## Dell Inc.

Raymond James IT Supply Chain Conference Darren Thomas, VP & GM, Enterprise Storage Business Dario Zamarian, VP & GM, Networking December 13, 2011

BRIAN ALEXANDER: With that, let me bring up Darren Thomas.

**DARREN THOMAS:** Well, thank you. Thank you again for inviting me. This was my second year. I think Dell has gone through a very, very big transformation, and I think there's a lot of interest in it because of that. So, I thought I would start off by going back. Let me just take you on a five-year journey. The journey is actually a little bit longer than that, but five years kind of captures the main thrust of it.

So, five years ago, and even back to when I start at Dell about eight years ago, the storage business was a reseller business. We didn't sell a single piece of intellectual property. Our value was really in working with the partners that we had to drive them into directions that we guided them that were really marketing positions, price points, feature sets, functionality, things that had been high costed before. We tried to move them into a more low cost structure. Features moving downstream, if you will.

And that was kind of our game. Our belief was that we could be a storage design opportunity and a customer opportunity that was based upon us a leading in a marketing view. And I think pretty much everybody at Dell agreed with that except me. And I had come from an IP background. I knew what storage was capable of doing. To some degree I think that was my job. And so, I looked around, and we had anemic margins in our storage business. If you're a reseller, you basically have all the cost of selling the product, which storage technologies typically have high costs to sell. Customers take anywhere from three to nine months, sometimes even more than a year, to do an acquisition. So, there's a lot of SG&A costs upfront. So, you have all that cost.

You have some testing costs. You have to make sure that the product works the way you think it does. So, you basically have all the costs, and none of the benefits of the higher margins because you're buying the product and splitting the margin with an OEM. That was kind of the model I walked into, and it wasn't a very pretty model.

There was a belief at Dell, because it had happened so many times prior that if you owned enough of the provider, the OEM provider's market share, then they would have to give you a better price, but there's a limit to that. They can't give you a better price than they can make if for themselves. And so that's kind of where we came from.

We started this journey, and I'll tell you we didn't just start looking to see what companies wanted to make an offer to sell themselves. Instead we looked at some very clear directions that would benefit us, specifically a company like Dell. And so, if you'll look, the first thing we did is we said, look, SMB

is our strong point. We're really, really strong there. Our name in the SMB space means more as an example than EMC's name means in the enterprise space. And I know that some of you might find that hard to believe, but it is true that the name brand recognition of Dell being a provider is extraordinarily powerful to the SMB customers who quite often buy almost all their technology from us.

And so, what we did is, we looked at the different portfolio. In order to really offer a product in the complete portfolio space you really have to have several products. The lowest end of the product, let's say below 20k price point is really the customers buy those in association with servers they buy. They buy servers, they buy storage to go with the servers. They're not trying to be elaborate, or complex, or difficult. As a matter of fact, they can't handle complex at that price point because they don't have big IT shops. Their IT shop is usually somebody who has another full time job in the department. And so, those products are sold basically on price/performance. It's an equation of the ability to deliver a certain amount of feature, and then it's just your price. And that's not necessarily the highest margin business. Typically margins in that space run 30 to 35 maybe 40 if you're lucky percent margins. But it can be lucrative in that space if you own enough reasons why the customer buys from you.

In the midrange space, it's kind of the tweener space. The customer at the high end is probably easiest to explain. They want every feature on earth, and they need to know how they're going to make these technologies work for them at a delivery cost, not the product cost, but the total cost of ownership cost that they can afford, but they need features. They do things like synchronous replication across the United States, and they have multiple backup and recovery strategies. They probably have more than one IT site. So, they need a very different product set. And they're willing to pay, almost, well they are willing to pay the most expensive product sets in the world typically starting at 80k to 250k per unit they pay for the technology to be able to deliver those.

And then that middle space that I said was kind of in the middle is their customers are low price sensitive, but little feature sensitive. And some they really want as many features as they can get, but they want a little bit better price. And so they're willing to forego some of the bigger features in trying to get that tradeoff between price.

