

Main players position themselves for VoIP By Derek Abma

Voice over Internet protocol (VoIP) has captured the attention of those in the technology and communications industry. It's a process that transforms voice into packets capable of being transmitted over Internet protocol networks, and there are new business opportunities being created by it. Network equipment vendors are using it to build more multipurpose infrastructure for carriers.



Michael Calyniuk, technology continued on page 10 market analyst, PwC

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### **TELECOM:** WHAT DO THE VCS **LOOK FOR?**

By Andrea Zoe Aster

Every venture capitalist prowls for the next "disruptive technology," a breakthrough which pulls the plug on a standard application. It's debatable whether music downloads will ever replace CDs, or if e-commerce will ever replace shops—but digital cameras and mobile phones are prime examples of the term.

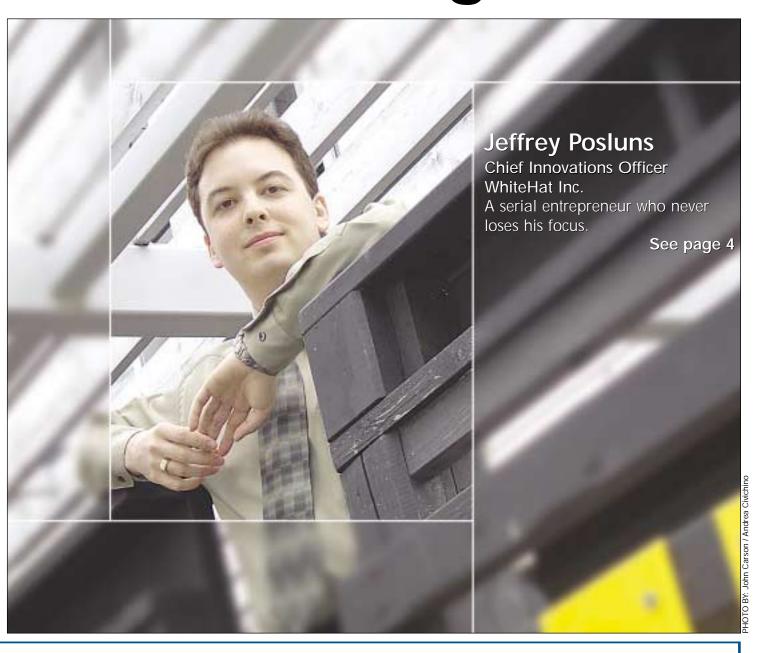
Indeed, a recent round-up of prominent VCs reveals common enthusiasms. They were all asked the same question: What telecom or technology ventures are inspiring your major investments?

"There are people under 30 who've only ever owned mobile phones," says John Piercy, managing director at BCE Capital.

Indeed, mobile is the buzzword which causes jaded VC ears to perk up. What's first on the wish list? Young companies with the brains to build diagnostic software for smart phones. That's because, as mobile phones get smarter, call-centre reps are increasingly perplexed by service requests.

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## Don't sit on the fence when taking risks





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June 28, 2004



#### Jeffrey Posluns | Chief Innovations Officer | WhiteHat Inc.

By John Carson

"They won't be too happy if I break my leg!" quips Jeffrey Posluns as he hands over his jacket and clambers up a rickety fence for our photo shoot. But then again, he's not averse to taking risks, having founded eight technology companies, investing in two dozen more, authoring three IT books, helping the RCMP bring an infamous teen hacker to justice—and becoming a millionaire in the process. He's still only 26.

The "they" he refers to is WhiteHat Inc., a Burlington, Ont.-based IT security provider that Posluns works for three days a week as its chief innovations officer, a position he accepted in April along with a percentage of the company and a development team of 20 staff.

Some people are born with an entrepreneurial gene.

He started his first tech company at 14, designing computer networks for small businesses in Montreal. Five years later Posluns founded Top-Five Inc. a Web site-development company specializing in e-commerce initiatives. He sold that in 1999 for "a bunch of money" from which he allocated 15 per cent to share amongst the staff

"I make a point of doing that with every company I'm involved with," he explains. "If not for the employees, I wouldn't have got to where I am."

The next venture was a slight blip on the resume. He co-founded information security services firm SecureOps Inc. at 21 with personal seed money of around \$75,000 and some business loans.

"We went to a bunch of VCs, but the problem at the time was the security market was very young; few people understood it," he recalls. "I would have preferred a strategic partner, as opposed to someone putting in money for a percentage of the company and then taking a lot of the control away from me."

Motorola took 10 per cent of the company for \$1 million, but about a year later "the company started going in a direction I disagreed with," explains Posluns.

He got bought out, bounced back and founded SecuritySage Inc. in 2002, a firm offering custom security solutions to corporate, government and law enforcement agencies. In two years he grew the company from five employees to over 100 in three countries: "Canada, the US and London, UK. The 'fish and chips' London," he says with a laugh.

