EMEA PRESS SPOTLIGHT ON 'THE CLOUD'

FINAL

Emerging Cloud-Based Business Models

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Panellists:

Simon Abrahams	Head of Market Strategy and Insight, Rackspace
Nick Watson	VP, Sales & Networking, HP
Marc Latouche	Cisco's Consulting Services, Cisco Systems

Welcome. I'm Pim Bilderbeek from the METISfiles and we're a boutique analyst house out of the Netherlands. We're looking at three themes: clouds, connected worker and partner ecosystems. I'd like to talk about emerging cloud based business models and to help me discuss that we have our distinguished panellists here on the right hand side: Marc Latouche from Cisco Systems, Nick Watson from HP and Simon Abrahams from Rackspace. And I've got a couple of discussion points that I'd like to discuss with the panel and we'll get to that.

But first, I'd like to take a step back and have the cloud in perspective for you. And what we use at the METISfiles to get this perspective is a computing deployment table and this picture here shows you the computing stack from the bottom to the top: The computing layers we define in our model are, from the bottom to the top:

Datacenter infrastructure, which includes power, cooling, cabling, and racks. Physical computing, which includes servers, storage, networks, and firewalls. Virtual computing, which includes virtual machines, virtual storage, and virtual networking. Software development infrastructure, which includes software development tools. Software applications which include business apps like CRM, ERP, and BI. And, last but not least, business process, which includes business processes such as procurement, sales, finance and marketing. The layers depend on each other and form

the computing stack. There can be no software application without the support of physical computing. There can be no automated business process without software. The value of the computing layer to the business increases from top to bottom, with business process activities being the most valuable.

This computing stack can be deployed in a fully dedicated model (you do everything yourself) or fully shared model (as-a-service). The choice of deployment models include:

