



## CIO Round-Table

# How Networking and Collaboration Support Business Resilience and Continuity During and After Times of Crisis

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### Transcript

#### Featured Speakers:

**Analyst Chair:** Brad Casemore, Research Vice President, Datacenter Networks, IDC  
Pathmal Gunawardana, Head of Americas, TATA Communications  
Russ Currie, Vice President, Enterprise Strategy, NETSCOUT  
Bill Miller, Chief Information Officer, NetApp  
Christina Kite, Vice President, Global Business Strategy & Analytics, Oracle  
Dan Krantz, Vice President, Chief Information Officer, Keysight Technologies, Inc.  
Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies  
Veresh Sita, Chief Digital Information Officer, F5 Networks

#### Mark Fox, CEO, NetEvents

Welcome, everybody. Thank you for joining us today. I'm Mark Fox, CEO of NetEvents and delighted to welcome you to our webinar, roundtable business continuity and collaboration. Sharing the session today is Brad Casemore, Research Vice President of IDC. Brad over to you to introduce the session today.

#### Brad Casemore, Research Vice President, Datacenter Networks, IDC

Thanks very much, Mark. Yes, indeed I am Brad Casemore, Research VP for Data Center Networks and Multi-Cloud Networks at IDC. And I have a distinguished panel with me today for today's Roundtable. We have Kevin Herrin, who is Vice President, Infrastructure Platform Engineering at Dell Technologies. We have Veresh Sita who is Chief Digital Information Officer at F5 networks. We have Dan Krantz who is Vice President and CIO at Keysight Technologies. We have Bill Miller, who is Chief Information Officer at NetApp. We have Russ Currie, who is Vice President of Enterprise Strategy at NETSCOUT, We have



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Christina Kite who is Vice President Global Business Strategy and Analytics at Oracle. And we have Pathmal Gunawardana who is Head of Americas at TATA Communications. So it's a great panel and we're going to have an extremely stimulating and I think, interesting discussion for you today. So, I just want to frame the discussion before our panelists provide their perspectives and their insights. Just a few slides to queue it up for you. This is based on IDC has been doing a rolling survey, all through the current, the current pandemic, the COVID-19 crisis, and we've received some interesting responses from enterprise respondents. These are enterprises across a range of vertical markets, how they're coping with the crisis, how they're reacting. Or reprioritizing their IT investments during the crisis and also how they see an emergence from the crisis as we move on to what IDC and others are calling the next normal. So it's all about business continuity and collaboration, how you keep your business going during a crisis, how you ensure that, that you have the collaboration platforms capabilities in place to ensure employee engagement and productivity. And it requires, I think, thinking in the long term about as we move into this next normal, how can we move beyond having contingency plans that may or may not be put into productive effect and move towards something that is more like a continuous preparedness? As we move into the next slide, I'll dive right in with some of the data. We've seen profound changes globally in the last few months. And that's probably an understatement. 2020 has, has been like, like no other year in living memory. And even if we compare what the IMF and others have called the Great lockdown, which is what we're living through now, to, you know, the previous crisis, which was the global financial crisis in 2009. This has been a very different type of crisis. And you can see from this slide that regardless of where you are in the world, it has affected everybody. You can see the data here from the sources IMF and the World Economic Outlook. You know, the global financial crisis, I certainly don't want to play down its effects. But it was it was a very different type of crisis. For me, it wasn't a health crisis, as well as an economic crisis. It was it was a financial crisis. And it manifested differently across the world. And you can see it on this slide. If we move to the next slide, we can look at what we're going through now. Right? The credit is hit. And when the crisis hits, this is a, you might call it a technology journey to recovery map, where you know, you have the initial crisis and your focus is on business continuity, you go through a slowdown, and you're looking at an ROI focused cost control focus, and ensuring that, that the technologies in which you're investing and implementing are providing an ROI. And then you look at getting into a more normal cadence of operational resilience as you move through a recessionary period. And as you begin to this is a U-shaped curve as you begin to ascend that curve. You're looking at accelerating to a you're looking at investing to accelerate your way into growth, and then you want to move towards recovering innovation. We're still very much in the early stages of this. We're in this crisis, slowdown period. And obviously the focus right now is on business continuity. And if we move to the next slide, we can see we can see some interesting data. From the rolling survey I talked about, and this is a survey that we do on COVID-19 impact on it spending. This is from late March, this particular snapshot 103 respondents, and we asked about due to COVID-19, and the need for new technology and changes to the working model of some organizations, which of the following tech investments do you think will benefit most from increased demand? So it's, you know, asking people to, to project and to predict. And you can see there's a range of them here. And I really want you to think about this as a continuum where you have the placement of applications where applications reside on one end, and you have, where they're consumed and how they're used on the others. And you can see if you think about it, in that context, all of these things begin to make sense on that spectrum. You have cloud computing and cloud software as well as SAS represented here. You

have, you know, data security, which is everywhere, but Then you have all the endpoint items in terms of workforce, workforce performance management, enterprise social networks for you know, collaboration and communication, employee engagement tools to make sure employees are still engaged as they become teleworkers remote learning and training. All of these things are important and it is very much a continuum. And we can see how much things have changed on the endpoints on this next slide. This is the impact of COVID of COVID-19. On working from home, and it's a question that we asked what percentage of your organization's employees are working from home? Or do you anticipate will be working from home out in 2021? So there's pre COVID you can see on the far left hand side of the screen, and you know, there was a very small proportion of employees who were regularly working from home. And then you can see now, you know, this was in the midst of the crisis. This was like it I think an April and April snapshot. And obviously you've got a significant percentage of employees working from home, including a very significant percentage of that's more than 75% of overall employees. And then there's also even larger compliment that said between 50 and 75% of employees and so forth. But even if we roll this forward, and this is why we talk about the next normal, even as respondents looked out to 2021, you do not see a return to the pre COVID. Chart. At the far left, you still see a very significant number of employees working from home some organizations have found that at least from a productivity standpoint, it's worked quite well for them. mileage varies Of course, but this is this is this is a new world and obviously from a from an IT perspective, it requires certain investments and a reorientation of kind of a world view on technology and how it contributes to the business. And I think now I just want to make some points before I turn it over to our illustrious panel on the next slide. I think you'll see some IDC conclusions that we found from our ruling survey. First of all, the COVID-19 Christ crisis is leaving a permanent mark. enterprises now fully appreciate that unforeseen events can and do arise, right, we always knew they could. But we've seen firsthand through the current pandemic, just how immense and serious they can be. They can do real business operations and unprepared organizations obviously will suffer the most there are degrees of preparedness, but you want to be as prepared as you can be. Second point, business continuity and resilience should not be limited to a contingency plan that sits in a drawer. It needs to be more of a preparedness posture that is actionable at any given time whenever one of these crises may surface and it should give organizations the agility, flexibility and responsiveness that they'll need. Indeed the resilience they'll need in an unpredictable world. Finally, investments need to occur in a wide range of technologies. Remember that gamut or spectrum I talked about earlier, spanning the spectrum of digital business continuity, and they need to be emphasized well into the future, right? This isn't something that we can we can just drop a few months from now, I think we realized that this preparedness needs to be a continuous posture. And it needs to address not only where the applications reside in an increasingly distributed world where cloud AI as and SAS are being 11 are extensively but also to how they're flexibly accessed, then use collaboratively, you know, by your employees at endpoints and of course, this has to be secure as well brings up a whole range of challenges. And I think now as we move to the next slide, and we turn to the panel, we're going to discuss this in a in a chronological way in terms of how panelists responded to the immediate crisis when the crisis arose and how they responded to it organizationally in terms of the it technologies that they put in place some of the short term priorities as we climb out of this, and then long term lessons that they may have been able to derive from the crisis in terms of that continuous preparedness that I mentioned earlier. So we'll move now to discussing the immediate crisis response. And I wonder, now, as we turn to our panelists will operate in terms of how the panelists appear on the screen. Kevin, I wonder if you

could give your perspective on on how Dell Technologies responded when the crisis surfaced, and and how you were able to scramble to to maintain business operations and continuity.

