

ENTERPRISE ARCHITECTURE - THE KILLER APP FILE

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Simon Gauthier. Thank you. At the national rep meeting yesterday when we were all talking about e-Government there were themes putting the citizen at the heart of a whole of Government approach. There were themes of greater transparency in the way our respective Government operated. There were themes of greater efficiency, greater effectiveness and the likes and all of these themes for me means that we as organisations need to really change or transform the way we are doing business and this is the way that Canada has been looking at E-Government for the past several years. We found out though also that change is not easy to manage, to implement in specially in large complex organisations as are Governments and as such several years ago we started a programme that we called Federated Architecture Programme FAP. Unfortunately FAP was translated by many as being a large IT project when really FAP Federated Architecture had to do with rethinking the way business processes were being carried out so we changed the name, we went to FAP2 and rather than calling it FAP2 we called it Business Transformation Enablement Programme BTEP and I have here with me John Weigelt, John is a Senior Director in the CIO office of the Governor of Canada in charge of security standard and engineering and as such John leads really the long term development of this new framework that we are trying to put in place in order as a Government to transform, or to look at transformation anyway, not necessarily the same way but at least in the same direction so without any further ado I will ask John who is really the resident expert in his domain to give you a presentation.

John Weigelt. Thanks very much Simon. You will notice the title in the handouts says 'Enterprise Architecture - the killer App File'. It truly is an exciting topic, we are really seeing a lot of excitement within Government on how we are transforming how Government does its business and hope to talk to you about that today.

You have probably seen this slide before, Michelle d'Auray (the ICA National Representative for Canada) has used this slide in a number of presentations but this gives the approach what are we trying to accomplish for e-Government, e-Government services. As you know the Government of Canada is providing services to a number of citizens, a number of clients geographically distributed, some in cities, some in remote areas and we want to provide them services, our clients, the businesses and individuals we want to provide them services 24 hours a day, seven days a week regardless of where they are in the language of their choice accessible to those that have accessibility challenges. So what is our target those most frequently used services by 2005 and these are transactional services. This isn't simply putting publications on the web, we've done that; we managed to get on the web everything except those publications that require magnetic ink. Hewlett Packard doesn't sell those toner cartridges just yet. So every year documents that you need to get, every form that you need to use for the Government of Canada is now on line but we want to start doing transactional

services, start inter-active services with our clients, so how are we going to know that we got there, simply putting the services up, what if we went there and nobody came so we want to see that 10% increase in citizen satisfaction. We've been quite aggressive at going out to the citizens and asking them about how they like their services, what do they like about the service, what don't they like, what do they need to see, we've had a lot of focus group testing under our belt to find out what exactly they are looking for. We've had some quite humorous results from some of the expectations, some of the mis-conceptions about Government services, I'll share some of those later on this week when we start talking about our security services and authentication services. We are doing this to a 5-point work plan first off is Service Delivery – what services do we want to provide? How are we going to provide them? How are we going to improve those services?

Next, common infrastructure. Provide a common infrastructure for use by Government Departments and Agencies. Work on the policy side, human resources and communications. We've heard it all too often and we've heard it even today that its not just technology, it's the people side of things, it's the service side, it's the policy side and we are focusing on that.

So what are we going to do by 2005 well 135 services are going to be on line and we have managed to whittle that down. I think when we started off with Government on line, I think there were some 700 discreet services, we got that down to 200 and some down to 135 where people are starting to resolve their services into common clusters, common groupings, we also have the policy and standards to support that. Common look and feel, one Government as an enterprise when you come into Government of Canada website will have the same look and feel regardless of department.