On-premise, where the complete computing stack is deployed in a dedicated fashion. Co-location, where the bottom (data center infrastructure) layer of the stack is shared. Of course, one can co-locate servers, but also a complete cloud infrastructure. Hosted, in which dedicated (servers or cloud) or shared physical computing infrastructure (web hosting) can be rented. IaaS, where virtual computing infrastructure can be rented on-demand, e.g. the Amazon elastic cloud. PaaS, where a software development environment can be rented on-demand, e.g. Microsoft Azure. SaaS, where a software application can be rented on-demand, e.g. Salesforce or Webex. BPaaS, on-demand business process infrastructure based on shared computing infrastructure, e.g. payroll or HR or other business processes. See the figure below for the graphical representation.
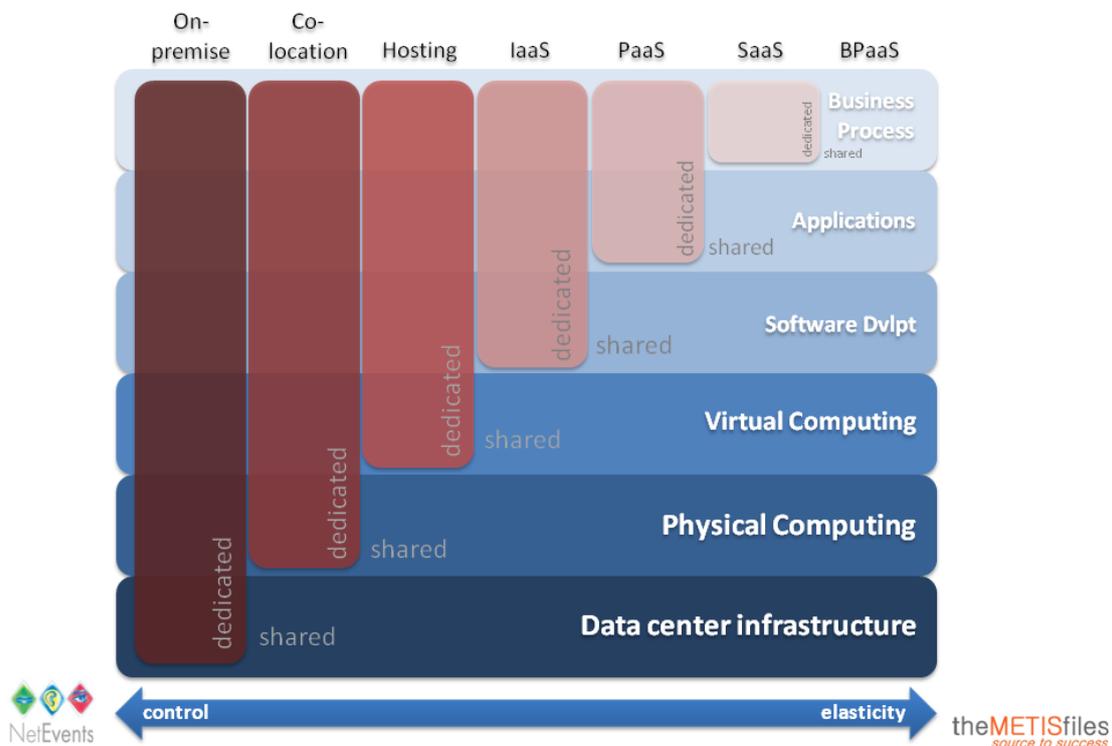
As stated before, the level of control is highest with on-premise deployment. The level of elasticity is highest with a BPaaS deployment. Dedicated infrastructure delivers more control, shared infrastructure delivers more elasticity. Own the base and rent the spike as Rackspace says.
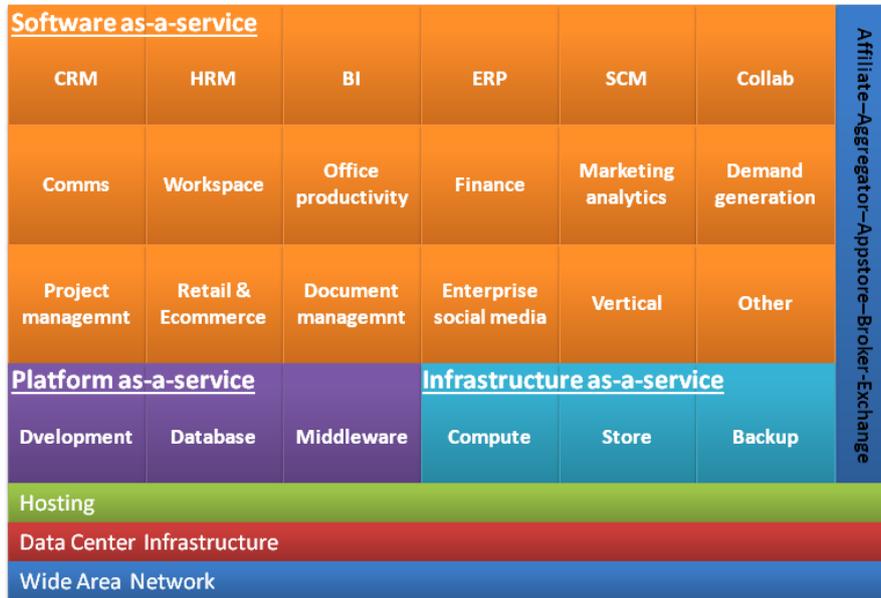
So, Enterprises are slowly adopting deployment options that are delivering more elasticity and are prepared to give up control to gain agility. A statistic was quoted today that 85% of computing is still on-premise today. Already, co-location and hosting are tried and tested deployment styles. Also, demand for SaaS solutions is growing. The METISfiles believes that this trend will continue and that by 2020 it is quite possible that the bottom three layers of the computing stack have merged to form a single compute entity.

And a new computing value and supply chain is emerging as deployment models are becoming more elastic. For instance, a BPaaS vendor can take services from a SaaS vendor that is running its infrastructure from another IaaS vendor that has co-located its cloud in another vendor's datacenter. Just like in food safety where the EU is regulating food traceability ([from the farm to the fork](#)), enterprises should track deployment options from the data center to the business process to make sure the value chain is uncompromised.