And so, in the midrange space, by the way, that one that's the tweener set that sounds like it's hard to describe, that's the one that's growing right now. That is the one that has really taken off. And, as a result, as we looked at this from Dell, we thought, well, we buy the EMC product, that really fills the hive space. We had a relationship to buy the products at the low end. We actually built the hardware ourselves, which is where most of the cost is, and we bought the software stack, from a company, LSI, as you probably are well aware.

And so that mid-space was our golden opportunity. It's where we played a lot. We had a lot of customer influence, and we needed products. That's where we bought EqualLogic. And the EqualLogic met that requirement because of two reasons. One it's fully featured. At the time, it was one of the few companies that had been provisioning a very cost-effective way to deliver. It does thing called peer-scale, which means just add another box. So, expansion is so simple anybody in this room could do it. It's setting the system up is so simple probably anybody in this room could do it. And so that was one of the requirements, if you're going to give them this technology, those mid-range companies don't always have big shops, and usually count on the reseller to deliver a lot of that capability. And EqualLogic fit that bill perfectly. And it continues.

Now, if you remember correctly, we were one of the first ones to be pushing iSCSI, but this space of customer really wasn't a fiber channel spigot, they really hadn't gotten that far yet. So, that's kind of the model that we started on. And we always knew that we wanted to have a complete portfolio. So, we would have to have a second company that would take us into that larger space, the space where no features at any tradeoff. And that's where we made the Compellent acquisition.

So, if you think of this journey, it was a logical journey for us. Obviously, I didn't get up here and tell you, I'm going to look at a company here, a company here, and a company here, and many of you would be able to figure it out, and that wouldn't have played in anybody's best interest.

I'm still looking at companies, and I'm not going to tell you who those are, either, because there's a third area that I want to continue to grow in, but we'll have to wait and see what that is, because it's best that we do those things in private.

So, having said that, that's kind of the journey. One of the big questions I get asked is, what happens to EMC? Well, we kind of knew. EMC is kind of a jealous girlfriend. You don't bring in other partners without suffering the consequences of that. And, to be quite honest, the financial of that business relationship, while it worked for a while, was not a long-term.

So, what Dell got out of that relationship is, we learned how to sell in the enterprise. We learned how to spec and deliver those kind of product. And we also picked up a good number of customers in that space. And I want to make a point, the EMC customer never bought EMC from us because he couldn't find out how to spell EMC and look it up in the phone book. That was never why they bought from us. They had basically three reasons for buying from us. Number one, they didn't like EMC. That's actually a bigger reason than you might imagine. There are a lot of companies out there whose buying model doesn't quite match the EMC selling model, and so they prefer to deal with a gentler, kinder kind of a storage company. That probably wasn't the biggest one.

The second reason was customer service, they could actually either combine their customer service for all the servers, and desktops and notebooks that we sell, and we are in virtually every country in the world, and they basically weren't. So, some of these countries are fairly significant that we have a much better presence of services than they do. And we have a much better understanding of global services because we do it on a many, many, many billion business with our servers and desktop business. So, the second one was better coverage in services. That was probably more than a third of the customer's reasons for buying from us.

Then the last one was share wallet. The customer might be spending a lot of money with Dell buying desktops and servers, and as a result we were looking at the total acquisition from us, and able to give them probably a better discount.

So, the question I get asked is, what about EMC going forward. The problem is, none of those three reasons have changed. They still -- those customers still have those three reasons. It doesn't mean they won't move over and buy from EMC. It just means that they had a reason for buying from us before.

The other caution I would give you is that not all those customers want to change right away. Buying a big storage device is a lot like buying a big, expensive car. You want to keep it for a few years to

pay it off, and so literally only about a third of the accounts ever come up for transition in a given year, sometimes less than that. Many, many customers have gone to keeping their technology four and five years. And so we have a lot of time. Time is on our side. And we also have a lot of intellectual property.

We bought the premium companies in the industry. EqualLogic, you remember, was the most expensive storage company ever bought in its time. And so we bought a premium asset, and with Compellent we also bought a premium asset. Both of those were fast, fast growing startups that had been well accepted by the marketplace. So, we didn't buy an uphill battle.

