

Morgan Stanley Technology Media & Telecom Conference

with Brian Gladden, Dell Chief Financial Officer

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KATY HUBERTY: Good morning, everyone. I'm Katy Huberty, Morgan Stanley's Technology Hardware Analyst, and it's my absolute pleasure to welcome Brian Gladden, CFO of Dell to the stage.

Brian has been an integral part of Dell's evolution away from just a commodity market towards more of an enterprise focused, solution selling business, all while driving cost efficiencies in the core PC and server market. So, I'm very much looking forward to the conversation today.

I just have to read one quick disclosure, and note that Morgan Stanley Personal Holdings Disclosures, and other disclosures, can be found on the public website at www.morganstanley.com/researchdisclosures, and Dell's disclosures can also be seen on the company's website.

So, with that, thank you very much for your time, Brian. I want to start by talking about this evolution in the business, which, as I said, you've successfully driven over the past couple of years, and particularly in the past year. And that has really driven the debate on the stock to gross and operating margins, and namely are they sustainable, and how much higher can they go.

So, maybe start by talking about the various factors, pricing mix, component cost, scale that have helped the business, and where you see the most opportunity for further improvement?

BRIAN GLADDEN: Yes. I think we've tried to change the discussion. And it's a big, long-term transformation that ultimately is based on the mix of where we're playing, and as we look at the enterprise, and things like servers and storage, and services and networking, and software, these are places that have higher margins for us, that have significantly higher growth opportunities that we have very small share generally, servers may be the exception. And as we can grow faster in that space, that mix is the large, the big picture driver of what's going to happen to our overall profitability. It's gross margin as well as operating income.

And as you look at our fourth quarter results, and FY '12 results, many proof points around how we've made progress there. The growth in the storage business at 33 percent for our owned IP in the fourth quarter. The growth of our services business, which for the year was high single digits, and double digits in the second half, and 12 percent in the fourth quarter. With higher margins, and that's the dynamic we can expect to see in the big picture view of the company. And that's a different conversation than talking about commodity prices, and QCs, and pricing discipline.

That said, as we talked about last night, Katy, the PC business still represents a big part of our company. It's an important asset for us. And we're very pleased with the profitability in that business. We've talked about 5 percent operating income, and we're doing better than that today. And if we can run that business at market growth rates and still get 5 percent operating income, it's a great platform. It generates a lot of cash flow. It funds a lot of the other things

we're investing in in the company. It's important to scale in the procurement side. It's important to our customers in mid-market. It's important to customers in emerging countries.

All of that makes sense, and it's a core piece of the company. You have to execute well there. And that means managing pricing. That means managing the mix. We're moving to higher price bands in general. It means effectively balancing commodity inflation and the things that happen in things like hard drives in a given quarter, or a given half of the year, or a given fiscal year. But if we can manage that well over time, it helps facilitate this transformation into a broader enterprise mix company.

KATY HUBERTY: The most significant opportunity is the mix towards the enterprise business.

BRIAN GLADDEN: Absolutely. In the mid-term, we would expect to manage that PC business in a way that's maintaining current profitability levels, which we would admit are relatively high compared to recent performance. Some of that is our execution improving. I think some of it is the competitive environment. And if we can do that, it allows us to then additively build out this enterprise business that's a different profile, and changes the whole shape of the company.

KATY HUBERTY: And how are you thinking about the disk drive headwind in the near-term, and even beyond that, the bill of materials, what does that look like over the course of this year?

BRIAN GLADDEN: It's been somewhat disruptive. I think I would tell you in hindsight, our team has managed this pretty well. We got access to the supply we needed in the fourth quarter. I think we're in a position to get access to the supply we need in the first quarter. What we said on the call a couple of weeks ago, or I guess last week, was that we had a mix impact that affected our ability to up-sell and move to higher end, higher profitability client as well as enterprise products, and servers and storage. That issue affected margins in the quarter. I think it's transient, and we get through that as we head to the first quarter.

