NETEVENTS
2015 CLOUD INNOVATION SUMMIT

DRAFT

The Clouded Leopard's Den

Chaired by: Bob Metcalfe

**Professor of Innovation and Murchinson Fellow of Free Enterprise,
The University of Texas at Austin Cockrell School of Engineering**

Panel:	
Dan Scheinman	Angel Investor
Murli Thirumale	Serial Entrepreneur/Angel Investor, Co-Founder and CEO, Portworx Inc.
Janice Roberts	Partner, Benamou Global Venture Partners
Jim Lussier	Head of Dell Ventures

So we are The Clouded Leopard's Den. And you understand that's a play on the term shark tank, so a shark is like a clouded leopard and a den is like a tank, so we have rampant metaphors here today. I'm here because I think there is an Ethernet in here somewhere. What's going on here I'd like to say in my opening remarks is important and interesting and difficult. I'd like to thank OCC (OpenCloud Connect) for gathering us all together on this topic, and the members of OCC for supporting it, and you all for coming.

So this is all going on in the context of internet, ongoing internet innovation I see. For example, the Ethernet which is on May 22nd 42 years old continues to evolve rapidly at IEEE and at MEF. And I'm very happy to say that the dominant mode there is BIATWC, build it and they will come. So we are now moving to the Gigabit Internet. We are gigafying the internet. A lot of the traffic we see is coming from cellular backhaul and from video on Netflix's. But, gosh, we are going to gigafy it. We had the kilobit internet in the 60's and 70's and 80's and then we went to the megabit internet and now we are going to the Gigabit and that's happening right now.

The next applications that need disruptions are starting to be disrupted. My favourite three are education, energy and healthcare. And all three of those industries are huge, much bigger than industries we've tried to disrupt in the past. And they are on deep denial, claiming -- you can hear them making sounds that the internet will not really impact them as it did other industries. It's fun to watch.

And then we have the topic that we just touched on moments ago Obamanet. The internet has been taken over by the Obama Administration as a utility and it's kind of scary. And what makes it really scary is behind the FCC are 50 public utilities commissions in the United States who, if they begin to look at the internet as a utility, might wreak havoc as they had in the past.

There's the social mobile bubble, some call it a bubble there's an app for that. And pretty soon we'll have all the apps and then that bubble will burst. And then we have the near future which is the Internet of Things coming, which you've heard a lot of about and, of course, what's going on here today in the cloud computing.

My model is that what's going on here today is a response to the Internet of Things really or in preparation for. It's, I think, as [Juan Tellez of Apcera] earlier today said it best I think, what we're doing here is we are driving the -- we are building a hybrid multi-cloud OS. That is we are creating a new set of APIs if that's the right term or better yet an operating system that's multi-cloud, hybrid and anticipates I think IOT. And what's driving it is Moore's Law driving it, did you know Moore's Law last Sunday turned 50 years old, big debates about whether Moore's Law is continuing, we hope it is. And there's a couple of other laws that might impinge on this topic like, for example, my favourite Metcalfe's Law. Have you hear of Metcalfe's Law from anyone but me? Oh yes, Nan has heard it, which basically says its better if you connect things.

What we are involved in here today is the hard work of creating, I think, a new innovation platform. And there's two kinds of innovation there. There's the innovation in the platform, about which we've heard a lot, and then there's the innovation over the top, on top of the platform. And one of the questions that has to be asked constantly is is it time to standardise? That is innovation and standardisation can be viewed as opposites at some point. You need to ask do we know enough about the technologies in order to standardise their interfaces now or do we need them to play out a little bit. I think the conclusion here is its time to remove many needless variations in the cloud operating systems and produce an innovation platform.

Now this is an art. For example, the design of the APIs the selection of the APIs is very important. Do they have the right expressive power? Can they accomplish what needs to be done those APIs? But more importantly do they allow for serendipity the development of innovations on top? Security and privacy are big issues that need to be confronted by this operating system.

Welcome, good to see you. Another leopard has joined us on the stage here. We'll meet in a moment.

