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CFO Perspectives on Sustainability and IT

Executive Profiles

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This document contains two CFO perspectives on sustainability and IT. The first is an article, originally posted on [The Sustainability Platform \(http://sustainability.itincanada.ca/\)](http://sustainability.itincanada.ca/), based on a keynote presentation by Lauralee Martin, EVP and COO/CFO for global real estate company Jones Lang Lasalle, at the Uptime Institute Symposium in May, 2010. The second is a transcription from a video interview with Glenn Vollebregt, Senior Vice President, Finance and Administration for St. Lawrence College, Kingston, Ontario, conducted on April 16, 2010, by Michael O’Neil, Chief Content Officer for the IT in Canada network.

The CFO Perspective on IT Sustainability Programs

“The C-Suite is worried about one thing, and that is delivering results.” How does the IT department gain C-suite visibility and support for IT contributions to sustainability?

Lauralee Martin, EVP and COO/CFO for global real estate firm Jones Lang LaSalle, began her presentation to the Uptime Institute Symposium – a forum dedicated to data centre energy management and green IT – with a surprising admission: “Full disclosure,” she said, “I am our C-suite sponsor of our energy and sustainability commitment – IT reports to me – and I had no idea that data centre should be in that equation.”

It seems intuitive to IT professionals that IT plays a critical role in sustainability, both in reducing its own use of electricity, and in enabling other options, such as improved facilities management and virtual travel, that reduce cost and carbon in the overall economy. However, as CFO, Ms. Martin’s perspective is shaped by her need to communicate to shareholders. Sustainability is an important part of her message, but at a “big picture” level that considered actions taken across all of Jones Lang LaSalle’s operations.

What did get Ms. Martin’s attention was information that she received at the 2009 Uptime Institute Symposium, at which she saw the projected growth in data centre power usage, taken from the landmark 2007 EPA report to Congress, which shows that without a change to current practices, data centre energy usage will rise from 60 billion kW hours in 2006 to more than 100 billion kW hours in 2011 – and that even with improved operations, it will rise by more than one-third in that timeframe. This is a clear signal for IT to approach senior management: “Any time you see growth that is at double digits with nothing slowing it down,” she notes, “you have to get the C-suite’s attention.” This is especially true when

discussing power, since these are “costs that add no value, because it’s energy cost...it’s taking away money that should go into business growth.”

After attending the Uptime Symposium, Ms. Martin went to her IT organization and asked, “are we doing anything in energy and sustainability?” She admits that “that’s a sad thing, that I was responsible for both energy and sustainability in our company, and IT,” and she was unaware that her IT group was actively reducing power consumption through virtualization and other measures. But, she adds, “shame on them” for having not made the company aware of these activities. When the IT department was asked, they put together a report that made Jones Lang LaSalle managers in many areas aware of IT’s contribution to sustainability, and gained “much more respect from their business partners.” The lesson here, as is often the case in IT-enabled sustainability, is that IT’s characteristic reticence to promote its initiatives to the user community is a barrier to success: “Clearly, you can have an impact when you effectively communicate.”

When she began to focus on IT as a contributor to overall sustainability, Ms. Martin found that it can drive success both within and outside technology deployment. The Jones Lang LaSalle IT department has saved 600 tons of CO₂ by using virtualization to eliminate 355 servers; an additional 2,502 tons by replacing 8,628 PCs with more energy-efficient units; and another 1,761 tons of CO₂ through reuse and redeployment of 1,233 IT units in two of its regions. The IT department also helped to salvage a senior management/directors conference that was to be cancelled as a cost-savings measure, by hosting it as a global, virtual, interactive meeting – which saved 2,130 tons of CO₂, and proved to be a “breakthrough moment,” positioning IT as a solution to a pressing senior management issue. The net of these activities is an IT-enabled savings of nearly 7,000 total tons of CO₂, the equivalent of energy used by 556 homes in a year, or the carbon eliminated by more than 160,000 seedlings grown for 10 years.

Ms. Martin concluded her session by noting that IT will continue to have an impact on business costs and sustainability activities. One area that she focused on was mobility, which is already part of the daily routine of the “millennials” (people born between 1977 and 1997) who will comprise half of the workforce by 2014. This group will demand mobile technology and the flexibility to work from different locations. From a cost and carbon perspective, the use of mobility will reduce both travel to the workplace, and the need for physical office space (which is itself a major contributor to carbon emissions). Ms. Martin predicted that rentable square feet per employee will fall from 200 RSF/person today to 50 RSF/person in 2015, with workplace utilization rising from its current level of 35%-50% to 85%. This IT-enabled reduction in operating expense extends far beyond the IT department “silo,” and into the entire organization – necessitating new workplace design and efficiency metrics. Clearly, these cannot be managed by IT in isolation; it requires collaboration between all of the functions



Lauralee Martin, Executive Vice President and COO/CFO, Jones Lang LaSalle

in an organization.