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

Sure, so at Dell we have a fairly robust crisis management team structure that gets called across the organization. And so that was called up and we started working on what are we going to do about this problem early on when it was really impacting China more than anywhere else. We sort of, of course, do have business interests there and a lot of employees there. So we were very focused on China and how to deal with with China from a technology perspective. I own the infrastructure at Dell. So we were very focused on our networks, there are VPNs there so people could go to work at home. And we were scrambling to deal with how do we if we run out of capacity and China because we didn't design our networks to for everyone to work from home at the same time? How do we get those users connected to nearby VPN capabilities in Asia to to keep keep our business operations moving forward?

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Did you did you leverage any were you Are you looking more at VPN connections to VPN concentrators was where SD LAN overlays part of that or...?

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

There were a lot of what really helped us here was a big investment we've been making an SD WAN across the world. And we had been replacing a lot of MPLS with internet and and so when we do that we were able to get in a lot of cases, you know, almost 10 X the bandwidth or that we were we had before or even better for better cost. So the SD WAN thing was a play to use our own technology was one of our obviously I'm sure there's other folks who say the same thing about their technologies in their companies, but we're big believers and using our own technologies and proving the point and we got out on the edge and started doing it and it's been a great project helped us be well positioned to take almost 100% of our employees to work from home very quickly. Once again. This thing broke out kind of start breaking out of China.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thanks. Thanks very much, Kevin at eating your own dog food is always great in terms of giving.

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

We'd like to say something.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yes, it's a little more, more attractive. Veresh. I wonder if you could give a perspective from F5 in terms of what you saw and how you respond to it?

**Veresh Sita, Chief Digital Information Officer, F5 Networks**

Yeah, absolutely. Look, right out of the gates, you know, thinking was to be quick to be decisive and to be transparent. You know, I remember very early days, you know, I was driving back home from a ski resort with the family on the Sunday evening. And I had to actually pull up into a supermarket parking

lot to take a call with my leadership team, where we actually invoked our crisis management and business continuity plan. And I remember opening the call by saying, I hope this call turns out to be much ado about nothing. But I'd rather be abundantly cautious than not and, you know, it turns out that, you know, we did that fairly early on, it was one of the best decisions we could have made. The first thing that we did was establish a guiding principle that our entire response plan was going to be governed by. We're a global company and to roll out procedures, policies on global scale immediately is going to be tough. We really came up with a guideline and an operating philosophy that we call a human first approach. And that Kevin decision that we were going to make going forward was going to be based on a human first approach. And so that gave license to, for example, frontline salespeople that were trying to make a man to make a quarter that they had the license to, to take a human first approach in terms of their personal health, their personal safety, and also doing the right thing by our customers. And so if it meant we missed a month from the financial perspective of Mr. Porter from a financial perspective, we weren't going to Okay with that from a company perspective, as long as we took a human first approach, we moved quickly to implementing office by office guidelines around working from home etc. working with local authorities, local governments, local leaders, and (Inaudible) level companies within the different geographies, to implement work from home practices. We had to scramble pretty quickly to enable the, you know, effectively 100% work from home for our entire organization, making sure that we were provisioning the appropriate tools, technologies and equipment for people to do that. And as you know, as soon as we were able to establish that our entire global workforce was safe was well, and was able to continue to work from home. We made sure we extended the human force approach to our customers, and recognizing the technology that we provide is a five you know, as a as a as a leader in the networking space and security space. Our ability to enable companies who are dealing with trying to enable large volumes of people to work from home was high. So we immediately focused on that and removed every type of roadblock that we could in terms of enabling customers to be able to support them to help their workforce to work from home. And so, you know, our entire initial response was based on enabling our business continuity plans pretty quickly, but really putting an overarching lens of human first in every decision that we made.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

That's very important. The human first precept is a recognition that the crisis was disruptive to every aspect of life, right, not just the work life, but personal life as well. So it's a good insight. Dan, I wonder if you could provide your perspective from what you saw at Keysight. Yes.

**Dan Krantz, Vice President, Chief Information Officer, Keysight Technologies, Inc.**

This this was kind of a deja vu moment for us, not with a pandemic sense. But in late 2017, our headquarters are in Santa Rosa, California. And there was a wildfire that Tubbs wildfire that came racing down the hills, and really took out our corporate headquarters. Significant fire damage. This is where not only our headquarters, but our fab and our tech center hub of global operations. And we had to exercise crisis management back then. And did a pretty significant retrospective on what would happen at scale globally with our multinational company, If this occurs anywhere else, not knowing that a pandemic was soon going to be what we're faced with. But the good news is we had really dusted off our crisis response to begin about how to be employee first put employee health and safety number one priority and reimagining what would we need to do at every location around the world with that as

our number one priority for whatever crisis may hit via China or Europe or other parts of So as this unfolded in January, we just put that into motion, sent everybody to work from home, probably before the local authorities required it, we'd already re-engineered our, our entire global network to be SD WAN. We'd rethought our whole VPN architecture, just in case something like this were to happen. But we couldn't kind of imagine in January that this was actually happening. So we kind of assumed this is a one off, this is a china only thing. Good thing. This isn't global yet. And then South Korea started to hit just a few weeks later. And then that's when we really kicked into high gear to say this is going to spread this is indeed going to be global. This is not one facility of ours. This very well could be every facility on the planet that is going to need to work from home. And we had to go into hyperdrive to really make sure we put all of the actions into motion to help everyone basically connect and just work remotely.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Absolutely no and you absolutely this is such a such a connected world today, not just in terms of technologies that we're talking about, but obviously transport too and, and these viruses certainly got around this virus certainly got around the world in an incredible time, right? It just spread at such a rate was hard for hard for all of us to keep up, I think. Bill from the NetApp perspective, I wonder if you could provide some insights into whether your experience was similar to the ones we've already heard about or whether you had a something that was that was particular to your organization, and requirements?

**Bill Miller, Chief Information Officer, NetApp**

Yeah, thanks, Brad. Yeah, NetApp is, you know, a large technology company. We span cloud utilities and on prem resources, data centers around data management, data storage, so we're kind of a tech company, a pure tech company that really builds and sells software. So let me tell you a couple stories about this that I think are really interesting. The first one is are you know, it all starts and ends With the customer, right, I think most of us share that view, it's our raise on (inaudible), you know is that we provide value to the customer. So we have a pretty significant call center in Customer Support Center, interestingly enough, in North Carolina and a center in North Carolina, so we had been prepared due to previous hurricane evacuations due to coastal hurricanes in the Atlantic season, where we basically had to lift and move our North American customer service operations to be able to allow these agents to work from home work from the road wherever they were during these evacuations due to Hurricane. So actually, the shift due to the pandemic to take the Diaspora of those service resources and continue to function was a natural outgrowth of some of the things we've done before. So, you know, it's a case of not all crises are the same, but they provide you with that muscle memory to deal with that crisis and figure out how you're going to deal with the next crisis. So That was really helpful to us so as not to impact our customers. And of course, a lot of customers were going through their own throws and challenges and needed that reassurance and that close contact with their support partners during this period of time. So, that's a really great example. I'm going to give you another one that never occurred to any of us and occurred during this pandemic. India was hit particularly hard in their lockdowns in their cities. And most of you who are familiar with Indian operations know that several of the cities literally locked down street traffic. We have a major presence in our Bangalore India office, and people could not get the permits to go out on the streets to go to the office for any circumstances at all for several weeks, due to the authorities not wanting the spread of the pandemic. We continue to hire and onboard employees in India during this crisis, and we actually went through about a three week period

