

NETEVENTS
EMEA IT SPOTLIGHT

DRAFT

*Conference Round-Up - Analyst reflections & predictions
for the future*

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Panellists:

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Rik Turner	Principal Analyst, Ovum
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Fran Howarth	Practice Leader: Security, Bloor Research

Manek Dubash

Thank you. This hopefully will be an informal session where we're going to review what we've talked about over the last couple of days. Some of the issues, perhaps, what worked for you, what didn't, what you found interesting, what you didn't find interesting, which will hopefully provide some food for thought, maybe even [some coffee]. If you've got some questions for all these brains, please do stick your hand up and we'll get a microphone to you.

Let's move along the table. Joel, what worked for you this conference and what didn't?

Joel Stradling

Well, I think the gathering of minds has really worked for me. Within the room, there's a tremendous amount of experience and knowledge and thinking about this and this final discussion piece, I loosely put them into two categories. There are some very

forward-thinking views that have been expressed, things that might happen in two to three or even five years' time which has been very interesting. Those thoughts will drive the industry, I think, and I'm referring to standout presentations by Michael Kagan from Mellanox and also by Joe Baguley from VMware where the intrinsic security and application development is very interesting. What Michael shared earlier around computational was fascinating.

Then you have people that I think are front line in this room where their scope is more narrow, but incredibly important. Those examples are, for example, Ray from Verizon, we have managed security services, Aaron from Hotshot has shared some really interesting stuff about how to secure smaller companies from very large and sophisticated state-sponsored players and as well, Roark from Ziften.

These companies, they might have a smaller and not so future-thinking approach, but it's really pragmatic, and so collectively together, if you're an enterprise or a government or indeed even as an individual, if you multilayer your security practice with all those great minds contributing and products and service I think you're in a far safer position than not adopting those security practices that have been spoken about.

Manek Dubash

Great, thank you. Ian?

Ian Keene

Yeah, what interested me was the discussion and presentation on the future of the internet of things and industrial internet of things. It really brought home to me what a mess than industry's in. It really is. It's a complete mess. It's like, there are so many different ways of doing it and no one knows which way is a good way, which way is a bad way. There are obviously big security issues involved. You hear analyst companies saying, oh, the internet of things, it's going to be a huge market, it's going to grow - it's a mess. It's an absolute mess. I think there needs to be a lot more probably regulation, standardisation and you hear people saying oh, it's all going to be stuck on 5G. No, is it heck. No, it's a mess.

Joel Stradling

But isn't this just typical of a new market?

Ian Keene

But it shouldn't be a new market anymore. It should be an established market. There's obviously a need. I mean, I just think of - a great example [has happened] in the UK where I live, remote monitoring of meters for domestic gas and electric, et cetera. Let's put something in that's proprietary, and when you change your supplier, you've got to put something new in. How much money has been wasted in the UK by some idiotic decision in the first place about not standardising on everything? I think this is a thing.

Okay, there are going to be some high-value IoT connectivity things where one can spend \$100 or \$200 on an end-user device, but there are so many things that if it costs

more than \$10 and the battery life doesn't last more than eight years or something, it's pointless. But how are you going to reach that cost and the capability unless things are standardised? When you've got 100 different ways of doing stuff, no one's going to reach the scale to achieve anything. Maybe it's going to take a country like China with the massive scale they have to say, this is the way to do it and whatever. So, all the talk coming out of Europe and the US and whatever, it's going to be led by a country the size of China or India or somewhere like that to actually bring this to market.

Joel Stradling

So, it's sad to say that we can't even say, standards, we've got lots of them. Actually, we've got none of them.

Ian Keene

Yeah.

Manek Dubash

Rik.

Rik Turner

Yeah, I'd follow up on that point on the IoT question. I think it's probably a good idea to stop even talking about the IoT market but looking at it from - as the first of the two security analysts on this panel, I'd say when I looked at IoT security, I realised it didn't exist as a single entity. In fact, the IoT - look, if the IoT were a planet, it would have multiple continents which would be very different one from another. So, if we talk about [unclear] the consumer IoT, smart home and stuff, there's one level of security which is virtually non-existent.