So, we think it gets better over the course of the year. We think pricing in the second half of the year gets back to -- begins to normalize a bit, and we'll manage that. Also, as we headed into the quarter, we knew we would have some disruptions in the supply chain, some inefficiencies. For instance, we couldn't put as much product on the ocean to ship, that saves \$20, \$15 to \$20 a box. And having to put those on an airplane given the instability and unpredictability of the supply chain, we knew that coming into the quarter, and that was part of why we gave an outlook that was sequentially probably down a little bit.

But I think that will all work its way through over the next two quarters. And as we head into the second half of the year, we should be in a better position where we're back to a more normalized supply chain.

KATY HUBERTY: And do you have any thoughts on material beyond disk drives, for the remainder of the year there's a lot of talk about DRAM pricing right now.

BRIAN GLADDEN: The way we're managing the year is, not assuming a lot of inflation or deflation. So, hard disks are at a very high price point. We would expect the second half of the year they come down. Our assumption, our working assumption at this point, given capacity and how those markets are playing out, I think both DRAM and LCDs as key components will probably keep some inflation during the course of the year. And, net-net, not a lot of inflation, not a lot of deflation, that's how we're planning the year.

KATY HUBERTY: Okay. We'll talk some about acquisitions, but another driver of the mix shift in the enterprise business has been actually cutting revenue, and pulling back and pruning revenues that are low margin. Can you talk about where still see opportunities to do that? Last year I think you cut roughly \$3 billion of low margin revenue. This year is it a bigger number or a smaller number?

BRIAN GLADDEN: First, I would say it's an imperfect analysis as to what we pruned. You get into debates with the sales teams around what was really pruned versus what did we lose versus. That said, we think it's about \$3 billion, \$2 billion of that probably on the client side, a fair amount in retail clearly in low price bands in general, large competitive reverse auction type deals, things like that we walked away from. I think the client business is probably in a spot where most of that has been done. And we're at a reasonable -- we may have some comparisons year over year, but as we head into the fiscal year, not a lot more of operationally pruning to do on the client side.

We would talk about the software and peripherals business, which probably has a fair amount of work to continue to do, and we'll see profitability should improve in that business, and revenue will be stunted as we do walk away from some of that third party reselling. We've had a big proliferation of a lot of offerings there, and a fair amount of that doesn't make a lot of money. So, we'll work through that the first half of the year probably the majority of that heavy lifting will be done.

KATY HUBERTY: Okay. We talked to a lot of the gross margin factors in the January quarter, mainly driven by drives, but having to do with mix, and the higher costs like air freight. But there was one other factor, which was the public sector. Can you just talk about what you're seeing in public sector demand, and how that's weighing on margins, and what a recovery might look like?

BRIAN GLADDEN: Just to remember, public for us represents healthcare, education, state and local government, federal governments around the world, the U.S. Federal, the UK Federal have been, I would say, the most challenging elements. We talked about it coming out of the third quarter that reasonably good federal year-end close in March and September, and then saw relatively weak demand heading out of that. That continued. We had hoped that it would pick up a bit. It's arguably budget related. As we look at the pipeline of opportunities we're pursuing in both of those, you know, U.S.-UK government businesses, still a fair number of opportunities. Clearly, business that will work its way through the system. I think it's just a question of budget approval and really spoon-feeding dollars, I think, into the system at this point. So, that continues to be a challenge.

I would say more of a competitive environment than we probably expected coming into the quarter, into the fourth quarter, and in testing elasticity, and working through that competitive dynamic probably had weaker margins than we would expect. And we'll adjust pricing, we'll adjust our overall participation in those transactions, and I would expect margins will get back to more normalized margins as we head into the year, even in a weaker demand environment.

KATY HUBERTY: So, we talked a lot about gross margin, but ultimately you manage the business to operating profitability. So, I just want to talk to you on operating expenses a bit. Last year, revenue grew roughly flat, OPEX was up double digits. Was Fiscal '12 a year of investment, and now you can grow into that, or do we expect to continue to see OPEX growing faster than revenue?