It was during this period that he put on his "white hat" (a slang term for a hacker who, upon discovering a vulnerability in a computer system, alerts the system vendor to the problem) and assisted the RCMP in catching one of the most infamous "black hat" (think *Mad Magazine's* Spy vs. Spy) hackers in computer history: Mafiaboy.

Major Internet sites like Amazon and Yahoo were crippled by the black hat hacker, causing an estimated US\$1 billion in damages.

"We wouldn't know what the case was, who was being investigated or what for," says Posluns. "Having had security clearance for quite a while, they brought me two pieces of code and asked me to analyse them. Code like that would make its way public quite quickly. It took us about a month to find a location from where it could be retrieved on the 'Net."

He explains that one of the tools found

is a storm brewing; in fact, one of his nicknames is Tempest. The driving force behind him is doing things that no one else has done before, or better... things that someone tells him cannot be done.

"A technology challenge for Jeff is like a red flag for a bull. I doubt we will see him sitting in the same chair for more than a few years," he adds.

By necessity, the secretive and often deceptive world of IT security has a large presence in Posluns' life. He has to keep abreast of all major new threats, technologies and trends.

"Most people in the security area will have a number of different aliases; less people will talk to you if you're a big corporate type," he says. "Some of my friends call me by my alias as opposed to my real name!

"For example, a really great coder is

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"There's a large group of industry professionals that get together once a month over a beer and think of new ways to take over the world. We're all on the good guys' side."

### Jeffrey Posluns CIO, WhiteHat Inc.

in the code could be used to compromise a specific type of server; the other sends out tons of data with falsified source locations making it look like millions of systems are being used in an attack.

"That's called Distributed Denial of Service today—at the time it was just six university computers," recalls Posluns. "The public was told it was a distributed attack, but following the pathways on the Internet from router to router, it's determined that all the traffic is coming from one particular spot."

Shortly after, Mafiaboy—a 17-year-old Montreal male—was arrested and sentenced to eight months in a youth detention centre. Robert Currie, the RCMP staff sergeant handling the investigation, publicly thanked Posluns after the trial ended for his code analysis expertise.

Currie elaborates: "Don't be fooled by Jeff's calm veneer. He might appear calm, cold and calculating, but underneath there called Rainforest Puppy and very few people know his real identity." It's noticeable that Posluns refers to him as a "great coder" while some Web sites refer to him as "hacker." What shade of hat is he wearing when showing admiration?

"There's a large group of industry professionals that get together once a month over a beer and think of new ways to take over the world. We're all on the good guys' side," he reassures me.

So, was the Sasser worm good for business?

"The only reason that viruses and worms can be considered good is that they raise public awareness. There's only a limited number of mechanisms for security exploits," he replies.

"The biggest problem in security will always be the users; the lack of desire of non-IT personnel to conform to common policies. Their job is to come into work, provide a function, work on their computer, communicate, write or whatever, and then leave. It's not their job to worry about security, patching or whether their virus definitions are up-to-date.

"I believe an added job function should be to check for updates every morning. Without enterprise-level software, that will take under a minute. But it's difficult to get people to do so. The problem will continue to be user- or policy-related for the next few years," he predicts.

Posluns also does some work for the government, but is understandably vague on the specifics. "We set up the secure communications facilities between a number of different groups in government, and intrusion detection systems. We've done security policy work and audits.

"SecuritySage has had 15-20 large projects. There are also a lot of little ones. For example, we may get a call such as: 'In theory, if there were a situation like this... what would you do? It doesn't exist, but in theory, what would you do?'" he says with a wry smile.

What's next on the horizon for a serial tech entrepreneur? Surprisingly, it's non-security related.

He started Dev/Null Industries Inc. in January to develop an online mall solution. Some may see this as a risky project considering the plethora of e-shopping Web sites, but Posluns is typically upbeat about it.

"I wasn't sure if this would be successful, but decided to throw a little bit of money at it because it's interesting," he says. "The mall template is automatically generated, you pick colours and graphics, and collect a commission on every product sold. It's been doing phenomenally well in the few months it's been around. It's still in beta stage and we're looking at a fall launch. Right now we have Montreal, Toronto, London, Boston and New York."

Apart from that, where does Posluns see the next opportunity coming from?

"I think there's going to be a very big overhaul in communications over the next few years," he says. "We are seeing the beginning of a widespread deployment of VoIP technologies. There's a company [in VoIP] that I'm in the process of finalizing an investment in, taking a good percentage." It's worth watching where this modest guy puts some cash—he seems to have the knack of picking winners.

Next on his whirlwind itinerary is a conference in Athens, business meetings in Copenhagen, some well-deserved R&R in Rome and to London for some fine dining.

Not fish and chips.

