Company Name: Charter Communications
Company Ticker: CHTR US
Date: 2018-10-26
Event Description: Q3 2018 Earnings Call

Market Cap: 72,775.63
Current PX: 285.70
YTD Change($): -50.26
YTD Change(%): -14.960

Bloomberg Estimates - EPS
Current Quarter: 1.438
Current Year: 5.382
Bloomberg Estimates - Sales
Current Quarter: 11133.200
Current Year: 43538.375

Q3 2018 Earnings Call

Company Participants

- Stefan Anninger
- Thomas M. Rutledge
- Christopher L. Winfrey

Other Participants

- Vijay Jayant
- Philip A. Cusick
- Craig Eder Moffett
- Benjamin Daniel Swinburne
- Mike McCormack
- Jason Boisvert Bazinet
- Brett Feldman
- John C. Hodulik

MANAGEMENT DISCUSSION SECTION

Stefan Anninger

Non-GAAP Financial Measures

During the course of today's call, we will be referring to non-GAAP measures as defined and reconciled in our earnings materials

These non-GAAP measures as defined by Charter may not be comparable to measures with similar titles used by other companies

Thomas M. Rutledge

Business Highlights

New Spectrum Pricing and Packaging

- At the end of Q3, 67% of our acquired residential customers were in our new Spectrum pricing and packaging up from 62% at the end of Q2
- So we're delivering better products at better prices to more customers which will drive lower churn, faster customer growth and financial growth
- Over the last year, we've grown our total Internet customer base by over 1.2mm customers or 5.3% and video net losses this quarter were less than in Q3 2017
- In Q3 we grew cable revenue by 4% y-over-y and adjusted cable EBITDA grew by 5.5%

Gigabit Speed Offering

- During the quarter we rolled out our Gigabit speed offering to over 7mm homes passed using a very capital efficient DOCSIS 3.1 technology
- Earlier this month, we launched our Gigabit service to more than 12mm additional homes passed
- So we now offer Spectrum Internet Gig to over 95% of our passings and we'll be offering Gig service to nearly all of our 51mm homes passed by the end of this year and over 80% of our residential Internet customers subscribed to tiers that provide 100 megabits or more of speed
- Our faster speeds are having their intended impact of driving Internet customer growth

Spectrum Mobile Service

- In early September, we executed the full market launch of our Spectrum Mobile service with the goal of accelerating connectivity relationship growth and we expect our mobile product to be profitable on a standalone basis once it reaches scale
- We now offer mobile services to both new and existing Spectrum Internet customers on both Apple and Android devices
- Spectrum Mobile is being marketed via TV, radio, direct mail and other – and through other advertising and marketing platforms, and our selling machine is scaling across key existing sales channels including our stores, inbound call centers and online

Costs

- We offer our mobile services at prices that give new and existing customers the opportunity to save hundreds of dollars per year on their mobile bills
- Our Unlimited service costs $45 a month, and our By the Gig service is $14 per gigabyte

Broader Market

- So far, our broader market launch has gone very smoothly
- Our mobile operations and the service itself are scaling and working well
- We started selling this product after Labor Day, and so our total customer base is relatively small at quarter-end, about 21,000 lines
- But we're seeing steady new sales growth and yield in traditional cable sales as we build brand and product awareness

EBITDA

- In the next few months, we will enable customers to transfer their existing handsets
- We also have a pipeline of product improvements that will extend through the middle of next year, and which will continue to make our product more attractive and easy to switch an entire household's mobile service package
- Ultimately the goal is to use Spectrum Mobile to save customers money via an integrated superior product offer driving faster customer growth and better retention, higher penetration and greater EBITDA per passing

World Box

- Shifting back to cable, our all-digital initiative is on schedule for completion by yearend, about 95% of our footprint is now all-digital
- By the end of this year the whole company will be fully digitized as we deploy fully functioning two-way digital set-top boxes, mostly our World Box and increasingly third-party IP devices on all remaining analog TV outlets that we serve

Operating Strategy

- Simultaneous implementation of high touch integration projects and product improvements which are nearly finished is actually counter to our operating strategy of reducing service interactions
- The customer disruption at all-digital drive is well understood, with the migration of millions of customers to Spectrum pricing and packaging with different equipment and builds, the installation of uniform business practices, the integration of various product, network IT and billing platforms and parallel network upgrades and integration has also been disruptive to our sales, service, customer transactions and churn
- We said at the start of this integration that putting Charter in a position to operate as a single entity and grow faster over the long-term would impact our operating and financial outputs during the integration and drive outsized capital investment in the short term
  - But our integration is coming to a close and most of the disruption will be behind us in 2019

Capital Spending

- And you will quickly start to see the tangible benefits of our operating strategy through lower churn, continued higher sales and increasing operational efficiency resulting in higher revenue per passing and lower operating costs
- The completion of our integration will also bring a meaningful reduction in capital spending
- And as one company with a superior bandwidth-rich network, a unified product marketing and service infrastructure and a value creation model as laid out on slide 4 of today's presentation, we believe we know what works
  - We will be in a position to accelerate growth, and innovate faster than where we have been over the last few years

