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Video Transcript: Building the Business Case for Cloud Solutions

An ROI Innovation Report

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This document contains an edited transcription of a video roundtable session from December, 2009. Participants include Mark Kovarski, Senior Business Technology Consultant for Bank of Montreal; Rene Marquis, IT Director for the Laval School Board; and Doug Jones, Business Unit Executive, Cloud Computing for IBM Canada. The session was moderated by Michael O'Neil, Chief Content Officer for IT in Canada.

Michael O'Neil: Welcome to the IT in Canada discussion on the benefits of cloud computing. I'm Michael O'Neil, chief content officer for the IT in Canada network. I'm grateful to be joined today by Mark Kovarski, senior business technology consultant for the Bank of Montreal; by Rene Marquis, IT director for the Laval School Board; and by Doug Jones, Business Unit Executive for cloud computing for IBM Canada. Gentlemen, welcome and thank you for joining us.

In our previous two sessions, we've walked through the business triggers that help to identify a situation in which cloud computing might be an appropriate option for a business, and the sources of either savings or new capabilities that a business might recognize from pursuing a cloud strategy.

Today what I'd like to do is hone in on the business case for the RFP around a cloud computing strategy. What is it that we look for when we're looking to quantify the benefit of cloud computing, that can be articulated to senior management – and how can we then articulate the requirements around that benefit to potential suppliers?

Mark, maybe I'll start with you this time. How do you present the business case for cloud solutions? What figures do you need to highlight for senior managers to get them to understand the cloud is something we should definitely put down on our list of initiatives we're going to commit money to when we're committed to take the next step?

Mark Kovarski: When you look at cloud computing as a whole part of the bigger picture, it's not just the technology scene. When I say "bigger picture," it's CAPEX/OPEX, but also the perspective of specific technologies, people, and processes that yield the best ROI. So those would be the areas you are looking at.

Michael: What areas did you include in that when you're articulating that to the senior managers. What areas do you point to and say, "Here's the source and here's the source and here's the source that we can put in a business case and end up signing off at a positive ROI"?

Mark: I look at the capex of the acquisition of hardware, for example, from day one. There's hard numbers behind that. When you start looking at benefits such as security and others, it may be a blurred line, and there are no solid numbers. But at the end of the day when you combine all of those together, that will yield the best results.

Michael: And within your environment, I'm sure your senior managers react very quickly, very positively to security as a component of the business case.

Mark: Yes, they definitely do. It's an important part of the process for the banking industry as a whole.

Michael: Rene, I know that in a school environment, security is also something that you must cover off as part of what it is that you deliver in a business case to your management, "We will keep our students' information secure." What is it that you needed to put into your business case for the school board in Laval to help them understand that cloud was a sensible approach from a tactical perspective to roll out within the board?

Rene Marquis: Basically to us it was a natural evolution of all the different projects that we've been doing for the last 10 years, when we initially built this fiber network. And going to cloud computing was a just natural decision to make at this time. As I said earlier, we want to give all students access to technology, and one of the ways to do that was to lower the ratio of students per computers. And see if I can lower my cost, my operating cost per thin client, then I can actually increase my number of clients per machine.

So it was an easy one to present to the management, different ways of saving investments, saving resources. I should mention to you I'm now using about two technical people to support about 4,000 thin clients.

If I look at this from a desktop point of view, I would require many more people than just a couple of people doing that. So naturally now what I've done is I've touched a position that I can increase the number of thin clients without having to increase the number of employees to support that. Usually you find that we have about one employee per 500 desktops in my department, more or less. So, 4,000 thin clients I should be able to require about eight people to go around and support the environment that the cloud is distributed in.

Michael: So right there is the cost savings, you save six full time equivalents from a support perspective and you mention that you get better amortization and depreciation because you have a seven and a half year asset life cycle versus a three year or five year asset life cycle on a portable or desktop.

Rene: That's right and if you do the math on these numbers, those are very, very significant savings. Now mind you within the school, our administration will be different because we have also been using open source as well and so we are also saving some dollars on the operating system in education as well, so this adds up on top as well of the printing, saving from the operation as well. So, it's quite significant for us, and we did find that actually for this first decision was to go thin client and the second decision was to use open source for the students, and those two together are really significant, substantial savings over a regular environment. So it was an easy decision to make.

Michael: So are those the areas that your senior management found most compelling, the hardware, software savings and then the full time equivalent savings on the opex?

Rene: Yes, yes, and also I think within a large organization such as ours, for example, in education, it does make a lot of sense. Cloud computing is obviously the best solution for our type of organization whether you want to use a commercial solution or not; it lowers the purchase cost per unit, but also centralized management will save you money and it will increase your reliability within the classroom. And those three factors are things, that...you know in my situation, the teachers are not technology savvy, and we want to make sure that the equipment we put before them is easy to use, is always used, is always working and is this is something we have been able to achieve with cloud computing.