The platform must also perform. If it's beautiful and slow no one will use it. And then it has to go through the process of adoption. And I remember vividly when Ethernet was young we then went through the land wars, we went through 10 or 20 years depending on how you count for Ethernet to finally get adopted. And, of course, the -- I guess we heard a lot of talk this morning about how rapidly OCC is going to get the cloud OS out there, but it's going to have to go through an adoption war, cloud wars, and eventually the proprietary providers will either win or lose or join I guess is the better word.

Now the Internet of Things, which my hunch is that's what's driving the production of this platform, it's not personal, the devices on the Internet of Things are not personal. There's huge numbers of them. I don't know the numbers exactly but hundred, billion by 2020 I heard. They are distributed, they are mobile, they need security and we know so little about them that we call them things. But it's beginning to emerge what these things will be, for example wearables, for example buildings and for example cars, driverless cars for example.

So this platform that we are all working on this cloud platform, well one thing it's a marvel to watch the competitors on the stage this co-opetition thing that works so well here in Silicon Valley, we have co-opetition that is competitors taking common cause to produce a platform. We have judgements being made about what's ready to standardise and what's not. We are in essence pitching a tent in the wind. The wind is blowing us around but we're driving the stakes into the ground to make standards. The implementations, we need early implementations that work or people will walk away. We need interoperability, fierce competition and then as I mentioned earlier the whole adoption phase which will take a very long time.

So here we are at the Clouded Leopard's Den, because one of the things that an innovation platform enables is start-ups. And I think it's great that the OCC has encouraged start-ups, so much so that we are about to look at five beauties that are about to come along. So thanks to the OCC, thanks to the media and analysts judges who have pruned it down from 25 to 12 to the five start-ups we are about to see.

And then under this metaphor we have the Leopard's and we are going to meet the Leopard's in a second. Then we are going to invite five start-ups to come up one at a time and each present for two minutes, and then the Leopard's will grill them for three minutes each. There'll be two rounds, the A round the early stage and then the pre-IPO. So there'll be two A round start-ups and three pre-IPO start-ups. The judges will then later this afternoon decide who the winners are, and that will be announced tonight.

Leopard's have I forgotten anything, or is it time for you to introduce yourselves? Dan?

Dan Scheinman

Hi, I'm Dan Scheinman, Angel Investor, Arista, Tango, Zoom and others. And I'm thrilled to be part of the panel

Murli Thirumale

Hi, I'm Murli Thirumale, Serial Entrepreneur. I just co-founded a third company which is called Portworx and we are in stealth mode. But what the heck, there's a bunch of press people here; we are in the container business.

Janice Roberts

We should talk. So, I'm Janice Roberts and I'm an investor, investing in early stage enterprise-centric companies. I've been an investor for a number of years. And come from the networking business that was built on the back of Bob's innovation here, so looking forward to spending time with a number of you here today.

Jim Lussier

Hello this is Jim Lussier and I'm Managing Director of Dell Ventures. We have a $300m fund investing in early to growth stage companies that are strategically relevant to Dell in areas including storage, software defined and networking, data centre, security, big data, mobile and cloud.

Bob Metcalfe

So, welcome Leopard's are you ready to be fierce in your den?

Jim Lussier

Absolutely.

Bob Metcalfe

I just left my program down there, would the first start-up please --. Innovate Create would you please come to the stage. Innovate Create where are you. I think the plan is for you to stand right here for two minutes. We look forward to hearing your story, welcome.

Euan Walls, Innovate Create

We are here to solve a problem to take back time for teams and individuals, to work as a filter for your digital lives, to sort out a convoluted mass of apps and systems and to create a seamless experience across all the devices we use.

Zephyr is that solution, an innovative cloud work space where you can integrate your social channels and business systems, with powerful productivity tools built right in for projects, storage, communications and more.

Productivity increases with collaboration, teams who can communicate better, have easier access to information, an instant understanding of what stage each team member is at will save time and be more efficient.

Our [UI] is learn once and then used everywhere. Web is not different to mobile with Zephyr. You will be productive on all your devices.

With our innovative pricing system you can spend your exact budget then allocate your Bandwidth to where you need it. A completely versatile approach where you can add, remove, edit anything on Zephyr dynamically.

