

# TAKE TCO to the NEXT LEVEL

Part of the 'Frankly Speaking' Breakfast Series

## HOST

**Jim Love**  
CIO, IT World Canada

## GUESTS

**AJ Byers**  
President, BLACKIRON Data

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CIO, Sheridan College of  
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## OVERVIEW

CIOs have a history of innovating around costs – making strategic decisions that reduce expenses while maximizing the investment they make in specific technology products and services.

The concept of total cost of ownership (TCO), however, has changed dramatically in light of cloud computing, bring your own device (BYOD) and managed services.

How can CIOs take TCO beyond the ‘necessary evil’ of their IT budget and into a practice that contributes real and lasting value to their entire organization?

That question was explored by Canadian IT professionals and executives who gathered at Toronto’s Park Hyatt Hotel on February 6, 2013, for **Take TCO to the Next Level**, an event sponsored by BLACKIRON Data as part of the Frankly Speaking Breakfast Series presented by CanadianCIO.

Although the subject at hand was all business, the tone and format of the event certainly weren’t: Canadian IT professionals and executives in the audience engaged in a lively, forthcoming, interactive dialogue consisting of comments and questions for moderator Jim Love, CIO of IT World Canada, and the two featured guests:

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### **AJ BYERS** **PRESIDENT, BLACKIRON DATA**

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Byers describes BLACKIRON Data as “a brand new company with over 15 years of experience.” Although BLACKIRON was officially unveiled last autumn, it’s just the newest division of Primus Telecommunications Canada Inc., which has built up an established track record of providing enterprise-grade business benefits to Canadian SMBs.

To cater to rising demand for its expertise among mid-size and large enterprise clients, BLACKIRON has been spun off as a unit focused around its data centres, cloud products and managed services offerings. It delivers highly compliant and certified outsourcing solutions to mid-market, enterprise and government customers.

The most certified data centre services company in Canada, BLACKIRON has eight Canadian data centres. Its newest one, a 50,000 sq. ft. facility north of Toronto in Markham, Ont., is the first in Canada to boast LEED and Tier III design and construction certification. About 80 per cent of all Canadian businesses are within 200 km of a BLACKIRON data centre. BLACKIRON was named a Champion of the Canadian Co-location/Managed Services market by Info-Tech Research Group.

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### **SUMON ACHERJEE** **CIO, SHERIDAN COLLEGE OF TECHNOLOGY AND APPLIED LEARNING**

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Founded in 1967, Sheridan College serves approximately 17,000 full-time and 35,000

continuing education students annually at its four Toronto area campuses: two in Oakville and one each in Brampton and Mississauga. Sheridan has built a reputation as a leader in the areas of digital media studies, visual arts and design, applied computing and telecommunications, and engineering and manufacturing services. Sheridan's SPARK incubator in Oakville supports emerging entrepreneurs in digital media.

Sumon Acherjee has over 17 years' experience in developing and implementing innovative IT solutions for a diverse clientele in both Canada and the U.S., including Sony, Novartis and Playtex. He has a bachelor of mathematics degree from the University of Waterloo and an MBA from Wilmington University. Acherjee joined Sheridan College in 2008 as Director of Information and Communications Technology and was promoted to CIO the following year.

## SETTING THE STAGE

Gartner Group put forth a modern TCO framework for ICT industries that became popular in the late 1980s, factoring 'soft' costs such as depreciation, technical support and implementation into the overall cost of hardware and software purchases.<sup>1</sup>

Today, newer IT innovations, like cloud computing, mobile technology and managed services, are turning the concept of TCO on its head. More and more, what CIOs 'own' is the data, and nurturing the right working relationship with key suppliers is the most critical piece of determining how much data centre infrastructure they will need to build themselves, and what they can simply buy from a trusted third party.

While there can never be an exact formula for calculating TCO because each company operates differently<sup>2</sup>, some recent research has taken a closer look at the impact of these newer technologies on TCO in the IT sector.