where we were hiring some experienced personnel as well as some new college grads. We could live not get them a personal computer during that period of time, but yet we wanted them to onboard. We wanted to keep up the momentum of the hire and the onboarding process. We have what we call a net app, virtual desktop, which is really a cloud based utility for a virtualized secure, enclosed desktop that protects our IP. And we were able to use that cloud utility to drop that image remotely on laptops that these Indian employees had in a couple of cases. These were laptops that came with new college grads that they used in college productively, we were able to drop that image on those machines and get those people working with our software tools during the early stages of this pandemic. And to be able to do that in the outskirts of a city like Bangalore during this crisis, really talks about the New World Order in how we're operating today. So some fascinating lessons learned there. And then the third thing I share and I'm pretty Probably not alone in this and love to hear what the other panelists think, you know, we're largely a software development company, even though we deal with data center, you know, 95% of our asset value in IP is in the software that goes into operating systems and utilities. We actually look statistically, at a lot of our engineering tools and platforms, we looked at code check in, we looked at code Checkout, we looked at code progression, we looked at lines of code produced. And we did this for the first couple of months of the pandemic. And we actually saw a material statistical improvement in productivity of our engineering teams during this period of time. Unbelievable and undeniable. And part of it. I think part of it is, you know, everybody proving to themselves that look, I'm going to be productive in this environment, I can be as productive if not more productive in this environment. I'm going to prove it to myself. But I think there was more to it than that. I think there's a, a compression in time that goes with not walking Building the building conference room, the conference room golf going to the coffee klatch and having a discussion and people moderating and managing their time over more than that eight hour in the workplace day working at across the day that makes sense to them maybe 1215 hours when they're at home and and to be able to modulate that effectively. And so we actually have seen engineering productivity increases, and that will not be lost on the management team as we look at future posturing. So just some real interesting stories there, Brad. I wanted to share with it Yeah,

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Great perspectives Bill, certainly the commutes are much shorter to write there.

**Bill Miller, Chief Information Officer, NetApp**

Yeah so hey Brad some of us had trouble making it from the you know, from the kitchen to our home office in time to get that first. Getting a little lax there.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Absolutely. Thanks very much. Russ similar perspective from NETSCOUT anything that was that was available reiterating on the themes we've heard about now, or did you see some common challenges?

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

No pretty similar, actually, in a lot of what Bill said, brings home to, you know, the longer days and the way that people are adjusting to the environment. And it really is you get done what you need to get done when you need to get it done, right. So you kind of take that approach. We were lucky at that



scale, we had just finished a major redesign of our network going to an SD-WAN implementation and implementation. So we kind of got in front of the curve. We were very fortunate. We did that all in 19. So we're pretty robust in terms of our compute and networking capabilities. But in my role at NETSCOUT, I also get to work very closely with our customers and get some of the insights that they see. And it was very interesting right after the crisis really happened and everybody went into lockdown. It created a great challenge for folks to get remote access. turned up and make sure that they had the capacity and the capability to handle this new remote workforce and an awful lot of our customers, our financials, and kind of tend to have a limited amount of remote workforce in those environments. You know, we have one of our customers that basically provisioned VDI access to 1100 users over the course of a day. Well, in one day's time, they had to move to an 11,000 user VDI environment. So this is just, it's stunning, you know, all of a sudden, you have 217,000 users coming in remotely. Some of the big opera organizations that are out there. So just the stunning amount of activity that went along with this was very hard for people to address, but they did. And I think that the interesting thing that came back as most of them said, we're running hot but we're stable. And that was kind of the best that anybody could hope for. And then over time, what we started to see too, is that as a change, also in the security angle, we're starting to see a little bit more targeted DDoS attacks towards the VPN resources and the like, they tend to be smaller in scale, but very, very focused. So these are real challenges for folks to ensure that they're able to protect themselves in those environments. And for that kind of more targeted attack where they were pretty well protected on the business side, because he kind of got that from your content delivery networks or whatever. But now, it's really as we take a look at the private IP space and how do I protect that? That's a challenge as well.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, so even the cyber attackers have adapted to the to the new reality. Absolutely.

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

You know and it gives a gamer kids a new target.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah. Probably not good. Christina, I wonder from, from your perspective is global in global business strategy and analytics at Oracle, do you have a different take on what happened and how Oracle responded to it?

**Christina Kite, Vice President, Global Business Strategy & Analytics, Oracle**

Well, I echo a lot of what my colleagues have already mentioned, maybe a couple things that I'll add from more of a business, angle or view. Oftentimes, when a crisis hits, no one will fault you for your response, as long as you have a plan. And in this case, I think we had multiple plans. If we really step back, even though this is a pandemic, and has always been identified by our insurers, for those that, you know, do really follow their insurers risk maps, a pandemic was always something that was at the far right low frequency, high severity, but it's been on all the risks, maps, Zurich, AIG for at least two decades. No, we've always known we've lived with this risk. But what we may not have known until we absolutely had to execute some of our plans was how much interdependency there is within an among this particular risk. For example, we looked at number one employees, first customers and its suppliers so



that triage absolutely was true. However, when we look at a pandemic, your continuity plan for succession planning becomes very important, because we really didn't know based upon this pandemic, would we actually have a loss of life to some of our employees and how would we leverage our succession plans? Number two, if you look at things like people working from home workers compensation, how do you make sure your employees are not only productive, but they're safe? You have to consider those risks. Third, someone mentioned I think it was Russ security. How do you look at security breaches, and What is your response to a security breach? These are things that are often true bioterrorism at one point, how could you also look at your continuity plans and how you would address bioterrorism? there are aspects of this particular risks that are multi-threaded. And I think that's something that I'm really proud of Oracle and the way we looked at it very critically, very systemically. Some of the things that I saw us do that maybe we are we didn't mention is number one communication. How does the organization communicate? And how do we leverage everything from video to town halls, to ask me anything forums, so our employees have a voice and can literally be heard, and we can absolutely talk to them. Second, our HR organization not only leveraged our human capital management software, to actually whether through this and we still are, but they also really were very proactive and having different forums, different webcasts on working from home, looking at dealing with, or balancing work life, having specific medical advisors coming in. And I really appreciated that focus on our people. Because if you take care of your people, they'll take care of your customers. And we're all here using zoom. And where, you know, zoom is one of our customers. So very, very important. Oracle's responsibility that some of our customers are the frontline. And we have to make sure we're there for our customers. And that first and foremost means we have to take care of our employees, so they can take care of the customer, as well as how do we make sure that we build customer and employee loyalty throughout this period? I think the last risk that we didn't mention is creditor risk. How can we also look at that last risk, there are going to be some organizations that literally aren't going to be able to pay their bills? How do you look at credit risk? And how do you manage all of these different risks? From a systemic perspective?

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, absolutely. And yeah, it's a great observation regarding the organizations that have really suffered a lot of hardship during this period. Right. And we've, we've done surveys where you can see certain vertical markets and obviously those that depend more on, on human interaction and human exchanges, think about transportation, you think about hospitality and so forth. A lot of those sectors have been hit particularly hard during this crisis. It's a great observation. path. Now I know TATA obviously, a worldwide company, you're ahead of America's but you belong to a company that operates worldwide. What did you see when this crisis hidden? And how did how did how to respond to it?