And if you have too much Bandwidth you can gift it to friends or clients, or you can trade it. We do not put limits on your usage. There is no overspend and there's never any wastage. If you share socially, if you refer new customers, if you test our platform and provide feedback we will give you Bandwidth because we value what you do for us.

We are forward thinking. We build using Scrum and ship continuously. We always improve upon what we build. And we continue to make it faster. We design, develop, build, test and ship in small increments, analyse and continue or pivot as needed. Our plan is dynamic but our vision is concrete.

We have a clear roadmap in place for the future. Our growth aims are not just software but hardware too. We will push from

SME to enterprise, we will be a major global player and disrupt wherever possible to ensure this.

Janice Roberts

I have a question. So your business model is interesting. Will your injected advertising get in the way of my collaboration?

Euan Walls

I would say no. Initially, we are going to just use advertising to advertise our products, our actual own modules on the platform just to test it to see what kind of impact it has to the user base. And then as we grow the system, as we grow our user base we'll add partners to that.

Dan Scheinman

Is your competition Microsoft Office?

Euan Walls

I would always say our competition would be Slack or Asana or Trello the productivity platforms, the communications platforms, Microsoft Office no.

Dan Scheinman

And what's the gap in Slack that you're trying to fill with your platform? What's the miss that Slack has that you guys?

Euan Walls

Well Slack is a really solid re-envisaging of IRC chat channels, but it's really mainly to do with communications and a really powerful search. What we do on top of that is we provide all the project management, we provide encrypted storage, end to end encrypted storage. Because we've built a platform we can actually design multiple products in different modules and we can continue to ship them out to our customers. And with the Bandwidth they can just put their Bandwidth to different modules, add new users and everything else, so it's more flexible than what Slack is.

Jim Lussier

Getting customers is the hardest part, as a brand new start up how are you going to get adoption? This is a chicken and the egg thing where you need more than one person to use this. This needs mass adoption how are you going to get it?

Euan Walls

We are initially going to look at an equity crowd funding scheme, so we are going to sell a small proportion of the business to a large number of equity subscribers and they will provide us with our initial customer base which we can grow upon. So, because they've invested in the company they would be like our brand ambassadors, they'll get our message out.

Jim Lussier

Have you any examples you can cite of products that have gone viral through a crowd funding campaign like that?

Euan Walls

There are plenty of examples from tech firms to consumer retailers.

Jim Lussier

Okay.

Murli Thirumale

It says that you have a sentence based user interface for your users, how has that worked out in the alpha testing?

Euan Walls

It's just had some good feedback. It's very simple to use. We started off with an initial five symbols which provide access to our modules, access to files, access to searching via tags which you can embed in your content. And from the testing came back that we've added a sixth symbol, so we can separate out the actual commands from the searching mechanism so it's a lot easier to use. And as you type you have a number of options, and then when you type the options reduce and reduce and reduce until you've only got one or you can just click or you can hit tab and that will access the commands that you're trying to get.

Janice Roberts

So, if I'm running an enterprise what's going to get me to start to work with you?

Euan Walls

Well by the time we actually focus on enterprises we'll be more established. We are going to look at small teams of up to 10 to 25 where there's only one decision maker, so they can adopt us quite early on without any or minimised risk. Enterprises would be further on, probably in the year two or year three when we have quite a large profile and they'd be quite content to take on our system.

Dan Scheinman

How much customer interaction have you had? Do you have much traction?

Euan Walls

We've got about 300 beta testers at the moment. We signed them up when we went to last year's Web Summit. We met a lot of people there, got a lot of business cards. And we've just put out a very early version of our beta today, just [saying] you can have a wee look at it if they want to. And we are hoping to, with the crowd funding, push that to 1,000 and then we are going to publicise the platform on Hacker News and also on Beta List but we hope to

(The Leopard’s Roar kicked in signally time-up)

I wouldn’t want to meet that in a dark alley.

Bob Metcalfe

Thank you very much.

Janice Roberts

Thank you.

Euan Walls

Thank you.