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If not for the employees, I wouldn't have got to where I am. 9 9

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Make it easy for the VC to say 'yes' by focusing on his needs, not your wants.

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We believe that VoIP can become one of the biggest applications on the Internet. 9 9

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There's a growing tension between angels and VCs.

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# Techs and the City

The words "unemployment," "downsizing" and "layoffs" are unwelcome additions to anyone's vocabulary, especially in the technology arena where workers can find themselves replaced by automatic production lines, offshore outsourcing and other business processes.

Ottawa has taken a few cold showers in the past couple of years, but local support at the grassroots level and the findings of a Scottish study point to signs of renewed vigour and a strong will to help the region get back on its feet and heal the bruises. Like a prizefighter, the city's technology morale staggered, bounced off the ropes and has come out fighting.

Figures from Statistics Canada show that overall employment in Ottawa-Gatineau stands at just over 607,000 for May, and a Manpower Inc. survey in the second quarter of this year shows that 27 per cent of respondents plan to hire. According to the Ottawa Centre for Research and Innovation's semiannual technology survey released this month, the number of tech companies in the region has increased by six per cent to 1,585 while employment levels increased by 500 people to 64,200.

Since January 2001, many groups of laid-off technology workers have joined together to create peer networks focused on helping their members. The need to co-ordinate activities led to the formation of the Ottawa Talent Initiative (OTI).

The OTI is an organization composed of unemployed volunteers and the community working together to create positive change for the unemployed—and underemployed—technology workers in the Ottawa area.

I asked Dave Sproule, a founding member of the OTI, what he sees happening to the Ottawa tech employment scene from the grassroots level. Improving or declining?

While there have been some successes by individuals with corresponding encouragement to the community, there have also been surprises," he says. "Due to the nature of the timeliness of statistical data, it is not easy to quantify this into a trend."

He goes on to say that the 18 key recommendations identified in the OTI's Community Action Plan released in May correspond to three main strategies: grow jobs in Ottawa; immediate support for unemployed and underemployed tech workers; provide assistance for those same people in transitioning their skills to other sectors.

That's the view from inside the ballpark; parties overseas have taken an interest too from a positive stance. A study undertaken by a team of Scottish researchers has highlighted some of the entrepreneurial processes involved in the "emergence of Ottawa as a leading world technology cluster."

The study was undertaken by Colin Mason and Sarah Cooper of the Hunter Centre for Entrepreneurship at the University of Strathclyde in Glasgow, and Richard Harrison of Edinburgh University Management School. It was funded by the Canadian High Commission under its Canadian Studies Program.

In the report Ottawa is cited as a world-class technology centre dominated by information and communications technology industries—notably telecom equipment, semiconductors, software and emerging photonics and life sciences clusters. More than 20,000 technology jobs were lost in 2001-02 as a result of redundancies from leading employers such as Nortel, Alcatel and JDS Uniphase.

The authors mention the case of an entrepreneur who had been responsible for establishing a new facility on behalf of his employer to develop a new product line. Having set it up, he was "basically asked to knock it down again because of a change in direction." He formed his own small team, got support from an extensive group of financial backers and exploited the technology himself.

It's a great example of seeing opportunity when senior management pull the plug.

Success in Ottawa seems to hinge on incestuous business relationships. Who have you worked for? Who do you know? As one VC is guoted in the study: "This is a community where most of the people are spin-outs of spinouts. Two phone calls and I can find out everything...

A British friend was unfortunate enough to hit the shores of Canada during the moribund tech landscape of 2001. The timing was totally off; after four months of vainly searching for a network support position he very nearly cashed in his return ticket and left. But 3,500 miles is a long way to come just to throw in the towel.

He took a pay cut, joined a small tech start-up, worked the hours and is now considering starting his own enterprise. That's the attitude that will get Ottawa's unemployed back to work, but only if the opportunity and will are

As Denzil Doyle says in his column in this very issue: "If someone can prove to me that the Ottawa area is a net acquirer of high tech companies, I will dance a jig on the front steps of Parliament every Monday morning for the rest of my life."

Why should Ottawa be an acquirer? It should be supporting those branching out on their own, starting new ventures. It takes guts to put your own money—sometimes a redundancy payment—on the line and lay the foundation for a start-up. If that means joining a like-minded community of collaborators, or asking a VC to make those "two phone calls" then that's the way to go.

In its report entitled "Start Me Up: A Look at New Entrepreneurs in Canada" released this month, CIBC Small Business demonstrates that startups in Ontario are growing at a rate consistent with the national average, but the graph shows it trailing all the other provinces except Quebec. Why should this be? Is it a lack of motivation or funding?

With the report predicting 100,000 small business start-ups over the next five years, I hope that the techs in the Capital region can contribute, play a large role in the community and lead the way.

Don't throw in the towel just yet. There's still a few more rounds to go...



John Carson **Editor** 

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