Christopher L. Winfrey

Financial Highlights

Hurricane Florence

- A few administrative items before covering our results
- As I mentioned on our last call, we're now reporting all of our results on a consolidated basis
- There is a small impact to our Q3 results due to Hurricane Florence primarily in the Carolinas

- The impact to the customer base was a few thousand customers and the financial impact was about $5mm to each of revenue and operating expenses, so a little over $10mm in adjusted EBITDA
  - We had a similar impact from storms during Q3 last year
- So the y-over-y impact was not material
- We are still in clean-up mode for Hurricane Florence
- We're in restoration mode for Hurricane Michael
  - We'll provide a similar update on our Q4 call as needed, however, we don't expect material y-over-y impact from either hurricanes

FASB's New Revenue Recognition Standard

- Finally, as a reminder starting on January 1 of this year, we prospectively adopted FASB's new revenue recognition standard
- Like last quarter there are a number of adjustments in the quarter related to the adoption of the standard both in revenue and expenses which in total lowered EBITDA by about $15mm this quarter as compared to last year
  - That y-over-y impact from the accounting change will go away after Q4

Q3 Results

Residential and SMB

- Now turning to our results, total residential and SMB customer relationships grew by 234,000 in Q3, 903,000 over the last 12 months
- Including residential and SMB, Internet grew by 308,000 in the quarter
- Video declined by 54,000 and voice declined by 77,000
- As Tom mentioned, 67% of our acquired residential customers were Spectrum pricing and packaging at the end of Q3
- We expect to be above 70% by the end of this year and similar to what we saw of Legacy Charter, pricing and packaging migration transactions are slowing which together with the completion of network upgrades this year means that in 2019 we'll see lower CPE spending and meaningful churn benefits

Sales

- In residential Internet, we added a total of 266,000 customers vs. 250,000 last year, total Internet company sales were higher y-over-y
- As Tom mentioned, we now offer Gigabit service in over 95% of our footprint
  - We expect to have that service available nearly everywhere by the end of 2018
- Over the last 12 months we've grown our total residential Internet customer base by 1.1mm customers or 4.9%
- In the last year our residential video customers have declined by about 1.6%, all of which have come from limited basic

Stream and Choice Package

- Sales of our Stream and Choice packages, which are primarily targeted at Internet-only has continued to do well
- In voice, we lost 107,000 residential voice customers vs. a gain of 26,000 last year, driven by a lower triple play selling mix and lower retention at TWC

Acquisition Pricing

- In mid-September, we made a change in the way we market and price wireline voice within our packages to address wireline voice sell-in, retention at roll off, and the launch of mobile
- In most of our markets, our Internet and video double-play pricing will be $90 with some targeted acquisition pricing elsewhere
- In either case, wireline voice at acquisition is now $10 add-on with no change to that price when their customer rolls off a bundle promotion

wireline Voice

- With wireline voice at the $10 value-added service going forward, mobile is now positioned to be the triple play value driver for connectivity sales, similar to what wireline voice did for cable over the last decade
- And even though the revenue per household for the new triple play will be higher, we will be saving customers more money with the best products

Mobile

- Turning to mobile then, as Tom mentioned, we executed the broad market launch for Spectrum Mobile product on September 4
- So our third quarter results include only a short period of active marketing and sales of the product
- As of the end of the quarter we had about 21,000 mobile lines with a mix of Unlimited and By the Gig lines
    - We are still focused on branding and awareness marketing, which some of you may have seen

Existing Sales Channels

- As we add new features and functionality including bringing [ph] new (11:38) device capabilities, the marketing will become more offer driven
- Essentially all of our existing sales channels will be activated and integrated for mobile over the coming quarters
- All of which will help drive continued acceleration of mobile line adds and overall connectivity relationships

Promotional Campaign

- Over the last year, we grew total residential customers by 734,000 or 2.9%
- Residential revenue per customer relationship grew by 0.4% y-over-y, given a lower rate of SPP migration, promotional campaign roll off and rate adjustments, which were significantly offset by last year’s third quarter Mayweather-McGregor fight, which drove over $50mm in revenue last year, a higher mix of Internet-only

customers, and higher full year sales at promotional rates

- Excluding pay-per-view and VOD, residential revenue per customer relationship grew by 1.1% y-over-y

ARPU Growth

- Slide 7 shows our customer growth combined with our ARPU growth resulted in y-over-y residential revenue growth of 3.3%
- Excluding the impact of pay-per-view and VOD and some rate adjustments last summer that were not mirrored this quarter, residential revenue grew by 4.4%, so similar to last quarter's growth rate