Someone was talking about internet-connected kettles attacking somebody yesterday. There's a very logical reason for that which is that most of the entities who are internet-enabling their devices in the home are companies that have never had to think about internet security before and probably not think much beyond securing their own corporate networks before, if you're a kettle manufacturer.

Secondly, a lot of them are doing it on the cheap by acquiring a very cheap Wi-Fi card, probably manufactured in China, with the standard password of password123. There is that end of the spectrum. On the other hand, I'd say probably - well, people mentioned Stuxnet and clearly Stuxnet was a wake-up call for industrial IoT. Not saying there's not a lot more work to do in that, but at least every time I speak to folks in that sector, there's a greater awareness. I'd also add that there are simply far more companies trying to sell security technology into the industrial IoT world. So, they're two extremes.

The automotive world - for obvious reasons, you can kill people - means that there's a level of concern about security. I think the issue around the automotive IoT is quite simply that the value chain is much more complex because everyone wants a piece of the action; the car manufacturers, the retailers or the dealerships, the garages, the police. Everybody needs some data off of your car, so there's a lot more going on there.

So, that's one level and another security observation, if I may: it was very tempting to - I enjoyed and liked Joe's presentation, his keynote, yesterday and he made a very attractive analogy of saying that it's nice that if you can move away from thinking about security or thinking about the way that you architect your systems, move away from a tennis match towards a game of golf, because obviously in a game of golf you're not having to play against anybody who's trying to stop the ball or hitting back at you. I liked that analogy, I thought it was very attractive.

I would, however, add that security is the only area of IT which is clearly and inevitably always adversarial and as I think I mentioned to you yesterday, Manek, think about it as a game of golf where overnight somebody has crept into the golf course and filled in all the holes and they've also substituted all of your drivers and one thing or another with plastic drivers. Then think also about the fact that maybe your caddy is working for the other side.

In other words, it can't be a golf game. There's always an element of tennis and there will always be somebody else on the other side who is working just as smartly as you are and probably harnessing AI and ML to do it. That's me.

Manek Dubash

Thanks, Rik. Ksenia.

Ksenia Efimova

I would also like to reflect on Joe's presentation, and for me, as a person who is covering the enterprise networks and networking in general, it was very interesting to see that application as a new network. Because it means that enterprises or whoever builds the network needs finally to understand that you need to understand what services, what applications, what workloads you're going to be running in your organisation and think about the networks or underlay that has to support all of that.

Because right now, what we see - and we see that for example in the banks, the banks are trying to re-establish themselves, right? They want to re-establish their retail part and they create those fabulous applications. They collaborate with insurance companies to provide the insurance. But what happens is that doesn't work together. What happens if the network does not provide the quality that it needs to provide, for example when the customer just adds the insurance on top of the banking offer, but that just can't go through because network can't support it?

So, who's to blame if something happens to the customer? The bank who didn't provide the infrastructure, or the insurance who didn't take care of it? So, that's important and I think for me that was very interesting and very changing.

Manek Dubash

Okay, thank you. Fran.

Fran Howarth

For me, what was most important was listening to the practitioners who are actually doing things. I do agree with you, Ian, it's a mess, but I'm very pleased to see that we've

gone from treating security as a tactical problem into [well] you're just chasing and it's actually becoming more proactive. It's becoming part of the business. Now, we are at the beginning of this journey, and as Rik pointed out, operational technology is a whole area that has really been letting businesses down. We didn't hear enough about it; I think that is a gap that should have been addressed.

It's not just about the IoT. We are looking at the big SCADA networks and that kind of stuff and until we get security pervasively into these areas, not just reactive but as a proactive area, I think we can't get along the journey where we want to be. I think we're at the point where we're still learning to drive but I think we're near to taking the test and we will probably pass. It is heartening to see that it's becoming a strategic issue.

Joel Stradling

It's sad to hear that, in a way, because we've been talking here in NetEvents for the last [23] years about exactly that issue and we don't seem to have moved on any.

Ksenia Efimova

Well, on that point, taking into the account the migration of IT and OT and those two industries or networks coming together, I think the IT vendors that are used to dealing with security would push that in OT as well or not only network vendors but any vendors that used to deal with IT security.