Now this panel is about new business models and I want to make a distinction that we're going to talk about public cloud business models. We talked about the hybrid business model and datacentre and networking already in earlier panels.

So if you look at this public cloudscape, it is built on the underlying infrastructure which includes the network, the datacentre infrastructure, the hosting and the physical computing. On top of that, we have what we call infrastructure as a service, platform as a service and software as a service.

The Public Cloudscape

Software as-a-service						Affiliate–Aggregator–Appstore–Broker–Exchange
CRM	HRM	BI	ERP	SCM	Collab	
Comms	Workspace	Office productivity	Finance	Marketing analytics	Demand generation	
Project managemnt	Retail & Ecommerce	Document managemnt	Enterprise social media	Vertical	Other	
Platform as-a-service			**Infrastructure as-a-service**			
Dvelopment	Database	Middleware	Compute	Store	Backup	

Hosting

Data Center Infrastructure

Wide Area Network

Those three segments break down into multiple subsegments. For instance, within infrastructure as a service you can distinguish compute, store and back up. And within Platform as a service, we have platform based development software, or database, or middleware. And in the SaaS space there are hundreds of domains of which I included the most popular here. For example Salesforce in CRM, Workday in HRM.

Also there's a new kind of partner environment emerging around SaaS, PaaS, IaaS, including affiliates, aggregators, app stores, brokers and exchanges. These are companies that don't own any of that stuff but they resell or recommend or package solutions. That's the public cloudscape as we see it today.

So the first discussion point I'd like to take up with the panel here is looking at the public cloud market as a global market. What is -- which organisation is going to be successful in the global marketplace? And I think the global marketplace is not just the global marketplace. I think we have to segment this marketplace and look at different segments in which different organisations can excel.

And to help the discussion, I've made four quadrants using global versus local presence and horizontal versus vertical specialisation as two axes.

The Battlefield

In the global horizontal space, it's about volume and scale. It's about being able to provide this global computing platform of capacity that provides availability across the globe and it's about scale.

On the global vertical side, it's about specialisation but still having that global perspective, for instance the SITA cloud in the global air transport industry. In the local vertical space it is about a vertical niche, for instance health care, that is more country specific. And then there's what I would call and maybe I should ask the panellists their opinion about that, the danger zone, which is cloud providers that offer a cloud computing generic infrastructure as a service say, in the UK or in the United States or in Netherlands or in France. My take is I think that's a danger zone to be in because if you're not distinguishing yourself enough from the global providers who can beat you on price and volume, you might lose out.

My first question to the panel is, looking at this battlefield, would you agree with this positioning and say there's no single cloud for everyone and that basically there is a room for global players, global niche players, for vertical niche players and that the horizontal player locally is in a danger zone?

Simon Abrahams - Rackspace

Thank you Pim for allowing me to talk first. I'm not sure I do agree with the analysis which I guess is what you hoped for. I think that obviously the global players have a

scale advantage and that's inevitable. But I think there's definitely still a role for niche players.

I think, I really think that there's very different levels of adoption across different sectors and across different geographies. You're saying for example that there's a danger zone for local horizontal and you mentioned when you were talking about software as a service, Salesforce, being the typical example of it, a huge player that has a lot of recognition.

But actually if you think about software as a service, I would say that probably one of the most widely adopted software as a service solutions would be email. And probably the most successful software as a service email providers would be telcos who would be linking that software as a service email to their network services typically adopted by small businesses, typically completely a low element of the overall revenue of that telco, but definitely making that service stickier to that particular telco.

So I can see that there would be local services which would be completely horizontal which would be very, very successful at a local level. But equally, I can also see that there are sectors and I think about maybe someone like Microsoft Office 365 or in particular industries, where there are really specialist protocols that are used for, for example, in the maritime shipping sector. That kind of thing, where just because of scale, huge industries that for hundreds of years or more have insisted on very particular protocols about shipping containers and that sort of thing, when was the date of shipping, when was the date of arrival in the port that had their very particular protocols. They're actually now accepting a completely standard offer and it's just because of the economies of scale that that completely standard offer can offer.