Commercial

- Turning to commercial
- Total SMB and enterprise combined grew by 4.3% in Q3 with SMB up 2.8% and enterprise up by 6.4%
- Excluding cell backhaul and Navisite, enterprise grew by over 9% with PSU growth of 15%
- Sales were up in SMB as well and we have grown SMB customer relationships by over 10% in the last year

Revenue Growth

- Revenue growth in the acquired markets hasn't yet followed the unit growth
- Revenue growth impact of the repricing of our SMB product has slowed and our SMB revenue growth has essentially bottomed out over the last two quarters
- In 2019, we expect less impact from the repricing on our SMB revenue growth

Advertising Revenue

- Third quarter advertising revenue grew by 18% y-over-y
- Political advertising accounted for all that growth as it also utilizes traditional inventory
- We also continued to sell more overall spots with better inventory utilization and targeted selling

Mobile Revenue

- Mobile revenue totaled $17mm, with essentially all of Q3 revenue being device revenue
- As a reminder, under equipment installment plans or EIP all future device installment payments are recognized as revenue on the connect date
- In total, consolidated third quarter revenue was up 4.2% y-over-y, with cable revenue growth of 4.0%, or 4.1% when excluding both advertising and pay-per-view and VOD.

Operating Expenses

- Moving to operating expense on slide 8
- In Q3, total operating expenses grew by $302mm, or 4.6% y-over-y

- Excluding mobile, operating expenses increased 3.1%
- Programming increased 3% y-over-y, driven by contractual rate increases and renewals, offset by a lower base of total video customers and last year's Mayweather-McGregor fight, which also reduced our y-over-y programming cost by 1.2%
- So excluding pay-per-view and VOD programming costs in this and last year's third quarter, programming grew by 4.4%, with 5.8% on a per video customer basis

Cost of Service

- Regulatory, connectivity and produced content grew by 4.4%, primarily driven by our adoption of the new revenue recognition standard on January 1, which re-classed some expenses to this line in this quarter
- Cost of service customers grew by 1.7% y-over-y compared to 3.4% customer relationship growth
- We are lowering our per relationship service costs through changes in business practices and continue to see early productivity benefits from ongoing in sourcing investments

Cable Marketing Expenses

- Cable marketing expense grew by 3.7% y-over-y, driven by higher sales and other cable expenses were up 5.5% y-over-y, driven by ad sales costs, enterprise costs and IT costs from ongoing integration
- Mobile expense totaled $94mm and was comprised of device costs, market launch costs and operating expenses to stand up and operate the business, including our own personnel and overhead costs and our portion of the JV with Comcast, the accounting for which we discussed on last quarter's call

Adjusted Cable EBITDA

- Device cost like device revenue are immediately recognized but consumer payments for handsets are generally received over a two-year period, hence the working capital headwind which we've highlighted
- Adjusted cable EBITDA grew by 5.5% in Q3, and when including the impact of mobile, total adjusted EBITDA grew by 3.5%

Net Income

- Turning to net income on slide 9, we generated $493mm of net income attributable to Charter shareholders in Q3 vs. $48mm last year, and that was driven by a pension re-measurement gain in this quarter, lower depreciation and amortization expense, higher adjusted EBITDA and lower severance-related expenses partly offset by higher interest expense

CapEx

- Turning to slide 10, CapExs totaled $2.1B in Q3, $275mm lower than last year
- The decline was primarily driven by lower CPE and scalable infrastructure spend, partly offset by spend on mobile
- CPE was down given the y-over-y decline in the volume of migration of acquired customers through our Spectrum pricing and packaging

 - We spent about $42mm in all-digital this quarter vs. $47mm in Q3 last year, and $88mm in Q2 this year
- The decline in scalable infrastructure capital was related to more consistent timing of in-year spend in this year vs. last

Merger Conditions

- Line extension spending was up y-over-y as we continued to build out and fulfill our merger conditions
- We spent $66mm on mobile-related CapEx this quarter driven by software, some of which is related to our JV with Comcast and on renovation to create mobile product marketing areas in our stores
- As I mentioned last quarter, our CapEx spending is more level-loaded this year than last
- For the full year, we continue to expect the cable capital intensity or cable CapExs as a percent of cable revenue to be similar or slightly lower than 2017
  - We also expect 2019 cable CapEx to be down meaningfully in absolute dollar terms and in terms of capital intensity

FCF

- As slide 11 shows, we generated $532mm of consolidated FCF this quarter, including $149mm of investment in mobile
- Excluding mobile, we generated $681mm of cable FCF compared to $594mm last year
- And the increase was largely driven by higher adjusted EBITDA, lower cable CapEx y-over-y, and lower severance expense
  - That was partly offset by higher cash paid for interest and a negative contribution to cash flow from working capital
- That negative change in working capital is primarily the result of lower CapEx payables on our already declining y-over-y capital intensity

