

12-Dec-2019

Ciena Corp. (CIEN)

Q4 2019 Earnings Call

CORPORATE PARTICIPANTS

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

OTHER PARTICIPANTS

Jeffrey Thomas Kvaal

Analyst, Nomura Instinet

Simon Leopold

Analyst, Raymond James & Associates, Inc.

Paul Silverstein

Analyst, Cowen and Company, LLC

Rod Hall

Analyst, Goldman Sachs & Co. LLC

George C. Notter

Analyst, Jefferies LLC

James Suva

Analyst, Citigroup Global Markets, Inc.

Michael E. Genovese

Analyst, MKM Partners LLC

Samik Chatterjee

Analyst, JPMorgan Securities LLC

Meta A. Marshall

Analyst, Morgan Stanley & Co. LLC

John Marchetti

Managing Director & Senior Analyst, Stifel Financial Corp.

Tim Savageaux

Analyst, Northland Capital Markets

Troy D. Jensen

Analyst, Piper Jaffray & Co.

Amit J. Daryanani

Analyst, Evercore ISI Institutional Equities

Ryan Koontz

Analyst, Rosenblatt Securities, Inc.

Catharine Trebnick

Analyst, Dougherty & Co. LLC

MANAGEMENT DISCUSSION SECTION

Operator: Ladies and gentlemen, thank you for standing by and welcome to the Ciena Fiscal Q4 2019 Financial Results Call. At this time all participants are in a listen-only mode. After the speakers' presentation, there'll be a question-and-answer session. [Operator Instructions]

I'd now like to hand the conference over today to Mr. Gregg Lampf, Vice President, Investor Relations. Please go ahead.

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Thank you, Sharon. Good morning and welcome to Ciena's 2019 fiscal fourth quarter and yearend review. With me today is Gary Smith, President and CEO; and Jim Moylan, CFO. Scott McFeely, our Senior Vice President of Global Products & Services, will join us for the Q&A portion of today's call.

In addition to this call and the press release, we have posted to the Investors section of our website an accompanying investor presentation that reflects this discussion, as well as certain highlighted items from the quarter and fiscal year. Our comments today speak to our view on current market dynamics and how we're addressing the opportunity in front of us. Our Q4 and fiscal 2019 performance, as well as a discussion of our long-term financial target and near-term outlook.

Today's discussion includes certain adjusted or non-GAAP measures of Ciena's results of operations. A detailed reconciliation of these non-GAAP measures to our GAAP results is included in today's press release.

Before turning the call over to Gary, I'll remind everyone that during this call we'll be making certain forward-looking statements. Such statements, including our guidance and long-term financial targets, are based on current expectations, forecasts, and assumptions regarding the company and its markets, which include risks and uncertainties that could cause actual results to differ materially from the statements discussed today.

These statements should be viewed in the context of the risk factors detailed in our most recent 10-Q filing and our upcoming 10-K filing. Our 10-K is required to be filed with the SEC by December 30 and we expect to file by that date. Ciena assumes no obligation to update the information discussed in this conference call, whether as a result of new information, future events, or otherwise.

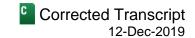
With that, I'll turn it over to Gary.

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

Thanks, Gregg, and good morning, everyone. Today we reported strong fiscal fourth quarter results, rounding out an extraordinary year of top and bottom line financial performance and leading market share gains. For the full fiscal year, we again delivered industry-leading growth and profitability, including 15% revenue growth and greater than 50% growth in adjusted EPS.

Q4 2019 Earnings Call



We delivered 13.1% adjusted operating margin for the year and took important steps during the year that will drive continued leverage and improvement. We also had a very strong year for cash generation with more than \$413 million in cash from operations, ending the fiscal year with over \$1 billion in cash and investments.

We, frankly, had a phenomenal year by any measure, highlighting our clear market leadership and, most importantly, positioning us to continue delivering profitable growth going forward. We are entering 2020 with tremendous confidence and have strong visibility into our business, prevailing market dynamics, and key customer relationships.

We are the industry's clear innovation leader and have an enviable competitive position with our technology leadership. Our diversification and global scale have created a balanced and resilient business, and one that has consistently outperformed the market and our peers even in the face of short-term challenges in any particular geography, segment, or customer.

Our deep understanding of industry dynamics and customer behaviors has enabled us to provide both short-term guidance and longer-term forecasts that we have consistently met or exceeded. While there are some well-documented headwinds as we head into 2020, we have taken them fully into account and balanced them against the positive drivers of our business, giving us confidence in our view towards continued faster than market growth and bottom line expansion. In fact, this confidence has also positioned us to increase certain of our long-term targets, which Jim will discuss later in this call.

Overall, the fundamental demand drivers for our business remain very compelling and the industry dynamics are largely unchanged from the past several quarters. Specifically, we continue to see strength in customer spending in North America and EMEA, and this is particularly true with our service provider customers. Despite a relatively flat overall spending environment, we continue to build on our relationships to win new business and execute on our recent awards, giving us strong visibility to growth within this customer segment in 2020.

Asia Pacific continues to present growth opportunities and our outlook there remains positive, despite some challenges in certain geographies during fiscal 2019. With respect to India, like other companies, we saw a meaningful reduction in revenue after a couple of years of very aggressive network build-outs and a fluid regulatory environment. Given our position in some key accounts there and our overall competitive position, we have a good line of sight to modest growth in the India market in 2020 compared to 2019.

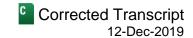
Regarding our Web-scale customers, we are now clearly an established incumbent in several key accounts, and we broadened those relationships considerably in 2019. This led to a greater than 50% market share in the global DCI market. This strong market position has benefited our business meaningfully. Direct sales to Web-scale customers grew 40% year-over-year, representing 22% of total revenue for the year.

Going forward, we believe that Web-scale spending will continue to grow, although at a more moderate rate than recent years. However, we fully expect to maintain our DCI market share [indiscernible] (00:06:48) and beyond.

More broadly, we're seeing increased engagements and opportunities across multiple market segments as customers continue to pursue a flight to quality to strategic partners who offer leading technology and engagement models on a global basis, and those with the financial strength and stability to deliver innovations over the long term.

Overall, we are operating in a demand environment that reflects significant network traffic growth and automation needs. These dynamics are driving the transformation of network architectures and this represents a great market

Q4 2019 Earnings Call



opportunity for Ciena. And we have a unique and favorable position within high-growth areas of our markets, where we've made significant strategic investments over the last several years.