And then we bought two technology companies, one that does file systems. The main reason we bought that was because that file system scales the way we want it to scale. It does what we call pure scale and it's a global file system, which means it can scale horizontally. If you want I'll answer that in a question. I don't have time in my opening remarks, but that's a key value of the file system, is to be able to scale. And then the other one is compression technology, our compression technology that we bought very early in this company's development is about a content aware compression. We use that word and it kind of just rolls off the tongue, but what it basically means is we look at what the file is before we compress it. We know how to compress it better than an off the shelf standard compressor, and so we get better compression for any file.

So, those are basically our intellectual property assets, and we have moved from those early days when profit was difficult to now we are the most profitable division at Dell, and we have a very, very strong capability of growing. And I think as has been said before, we've been kind of shedding some uncomfortable pounds of some of the prior businesses, but we're very close to turning around and having regular growth.

Our growth of our assets that we bought has always been in line, or slightly above the market growth. But, we've been continuing to decline off the EMC number, which after 11 years was a pretty big number. So, those are my opening comments, and I guess I'll wait to take questions.

**DARIO ZAMARIAN:** Good morning, everyone. Dario Zamarian is my name. I joined Dell about 18 months ago and I have the pleasure of running the networking business at Dell. Networking is an early business at Dell. But, in the last 18 months we have brought together a pretty big portfolio. In fact, let me describe what a portfolio is today. On one side of the access layer, typically they're called access layer switches. We have a band called PowerConnect. It is an ODM model, with Broadcom. We have a partnership with Aruba that allows us to have wireless connectivity, and therefore go into solutions where the mobility of the end user is important.

We continue to have a very strong partnership with Brocade, in particular, for the fiber channel SAN switching, very much a solution partnership with the Compellent acquisition.

Perhaps the most exciting area and the one that I led recently was the entry strategy for the data center. So, if you look back to August 2011, just a few months ago, four months ago, we decided to go after Force10, because we saw that the data center is really where the transformation for networking is happening. And it's happening for multiple reasons. One, as you know, there is a daily plan for virtualizing the data center. You know that 10-gig ports, and 10-gig going to 40-gig bandwidth is becoming more and more the norm in the data center. And we felt that without our own intellectual property we could not drive our solution orientation that Darren alluded to.

Solution orientation is a different way to say that you bring together server, storage, networking, system management, and you provide particularly for a mid-market design point something that, coupled with services, I believe only Dell can do.

So, in that regard we went out on a campaign for who is the best partner, or strategic acquisition for the data center and I felt that Force10 had the properties of being a leader on the element that we care about from a strategy standpoint. They brought in about 1400 customers, \$200 million, 750 people, of which half of them approximately are engineers. They're sitting in Silicon Valley and India, classic for a Silicon Valley innovation-based company. And they also brought in a significant amount of sales specialists.

Our transformation on a go-to-market, on the sales, on the small and medium business, as well as the large and enterprise is clearly not just a technology conversation, not just technology transformation, but also a go-to-market, and the sales specialists, and marketing is equally important. So, I like Force10 from a technology and capability standpoint.

If you think about the elements that matter these days, the architecture in the data center is no longer what it used to be. Over the last 5 to 10 years there has been a pretty static way to design the network for your data center. Well, no more, because the mobility of the virtual machines, the workload centricity on how you build your data centers, the ability to add non-blocking bandwidth fabric, the keyword is out there that you've heard, allows you, or forces you to think about the data center network very differently. So, what Force10 brings to the table is, simply put, a complete portfolio for the data center, modular chassis, E-Series, C-Series, top of rack switch, the S4810 in particular, the distribute core Z9000, these are the contributing portfolio elements you want to go and provide an end-to-end data center solution. And on top of it, of course, I've always been a believer that form factor, is just basic necessities. The real differentiation comes in the software. So, the first time now we own a network operating system, it's called FTOS, Force10 operating system, for us to be able to actually create the glue on the software that goes together across the networking layer, as well as the server and the storage on the system management.

Think about the properties that we care about, helping our customers, we want to be open. Force10 has embodied open, standards-based -- Broadcom in particular. We like the economies of scale of the merchant silicon fabric, we do not believe in spending and investing an extraordinary amount of money in building your own assets. It does not allow you to have the time to market and velocity, and the R&D spend on the software, as opposed to the hardware.

