CMCSA - Comcast Corporation at UBS Global Media and Communications Conference

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Good morning and thank you all for coming to UBS's 36th annual media and telecommunications conference. My name is John Hodulik. I am the telecom, cable, and satellite analyst here at UBS. We are very pleased to announce our next speaker. We actually have two speakers today from Comcast. The first is Dave Watson, the EVP of Operations. Dave's responsibilities include sales, marketing, high-speed Internet, voice, the Company's four operating divisions, and advertising sales.

Following Dave will be John Schanz, the EVP of Engineering and Technical Operations. John oversees all engineering and network operations and leads the Company's technology strategy. Dave and John are going to speak probably for about 40, 45 minutes and then we will have some time for Q&A.

So with that, let me turn things over to Dave.

Dave Watson - Comcast Corporation - EVP of Operations

Thank you, John. Let's see if we can start off with here of course the Safe Harbor statement that's reminds everybody about the presentation and perhaps some forward-looking statements subject to certain risks and uncertainties.

All right, so, John and I are going to talk today about the competitive focus that we have and really the mission around delivering the best overall customer experience that we can regardless of any circumstances there might be and I think our strategy has not shifted really much at all. I think it serves us -- or has served us very well and will continue to. And really if you break it down, there are three things that we are focusing on.

One is the continued enhancements of our product lines so both in video, high-speed data and now the voice independent and as they come together. Second thing is the evolution of our packaging approach with competition and also independent ways of introducing packages that include some of the great strengths of our products but also helps us address today's economic times. The third thing is that post-consolidation, post-rollout of the phone, it really has been I think a very good time for us to focus on the experience and service and reliability.

So I will talk a little bit about the development of the workforce, the operational approach that we have to manage this terrific network that we have that I think is the envy of the competition and many tools and systems that we are rolling out right now to help us not only become more efficient but also I think just deliver a better experience for our customers.

So let's start with video. In video, our strategy has been to evolve the product line to make sure that the customers have the very best-in-class video experience. So growing the products very nicely, you look at the mix ending a little over 24.4 million overall video customers. And we have of that very high video digital penetration just about 69% and within that 16.8 million
digital customers, there is about 7.3 million of those customers that we consider advanced customers that have high-definition
and/or DVR.

So if you look at what are the implications of that, we think it’s a stickier situation with customers that have advanced products
within it but it also helps drive healthy ARPU if you look at the difference between the average video household in the 60s
compared to an $80 average advanced video household. And so I think it helps us competitively. It also helps us financially.

And so starting off with On Demand, continued success story for us and a real point of differentiation. A lot of people talk about
On Demand, but I think we were in their early. We have not waited and really taken our time on this thing. It’s been an aggressive
approach every year in terms of enhancing the catalog of On Demand. So you look at where we started since 2004 to where
we are right now, pretty incredible progress that over almost 300 million views that we had in October. And if you go back to
2004 to over 9 billion views since that point.

So in that time, we have really focused on the categories. Now the key drivers of this continue to be movies, music, television
shows, and we treat each one of these categories almost like a channel. We optimize the viewing within it, so not a lot of filler
that you’re going to see even though we have a very healthy over 10,000 choices in our On Demand catalog. An incredible
amount of options for customers to choose from but within that, they are getting some terrific choices.

So again, customers have told us over and over again a real point of differentiation. In any of the unfortunate moments when
there’s been some exits, customers have left us, we asked them what are the things you miss the most? On Demand is certainly
at the very top of the list.

And so also a focus within the video category is high-definition and high definition I think we’ve also taken a leadership role.
The customers have told us is we need to provide the most relevant, important live HD content and most specifically sports
and hit television shows. But beyond that, customers very much are buy off on the notion that we have introduced and that’s
the great HD choice.

So today we deliver throughout almost all of our digital footprint where we deliver HD over 1000 HD choices. And within that
are the most relevant, important live shows, all the sports content that people want, hit television shows that are available in
HD, we carry them. And so we have the best of linear HD channels but we also follow that up with terrific HD content that is
available on demand.