Bob Metcalfe

TapLink, welcome to the stage, welcome to the den. Dare you enter the den?

Jeremy Spilman, TapLink

Hi everyone. My name is Jeremy Spilman; I'm the Founder and CTO of TapLink and inventor of Blind Hashing. Blind Hashing is a new technology which completely protects your passwords against offline attack. So what we do is we make your password database impossible to steal. This protects your systems, your operation your brand and most importantly it protects your customers. One of the biggest challenges that we faced trying to drive cloud adoption, getting people to trust the cloud, put their data, their personal data your business data into the cloud they wonder if their data is secure or is it going to end up on the front page of WikiLeaks like Sony.

So we have a system which completely eliminates the threat of password breaches, and it's easy to integrate, it's on the cloud, its invisible to the end users this doesn’t provide any complexity to the end user login experience, there is no risk, there is no lock-in and its available now.

I'll tell you a little bit about how it works. What we do is we use something called a Blind Hashing data pool. It's a massive pool of completely random data. Cryptographers call this the bounded retrieval model. Basically it's an idea that our data is too big to steal over the network. What [Reddick] calls it, is security by obesity. We have this data pool replicated across multiple data centres, it's highly available and redundant and it's available for you to start protecting your passwords today. This is on the public cloud, private cloud and that's it.

They took out one of my slides. Sorry about that. So we'll protect your passwords. We can eliminate the threat of password breach and we can protect your brand, protect your systems. Thank you very much. [I'm Jeremy Spilman].

Bob Metcalfe

So an individual user can buy your product or does it have to be adopted by a cloud provider?

Jeremy Spilman

No, we have 40 sites that have been running this in beta right now. This is something that the service implements on the backend. It's available for -- it's an open source library that's available for all the top languages or it's a plug-in for all the top platforms. You put this in on the backend system and the end user doesn't even know that it's running.

Murli Thirumale

So usually any security technique likes this causes a swarm of people trying to break it. Has that happened? Do you anticipate it happening with your approach?

Jeremy Spilman

So we went to a conference in Norway back in 2012 called Passwords 12. It's basically a meeting of the minds between the black hats and the white hats, the people who are cracking passwords and trying to defend it. And we presented this technique in a lightening talk and the -- basically the resounding opinion was that this is something completely new, completely different. It's a better way to protect passwords. Instead of just trying to slowdown an attack where after the hackers can get in a [steal attaches] where you have to reset everyone's password, instead of just slowing it down we can completely eliminate that threat.

Janice Roberts

So, who are going to be the early adopters of your technology?

Jeremy Spilman

SMEs right now are jumping on this because it basically lets them focus on their core business of providing whatever that service is to their end users and not have to worry about the breach. So someone -- you mentioned Slack earlier, Slack just got breached two weeks ago. They lost 3m passwords. And so on the top of Hacker News everybody is talking about, wow, we are having our internal business communication on this platform if they are losing our passwords can we trust our data, is it next? And so systems like that it's very easy for them to turn this on and eliminate that threat.

Jim Lussier

How big do you think this particular market is for your product today?

Jeremy Spilman

Well I think basically every cloud service that has authentication is going to have passwords as part of that authentication. Multi-factor is important, sometimes we do

add additional factors, but a password is going to remain a foundation of authentication. Everywhere there's passwords you can use Blind Hashing. So we think that this is a $1b market.

Dan Scheinman

So, congrats on making the finals. And in the materials that you sent out ahead of time that we viewed you mentioned that one of the benefits of this is that the database is very, very large. And at the same time you have to steal the entire database in order to make sense of it all. So, how large is this database?

Jeremy Spilman

Well call it the common defence [fund] for passwords, because basically as more people join it's a shared data pool, and so as sites join in we have more funding we can invest into that data pool. We started as a beta with 16 terabytes and these are literally solid state drives in data centres that we have in San Jose in Dallas that are just filled with random data. We want to grow it to 100 terabytes and by the end of the year we hope to be up to petabyte of data where literally if you're missing any of that data, if an attacker can't steal all of it they can't crack a single password even if the password is a password.