Working Capital

- I also expect working capital-related reduction to cash flow in Q4 at least as compared to last year and recall that last year's fourth quarter working capital benefited from the much higher level of CapExs and from the in-quarter timing of that CapEx, both driving temporarily outsized payables
- Q4 of this year will not have that level of benefit due to the more level loaded CapEx spend at this year
- And in Q4, we will see the initial working capital investment in mobile device EIP sales where the associated revenue is recovered over a two-year period
  - We will continue to isolate that impact within the overall mobile reporting, but that trend accelerates in tandem with wireless subscriber growth

Debt Principal

- Looking to next year, we do expect a working capital-related reduction to our cash flow in Q1 2019 for cable
- That's due to lower CapEx

- And it shouldn't be quite as pronounced as what we saw in Q1 this year
- We finished the quarter with $71.5B in debt principal, our current run rate annualized cash interest expense is $3.9B – I am sorry, annual cash interest payments annualized is $3.9B, whereas our P&L interest expense in the quarter suggests $3.6B annual run rate
    - That difference is primarily due to purchase accounting

Liquidity and Cash on Hand

- And as of the end of Q3, our net debt to last 12-month adjusted EBITDA was 4.47 times at the high-end of our target leverage range of 4 to 4.5 times
- And at the end of the quarter, we held over $4B in liquidity and cash on hand and revolver capacity and during Q3 we repaid $2B of debt maturity
- We also raised $2B in the investment-grade market
- Also during Q3, we repurchased 3.5mm Charter shares and Charter Holdings common units totaling $1.1B at an average price of $303 per share
    - Since September of 2016, we've repurchased about 18% of Charter's equity

Cable Integration

- And we intend to stay out of the low 4.5 times leverage on a consolidated basis including the impact of mobile on our financials
- So looking ahead, the level of integration activity, CapEx and service impacting changes including network upgrades will continue through the end of Q4
- So we're looking forward to 2019 as the largest ever cable integration will be mostly behind us
- But based on the past experience and the operating metrics we already see, we expect continued strong demand for improving connectivity products set, which includes faster Internet speeds, a great mobile product which saves consumer significant money, and high quality, attractively priced bundled services like video and wireline voice
- And that growth combined with lower integration activity beginning in 2019 and declining capital intensity demonstrate long-term benefits for our customer focused operating strategy and our cable FCF potential

QUESTION AND ANSWER SECTION

<Q - Vijay Jayant>: I just want to first unpack the video trends, obviously the losses declined in the quarter. I think you called out that Stream and Choice package has become a bigger piece. And that limited basic is moderating. Can you just help us understand sort of what's really going on, on the video, competitive landscape and the growth on the expanded basic product?

And then for Chris, I just wanted to reconfirm your comments, which was that there was $15mm hit from accounting changes and about $10mm from the hurricane. So the EBITDA impact was about $25mm? Thank you.

<A - Thomas M. Rutledge>: So Vijay on the macro issue, I guess, there are two things to explain. One is that our desire to sell feature rich high value video products is part of our overall market facing strategy. Meaning, when we sell or create a customer we like to or we believe it's appropriate to try to give that customer the full capabilities of our service. And then through time as a result of that keep that customer and satisfy that customer fully.

In order to implement that strategy, we sell full packages of product in video, which means we don't sell video or basic only products generally incrementally. And therefore, as we grow, we are growing rich products and shrinking our broadcast only base. And so that was the strategy at Legacy Charter, Legacy Cablevision actually even – and so we have been implementing that through this transaction successfully. So if you're actually a programmer receiving funds from us, we're growing in your eyes because we're growing expanded basic as part of every acquisition we make generally. Every new customer we get. So that's our product strategy.

In terms of where the overall marketplace is, I think it continues to be pressured for all the reasons we have expressed before by high class of content. The fact that the content is bundled the way it is as it's wholesale to us. And the fact that it's not very secure incrementally on the IP level meaning that you can get it without paying for it. All of which puts pressure on price along with the whole value proposition of the content because it is continually going up in cost. And I don't see those trends changing and so you see a continued erosion of the overall marketplace for bundled video. That doesn't mean we can't be successful in that marketplace using video to drive our overall customer relationship growth. And that our video products can be relatively better than other companies video products and that we can achieve share shifts as a result of that.

<A - Christopher L. Winfrey>: Vijay on the accounting question. So we've had due to the adoption of the rev rec standards at the beginning of the year, we had some small impact in Q1 and Q2. It's a little larger in Q3, so we just made mention of it. But you are right, it was $15mm on a y-over-y basis, meaning that there is $15mm hit to EBITDA this quarter as compared to last year. As we get into Q1 of next year that y-over-y comparison difference will go away. The other item that you mentioned is the over $10mm related to the storms. That is true. That it lowered our EBITDA this quarter, but it's also true that in Q3 last year we had a pretty similar amount that was going through. So just be careful when you're adjusting that on – it is definitely relevant for forward-looking, on a y-over-y comparison it's about the same if that makes sense.

<Q - Philip A. Cusick>: Two things around pricing and revenue. First, can you compare the price increases that we've seen in the last week to last year, is there any impact higher or lower on broadband or video revenue this year?