Fran Howarth

Well, it's not just the vendors, it requires a whole mindset change within the industry. They've never paid attention to it. I did a big survey last year and it was horrifying. They're not even doing assessments of security. They aren't considering cyber security. They all think they're still air-gapped, but they're not, everything is now interconnected as we're seeing with the IoT. I think that's going a bit far with OT networks.

It's kind of the vision of the future, we're not there yet. We've got to go back and do the basics and do it strategically and put cyber security, physical and logical security, into one big bucket and treat it all together.

Manek Dubash

At this point, it's worth reminding the press here you have a chance to get a custom analyst quote from one of these wonderful people. If you want to ask a question, now's the time to do it. Nope?

Unidentified Male

Yeah, I'm on a slightly different topic, but we're talking about the predictions for the future and something I'd like to see in the future. We've got two women on this final panel, but women have been fairly absent from most of the panels during this conference. How are we going to address the women in tech issue if women in tech aren't given this opportunity to come and talk to us? It just seems bizarre moving forward that we're still in a position where there are so few women representing at these sorts of conferences. So, I'd like your opinion on that, thanks.

Rik Turner

I find that a very unusual observation, actually, because in my lifetime of being an analyst, which spans 23 years, I've seen it as a very equal thing. I haven't seen it male-dominated at all. Maybe at the management level, but that's industry's issue at all, the top managers tend to be - have tended to be male. But no, I don't see that in the analyst industry, actually. I just don't see it.

Unidentified Male

I see it an awful lot at the conferences that I attend.

Rik Turner

Yeah, well maybe it's because...

Unidentified Male 2

[Unclear] analyst industry or IT industry?

Rik Turner

No, no, IT industry.

Fran Howarth

Yeah, Ian, I think he didn't just say analyst industry, I think he's talking about the panellists and technology being driven through the organisations completely. I still think it's seen to - women are seeing too much of the soft skill area, they're not as the ones who can really take on the hard technology jobs. I think that is perhaps changing now. [Unclear] security is finally got so it's being taught in universities and we do finally have what we need coming up. I know I talk about the skills shortage and everyone does. It's being addressed. It's at the very lower level yet. This is where the equality is coming from. But perhaps we need more mentors.

Joel Stradling

Just on that, I can personally say when I joined the IT industry as a graduate, it was 50/50 in terms of the intake, and that obviously takes 20 years before it's then 50/50 in terms of the room and people talking about things, but I think it is happening at the earlier stages and it's definitely going to take time. There does still need to be some societal change around how IT is perceived, how STEM is perceived and women's position in society. I'd like to think it is improving, but I do think it's still probably a decade away from what you want to see and what we want to see.

Rik Turner

Yeah, but my boss at Ovum, it's a woman and it's pretty hot on this particular topic. She quotes quite often that currently I think it's 15% of the workforce globally in IT is female, about 11% in the UK, so we're behind. Beyond just the fact that over half the population is therefore underrepresented in the IT sector, it's also still overwhelmingly male, pale and stale.

[Applause]

Joel Stradling

But I would also like to suggest that the pay gap would be a good place to start. Start paying fair and equal salaries.

Rik Turner

Absolutely, it's...

Joel Stradling

That's where I'd come in with. It's been a legal requirement for decades.

Ksenia Efimova

But then also don't forget that it's perceived in the industry that it's a hard-working industry, it's very knowledge-heavy et cetera. For some women, it's a barrier itself because they were taught in schools that you have to be a girly girl, or you have - that's a boy's field or something like that. It's a psychological barrier. So, I see that it's changing right now but maybe if we can make the technology sexy in a way and to really show women or girls that it can be interesting. It can be entertaining, it can change lives and save the earth. That will attract young, very young generations to that industry and that will change. In the future of course, not tomorrow.

Manek Dubash

That's a positive note. Any other questions? Any other thoughts - oh, yes.

[Aside discussion]

Abraham Joseph

Abraham Joseph, IoT Insights. So, I'd like to defend IoT a little. I think there are lots of use cases, for example shrimp farming in Columbia, for example, lighting, for example, farming. So, I think instead of expecting some humongous everything lifts, there are definitely places where you go in and you can prove a particular use case, whether it be concrete curing or whether it be cold chain for Tesco. I think the cases are there.

Joel Stradling

Well said.