Privacy Impact Assessments. Privacy is extremely important to our constituents. Departments that deliver new services have to have privacy impact assessments for their services. Other policies are supported, their authentication services when we looked at our service delivery we found that over 70% of our applications required some sort of authentication. Now that's everything from "Hey, you've been here before" to "Yes, we want to give you credit for paying your taxes" that type of authentication. But what are we doing beyond 2005, how do we transform how Government interacts with their constituents. I'll put this very busy slide up on the wall and start talking through that. We start off we find three stages of being, three stages of service delivery. We start off in the bottom left corner and we start off with our foundation strategy. So we start putting our services on line, getting an on line presence, start looking at technology infrastructures, technology architecture and this has been you know really quite challenging for us from an architectural prospective. You know, as Simon mentioned people tend to pigeonhole architecture as a technology problem and it truly isn't. Architecture goes well beyond technology, goes up into service strategies, into Government policies and I'll show how that fits later.

So we started off with Stage 1 created a Federated Architecture Programme focusing on technology domains, network domains, security domain, information or directory domains and accessibility domains. We've had some great successes there coming up with an accessibility architecture that appeals to those that require other devices to gain access to our services. Trying to expand that now to show that it's not 5% of your community that needs those special services it's 100% because you are going to find people on their cell phones require that screen reader. You are going to find that people with PDAs want to have a different way to get access to the information. As you start evolving this you start realising that people can start doing things together but you will never be able to meet the challenge of getting departments to change their back end systems right away, to agree upon common standards and so to gain that common service or to link up services you start adapting your services together. You start putting in some conversion utilities, some translation engines to enable some key departments to start working together, start sharing their services and that's the stage 2, the adapter strategy We start looking at the business inter operability, to looking at data inter operability but really using some shims or middle wear to make this all work out

and for some applications you've got to remain in Stage 2 there is no business value to go further. You don't have any reason to do so with transformation but for others once you start doing business together, once you start sharing information you start to realise the benefits of doing business together. You start to realise that hey, your business is not much different than that colleague in another department. It's really the same and you can start looking at transforming your business that third stage of being, start changing how you interact with your constituents.

We found that you can't easily jump from 1 to 3 that intermediate step is almost always required so that you can start to understand what the business processes are, start to understand the culture and relationships in other departments so you can see and bring these business peoples together.

So what are our goals for business transformation and business transformation try to find a better name we say architecture technology people get excited but the business people don't show up. We say business transformation enablement programme and people say that's just too much, I don't understand what that is so we'll have a contest for names just write something down and we'll collect them later on and maybe we can have an interactive type process. Well what is the goal? Consistent outcome, standardised design for common business goals, for instance processes across government. Let's take a step back and look at what government does. We'll talk more about government business in a minute. If we look at some key examples in the Canadian Government, we give grants to film makers so that they can promote Canadian culture; we give grants to farmers if they have a bad year on their crops; we give grants to students so that they can help them go through university. If we look at the process, in order to get that money the first thing you do is to sign a form. Fill out a form; give the form to a government department. Then you look at the form in the department, figure out if someone is entitled to it, and lastly give them the money if they are entitled to it. It is the same process across three departments. Why are we running three different systems? Can we look at common business processes, common financial management process, a common granting process, and make use of that, simply through the use of smart data. Now that's smart form. You know, enable the business to be able to use a common business process with their own lexicon, perhaps with their own forms, perhaps with their own decision matrix. And allow that information to be shared in a way that is interoperable, that is private, that is secure, that we can share that with either direct consent from the user or not, expiry all those things.

We can't do that without shared governance as well. We have to have a governance structure that manages all that. And all too often, we find the government structures don't exist to provide horizontal services across government. Or you have a programme such as education, provided by many departments and agencies, how do you manage that across the whole of government perspective. It is quite a challenge, the existing frameworks aren't there so we can't do service exchange or service transformation without thinking about the transformation side of things; the governance side of things.

So what is this business transformation enablement programme? A big mouthful of words, that doesn't really mean too much. Well, it's a new way of thinking. It's a new way of looking at government as an enterprise. We are all one family, talk to any citizen in the street and they look at the federal government – "it's the federal government". Don't tend to look at individual departments and agencies, and they actually may not even make the distinction between local, provincial or federal government. Might not even be able to tell you where the service comes from. So it is a matter of taking a whole of government approach, looking at it as an enterprise. The government of Canada has about three hundred thousand employees working for the government in Canada. Many businesses are much larger. Can we compare ourselves to a similar business that has perhaps the same business lines? We need to have harmonised legislation, regulation policy so we can do these things across the board, so that we can take advantage of perhaps some improved business process. Can we have a common

helpdesk for government in Canada? And do the triage at the front door call 1800 Help Me Canada, and go through that way? We need to have inter-operable, integrate business information systems so that we can make use of those common systems, leverage that.