The second area that we liked a lot about Force10, and we continue to invest very heavily, is the whole manageability aspect. You want to be open, but you want to be creating automation and being able to manage the networking fabric through the upper layer system. What does that mean? It means that if you have a change and the virtual machines move around, we like to see that network layer configured, or reconfigured, or changing through the tools that sit on the top of the orchestration level, as opposed to adding a traditional networking centric way to manage your network.

Force10 brings to the table also something very unique, because the density of the port, to give you an example, we have a Z9000 chassis, actually it's a fixed form factor, 128/10gig port, 32/40 gig port, for the technical tier. But, the question is here that these are units, equipment that can be deployed

at a fraction of the total cost of ownership. It's our unit, it has a phenomenal power profile, and they have the density required to be able to actually compete in the data center. The mid-market in particular likes this distributed core concept, because when you have a distributed core, you no longer have to invest up front, and it's only an amount of capital to buy a big one or more model or chassis. You buy a fixed form factor and you scale linearly as the need in your data center goes up.

So, what it means from an economical standpoint, it can go into a small business, onto a small, but growing business, and being able to go in with a fraction of the cost and therefore the value proposition becomes extremely high. And as the data center grows, you can actually start adding modules to your data center.

So, we'll talk more, perhaps give details in a moment on the Q&A session, but as you can see, I just give you a couple of data points on the market. The data center market is about a \$6 billion market. It grows at about 20-25 percent in the next three to five years. The total LAN market is about \$20 billion, but that grows more like mid-single digits, four to five percent. So, as you can see there is also a financial benefit to being in the data center, networking, and as you can imagine the best of breed gross margin of a networking company are in the 45 to 60 percent growth margins.

We aspire very much to be able to be a similar profile and therefore you can see that this is also a financial benefit in addition to a solution-orientation and a portfolio technology benefit. We grew the business 40 percent year-over-year, and 80 percent if you include the acquisition of Force10.

It's exciting to be here, because you can imagine with a 2 percent market share today the upside is looking up. So, thanks. And we'll spend some more time together.

**BRIAN ALEXANDER:** Let's stick with Dario. Darren talked about the storage journey as incomplete. How would you compare and contrast your networking strategy in terms of the need for more acquisitions over time? I think Darren has been at it for five-plus years. Where do you see the business headed?

**DARIO ZAMARIAN:** Well, it's very clear for us that the networking space is much, much bigger than what today you have on a layer-two, layer-three fabric for the data center. I also think that we want to do this at a certain pace, because we want to be able to create the credibility in front of the customer, the brand name, that is increasing, particularly on the networking side. And areas that we'd like to continue to pay attention to, in general, are clearly areas that are synergistic with the rest of the portfolio of Dell. SO, when you think about connectivity in the user experience of the mobile user outside the data center, that means an area that is important to us. What does that mean? It means that traditionally campus, branch, mobile user; these are areas that I think we can bring to the table with new innovation. And there's a whole, healthy amount of what I call layerfour, layer-seven type technologies, that allows us, in partnership, or possibly through some inorganic efforts over time to bring together a whole data center in a box, so to speak, particularly for the mid-market. So, these are the areas that we continue to pay attention to.

**BRIAN ALEXANDER:** And Darren, just talk a little bit about the competitiveness of Dell's portfolio today, versus the storage-only guys who often take shots at the server vendors as not being competitive. How would you say you're doing against them, what are the win-rates, and how have those trended?

**DARREN THOMAS:** I think from a product standpoint, we're extraordinarily competitive. There's really not a feature we don't have. There's not a -- there's always -- the competition really is down to how quickly you do app integration now. It's less about whether you do RAID right, or whether you replicate, or do snapshots. A lot of that technology is still evolving. We're beginning to find tune those technologies, like we're doing like thin snapshots, and think replications, and things like that. But, that's a very, very small change in who's got the leadership in that space. I would say EqualLogic out-led both NetApp and EMC when it first came into market. I think they caught up a little bit. We still lead in the VMware virtual integration space.

Compellent leads in tiering. There is no system more optimized than it. And that typically -- that's a really strong appeal to the large enterprise guys who have a lot of that equipment, and each machine saves them 10, 20, 30 percent then the sum of all the machines saves a lot. So, that part very, very clearly we don't have a portfolio issue at any single portfolio level.