Ian Keene

Yeah, absolutely, I agree, but until there's a pretty common way of doing things, how does your average sheep farmer put in an internet of things system? They can't. So, they need the services and they need the [scale], so it's a very affordable and they can actually save money or improve productivity through it, and at the moment it's a minefield. It's a high-risk investment for a lot of industries.

Abraham Joseph

Well, I'm not suggesting that the average shrimp farmer or carpet layer necessarily invests in IoT. What I would say, though, is that IoT does have the potential to transform lots of industries, including sheep farming and carpet laying and whatever. So, rather than - if you go at it from the point of view of what can IoT do for me, I think that's a question that each vertical might be asking. I'll give you an example. I chaired an event

called M2M which is what we used to call it in the old days, for the oil and gas industry. I got there late, and it was speaker changes and so on.

I finally got to speak to the oil industry on the first break of the second day and this gentleman from the oil industry said to me, what's all this M2M stuff anyway? I thought, my God. We've done nearly a day and a half of conference and we haven't explained to this industry that we're hoping to serve what all this M2M stuff is. When I explained what - he said, well, what's the big deal? We've been doing that for the past 20 years, 30 years. Of course, they've always had remote sites, they've always had lone workers to worry about and so on. But yes, these technologies now give them significant opportunities to gain vast efficiencies.

I wasn't kidding when I was talking about shrimp farming. I did an event in Slovenia many years ago and somebody talked about beekeeping, IoT for beekeeping. A week later, I'm in London and I'm talking at an IoT conference and three people came up and they said, oh, this beekeeping stuff. So, it sounds about yes, just about every major city there are people doing beekeeping, you can remotely monitor the weight of their hive. There are lots of - so, the cases are there. It's not that we should expect that it will get magical transformation [in the community] ...

Ian Keene

But we have an expert on IoT and beekeeping here.

Manek Dubash

As a beekeeper myself, yes, I'm strangely interested. Tell me more. Okay, so are there any more questions? I have one more question for the panel. We have a question here, Mark, if you would please.

Stefano Uberti Foppa

Thank you. Stefano Uberti Foppa from ZeroUno, Italy. Because this is a general session with brainstorming and so on and during these two days, we didn't talk about maybe two or three main aspects. We discussed about technology application and the business environment, but we didn't talk about [four] great changes that we have in the next future, like ethical approach about technology, for example, human centre technology and environmental protections and so on. So, I think today some reflection about this point is very important for the next years applying technology not only for the business but [also for an] ethical and environmental protection business and so on.

Manek Dubash

It's an interesting question and it actually feeds into what I was going to ask, which is what do you think we'll be talking about at the next NetEvents over the next couple of years? So, perhaps fold all that in. Thoughts on that, anyone? Who's first?

Ksenia Efimova

Yeah, I think I can start and continue the topic of IoT because when we talk about the nature and saving the earth and using technology to help humanity, if you want, and ethics - well, first of all, there are IoT cases that helped save [rhinos] in Kenya. That's

how you help the environment, right? There are IoT cases that use - for example, in Belarus, there is an amazing start-up. They are building sensors to measure the waste in the soil and in the air because Belarus plans to build the nuclear power station. So, they want to be protected.

Also, when we talk about ethics, of course using sensors - the security specialists have to address that and I'm pretty sure they will, but I think technology will help when using it properly and correctly and not abusing it.

Joel Stradling

I also have something to say on that. I'd like to thank you for raising it, I think it's a good point. The issue here is social responsibility. To a degree, your question is slightly related to that and so we have a lot of people creating technology, putting it out there on the marketplace and saying, okay, wow, this is fantastic and that's true. Facebook, YouTube, we all have great experiences with that, but there's another side to it, right, that can be far more dark and sinister. So, perhaps for another NetEvents we could bring an anthropologist or a psychiatrist, that type of diversity to the minds that are here because technology does have a pretty big social responsibility tied to it.

Fran Howarth

As long as we don't get any politicians involved.

Joel Stradling

No, no politicians.

[Laughter]

Manek Dubash

Any further thoughts on...