**Pathmal Gunawardana, Head of Americas, TATA Communications**

It's very interesting. Brad, listening to the esteemed colleagues on this panel. What is similar experience? So when this hit us first we had two parallel tracks, one is our employees, their safety and health and our customers. Equally important, right. As a digital ecosystem enabler, a lot of our customers - actually all of the companies that are represented on this panel - we in one way, shape or form, do business with you in every part of the world. How do we serve our customers, especially for their requirements? And



then with our employees, how do we make sure that business continuity happens, as far as talked about the empowerment went down, all the way down in the organization, to the account manager level to make sure let's do what's right for the customer. Right. Dan talked about the fire in Santa Rosa bill talked about the hurricanes. Kevin talked about China. Look there, I don't think there's any statistical models that define the situation we are at because this is truly a global pandemic, right? All the other events, we were prepared in isolation, okay? If a hurricane hits, or one country's not, doesn't hit the entire world at the same time, this came as a domino effect, right? It starts with China going to South Korea, India, US etc. And so as a global provider, presence in hundred 60 countries in the world, and when the customers are calling us up and saying I need bandwidth here I need to increase my add people so they are and, and with our center of gravity from operational perspective centered in our headquarter location in India. And Bill talked a little bit about how the India situation world managing through that and the regulatory and the garment restrictions the constraints. It was it was truly an experience that I don't think we ever could have defined before this happened and I was very pleased with how the interdependencies between our partners worked out I think the entire industry came together with the with the two parallel track customer first and employee for something that open mindedness aware we put behind the all the financial and all that stuff. What stood up for the moment was truly exemplary and, and it's a big lessons learned all of us are in my point of view, and how we manage collectively managed through it within the ecosystem to help each other out.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

That's a good point given where Todd is in the industry, as you said, you work with many if not all of the other organizations represented here in terms of providing solutions for you. customers in there. And it's an interesting perspective. Thank you for that. Now we're going to move to how priorities have changed as a result of the crisis in terms of, you know, how you allocate your budgets for it, and IT infrastructure and, and tools and collaboration and so forth. We'll go back to the panel. Now we'll go in the opposite direction. We'll start with half mile now. What have you seen from Tatas perspective, in terms of and responding, I suppose to your customers in terms of what sorts of what sorts of priorities they have now as they kind of work through this and get to the other side.

**Pathmal Gunawardana, Head of Americas, TATA Communications**

Thank you, Brad. So, our portfolio consists of four pillars network cloud, UCC, and mobility, IoT and on the network cloud side, I think Everybody's moving to the cloud, right? So that's, that's a given in a situation like this. And one thing we've seen is many of our customers, building networks to connect their office locations and optimize all of that. And, and we never plan to have our entire workforce working from home. And that brings a whole different set of challenges, the endpoint security, the VDI, S and all that stuff that comes together, right? And how do we package that solution to have all your workloads all your apps running out of the cloud and optimize that so that people can work from home and drive SAP HANA and all that stuff in a remote location, workforce experience, customer experience with contact centers, etc. And so that's a trend that we saw. I think all of us Have you would agree with work from home brought a different set of challenges. And that's a trend that we see. And I don't think also going forward, that's going to change right on your slide. But in two or three, you talked about Brad, how the fit going into next year, it's going to look like so that that's one area on the UCC side on the collaboration perspective, right. We are here on a video call. That also was a trend that we saw in the

industry, how to enable your workforce to work from home. How do you get your customers to work from home the stairs motion that we used to see in the past where you go out and meet a customer face to face? I the business is still continuous, right. So all of our roadmaps, all of the customers roadmaps that we've seen before three, three stages. One was the customers who already were in cloud. So that was a very easy transition for them. The others who had a roadmap who had milestones, going into Cloud and enabling that all the apps and everything, they had to just compress the timelines and get the get the ball rolling on that. And then there's a third category. We're still at the early phase in in rocket thinking through conceptualizing and building their vision strategy on the IP roadmap, I think they are they were forced in an accelerate the road maps in order to accommodate the evolving situation. And then when you go to IoT mobility side, especially in the industrial manufacturing side, the factory is now opening up, how do we manage the worker, the social distancing with the factory flow of safety, so that there's all kinds of applications It won't be as we speak. So that's a big, big shift. But it's nothing new. I think every IT organization had a roadmap. It's just how we adapted to the situation.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, it's funny when you mentioned the sales motion. We've heard other organizations. Tell talk about that in terms of, you know, obviously, you can't take your customers out to lunch. Maybe you can do a virtual lunch, but you have to find other ways of engaging with them. Right. And, and, and having the discussions that matter to the customer. So great observations. Christina, I know from you probably have an interesting take on this in terms of when you think about Oracle's business includes cloud includes, obviously the well-known database, the applications, the workforce, performance management capabilities, that whole range of products and services, obviously, from your perspective, how have how has How has the price How have priorities changed? as you as you look to get through the rest of this crisis and come out the other side.

**Christina Kite, Vice President, Global Business Strategy & Analytics, Oracle**

Thank you, Brad. And yes, Oracle, we offer the entire stack. So we feel from a global perspective, customers, not only from a software, hardware, but certainly services perspective. So the headline, I always say is moving from physical to digital. And let me give you three trend lines. Number one, we're not thinking near shore offshore, or onshore, we're thinking the digital shore, and how do we continue to, in many ways look at that digital shore and how we will continue to invest in capabilities, whether it's touchless transactions or other ways that we really continue to look at that maybe fourth shore, and we've even coined that as a new term, the digital short. Second, we've actually seen a dynamic that's been pretty amazing with our customers. Now. We have to recognize that this particular period of time, we're all on an equal playing field, meaning everyone is working from home except for those critical resources. So we have been able to in many cases, I'll use our CEO Safra Catz as an example. She's been amazing, being able to meet with customers because now there's not that schedule and being able to travel and being in another country, and then having to, in many cases travel to another place. I've actually witnessed her being able to meet with someone in Hong Kong, then meet with someone perhaps in Switzerland and then to turn around and end the day with someone in the US and that's a pretty amazing capability for her to get out and be with those customers. I've been on one call and I can tell you she's as good in person as she is in a virtual setting and she was meeting with a video Very important enterprise customer and their CEO, Chief Digital Officer as well as their CFO. Second, is

absolutely the physical of investment in facilities to how do we literally rebalance our budget and look at more investment in technology. So this is an opportunity for companies to really look at, in many ways, their three year plan, an 18 to 36 month plan of where and how do they really want to rethink work? And how do you move from these physical buildings to in many cases more remote working, because we've seen it work for us, which has been very amazing. Now, let's use the third trend line. And this is with customers. Cloud in my humble opinion, not just because I work for Oracle, but I've always been a huge believer in technology in terms of eating and improving productivity but We really see our customers where cloud was a good idea. It's now a business imperative. How can they move there? How can we help them move there collectively on this roundtable? How do we help customers move to that digital shore? Because this is the type of threat that no one has a crystal ball, so plan for the worst hope for the best. And hopefully us as technologists and cloud providers, we can help everyone a rising tide lifts all boats,

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Great observations and you know, we probably have just like your CEO, we probably have other CEOs who are following the sun so to speak with their with their video engagements with customers around the world. It's a long day for them but I'm sure it's very rewarding for them and for the business and for the customers. Ross from your perspective of net Scout, what sort of reprice re prioritizations Have you folks made in light of this In light of this crisis,

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

We're going to look at it more from the perspective of our overall user community. And I do want to carry on the cloud discussion a little bit. I was looking at actually your network infrastructure market glance, earlier today. And it's called a cloud like deployments that are really kind of top of mind. For most of our customers, you know, some it makes sense for them do public cloud, others are really looking at private cloud technologies, and how they're going to implement that where they deploy. Who knows, you know, there might be private data center, it all depends. But the reality is the ability to spin up services as quickly and responsive responsibly as possible, is really what people are looking for. They want to be able to adapt. Right. And I think that the point that everybody made here about everybody being in a level playing field is certainly part of the situation that we've had. We've had a degree of forgiveness. It's come back, I think. Christina spoke to that her earlier time. And I don't know that that's going to maintain. You know, I think that when we start to look at collaboration services, for example, people are starting to say, Hey, you know, we got to take another look at who use this service isn't working for us add services, more departments, and try to adapt and change. And I think we're going to see that happen in our user communities a little bit as well. But they're going to say, Hey, you know, what, I want to be seen as effective and instrumental in the success of the company as those that choose to come back to the office. We're going to have to try and ensure that we have an equitable approach to delivering services to the new remote workforce.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Absolutely. And I think I think that point is bang on. Bill. I know, from an ad app perspective, obviously, data is extremely salient to what you folks do. How have you seen requirements change or your needs change? And how are you re prioritizing for those?