Dan Scheinman

Well a terabyte or 16 terabytes or even a petabyte could be stolen.

Jeremy Spilman

It could be but what we do is each request into the data pool it's very simply [inaudible] 64 bytes in, 64 bytes out. So where we say well we want to support 100,000 log-ins a second, which is a tremendous number of log-ins this is only when users are typing their password and hitting enter. So we say, okay, well we need 6.4 megabytes of bandwidth going through this pipe, we can provision the pipe to provide only exactly that much capacity and we can say well even if an attacker can compromise our perimeter and start transferring data out its going to take them a year at full line rate to move that data off of our systems. So we reduce the threat model to literally somebody breaking into the data centre and stealing [inaudible].

Janice Roberts

Thank you.

Bob Metcalfe

Thank you very much. So those are the two entrants in the early stage start-up. So we heard two interesting presentations that we will be discussing later and deciding which is the winner, and by the way have you seen the gorgeous prize the winner gets. And those are actual Jaguar -- oh they're supposed to be Leopard's. But they look a lot like Jaguar [hood] ornaments actually. So shall we move on now to the second group beginning with Mirantis, welcome.

Amar Kapadia, Mirantis

Competing in the software economy is really hard. Every company in every industry is under attack by start-ups that are using software as a differentiator. Why is it so hard to compete in the software economy? The problem is not the developers or the business leaders but rather it's the IT infrastructure that these companies are using that takes weeks to months to provision and is extremely inflexible.

The solution is an open cloud, a cloud that uses open source software that has open APIs and is agnostic to the underlying hardware, and that's OpenStack. For those who are not familiar, OpenStack is an open source cloud project. It was the number one in 2014. And it's going to be the way where companies manage their containers, their VMs, their bare metal servers in one single management platform along with storage and networking.

Our customers agree with this thesis. We have the largest number of OpenStack deployments by far. My personal prediction is that in three to five years every medium and large enterprise will be using OpenStack with Mirantis as the number one leader.

Our product is an OpenStack distribution. It's the leading pure play distribution, we surround it with professional services managed services and training to make the end user successful. And in closing we have raised $120m over two rounds. We have 700 employees. And we have 11 offices worldwide. Thank you.

Jim Lussier

Is your business model a support base model or is a premium version of the product for a fee?

Amar Kapadia

It's pure open source, so our model is subscription based support but like I said we also have other offerings in terms of professional services managed services and training.

Dan Scheinman

So I know you started as a services company and came out with the distribution, and my understanding is that the leaders in this space are Canonical and Red Hat and that you're third. How are you different from your competitors and how are you going to take share against them as OpenStack distribution's progress.

Amar Kapadia

The company really started transforming itself from a services company to a product company in 2014, and it depends what metrics you use. If you use the metric how many of our engineers are contributing we are number three with HP and Red Hat being one and two. But if you look at the number of OpenStack deployments we are actually number one. In terms of services and products it's a mix.

Jim Lussier

So why do they employ you as opposed to the competitors out there?

Amar Kapadia

We have uber-differentiator and then specific product ones. The uber-differentiator is pure play. We are completely tied to the hip with OpenStack. We don't offer OpenStack as a way to sell hypervisors or as a way to sell hardware or storage that's all we do. And so the customer if they want to put a system together where, let's say, they want to use Cloud Foundry and OpenStack and specific hardware then we are the only ones that can do that. And then we have specific product differentiators which I won't go through at this time.

Jim Lussier

What is your route to market? Are you [inaudible] many people is it really a direct sale that you guys are doing?

Amar Kapadia

We have a two-fold, it's very traditional, we have direct sales and then we use regional resellers etc and large resellers.

Janice Roberts

So, given that model how scalable is your business, the cost scale? Because you've raised a reasonable amount of money I'm just trying to think about how you sustain your business, grow your business and still have a decent business model.

Amar Kapadia

The number of customers we go after are not that many. If you look at the Telco's there are only so many large Telco's. If you look at Fortune 500, there are only 500. And SAS companies there's only a couple of hundred. So we believe that the combination of a direct and reseller should -- we should be able to get there with the amount of funding.