So if you break it down, you ask customers, they will say they want their sports stuff lives, television shows live, but they will say
movies, music videos, children’s programming, everything else in HD very much they would like on their schedule. So on their
schedule absolutely is I think a strong point for us and another good sign that we see our competition again to talk about
choices versus channels, that’s a good sign. So we know we have them following us, which I think is a very good thing.

And so the last thing that’s going to help drive HD and the video category, many of you have heard about this initiative of going
all-digital and the purpose of this is to recapture bandwidth so we can continue to drive further HD choices, increase speeds
for customers as we go into wideband, DOCSIS 3.0, as we continue to rollout further ethnic programming for customers. And
so John will go into a little bit more detail later but the all-digital -- we are in a great position to pull this off right now to fuel
the further bandwidth expansion primarily because we are almost 70% digitally penetrated at this point.

We have also developed a $35 digital to analog adapter, a very small device, very unobtrusive that customers can put in that
really helps solve the additional outlet issue within the home. So it is -- the time is right. We’ve begun the process. Many of our
markets are poised to get going with this in terms of the all-digital approach.

We think that this is a digital upgrade looking at it from the customer standpoint, you look at the right side of this chart. I talked
about expansion of the HD choices and all the other things that they have. We have not spent as much time talking about some
of the operational benefits, but there are some that we think are very important and when you take an analog video system
and you digitize it, then you begin to capture some operational benefits that fall into the category of trapping. You don't have to trap as much. You don't role as many trucks as we found in Chicago where we have gone; big chunks of Chicago has already gone all digital.

So there are some really nice operational benefits as well once we've completed this. So we will take our time. We are going to start the process in a handful of markets but again, we think from a customer standpoint that we are going to come in and treat this as an upgrade. You're going to get faster high speed data speeds. You're going to get more HD content and then there's going to be more ethnic content available. So once the process begins, there will be some challenges along the way for sure. But the customer also will be able to get some extra channels in addition to it once the upgrade is finished, so we are optimistic about this, the upgrade experience.

Let me switch gears to high-speed data and we have always felt that it was important to continue to drive faster speeds, feet speed matters when you are in the high-speed data business. You look at where we are right now, a leader in the nation in terms of residential high-speed data 14.7 million customers. And if you take a look at the line through the years starting in Q3 '06 to where we are right now, I feel very good about the source of business and where it's coming from. Obviously starting back in the left side of the chart that we were giving a fair amount of business even back then in terms of dial-up, but I think as we are seeing, the new dial-up is DSL.

So we are now getting a fair amount of our business, 66% coming from the DSL ranks, very difficult I think if you have ubiquitous, very fast high-speed data product that covers across your footprint. We are not going to let our customers guess what kind of speed you're going to get where you reside to the head end. It's consistent across the board and we're going to continue to expand the differences.

And so if you look at -- once we go wideband and deliver 3.0, you're going to really see some further extensions of our competitive advantages in high-speed data as we introduce new through the end of the year in about 10 markets the extreme speeds of 50 megabits. So we talked about last year. We've rolled on the other end of the spectrum an economy tier for 2495 and that 768 speed. And then performance speed, our flagship product, most of our customers are at 12/2. And the Blast! for $10 more you get those speeds of 16/2. And already -- a real focus and we have seen a balance whatever that we have had on the economy tier that we more than made up for in terms of selling on the Blast! side.

Just one data point; one market doesn't make the entire company, but San Francisco sells in so new customers are calling in -- about 20% of the time they are taking the Blast! tier for $10 more not promoted at all. So a real focus for us going forward will be looking at the flagship and selling in once we get the opportunity the Blast! tier and then where if customers really want the very best in the marketplace, then of course we will sell them the extreme.

So just to put it in perspective, I'm going to show you a couple of spots that I think help to illustrate how we dimensionalized competition. DSL is a new dial-up, so number one. We put a real couple of figures to that. And the second thing is how are we going to talk about us as we go forward and these very fast extreme speeds?

So that was that, why don't we run a couple of spots? Thanks.