So I guess I'm saying that it really depends and that are opportunities for everyone. And surprising things are now happening that local operators can now really offer a generic horizontal service and succeed and equally, the global operators can offer a generic horizontal service and succeed in niche markets that operate globally. That's my position.

Pim Bilderbeek - The METIS Files

OK, I understand. To take you up on that email thing, I'm a small business myself. With Gmail I get like 7 gig storage and spamfilters, and what have you. I can send all the emails I want and if I have Gmail for business I get even more. But with KPN and UPC and Ziggo in my country, I get far less in terms of storage and I get a less sophisticated web interface and also less sophistication in terms of mobility. So I'm not sure if I can agree with your position that local providers in terms of email are better than global providers.

Simon Abrahams

I mean I think the telcos will take advantage of the fact that there is nothing that is stickier than your email address. And I guess that with a package which combines probably a very simple webpage with an email solution, with some other SaaS

solutions that it becomes attractive to small businesses. And until and unless they want more that's probably enough and they're probably happy with that.

Pim Bilderbeek

Let's move on to the next panellist, HP.

Nick Watson - HP

So I think probably I would use an example here. I was in Warsaw a few weeks ago. There's a company there that has very successfully set up a specific service for the medical profession. They have a very strong pedigree of providing medical applications and they have built a service-based, cloud-based offering for organisations specifically in their country. And I think that will be very effective.

It's sufficiently niche that it builds on their skill set whilst using the standardisation of open flow and open stack. And I think that's the key. If we look to your matrix there, it makes perfect sense that a large global organisation can standardise and drive a structure on which local providers can benefit.

The key is what is the differentiator that the local provider has. And if that differentiation is sufficiently vertical and I think -- and it needs to be niche in some way, then it's an entirely complementary approach and I think both can absolutely flourish in this market.

And bearing in mind, every IT organisation is desperate to drive complexity out of their environment. They just want to drive simplicity and standardisation and the key moving forward is obviously going to be the capability to orchestrate and provision and manage.

Marc Latouche - Cisco Systems

What I would say is two things maybe it's also react to your discussion between Gmail and telcos, because actually a telco could be global. We're working with Orange. They developed a collaboration suite. It's developed in 44 countries and they do offer that as a service to [3Ms] and other corporations. So I think it's not the discussion between telcos and web but more about scalability because of course if you're global and you're scalable you can reduce your costs.

But then on the local side, are there any requirements from a regulation perspective or from legislation that then make a play for a local player. I mean data protection is the classical example, but it's an example. We see if you work in certain industries, you're required to have the data physically located in your country. So you could still be global but you will still need to have something and a presence locally.

So I think that's where I would make the distinction between global and local is really do you need a local presence and in some applications and some verticals, you do need that as well that the technology is also the go to market. I mean one of the important aspects is also to know your customer and you were talking about SMBs.

Maybe for Gmail, I don't need to know you, but for other applications you will feel more comfortable to deal with me as a Dutch (which I'm not).

Pim Bilderbeek

But let me take a different stance here. In the Netherlands we have a financial provider called Exact Online and I know they host their stuff on Rackspace in the UK And nobody in the Netherlands knows that if they buy Exact Online, that Exact Online has got their stuff hosted in Rackspace in the UK. But still they're pretty much happy to take that on. So what about that local presence then?

Marc Latouche

And that's a [difficulty] we have also in the past. And it is as people move more and more to hosted service, they start to have no idea where actually the application or the storage is stored. Today, for people it doesn't seem to be it's a problem. Maybe for some vertical or the finance in your case it's not a problem. But I think now people will become more and more aware that I'm using this SaaS provider, maybe I should care where does he store the data. And I know we see some RFPs and when we talk to enterprises, we see that some start to actually ask that question to their provider where does physically the CPU reside, your call centre could reside, but where are some of the data I'm sure I own and that data is protected.

Pim Bilderbeek

So you say branding yourself as a local provider, a trusted local provider and assuring that data is stored in country is something which can set you apart, right?