Dan Scheinman

So how big a company can you be?

Amar Kapadia

I believe the limit is we could be the next Oracle or VMware. Like I said I believe every enterprise large or medium will be using OpenStack I truly believe that, so I think sky is the limit.

Dan Scheinman

So the OpenStack project has [Swift] for storage and since there is a networking angle to this conference the Neutron project is the one that is more on the networking side.

How are you taking advantage of that? How engaged are you in that aspect of it? We see you a lot more in the storage and compute aspects.

Amar Kapadia

We use Neutron which is a project in OpenStack for networking, but we are sort of agnostic. There are many, many companies creating SDN frameworks, I think some of them presented here, we just announced a partnership with Juniper on Contrail. There's other, open source and proprietary Networking that we are working with --.

Janice Roberts

Thank you.

Bob Metcalfe

Thank you very much. Viptela, welcome.

Lloyd Noronha, Viptela

So, some see [IO] problems, basically you want to roll out telemedicine in your hospitals but you don't have enough network capacity. Or you just acquired a bank and you want to integrate the systems but you realise that the first step to integrating the network is going to take 12 months. And three, you have Office 365 that has poor latency so you have switch from the cloud models to the on-prem model.

Well all these three problems are due to an area of infrastructure called wide area network or WANs, essentially this is what securely connects the various sites of an enterprise together. There are three problems with the WAN today. It consumes 10% of IT budgets so there is a cost constraint to increasing capacity. It's complex and it's rigid and it's hard to reconfigure, just like our servers were before [inaudible] virtualisation came along, so it takes a long time to add capability. And three you have a rigid hub and spoke architecture today that was designed when most applications were on-prem, so essentially you're force fitting a cloud model on an old model and you have latency problems.

At Viptela we are solving these problems we are virtualising the WAN. Essentially we are building a secure networking fabric that decouples the service layer from the infrastructure layer. Now since security is built in you can integrate broadband and commodity internet into your network and essentially take the cost really low and add plenty of capacity on your network. Now since intelligence is in software you can point and click to reconfigure your network and add capability instantly just like you do with your servers today. And third, since we are virtualising the network you can build in flexible topologies that optimise for those cloud applications.

We just got voted as a cool vendor for Gartner in 2015. Thank you.

Janice Roberts

Sometimes it's easier to introduce a totally new concept than it is to reposition an old one, so you're coming in and you're repositioning the whole approach to wide area networking. How are you going to do that?

Lloyd Noronha

Well we are essentially going directly to the enterprises and we are saying you have problems related to cost, capacity and performance. And some of the problems are because the control is not with you it's with the carriers and with virtualisation we are giving the control back to you and essentially you have the ability to solve all these problems within your control.

Janice Roberts

Is there a short cut way to get to those people and say that?

Lloyd Noronha

Yes. We essentially say give us 10 off your sites, problem sites and give us two weeks and we'll show you how we can increase capacity 10 times, increase performance of your applications by 5 times, do it with higher security and half the cost.

Dan Scheinman

Do you have problems with legacy features? One of the issues in what Janice is saying is sometimes when the person comes along and tries to transform a market you run into a lot of legacy features that make it years to implement. Do you have that problem? And then do you have the problem with legacy vendors pricing you out of the market?

Lloyd Noronha

Absolutely, so I think we are in a market where there is a 90% incumbent in terms of a network infrastructure player. And we are in a market where the carriers dominate the services, so it's a $70b market share by vendors and carriers. So we essentially are -- we completely integrate with the current technology, so we support all the open routing protocols, integrate with the current technologies and we use the carriers actually as partners now as we go into the enterprise, so they roll our technology as a managed service to the enterprises.

Dan Scheinman

So this is a huge cash cow for Cisco, it's a very attractive market, at the same time you're not the only one going after it there's Blue Networks and there's others and so how are you going to differentiate yourself? I'm more worried about the start-up competition in some ways, how are you going to differentiate yourself against them?