(Video Playing)

The shaving part is creepy, but the rest of it is pretty good. So let's switch gears then to phone. You know, the phone has been primarily a real driver for packaging, so I will talk about in one second. It's helped us in the triple play. We've done very nice in terms of the growth; already the nation's fourth-largest telephone company residentially and now with over 6 million customers in the short period of time. We started later than everybody because of what we bought with AT&T was not the right infrastructure. We've taken our time. We felt like we priced the product at a reasonable price point to have unlimited usage sub $40.
And our penetration, I think there’s still upside. No question that this product perhaps across the other ones you’ve heard Glenn Britt talk about earlier and others where you have a slowdown in terms of incoming calls into us in terms of less moving situations for us to handle through our call centers. Then you are going to have less opportunities to sell a phone.

And so having said that though, we are at 13% penetration, still feel very confident over time to be able to get to that 20%, 25% overall penetration. Certainly we’d like a few more telephone calls to the call centers. Having said that, we are not disappointed terribly with this. And in particular, this I think has been such a price focus for us and you are going to begin to see us integrate the product as we’ve done with the other lines, high-speed data and video into each other. Just an example of, you see it on color line ID into the television set. Some of you may have seen that your cable operator. This is new for us. It really is a great feature.

If you have our phone service, you have video from us -- I was with some of my friends recently on a little outing and I’ve heard phrases like, well, when I saw thing come up, I’m definitely not answering that phone call. So they are not going to answer it anyway, but they’re definitely not going to answer it now. So with that, you’d be able to get all of your messages through the SmartZone, your email.

And then through the enhanced cordless telephone -- I will be rolling that out in the first quarter of next year -- you are going to be able to on one handset get a lot of the benefits that we’ve developed over time, the IT side of things, your email, search capability on an enhanced cordless telephone. So you will be able to sit there and take care of your voice needs but you also will be able to take care of some of your data needs as well.

And so I mentioned packaging. We’ve just introduced within the last week a high definition tier of triple play which we’ve begun to put in. We think a real strategic advantage is the simplicity, the ease of packaging of high definition into it that you are going to be able to get the great benefits of getting all things very simply from us. First time in, if you want to add on the products, you get a fair deal. It rolls to another price point. So there’s real clarity in terms of what you’re getting up front, what you will roll too.

And so we have introduced high-definition. That will be included in these packages, good/better/best, starting at $115 on up to $180. And so the $180 includes a DVR. And then the middle tier, HD Plus, includes a higher speed, includes the Blast! tier. And so you begin to get some of the benefits of wideband and high-definition included in these tiers.

So we are going to continue to innovate. We are going to continue to evolve our packaging and make sure that we are focusing on the real strengths of our product catalog. And so we are pleased to announce that. We are already getting some early stage, very early stage good results.

But in addition to that, the evolution of triple play packaging and marketing must also and in particular now include good economic options for customers that are demanding better value and perhaps a lower price point in addition. So we’ve already had both the local with more phone product at $24.95. We introduced that a while ago and we’ve also introduced the slower speed data product.

So we’ve just introduced a video, economy video product for under $30. You get 50 channels and you get music channels. You get some of the benefits of the digital experience but you don’t get the full breadth of the basic video package. So what we’re able to do with this is be able to get everyday price points if needed within a marketplace so you can get $79.95 or you can get to sub $110 every day. You could promote that if we want to still at $99 if we choose.

So we standardized this approach throughout the country. Every one of our markets now has all of the economy, video and data and phone products. It gives us a lot of flexibility whether its acquisition-oriented or its retention, helping customers perhaps that call us and say times are a little tough, I need some help versus letting that customer leave a product category, we are going to make sure we try to keep them in all their products. And these triple play offerings will help us do that.
Okay. So in terms of the real new kid on the block is the business side which we are real pleased with the growth. We are really taking the time -- 2007 was a building year getting the new modems out and hiring over 2000 people. Over half of those are sales representatives. It's -- the target audience again five million small businesses. Our sweet spot is less than 20 employees. And again the goal I think is modest going up against principally the telephone company. And our focus is to give that business, a sales rep, give them local care and attention and so far so good.

Let me show you and add more ad. Just introduced this. This came out last week and shows I think the sharp competitive focus. We are going to be able to save these customers money in particular now in a tough economy. I think the small business side is even here -- you are certainly going to see some growth.