BRIAN GLADDEN: I think, yes, as we look at FY '12, the investments we made were in line with some of the key priorities, and some of the acquisitions we made around storage, building out sales capacity there, adding R&D. We did, over the course of the first half of the year, add a lot of resources. I think as the demand environment became clear to us in the second half of the year, we cut back on some of that. And I think sequentially you would have seen relatively straight OPEX in the second half of the year, and into the fourth quarter.

I think as we head into Fiscal Year '13, part of the reason the outlook that we gave was really, we're going to continue to make investments. We're not going to see 20 percent growth in OPEX, which is basically what we saw last year. So, it will be, I would say, more disciplined around specific areas, and I think metered in terms of what we see in the demand environment, and we're not trying to -- structurally, I think, you won't see us dramatically grow OPEX at a rate that's that dramatic. That's what we're trying to do in this environment.

KATY HUBERTY: And as it relates to research and development, as you said, a big part of the transformation of the company is acquisitions you've made in higher margin, Dell-owned IP in storage, software, networking. Obviously, those businesses require research and development. Your competitors spend a lot of money on research and development. Can you talk about how you think about evolving Dell from more of a selling model to more of an innovation model? And what you're doing to rationalize some of the commodity business that you could invest in these higher margin areas?

BRIAN GLADDEN: Yes. I would look at it in three chunks. So, R&D, for the acquired asset, in some cases, things like Compellent, EqualLogic, we've more than doubled R&D investment and the number of resources focused on new products, and bringing together that storage portfolio. And I would say we're very aware of the kinds of investment benchmarks that competitors would have in that space, and we're ultimately going to have to be competitive and have similar levels of investment. And we're well on track for that.

On the selling side, clearly thinking about we have a generalist sales force, we have professionalists in our higher end enterprise businesses, that's where we've added a lot of costs. We've also had focus and initiatives around driving productivity in our core, more PC sales business to try and fund some of those activities. And I think we've had fair success there, but recognizing that selling expense related to those products is a significantly higher percentage of revenue than what we've historically seen.

So, that's really what's driving these significant increases, is a recognition we need to put those resources in place. We've also, on the R&D side, over the course of the last three years as part of getting our client business back in shape, we've made some clear decisions to reduce R&D in that space. And you use those dollars in client R&D that are now in some cases more efficiently managed with ODM partners to help fund some of the activities around storage, and servers, and important higher margin parts of the business.

So, I think we've done a pretty good flip of where the cost focus is, and clearly prioritizing investment dollars that are going into those parts of the business.

The third bucket would be around G&A, and we've done an awful lot of work benchmarking G&A, and I would argue in general world-class levels of G&A in the company, and we'll continue to do that.

KATY HUBERTY: You've made a number of acquisitions over the past several years, which has improved competitiveness as well as the margin profile. How should investors think about the rate of acquisitions going forward? How likely are you to do larger acquisitions? Most of what

you've done have been more bite-sized, and easily digestible. How are you thinking about that going forward?

BRIAN GLADDEN: I think we've built a track record now, over the last two to three years, that says that's our sweet spot, you know, mid-size and smaller acquisitions where we can get access to intellectual property and leverage our customer go to market scale, and footprint to take these great intellectual property, and new technologies to a broader market, mostly in the mid-market, is working.

There are places, I would say that the Perot acquisition that we did over two years ago now is a platform that allowed us to now build out a broader services offering. An important investment, but very much at the high end of the kinds of transactions we would look at.

So, we feel really good about those mid-sized acquisitions that have a fair amount of revenue that have proved that the product works, and that we can fit into our sales force that maybe companies who have a couple hundred, or 100 sales people when we acquire them, and once we get the integration up and running, and usually we try and do that very, very quickly, you can have 15,000 sales people very quickly selling the same product. And that model seems to be working for us.

KATY HUBERTY: Most of the acquisitions, really all of them have fallen into storage, networking, software, and services. So, I assume those are the same areas that you would look to fill out. Are any of those largely built out, and you feel like you have the portfolio you need, or are those all still areas that you look at for additional assets?