Michael: Thanks. Mark, you heard Rene mention that the four to one ratio decrease in the support staff needed for a cloud-based client infrastructure versus a fat client infrastructure, does that ring true in your environment as well?

Mark: Absolutely. I mean what we've seen, especially on the opex side, is very, very significant savings. And you know, again, that will vary from organization to organization, but definitely there is a strong case in support.

Michael: Yeah, I don't imagine you guys would get any more than five hundred clients per support staff, in fact in a bank environment I would guess it would be even less.

Mark: That is correct and you know from a client computing perspective there's a lot of factors here in play, applications sets and things like that, but definitely in terms of cost savings that they offer.

Michael: Great. So Doug, let me ask you to chime in here. Are the stories that you've heard here typical of what it is that you hear from clients as they're trying to put together the anticipated benefits of a cloud strategy in a business case they can bring to management to win support for the sorts of services that you provide?

Doug Jones: Absolutely – very typical. But I would like to make a point that some of these business cases actually don't need to be so substantial. Many clients already have in their environment all of the components that are needed in order to assemble a cloud. A lot of clients have already got virtualization running, for example and they're just missing the automation piece. So the business cases, some of them really are fairly small, it's really a quote/unquote "no brainer" in some cases.

Michael: Right and I think that that speaks to something that Rene said where it just becomes a natural evolution to the cloud.

Doug: Absolutely.

Michael: So is virtualization one of those triggers? Do you find that when a client has virtualization that cloud makes sense as a next step for them?

Doug: It does. It does. If a client has virtualization in place so they're already part way there to cloud and they've already got the benefits of reduced software and hardware costs. Now you go and add the automation to it, you decrease the labour cost. And add an end user portal to that, which provides self-service from anywhere, anyplace. You've now got a cloud environment. The cost of doing that in some cases is really minimal.

Michael: Mark, I see that you're nodding, because I know that your virtualization was a big step for you down this path, and you've already referenced in the previous session the self-service aspects. Does this ring true to you? Does the business case become easy if that's your starting point?

Mark: Absolutely. I think the natural evolution in this organization is to go towards the virtualization direction. Cloud computing just makes even more sense as a next step toward that. And I might add also,

looking at SLAs, it's one of the things we looked at, especially when you start dealing with external cloud providers, it becomes also increasingly important.

Michael: Well, you know, that's a great springboard to my next question, which is, when you're putting together an RFP or when you're evaluating suppliers, what are the attributes that you look for? Are SLAs at the core of what it is that you say, "as a supplier to the Bank of Montreal, this is what you need to commit to?"

Mark: Absolutely. SLA becomes very, very important when dealing with a cloud provider.

Michael: And so what is it that you look for in that SLA? What is it that you say to a supplier, this is the level that you need to perform at?

Mark: Up time, the availability of the systems, along those lines we look for.

Michael: Now Rene, I suspect you have kind of a slightly different take on this. When you were putting together your RFP for a cloud solution, what were the key attributes you insisted that a supplier be able to demonstrate to you?

Rene: Because of the new technology we were involved in, we were looking for a major supplier to give us the skills - highly specialized skills, and the technical resource that goes with it. Because we were innovating in our approach based on open source, we had to make sure that we were with someone that could give us the knowledge required if we do need it in time. And the second aspect I looked at, it was through IBM in that case, we were able to connect with a larger supplier for our thin client equipment, and we have access to the VT and the proper level of decision [authority]. So in case you have problems, you can get a problem fixed really, really quickly. And this is what the supplier gave us, direct access to the manufacturer with quick response.

Michael: So, Rene, you were looking for skills in an area that isn't particularly common, technical resources to support those skills, and then access to executives for escalation?

Rene: Well we haven't mentioned it so far, but network infrastructures must be extremely robust when they do a thin client solution, and this is one of the areas we didn't think about. We thought we had a very good network, but once they started installing thin client, for example, we had to make sure that the virtual storage was running fine, all the systems are up and running, everything is really protected and available all the time, because if you have a glitch within your network, you lose your client. And this is where you want to have a major supplier come with you just in case you do run into problems and you do need to find a solution quickly.

Michael: So when you went out to evaluate suppliers, did you find that there were many firms that have this mix of skills and technical resources and access and the ability to support and ensure network infrastructure? Or did you find that there are in fact relatively few firms capable of providing that level of support today in Canada for a cloud infrastructure?

Rene: Yes, true. And also, I should mention, in terms of project management, one of the things we haven't talked very much about this afternoon is the fact of the deployment. For example, we deployed about 2,500 units within something like four weeks, like a month. Anyone who has been doing this for some time, deploying 2,500 data would take you quite a few months to do that. Thin client is very different, because you don't have anything actually to do before then. You just need to drop a unit within the location, plug it in, and certify that everything is running fine. Then you go to your next client. And that's one of the advantages to what IBM came up with in terms of project management to make sure the deployment was going to be fast and easy just to make an impact on customers.