Lloyd Noronha

Absolutely, so there are a couple of ways we differentiate. Firstly we are essentially solving the problem comprehensively, so when you look at some of the competition that you mentioned they are taking an existing Cisco infrastructure and automating it over that layer, so providing an automation layer over the current complexity. We are taking the approach that if you completely choose to you can replace all your existing infrastructure with ours and essentially get all the value that I mentioned or you can take a step-wise approach and get it incremental value.

Jim Lussier

So it's rip and replace?

Lloyd Noronha

It could be completely rip and replace it could be completely -- it could be a step wise approach, it depends on the risk appetite. We essentially are playing with the three biggest institutions in the US, financials, retail and healthcare who have the highest compliance. So their risk appetites are different across those enterprises and based on that we have an approach to [inaudible] that technology.

Murli Thirumale

So is the value more in re-provisioning or actually you're doing some fundamental reshaping of the traffic itself?

Lloyd Noronha

No. We are actually doing exactly what [VMware did] to the servers what Nicira did to the data centre networks we are doing to the wide area network. So we are essentially taking this approach that you have complexity and intelligence built everywhere but now you just have an abstracted layer which you configure and manage and you essentially can point and click and do what you used to do manually before.

Bob Metcalfe

Thank you very much. CENX

Nan Chen, CENX

Hi, good afternoon everybody. So, by the way just so that -- it's called CENX, so if you call the Ethernet Athernet then it's cool.

Bob Metcalfe

So it's CENX?

Nan Chen

CENX, we'll see what comes next.

Bob Metcalfe

But Ethernet is spelt the way it's pronounced.

Nan Chen

There you go. So anyway good morning, good afternoon. Normally I would represent [here] but MEF which most people know me off. Today I'm going to talk a little bit about the CENX which is a company I co-founded. So what are we talking about here? What we really want to do we want to make the networking cool again, so kind of the goal. This is my third start-up. [The] couple of ventures before that, but this one though I'm really most excited about simply because the fact that we really want to revolutionise a huge portion of the network, which is related to the operating support systems which is a $50b to $100b.

Okay, let's start with the investor, our investors are not only from the VCs like [Highland] or DCM but also some strategic investors which we have been working with Verizon is one as well as Ericsson. So what we really wanted to do is make it an industry-leading product, and also driving the industry. So we -- in those organisations MEF, ONF [EDSI] which we are trying not only lead but also work with other people in that particular area to really help to drive the [well] we call it service orchestration, life cycle service orchestration and to make the industry standards. Not only that we think it's cool, but also we think that really here can change the world. And one of the key problems with today's network is really about the ability to deliver services and manage those services.

So let's talk about CNEX for a second. So what we are really trying to do there is really trying to unify the network as well as the cloud together have seamless ability to deliver end to end services and not only manage that network but also deliver services to enterprises or individuals. So what we really call it, we call it service orchestration but really what it delivers is autonomic networking capabilities.

Murli Thirumale

Are your customers the data centre cloud providers themselves?

Nan Chen

Our customers primarily are the telecommunication service providers.

Murli Thirumale

Okay, in which case they've started and been kind of growing their service over a number of years so they probably have some existing ways to orchestrate and manage that service, so you're coming in and replacing a build-up from scratch system.

Nan Chen

We are really sitting on top of their existing infrastructure what they have [OSSs] and to be able to automate that whole process with their existing infrastructure as well as the SDN and V-based infrastructure going forward so we are really helping to do that. And then one of the -- obviously an example is such that we reduced their, for

example, service [turn up] time by 80%, reduced the operation costs by 40%. So it's really helping them to move into the more automated way to deliver the services to their customers.

Murli Thirumale

It's kind of a build versus buy for some of these folks.

Nan Chen

That's right. We actually compete, if you think the competition is really the It's the internal IT guys. But the thing is just like how the enterprise moved things into the cloud we do the same you're actually working with users instead of the IT guys. And when the user said when we wanted -- really want to use this then the IT guy have to work with us to do it.

Janice Roberts

What's the compelling issue or use case that really brings you in and gets you into the business?