Now, what's very interesting is Dell has a broader portfolio than any of the pure pay storage guys. So, we have a much lower-end price point. I know EMC has talked about their VNXE. We have a product that is priced at a VNXE price-point. We have three below that. So, it's not an issue of whether our portfolio is bigger than theirs, it is. And we're a much broader reach company. Dell is a \$60-plus billion company. So, we have a much broader touch from that standpoint.

From a focus on the sales team, that's where they're really good. They're -- I always like to tell Michael, the thing about a lot of these pure play storage companies is that if they don't sell storage they don't eat. And I've got a sales force that can bill up selling desktops and servers and a lot of other stuff. And so a lot of their aggressiveness in this space is really their key advantage.

Now, I'd say, that was really their key advantage. As you well know, we've hired 600 storage sales specialists. So, I finally got my way. We now have 600 people, if they don't sell storage they don't eat. And I'm being kind of unkind there, but that's the -- you get the point. You get the picture, and I think that's the differentiation today and that's what we're targeting right now.

So, this is kind of a normal model. You have to own the IP before you can own the sales force to sell the IP. So, we've been owning the IP, it started over three years ago, buying it. We now have a sufficient amount of it, and we're starting to build that juggernaut-type sales force. And we're not just hiring kids out of college and teaching them how to sell, we're hiring highly-skilled and trained people from the industry, fro, all those companies, and we're building our core capabilities based on people who already know how to do this. So, it's not like it's a big risk. We're hired probably 80 percent of that team this past year. So, they're not all up to speed and running, but they're getting close. And we're starting to see some of the seeds of that starting to take root. So, I think that's the challenge for us, is to be as strong in the sales side as we are in the product side.

**BRIAN ALEXANDER:** Just to pick up on the specialists, it's having a noticeable impact on the P&L OPEX. It's been growing well faster than revenue. And outside of storage there's been a lot of specialists added in networking and services. So, how could investors get comfort that these are starting to pay off. What are some of the metrics that you're tracking and are you confident that these investments will pay off in the next 6 to 12 months.

**DARREN THOMAS:** Yes, I'm going to start backwards. Yes, I am confident, or we wouldn't do this. It's one of those things you have to pay up front a little bit. It's probably like a one-year up front. It's

not just more than that. And the reason is, because the sales force specialization is really the going team. These guys are like Delta Force. There's one of them who is really good at TCO, and another one who is really good at Oracle, or SAP, or really good at backup and recovery.

So, not every one of them is unique, but you need to have a lot of each ones of these types, some very technical, some very storage-driven, they understand storage architectures at a high-level. And so you need these teams. There's actually three different disciplines inside the sales force and so we have to kind of develop each one of those. And in many, many countries and in all these different regions, and as you can imagine, the ones that face the public sector, selling to the government, probably do have the specialization around security, and the ones that probably go to the small and medium business not so much about security.

So, there is some uniqueness, dependent on the space. And that's what we're building out. We bought into this idea and starting building what we call Storage University. We now have, if you will, the freshman-sophomore class completed. My team, the engineering team, is currently doing the, if you will, what I call the graduate class and the post-graduate class. So, deep-dive architecture and things like that. So, there's a lot of fundamentals that have to happen to make this sales force really work the way you want it to work. Just because we hired the best sales person that, let's say, EMC or NetApp had, on the East Coast, doesn't mean they understand our product set, or our technology. And they are different.

So, that's kind of where we are. So, the confidence you can have is, we understand what it takes to make this happen, we understand those steps. You can't sell storage by putting a really pretty, flashy website up and have the people hit the Buy Now button. Most credit cards won't hold an \$80,000 purchase. And so that's not how you sell storage. And so we've had to kind of grow into the storage model, if you will. We were one foot in that water. We had an AE sales force that knew how to sell storage. But, the closers, the big closers were quite often our partners. And now we've hired all those closers.

