a slow uptick in demand. But only because it's an idea whose time has come. Not because of any help from the government.

Back to the current $ 35 laptop. Despite of high-falutin arguments by tech experts, a good chunk of Indians want to believe the government DOES mean well. That no matter what the world says, a resurgent India CAN really pull of a miracle. After all, didn't we build the Tata Nano, after every auto expert pooh-poohed it?

Among them is Rohan Shravan, young co-founder of Notion Ink, an Indian start up that's also making a tablet PC, tentatively named "Adam". Their product was hailed by international tech magazines like Wired, they've displayed at expos abroad, they've worked on a shoe string budget for almost two years. Their product will cost $350, if not more, when they hit the market.

Yet, Rohan refuses to write the govt off. "Critics are buzzing a lot of negativity. But being a youngster myself, I want the govt to go ahead and prove my generation wrong. It's extremely important they the get rid of the prejudices we have".

Indians like him would be disappointed, if the govt's claims turn out to be untrue.

An innocuous looking set of emails I've seen, seem to suggest just that. One of them, from a scientist supposedly working on the $ 35 laptop project, suggests the device Minister Sibal bandied about at the press conference, was just a prototype, not "India's gift to the world of Computing."

Another email suggests a formal invitation to IISC and assorted IIT's, to come together and collaborate on the cheap laptop project, was sent only on June 3. Yet, the press conference hailing the new device was held on July 23. How could a path-breaking machine be developed in so short a time?

If the machine was a mere prototype, where did it come from? A search on the web threw up at least one obscure Chinese company called HiVision. They're known to make dirt cheap tablet PCs. But I didn't find

much info on how reliable they actually are. They make a machine called SpeedPad, that's a feature by feature clone of the device Minister Sibal held in his hand. They displayed it at the tech expo CEBIT Germany, in March this year.

Yet another email I read suggests 100,000 devices are to be purchased outright at a cost of $ 35 each. Besides this, testing facilities and trials for these devices are to set up across India. The total cost is about Rs 41 crore, of which 16 crores are for purchasing the devices alone.

If it's Indian scientists who made a breakthrough and perfected a technology, then who are we buying the device from?

On the flip side, let's assume our scientists designed the crucial innards of the PC. But asked a Chinese or Taiwanese company to make it for us, because costs of production there are much lower. Before showing it off to the world, wouldn't we have asked for a unique packaging? Something to differentiate our machine, from cheap stuff that's already been displayed abroad?

A quick word here about Tablet PCs. Slim, sleek, gizmos. No physical keyboard, just a touch screen on which you have your fun. Many of us think the Apple iPAD is the be all and end all of tablets. An outstanding piece of American technology.

But trawl the web, and you'll find Taiwan alone has 81 home grown brands making tablet computers. The competition is cut throat. Large sized corporations constantly try to slash costs, to edge out others. Yet, the cheapest device they've made so far costs around $ 100.

Those $ 100 machines use the same hardware and computing power we have in cell phones today. The main difference being, they have a larger screen. You can browse the web, type and view documents, enjoy video and audio. But they're slow. The industry is still trying to perfect them.

Niche websites sell these machines to hole in the wall dealers, in lots of six or more. I spent half a day in Gaffar and Palika - New Delhi's famous grey markets, looking for them. Dealers there don't stock them yet. A few who've checked them out weren't very impressed with the battery life or performance.

Dr Sreedher and Dr Krishnamoorthy, from the Commonwealth of Learning, an educational organization based in Delhi, worked with ultra-cheap PCs for the past two years. They sourced parts from Taiwan, stitched them together into professional looking mini laptops, with seven inch screens and a proper physical keyboard.

Even with free Linux or Android software, the cheapest price they managed was around $ 80, or Rs 4000. Thirty of these machines are being used by school kids in the Maldives, a few others by village kids in the heat and dust of Tilonia, Rajasthan. At that price, they're very tempting machines. But they're slow, hang occasionally and heat up quickly.

AllGo Embedded Systems in Banglaore, has a prototype tablet PC tentatively called "Stamp." They're all ex IISC or IIT students, senior scientists with years of working experience. Their machine costs just $50 today. But they admit when steady production and distribution costs are factored in, prices will zoom up.

The cheapest, reliable computers we have today then, are commercial netbooks. They sell in electronic stores for around Rs 15,000. What they don't have, is software specially tailored for a child's education.

A ten year old project, called "One Laptop Per Child" or OLPC, does. An idealistic vision of giving every child in the developing world a computer, made a bunch of scientists from the Massachusetts Institute of Technology and engineers from corporations like Intel, AMD and Marvell, work together.

The project's had a very stormy past. The machine they made looks like a toy. And costs about Rs 15,000.

But the maker's claim it's waterproof. That it works even if slammed down from a height of ten feet. It works on solar power, on power from a foot pedal or even a small hand crank.

Besides being immune to all the abuse a naughty child can throw at it, the machine has software that talks to the kid. It interacts with children and makes learning fun. OLPC claims to have sold two million laptops. Forty different countries are running small scale pilot projects. Governments in Uruguay and Brazil have officially rolled it out in their rural schools.

But India's holding back. Even after OLPC offered the govt access to all their know how, free. The government believes even that generous sounding offer, will not make the machine cheap enough to give to every child in India. But should we then shop for unproven Chinese machines instead?

Post Script: News reports trickling in suggest HCL Technologies has been given the task of making these devices. But the email I have suggests they are in charge of setting up testing facilities for them, across the country. Either way, is there any clash of interest here? A few years back, HCL partnered with Intel to make the Classmate PC, a break away effort from the original OLPC project. It was priced between Rs 8000 and Rs 18000 when revealed. But the project was reportedly shelved later.