(Video Playing)

So sharp competitive focus. If you think about the voice side, we have been -- we have been selling data applications for some time to small businesses but we really have only had the eight-line phone [ENTA], the eight-line modem available across our entire footprint. That really only happened recently. So we've had it in certain markets and so we take a look at the annualized revenue over $600 million and then the revenue growth over 40%. And so we are optimistic that for their small business prospects. We have the building blocks in place, a great group of salespeople that are excited about the opportunities for us. And so I think this is going to be a growth part of our business for years to come.

All right, so we talked about the need to improve service. One piece of this, you ask customers what do you want from a subscription recurring revenue service provider? They say a couple of things and not surprisingly. It starts with the thing that John will talk about is they want reliability. That is job one. They just want their products to work. So in a competitive environment, a tough environment now more than ever, that has to be the case.

But when things don't work and the amount of transactions that we do and we complete over 360 million transactions, telephone calls, over 40 million to 45 million truck rolls on an annual basis, when that kind of activity happens and we are not going to have perfection, then you have to make sure that you are on your game, that you have a motivated group and we have a terrific workforce out there.

I think the thing that has been lacking has been the standardized tools and systems that have given visibility into the deeper, harder video issues that we've had. And so versus us hearing about it perhaps for the first time in the call centers, we are proactively addressing all things not just IP, data, but also video.

So if you think about going back to the all-digital side of things, one of the operating benefits of digital -- going all-digital is you think about having a digital device in every home. Over time that will help us capture better information and we will be able to proactively manage this network very differently than we have in the past.

So we are starting with the training and the development of our people. We've hired a lot of people, getting prepared for triple play over the last couple of years. And so now is the time to make sure that we activate that trained workforce and giving them in particular the best tools. Tools, handheld devices and so we will start the year with all of our systems having hand-held devices that can automatically track job orders throughout the day. So versus our technicians having to call in repeatedly and/or customers that are calling and saying where's my tech, we will be able to -- they will be able to log on, close out orders automatically, and being able to give the next job based on geographic location in a much more efficient manner than what we were doing historically.

So we think this is one of those rare moments where we will become more efficient, at the same time raising the bar of the experience once customers call us. They are going to get a knowledgeable person that has the right information, that's effective in solving the problems. And so we will look at -- and in particular and you ask them in terms of the most bothersome thing is that any kind of a repeat situation -- you had a service call, you had an installation and somebody had to come out in pretty short order. That's not a great experience. And so we are really hustling to make sure that we solve repeats.
We are seeing some benefits. If you look at the bottom of the chart, so the amount of time that customers are calling us, we are down 4%. Overall truck service truck rolls down 6%. Repeats, the amount of time customers call us back within 30 days are down 6%. And overall satisfaction beginning to climb up, which is positive.

So we think in particular now we're going to continue to invest in the experience in tools and systems, standardization to make sure that our people are equipped with being able to effectively solve problems when they have them -- and they will have them.

So with that, I'm going to talk about things with John and really focusing on delivering the best customers experience, but again products, the customer focus and now network reliability, which John is going to go into. Thank you very much.

John Schanz - Comcast Corporation - EVP of National Engineering and Technical Operations

Thank you, Dave. So one of the things that I thought I would do is very rapidly give you a mini-tour here of the engine room and talk about the network and reliability as well as some of the technologies that Dave highlighted. It looks like we went to the beginning of the slide deck, so if you want to just hang on one second I will get us there. For those of you that missed it -- at least we missed the spots again.

So let's first talk about the building blocks and how we think about the network. Clearly as Dave points out, reliability is table stakes. It's foundational. I think what we are going to talk about is just how much we are raising the bar there and intensifying the effort around that. Reliability clearly has a number of components. It's a word that we bring as a holistic word, but it talks about availability of the service. Is it there when the customer wants it?

The performance of the service, is the service performing at the expectation of the customer, not just is it available? This is something that we spent a lot of time on in the last couple of years which I will talk about.

The second thing is around infrastructure and the capabilities of the network; cost-effectively scaling the network infrastructure as well as enabling new services and experiences that Dave talked about. This building block is obviously topped off with the products that Dave just took us through and those are the areas where we are differentiated to compete. And given that Dave is focused on all those products, what I want to talk about is the foundation of superior products starting with reliability and working into the network infrastructure.