A year ago, we explained how our innovation, diversification, and scale enable us to address these key opportunities, and we proved that ability in fiscal 2019. Non-telco revenue grew 25% year-over-year, led by our growth with Web-scale customers. We continue to advance our innovation leadership in optical with a very healthy business that grew nearly 17% in fiscal 2019, and we expect that business to grow even stronger.

On the development of WaveLogic 5, our next-generation coherent optical modem, we've made great progress and are very pleased with the performance we're seeing. Customer demonstrations during the recent Vectors technology event at our Ottawa lab were extremely well received. We remain very confident that we will be firstto-market with an 800-gig solution; in fact, well ahead of any other commercial offering.

Customers, obviously, share in this confidence as engagements continue to ramp, including POs already inhouse from several of them. As such, we are on track to have WaveLogic 5 in customers' hands in our fiscal Q1 and continue to expect revenue momentum to begin in Q2, with more material revenue in the second half of 2020.

At this time last year, we also noted that we would augment our packet networking capabilities to expand our addressable market in IP/Ethernet as the market grows. We had a record year in our Packet Networking segment in fiscal 2019, with revenue growth of nearly 23% year-over-year, and we are aggressively attacking this space with our adaptive IP solutions.

Already deployed with two global Tier 1 customers, Adaptive IP is designed to be automated, lean, and open for a simpler and more cost-effective means of scaling access on metro networks versus traditional complex and expensive routing options. At Vectors, we received resounding feedback that our Adaptive IP solution is just what customers need to evolve their Layer 3 applications.

And finally this year, we reinforced our commitment to building out our intelligent automation software business as service providers look to tackle service and network complexity across the globe.

Revenue from our Blue Planet business doubled in fiscal 2019 meeting our annual target. This revenue growth included some significant customer wins, including with Vocus in Australia, where our entire Blue Planet software portfolio will play a critical role in their network transformation.

We also recently closed the acquisition of Centina, a leading provider of service assurance analytics and network performance management solutions. This rounds out our software capabilities to enable closed-loop automation and positions us for even greater opportunities heading in 2020.

As we leverage our technology leadership and investment capacity, we continue to have the most compelling portfolio today, and the most credible and robust road map for those going forward. Coupled with our global scale and diversification across geographies and customer segments, these advantages are directly driving our strong market share gains and differentiated financial performance across the business.

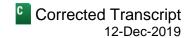
With that, I'll turn over to Jim.

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.



Q4 2019 Earnings Call



Thank you, Gary. Good morning, everyone. Q4 marked a strong end to an extraordinary fiscal 2019. Total revenue was \$968 million. Q4 adjusted gross margin was 43.8%. Adjusted operating expense in the quarter was \$295 million. This was higher than expected, due largely to higher variable compensation tied to our strong performance in the quarter and the year, as well as a one-off charge for doubtful accounts in Latin America.

With respect to profitability measures, in Q4 we delivered adjusted operating margin of 13.3%, adjusted net income of \$90.4 million, and adjusted EPS of \$0.58. In addition, in Q4, our adjusted EBITDA was \$152 million and cash from operations was \$240 million. As Gary mentioned, we ended the quarter with approximately \$1 billion in cash and investments.

Finally, we continue to execute on our share buyback plans. In the fourth quarter, we repurchased approximately 1 million shares for \$38 million, to close out the year with total amount repurchased of approximately \$150 million, as expected.

With respect to our performance for the full fiscal year, as Gary mentioned, annual revenue increased 15% from fiscal 2018, which was significantly above our target growth rate of 6% to 8% and well above market growth. We believe that we gained approximately 3 percentage points of market share as a result of this performance in 2019.

Adjusted EPS was \$2.11, which greatly exceeded our target, 20-plus percent annual growth rate. And finally, free cash flow for fiscal 2019 was \$351 million, which represents 75% of adjusted operating income, also well above our 60% to 70% target range.

Following this strong performance in 2019, we are again providing an updated set of three-year financial targets; in this case, through fiscal year 2022. For the most part, these long-term targets remain about the same and reflect the continued confidence in our ability to execute. So I will only speak to a few key metrics and address those that have changed. The full set of our long-term targets will be included in the earnings presentation that will be posted on our website after this call.

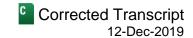
To start, and as we previewed in September, we are maintaining our target annual revenue growth rate of approximately 6% to 8% over the next three years. With a continued focus on driving increased profitability, we continue to target a growth rate in our adjusted earnings per share at 20% per year over the next three years.

I'll now start with an adjusted operating margin update. Given our operating margin performance in 2019, as well as additional efficiencies to be gained within our operating model, we now have line of sight and confidence that a 15% adjusted operating margin is an achievable goal for fiscal 2020. From there, through continued revenue growth and disciplined operating expense management, as well as some gross margin improvement, we are now increasing our long-term target for adjusted operating margin to 16% to 17% for fiscal 2022.

Investors in Ciena know that for many years we have set out operating margin targets for the company reflecting our continued confidence in our future performance. As we have achieved each of these targets, we have set for ourselves a new higher target for operating margin. We have done this again this year. And this next target, a 16% to 17% operating margin, sets a new, higher bar for performance in our space.

With respect to cash generation, we are increasing our expectation and we are now targeting annual cash flow of approximately 65% to 75% of adjusted operating income over the next three years. Final update to our long-term targets is for annual revenue growth for our Blue Planet, our end services segment. For that segment, we are increasing our target to \$120 million to \$140 million in revenue for fiscal 2022.

Q4 2019 Earnings Call



With these long-term targets in mind, I'll now provide a view into our expectations for fiscal year 2020, which, as Gary mentioned earlier, takes into account industry headwinds, while balancing against the positive drivers of our business. You will recall that when we reported Q3 financial results in September, we said that in 2020 we expect to grow revenue consistent with the consensus expectation at that time.

We continue to expect that level of growth reflecting the low-end of our 6% to 8% target annual growth rate for 2020 and a return to our long-term target range after two years of extraordinary revenue growth. Specifically, our revenue expectation for 2020 aligns closely with the current consensus of approximately \$3.8 billion and, given that the market is expected to grow only in the low-to-mid single digits, it represents continued share gains and faster than market growth, driven by market leadership.

As for fiscal 2020, we expect to deliver adjusted gross margin in a range of 42% to 44%. With respect to operating expense, we've taken significant steps over the last year to drive additional efficiencies and process improvements across the business.