And then second, can you help us sort of think about your expectations for revenue and EBITDA in the next few years? I know you're not going to give guidance but you've talked about an acceleration, I think, it would help to put some framework around it. We understand you don't expect revenue to grow 4% and EBITDA 5.5% from here, but what's the level of increase we could expect in the next few years as you come out of the transition? Thank you.

<A - Christopher L. Winfrey>: Hey, Phil. This is Chris. It sounds like you're looking for a lot of guidance. We don't blame you for trying. There was – our core pricing and packaging other than what I mentioned on our double play pricing and what we're doing with voices and add-on, our core pricing and packaging hasn't changed.

You're right that we've had a few small increases on different services around the edges, but it's not really material. The full impact of which won't be in our numbers until December. So I know that starts to roll through some of the billing cycles in November, but full impact really won't be there for a full month until December.

And that's what we've done today. It doesn't mean that ultimately that's where we'll be for the full year in 2019, but it is a slightly lower amount than what have been going through this year. And the last year, as I think I have mentioned in my comments we took – so meaning in 2017. We had some small rate increases that went in January. We had some small increases that went in August. Certainly that impact to the comp for this year Q3-on-Q3 we've got some small around the edge rate increases, which you've highlighted. I know, you've written about it as well. But they won't be fully impacted until December and during the course of 2019 we will see where we are.

But if you were to just take that and say how does that compare to what we did in January of this year, it may be slightly less than that. And revenue and EBITDA acceleration without giving guidance, the first one ties purely to customer relationship growth, and from SMB having bottomed out.

We think SMB is going to continue to improve. Will it be at the full rate of customer relationship growth next year? No, it won't, because there's still repackaging and pricing that's going on.

Enterprise is going through a similar phase, slightly behind SMB and certainly behind resi in terms of where it was just given the way those contracts roll. So, and then next year as well, we're going to have the absence of political advertising, which you need to keep in mind as well.

What remains when you put all those pieces together is how fast can you grow customer relationship growth and some very small level of rate increase that we just talked about. We think we can grow customer relationships. We think the step ups will continue to play in as we have been in a high acquisition mode with a lot of customers going into promotion, which then roll off.

But a lot of that, the political advertising, SMB and enterprise, which I just covered and the remainder really ties to customer relationship growth and some promotional roll offs. From EBITDA, there is a lot of benefit that comes from taking transactions out of the system. Not only the cost of those transactions, but also reducing churn, which means that the same marketing and sales dollars can be applied to new sales as opposed to replacing the customers that you just lost. And that generates not only incremental revenue, but higher EBITDA.

Our cost to serve today continues to go down on a per customer relationship basis. We think that continues to go down, maybe even accelerating in terms of how efficient we can become.

And as much noise as we think we are taking out of the system as it relates to transactions and TWC, both the number of calls and service calls and churn at TWC is still significantly higher than it is at Legacy Charter, which means there's a big opportunity that still sits in front of us. That's about as good as I can...

<Q - Craig Eder Moffett>: I wonder if you could just talk a little bit about the wireless business. Tom, you've talked in the past about some limitations technologically with respect to the network controller and your ability to direct traffic between Verizon's network and your own network.

How do you think about the MVNO in terms of sort of strategic sufficiency for your ambitions in wireless and what might you need to do to ensure that the MVNO sort of satisfies your needs?

<A - Thomas M. Rutledge>: All right, good question, Craig and I've read some of your materials recently on that as well. And I would say this, we are a wireless company today and have over 300mm authenticated devices on our network prior to the launch of our MVNO and as we move through the MVNO, it does have limitations on our ability to manage that network and certainly has limitations on our ability to get owner's economics in some ways.

Although, we can shift traffic onto our own network through Wi-Fi and increasingly more likely through new spectrum that will be available to us also in a public way like Wi-Fi in the form of the CBRS 3.5 spectrum, some of which will be public and some of which will be sold and auctioned.

There are new technologies coming along with dual-SIM and e-SIMs in mobile devices, which will allow somebody with an MVNO like us to actually run their own network and an MVNO simultaneously on the same device, which is an interesting thought as you go forward in terms of what you could do and how you could manage traffic, and how you could do that efficiently so that the MVNO was good for us and fit the consumers' needs. But we could manage our own network and traffic on our network in a more efficient way than we can today.

But today we have a limited MVNO. It doesn't do what ultimately we'd like it to do. But it's more than we had a couple of months ago. So it enhances the total value of our product. We can still save our customers tremendous amounts of money on their wireless bill every month.

And give them more services than they're currently getting because we can package that with the products that we have. And back to what I started the conversation with Vijay with. Our product bundle is superior in terms of its total capability to what others are providing in their marketplace. And so therefore we think we can grow our business.

And we look at our current mobile relationship, our MVNO as a way to do that. But that doesn't mean that there aren't opportunities going forward technologically that we will ultimately be able to take advantage of.