In the second annual Future of Cloud Computing Survey released last June, 53 per cent of respondents said they believe the cloud "maintains a lower TCO and creates a less complex IT workflow."<sup>3</sup> The survey of 785 cloud experts, users and vendors was conducted by North Bridge Venture Partners. And a 2011 study by Frost & Sullivan estimates that over five years, a 500-seat call centre using full-function cloud solutions could see TCO savings of 43 per cent compared with a traditional premise-based solution.<sup>4</sup>

In terms of mobile trends, the jury is still out on the impact of BYOD on TCO. As IT consultant Farida Bambot summarized in a Feb. 2012 post on the mHIMSS (Healthcare Information and Management Systems Society) blog:

**"Corporate drivers for BYOD are primarily financial and worker productivity gains. However, there are no large-scale studies to conclusively prove that BYOD is a cost effective solution. The total cost of ownership (TCO) for BYOD is essentially unknown or anecdotal at best. Additionally, there is heightened concern about data security, especially in highly regulated industries such as finance and healthcare. Fortunately these fears have not been borne out since there have not been any large-scale mobility-related security breaches reported thus far."**<sup>5</sup>

An April 2012 Sand Hill Group survey of 105 company CIOs, CISOs, principals and vice-presidents found that although "the TCO tab (for BYOD) is ... huge and contains some hidden costs" such as more frequent device refresh rates, bigger IT support costs and rising mobile data usage fees, BYOD "usually results in a short-term increase in costs and a long-term decline in costs – but only if the company is responsible for supporting the applications and the employees are responsible for their own device support."<sup>6</sup> Now we turn from research to the real world



experiences shared by the guests and attendees at our Take TCO to the Next Level event.

## ON POINT:

Highlights of what emerged from the conversation at the event.

### *How do we define TCO and why is it important?*

Today, CIOs must look beyond just the traditional hard and soft costs and explore the cost in terms of impact on:

- speed to market
- time (spent on implementation, support, etc.)
- risk and risk management
- reliability, especially in a 100 per cent uptime environment

Consumerization of IT means laypeople are using mobile devices but may not have a full understanding of the costs involved in supporting, securing and integrating them into networks. Acherjee recalled that five years ago – before Sheridan embarked on supporting BYOD for students – students and parents would sometimes ask why the college charged \$3,000 “to distribute a laptop they saw for \$399 at Best Buy,” unaware of the aforementioned costs incurred by the school. So CIOs need to educate members of their organization to understand that costs saved on acquiring devices don’t necessarily result in lower costs overall, at least initially. (Long-term cost savings are explored later in these highlights.)

### *How do you incorporate the productivity gains that come from BYOD into TCO calculations?*

“Applying an ROI benefit to BYOD is very hard. But not applying it at all is wrong,” said BLACKIRON’S AJ Byers. Although

ROI of BYOD will vary from organization to organization, it must be taken into account when determining TCO, he said.

Acherjee pointed out that BYOD may not be essential for every person in every organization. “You need to look at what’s core (to each department) and what is the purpose of using these devices. So understand the needs of those users and tailor your BYOD (strategy) to them,” Acherjee advises. An audience member echoed that sentiment: “It works if you have millennials on staff but my shop is an aerospace firm with lots of security issues and (our staff) don’t need to be working 18 hours a day.”

Moving toward IT agnosticism – i.e., using apps that work on several OS platforms instead of just one – could relieve some BYOD and TCO pain points by bringing a greater degree of standardization to interoperability, training, support and security, some participants said.

Others suggested that productivity gains from BYOD can be factored into TCO in terms of:

- fewer productivity losses if workers are unable to come to the office due to illness, bad weather or family obligations (they can still do some work from home)
- faster, smoother transition after a merger or acquisition situation (people can use their own devices for work immediately vs. training on a new system or waiting for the full integration of the two previous enterprise networks)
- streamlined hiring process (since BYOD generally makes it easier to attract new talent)

### *How does downtime (i.e., service outage) factor into TCO in today’s 100 per cent uptime environment?*

The cost of downtime really depends on the

impact it has on end users, Acherjee said. His example: a recent Apple service glitch that took a week to fix didn't cause a massive public backlash from millions of users, yet a cloud outage that affected Sheridan's internal user network had a huge impact on its students, even though they number in the thousands.