The key to IT helping the C-suite to drive and capitalize on these changes, Ms. Martin says, is effective dialogue with senior management. At the conclusion of her keynote, her final words of advice for the Uptime Institute IT audience were: “articulate your data centre strategy...why does that strategic choice give you a better OPEX, a better CAPEX...and how does sustainability fit into it? And...focus on communication – it is the most powerful thing to make you effective.” In many cases, this kind of communication represents an “unnatural act” for IT managers – but it is a critical link in connecting IT to sustainability.

A CFO Perspective on Green and IT

“A good green project will also be a good investment.” How does a CFO align stakeholder interests and sustainability with sound investment practices?

Michael O'Neil: Hello, and welcome to the IT in Canada's Video Network. I'm Michael O'Neil, Chief Content Officer for IT in Canada. And today we have an opportunity to speak with Glenn Vollebregt, Senior Vice President of Finance and Administration for St. Lawrence College, to gain a CFO's perspective on a major green IT initiative that the College recently embarked upon. Glenn, welcome to the Network.

Glenn Vollebregt: Nice to meet you, Mike.

Michael: Nice to meet you, as well. I have a bunch of questions that I'm eager to ask you, but before I do, I think our viewers would benefit from some context. Could you briefly describe the College's commitment to sustainability and green?

Glenn: Sure, Mike. The College has a huge commitment to sustainability. We offer a number of programs for our students. We offer an Energy Management Systems Technicians program. We offer a Wind Turbine Technician program. In fact, you might have passed the building that was under construction when you came here, and that's our new wind turbine facility. And you can notice it's quite high, in order to get those big turbo props in there.

We have a demonstration house called Energy House out on our front of our property, which is entirely off the grid. It's there so that faculty can teach students some of the principles of energy conservation and energy management. And we use it as a demonstration unit for tour groups for kids from the primary grades, as well.

Michael: That's a really rich kind of context for green, and so I imagine that you, as the CFO, get quite a lot of green proposals crossing your desk. How would you categorize IT's contribution to helping address the green and energy efficiency goals of the College?

Glenn: Well, IT has to be there. IT, as you know, is a large user in consumption of energy, so they need to participate in the sustainability of a college. So we're very much looking to our IT leadership to play a

leading role in there. We're a fairly large college. We have three campuses spread across eastern Ontario and a large investment in IT technology. So, for us, it's very important that IT be at that table.

Michael: That's really helpful. Let me start the questions off with a really straightforward one. We often hear that the rationale for green IT involves the “twin ecos” of ecology and economy, not always in that order. How do you, as a CFO, evaluate projects that relate to your green efforts?

Glenn: Well, that's an interesting question. I think that's changed over the years, as well. I think even if you go back only three or four years ago, if a green project crossed your desk, you would think, oh my God, it's going to be a lot of money, and the return isn't going to be there. And that, I believe, is no longer the case, and, in fact, I don't think they're mutually exclusive any more. A good investment, a good solid investment, needs to have a green component. And if it has that green component, then it is going to be a good investment. And I think that's primarily the biggest change that I've seen, probably in the last couple of years, for projects that cross my desk.

Michael: That's really interesting. So green projects, you think, stand on their own legs now economically, as well as bringing in the ecological angle?

Glenn: I do, and not only should they, they need to. I think green projects should stand on their own. And if you take into account the full life cycle of costs, green projects definitely stand on their own.

Michael: Yes, and from an energy conservation perspective.

Glenn: Absolutely.

Michael: If you were to assign 100% of the rationale for doing the green data center project, to one of ecology or economy, what percentage of the rationale, that ended up getting you to sign off on the project, came from cost savings, what percent came from the sustainable practices, or were you spurred by something else altogether?

Glenn: Well, the data center project for us, first and foremost, became an issue of risk. It was really the business that drove this project. And then once we decided that we needed to do this project, it became very important for us that it had green elements to it. Anything that we do, if we're going to be a college that promotes sustainability and green, then we need to walk the talk, and we need to make sure anything that we do, any investment that we make, we're making sure that we've covered our bases in terms of the green approach.

Michael: And did the investment in the green data center compare favorably with other possible allocations? Out of what I'm sure are [many competing priorities]?

Glenn: Well, it goes back to your earlier question, too. And IT can use a lot of energy and a lot of power. As part of our



Glenn Vollebregt, Senior Vice
President, Finance & Administration,
St. Lawrence College

data center projects, we went from something like 70 servers to 12. So that alone was a huge reduction in terms of energy consumption. And that's just part of it. The other part's in terms of more efficient utilization of our technology and all that. But just from an energy point of view, [St. Lawrence sees] tremendous savings there.

Michael: So, as a CFO, how do you define the “hurdle rate” for a data center project of this type, overall? And then how do you layer on the green considerations around that?