As a result, in 2020, we expect adjusted OpEx to be flat to slightly down from fiscal 2019 levels in the average range of \$270 million to \$275 million per quarter. As I mentioned previously, this drive for efficiencies gives us increased confidence that our target 15% adjusted operating margin is an achievable goal in fiscal 2020.

And finally, speaking to our fiscal first quarter 2020 performance, we expect to deliver the following. Revenue in a range of \$805 million to \$835 million, consistent with the historical revenue seasonality disclosure we shared previously. Adjusted gross margin in the 42% to 44% range, and adjusted operating expense of approximately \$265 million.

I'll close with this. We are the established market leader in our space. We continue to deliver consistent, differentiated financial performance. And we intend to press down aggressively on our competitive advantages, including our leadership in technology. The diversification in our business across geographies, customer segments, and applications, and our ability to leverage our global scale, remain critical to our ability to meet and outperform our target expectations.

These foundational strengths form the basis of a balanced and resilient business, underpinned by a proven ability to navigate short-term challenges and drive broad-based growth across geographies and verticals. We feel great about 2020 and we enter the new year with strong visibility and great confidence in our ability to continue taking market share and increasing profitability.

Sharon, we'll now take questions from the sell-side analysts.

QUESTION AND ANSWER SECTION

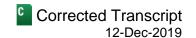
Operator: [Operator Instructions] Your first question comes from Jeffrey Kvaal with Nomura. Please go ahead. Jeffrey Thomas Kvaal Analyst, Nomura Instinet Yes, thank you, gentlemen, for the question. I'm wondering if we could start by discussing some of the variables underneath your 6% outlook for 2020. I ask because there are - it was a little bit lumpy in terms of where the revenue sources came from, particularly in this last quarter, Web-scale down, Packet Networking up. So if you could help us kind of understand a little bit about either what happened in the quarter and what that means for the 2020 view, we'd appreciate it. James E. Moylan, Jr. Senior Vice President-Finance & Chief Financial Officer, Ciena Corp. Sure, Jeff. First of all, we are very diversified and we have a project-based business, so there are always going to be movements among various customer groups, and you saw that in Q4. As we look to the future in 2020, we expect really a broad-based growth across geographies and verticals. We expect [indiscernible] (00:21:15) service providers, particularly in North America. I'd just highlight the point that broad-based growth is what we expect across a lot of different geographies and verticals. Jeffrey Thomas Kvaal Analyst, Nomura Instinet Okay. And then – sorry. Gregg M. Lampf Vice President-Investor Relations, Ciena Corp. Go ahead, go ahead. Sorry. Jeffrey Thomas Kvaal Analyst, Nomura Instinet Okay. Just to I guess follow-up on that. The trajectory of the revenues in Asia Pacific has suffered from India. It sounds like that's going to be somewhat better in 2020. What's the confidence level in that and to what extent could some of the other regions in Asia Pacific help there? You've talked about success in Japan in prior quarters.

Gary B. Smith
President, Chief Executive Officer & Director, Ciena Corp.

Yeah, Jeff, this is Gary. Yeah, we expect to have growth in Asia Pacific. I think India specifically, obviously, was a challenging year last year and we expect the dynamics to continue to be challenging in India, frankly, for the next probably couple of years. But given the relatively low number bar of 2019 and given the engagements and orders that we're seeing from certain of the stronger customers there, I would say we expect modest growth in India.

We feel more bullish around Australia and some of the wins that we've had there and some of the momentum that we've got there. Subsea also, I would highlight, in Asia Pacific is going to be very good year in 2020, and we've got good visibility to that. Also, I think Japan is going to have a good year. I would sort of reinforce, I guess, what

Q4 2019 Earnings Call



Jim said around broad-based demand. I think we've been very realistic and understand very well the challenging markets in places like India, et cetera. And I think that's all built into our guidance for the year. I think we've been very realistic on that.

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Thank you, Jeff.

Jeffrey Thomas Kvaal

Analyst, Nomura Instinet

Okay. Thank you all.

Operator: Next question comes from Simon Leopold with Raymond James.

Simon Leopold

Analyst, Raymond James & Associates, Inc.

Great. Thank you. Appreciate you taking the question. I wanted to double-click on the hyperscale/Web-scale market vertical in particular, and maybe just a couple things I'd like you to address. Part one is, what's implied within your forecast of revenue growth for fiscal 2020 of kind of 6%, what are your assumptions?

And I'd appreciate if you could maybe explain how you see the drivers for this Web-scale market, because I think many folks have associated your prospects with the prospects for switching or servers. And maybe help us understand the relationship, correlation or lack of correlation. Appreciate that. Thank you.

James E. Moylan, Jr.



Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

Yeah, I'll start, and then Scott or Gary can answer the second part of the question, Simon. First, I'd say that we've had two phenomenal years in the Web-scale space. As they have grown themselves, they've grown their CapEx at really extraordinary rates. We've gained share. We think that we're well over 50% in that sector right now. As we look into 2020, it is our view that their CapEx is going to moderate. We think that it's going to grow, but probably in the 7% to 10% range or something. That's what we get from our checks. In that environment, we expect to maintain our market share. I think it's going to be hard to grow market share, given that we have such a high market share. But we expect to maintain our market share as we move into next year.

Scott McFeelv

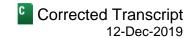
Senior Vice President, Global Products & Services, Ciena Corp.

And, Simon, it's Scott. In terms of the dynamics, I think you see demand coming at us from really two different dimensions. One is geographical expansion, other data center footprint, and then bandwidth coming at us from just application growth. And if you look at just sort of ports shipped, you can see that growth absolutely in our numbers and we continue to see that looking forward in the future. What's different with us maybe than some of the other competitors that you're seeing in the marketplace is just the breadth of the logos that we deal with. We don't have the same customer concentration than some of the other folks that you may be looking at here.

Simon Leopold

Analyst, Raymond James & Associates, Inc.

Q4 2019 Earnings Call



Great. And if I might just a quick clarification, please. The one 10% customer, looks like you're pointing to a North American telco. Just want to verify I got that right.

Scott McFeelv

Senior Vice President, Global Products & Services, Ciena Corp.

Yes, that's absolutely correct.

Simon Leopold

Analyst, Raymond James & Associates, Inc.

Great. Thank you very much.

Operator: Next question comes from Paul Silverstein with Cowen.