Marc Latouche

That could be effectively a value compared to some.

Pim Bilderbeek

It's also dangerous because in my country, we have an operator KPN who has been doing just that and said we give you the Dutch cloud. However, KPN might now in danger of being taken over by America Movil. So all of a sudden what you've been branding as a Dutch cloud becomes a Mexican cloud. Isn't it dangerous to brand yourself as a local cloud?
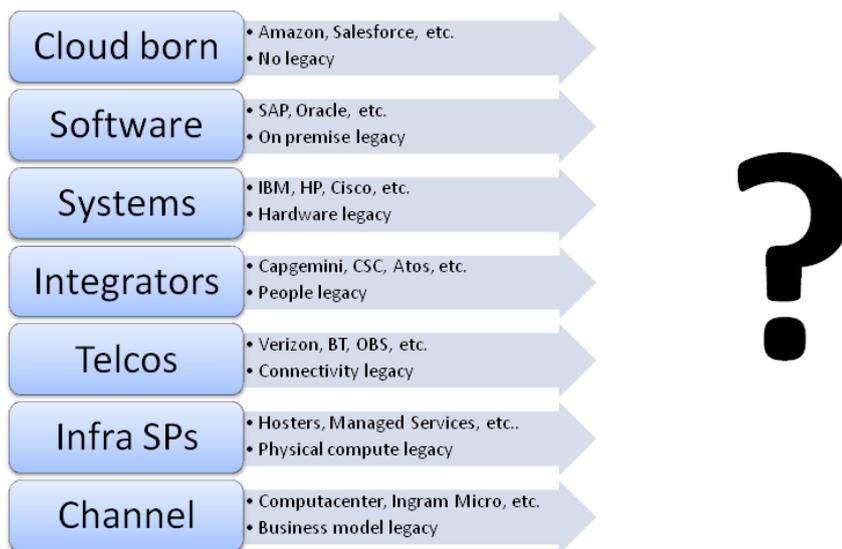
Marc Latouche

Well, I would say as long as Carlos is making sure that your data is stored in the Dutch datacentre and obeys to the local regulations and legislation, maybe you don't care. But if suddenly your data that requires to be located in Holland is now in Mexico then you care. And I think that's the difference between global and local. I think we're going to a global world. In the telcos we see a lot of globalisation but they will still need to have a local touch for some verticals.

Pim Bilderbeek

Okay. So let's move on to another discussion topic which is going to be quite interesting I think. So we are not talking about the global environment here, but more about which organisations are best placed to adapt and benefit by fully embracing the public clouds and the cloud-based business models.

So I put it to you that the cloud born companies the Salesforce, the Amazons are the ones that have no legacy today and are best positioned. And then we have a host of other companies from the past that have legacies. So software companies like SAP and Oracle have an on-premise legacy. System companies like IBM, HP, Cisco have a hardware legacy. Integrators like Capgemini, Atos and so forth have a people legacy. Telcos have a connectivity legacy. Infrastructure service providers, hosted managed services have a physical compute legacy. The channel has a business model legacy.

Which organisations are best placed to adapt and benefit most by fully embracing the trend towards Cloud-based business models?

Cloud born	• Amazon, Salesforce, etc. • No legacy
Software	• SAP, Oracle, etc. • On premise legacy
Systems	• IBM, HP, Cisco, etc. • Hardware legacy
Integrators	• Capgemini, CSC, Atos, etc. • People legacy
Telcos	• Verizon, BT, OBS, etc. • Connectivity legacy
Infra SPs	• Hosters, Managed Services, etc.. • Physical compute legacy
Channel	• Computacenter, Ingram Micro, etc. • Business model legacy

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So first of all -- and I'm being provocative here, would you agree with me that these legacies need to be overcome by these players to compete with the cloud born entities?

Secondly, who do you think is best positioned from your perspective to actually overcome those legacies and be very effective in competing in the public clouds? Not hybrid cloud, we talked about that earlier, but the public cloud.