So what does BTEP provide at the end of the day? We need a common language across government. We all need to be talking the same thing. If we are giving a benefit, if we are giving a grant, if we are contributing to someone who, for giving a donation or a loan; we need to be able to talk about the same thing so we can equate these across government. It also helps us to avoid that departmental mantra "I'm special, you know, my programme is different from yours. Now I am doing agricultural activities, that's much different than Canadian heritage activities". No, we need to break down those stovepipes with the common lexicon. We need to increase our discipline, especially at the business level. Go away from our plain language requirements and start getting some diagrammatic definitions for business process. Making maximum use of things like, you know for modelling language. We need to look at strategic outcomes, know who is accountable, manage the risk of course – we always need to do that. Make sure business systems are adaptable, sustainable, inter-operable and again this is a business focus. We are not looking at the IT side; architecture goes well beyond IT systems, goes into the business models. How are we actually doing business, and what is the business we are in? And the legislation, we cannot forget about that part.

So that's a five step programme. We are not at the twelve-step programme yet although I might get there soon. We have a framework for communication, planning and design. Business reference model: the second piece so that we know what business and we have a common way to describe it across government. We have some enablers, some catalytic processes that really help to get this started, get department to see the values, see the power in this tool. All that is just paper. So we have got to do something. How do we do this? We have a methodology. A methodology for actually creating our results and finally again, that's governance model to make it all work.

So we start of with the framework. For those of you who are in enterprise architecture will recognise this framework. I look at it as the Dewey decimal system of architecture. So if you happen to go to a library and pull out the card catalogue, you know you don't tell the author how to write a book but after they have written the book you know where to put it in the shelves. Likewise with this architecture: with this framework of architecture. We don't tell people how to write the artefacts but we know where to put them so that when somebody else wants to duplicate that example, if industry in Canada wants to use a model that they've received from agriculture, they know where to find it; it's right there on the shelf, they can pull it off. It is also key to note that this is not net new. You put something like this on the board to the business manager and they fall off their chair, and they think money. It's going to take a lot of time to fill this out, I don't know what corner to start from, I don't know if I start from the middle and work my way outwards, a column at a time. This is not net new. We've created business strategies all along. We've created our business models, our strategic conceptual models; they all fit in here, a business vision, a list of processes, important things. And we decompose that into systems. So this is not net new. It is just a matter of taking those things we already have, perhaps refining them a little and then finding a place to put them so that other people can use them and share them.

The next step is to have a common language for business. And so we have looked around, and we happened to find a public service reference model. And that was generated by what is called the Municipal Information Systems Association, a bunch of cities and provinces in Canada and US, they have taken a look at government from a business perspective and they have defined what is the business of government? And I am sure that when you take a look at it on the next slide, you will take a look at your constitution or whatever enabling legislation you have within your nation you will say "That makes sense. Yes, we are government. We are supposed to do this, we are supposed to do that." You will find a lot of equivalents there.

And our hope is that if you find the equivalent business lines, you can start sharing these models across different jurisdictions, different nations, to actually do that business better.

When we have taken a look at business fields, we have some nineteen business lines. I apologise for the size of them here. We have some public facing programmes, there is some eleven of them. I will rattle them off: education; public health; national defence; now these things are all quite familiar to everybody in the room as things that government provides. Also internally, public policy, human resources management, financial management, all those that you do as a matter of course to keep your business up and running: to keep your government up and running. So if we can start to model our governments along these business lines, and share those experiences, share how we provide those services, then we can start to have inter-operable services at the business level. We are not talking technology just yet. At the business level, how do we do business better together?