Paul Silverstein

Analyst, Cowen and Company, LLC

On the competitive front, Gary and Jim, there's been a lot of talk about Infinera stabilizing and improving, a lot of concerns about 600-gig taking away share. So two questions here, a broad and a narrower question. On the narrow question, there has been talk in investment community about you all having to respin. I trust from your comments on WaveLogic 5 on the timing that that is not the case. It sounds like you're confident that that will ship in the near term. You've already got customer orders in hand. The broader question, what are you seeing in the competitive environment from Infinera in particular and more generally from your key competitors?

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

Yeah, Paul, it's Scott. Just on the generic WaveLogic 5 question, I'd say this and Gary talked about it in his remarks, but just to reiterate. We're thrilled with the execution both from a program execution perspective and a performance perspective. And since we talked to this group in September, we've had our technology forum, which we call Vectors, where we had several hundred customers come through the labs and witness that execution and witness the performance, and they walked away exceptionally confident, which is more important than my confidence by the way. And as witnessed by the fact that many of them have placed orders on us for that and we do expect to have that capability in their hands, as we said, starting before the end of our fiscal Q1, which is not that far away, and revenue in Q2. So, we're thrilled and feel great about the competitive position on that one.

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

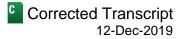
In terms of the overall dynamics, the broader question policy – Paul, this is Gary – we think that the competitive advantages that we're going to deliver in WaveLogic 5 in 800, frankly, causes most of the engagements that we've had with them to skip over any 600-gig requirements, quite frankly. And we're seeing that in Web-scale, we're seeing it in service providers. There's just not enough benefit in terms of the speed and reach of 600-gig, which, frankly, some of the stuff that's coming out is really only competitive with WaveLogic Ai, which has been in the market for two to three years now.

Paul Silverstein

Analyst, Cowen and Company, LLC

Okay. And, Gary, if I could just one - hey, Gregg, can I do one quick follow-up?

Q4 2019 Earnings Call



44 2010 Lannings Can	12 000 201
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	A
Yeah, sure, go ahead.	
Paul Silverstein Analyst, Cowen and Company, LLC	Q
I think it's clear from your comments, but I'll ask the question. Are there any one-offs fo look at fiscal 2020?	r better or worse as we
James E. Moylan, Jr. Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.	Д
You're talking revenue or what are we talking	
Paul Silverstein Analyst, Cowen and Company, LLC	Q
Yeah, I'm sorry, Jim, from a revenue standpoint. I mean, certainly the theme has been across regions, product markets, customers, et cetera. But are there any particular – from revenue for better or worse, are there any particular from any of those vectors as you longer than the standard product of the standard produ	om a meaningful impact or
Gary B. Smith President, Chief Executive Officer & Director, Ciena Corp.	Д
Well, I would describe it like this, Paul. I think what we've seen over the last two to three customers pause or they have some challenges, certain markets pause. We saw India of years and then pause last year. And the point that I would make is that we've got such that we can withstand and navigate our way through those challenges.	go very strong for a couple
We had some real challenges in 2019 around some of those markets, which I think are what was particularly strong in 2019 was Web-scale. We expect, as Jim said, for that to more moderate rate. I think what we're seeing in 2020 is just more moderate growth accustomer and market segments. I'd characterize it as that.	continue to grow, but at a
But if you look at 2019, I think what was particularly strong was Web-scale and some o service providers. I absolutely think that service providers will be strong in 2020 across	
Paul Silverstein	\Box
Analyst, Cowen and Company, LLC Appreciate it.	
Apriorition III	

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Thanks, Paul.

Gary B. Smith
President, Chief Executive Officer & Director, Ciena Corp.

Thanks, Paul.

Operator: Next question comes from Rod Hall with Goldman Sachs.

Rod Hall

Analyst, Goldman Sachs & Co. LLC

Yeah, thanks for the question. I wanted to drill into this Packet number. The revenues there are lot stronger and I know, Gary, you talked about Adaptive IP wins. I wonder, could you just talk a little bit more about the pipeline there and what sort of things you're seeing out in the market. Are you seeing people – I think you alluded to switching off of routing platforms onto this. Just any more color on what the trajectory of that's likely to look like, since that was way ahead of what we were expecting. And then, does that possibly drive networking platforms growth higher for you in 2020? So that's – I know it's longwinded. That's my first question, and then I have one follow-up.

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

Yeah, I think – Paul, it's Scott – in terms of looking in the rearview mirror and what drove the growth on Packet, it really is I look at sort of the applications when people are looking at modernizing their access and aggregation networks to deal with a number of different application sets. In particular in Q4, we benefited from a number of projects that were looking at migrating from their legacy TDM services onto a packet infrastructure. And when they did that, they actually wanted to go with a more modern, which we call Adaptive IP, approach to it and we've definitely benefited from that.

Looking forward, we continue to see that as an application driver. But I also think as people start to look at 5G from a stand-alone perspective and start to make architectural decisions around that, there's an opportunity there for that same product portfolio set. We do expect looking forward for that Packet portfolio to grow faster than our aggregate numbers. We haven't updated the targets I don't think explicitly in the three-year plan, but they're very consistent with what we had in the last three-year plan, which is higher. It'll be double digits, but higher than our aggregate numbers.

Rod Hall

Analyst, Goldman Sachs & Co. LLC

Scott, could you just expand on that 5G comment and say a word or two about what's happening there with regards to visibility and revenue trajectory right now?

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

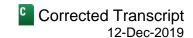
Yeah, I think what's going on right now is in general those of us that are in the packet-over-fiber infrastructure business are benefiting from a number of different drivers as it's bringing more bandwidth on to the network. And those drivers have been consistent and I think they're going to be consistent going forward. Specific to wireless access networks in 5G, I think what's going on right now is a lot of augmentation non-stand-alone deployments, which is bringing, yes, more bandwidth on to the network, but not necessarily them looking at their new architectures and making new vendor decisions because of that. I think going forward in the future, as they start to look at stand-alone deployments, those architecture conversations come up and there's opportunities for new competitive displacements for vendors like ourselves. But I think that's really going to be a 2021-type timeframe.