<Q - Benjamin Daniel Swinburne>: Just going back to your prepared remarks where you talked about the integration having been disruptive to the business and that you expect to quickly see benefits in customer growth and meaningful churn benefits. May be you guys could just spend a minute talking about where that disruption showed up in the 2018 financials and customer metrics? And so it would help us think about the improvements you should see as we head into 2019. And I don't know if it makes sense, but it'd also be worth hearing from you, really when you think this company is operating sort of full steam ahead for lack of a better phrase without the complexity of this integration. Is that literally January, is it a phase in over the course of the year? I just think helping without giving guidance, we can hear your enthusiasm for the business coming around the churn of the calendar, but putting maybe a little more specifics about it would be helpful?

<A - Thomas M. Rutledge>: Sure, Ben. Look I think the biggest impact on the financials in 2018 of the integration was in capital spending. And that ties into disruption in the operations too, so let me explain. We spent a lot of money to upgrade the network to all-digital. When we purchased Time Warner Cable and Bright House which you got to remember too was 3 times of the size – Charter's one quarter the size of the new company put together. And it had that new company and most of the acquisition footprint still had analog television on. And analog television is very fat, but it doesn't require set-top box.

And so it has two negative attributes to – three negative attributes to our ultimate strategy. One, it eats up channel spectrum that we ultimately want to use for high-speed data and IP video. It is an inferior picture and without a – and in order to fix it you have to put a set-top box on the customers' televisions which in itself is very disruptive.

So we decided that it was necessary to get the spectrum back for the long run benefit of the business even though it meant that we were going to have to go out to millions of customers and put new set-top boxes on analog outlets so that we could recover the spectrum. That all-digital process is completely contrary to our operating strategy which is to provide superior products packaged in an appropriate way that takes activity out of the business so that the overall customer relationship is less transaction intensive and therefore longer-lived.

And as a result of that virtuous from a consumer perspective, meaning the consumer gets the products they want with less activity. They last longer so there's more revenue per transaction. And it's a much more satisfying form of business, completely contrary to that is to go visit millions of customer houses and put digital set-top boxes that the consumers don't necessarily want on outlets that they may not even know they have.

So that was one – that capital to buy the set-top boxes, to roll the trucks and the disruption in the operating business and the impact that has on phone traffic, and service calls and therefore the ability to focus on sales, all that impacted both 2017 and 2018.

The other thing we did, because of the changing marketplace, we thought it was necessary to take our speeds up. We have a superior infrastructure almost everywhere we operate, and we need to make that superior infrastructure available to our customers in terms of its capability, and so we did the 1-gig upgrade across the entire footprint in a very short period of time.

That was also very capital intensive, and as a result of that also required a lot of activity in headends and hubs where we had to sort of re-plumb the architecture and reallocate the spectrum that we received back from the all-digital project to our high-speed data product.

And if you think about the way Time Warner operated as independent divisions for years and years, and Bright House, these were separately built companies that had separate architectures, in many cases 50 divisions at one point. And so all of that had to be re-architected electronically into a uniform environment.

We did the same thing with our call centers, sales centers, stores. We had multiple systems, building systems throughout the footprint in a very decentralized way and we built an infrastructure over top of all of that so that we could operate in a uniform way. That was also very disruptive because we were changing practices for our employees, which required retraining the whole workforce.

So essentially, all of that activity related to integration and to take a very decentralized set of assets and put them into a uniform set of assets in a very customer disruptive way, we'll be finished by the end of 2018. That doesn't mean there's no activity going forward in 2019. There is some, but the bulk of it in terms of its financial impact is behind us by the end of this year.

We still have to finish the all-digital project this quarter. We still have to finish the DOCSIS 3.1 1-gig rollout this quarter. We're still putting billing systems together this quarter. And the billing system integration will follow out a little bit into 2019, but by and large most of it's behind us. Particularly the customer facing disruption will be behind us by the end of this quarter.

And so, going forward, our ability to execute and just the pure financial impact of not having to spend all that capital on all those projects will terminate. And so, it's going to be a different operating model going forward both financially and from a physical execution perspective.

<A - Christopher L. Winfrey>: And what Tom was just describing, it feels like a year-and-a-half, two years now I've been talking about non-linear or choppier q-over-q. We've been turning a lot of knobs and making a lot of changes, some of which have an immediate positive impact. A good example of that'd be last year fourth quarter we started to roll out some of the streaming products which caused some lift.

On the other hand, at different stages through all the things that Tom just described, it had an impact on service transactions and churn. On the increment, that customer facing should go away in Q1. It doesn't – are we at full steam in Q1? No, because the impact of what we've been doing over the past two years will stick for a little bit. But, I don't think it'll be Q1, but I think that incremental activity goes down in Q1 and starts to look better through the year.

<A - Thomas M. Rutledge>: Well, the activity is going down already, it is, and churn is going down and as we would expect. So we see the metrics, the operating metrics and have confidence that the strategy will do what we think it will do.