**Bill Miller, Chief Information Officer, NetApp**

First of all, great comments by the panelists here. Let me build on something that Christina said, because I really like that. That joining of cloud and customer right for us, migrating from on prem storage solutions to true cloud based, you know, point and click Build out of storage capabilities around the globe in a in a hybrid multi cloud world is part of our journey. We've been on this real focus on redefining the customer journey for the last two years. So going from traditional sales people going out and meeting enterprise customers and developing that relationship. How do I reach out with telemetry? What data do i do i glean about customers coming to our websites, trying our products, you know, bringing down pilot versions of software, and in nurturing that experience through that journey is a true Glatt cloud business that's really new to NetApp right in agreement. With rosette, I think we're all going to be cloud companies over time. And we have to exercise and develop some new muscles around those customer journeys where you don't necessarily reach out and touch everybody. I do a lot of executive briefing center sessions. Normally, I would have done two or three visits on our California campus to briefings with customers in speaking with them, or maybe even hosting them. As the executive sponsor in these meetings. I'm doing all that virtually now. I've accepted a couple of meetings coming up in a few weeks one in India, and one in Hong Kong. In the past world, I probably would have chosen to maybe go to one of those meetings and make it part of a visit to my teams in that region of the world. Now I'm doing both of them and the only real change is, I have to tell my wife, I'm not having that glass of wine at dinner because I have to be cogent for a session later on in the evening that I'm going to do from afar, but we're bringing people in from around the globe, that's the expectation, something that might have been a half a day session is now a two hour session. And there's a silver lining on a lot of these things. We look at these as challenges we have to overcome. But there's really wonderful opportunity. Let me give you an example. In the past, maybe we would have had a hard time getting an SVP or CIO into one of these sessions to talk about data rather than storage because that individual wouldn't want to schedule travel or couldn't give up a whole day or a half a day to come to one of these meetings. Now you can surgically carve out a piece of time to go over the material they're interested in, they'll be part of this virtual experience for that period of time. There's opportunity to reach out and touch and engage with our customers in a new way. That's very positive and advantageous to everyone involved. And I think we have to look to leverage those opportunities and not sit and pining over the way we used to do business which wasn't necessarily the way we were going to do business in the future anyway. I think this new cloud era, really appreciating the customer journey, and how we how we nurture those customers and take advantage of this in a truly digital environment is something that we've all got to be passionate about to be successful.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Absolutely. As you had a chance to step back, you saw the opportunities rather than the, than the risks or the or the drawbacks of the crisis, right, the opportunities that were suddenly available. And I think that's a very positive way and also a healthy way of looking at any crisis. Dan, from your perspective, at Keysight. Any changes in terms of the priorities, at least in the near term that were occasioned by the crisis?

**Dan Krantz, Vice President, Chief Information Officer, Keysight Technologies, Inc.**

Well, a renewed sense of urgency for what a lot of our product teams are working on. So Keysight is helping to accelerate innovation to improve connectivity, everything we're talking about with cloud comes down to being able to connect, can you connect at scale Can you connect at speed We have a lot of solutions we're working on be at 5g in the to replace LTE for two orders of magnitude increase in bandwidth with much lower latency, or in the hyperscale data centers trying to bring 400 gig Ethernet to market, but down to the chipsets going to five nanometres inside of our smartphones so that we've got better power utilization of our compute devices. We're working across all those domains. And what we're pivoting to now is how can we accelerate our own work to bring to market these capabilities for everybody to better connect? Our initial response was, how do we get everyone to connect from home? Now that everyone's home, how do we get everyone to thrive? How do we get everyone to reimagine how they work? As simple example, that kind of comes to mind for me, a lot of our software engineers, as Bill mentioned, it turns out are more productive doing their development work from home? That's great. But when we looked at our hardware engineers, we saw a steady decline. These are the guys who need network analyzers as Scylla scopes, signal generators, a whole garage full of equipment. Well, it's not surprising that our heritage, we're going back to the bill Hewlett and Dave Packard days, the original HP electronic test and measurement business. That's key site and it all started in a garage. Now we've got dozens, if not hundreds of engineers who have filled their own garages with equipment. And they're trying to connect all of this formerly unconnected equipment into the Keysight network. And we're trying to reimagine how would we do connectivity from people's garages full of instruments? That's a new priority. It hadn't even dawned on us that we might need to figure out how to do that. We just thought it was about bringing your laptop home and VPN back into the home office. It's a completely different paradigm. When you embrace How do people work in the new norm and you look at hardware engineers and in a variety of different roles, and how what it's going to take for them to be productive.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, that's a that's a big challenge, right? telework test and measurement and almost HPC like capabilities? In some cases, that's a that's a tall order. Yeah, absolutely. I know, I know f5 well from application delivery infrastructure within the company and without in terms of customers, how have you reprioritized or, or reallocated resources

**Veresh Sita, Chief Digital Information Officer, F5 Networks**

I wouldn't necessarily say a reprioritization. But just a renewed focus and energy in terms of the things we were already doing. You know, over the last three years, the company has been on a massive shift from being a hardware company to a software company, and to enable our customers on their code to customer journey, and to be able to enable that in a multi cloud environment. And so, you know, we double down on that and making sure we can accelerate to that path. There are three big focus areas for us right now. The first one is what we call in business Digital agility. We believe that the primary competitive differentiator over the next five to 10 years is going to be digital agility. It's going to be an organization's ability to pivot and react and respond very quickly to market conditions. And the pandemic is a perfect example of that. So we need to live our entire back end platform system tools, people processes to be able to enable this level of digital activity. We focused on the overall workplace

experience, we focusing on automation, everywhere, everything. We focused on self-service, self-solve. We focused on mobile and enabling mobile throughout the environment we focused on, you know, taking down these monolithic systems and moving to microservices based environments. We also focused on redefining our ways of working, we now have a global distributed digital workforce and how do we engage with this these group of people In fundamentally new ways. So again, we will be defining, you know, what we previously called our rhythm of the business. Well, that needs to fundamentally change in the new ways of working, of course, but thinking about that fundamentally differently. So again, we're looking at tools, technologies, processes that just change the way we work with one another. And then the last thing that we focused on is what we're calling a unified customer and employee experience. You know, we have what we call the Infinity loop, we describe it as the buy side of the customer experience and the cone side of the customer experience. And we will be defining in this new way of working fundamentally how that entire experience runs and operates. You know, one of the panelists earlier talked about the sales motion, and yet we are fundamentally reinventing our sales go to market and our sales motion with clients, the number of customers that are now willing to to engage with us from a remote support perspective, you know, before it was always seen, we can things in the data center and like we want boots on the ground. We're now in an environment where they actually comfortable with us doing a lot of remote support. So what does that look like in the new way of working from a salesperson perspective, our sales engineers, their prowess around zoom technology is completely off the charts would have thought that Unified Communication, video videography and those type of skills are going to be required skills in the new way of working. But certainly we have that so we're running a lot of cleaning around you know how to run zoom and you know, video and lighting and mood and how do you create energy within a zoom call? We would have never done stuff like that before. And so you're starting to see invigorating, engaging, remote conversations that otherwise wouldn't take place. But you know, all said I think it all starts underpins this theme around human first, and enabling digital agility. That's all primary focus right now.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

It's great point, I just want to elaborate on just very briefly on something you said about automation. I only had so many slides that could present. But we saw a lot of enterprises come back in the surveys and say, Yes, we recognize certainly from a data center out perspective and across the network, the importance of Intelligent Automation, right? That includes visibility across the across the spectrum and across the landscape where applications reside, because as you said, there are times as this crisis demonstrated when you can't get people into buildings, and you need to be able to rely on automation as a core piece of, of any business continuity strategy going forward, I think. Great, great observation. Kevin, I wonder if you could, could provide some insight from Dell's perspective. I know you talked about it, obviously a company with an extensive portfolio and all the way from the end point to the datacenter and the cloud.

