

Riding the mobile wave

WASHINGTON, US: "The mobile wave is going to sweep through and obliterate billions of jobs and millions of small businesses and that's going to be viewed with trepidation by politicians, unions and businessmen, all three, because they're going to see their world disrupted. But at the same time, it opens up the possibility for three or four billion people in the underclass to get a PhD."

So says Michael Saylor, chairman of the board, president and chief executive officer of MicroStrategy and author of *The Mobile Wave: How Mobile Intelligence will Change Everything*, published earlier this year by Vanguard Press.

Saylor sees the agricultural revolution as a model for the changes the mobile wave will bring about. In 1850, 67% of Americans worked on farms. Thanks to vast improvements in farm technology that led to massive and rapid increases in productivity, today less than 2% of the US population is employed in agriculture. This allowed 65% of the population to shift away from farming, learn new skills and contribute to the economy in other ways.

"For the civilisation to move forward we need to generate millions of new skills," Saylor says. "The secret is education. Right now, we spend US\$2 trillion a year on education, and we spend it poorly. We teach people the same way we have for 100 years."

Mobile's potential

But mobile can change all that. By moving education online, the best professors and teachers can expand the number of students able to learn from them. When textbooks move online and become software, they become "magical." Students can inexpensively perform experiments online, simulating not only simple things, like boiling water, but things that are impossible now, like playing with a pendulum on Mars.

Even better, the incremental cost per student drops dramatically when learning goes mobile. Saylor predicts that a PhD, which can cost US\$100,000 to attain today, could be only US\$10,000 in the future. These new minted minds will have the information and time they need to tackle civilisation's most pressing problems, things like super strains of viruses that have become immune to present day antibiotics. Saylor has launched the Saylor Foundation (www.Saylor.org) to make his vision a reality. Based in Georgetown, it currently offers 13 areas of online college-level study, including biology, economics and mechanical engineering, at no cost to students.

But education is just one area being impacted for the better by the mobile wave.

New technologies will make our identities mobile, and "100 times easier to prove and 100 times more secure," Saylor says, than current employee badges, credit cards, personal signatures and other credentials, which can be forged. Our mobile identities will have unique identifiers which change every few minutes, but which anyone on a mobile device can use to confirm that you are who you say you are.

The next big thing

Mobile identity technology will make it easier to control access to sensitive areas like schools, where we want students, parents, teachers and other authorised personnel to enter. It will also make it possible to verify quickly your identity to someone thousands of kilometres away. This is the direction that MicroStrategy is moving with Usher, its free app which allows users to manage events with Facebook but which will become a virtual wallet for credentials. Saylor predicts that mobile identity technology will be widely used within the next five years.

Speaking of Facebook, Saylor says, "If you don't use Facebook, my advice to anybody would be to become a Facebook user. It's time to get on the bandwagon. You can't really live outside of that stream."

What's the next big thing? "The most powerful idea in the world in the year 2012 is the software application network," said Saylor. YouTube, Facebook and Wikipedia are examples of networks that allow people to share information and photos. "So what about a teaching network, a safety network, a payment network? All these things are living in the domain of plastic cards and pencils and pens now. They will become networked. I can't say which one will commercialise first, but we're already investing in intelligence networks (MicroStrategy's Wisdom app) and identity networks (the future of MicroStrategy's Usher app)."

In Saylor's book, mobile Internet is the fifth wave of computing, following the mainframe, the mini-computer, the desktop computer and the Internet PC. So what's the sixth wave? "The point that we cross the man-machine interface and we're able to receive information and give an instruction without our hands or our voice - a direct neural link," Saylor says. "At this point, the entire world becomes merged with cyberspace, like the holodeck on Star Trek."

Michael Saylor background

Michael Saylor: "It's Kind of a Fluke That I'm Here at All..." "I come out of a generation of men who grew up loving science fiction. We read Arthur C. Clarke, Robert Heinlein and Isaac Asimov and our aspiration was to be an astronaut, go to Mars and build spaceships. And when I was in high school I wanted to be a fighter pilot, be an astronaut, go to Mars and build spaceships."

After leaving high school, Saylor followed his dream, joining the Air Force and earning a degree in aeronautical engineering from MIT, where he studied spaceship design and learned how to fly. But his plan was derailed in the final semester of his senior year when he was misdiagnosed with a benign heart murmur disqualifying him from combat air duty.

Shortly after that, Congress cut the defence budget. So, instead of going on active duty in the military as an engineer, he served in the Air Force reserve weekends and summers and went into the civilian world.