Ciena Corp. (CIEN) Q4 2019 Earnings Call



Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	A
Thank you, Rod.	
Rod Hall	Ω
And then I was just – my follow-up was just on India. Gary said moderate growth. Could you go ballpark on that, like are you talking – what do you mean there, mid-single digits or any kind of can give us?	
Gary B. Smith President, Chief Executive Officer & Director, Ciena Corp.	Д
I would say sort of single-digit type growth in India, in that kind of range off a pretty – off the 20 yeah.	19 performance,
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	Д
Thanks, Rod.	
Rod Hall Analyst, Goldman Sachs & Co. LLC	Q
Great. Okay. Thank you.	
Operator: Next question comes from George Notter with Jefferies.	
George C. Notter Analyst, Jefferies LLC	Q
Hi, guys. Thanks very much. I guess I wanted to go back to the strength in the Packet Network connect some dots. I think my hunch is what you're seeing there is a cross-connect replaceme with a major Tier 1 North American customer. I guess my impression is that it's still very early of My impression also is that there is a big installed base of those platforms in many other custom just was hoping to get any commentary you could give us on kind of the picture for new project kind of what inning are we in terms of that kind of application and where it can grow to. Thanks	ent project and – days in that project. ners as well. So I t wins there and
Scott McFeely Senior Vice President, Global Products & Services, Ciena Corp.	А
George, I guess two things. It's Scott. So, first of all, that application was one of the drivers for It's broader than that, so I wouldn't just fixate on that. But that was certainly one of the drivers. itself, I do resonate with how you phrase it. I think it's early innings. I think both in terms of the we're in, but also the number of customer logos out there that have this challenge in front of the	On that application customers that
George C. Notter Analyst, Jefferies LLC	Q
Okay Thank you	

Q4 2019 Earnings Call



Operator: Next question comes from...

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Д

Thanks, George.

Operator: Next question comes from Jim Suva with Citi.

James Suva

Analyst, Citigroup Global Markets, Inc.

Thank you very much. Thus far the questions have been mostly focused on revenues, which is absolutely the correct thing to do. So maybe if I can switch it down to operating margins and operating expenses a little bit. If my math is right, it looks like you came in around 13% operating margins this quarter, and maybe I'm off on that. But it seems like OpEx, your costs are a little bit higher. Is that related to you made a comment about like a doubtful account adjustments, or can you help us understand kind of why it seems like operating expenses were a little bit higher than maybe what some of us would have thought for this quarter?

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.



Sure, Jim. Yeah, we came in a little bit higher on OpEx than we expected, but it really is driven in large part – in fact, mostly by the fact that our incentive comp on both our sort of sales commissions and regular corporate bonus was higher than expected. We had well over \$20 million of extra expense because of our performance in the quarter and the year. So, it's a good thing for you that we performed as well and a good thing for our employees, frankly.

And then the other thing is, we did have roughly a \$4 million charge for bad debts in South America. It was a number of accounts and we took those to reflect what's going on in those accounts. So, overall our OpEx for the quarter and for the year is very close to plan. If you look at our annual OpEx against our plan, just about all of it is driven by the incentive comp pluses that we had during the year and this \$4 million charge for bad debts in Q4. So if you take those out, we're very close to our plan for OpEx for the year.

James Suva

Analyst, Citigroup Global Markets, Inc.



That makes a lot of sense. Thank you so much for the clarifications.

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.



Yeah. And the other thing I'd just repeat, as I said earlier, we're going to return to a lower level, \$270 million to \$275 million per quarter, for the year 2020, which reflects flat to slightly down from the OpEx that we experienced in 2019.

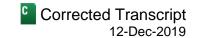
Operator: Your next question comes from Michael Genovese with MKM Partners.

Michael E. Genovese

Analyst, MKM Partners LLC



Q4 2019 Earnings Call



Thanks for the question. So, with the WaveLogic 5, I mean, it sounds like the customers have come and seen it in Ottawa, and then you're going to get it to them, it sounds like, in January for field testing and first office applications. I'm just wondering how long does that stuff typically take. And can we have a strong revenue uptake in Q2 or is it more Q3, given the timing?

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

Α

Yeah, Mike, I think the way to think about it is we'll start to recognize revenue in Q2, but a significant material amount will be in the second half of the year.

Michael E. Genovese

Analyst, MKM Partners LLC

Okay. And then I guess, can we talk in the hyperscale vertical and maybe the subsea vertical as well sort of – or maybe more in the hyperscale the importance of that technology? I mean, I'm just getting a sense that the 400G cycle is coming to an end and we really need to get this product out to have the growth that we expect in the vertical this year. Is that accurate to you, or is there more life in 400G that I'm talking about here?

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.



So, the way I would say it is that folks that are fiber-constrained and have high bandwidth growth demands will always go to the highest performance optics, and that will be WaveLogic 5 in the very, very, very near future. So, those folks will move to that new technology fairly quickly.

When you say the 400G cycle, though, I want to point out, like the 400-gig cycle as a capability is just starting. Being able to carry 400-gig anywhere on the globe without having to regenerate it is a key value proposition of WaveLogic 5, even though we talked about it being 800-gig. And that's important, because the client rates coming up with things like switches and routers are still 100-gig today. They're going to go to 400-gig. So, that's still in front of us.

Michael E. Genovese

Analyst, MKM Partners LLC

Yeah, I agree that particularly the telco market, the 400G cycle is in front of us. And I was asking about hyperscale and I appreciate the answers. Thank you, Scott.

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Α

Thanks, Mike.

Operator: Next question comes from Samik Chatterjee with JPMorgan.

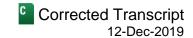
Samik Chatteriee

(.)

Analyst, JPMorgan Securities LLC

Hi. Good morning. Thanks for taking my question. Gary, if I can just ask a bit about the longer-term targets, kind of more the confidence level in reiterating the 6% to 8% revenue guide, particularly as you're guiding to 6% revenue growth in the next fiscal year, and then 6% to 8% over the three-year time horizon, and you've spoken about some of the headwinds here. What's giving you the confidence that some of the headwinds don't

Q4 2019 Earnings Call



accelerate? Or should we see it as necessarily a confidence in the market share wins that continue to drive you in that range?

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

А

I think if you look at the overall market dynamics and fundamentals, I think they're very, very solid. If you look at the wins that we've got and the customer plans that we have and we're intimate with across the globe, I think we've got a very high degree of confidence and visibility into that. I would also say, the balance of it, when we look at those things, we're not counting on miracles in any of these markets or customers. We take a very balanced and realistic view to it. And quite frankly, over the last few years we've been very accurate on that, we've either met it or exceeded it.

So I think we have very good confidence in it. I think we've got a very good understanding of the dynamics where there are some challenges and we have good visibility into that. We have great customer and intimate relationships, which give us privy to their plans both in this year and beyond. And I think folks tend to – and I think quite rightly – focus on some of the headwinds which are sort of well documented.