So if I could use a metaphor of looking a little bit in the rearview mirror and also looking through the windshield because we have been spending a lot of time on this in the last couple of years. So let's talk a little bit about through the rearview mirror.

Some of the things that we've been focused on is our HFC node health. So these are a fiber-optic nodes that are deployed into the neighborhoods. There's over 115,000 of these fiber-optic nodes and they are so important because they deliver all services to all customers. And in fact, these nodes and the availability or up time of these nodes is something that clearly the Company has spent time on for a very long time. But where we have raised the stakes over the last couple of years is to look at the performance of those nodes, to understand impaired conditions that in fact are indicative of the types of outages or customer issues that we might see in the near future and to create a scoring metric around these nodes to know that they are at peak performance or they are starting to degrade and for us to notice that and take action proactively before it impacts a customer or a customer's experience.

So this is an area that we spent the last couple of years very, very focused on with these fiber nodes in the network infrastructure.

The second thing we did is took advantage of a unique opportunity. With our high-speed data service and our voice service, we actually had over 16 million devices on customer prem that would tell us how the network was performing looking back into the network. Some of the things that we've been focused on is our HFC node health. So these are a fiber-optic nodes that are deployed into the neighborhoods.
that the devices on the site were actually seeing looking back into the network. This is where we spent a lot of time over the last couple of years.

Now if I transition into the windshield, where are we heading? Dave touched on this a little bit. It’s to take that same approach, that same thinking, that same way to go into performance and manage the video service much more proactively. So in fact what we are doing is we have been starting this year and we will continue next year developing video probes strategically placed across the network infrastructure. And these probes will allow us to isolate customer issues long before customers experience these issues by doing the same level of scrutiny that we've used in the high-speed data and in the voice service.

We are also deploying tools to enhance our ability to monitor what a set top box is seeing when it looks back into the network much like we did with the high-speed data service, much like we have done with the voice service.

These tools or probes that will be deployed into the infrastructure are being leveraged across the entire operation. They are the very same probes and tools that will be used in our local management centers or our national NOCs. They will also be used to create a better customer experience to our call centers when folks call in to report an issue.

So let’s look in the rearview mirror and say okay, that’s nice. You’ve been up to a couple of years but what’s actually happened? How have you improved? When I look at these fiber-optic nodes which are so important to deliver all services to all customers, by scrutinizing and developing a higher level of performance criteria and raising the bar, what we’ve done over the last couple of years has increased the performance of these optical nodes from a reliability standpoint over 35%.

This is an area that the entire company has spent a lot of time in the last couple of years while we have been growing and scaling the services, making sure these notes aren’t just up and operational but they are operating at absolute peak performance with some of the impairments that you might see in an optical environment.

Secondly as approved statement in the rearview mirror is we took focus on the voice service. And if you look since 2005, we have significantly improved and basically decreased the number of customer-reported troubles with the voice service 85% since 2005. This is a really important statement in that I believe that we are currently operating at Telco standards in a lot of the markets where we offer the voice service and a lot of the work around the nodes, a lot of the work around the voice service that we did in terms of hardening the network.

I believe it’s not the only but it’s one of the major underpinnings and some of the operational efficiencies and customer experiences that Dave described in decreasing contract rates, decreasing truck rolls and increasing customer satisfaction. So this is one of the contributors in fact to that success over the last couple of years.

Now looking forward through the windshield, what are the types of things that we’re doing with these video probes? This graphic makes a simple representation of the network infrastructure with a global backbone that feeds into regional networks that feed the fiber nodes in the neighborhoods and eventually to the houses. You can see what we’re doing there is deploying video probes which are a very small piece of software or capability within the network infrastructure so that we can rapidly identify video issues that may be causing impairments in a customer’s video experience.

So these probes aren’t particularly focused at whether the service is up or down. We have instrumentation and have had that for quite some time. These are probes or capabilities that allow us to examine the video experience at a much more granular level. It also allows us to isolate where that problem might be occurring. And you can see these video probes will be strategically placed across the network infrastructure. They will be in our set top boxes that are in customers’ homes such that they can report back the type of experience or the type of capability or issues they might be seeing from the network into that residence. And these probes are being leveraged into our operation for efficiencies as well as into the call center for a better experience with customers.
One of the features of these probes to show you what can happen in a call center is what's called the proximity check. If a customer has called in and has talked about a particular digital interactive -- can't get access to On Demand, that one of our care agents using these tools can actually run approximately checks to look at that particular customer's home and understand if there's a signal level issue with the network in that particular area of the service, the services are down, perhaps in this case they are unable to receive On Demand videos.