BRIAN GLADDEN: I think the play remains the same. I think there are some, storage is probably the example that we've been building out longer, and are probably a little bit further along, but there are still things we'd like to add there.

KATY HUBERTY: As it relates to cash, you're not just spending on acquisitions. So, if you think about the more than \$17 billion of cash and investment, \$9 billion on a net basis, how much is sitting in the U.S. that you feel like you have access to, how much do you need to run the business, and then how will you divvy the rest up as it relates to acquisitions versus buybacks?

BRIAN GLADDEN: Again, I think from a capital allocation standpoint, as we talked about last week, it's a pretty consistent model that we've been driving over the last couple of years, where we've said as an outlook is we'll spend 10 to 30 percent of our pre cash flow on share repurchase activity. We actually did more than that last year; we did about 50 percent of our pre cash flow on share repurchases, and spent \$2.7 billion. I think some of that was access to capital in the U.S., and debt market availability. Some of that was the pace at which acquisitions, I would argue last year was a relatively slow year for M&A for us and for the entire market, and as a result we had more capital available to return more to shareholders.

So, I think we'll keep with the same framework. Strategic investments M&A continues to be a priority, and in an environment where we can execute on the kinds of M&A transactions that we've been doing, that we feel good about, and that are returning good returns to our shareholders, the 10 to 30 percent, probably towards the higher end of that range continues to make sense for how we think about it.

KATY HUBERTY: And free cash flow has been incredibly consistent the last couple of years. I imagine it will only become more consistent as you drive more towards a solutions-based business with recurring revenue. Does the company consider a dividend, given the cash flow characteristics of the company?

BRIAN GLADDEN: Yes. I think it gets back to U.S. liquidity is the question that we struggle with. As you look at our tax structure, and our growth outside the U.S., and where our cash ends up, that is one of the challenges. At any point in time, 10 to 20 percent of our cash is available in the U.S. There are obviously longer term tax planning things that we would work through to try and get access to more. We can raise capital in the U.S. But it's not a -- I think you want to have confidence that you have a long-term roadmap to pay the dividend, and increase the dividend over time. And until we get a little more certainty around U.S. liquidity, I think we struggle with that. I think there are lots of reasons why it would make sense, and we've spent a fair amount of time talking to a broad group of investors around what that would mean. I just think that's a constraint that we have to work our way through.

KATY HUBERTY: Okay. Before we get into some of the segment discussion, just a quick question on guidance. You talked about growing earnings, but you don't necessarily need to expand operating profit dollars to get there. So, there's clearly some flexibility, and arguably conservatism in the guidance. Can you talk about a few of the factors that drove that conservatism? And then, are there one or two things that could potentially -- are wild cards and could potentially surprise to the up-side this year?

BRIAN GLADDEN: Yes. It's clear that there's a relatively uncertain demand environment. Hard disks will continue to be a challenge as we head to the first half of the year. I think we have some line of sight to an improved environment around that, but clearly we've taken that into consideration. You talk about public market, and the demand there; you could about consumer dynamics; you talk about Europe as a market where we've actually done fairly well, but it's hard to say where that goes. I've tried to factor in all that uncertainty around the demand environment.

At the same time, also tried to factor in the fact that we're going to continue to make investments, that this transformation of the company will take time, and we don't want to be in a position where we have to slow down the positive momentum we have in this transformation because of some short-term commitment that's hanging over our head. So, I think that's the overall framework we took around setting the year's expectations. And it does give us some flexibility.

As you know, we also stopped providing revenue outlook for the year. We talk about it quarter to quarter, but that also gives us the flexibility to prune where we need to to make the investments that may not affect or help revenue in the short-term, but help us in the long-term, and change the shape of the company.

So, I think those are the thoughts we had coming into the year, and want to set a target that we can do better than. That said, I think things like Windows 8 could create some up-side opportunity in the second half of the year. I think there are some areas of the market that continue to be relatively strong. Large enterprise, corporate refresh continues, we continue to feel very good about that. The SMB business for us has been a mid-single digit growth business. That continues up about the same in the fourth quarter. So, expansion in emerging countries continues to be strong. China for us was up 15 percent. So, I think some of those things can contribute.