**DARIO ZAMARIAN:** Let me add, if you don't mind, speaking of metrics, what we pay attention to, keep these under controls. As a general manager, I think there is a healthy tension to what I call the sales organization. What does that mean, healthy tension? It means that the metrics that we pay attention to are metrics like productivity of the sales specialists. Time to close by a duo-sales motion that brings in the generalist and the sales specialist, the training coverage time, over time. Then on top of it, we have a whole -- what we call internally domain P&L. As a networking general manager I look at the end-to-end, and they are not the same, as it pertains to revenue, discounting, gross-margin, R&D, OPEX, sales and marketing, direct and indirect, and I pay attention to the contribution to OPINC. So, there is a healthy conversation when I sit down with, so to speak, my sales counterpart, to say, to say how are you streamlining and contributing your OPEX so that my OPINC is in line to what ought to be best in class networking. That's the way we control the OPEX and streamline that over time.

**BRIAN ALEXANDER:** So, what kind of growth premium relative to the storage industry do you think is appropriate for Dell now that you've made all these investments, the resources are going to start to hit their stride. You're no longer suffering the headwind from EMC, winding down to the relationship, what's appropriate? I think at the Analysts Day you laid out maybe a 30 percent CAGR over the next three to four years. Some might say that's aggressive, but how do you think about it?

**DARREN THOMAS:** You know, there's all kinds of motions in this, right. The economy is kind of playing a little bit more headwind than it did just a year ago. But I think you're absolutely right, we kind of forecasted, and we'd like to be a \$4-5 billion by FY '15. That is roughly, If you take out EMC, that's doubling everything else. And that was our internal target. We absolutely think there is room to grow in that space, so I don't think that's an unreasonable expectation. I think the market probably has been running, and there are several markets here, it's not one market, but the overall total storage market has been running around maybe 11 percent. Maybe it's going to slow down to 8 or 9 percent, it's hard to tell. And I don't want to guess what IDC is going to say, but I think it's going to be challenged. We see the public sector spending slowing down a bit. We see mixed results in EMEA. APJ is taking off. U.S. is kind of mixed results. But within all that storage is the sweet spot. Storage has been the thing that people that people can't quit buying. I mean, even if the economy turns down and really slows down, Facebook is not going to say you can't join and put your movies and pictures up there, and you guys, every one of you, every time you type on your keyboard you're making files. Thank you very much. And almost no one ever deletes them. And we love that too.

And so all these optimization technologies that we sell help customers manage that impossible growth in a bad economy. So, I think of the economy headwind as actually favoring Dell. That causes customers to actually look at more economic solutions to their problems. And while we have a lot of intellectual property, and we talk about gross margins and all, make no mistake about it, our core value still exists, we are a company that knows how to deliver customers more value than anybody else. And so that's kind of our opportunity.

And I'm not going to predict a number, but I do believe those numbers that you just mentioned are within our reach. And we're capable of doing them.

**BRIAN ALEXANDER:** I'll just turn it over to the audience, if there are any questions in the field? Up front.

## QUESTION: (Off mike.)

**DARREN THOMAS:** So we have two things that are changing. As we've introduced this new, just call it an overlay sales force, that's kind of the model, the term, that sales people use. As you do this, we're actually compensating the generalist sales population to sell, and they're really compensated on revenue and margin from any P&L, from his, from mine, from anyone's. But we do target enterprise because it's harder to sell, so we give them -- they're called gates, but we give them incentives to spend more time in the richer margin areas by giving them a margin number.

And then the storage specialists are just compensated on storage, and we're going to have some that are just going to be compensated on backup recovery, some that will be compensated on Compellent more than EqualLogic. We also have a large channel that's coming into play. And we do that by incenting the channel with different incentives so that when they sell a Compellent, or an EqualLogic device, they make more than if they sold a desktop or a laptop.

So, there's a lot of levers. We actually our FY '13 quotas are being established right now by the sales force. So, I'm not at liberty to say what they are, because I don't think we've locked them. But they do have these concepts of gates for the generalist sales force, and very targeted compensation for the overlays.

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QUESTION: (Off mike.)

**DARIO ZAMARIAN:** I can start, if you like. So, to be more specific about how we have structured our sales force, particularly for the mid-market and the enterprise. There are all kinds of profile of selling. The first one is what we call a global account manager. That is the one that orchestrates the business need, and speaks the language of the customer. It could be federal, it could be in education, optical, we have a number of segments. That individual is paired up with a customer system engineer. That is the individual that allows you to have a technical understanding of the policy, the business needs, the team needs, and the overall evolving IT infrastructure of the customer.