Rik Turner

Yeah, a couple of things. First of all, I think it's a great idea to get someone or a panel or a group of people talking about - maybe one of the keynotes, even - about the technology at the service of environmental protection and so on. I think that'd be really useful, really interesting, I'd personally definitely like to see and listen to a few presentations about what's going on and even with an IoT presentation about how they're improving meteorological prediction or what they're finding out about the rainfall in forests and all kinds of stuff. That's definitely a great idea.

I would add that I saw a magnificent presentation - it was actually a vendor event in London, but one of the big US vendors, [Juniper] if I'm not mistaken. Anyway, they brought over a guy who, having made his millions in some start-up, I can't even remember which one, had founded another company where basically what he did was, people had presented him with problems to be faced, primarily in developing countries, and they would brainstorm.

He and a bunch of his pals from Silicon Valley would brainstorm and they would actually get to the stage of productising stuff that really helped folks out in developing

worlds. The example that - there's a few videos, if you're interested I can find the name of the company, but he was doing - he had worked out how to use 3D printers to make prosthetic arms and how to mount them and teach people in villages in Africa to work these things and even brought their own generators in the villages that didn't have electricity and there were folks in the video who were benefitting directly from that. That kind of stuff is really interesting.

The only other thing I would say is, on the question of ethics, that's a massive topic. We've just asked - were asked and refused to write a large thought piece on the ethics of artificial intelligence. The reason we refused is quite honestly because we don't have at the moment sufficient ethicists at Ovum. But it's definitely a massive topic that we're going to need to address going forward for obvious reasons.

Manek Dubash

Joel?

Joel Stradling

Yeah, sorry, I just had another one because I have three examples of companies that are major multinational companies that I think take social responsibility seriously and I applaud them for that. One is VMware, so Pat Gelsinger is quite front and centre about gender equality within the company and responsibility - they sponsor a medical ship that travels to countries and helps people that are ill. Orange Business Services take social responsibility very seriously, it's part of its programs for a lot of the things that it does. Telefonica here in Spain is applying big data analytics to help prevent malaria outbreaks in several Latin American countries. They talk about those things, so it does exist with some big technology companies and that's a good thing.

Ksenia Efimova

Yeah, just to add to the list, Vodafone in the UK for the farmers, for the cows.

Manek Dubash

Okay...

Rik Turner

Yeah, but because the environment says we shouldn't have many cows...

[Laughter]

Rik Turner

[Unclear] environmental protection then maybe forget about farming. But, no, I think the environment's going to be an increasing hot topic. I think it's also going to be turned around in looking at how much of country's energy consumption is actually used by IT. So, it's not just, hey, IT can help protect the environment, it's actually, it's causing damage by itself.

Joel Stradling

Data centres is 2% of the world's electricity.

Rik Turner

Well, yeah, and it's going up, it's going up and up and up. We're really trying to cut down carbon emissions and save on energy consumption in many, many areas. In IT, the consumption is just shooting up and it's also becoming basically a cost issue for many of the IT providers. But the other thing I think that we're going to keep talking about, it's going to be more of an issue, is politics in IT. That's not going away, it seems to be getting worse and worse and worse. Going back 10 years ago, what does politics have to do with IT? Nothing. But it's a big issue now and I think that's going remain over the next couple of years.

Ian Keene

Unless you think there should be social control over large and influential industries, in which case you wouldn't call it worse. Depends which side your bread is buttered.

Rik Turner

But I think it's worse in terms of it's an issue, and I think it's going to hold the industry back rather than advance it. Maybe it's for good reasons, I'm not going to argue it isn't, but it's going to become more of an issue.

Manek Dubash

[Unclear]. Okay, if no one's got any further to add, I'm aware that we are running slightly late and lunch is imminent, so before I close this session, I just want to say that one individual on this panel has been to a huge number of NetEvents. He came, I think, to the first one and this may well be his last one because he's retiring. So, I'd like to say...

Ian Keene

It's me.

Manek Dubash

...thank you to Ian for his participation.

[Applause]

Ian Keene

Yeah, more time fishing, sorting out my little smallholding and enjoying life, I think. I've done enough work.

Manek Dubash

Good luck, mate.

[Applause]

Manek Dubash

With that, I think that's the end of this session, unless - so, that's the end of the session. Go and enjoy lunch and we'll see you next time. Ta ra.

[end]