BLACKIRON's Byers agreed, noting that downtime affecting financial transactions, for example, may have bigger implications than other types of interruptions. Everyone concurred that CIOs must be proactive by doing due diligence on service providers (for cloud, virtualization, etc.) to avoid higher TCO in the event of downtime.

"Not every cloud's the same," Byers said. "You have to do due diligence. We should ask what is the downtime plan of the providers. You can't just hand it over to the cloud and hope they'll keep it working all the time." Acherjee cautioned: "Just because you 'clouded' it or outsourced it doesn't absolve you from constantly managing that situation and its risks." At the end of the day, CIOs must be proactive in planning for downtime, said moderator Jim Love, CIO of ITWorld Canada: "I stopped saying 'if' we have downtime and now I say 'when.' I want to know that cost beforehand."

Others suggested considering these factors when incorporating downtime into TCO:

- cost (in both time and money) of staff putting in overtime after an outage
- cost of "Plan B" contingency and disaster recovery (should be considered ahead of time)
- reputational cost (lost trust of users and customers)

### **What don't people 'get' or realize about TCO today?**

Today's business and technology cycles

move faster than ever. Participants said some organizations or customers have been slow to catch up with these new realities in enterprise IT:

- CIOs used to have years before technology became obsolete. Now it's sometimes a year or even less;
- CIOs face increasing pressure to balance the costs of replacing devices more often (i.e., new training, support and security) with the costs of stretching out the use of existing technology longer (i.e., risk of failure, obsolescence or security breaches).

### **What will TCO look like three to four years from now?**

TCO will become less focused on reducing costs and more about ROI, specifically how to use technology to benefit the business and add value to it. "We have to get the conversation off of cost. We have to be strategic more than at any point of our careers," Love said.

Acherjee said CIOs may get some help in this area from hardware makers who are now incorporating features into mobile devices that help separate personal and business activities, especially from a security perspective. This may allow CIOs to focus less on 'plumbing and keeping the lights on' and more on strategic, big picture activities.

Other recommendations for embracing this shifting TCO approach included:

- CIOs must see themselves as key parts of their entire organization, "not just the guy hired to fix the server," Love said;
- CIOs should proactively look for ways to help all departments - from marketing to customer service - not just their own;
- Get ready for the latest trend happening in markets like Australia, where 'green' environmental impacts are included as part of TCO, as one audience member noted.

## KEY TAKEAWAYS:

- BYOD is a top-of-mind TCO issue for CIOs today
- Incorporating BYOD into TCO is challenging, but essential
- Productivity gains from new mobile and cloud technologies must be included in TCO, not just higher initial costs of implementation, support and security
- Potential downtime and other risks should be included in TCO and planned for accordingly
- Moving data and functions to third-party services like the cloud doesn't absolve businesses from performing due diligence on those service providers
- Today's TCO is putting more emphasis on soft costs vs. hard costs
- CIOs must focus less on 'keeping the lights on' and more on big picture strategy
- As a result, they must shift from focusing on cost reduction to leveraging technology to add more benefits and value to businesses

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### FOOTNOTES: (Endnotes)

(1) James Bucki, About.com, "Total Cost of Ownership (TCO) – A Definition of Total Cost of Ownership (TCO)."

(2) *ibid*

(3) "New survey exposes latest trends in cloud and SaaS 'tipping point'", [www.businesscloudnews.com](http://www.businesscloudnews.com), June 20, 2012.

(4) "TCO study confirms: save up to 40% with the cloud," Heather Hurst, inContact Blog, May 3, 2011, <http://blog.incontact.com/blog/heather-hurst/tco-study-confirms-save-40-cloud>.

com/blog/heather-hurst/tco-study-confirms-save-40-cloud .

(5) "Bring your own device to work – should we even go there?" Farida Bambot, mHIMSS blog, Feb. 3, 2012, <http://www.mhimss.org/blog/bring-your-own-device-byod-work-should-we-even-go-there> .

(6) "Hidden cost factors and total cost of ownership for enterprise mobility," M.R. Rangaswami, [www.sandhill.com](http://www.sandhill.com) , April 24, 2012, <http://sandhill.com/article/hidden-cost-factors-and-total-cost-of-ownership-for-enterprise-mobility/>.

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