Glenn: Well, again you look at the hurdle rates, or their internal rate of returns, they should match up with other projects. And in this particular case it did. So you're looking at payback values at three to five years, and that should be there. If it's not, then you've got to really revisit what the project is. But the green component with that definitely helps on that aspect. And it's like we talked about earlier, the two are hand in hand now. So a good green project will also be a good investment.

Michael: Did you have a formal IRR assigned to this project?

Glenn: We didn't. The College operates on funds from the ministry, in terms of capital grants, and so forth. But, what I can say on this one is that we didn't have a lot of capital dollars this year. We believed in this project [so much], that we were able to take our operating funds. We made a case, there was an investment opportunity for the college, and we used our own operating cash to finance this.

Michael: You've seen some early returns now. Do you think you're going to achieve the benefits and the savings that you expected to see?

Glenn: No question. It is still too early to tell, but again, when you go from 70 to 12 machines, you know that's going to happen. We have dedicated cooling, heat recovery...we're very positive that we're going to realize those savings. In another year from now, when we start comparing, we'll see that. But, there's no question this has been a tremendous project for us.

Michael: Heat recovery is a really interesting subject, and not one that was part of the first wave of green. It's really something that's influencing the current wave of green, in helping to support more robust financial measurements. Can you talk a little bit about how that works?

Glenn: It's important that when you're doing a project that it's not an isolated project. That meant working with the facilities group to make sure that it ties into the total college's HVAC system. That's what we're talking about. It's not an isolated data center in a room, it has to tie into the energy management systems of the whole college. Once you do that, then you can generate some efficiencies.

Michael: So, you tie the heat that you take out of the data center into the HVAC system, in order to heat the rest of your facility?

Glenn: That's correct. We're not totally where we want to be on that, and that was part of the notion of making this project scalable and modular, so there are other components that we can actually utilize a little bit more of that. We have a long-term plan on this.

Michael: It's interesting that you mentioned the facilities folks, because frequently when we look at green data center initiatives, there's a fair amount of need to synchronize facilities and IT -- groups that aren't necessarily well synchronized. But, data centers are energy hogs. They're shown to consume up to

80 times as much energy on a per square foot or square meter basis as office space like this, or classroom space. You've taken some interesting steps to align the interests of facilities, and the CIO, and the entire campus around your accounting policies for energy use and cost. Could you describe that a little bit?

Glenn: It was important for us. We just made a substantial investment from a facilities perspective into reducing our annual energy costs – we made a \$6.5 million dollar investment in all three of our campuses prior to undertaking the data center. It was very important to us when we took this project that it tied into our overall college management energy plan. That's why it was important to have our facilities person at the table. The other thing that we're trying to do, from an accounting perspective, or a CFO-type perspective, is that we need to allocate our costs to our programs. The two largest components of a program's cost are space and IT technology. Unless you put ownership in the hands of the folks that are running those programs, and by that I mean allocating space, allocating technology... That's how you can make it a true, college-wide endeavour. Otherwise, you basically have the CIO and the facilities director being their own champions. It doesn't work that way. You need to have the whole college on board.

Michael: So, do you do charge backs that involve both the technology, as well as power to run that technology?

Glenn: That's what we're getting to, absolutely. As you can imagine, within the academic institution, there's a lot of discussion that needs to take place along that line. But, most folks have bought into that concept, because you really do need to be able to manage your costs and manage your revenues. Essentially, you need to be able to charge back those types of things, so that they will be managed. Otherwise, people just won't pay attention to them.

Michael: It would seem like, by doing that, that you get the entire campus brought into the idea of moving from 70 servers to 12 and economizing on cooling...

Glenn: Absolutely, because the one thing with technology, it's there for a reason. It's not there because it's cool, it looks good in the data center, it's kind of neat.. It's there to support our customers, and that's our students. That's the primary reason why we have it. It's important to get the whole college to buy in to a project. So, yes, a data center actually means something to a Dean of Business, for example. Until you get to that stage, you're not going to make any headway on those initiatives.

Michael: Your background spans not only academia, but other business environments and government environments as well. Does this kind of approach, where you charge back for IT and for the power to run it – do you think that applies in other contexts outside of academia?

Glenn: No question. I think you have to... For public sector, private sector enterprises, you've got to push the cost down to its lowest level. If you do that, then you can manage it. You can measure it, you can manage it – there's that old saying, but there's no question, I think that kind of accounting needs to happen, and is happening throughout most public sector entities, now for sure. The private sector has been doing it for a lot longer than that, so...

Michael: So, align the interests of the different stakeholders around conservation, and make sure that facilities and IT aren't so disconnected.

Glenn: That's right.

Michael: That's terrific. Thank you very much. I think this kind of financial perspective is really invaluable to the IT discussion in general, and to the green IT perspective in particular. Thank you so much.

Glenn: Thank you.