Michael: Doug, there you go, you've had one ringing endorsement for the skills that you folks bring to this. So what we've learned, Mark focused on uptown availability SLAs as a key supplier attribute. And Rene's list included project management as well as skills and escalation access and the ability to deploy broadly and rapidly. Are these common to the kinds of opportunities that you encounter? Are there any other factors that you typically find on these sorts of lists?

Doug: Absolutely. But one item that's making it on client's list more and more is to make sure that if they're going to looking for an external provider, that they choose a provider that provides, just like Rene has, an open environment based on open standards. So that if you're choosing a cloud provider, you have the ability to disconnect from that down the road and potentially switch suppliers. You get clients that want to start with a public cloud and then maybe pull it in house to private and then back again, or go with different suppliers. So [it's important] to make sure that you're able to have to flexibility to go forward.

Michael: Is there any conflict between the ability to support an open environment and that ability to migrate private cloud and public cloud back again, and the kinds of SLA guarantees that Mark needs to get started in the first place?

Doug: Well absolutely. If it's an environment that's sort of a custom environment or a closed environment that's built from one supplier then you may be sort of locked into that service for a long time, until you can move away from it, should you want to do it. The other item that we're starting to see and requirements in our clients' lists when they're looking for a vendor, is the ability to go and audit the vendor's claims. So whether it be SLA or security or privacy attributes that they're looking for, to make sure that they're able to go and audit that the vendor is living up to the claims underneath the covers of the cloud service agreement.

Michael: That's a really interesting point. Mark, you said you need guaranteed uptime, you need SLAs. How do you go about assessing the ability of a supplier like IBM to live up to those claims?

Mark: Well, there's a lot of up-front groundwork and homework that needs to be done, and investigative work. Again, agreements have to be drafted. You work with a supplier in a partnership scenario to come to an agreement that works for both parties.

Michael: What kind of reference-type access do you demand in order to verify the claims made against SLA agreements?

Mark: Well, again, as far as an agreement that needs to be drafted, it probably would vary from organization to organization. But in our particular case, we look for specifics, obviously.

Michael: It strikes me that the two of you have an interesting difference in your requirements in that, Rene, you would need quite intensive support in a specific area that is a little bit off the beaten track for many suppliers. And Mark, you would require a service level guarantee that spans many different geographies and many different languages and network systems. As Rene said, the network infrastructure is critical, and you could have many different network infrastructures involved. So do you find that there are a lot of suppliers capable of providing you with global support on that sort of basis?

Mark: As of today, it's the big suppliers truthfully that can supply this kind of capabilities.

Michael: And do you audit references in the different geographies.

Mark: Yes we do.

Michael: So you need a reference in China, a reference in Brazil...

Mark: Correct. That's part of the business globally.

Michael: And Rene, what did you find... You need intensive support, and basically in Quebec City. Are there a range of options there, or do you say, gee, there are only a few suppliers who are committed to this region to the extent that we need them to give us access to enough people to deploy 2,500 units in the month.

Rene: No, we have all the options open. There is no difficulty having any software vendors or support from different suppliers. I like to add a little bit of a twist to our solution. See, we started with virtual storage about what, almost 10 years ago. We went for virtual servers as well. And now we're looking at virtual PCs. In our vision, the thin client solution, the opening that comes up on your screen might also depend on the type of student you are. If you are a potential student from a vocational school, or an adult that go to school at night, you need to use a particular piece of software, commercial software, that's available at your firm if you want to take classes – using a thin client, you can actually redesign your classes. Your classroom would actually reboot and will actually display the type of software that you want to have.

So you may have in the evening the same classroom that they use in the day with an open office or an open environment, if you wish. You can have the same thin client offer you now a commercial solution at night for the vocational schools as well. So I might actually be running two different type of solutions within the same client.

In this case, you want to have a supplier reference that supports you as well.

Michael: So thanks very much. Let's help our readers, and help our future development of tools to help our readers, by asking you guys to contribute to two parallel lists. I'd like each of you to nominate one or two or maybe three issues for each of two lists: one, factors that a firm considering cloud should include in its business case, and the other, for a firm considering cloud suppliers, to include in their RFP. So Mark, maybe we can start with you this time and stop picking on Rene as the first person for each of these things. What one or two issues should a firm definitely consider as part of its business case, as it's putting together an explanation to management of why cloud makes sense to them?

Mark: Well, there's the hard number and there's the soft numbers that you need to look at closely.

Michael: And under hard numbers, what would be the keys in there?

Mark: The hard savings involve the CAPEX savings on hardware in purchases by the organization.

Michael: And the soft numbers?