We talked about it on the call, acquisitions, we've been fairly explicit that our outlook digests the impact of what we think we'll do in terms of acquisitions, but clearly I think on the revenue line we could see some upside as we continue to execute that strategy too.

KATY HUBERTY: Shifting to the enterprise business just broadly, which would include the commercial, and SMB, and public, what are your thoughts as it relates to just broad enterprise IT spending for 2012? Our surveys are pointing to 2 to 3 percent growth. Does that feel about right based on what you saw in the January quarter?

BRIAN GLADDEN: I think so. As we spend time with CIOs, and talk about spending for the year, projects, and look at the pipeline, we think that's probably where it shakes out. I think you talked a little bit last night, I would say over the last couple of months it may have gotten a little bit more positive, whether that's improving U.S. economy, whether it's a little more stability or certainty around Europe. I think in general there are clearly lots of opportunities, and new technologies that are very positive return projects for companies, and it's been more of a budget constrain that's kept people from funding those things even though the paybacks are very good.

So, again, we see lots of opportunities. It's a question of whether there is certainty in budgeting that allows these projects to move forward. So, we're optimistic that it's probably, hopefully a little bit better than that.

KATY HUBERTY: So, some positive signs in the commercial business. Public, we talked about, is still weak.

BRIAN GLADDEN: I think that will continue to be challenged, especially in places like the UK, places like the U.S., that just have -- with the election this year, I don't see a lot of certainty coming.

KATY HUBERTY: You've put up very good Europe numbers despite the uncertainty and the weakness that some of your peers have seen. Can you talk about some of the Dell strategic investments you've made? I know Germany is a country where you've spent some focused dollars to try to drive business. Talk about that strategy.

BRIAN GLADDEN: I would say broadly, it's a place that we've been under-penetrated for years. And we made some decisions, it may have been two years ago, to begin to invest, and some of the OPEX that we put in last year would have been around expanding commercial footprint in key markets in Europe broadly. In Germany, specifically, about a year ago, we made some investments in marketing and branding, and some of the brand work that we've done this year in the U.S. we actually did in Germany first, the power to do more.

And creating a bit of an enterprise brand image transformation for us was something we did in Germany, and you can actually see progress in not only the metrics around brand that the marketing team likes to show, but in terms of our market share, in terms of penetration, in terms of consideration, and actually growth in key enterprise markets as well as the client business. So, Germany has been highlighted, if you look at the total year up double digits for us. And I think that's a nice little case where, with a little bit of investment, the economics really pay off, and maybe we can do that in some other places around the world. And you'll see us do that in some other markets this year.

KATY HUBERTY: You've added thousands of sales resources, some through acquisition, some separate to make sure that those acquisitions are successful. What inning are you in in terms of reaping the top line and the margin benefits of those resources you've added?

BRIAN GLADDEN: There are clearly proof points that showed up in the fourth quarter. So, as we see storage growth on the IP, the owned IP side of our business, at 30 percent. Compellent is growing at 60 percent sequentially. The server business, in terms of our overall revenue

share, profit share in that space, you look at what we've done in services, and acceleration in growth rates during the course of the year to 12 percent in the fourth quarter, the deferred balance growing double digits. Those are all proof points that would say -- those are the places, by the way, that we invested. Europe I would put in that bucket as well. Those are the proof points we can point to.

In terms of how we're doing in aggregate with those investments, we have detailed tracking around specific productivity commitments for, say, a storage specialist, how much did that storage be able to contribute in revenue and margin over the course of a transition period. We have a timeline that we believe is their appropriate ramp time. And I would say we're 30 or 40 percent of the way through tracking towards those targets, and are pretty encouraged. And that's not just a storage comment, that's a broad comment around the specialist.

KATY HUBERTY: In the server market, last quarter units were flat. Growth slowed in the back half of last year. But yesterday, Dell launched the new 12G servers based on the Romley platform. How are you thinking about Romley in general, and Dell servers in particular potentially driving growth as you go through calendar '12?