Now we are moving quickly, but the next step is the enablers. So we have the business models; we have a common place to put them so that we can find them -Dewey decimal systems; we have an organisation scheme. Now what do we do to make this happen? Where do we start? What are some of those key projects, key enablers that we can use to kick things off, that thin edge of the wedge? We can look at things like a modernised workforce; Multi channel service delivery, being able to access our client through fax, phone, mail, mobile, regardless. Provide them with that seamless access regardless of where they come from. We used to call these e-enablers. We have taken e-enablers right out, I think you will start to see business enablers come in, probably more and more because this really is going to enable how we do business. A bit of an example, because enablers is pretty fuzzy. You know, while it's still pretty cloudy outside, so it's the same thing with that concept. So what are some of the enablers? If we take a look at information systems which is where I am situated, we can start off at the bottom and look at technical inter-operability. We need an infrastructure so we need a network infrastructure, we may need some other services on top of that. We need to protect that infrastructure so we start moving up the chain, customer identity information management with the cross-cutting themes of accessibility, privacy and security. You can look at any of the enablers that are on the previous page and say, well, how do we implement these? How do we really catalyse that business and move forward with our service delivery?

Now these are all just standard paper models, unless we have a way to do it. So we needed a methodology to do the transformation. How do we go about this? And truly the way that we are going about that is through an innovative process. Through a common infrastructure, we started small; a couple of departments; a couple of services: we've put those on line. And our address change on-line is a good example of that, started off with authentication services for one small community. And after we delivered that one, we go round the cycle one more time and cast our net a bit wider and catch the next community, and move it off to employment insurance, to record of employment and other communities. Then we go round again and hopefully one of these times around that identity cycle we catch all one hundred and thirty five programmes that were listed in the government on-line agenda. So we can catch them all by starting small, doing those high-risk items first and then spinning outwards. But again, this is not anything new. We are still using those vision strategies designs, business cases plans, those were all there beforehand. We are simply categorising them a little bit differently.

We can't forget about governance. All too often we run into those battles between departmental stovepipes. The fiefdoms; how they spend their money? Are they going to get their money? Who they are going to help? Why am I helping them? How am I using their service? I'm special, you're special. So we need to work on the governance. We need to work out who does what to whom, who has the final say and then the legislation required to do that. Sometimes in policy, sometimes through memorandums, some understanding. But sometimes you need to be a bit more forceful and work on that challenging issue at the higher levels. So with those things, what are we going to do next? We are asking departments and agencies to help us out. Help us identify what are those catalytic projects, not cataclysmic

projects, those catalytic projects that we need to put in place. Authentication Services was one of them that trusted identity for service delivery. Help us evolve the framework and model. Those five pieces that you see in the models are very loosely coupled and sometimes you say, well it doesn't really follow that innovative design approach comes from a Zachman model, how does that work? So we are tying that all together to make you a stronger case for how this all fits together. Start to get the business people engaged with this. Again we have the misfortune that business people thinking that enterprise architecture is technology only, and they don't want to get engaged at that level for formal levels for formal design. And so we are really trying to engage the business people so that they can see the power of this. And the power of this was demonstrated by one of our provinces. We had a crisis in one of our provinces on a Friday afternoon; they needed to put a new system into place. By Monday morning, that system was in place because of the use of enterprise architecture and some of the tools that we are using and adopting within our model.

Looking at the initiatives. We are a project based organisation so projects and programmes is where the money is how we have to roll these things out, so which projects are going to move this forward. And then establish the capability. This being very new we are on a very steep communications curve. Education, communication of our constituents of the other architects and other departments, the business managers, trying to create a community interest, a community practice to start working with this tool. So there you have seen a very, very quick overview of the business transformation enablement programme, really where we are going with enterprise architecture for the government in Canada, with the focus on the business service delivery, less so on the technology side, follows where we are going on the business side. I'd be happy to talk more with you about where we are going with enterprise architecture, perhaps in the question and answers, or later on this week. Thank you very much.