Mark: Soft numbers such as security items. How do you put a number to security, for example. Again, it's a very important factor. You might not have a hard number for that area but we need to consider it.

Michael: OK. And then on the RFP, the one or two key things that a firm considering cloud should absolutely put in front of its suppliers as part of its requirement?

Mark: Well from my view, SLAs will definitely be one. Especially as we start looking in terms of cloud sourcing, going to external clouds, it becomes very, very critical. And I would agree with Rene. For an overall solution provider, skill sets – as an overall offer, that needs to be looked at. It's very critical that you again focus on the bigger picture. People, process, technology...

Michael: Which underscores the need for change management.

Mark: Correct.

Michael: Well Rene, since we're talking about you, let's turn it over to you. What one or two issues absolutely need to be in a business case for a firm, or in your case a public sector organization, that needs to explain to management why cloud makes sense as a strategy?

Rene: On the quantitative issue, you know we are bound by different laws and things like that – so we go with the lowest cost bidders, obviously. But I would say that on the qualitative issues, maintaining the software integration – and it's difficult, because actually when you're moving to thin client, you're building a new infrastructure, and ultimately, you have to make sure that this new infrastructure will blend in within the existing environment, which you will still support. So you would want to have some prior knowledge of the skills that the supplier would give you with regards to the network infrastructure and the ability also to maintain the software integration within your environment.

Michael: And you also mentioned, as far as the hard number justification, earlier in our conversation, the ability reduce full time equivalent FTE staff for the support of the infrastructure as well, right?

Rene: Yep. Well, we do all the numbers actually and we wouldn't expect our suppliers...well, I guess the suppliers did create a vision to give us other ways of savings, but actually we must do our work prior to that.

Michael: OK but in the business case of your management, you would highlight the, the full time equivalent support as well as the importance of maintaining software integration? And so how do you then reflect that in an RFP? What are the critical needs that you put in front of a supplier to say, "this is what it is you have to do to be a cloud supplier to Laval " or that your peers should put in front of their suppliers as a criteria for selection?

Rene: I guess we look overall to the quality of proposal, you know, now we have to come up with a set, we have to list a number of issues that we want to have resolved and we have to look at the overall qualitative proposal with regard to these issues, different issues, and the best possible margin. You know, the public sector might be a little different than what you see in the private sector, we don't have as much flexibility sometimes in terms of selection of the supplier. But our research process has knowledge, experience, network skills as well, would be something that would be highly regarded.

Michael: Thanks. Well, Doug, we're going to end with you, again, so now we have our two buy-side executives saying, "what I need in the business case is hardware savings and the ability to save money on support staff, and from a soft perspective I need security and I need to maintain my software integration with my versioning of software." What else would you add to that list in terms of critical aspects that you see in business cases to get management to say, "yes, we need to do a cloud initiative"?

Doug: Right. Well, cloud computing certainly has a huge value proposition and it can dramatically drop cost. However, there are some aspects where cost can actually increase a little bit. So they need to be in the business case as well.

Michael: And those would include?

Doug: So for example, if you're putting in a cloud department, be it a private or public cloud, you may need to beef up your network infrastructure, So you'd want to make sure that those items are also captured in the business case so that when it does get approved, you've got the resources to reap the savings but also make any changes in the environment that's needed in order to capitalize on it.

Michael: Well, I think that's a good point, to be realistic in the hard number aspect of the proposal, in terms of what investment is needed to capture the greatest savings. And then from the soft number perspective, we have security, we have software integration and integrity, what would you add to that?

Doug: Well there can also be productivity improvements as well. So, just the fact that you have a cloud in your environment, your staff and what you do can be more productive. To use the example of a bit earlier, the test environment, where now testing can be done 30 or 40 percent faster than in a normal environment – there you have some soft savings issues that can be included in the business case.

Michael: Thanks and as far as RFP's go, the RFP's that you encounter, I'm sure they call for SLAs, I'm sure they call for skill sets in terms of your ability to help manage change to support networks, to transfer skills and software. Is there anything else that you find to be particularly important to your customers?

Doug: Well, if a client's looking for an external provider, I really think it's important to include in there, the ability to go and audit the vendor's claims. And as Mark mentioned earlier, that if you're using a cloud because you're trying to reach new markets, if you're trying to do computing from any place at any time, having a company to be able to actually provide that, have a cloud infrastructure globally, would be a big benefit as well. And an open environment, so that if you're looking into the future, to make sure that you're not sort of stuck in the cloud that you can't get out of.

Michael: And the ability to migrate back and forth, from private to public and back.

Doug: Exactly.

Michael: Perfect. I think that's great. I think we're going to wrap on that. Thank you very much, gentlemen. On behalf of everybody here, I'm Michael O'Neil, Chief Content Officer for the IT and Canada Network. Thank you for joining us at this ROI Innovation.ca Cloud Computing video roundtable session.