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

A lot of these comments were great. I think one of the things for us, as we started coming around what we hope wasn't going to be a big deal to you, Hey, this is early not good to. Really now we have to kind of think about how do we sit in for the long haul here. And we started this trying to think about how to leverage our, our very broad spectrum of technology across Dell, and VMware. We've had a lot of

comments about cloud and how we're doing cloud and multi cloud and how we're doing our team member experience, and enabling our team members to work from home effectively. There's one thing pick up your laptop and go home, but then there was a universe of users who might not have even had a laptop and how did we get them laptops and get them home? working? Well, how do we get our call center agents working at home, doing remote support and managing that whole thing across the world? Where we have? We have, you know, team members and assets all over, including in our factories? And how do we maintain the above the comments on the maintaining team member safety and customer safety is for us, as was always and is still the top priority and everything. For us, it we're taking, we're taking a very conservative approach in terms of how we are looking at the problem. And honestly, we can work at home for, you know, an extended period of time and be effective, because a lot of the technologies we have in our bag of tricks comes right from our, for our family, and in most cases, and it's been really great to focus in on kind of, Hey, what is this long haul view look like? And how do we maintain more of that conservative posture in terms of weather, and how we're going to come back? Right, so

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Excellent. Thank you very much. I'm going to ask our hosts that Net Events how we're doing for time

**George Rickman, NetEvents**

Yes, we're into the last 15 minutes or so and we do have some questions from some of the media for the online. But I think if you just run through this third segment, and then we'll open up for questions.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thank you very much, I'll briefly get the get the panelists to touch on some of the some of the long-term lessons that they got that they're going to carry away from this crisis. Maybe I'll ask you to put on your prognosticator hats a little bit and touch very briefly on long term lessons and then and then what you expect in terms of long-term implications from this crisis. And it will start in the middle of this time we'll start with Bill.

**Bill Miller, Chief Information Officer, NetApp**

It's gonna come down to two particular areas. They're going to be very important to us. One is the customer, the whole customer experience, the customer engagement and how we, you know, we'll never go back to customer engagement that is the sales force embracing and, and you know, loving our customers globally and very close will always be a digital aspect of this. And we're going to have to find ways that work for our customers optimally. And globally, to really stay engaged as somebody had made that comment early on, it really is going to be a global play and how we maintain the intimacy in a meaningful intimacy in a way our customers want to embrace and adopt the technology. So I think that is kind of one book and for us is how we continue to get better and more nimble with that. The other side of this is how do we continue to innovate very effectively, how do we continue to collaborate? How does our innovation engineering meaning our engineering core, continue to produce more compelling new ideas that support our customers and add value is a part of this diaspora because I don't ever see engineering coming back into a set of bullpens closely located bullpens and cubes again, right? The talent is out there, the talent is dispersed. And I think we're going

to reach out in this new world order and find that talent wherever it is at unprecedented levels. And we're going to need to collaborate and bring those engineering teams together productively through digital sinew, right. So our collaboration tools, it's no longer going to be am I running teams or slack and how's that going for you? There's gonna have to be a whole new methodology in linking those teams globally and around the clock to be maximally productive, to yield that benefit on the other side of that book and for our customers. I think those have to be, you know, the fundamental principles and then whether you're in it or finance or legal or wherever else, you're going to go with the flow, but we're going to have to innovate globally. And then we're going to have to make sure that we're aligned with our customers in the new digital era. Great observations for us.

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

I think that, you know, it's really all about digital transformation. Right. I was reading an article with Nish Kapoor from Cisco are an interview that he did. And he said, it may be the most overused, overused word of the last few years, or term. It's certainly what we're in the middle of right. We are moving to a digital society. And we've got to figure out how do we make this all work? And how do we ensure that the user experience is maintaining a high quality and secure service for our user communities? And our customers, right? So it's all intertwined into how do we make this new digital frontier really worked for us? So that's how I see it.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Excellent, actually. And Christina, from the Oracle perspective,

**Christina Kite, Vice President, Global Business Strategy & Analytics, Oracle**

Yes, I'll keep this short because I really liked what Bill and Russ said, I think it's going to change the way we live, work, play and learn. And I absolutely believe, like any scenario modeling, we've done a discrete look. Meaning we've been able to model this from a discrete perspective. Now we've got a look at how we model it from a continuous perspective, much, much further out, and what that means, but I absolutely believe it's going to change the way we not only live work, play and learn. But trust. I'll leave you with that. I believe that some of the reason why we may not have moved to this way of working as quickly as we have, and in many ways, the agility, the adaptability we've seen in these large enterprise organizations hundred and 40,000 people at Oracle working remotely. I think we're all surprised, but I'll leave you with this element of trust. I really believe That now there's a new way of looking at remote work. And I think we're all learning to trust one another a lot more.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Excellent point. Excellent and Pathmal from the TATA perspective?

**Pathmal Gunawardana, Head of Americas, TATA Communications**

Yeah so from our side, it's as Ross said, it's part of the digital transformation. I think the new normal is still yet to be defined. It's evolving, right. And we have surprised ourselves. We think we all have surprised of organizations with what we have accomplished in the last three to four months, right. And that's indicative of our roadmaps, our digital transformation, journey, I think, the technology will evolve. So do

we have a new normal will evolve and, and it's the human adaptability that will that will sustain us as we move forward to drive that innovation to accelerate our digital transformation.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, humans have proven surprisingly adaptable throughout this crisis, and I'm sure that we'll continue Kevin perspective from them.

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

Sure, i think the just the way that we work together is fundamentally changed forever by this. And one of the things that just strikes me sometimes is the organizations that are the best at adapting to this and or already have that muscle are a step ahead. And how all of us just get out there and figure out how to solve the problems that inevitably are going to come up and are out there now. And I think that will that will be what defines the, you know, the next set of competitors who do the best out there. I really believe that resourcefulness and innovation playing a significant role going forward.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, absolutely. Veresh from F5.

**Veresh Sita, Chief Digital Information Officer, F5 Networks**

I think, you know, at the core of what we need to do going forward is this employee obsession, we really, you know, we talked about customer obsession. I think we need to flip that script and really think about it from anywhere. perspective, we've demonstrated over the last five to six months that our employees have been resilient and been responsive. It's just been amazing to navigate through this journey. I think as we move forward, we're going to see a fundamentally changing workforce, more distributed more global, I think you're going to see the rise of the independent worker, and people are going to have way more choice and they're going to pick based on the company's reacted through through this pandemic. So I think that's going to change and we need to start moving away from things like employee engagement, which is really a measure of extraction of value from individual to two things like employee fulfillment and employee happiness has a place for belonging and people to want to be. So I think that that that will continue to be a major long term focus for us. Coupled with innovation, you know, on your opening slide, you showed that journey to innovation is we come out of it. Well, we cannot wait for the economy to recover faster. to innovate, we have to innovate our way to get to the point of recovery. And so we have to fundamentally rethink everything we're doing. You know, the phrase, Necessity is the mother of all invention. And so we are in a period of necessity right now. And it's time for us to innovate our way through it to get us to where we need to be.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Excellent. And Dan, very briefly, and then we'll we've I know, we've got some questions queued up a couple questions. Dan, just some quick insights from you.