There's also on the broad demand a lot of tailwinds. And I would say, actually for us particularly, very specific to Ciena, it's the service providers and Tier 1 wins that we've had both in North America and in EMEA and in Japan and Australia as we look to 2020. I don't think other folks are enjoying that. And I understand it at a macro level overall CapEx spending in the service provider space is flat to down, but that's not the deterministic issue for us. It's what are they spending it on. And we've got the leading innovation and relationships with them, and that's why we've got confidence in the service providers going forward.

Samik Chatterjee

Analyst, JPMorgan Securities LLC

Got it. And if I can just follow-up on the balance sheet or the use of cash. You ended the quarter with a strong cash number and a strong balance sheet. So, what are the options you're considering here, given that lot of the investments also for the next-generation products appear to be largely done? Are you considering like maybe exiting repurchases or what are the options?

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

Δ

Well, I think you could probably name the options. They're pretty obvious. We're going to continue to generate a lot of cash over the next several years and we would love to make good acquisitions if they're out there and available for us. And if not, then we'll have a choice of perhaps increasing our distribution to shareholders. My own preference would be to do some smart, good acquisitions, but those have to appear for us.

Samik Chatteriee

Analyst, JPMorgan Securities LLC

Thank you.

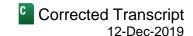
Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

P

Thank you.

Q4 2019 Earnings Call



Operator: Next question comes from Meta Marshall with Morgan Stanley.

Meta A. Marshall

Analyst, Morgan Stanley & Co. LLC

Great. Thanks. First question just on kind of the revised 16% to 17% kind of fiscal 2022 operating margin target. Should we assume that most of that comes from OpEx savings? And just give a sense of where within kind of OpEx those savings are coming would be helpful.

And then maybe second question. There's been a lot of discussion about Europe and Huawei, kind of where as it look like Huawei wouldn't be kicked out of certain accounts that is looking more likely. Just any change in commentary around European customers over the last couple of weeks would be helpful. Thanks.

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

Thanks, Meta. I'll take the first part. And with respect to our higher targets, we believe that it will be a combination of increased operating leverage as we continue to grow our revenue faster than our OpEx and also we expect a bit of margin improvement. So, it's a combination of those factors.

With respect to OpEx, we've done a lot of things over the last year to get – to wring efficiencies out of our business. And that's why we can call that our OpEx will be flat to down as we go into next year. We'll continue to look for those kind of opportunities. But, generally speaking, we're just going to run our OpEx in a very disciplined way and, as I say, we will grow revenue faster than OpEx.

Garv B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

Meta, on the European context around China Inc., I'd say that it's – really the dynamics haven't particularly changed. I think it's difficult to discern any impact on our business certainly to-date showing up in our financials. And it's, obviously, difficult to predict how all of this will play out. But what – I would say this, and in particular regard to the European carriers, I think there's much more of a sensitivity now around overdependence on uncertain vendors, regardless of all the other geopolitical and security considerations that are in play. And I think whenever you've got such a large market share of a particular player, I think a number of carriers are now becoming concerned about that and we're engaged in a number of conversations that presents an opportunity for us.

I would stress that these are mainly infrastructure type decisions. So, they're not quick and they're not quick to show up into the numbers. But I think we are engaged, as you would expect, with a number of major carriers, which presents opportunities for us within this dynamic of an over-dependency on a certain player.

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Thank you, Meta.

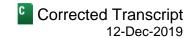
Meta A. Marshall

Analyst, Morgan Stanley & Co. LLC

Thanks.



Q4 2019 Earnings Call



Operator: Next question comes from John Marchetti with Stifel.

John Marchetti

Managing Director & Senior Analyst, Stifel Financial Corp.

Thanks very much. Gary, I was hoping you could just spend a little bit of time on that Centina acquisition that you kind of snuck in here. Just talk a little bit how that sort of rounds out the software offering and combined with sort of what feels like an improved outlook for that total software business. Just curious if the tenor or tone of discussions with service provider has changed to where now you really feel like you kind of know how to attack that market and then and look for that to be a real contributor for growth going forward.

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

Yeah. No, thank you. Thanks, John. No, I think it does round out in a number of ways. I think to sort of start at the end of your question now and the overall dynamics that we're seeing, we were, obviously, very early entrants into this market to get our self educated, and we've learned a lot over the last three to five years, particularly around the entry points into the service providers around their pain points and how to get this next-generation of automation, really solutions targeted at their needs. And we've now put together, I think, a world-class portfolio within Blue Planet to address that.

This last piece of it really was around the network assurance, which allows us to have what they sort of call a closed-loop understanding of what's going on in the network. And now we've got a very full portfolio around federated inventory, route optimization, analytics, and this was really the obvious and final element now which allows us to pull all those pieces together. We're seeing very good momentum now in a number of carriers around these kinds of solutions and automation and taking some of the complexity around their assets out. And we had a very good year. We doubled our revenues in Blue Planet, and I think we're going to have a strong year in 2020 as well.

John Marchetti

Managing Director & Senior Analyst, Stifel Financial Corp.

And then maybe just as a quick follow-up to that point, Gary. Is this being used primarily with – going in with some of the new network builds that you're doing? Is it customers that are looking to modernize some of their back office stuff? Just curious where you're inserting yourself as you go to market with that solution. Thank you.

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

There are some examples, John, of new networks and, obviously, that's the easy one, with the greenfield, you put the leading edge automation elements in there. We do have some of those. But largely it is around existing carriers looking to automate elements of their network. The back office is complex. It was not designed to deliver the kind of services they are today, when a lot of these back offices were designed to deliver basic phone service to your house and to offices. And so that's the issue that they're trying to deal with.

And now you have an environment where you want instant on-demand large amounts of capacity and services, and their back office is just not suited to that. And so, we've identified the particular pain points that can – high leverage elements that can deliver a lot of savings and improved services to the carriers. And we're seeing some great use cases now around improved service delivery and understanding of their network, and that's cascading around a number of carriers around the world. So, quick answer to your question is really it's in the existing networks and the problems that we're trying to solve there.

Q4 2019 Earnings Call



Gregg M. Lampf	
Vice President-Investor Relations, Ciena Corp.	

Д

Thank you, John.

John Marchetti

Managing Director & Senior Analyst, Stifel Financial Corp.

Thank you.

Operator: Next question comes from Tim Savageaux with Northland Capital.