BRIAN GLADDEN: Well, I think what you've seen over the last few years in servers is a move towards more highly configured, higher ASP, more efficient servers that maybe units aren't growing at the same rate, but capability is growing very quickly, and it's enabling a broader implementation of virtualization, the cost per data center, and higher workloads and a fewer number of boxes. I think the industry is seeing pretty dramatic improvements in average selling prices over that time.

And there's, oh, by the way, millions of units of lower end configurations selling into your broad Web 2.0 kinds of customer base. We think more of the same continues with the next generation of products, where we think clearly there are innovations in our 12th generation products that we think are differentiated, that are going to offer us some market opportunities versus competitors. And I think we'll continue to see a similar, not necessarily huge unit volume growth in servers, but I think revenue should continue to grow in high single digit kinds of ranges is what we've talked about, and I think that's still realistic based on everything we've seen in the market today.

KATY HUBERTY: One last question on enterprise before we move to consumers. The storage business you talked about some pruning in the EMC business, moving away from the EMC reseller partnership for Dell-owned IP. Are we now through most of that, and is it the April quarter that we can start to see growth in overall storage, or are we a couple of quarters out still?

BRIAN GLADDEN: I think that's the right timeframe, somewhere in there. As you look at the fourth quarter results year over year the EMC has now declined. It was down a couple hundred million dollars year over year. We're down at a level now as we head into the fiscal year, that's probably the sustainable level. So, sequentially it will be about where it is, is our view. The first quarter last year still had, there's probably another \$100 million of year over year erosion in the EMC business. So, I think we're at a steady state from the sequential standpoint that feels pretty good, a couple billion dollars of annualized run rate business, the total year business, and that will be our core IP business now moving forward.

I think as you get into the second, maybe it's the second quarter, maybe it's the third quarter, where you would see total year or year over year storage business in aggregate growth, and that's a good platform to go from.

KATY HUBERTY: I want to ask at least one question on consumer, but then I'll open it up to questions. So, if you have a question, just raise your hand, and they'll bring a mike over to you.

On consumer, we talked about pruning the business, and it sounds like you're most of the way through the shift away from lower end to mid-range, and high-end products. But obviously one of the secular themes in consumer is a shift towards mobile devices, a shift towards apps, and content. And clearly there are already some leaders in that market.

So, how does Dell think about just focusing on the strategy you have, which is higher end prosumer business, versus trying to be all things to all people, and compete with Apple? How do you think about that strategy, and how much do you invest into that over the next couple of years?

BRIAN GLADDEN: I think what you'll see from us in that space is really aligned with the broader strategy, which is enterprise-oriented, commercial offerings creating solutions that our customers on the enterprise side would value. And a mobility platform that works well within the enterprise environment from a security standpoint, from a management standpoint, and can balance some of this consumer content versus enterprise-related content in an efficient way we think is an opportunity. And I think that's where you'll see us focus versus broad consumer offerings that are chasing unit volumes in a relatively shrinking, small profit pool.

I think the prosumer comment around those consumers, and companies that are focused on bringing their own device, or consumerization of mobile, or PC, that's a place I think we have to be positioned to win, but I think we can do that in a differentiated way. And I think we can do it in a relatively manageable capital model, not a lot of capital required, I think, to build on some of the capabilities we already have.

But, I think you'll also see us invest more in sets of solutions where we can walk in and say, look, we can help manage your transition to a lower cost, either bring your own device, or integrated, better together corporate sponsored mobility device, tablet device, Windows-based devices that work within your current enterprise without investing in a lot of other complexity.

KATY HUBERTY: Got it. So, when you think about smart phones, ultra books, tablets, Windows on ARM, which of those would Dell prioritize relative to the mobile opportunity?

