

### **Clayton Christensen talks**



hen Clayton Christensen talks, CEOs listen. Christensen is a Harvard School of Business Associate Professor who has CEOs re-thinking their growth strategies

with his concept of disruptive technologies.

Now Christensen is talking about free software gaining a greater market share by getting small. More specifically, by getting small and onto handheld devices. He suggested that Microsoft should seriously consider getting into the Linux space by buying or building a separate company to pursue disruption on BlackBerry-like devices.

Simply put, a disruptive technology, in Christensen's terms, is a business model (like Sony's use of transistors in handheld radios in the early 1960s) that taps a new market in ways that are not interesting to the market leader in any given industry.

If Harvard Professor Christensen is right, tiny Softmaker just might turn out to be the mouse that roared

For example, Honda's little SuperCub Motorcycles dethroned market leader Harley Davidson, who had sold big bikes to North Americans who used them to replace cars as general-purpose transportation vehicles. Harley Davidson's customers rejected Honda's leaky little bikes, which broke down on trips out of town. Honda was on the verge of scrapping the SuperCub for North America when it found in the early 1960s that people would purchase its SuperCubs from sporting goods stores, where the motorcycles were sold as off-road vehicles. Within 20 years, Honda owned the North American motorcycle market, as Honda slowly eroded Harley Davidson's market share with low-cost alternatives. Harley Davidson has never recovered its former glory.

Christensen has recently forecast a similar potential market share drop for desktop software market king Microsoft. And like the case of the Sony transistor radios or the Honda SuperCub, the market entrant, GNU/Linux, will find shelter off the beaten path, and won't make an initial frontal assault on the king. Christensen said that:

"Where Linux takes root is in new applications, like Web servers and handheld devices. As those get better, applications will get sucked off the desktop onto the Internet, and that's what will undo Microsoft. As computing becomes Internet-centric, rather than LAN (local-area network)-centric, their stuff runs on Linux, because it's all new. As the BlackBerry becomes more capable, applications will get sucked onto it. Those are the kind of places where growth is. If Microsoft catches it, they'll be all right." (Source: Advice to Microsoft: Learn to Love Linux," by Martin LaMonica, Cnet news.com, 2004/10/15, http://news.com.com/Advice+to+Microsoft+

Learn+to+love+Linux/2100-7344\_3-5411843.html)

There are two disruptive technologies incubating out there that form the basis of an interesting partnership: OpenOffice.org (OOo), the free software alternative to Microsoft Office (MSO), and Softmaker, a small German start-up which is offering proprietary office solutions for the handheld and the desktop.

#### Will the mouse roar?

OpenOffice.org by itself represents both a low-end disruption and an emerging market disruption to Microsoft's market-leading MSO product. OpenOffice.org can be used by overshot customers in developing countries, who have the ability, but not the desire, to spend money for MSO upgrades. It can also be used by non-consumers in developing countries, where the cost of MSO means that in many cases, the users' only choices are a pirated version of MSO or OOo. StarOffice, Sun Microsystems' commercial brother of OpenOffice.org, also offers a low-end disruption for companies that want the reliability and name brand of a deep pocket, but don't want or need the greater integration with Windows offered by MSO.

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Softmaker, the German start-up, offers format compatibility currently with MSO, and its CEO, Martin Kotulla, has publicly stated that the company plans to release filters for OOo, and has made significant progress along those lines. Mr Kotulla displayed his Textmaker and Planmaker products, which are text processing and spreadsheet apps, respectively, at the 2004 Desktop Linux Summit in San Diego. Among other things, he touted his products' small executable footprint of four MB.

Microsoft does have a version of Word and Excel for handhelds, but not for handhelds running Linux. OpenOffice.org

has announced that a "Lite" version of its widespread office suite will be made part of its global marketing strategic plan; but the OOo Lite version is still in the planning stages, and there is no incubator project for OOo Lite at the time of this writing. The birth of OOo Lite therefore doesn't look particularly imminent.

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If Softmaker does, in fact, release a OOo/SO filters, Softmaker's products seem to offer a natural fit for Sun's clear interest in competing for the desktop Linux space, and might offer a viable alternative to the proposed OOo/SO Lite. Sun has made its intent clear: to move into the desktop Linux space, for example, with Scott McNealy's announcement at Comdex 2003 that it had secured a deal (http://sfgate.com/cgi-bin/article.cgi? f=/c/a/2003/11/18/BUGRM34CUC1.DTL) with the government of China and the China Standard Software Co., Ltd., for distribution of the Java Desktop System code in the world's most heavily populated nation. In June 2004. Sun has also announced that it had won a (http://www.zdnet.com.au/insight/ toolkit/businessapps/opensource/0, 39024866, 39149910, 00.htm) for the distribution of StarOffice seats in 72 public and parochial schools in the Canadian Province of Ontario, covering a total of 2.5 million students there. Students in Germany have, for several years now, received instruction in the use of both Microsoft Office and StarOffice.

Sun is not alone in eyeing the free software desktop, of course. Novell, which recently acquired both Ximian and SuSE, is also positioning itself for strong desktop competition. Novell has contributed code to the OOo project, and quite far along in switching to using OOo as its default office suite in-house. Hewlett-Packard has recently announced the availability of SuSE GNU/Linux pre-installed on its new nx5000 notebook, which includes OOo. Linspire has partnered with a Canadian start-up called Sub500.com for the delivery of Linspire's distro on competitively priced desk-

tops and notebooks, also with OOo preinstalled.