Tim Savageaux

Analyst, Northland Capital Markets

Hi. Good morning, and congrats on a strong quarter with a lot of moving parts, and that's kind of where my question is, which is, if you look at what was a very strong North American performance and some pretty severe headwinds in Asia Pac for the quarter, I guess I'd be interested in kind of where things may have surprised you to the plus side and maybe to the minus side relative to what you might have expected, either geographically or end market customer-wise on the one hand. And then, I wonder if you can comment on what you saw in the quarter on the cable vertical and what your expectations might be heading forward. Thanks.

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.



I'll start with that one, Tim. I'd say that the quarter played out generally as we expected. We have a big backlog. We have very deep engagements with each of our customers. And we know what projects are ongoing, which projects are beginning, which projects are coming to the end of their lives. So, we didn't really have any huge surprises. I would say that our big North American customer was – performed better than expected. That had to do with what things were going on in their network. But overall, no real surprises in the quarter. We did see a reduction in the Web-scale vertical, we expected that, and we had a great year with them and we'll have another good year with them next year.

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.



Tim, just on the cable element of your question. We had a pretty strong year in cable in 2019. But significantly we've had a couple of very large wins in that cable space, which will play through to 2020. And now we, frankly, have – all of the major North American MSOs are Ciena customers, and most of the international ones as well, particularly in Europe, where you've got the other large ones. So, we pretty much now have a clean sweep across all of the major cable MSO players, and that also gives us confidence as we go through 2020.

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

A

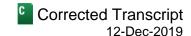
Thank you, Tim.

Tim Savageaux

Analyst, Northland Capital Markets

Thanks.

Q4 2019 Earnings Call



Operator: Next question comes from Troy Jensen with Piper.

Troy D. Jensen

Analyst, Piper Jaffray & Co.

Hey. Congrats on the great year, gentlemen. My first question would be for Gary. Just curious to get your thoughts on what the bigger revenue driver will be for 2020. Is it going to be 400G moving into metro, or is it going to be 800G in DCI?

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

I'll take the first part of that, and then maybe, Scott, get your views to it. I still think the main growth driver is going to be 400-gig, and we're saying that just as we're about to get 800-gig in market. Scott, [indiscernible] (00:53:01).

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

No, I totally agree. At the end of the day, the fundamental driver is continued bandwidth demand and growth, and that's going to materialize in a number of different applications. I think what you're going to see is 400-gig becoming the ubiquitous transport currency around the globe. So, that will instantiate a couple of different technologies, but that will be the key driver.

Troy D. Jensen

Analyst, Piper Jaffray & Co.

Scott, just to follow-up...

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

And just a reminder, we said earlier, Troy – just a reminder, Troy, we did say that we – as far as geographies and verticals, we expect pretty broad-based growth. And maybe a little bit of outperformance from the Tier 1 providers, service providers, particularly in North America, but overall we expect growth across a wide range of geographies and verticals.

Troy D. Jensen

Analyst, Piper Jaffray & Co.

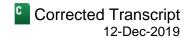
So maybe just a follow-up with Scott or Gary, just 400G metro, can you update us on traction you've had or significant revenue ramp?

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

I mean, we've been shipping 400-gig capable products with WaveLogic Ai for quite a while. And I think last count, we're approaching 100 different customers on WaveLogic Ai [inidscenrible] (00:54:10) technology. It's a combination of that. There's two fundamental drivers for people who want to have optical performance. One is, I've got significant bandwidth increase and I've got fiber constraints, I'm going to want the best optical performance I can get. And that's been consistent as we've been in the optical domain and that will continue forever.

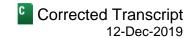
Q4 2019 Earnings Call



And then the other one is what services and clients are you trying to carry on that line. Obviously, we're not at the point yet where 400-gig as a client driver is the dominant client piece of that. That's still in front of us. But we've seen, on the optical side, broad-based growth from metro, DCI, infrastructure, core networks, and submarine across the piece, driven fundamentally by bandwidth continues to grow.

Troy D. Jensen Analyst, Piper Jaffray & Co. Understood. Good luck going forward.	Q
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp. Thanks, Troy.	A
Gary B. Smith President, Chief Executive Officer & Director, Ciena Corp. Thanks, Troy.	A
James E. Moylan, Jr. Senior Vice President-Finance & Chief Financial Officer, Ciena Corp. Thanks, Troy.	A
Operator: Next question comes from Amit Daryani (sic) [Daryanani] (00:55:12) with Evercore.	
Amit J. Daryanani Analyst, Evercore ISI Institutional Equities Yeah. Thanks a lot for taking my question, guys. I have two as well. First one, just on the free cash flow – cash flow conversion was fairly strong in fiscal 2019, I think it was [ph] over (00:55:24) 75% up. Could you help square away why do you expect that to drop to 60% to 70% as you go forward in your long-term targ there something one-off that helped fiscal 2019 to be really good? Or just help me close the bridge over the	ı just et? Was
James E. Moylan, Jr. Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.	A
Yeah. First of all, the range is 65% to 75%, so I'm not sure we're going to see that drop. But we did give a that reflects at the midpoint a slight decline. I would say that a lot depends upon the particular area of the where we're selling into, some parts of the world generally have longer payment terms than others. Also, the extent to which a quarter is front-end loaded or back-end loaded in terms of revenue. And for this past year enjoyed a very high percentage of front-end loaded quarters, given demand. Our expectation to go to sort midpoint of 70% reflects growth outside of the US, as well as perhaps going back to a more back-end load quarter.	world the ar, we've t of a
Amit J. Daryanani Analyst, Evercore ISI Institutional Equities Got it.	Q

Q4 2019 Earnings Call



James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

But I'd say that whether we get 65% or 75%, we're going to have great cash for the next several years.

Amit J. Daryanani

Analyst, Evercore ISI Institutional Equities

Fair enough. If I could just follow-up. When we think about either fiscal 2020 or the next couple of years, where do you see the biggest share gain opportunity from a geo or end market basis as you go forward? And then, on the Web-scale side, where I think you sound a little bit more tempered on share gain potential going forward, is that just a reflection that your customers are saying you have 50% share, that's plenty, we want diversity? Or is there some other variable there specifically?

Gary B. Smith

President, Chief Executive Officer & Director, Ciena Corp.

Let me start with the last question first. I think there's just a reality, when you get well over 50% market share — it's probably even closer to 60%, frankly — it's just tough to grow. It's the law of big numbers and share. I don't think there's a particular — particularly within that space, I don't think that's necessarily driven by a requirement for diversity of supply. Given the fact of our financial strength and our innovation and the rest of it, we're seeing more and more, both with large service providers and with Web-scale, there are absolutely — they've got the right flight to quality and trust in a vendor. This two vendor, three vendor thing is really becoming a little bit of a thing in the past. But the market share piece is just the law of big numbers there.