**Dan Krantz, Vice President, Chief Information Officer, Keysight Technologies, Inc.**

Yeah, just to go back to the word connectivity and that we were reacting to the crisis and sending everyone home to reconnect. And I just I was reflecting on 10 years ago, the level of lack of

connectivity we had and how many industries and companies have been birthed in the last 10 years because of the connectivity that exists today. Now, fast forward another 10 years from now, when our connectivity in the developed nations is 10 to 100 times faster than what we have today. And imagine our connectivity reaches into a billion more citizens around the planet. They're now connected as well, and what new possibilities will emerge and how we work differently? It's exciting times. And even in the midst of this scary pandemic that we're in. I think the possibilities, I think I heard a comment about a human ingenuity and navigating through this. I'm excited to see what we come up with in the next 10 years. With just it's been forced upon us.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thank you very much. And thanks to, to all the members of the roundtable. The panelists today, I know we have some questions. So let's turn it over to

**Mark Fox, NetEvents**

Just raise your virtual hand, if you want to ask a question. And George will unmute you. So you can ask your question. Cynthia, I know you've got a couple of questions. Would you like to put your questions to the speakers here?

**Cynthia Artin, TMCNet**

Yes, I sure. Well, thank you, everybody. This has been better than a TED talk. It's been a real honor and pleasure to hear all of you tell these stories. And I extremely impressed by the amount of humanity that has been part of this conversation. I am a mother hen for a bunch of writers for technology marketing Corporation. And so I will be working with Mark and George and Helen and their team to follow up on a few themes that I think are worth sharing. I've got three questions here and I have two minutes left. Unfortunately, I've got to jump to another call. But my first is this as focus continues to shift to investment in the digital shore, very nice term, by the way, and robust collaboration among teams. How is the budget for 2021 framing up? We all know that we're either getting into a budgeting process or we're, you know, standing there looking at what this actually ended up costing us to adapt quickly? And what does that going to mean for the bottom line this year and next year, and will the reductions in real estate costs and moving out of large facilities, for example, and reducing the amount of travel that's required and attending events like these very high quality virtual events. Will those cost savings be reinvested in more digital agility?

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

I know Christina mentioned the digital shore. Did you want to take that question Christina at least provide the first answer.

**Christina Kite, Vice President, Global Business Strategy & Analytics, Oracle**

Yes. Hi, Cynthia. I would just to make it short. Since you have two minutes, I absolutely believe yes to all of that. I think companies if they weren't already moving to a rolling, budgeting process, if you think about it, by the time you ink your budget, it's probably outdated. So most of the best practice companies that I've seen, including Oracle, not only a rolling capital expense plan, but a rolling budget, mostly because there's all different types of things that come up throughout the year. And in many



ways, how can you also think three years, even though you always have to inc an annual budget absolutely believe expenses that you may have had in facilities could be reinvested in other areas of the business such as technology. Second, if you think about the travel and expense to me, it's one of your largest budget items. And I absolutely believe that there's an opportunity to recycle that to any budget. I also think Don't be short term. Don't make short term decisions that have long term ramifications. This is a time to reinvest. And if you're not thinking technology and digital, I would be surprised any business is being disrupted by digital. Thank you, Christina. And I am going to actually ask George, if perhaps you can ask the other questions, and then I'll catch up with you on the on demand version of this. And I will follow up with you mark in your wonderful team on some editorial opportunities that have arisen out of this fantastic discussion. Wishing everybody really well. And thanks again for all the great work and thoughts

**George Rickman, NetEvents**

Thanks, Cynthia. Guy Matthews - AI business. You have a question to put to our speakers as well?

**Guy Matthews, AI Business**

Yes, a question for Pathmal. Just wondering how the crisis has affected the kind of conversations you've been having with the customers, particularly the multinational corporation for the customers, for example, I'm wondering if their appetite for innovation has been affected by the crisis and other some respects in which they've become perhaps more conservative, or do they sort of remain hungry for a transformation?

**Pathmal Gunawardana, Head of Americas, TATA Communications**

What I hear from every customer that I talk with is the hunger for innovation, hunger for adapting to the new normal, and accelerating deployment plans and accelerating, how to how to drive that business continuity. Right. And, and it also varies depending on the industry, right? If you're in the travel industry, it's a different set of requirements versus industry, manufacturing versus software, etc. It depends from the customers. But the general theme that we observe is the hunger for innovation. many use cases. Obviously, as a digital ecosystem enabler, we serve many customers, we run into many different use cases. And this is also an opportunity for a lot of our customers to learn from each other. Right. And we become kind of a repository of shared Bunch of use cases among our customers from different industries.

**Guy Matthews, AI Business**

Thanks.

**Mark Fox, NetEvents**

Hi, George, you have Cynthia second question. Do you want to just in case Cynthia is just if you want to just put that second question to the speakers?

**George Rickman, NetEvents**

Sure. I think I think Cynthia Artin has left. Cynthia's question is, how are you prioritizing supporting the frontline, the health care providers, the first responders, government agencies, and are you seeing



innovations coming out of the need to move quickly to save lives? If you can find some examples? Or inspiring innovations? They're welcome as well.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Who wants to put up their hand to take that one first?

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

Let's draw a solid take a stab at If that's okay, yeah. All right. So one of our customers is Cleveland Clinic. And we were talking to them just as the pandemic was getting into full swing. And you can imagine how fast they were moving. They've invested in us to ensure that they're able to track activity in ambulances as they're moving up stroke victims, and for example, to ensure that they can provide the right medical care as quickly and efficiently as possible. And one of the things that they did is they had to stand up, I think it was a 3000 bed, temporary field hospital in close to their headquarters, and they had to do that in the course of three weeks. So they were able to go ahead and deploy this environment that basically mirrored one of their standard brick and mortar type hospitals, and going ahead and just making sure that they can avail themselves of technology. To be more responsive, and the way that they give care. So that was a prime example that we had. Hey,

**Bill Miller, Chief Information Officer, NetApp**

Brad, I'd like to say something here. Also, I know our company's been involved in an effort with some other companies. Historically, you would have had some degree of competition between Junior universities and health centers. For example, we saw a lot of great work come out of Johns Hopkins early on this. On the east coast. We've seen incredible studies and work come out of Stanford here in my backyard in Silicon Valley. In a pandemic like this, what you see is these universities want to share that data, they want to, they want to collaborate, they want to interoperate, and put the best minds in the world together to solve these data driven problems. So where all of us in industry can help that data sharing the analytics tools and platforms that come together to make sense out of that because if there was ever a time to look at data in the let the data speak, and how we can address a crisis like this, it store in something like a pandemic when the truth really matters to figure out How a virus can be affected. So I've seen a lot of great collaboration across the University Hospital Center footprints. And it's really reassuring and some other people settle this call that humanity associated with that in the partnership is really warming. It gives me great satisfaction to see us come together as people to try to solve these really tough problems.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah, absolutely. And finding that actionable data, right. That's not only actionable and informed that that can make a difference in in a time of crisis. I think it's a great point.

**George Rickman, NetEvents**

I have another question here from Kishore I'm just going to unmute him. Kishore, could you say your full name and the title you're writing for today's call.