Then, those two as a pair orchestrate a number of opportunities and conversations back to the sales specialist. The sales specialist, again, two profile of individuals. The one that comes in, as an example from Force10, it used to be an individual account executive, which we call the quarter retiring, revenue paying attention from networking in particular, but it's also paired up with a deep dive system engineer, sometimes an architect. The combination of the front liners, and then the key sales specialist organizations are the one that we continue to pay attention as it pertains to planning, as it pertains to enabling them with all the sales materials. But that's not sufficient, because there needs to be a certain amount of work done upstream from an R&D standpoint, from a capability standpoint. And that's where we come together under the ESG, Enterprise Solutions Group, and you bring together up-front, from an architectural design, part of solutions like vStart. vStart is a classic example where we sit together and we say, what is the best way switch, together with the best storage array, with the best server put together into a 50 to 200 virtual machine type compute log. It would put together a single service to go to market. If you combine those kind of solutions, and you do the training, that's the way we try to differentiate ourselves and go after the sweet spot.

**DARREN THOMAS:** Let me expand on that a little bit, because if you look at a group like mine that has bought four technologies. I've got an integration going on internally just between my four technologies. I had to put some file system inside, the file system from the company Exanet inside the products, the PowerVault, the EqualLogic, and then the Compellent. Well, we've done two of those. So, we already have shipping together two of those, if you will, inter-technology investments. And I'll tell you, this is the triple back flip off the high dive. This is what most companies fail at doing is buying multiple technologies, and then bringing their values together. I'm going to go way out on a ledge here and say, I'm not going to fail at this. This is something that my team is very good at. We understand when we bought each one of these companies, we understood their operating systems, how we would integrate them. We understood that one of the operating systems was like BSD, an operating system that is UNIX-based, not Linux-based, and one of the other operating systems was Linux-based, not UNIX-based. And while Linux is a form of UNIX, they're not exactly the same thing. And so we figured out in the due diligence how we would do that integration. And it's not to say that we're perfect. We discovered some things were harder to do than we thought. We've had to backup and reapply it. But, make no mistake about it, this is our job one. And as a result, you've seen us talk about fluid data, which is my methodology of talking to customers about how the value of EqualLogic, and the value of Compellent are being melded together so that if you're an EqualLogic customer, you're going to benefit from some of the learnings of Compellent, and vice versa. And so, we've done that.

Dario just mentioned how we talk to each other about this. Upon Dario's arrival, within maybe a month or two, we took PowerConnect switches, and we had them automatically recognize when

they were installed with an EqualLogic device because EqualLogic uses PowerConnect switches, along with anybody else's. But the PowerConnect switches recognize the EqualLogic device, and set themselves to the perfect configuration. And they're very hard to change away from that configuration. You really have to work hard as an IT administrator to mess it up.

Now, if you buy anybody else's switches with EqualLogic, maybe you could get it off kilter a little bit, at a minimum you have to set it up. That's a better together value, and if you think that doesn't matter our SMB guys almost exclusively sell EqualLogic with PowerConnect switch, because that combination never gives the customer a problem. So, that's some examples of how we're doing it today. But I would kind of day those are the low hanging fruit. Those are the watermelons on the ground that were easier to pick up. We're now climbing the tree, and maybe even starting to see some. So, I would say hang on and you're going to see some in the next 12 months that are going to be a lot more insightful. And then even beyond that you're going to see some that are very different from anything anybody else in the industry offers. And we understand this is our value. If you want to know how Dell can compete against EMC, if we can make a storage device that recognizes the RAM or flash in a server, and uses that in the switch, understands the pathways and the bandwidth necessary to do that, and we can have all that configure itself, you have the mother of vStart, you have the best vStart in the world.

And so, that's kind of our vision, and we've publicly stated that. And it' something that I don't think any other competitor, with the exception of HP could do, and I don't think they have the intellectual property assets that we have at their fingertips.

**BRIAN ALEXANDER:** We'll take one more in the audience, and then I want to come back to big data, because we haven't really talked about that, and we have to in a storage discussion.

So, in the back.

QUESTION: (Off mike.)