In terms of other areas for us to take share, I think it's across the board. I really do. I think it's very broad-based. I think EMEA has some particular opportunities. I think EMEA, given the concentration with other certain competitors in EMEA, I think there's opportunity there. There's opportunity in Japan for us, again, some of the indigenous vendors there. And I think, given our strength of our scale and our technology and with WaveLogic 5 coming out, I think submarine as well, I also feel we're going to have a strong year in submarine from a share gain point of view as well.

Gregg M. Lampf

Vice President-Investor Relations, Ciena Corp.

Thank you.

Operator: Next question comes from Ryan Koontz with Rosenblatt Securities.

Ryan Koontz

Analyst, Rosenblatt Securities, Inc.

Hi. Good morning. I wonder if you guys have an updated view on the threat from white box. AT&T has been very vocal about their interest in edge applications and the Web-scale sector is seeing some utilization. Do you see that starting to wane and how is that affecting your product strategy going forward? Thanks.

Scott McFeely

Senior Vice President, Global Products & Services, Ciena Corp.

I think, there are certainly some segments that have more propensity to want to control some of their own innovation, and that's been going on for a while and we've reacted to that. We've made our technology bases available in various different consumption models, everything from our packet software assets available as an

Q4 2019 Earnings Call



independent network operating system. You mentioned one of the customers that we happen to be engaged with them on that. All of the various different open line system approaches around the world, we've been a leader there. And I think we took a leadership position in making our coherent technology available outside of our system business. So we've embraced sort of this open consumption model. Frankly, if we're bringing value to the marketplace from a technology leadership and innovation how our customers want to consume, it is how our customers want to consume and we'll react to that.

Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	A
Thank you.	
Ryan Koontz Analyst, Rosenblatt Securities, Inc.	Q
Thanks so much.	
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	A
We'll go to the next	
Gary B. Smith President, Chief Executive Officer & Director, Ciena Corp.	A
Thank you.	
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	A
[ph] in live (00:59:53) question.	
Operator: Next question comes from Catharine Trebnick with Dougherty.	
Catharine Trebnick Analyst, Dougherty & Co. LLC	Q
Thanks for taking my question. I just wanted to drill in more on the subsea. See a market share gain next year. Could you talk about who your typical cuview it as Google, Facebook, Microsoft. And drill into, are carriers still a piece actually your end customer? Thanks.	ustomers are for subsea? I always

James E. Moylan, Jr.

Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.

Yeah. I'd say that there's a kind of a broad range of people who want to have customer – or submarine capability, because everybody wants to move stuff across the world. In recent years, it definitely has moved to the Webscale fellows, because they are the ones who are building out data centers around the world and have to have that capacity. But we still do business with large consortia who operate across the world, and so it's really a combination of all of those.

The other thing that is important to know about that is we've moved very significantly toward an unbundled [indiscernible] (01:01:08) builds. And the customer was best-of-breed in terms of the cable. And in terms of the

Q4 2019 Earnings Call



optical gear, we are clearly the leader with respect to optical gear, no question about it. And so we think that whether it's Web-scale or whether it's service providers, our technology really puts us in a great position to win.

Catharine Trebnick Analyst, Dougherty & Co. LLC	Q
Great. Thanks, Jim.	
James E. Moylan, Jr. Senior Vice President-Finance & Chief Financial Officer, Ciena Corp.	A
Thank you, Catharine.	
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	A
Thank you, Catharine.	
Operator: And at this time I'll turn the call over to the presenters.	
Gregg M. Lampf Vice President-Investor Relations, Ciena Corp.	
Thank you. Thank you everyone. Have a Happy Holiday and Happy New Yea	ar. We look forward to 2020 and

Operator: Ladies and gentlemen, this concludes today's conference call. Thank you for participating. You may now disconnect.

Disclaimer

The information herein is based on sources we believe to be reliable but is not guaranteed by us and does not purport to be a complete or error-free statement or summary of the available data. As such, we do not warrant, endorse or guarantee the completeness, accuracy, integrity, or timeliness of the information. You must evaluate, and bear all risks associated with, the use of any information provided hereunder, including any reliance on the accuracy, completeness, safety or usefulness of such information. This information is not intended to be used as the primary basis of investment decisions. It should not be construed as advice designed to meet the particular investment needs of any investor. This report is published solely for information purposes, and is not to be construed as financial or other advice or as an offer to sell or the solicitation of an offer to buy any security in any state where such an offer or solicitation would be illegal. Any information expressed herein on this date is subject to change without notice. Any opinions or assertions contained in this information do not represent the opinions or beliefs of FactSet CallStreet, LLC, or one or more of its employees, including the writer of this report, may have a position in any of the securities discussed herein.

THE INFORMATION PROVIDED TO YOU HEREUNDER IS PROVIDED "AS IS," AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, FactSet CallStreet, LLC AND ITS LICENSORS, BUSINESS ASSOCIATES AND SUPPLIERS DISCLAIM ALL WARRANTIES WITH RESPECT TO THE SAME, EXPRESS, IMPLIED AND STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, COMPLETENESS, AND NON-INFRINGEMENT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER FACTSET CALLSTREET, LLC NOR ITS OFFICERS, MEMBERS, DIRECTORS, PARTNERS, AFFILIATES, BUSINESS ASSOCIATES, LICENSORS OR SUPPLIERS WILL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS OR REVENUES, GOODWILL, WORK STOPPAGE, SECURITY BREACHES, VIRUSES, COMPUTER FAILURE OR MALFUNCTION, USE, DATA OR OTHER INTANGIBLE LOSSES OR COMMERCIAL DAMAGES, EVEN IF ANY OF SUCH PARTIES IS ADVISED OF THE POSSIBILITY OF SUCH LOSSES, ARISING UNDER OR IN CONNECTION WITH THE INFORMATION PROVIDED HEREIN OR ANY OTHER SUBJECT MATTER HEREOF.

The contents and appearance of this report are Copyrighted FactSet CallStreet, LLC 2019 CallStreet and FactSet CallStreet, LLC are trademarks and service marks of FactSet CallStreet, LLC. All other trademarks mentioned are trademarks of their respective companies. All rights reserved.

delivering a very strong year again. Thank you.