**Kishore Jethanandani, FuturistLens**

I write for Futurist Lens. I was very intrigued by the comment on work from garage. I want to know more like how would it work in an enterprise environment where the teams would be relatively large?

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

I think that's Dan from Keysight mentioned some of those challenges.

**Dan Krantz, Vice President, Chief Information Officer, Keysight Technologies, Inc.**

Yeah, the Hewlett Packard garage now at scale, and how do we do that? So, for us, it's about each individual's engineer, they've got a garage, they've got equipment. And we're still maintaining social distancing. Our engineers aren't going to each other's garages, but how do they digitally get into each other's garages. And for us, this was an extension of SD LAN. Here's the secret sauce. We're taking our Viptela devices, we're extending our secure private network into our engineer's garage just because we couldn't instrument VPN remote connectivity into the instruments. We brought the network into the garage, and SD-WAN, which we put in place a couple years ago, and finding a way to extend the securely into people's homes. at scale. That was the trick for us that we've heard a bit. We've heard a few times now about the importance of the network. And I know SD-WAN was mentioned specifically. And, you know, when you think about obviously, the network is the is the digital nervous system in a in a dx context, and it's probably more important than ever at a time of crisis. So great point, Dan, in terms of extending the network as well as networking security policies to those endpoints to enable that, and I think there was a follow up question was there I saw I heard something.

**George Rickman, NetEvents**

And just in the interest of time, we have one final question from Hector Pizarro.

**Hector Pizarro, DiarioTi**

Yes, Hello. My name is Hector. And I work for DiarioTi which is a portal for Spanish speaking IT pros. I have a question for Veresh - cybercriminals have no hesitation in exploiting a health crisis to their benefit. And with so many people working from home, there is a huge opportunity for them as well. And while I know there is no silver bullet in terms of security, I wondered how far are we from a situation where security is just as guaranteed as connectivity is today. In other words, now, we know that the network is there and has the capacity that we need, and we have the services we need. But we still need to worry a lot about security. So when do you think that part will be solved?

**Veresh Sita, Chief Digital Information Officer, F5 Networks**

Yeah, look, the network is stable and the network is up and the network is running. And it's really environmental factors that typically impact the network. from a security perspective. Unfortunately, there are bad actors and as long as they are bad actors, you're sick. Your security platform is going to be vulnerable. I look the security technologies and infrastructure over the years as has improved dramatically, you know, from securing the network to securing endpoints to securing access, the level of artificial intelligence and machine learning that we can now use to instrument endpoint devices to instrument networks to be able to uncover, you know, pattern recognition and pattern detection to really uncover bad actors and knock them at source. those technologies have become tremendous



over the last few years and will continue to evolve. And the reality is, you know, I don't think there's the unfortunate realities. I don't think we're going to stand on the stage ever, and declare victory. I think we will declare, you know, this is an ongoing continuous, you know, continuous compliance, continuous security world we live in. I do believe technology has evolved tremendously to keep everyone secure from an environment perspective. But for as long as we have bad actors working on getting equally creative, I think we were going to have to continue to evolve and be number. And you know, back to my initial comment about digital fragility, we need to model our systems to be agile enough to be able to react and respond really quickly.

**George Rickman, NetEvents**

Thank you. We have one more question from Guy Matthews - AI Business and then we'll move to the Round-Up.

**Guy Matthews, AI Business**

Either a quick one here really fall for Russ from NETSCOUT. We were talking of SD-WAN just now. And now you mentioned that you just recently rolled out SD when sort of shortly prior to the crisis, when you can quickly map out some of the ways in which that's kind of worked for you and deliver the goods or is it too soon to say?

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

I think it's a little bit too soon to say. Quite honestly, our rollout was primarily for our remote branch offices. They're going on us today for the most part, though, we're starting to repatriate the buildings. We also had some amount of at home delivery of software and technology, kind of what Dan was talking about in terms of providing the engineers kind of garage to garage experience. I think we're going to see a lot more of that coming about right. I think there are three primary vehicles to provide remote access, standard VPN, VDI, an SD web, and people are going to choose what one of those is the best vehicle for them to maintain control and deliver the services that their users are expecting.

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

I can throw in there on top of it in terms of ours. We have our data centers on it. We have our large offices on it. We have our global interconnect activity is based largely over that SDN overlay today. And it's working extraordinarily well, even with all of our users at home, we're still using it extensively. So it's been a great, a great asset for us in terms of how that's connecting, all the way that the small offices, large offices, data centers, all the way looking at how do we connect users to homes? Great, a great solution out there. So.

**Mark Fox, NetEvents**

So that was a great session. Brad, I'm going to hand over to you now for the event Round-Up,

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Excellent. Thank you very much. Also to the round table participants. I really appreciated all of your perspectives we got. We got quite a variety of perspectives. There were some commonalities and obviously in in what you've seen, and that's understandable. One would hope that there is certainly



some shared challenges and opportunities that have arisen as a result of this crisis. But I think we also heard some, some very unique perspectives from each of the participants as well. Do we have time? I don't know how much time we have. Do we have time for each of them to say a final word before we sign off?

Kevin, would you like to go first in terms of something you'd like to share with the audience?

**Kevin Herrin, VP, Infrastructure Platform Engineering, Dell Technologies**

Thanks for attending And thanks for letting me be a part of the session. So really enjoyed the conversation and enjoyed the perspective of the other panelists. It was great

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thanks. Veresh?

**Veresh Sita, Chief Digital Information Officer, F5 Networks**

My couple words are human first.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Excellent. That's concise and powerful. Thank you. And Dan?

**Dan Krantz, Vice President, Chief Information Officer, Keysight Technologies, Inc.**

Just thank you everybody, for the participation and to my colleagues on the panel. Great. insights and it was a pleasure to be on the panel with you.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thank you, and Bill?

**Bill Miller, Chief Information Officer, NetApp**

Yeah, I would just say human beings are the most wonderful of analog creatures ever developed. And for us to be able to morph and adopt and get comfortable with this digital uncertainty is a wonderful time to live through

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Yeah humans adapting to the digital world. It's a great, it's a great opportunity. And Russ?

**Russ Currie, Vice President, Enterprise Strategy, NETSCOUT**

Thanks to Mark and all the team at NetEvents for pulling this together. Thanks to my colleagues on the panel. I thought it was a fun discussion. And yeah, we're all in this together. So let's go get them be safe. Excellent and Christina?

**Christina Kite, Vice President, Global Business Strategy & Analytics, Oracle**

Thanks to everyone, stay safe, be well, and I hope to be on a call with all of you again.



**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thank you very much, and Pathmal.

**Pathmal Gunawardana, Head of Americas, TATA Communications**

Thank you very much, all of you and to the panelists, as well as to the audience and the organising committee here - NetEvents & IDC - adaptability, innovation to drive the digital transformation.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thanks very much. And I think we're at the end of today's Roundtable. Thanks again to everybody who joined. And I think I'll turn it over to Mark, do you have some final words?

**Mark Fox, NetEvents**

Yeah, it actually thanks, Brad. Great, great job chairing the session and thanks to all the speakers. really insightful session today. Thanks for that little note to the media here. You'll get a full transcript tomorrow. If you didn't actually click on the Save button with Otter AI you'll get a full transcript from Helen and you can access all the BIOS and photos and media kits on the website. Plus Brad's presentation slide deck. And in seven days, we'll be rolling out a podcast of this session on iTunes channel and webcast session on air on our YouTube channel. as well, so you can link the podcast to your stories and the webcast to your stories as well. And you should find the full transcript useful for, for writing up the session - thanks also for the media for supporting today's event, and look forward to the next event. Thank you.

**Brad Casemore, Research Vice President, Datacenter Networks, IDC**

Thanks very much.