<Q - Benjamin Daniel Swinburne>: Yeah. No, that's helpful. I think the questions from myself and others are all aiming at the same thing which is we're heading towards the payoff from this acquisition and I think people are wondering how much revenue growth benefits the CapEx stuff, I think it's pretty straightforward, but it sounds like there has been enough in the system going on that has impacted net ads may be even ARPU and we're sort of going to come out of that, so thank you for all that color. I appreciate it.

<Q - Mike McCormack>: So I'm interested in the comment we heard obviously from AT&T this week, pretty weak results at DIRECTV NOW and significant losses on the linear DIRECTV product. I suspect we'll see similar results from DISH as well.

But just maybe your view on the overall video landscape what you're seeing out there from over the top guys. Is that going to become a slowing threat do you think, and then clearly the losses at AT&T, is that an opportunity for you guys, have you taken some share there? Thanks.

<A - Thomas M. Rutledge>: Well, Mike, I've said all along that I thought that the shrinking of the satellite business would benefit our video business. But then you got these other trends as well. Including recently price increases in the virtual MVPD space, which probably impacted their results too. You know we have had competitors in the virtual MVPD space who've been selling product below cost it appears and even they had to admit that that was true and raised some of their rates, which will impact the overall competitive landscape.

I mean if you step up above it all and look at the whole marketplace, you still have the requirement to sell most must-have programming in fat packages and the content companies ensure through their contracts that retailers like us carry their product in big bundles.

We are not allowed to carry it without carrying other services similarly situated in the same packages or unless we don't want to carry it at all. And if you look at the product sets that most MVPDs have, they are similar.

So that price driver and the fact that content companies have been able to price through that puts an enormous burden on a lot of people who can't really afford television. And that affects the propensity to use passwords and other things of that nature to get product without paying for it and by the content companies going over the top without having an experience of being distributors. They have done that in a way without securing their content, which any distributor would theoretically do if they knew what they were doing. But that hasn't been the case. So you have free service all over the country through passwords. Yeah, and it's not always that easy to deal with, and you got to deal with relatives, so there are impediments to that as well, but the reality is television can be had fairly easily without paying for it.

And that's true of over-the-air TV as well. If you think about people charging retransmission fees for free over-the-air content, eventually that drives people to get antennas, so all of those forces are still out there.

On the other hand, satellite is very high priced single product with $100 kind of ARPUs in a world where the content is devalued. And so I think you'll see continued erosion of that business and some of that will shift to us. And the question is, when you look at all of that, what's the proportion of that that comes to us.

<Q - Mike McCormack>: We clearly share that concern on the password stuff. But maybe just one follow-up, Tom, just on the mobile stuff, I think there has been maybe somewhat of a dismissive attitude on the wireless carrier side. What kind of customers – yeah, I know it's early days, but what kind of customers are you picking up? Is it the value seekers? Is it prepaid migrations? Or is it really very high-quality customers? Thanks.

<A - Thomas M. Rutledge>: I can't describe that yet. I don't have enough information about the individual sales that we have. But look, this is a fully distributed product, mobile is. It's fully penetrated. And like us everybody has one and everybody wants one. So we think that mixing those products into our product set in the right proportions, in the right prices, that the whole marketplace is available to us.

<Q - Jason Boisvert Bazinet>: Just a question for Mr. Winfrey. You mentioned mobility would achieve profitability once it gets to scale. As you go through sort of all the variables, mix of customers and wholesale payments and handset revenue recognition, all that stuff, what's a reasonable bid-ask in terms of the low high – in terms of how many subs you think you need before it does reach profitability?

<A - Christopher L. Winfrey>: Thanks, Jason. Look the question of breakeven is somewhat academic because it has to be answered in the context of your growth rate. But absent additional growth costs, we expect the mobile business on a standalone basis without the benefits of cable, which we think are significant, we'd expect no growth and no benefits to cable to reach financial breakeven, around 2mm mobile lines, which would be when you take customer relationships into account, about 5% penetration of our Internet relationships. I don't want that to be a guidance of where we are going to be breakeven because the reality is we expect to be growing and continue to grow well beyond that.

<Q - Jason Boisvert Bazinet>: Okay.

<A - Christopher L. Winfrey>: I also think there's meaningful benefits to cable, but as an academic or analytical framework, that gives you a sense of where the business needs to be. But it also hopefully shows our confidence around the NPV of mobile. And frankly the level of risk that we are taking on, which I've expressed in the past is either going to be wildly profitable and very high NPV or relatively low cost option for the company. And we think it's going to work really well, both on the standalone basis as well as creating value for cable.