So the option of OOo working with Softmaker to solve this problem seems like a classic example of how a free software project can work well with a proprietary program to solve a problem. Here, both Softmaker's products and OOo/SO represent low-end disruptive technologies from the Microsoft point of view.

From Softmaker's point of view, OOo represents a *sustaining* technology, once it gets filters in place for its PDA-capable products. Softmaker's best customers (including me) will be willing to pay a premium for the functionality of being able to use files created with the world's dominant free software suite (OOo/SO) on a handheld, because OOo/SO are currently "not good enough" for that application, as they are too big.

There are tens of million of OOo/SO users already, and that number continues to grow rapidly. Once the OOo filters are in place, Softmaker stands to find a ready market of nonconsumers in that emerging market who have pent-up demand for using OOo on their handhelds. I am a classic case in point. I refuse to buy a handheld until I can get my free software files working on it. Period! Lots of other applications currently work on handhelds, but not OOo. I and a million or so of my best friends are just sitting back, waiting for the opportunity to view, modify and save our files on a convenient handheld device, because our batteries on our notebooks are limited, and a notebook is too heavy to lug around. Yet I need my data in court, on planes, taxis, buses, anywhere I have significant down time.

Currently, I just grumble and do without access to my data, because I don't want to use MS Word/Excel on a handheld, for a wide variety of reasons, which basically boil down to the fact that I am too cheap to purchase a copy of the Microsoft products for that purpose, and of course copying without paying is not an option. So I'll wait.

In fact, pursuing non-consumption on handhelds would be directly in line with OOo's recently announced marketing plan:

"Try to compete against non-consumption: customers who are currently unable to use currently available products at all, either because they can't afford them or are too inexperienced to use them. These markets have the most potential because these customers will compare your product to

having nothing at all, and so will be thrilled to buy it even if it's inferior to currently available products." (Source: Clay Christensen and Michael Raynor, *The Innovator's Solution*, p. 11, Harvard Business School Publishing Corp., 2003.)

Also, Microsoft doesn't have a lock on the handheld market as they do with the desktop. This is a real opportunity for Softmaker/OOo/SO to gain market share, because each of those products has cross-platform capability. A partnership like Softmaker/OOo/SO has a real opportunity to get the lead on handhelds.

If Grameen can do it, then why not a partnered team of Softmaker and Sun? Or Softmaker and Novell? Or Softmaker and IBM or HP? Or Sun and Sun?

## There's a precedent in Bangladesh

There is a precedent for this kind of emerging market disruptive growth: the case of Grameen Telecom in Bangladesh. This is an extensive quote from the Christensen team's most recent book, *Seeing What's Next*:

"While most of us in the developed world take our phone service for granted, almost half of the world lacks reliable telecommunications service. In some areas, the cost to build or extend a wireline infrastructure is prohibitive. It would require charging people close to their annual incomes to make telephone calls. Enter disruption."

"Where most firms would see a hopeless situation, Grameen Telecom saw an opportunity. Its approach? Bring wireless service to the country's poor. It loaned up to \$175.00 each to women who became known as the 'wireless women of Grameen.' The loan covered the mobile phone's cost, training, and a small solar recharging unit. The women could then sell phone usage on a percall basis at an affordable price to other villagers."

"Users love the service. It is convenient and cheap. It allows farmers to get vital information such as crop prices without travelling great distances. They can place orders with distributors without relying on the postal system. Estimates of per-call savings are up to \$10.00 - almost 10 percent of household monthly income. The program has other benefits as well. People travel less, saving wear and tear on shoddy roads [and the travellers' meagre cars and gasoline supplies too]. Phone operators earn \$300.00 a year. They plough this money back into education and health care, increasing the country's human capital. Their status in the village increases considerably."

"So the operators are happy and the users are happy. What about Grameen? Its business model allows it be *very* profitable."

(Clayton Christensen, Scott Anthony, and Erik Roth, "Seeing What's Next", Harvard Business School Publishing Corporation, 2004, pp. 219-220)

Of the world's six billion people, five billion live in countries with average annual incomes under US\$10,000.00. That provides a huge opportunity for a someone to address the needs of a group like the "wireless women" to sell access to farmers who not only want to phone in orders, but want to keep track of their orders from year to year, so they don't have to reinvent the wheel. If Grameen can do it, then why not a partnered team of Softmaker and Sun? Or Softmaker and Novell? Or Softmaker and IBM or HP? Or Sun and Sun? etc.

#### Conclusion

While the critics of Sun's deals argue the significance of the bottom-line results from Sun's successes abroad with StarOffice and JDS, these Sun deals do lay the foundation for linkage between Sun's core infrastructure offerings with a more dynamic presence on the desktop. The immediate presence of tiny Softmaker on the handheld space provides at least one plausible case scenario for Sun, or another major Linux player to provide the key linkage with a handheld office package. Softmaker's product is itself, currently proprietary and closed, but Sun has shown an ability and an

affinity for acquiring a proprietary solution and either opening the code, as Sun did with OOo (which it bought from German start up Star Division); or seeding diverse applications with easily obtainable code such as its Java code, which can be found on everything from PDAs up to enterprise applications.

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## **Bibliography**

- [1] The story on Sun's deal with the Ontario schools (http://www.zdnet.com.au/insight/ toolkit/businessapps/opensource/0, 39024866,39149910,00.htm).
- [2] The story on Sun's JDS deal with China (http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2003/11/18/BUGRM34CUC1.DTL).

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#### About the author

Christian Einfeldt is the producer of the upcoming film "the Digital Tipping Point: the culture of freedom in cyberspace", to be released in September, 2005. For more info, go here (http://www.digitaltippingpoint.com)