BRIAN GLADDEN: Well, I think we should get into the next generation of products here post Windows 8 with, whether it's ARM or whether it's the next generation as well Intel architecture, a lot of that starts to blur a bit. And we get devices that have instant on, long battery life, touch, I think it all kind of blurs together a little bit, and you're going to see a lot of hybrid devices that bring some of those technologies together. I think we'll be in the middle of that, and I think that's going to be -- how that plays out in the enterprise over time versus some of that gets tested out in the consumer space initially I think remains to be seen. But, I think, targeting the enterprise, and bringing some of those solutions to market.

We'll announce tomorrow, I think, the launch of this product, which is a 13-inch XPS, consumer-based product. But as we look at this and share this with our commercial customers, there is going to be a lot of demand, I think, on that side of our business for a device like this that's going to work well in the enterprise.

So, I think it all comes together, and you'll see many of the technologies behind that, obviously, work well together, and we can leverage a lot of the same network from a supply

chain standpoint, development team, especially if Windows 8 is the consistent operating system because we have a consistent chip set as well.

KATY HUBERTY: Got it. Let me see if there are any questions in the audience. A question back there.

QUESTION: This is a little bit more of a philosophical question, but if you go back to Michael Dell's sort of foundational insight, it was going direct, cutting out the middle man, and that's sort of through all phases of his business life that's what's been the competitive advantage.

If you look at this transition you guys are making today, what provides you with a competitive advantage as you move into these new business lines?

BRIAN GLADDEN: Well, I think what's different about our strategy in the enterprise is really two things. One is, a target around the mid-market. And I think that's where this evolution of the direct model, and the relationships we have with customers has evolved to a real advantage for us. We play, and we serve the large enterprise, the Fortune 100, the Fortune 500, but I would tell you most of our acquisitions, most of our intellectual property, and the sales model that we're building is targeted for mid-market customers, and I don't think many of our competitors can say that.

And while the channel is important to us, and is a growing element of our go to market, those direct relationships have enabled us, I think, to execute on a lot of the fast growth that we've seen in some of these new technologies. So, I think that's a critical element in our path that has helped make us successful around that portion of the market, and a critical element of where we head.

And as you think about designing new solutions for market, mid-market will be a bigger part of that focus for us. So, I think that's number one.

I think the other is an ability to build value-oriented solutions, but solutions that work within a mixed environment, and not trying to lock our customers into a proprietary set of solutions where you need to commit to one vendor across the entire enterprise. That plays well in the mid-market, but it plays well as well in large accounts. And offering server solutions, offering storage solutions, networking that can plug into a broad set of diverse technology in an efficient way is differentiated. And I think that will continue to be part of our differentiation and DNA.

KATY HUBERTY: Any other questions?

QUESTION: Thanks, Brian. Could you talk a little bit about services, which I think grew high single digits last year. The rest of the business may be about flat. A lot of that is support and maintenance, but also grow and some of the other outsourcing businesses. So, where's the strength there?

BRIAN GLADDEN: We exited the year with services in the fourth quarter growing 12 percent. The deferred balance growing similar, I think 11 percent as well. It's a broad story of not only revenue growth for the year, and accelerating revenue growth, but also margin improvement in the services business. I think we entered last year with really finishing the acquisition integration of Perot, and building the Dell Services business. We had a change of leadership heading into the year, and a bit of a redirection in strategy within that business focused not only on expansion and growth, but also on execution, and we did some things around the cost structure of that business over the course of the year.

I would also say that it's a broad based story of good execution. The support services business, we saw an expansion of attach rates, which has contributed to the growth there in a relatively weak unit volume growth environment. That has contributed stabilized pricing, and pricing improvement in some cases have worked margins up and costs out.

And then, on the outsourcing apps, PPO projects side of the business, we saw good strength in terms of our booking and orders growth through the year. And the second quarter was especially strong, but approaching \$2 billion of signings in the year for that s, which is a great improvement over where we were the year before.

So, I think there's a good platform of success. We're now at a point where that business is pretty stable, and I think we can actually acquire some other assets, expand that business, and continue to contribute positively to the overall profitability of the company, and growth. Good story.

KATY HUBERTY: Great. We just ran out of time, so I'm going to wrap it up there.

Thank you, Brian, very much for your time.

BRIAN GLADDEN: Thank you.

END