And you can see by this proximity check that all the neighboring homes within 750 feet do not have this very same problem, and this is one of the tool capabilities that will allow us to have not only a more efficient operations because with this kind of output, we realize this is likely an in-home issue where you dispatch a technician to the home. Whereas if you had a lot of yellow bubbles around that home, perhaps that's a network issue in that particular street and you do a line technician dispatch. It's also a better customer experience in that we can get to those first-time fix capabilities that Dave talked about.

Now let's move to the infrastructure and let's talk first a little bit about scale of the network that we have in place today. There's nearly 600,000 plant route miles in the network. To give you some sense of what that is in distance, it would wrap around the Earth nearly 24 times; 115,000 fiber-optic nodes that are deployed into the neighborhoods and around the customers. Triple-play ready homes passed, I think this is the one metric to Dave's comment about the envy of our network is in fact that it's probably the only network that I know of in the world that has 46 million homes capable of scale, video, voice, and data today.

Now let's talk about the technology underneath that scale and clearly to drive these kinds of capabilities, there's a fair amount of technology. We are one of the first to deploy 40 gigabit integrated optics into the core infrastructure of the network. You might have read earlier this year at an Internet engineering task force, we were the first company to demonstrate 100 gigabit optics providing Internet access for that conference in Philadelphia in March of this year.

We have a very large scaled SIP infrastructure that we use for routing phone calls in the least cost method. The network is capable of not only IP version 4 but also IP version 6, which brings a whole lot more address space to the environment as there are more and more IP addressable devices in the infrastructure. The network has QOS-based video, voice, and data capabilities, and also a self-healing architecture.

Now all the scale and technology is very interesting but let's talk about what this network delivers on a typical day. This is on an average day, it delivers over 14 million On Demand views, as Dave pointed out. The network today serves 1.5 petabytes of IP-sourced video to our subscribers. The network nearly 60 million emails, 100 million web pages, nearly 100 million phone calls, nearly three million voice mails. So this network delivers an incredible account of services and capabilities today to our customers.

Now one of the things that folks always talk about is capacity, so I wanted to kind of take that particular area head on and talk about the multiple tools that we have to increase capacity and assign that capacity to the growing services and new product needs. The four tools that we have talked about and continue to talk about are the tools around node splits, digital optimization, going all digital, which Dave talked about which I will also hone in on, and switched digital video.

First node splits. This has been a tool that is very important to the infrastructure, has been for a number of years. We continue to use that for capital efficiency. It's an approach that allows us to provide incremental capacity where and when we need it surgically into the areas of RGU growth.

There are three types of node splits, one is logical. One is modular. One is physical. Logical is nothing more than software configuration within one of these fiber-optic nodes. Modular would look like adding a card into an existing chassis. And a physical node slip would be taking fiber deeper into the infrastructure and segmenting to a whole other physical fiber-optic node. This tool is a tool that we continue to use for capital efficiency.
Now on digital optimization, this is an area that we have begun to exploit as well and this is around advanced video encoding and actually acquiring programming feeds or the new video signals from the source digitally. This provides an improved video experience for our customers and a higher level of video quality, and this is something that we've also done.

Now we talk about all-digital, which Dave touched on this. An all-digital in my mind has had three phases. The first phase is to take the analog broadcast channels and to replicate them in a digital format. We call this ADS and this phase of the all-digital infrastructure is complete. It started years ago and you do that for a number of reasons. You do that for a quality video experience. You'd also do that to improve some of your economics around the video service.

The second phase, which is the phase that we’ve talked about and have recently announced, is to groom and take large analog broadcast channel blocks and reduce those to a smaller analog channel broadcast. And in fact, then repurpose those slots or that bandwidth to expanding digital services and more enhanced services. That phase is the phase that we've just begun this year with some of the early testing and rollout of devices that Dave talked about. And we will continue to do that over the next couple of years.