Simon Abrahams

So I think everybody who is close to their customers is going to benefit because actually all those list of legacies equates to a list of customers and all those customers need assistance on their individual journeys to the cloud. And the people who understand their customers and the challenges they face and the steps that they want to take in their journey towards the cloud are the people who are going to win. So I would say it really comes down to customer intimacy.

Pim Bilderbeek

Which one of these are most customer intimate in your opinion?

Simon Abrahams

Well, it's not going to be by sector right. It's going to be by organisation. It's going to come down to the behaviour of the individual organisations and how close they are to their customers. So it's not a simple answer. But I don't think it's a simple question either.

Pim Bilderbeek

But surely if you're used to -- take the integrators which were used to employing a bunch of consultants at enterprises to solve a problem, whereas in the public cloud you leverage infrastructure rather than people. That's a huge change.

Simon Abrahams

So that's true. But across those different sectors there will be telcos for example, that are better or worse at understanding their customers and therefore better or worse at taking their customer son that journey towards a cloud-based solution. Every telco in the world, I'm sure has at least one, probably several cloud solutions that they're cooking up probably from competing business units and the ones that really understand their customers will be the ones that are able to help their customers make the cloud journey. And it will happen at different rates again, because different markets have different appetites for innovation. I think it's really that simple.

Pim Bilderbeek

Okay. Nick, what's your view on this?

Nick Watson (HP)

I'm coming back to the previous question. I was listening to who should be responsible for where the information flows too, what disclosure. That's got to be a public/private partnership and in the same way here this is about interdependencies. Most of the customers that we serve will pick from multiples here and it's how we as an organisation and how the whole IT industry operates together that's going to really benefit here, which comes back to the standards which we approach.

So it's certainly perfectly feasible for a manufacturer to actually continue with its legacy skills and to develop things as long as it's developed on a standards based platform. I mean obviously HP is the largest IT company in the world at this stage, so we span multiples of those. And I agree with the hardware is our legacy and we're very proud of that as long as we then build platforms that other people can integrate with. As I said earlier, open flow, open stack and have open APIs, then everybody can flourish actually.

And the customers depending on their scale will want to pick primarily with the application and what the application will then run on. And I think that's where we need to start. Rather than on any one single organisation being the winner, I think it's how do we come together and then actually work interdependently to solve the customer's problems.

Pim Bilderbeek

So let me put it a different way. So HP is active in building clouds for enterprises right? But you're also selling hardware to service providers that help other enterprises enter the cloud. And you also have your own cloud that you sell as a service. Which of those three do you think is going to be the HP in five years time from now?

Nick Watson

That really comes back to your slide previously you see. There is no one answer here and there shouldn't be one answer. In fact if there is one answer it would be a very vanilla, uninteresting answer, which might be okay for 75% of people on email who don't worry about where the email is stored for example.

But as soon as you get down into real business problems, suddenly you get into a world of increased complexity. And that's why today IT is desperately trying to simplify and get out of this complex environment. And yet these, all these organisations are fundamental to most companies that we serve. So most of the customers, most of the clients, actually rely on us to connect the different elements.

There is no one answer. And that's why HP has these different approaches because the different approaches cover different markets.

Pim Bilderbeek

So Marc, I guess Cisco is different from HP in this aspect that you don't really have an infrastructure as a service play. Cisco does have WebEx which you sell as a SaaS solution. But apart from that you're basically selling infrastructure to help people build this rather than selling as a service. What's your opinion?

Marc Latouche

I agree with HP. We don't like too much to be called legacy, but you know. But maybe I'll have two part of my answer is actually for a system provider definitely that's also changed more on the business model. Now in the past we used to sell a box and that's it. Now as we see those SPs or hosters that want to move in a pay as you

grow, they turn back to us and say hey, can we work with you some models where actually instead of buying the box, we pay as we use. And that's quite also a shift for us. Even if we don't sell directly to enterprise or to end users, it still makes a shift for us working with more partners.

Having said that, then we move to the partners. Actually we have no intention to sell directly to enterprises. We have been also working through channels and we intend to continue with that. That means we provide infrastructure and the services to support web hosters and telcos and so forth or enterprise to build those clouds and to service their own customers.