Nan Chen

Yes, the compelling issue really is the ability agility to deliver the services. And today, for example, even Ethernet services it takes them 90 days to deliver. With our capabilities it gave them the ability to deliver that on demand in terms of in minutes. That's why we work with some of the largest Telco's to be able to grow our business like five times last year.

Dan Scheinman

So you've got some great investors and a compelling vision, how many customers do you have and what metrics can you share with us about any traction or momentum?

Nan Chen

We have probably north of the 10 customers the large customers, and those are the largest Telecom as well as the data centre operators. And one of the other things compelling is that we recently just raised another strategic round of funding which we don't necessarily need we think we are profitable already, but our valuations are north of -- well I shouldn’t say the number, but nine digit let's just put it that way, nine digit valuation.

Dan Scheinman

But how do you measure your traction is it number of services orchestrated or nodes in the network that are covered. Can you tell us what your growth is?

Nan Chen

Yes so our growth -- so for example we grew like last year five times, so that means number of Ethernet circuits or IP connections so growth is pretty significant.

Dan Scheinman

5x.

Nan Chen

5x growth yes.

Jim Lussier

How long is the carrier sales cycle for you?

Nan Chen

Yes, its long it's 12 to 18 months. So that's why you need to have partnerships to do it. So, for example, obviously Ericsson is our investor there's no secret that's one of the reason I wanted to [to leverage] them.

Janice Roberts

So what worries you about the future of the business?

Nan Chen

Worry, to be honest with you is really the [bag] how much we can deliver, how fast we can deliver. In fact last year we probably -- we could do even double the revenue if we could actually deliver fast enough.

Janice Roberts

So meeting expectations.

Nan Chen

Yes.

Bob Metcalfe

Thank you.

Nan Chen

Thank you.

Bob Metcalfe

So that concludes the Clouded Leopard's Den. Please stay tuned for this evening for the announcement.

Nan Chen

Bob, I have a suggestion to make if I may. Perhaps you'd like to ask them yourself and the Leopard's to offer your immediate feedback on what you've heard so far.

Jim Lussier

That's a secret.

Nan Chen

You don't have to say who's won obviously.

Jim Lussier

We are going to go into deliberations after this is my understanding.

Bob Metcalfe

Well I had a question, I was curious about how each of the companies depended on the outcome of the Open Cloud Connect project. I never heard any mention of OCC in the presentations, so I was curious about that. I should have asked but I didn't. Any other comments like that, that you'd like to share.

Jim Lussier

One thing that I felt was that the quality of presentation in a compressed period of time was really exceptional, so I wanted to thank people for really being concise and getting their top messages out. It's a hard thing to do and I appreciated that.

Dan Scheinman

Yes, I agree with that. I was going to say that. And also we have several different spaces, so we are comparing apples and oranges all very well done and so it's going to be a really tough decision for the judges here as we sort through this and figure out who earns the Clouded Leopard Award.

Janice Roberts

Yes, I would just say one of the things I see so many presentations and you come out of a presentation and you're thinking what was that all about so I think you did a good job here. And I would just encourage you to really think through this positioning of your company versus competitors and how customers will see you. And the interesting thing today that's different is that customers are looking for you, it's not just you going out and proactively selling. So, their first click on your company they really need to get a good sense of what you are. And like so many companies when you get into the Q&A you come alive, you really like to answer questions and sometimes you have to be proactive about that, you might not get asked.

Jim Lussier

I think one thing that was common was really that we were asking and you got it to a greater/lesser degree. What is the real pain point, what is the real motivator that you're really solving? And I think nailing that gives us a good sense that you know who the customer is and what the market opportunity is.

Murli Thirumale

Yes, Jim as an entrepreneur I would agree. I think there's big markets there's great technology in almost any start-up that you can see. Most often the key issue is how

do you make it over some of the humps that start-ups all of us go through and the person who pulls you through is a customer who is rooting for you to win. And I think that's - - it was really great to hear some of that coming through in some of those presentations.

Dan Scheinman

I think we should give them three minutes next time.

Bob Metcalfe

There you go, the Leopard's only two.

Dan Scheinman

Yes that's right.

Bob Metcalfe

Okay, thank you.

Janice Roberts

Thank you.

[End]