<Q - Brett Feldman>: Another wireless question. You were talking about your interest in the CBR spectrum, some of which will be available on a license basis. I'm curious if that is your desire to actually use and own the licensed spectrum because if that's case, obviously you have to shell out some dollars to gain access to it. So do you anticipate that that could be significant enough of an outlay that it might disrupt your capital returns program and then obviously a follow-up is, if you're going to gain access to more spectrum you have to build it out. How does that factor into your outlook for a material improvement in your CapEx going forward? Thanks.

<A - Thomas M. Rutledge>: Brett, first of all, we don't think that spectrum will be auctioned until 2020. And so from a timing perspective, that's probably the case. And one of the nice things about the way that auction will work is that it will be done on a county-by-county basis, which we were pleased to see. So that in terms of the need for that spectrum, the ability to bid on it in footprints that makes sense to us as conventional cable operators makes a lot of sense.

That said, there is also free spectrum available to us. And yes, there would be capital, if you – there would be cost if you bought spectrum, and there'd be capital associated with it. And back to Craig's question, it was really a question about if you had an MVNO business and had a certain cost level, and you had a technological solution that was more efficient than that, gave you a return so to speak, because you had less MVNO cost as a result of putting the capital out, that would be a good business opportunity.

And so when we evaluate whether we want to buy spectrum or whether we want to put capital or put radios in CBRS on our strand, or however we want to do the deployment or physically buy some location, we would look at the traffic and the cost of the MVNO and say to ourselves, what would the capital do from a cost perspective, if it was more efficient to spend the capital and reduce our expenditures on the MVNO that would be a good return on investment. So, we will look at that as it comes up.

<Q - John C. Hodulik>: First, you guys have been helpful talking about the decline in capital intensity we should see as you sort of come out of this integration tunnel. And then on the call here, I think the focus has been more on sort of the revenue impact. But if we could talk a little bit about the margin side, you've seen some margin improvement, but you still trail Comcast by about 300BPS. Should we see a corresponding sort of improving trend in terms of margin increases as we get through this integration cycle? Because we talked about the OpEx spending that goes along with all-digital and sort of duplicative cost. If you could give us a little bit more color there because it's not as evident as it is in the sort of the CapEx line?

And then over on the business side, Chris, your comments talking about the improving revenue trends, as we saw annualizing some of these – the repricing of the Time Warner Cable business segment. And I think you mentioned to have a site and cell backhaul there as playing a role in the deceleration we saw this year. If you could just give us a little color on sort of what's happening there? And sort of how it looks coming out of this repricing?

<A - Thomas M. Rutledge>: Okay, all right. So I'll start John with cost to serve and margin. As we come out of the integration, we pick up – we do – our margins – with all other things being equal, our margins would improve as a result of the fact that our churn is going to go down. And the reason our churn is going to go down, it's because our service is actually better. We're not visiting customers and creating more transactions that are necessary. Our repeat service call activity will go down, which means that there are less physical transactions per dollar of revenue or per customer relationship. If our churn goes down because our products work better and our relationship with our customer is better and more satisfying, the product mix is correct, the pricing and packaging is correct, then our churn goes down because the satisfaction goes up, that means that for the same dollar of revenue with a lower churn rate or the same customer count with a lower churn rate, you have less connects and less disconnects, which means you have less activity, which means you have lower cost.

So we have expectations that we will have significant reductions in cost to serve. And obviously going forward, technological change too and the way we put the company together from a scale perspective and our service infrastructure from a scale perspective, our ability to handle more customers more efficiently gets better through time. So we expect that we will be able to generate faster EBITDA growth than revenue growth as a result of the satisfaction that we create through the asset deployments that we've done over the last couple of years.

<A - Christopher L. Winfrey>: Years. Not just in 2019, but that carries through.

<A - Thomas M. Rutledge>: Yeah, yeah, so it's multiple years. Yes.

<A - Christopher L. Winfrey>: John, the question regarding enterprise, so rough order of magnitude that is $2.5B business and well over $600mm of it is in cell backhaul and Navisite which are flattish. That's the only point that we're bringing out there. So that there's a portion of it which naturally isn't occurring at the same pace to the rest of the business and the remainder is growing fast from a relationship standpoint, 15% PSU growth.

But the same thing that we've done in residential and that we have done in SMB, really for the past year we've been going to the market in a more aggressive way on pricing around whether it's fiber Internet access or Ethernet or Metro

Ethernet or voice. We have been more aggressive in the marketplace to go and try to compete and accelerate growth, which has worked, but we're doing that not only with better service but better pricing and that has an impact on your revenue growth rate as the existing base comes out of [ph] contracting license to the (57:35) new pricing and packaging on the enterprise. So same story, just a little later start and it's going to be more prolonged or slow in terms of where it bottoms out and returns to growth just given the nature of the contracts that exist in enterprise.

<A - Thomas M. Rutledge>: So there is one other thing I'd say about revenue growth to just finish that off is that we're selling in – we're going to be selling in mobile, which does have a higher revenue component to it and packaging going forward. And yet the consumer from a total cost to them perspective will be getting a savings. So we think that's a pretty interesting opportunity overall for us.