**DARIO ZAMARIAN:** I think we typically have an internal guidelines of 75 to 25 percent, our channel is still at 25-30 percent, and the remaining of the business is still direct. Of course, it changes a bit by geography, it changes a little bit by customer segment as well, SBM versus PLE. That will give you a sense.

At least from the networking standpoint, and I'll let Darren talk about the storage side, we are more and more wanting to be channel friendly, which means that I would rather not have a general margin conversation as it pertains to what is the best way to reach the customer, distribution or intimacy gets to be better through the channel. By all means, the channel ought to participate on their upside, and we preserve the margin. So, there is a lot of attention we put to the pricing on how we do both standalone product pricing as well as solution pricing to be able to actually have that margin neutrality across the two distributions.

**DARREN THOMAS:** I think Storage works in about the same way, both Compellent and EqualLogic at acquisition were almost 100 percent channel. We accepted their channel, and that number of channel partners has grown. The volume we get through the channel has grown, but our direct volume just grew faster, because we have a lot more sales people and currently this 25/75 number is not to me ideal. I think the -- we've done some studies in the field that say customers prefer to buy

through the channel and they do it for reasons of support from the channel reseller, closeness of relationship. The do it for a lot of reasons and so I'd like to see that number go closer to 50/50. And so we're -- as a matter of fact most of the Compellent sales team that we acquired is going into the channel sales team. So, they will sell with the channel sales people. Very few of them are going into that large, specialized storage sales force that I told you about, because that's not where they -- what they did before.

Margin-wise, we don't see that big of a margin play. We discount to the channel a little bit, but you can imagine we play the portfolio margin deal within our own direct sales force. So, the overall we see about the same margins from both businesses. You wouldn't set it up that way, but it kind of evolved to being that. I'd like to see -- I'd actually like to see us tradeoff some of our margins and go more aggressively at some of this market. So, that's the discussions I'm having with the sales leaders and I have a commitment from them that we're going to balance market share growth with margin growth. You can imagine when we first bought these companies the huge margins are almost intoxicating to a company that's the size of Dell in its margin play. But, I'm trying to -- we are now starting to look at the opportunity to grow market share by trading some of that margin for market share. And I think we're in a position to do so, because we've performed so well in our margins.

**BRIAN ALEXANDER:** So, we've got maybe one minute. Big data, the second biggest buzz word next to cloud, probably. How is Dell positioned to capture that growth in unstructured data?

**DARREN THOMAS:** Big data is a term like cloud, it means a lot of things to a lot of people, but roughly what happens is when customers go to use either large databases or they converge all their data into a single archive, the data gets large, and then there are two things, there are two concerns with it, how do you manage and scale a large pile of data. If anything happens to it, you've lost a lot and many, many companies are federal requirements not to lose that data. The second piece is, you want to mine it, you want to actually search through that data, and if you're talking about exabytes of data, which is the next thing above petabytes, it's 1,000 petabytes, it could take you a week to run a search through there that the judge may not give you a week.

So, those are the two biggest concerns. We've made a huge investment in our working with object stores. Objects are such that when you go to search a large object, even if it has billions of objects in it, it's 11 milliseconds to find any object. It's just the way it works. It's not a file system, it's not a block system, it's an object system that uses a lot of metadata, and as a result we get the very large scale. We currently sell a solution in the object space that can get to literally exabytes of data. It doesn't actually have an upper limit to how big the machine can get. It's very cost-effective. It spins down drives, it power saves, it can lock volumes so you can't delete them. It can create the rules that big data requires, like write once, read many, never delete. So, that's the first thing.

The VI aspect of this, the ability to search these, we're still partnering with that relationship. And I expect us to continue to partner for a while. You might imagine that the biggest database companies are the ones that have the best understanding of this. There have been little startup companies that have shown up and they propose to be able to manage big data, but none of them are managing the largest data pools, so I think our relationship with Oracle and SAP, and all the folks that do understand big data.

Cloud, we're going to continue to invest in cloud. That belongs in our services organization. So, Steve Schuckenbrock owns that. But, our teams are busily looking at M&A acquisitions at this time,

which obviously I can't even talk about. So, we absolutely understand the fundamental technologies in the storage area that are required to meet it, and we're implementing some of those as we speak.

**BRIAN ALEXANDER:** Thank you both. Darren and Dario will be available next door for breakout sessions.

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