Now who will win? We hope everybody. But more seriously I think clearly we see that cloud born providers have an advantage. I mean if you see Amazon, [inaudible]. If you see telcos, we work with telcos but we have to admit that today who has been very popular in selling purely infrastructure as a service from a telco point of view, they are starting but they are not yet there. But on the other hand if we see how they are active on the collaboration service, there we see then much more appetite for telcos to move there because also they believe that the margins they could do on that type of infrastructure is better than the margin that they would go if they tried to fight again Amazon or Google.

So I think there will be much more levels. And as people have said, everybody need to find their market. At the beginning there will be mistakes. I mean some SPs will try to sell infrastructure as a service to everybody and they realise that maybe it's tough compared to existing players. But I think they have all their own value and they need to address those values.

Simon Abrahams

Just to make one more point. We're focusing very much on the kind of the taxonomy of the service provider market. But actually if you think about the customers, the customers are going to make their own choices and mostly they're going to be multi sourcing. So they won't just be choosing multiple kinds of clouds. You wanted us to focus on public cloud. We know there are multiple forms of clouds, but there'll also be multi sourcing.

So if we just focus on the public cloud, they'll be buying multiple kinds of public cloud for different purposes, looking at different levels of availability and security and cost and all the rest alongside different geographies. So I think it's a pretty meshed solution that we'll end up seeing.

Pim Bilderbeek

So we've got a couple of minutes to wrap up here. The panel was pretty noncommittal on who's going to win here. Is there anybody in the audience who would like to make a stronger comment on who is going to win? Or is someone wants to ask another question, this is your moment. Any questions?

From the floor

It's a little bit far from what you're speaking about, but would you tell me about the SDN evolution. So for all these companies SDN is going to change something or it's going to be kept in the same way.

Pim Bilderbeek

So the question is about SDN and is SDN going to change the competitive playing field in this respect. Who wants to take this on?

Simon Abrahams

I'll take that one to begin with and then maybe people would want to contribute. I think SDN is nothing short of a revolution and the trouble is that people are attempting to then use SDN and use it in a proprietary environment. It's absolutely not intended to be a proprietary environment.

It's supposed to be a standards-based, open flow based proposition, which takes away all of the individual programming of individual parts of the network, raises it to up to a control plane level and provides for the first time ever, a truly dynamic pre-provisioned infrastructure which enables people to be agile and to connect applications at a speed which today's servers just expect to be able to serve.

It's an absolute revolution. And if you look at some of the ways in which people are already programming and working with the applications at the control plane level, it is astonishing and has only just begun. And the market is already expected to be 25% of the entire Ethernet market within three years. So it is nothing short of a revolution.

The challenge is lots of people are explaining it in different ways. And if you look at it as it takes completely the piece part design of a network and changes it into a coherent complete system, orchestrated and provisioned and managed from one point then you really start to see the value of SDN.

Marc Latouche

Maybe just a comment, as you enter the technology aspect now for a business will that change or will make one more relevant. Frankly, I'm not sure. I think what it can create is maybe more synergies between very separated organisations like the web providers and the telcos by providing programming APIs where actually web providers could interlock with SPs but in a much better way than it is today. But would that mean that the web win or the telco win, it depends on your point of view.

Nick Watson

From my perspective if we take SDN in this context, I think it would enable virtual telcos to emerge who are not dependent on physical infrastructure who are actually able to build a virtual network and have maybe -- and very dynamic, be able to provision virtual network resources as a virtual provider to enterprises. That's my point of view.

Pim Bilderbeek

My POV on SDN in the context of this discussion is that it will enable the entrance of new virtual telco's that do not own any infrastructure but can dynamically allocate virtual network resources to enterprise customers.

Wrapping up, I guess the panel has been fairly noncommittal about who's going to win. I trust you got some insight in terms of where the different values of the players are and what's the global playing field and what's the whole computing deployment landscape.

I'd like to just thank the panel for their contribution and we're moving on to the next one. Thank you.

[End]