Phase 3 in my mind is a flexible future decision and that means all digital is how much all-digital? That skinny analog channel lineup which depending on which particular geography is around 25 channels, does that get thinner or does that go completely to all-digital? That is a future decision that we don't have to make until we get to that point. But there's even more ability to be flexible on the all-digital side.

The last thing that is our fourth tool in the toolkit today is switched digital video and switched digital video is a capability where you groom broadcast channels either into a broadcast pool or into a switched pool. And when a customer calls for a particular channel that is in a switched pool, that's when that channel is put onto the infrastructure and allowed to be transmitted into the home.

If a second customer joins that very same channel, they join that very same broadcast instead of a unique one. This will enable even more HD than beyond the types of capabilities I talked about earlier.

Now what does that mean in terms of capacity? Up top would be a little bit in the rearview mirror and what you see is a little more than 50% of our bandwidth has been allocated around analog broadcast spectrum. And after you begin to apply these tools, what you start to see happening on the bottom graph is in fact where we are heading and you can see the analog channel lineup becomes a little less than 25% of the total bandwidth, creating available spectrum 50% or north of 50% for expanding existing services or adding new advanced services into that infrastructure.

So it's a very flexible environment in terms of how we allocate that bandwidth to various digital services, whether it's high-speed data, whether it's On Demand services, whether it's more HD channels. We have extreme flexibility with how and when and where to do that.

Now how might we might use a lot of that bandwidth and innovation is in fact around a few technologies that I just wanted to touch on here. The first one is DOCSIS 3.0 which is a technology in the access side of our network that is allowing for a lot of the extreme High Speed data products that Dave described. This is a technology that as it is even being deployed today is capable of north of 100 megabits a second but we talk about today deploying an extreme product which is 50 megabits. This is done through bonding multiple channels on that bandwidth map that I described earlier.

Tru2Way is something that we announced at CES earlier this year, and it standardizes the software infrastructure around the set top boxes. And if you have been following some of the recent press here in fall, we have in fact have available in the retail markets in Chicago and Denver high-def Tru2Way capable TVs in a number of retail outlets provided by Panasonic, and this in fact has a set top box capability embedded in it. It is the beginning of the Tru2Way infrastructure and capabilities that we announced earlier this year. It will clearly allow for a common experience across different the platforms, whether you are a traditional Motorola environment or an [SA] environment, and a lot more robust in interactive applications.
The RNG boxes are our next-generation set-top boxes and these are an open platform, basically a reference model of hardware much like the cable modem environment of years gone by. They are backward compatible with the existing infrastructure. It will create a multivendor environment for more efficient capital markets on set-top boxes and a number of advanced features in these advanced boxes will be enabled through more CPU, more memory MPEG-4 capabilities.

Project Infinity is really our progressive vision and project to have video anywhere on any device at any time and this is a number of areas to enable all these HD choices in the On Demand complex that Dave talked about with 1000 HD choices available at any minute in one of our systems today. But scaling that beyond into infinite choice and what we call the library server where in fact we will make use of this core network infrastructure such that tail assets that are not readily viewed across the footprints everywhere all the time can be pulled across the backbone into a local infrastructure through a Content Delivery Network.

SIP, which stands for Session Initiation Protocol, this is a software capability that we have rolled out at scale to perform least cost routing in our voice service. It's probably the largest SIP least cost routing infrastructure that I know of. In fact, and this allows us to deliver much more improved economics in the voice service. But more importantly, this is an infrastructure that is in fact foundational for more application experiences across all the products, video, voice, and data, that would be SIP-enabled.

In effect, you have an evolution here. The network is clearly hardened and hardened even more. We have raised stakes, but we are evolving to more software-enabled services across this network infrastructure.

So just to summarize, clearly world-class reliability and we've raised the stakes there with the types of things that we're doing proactively and with our toolsets enabling a better experience for customers. And actually maintaining the network above and beyond up/down condition focused on performance and experiences that may impair a customer's experience in the future.

A powerful network in place today as I mentioned with 46 million homes already triple-play capable in terms of our infrastructure, which I think is the envy of a lot of our competitors. And unmatched flexibility and capacity and capabilities for the future.

So with that, I think we're going to take a few of your questions.

**Questions and Answers**

**John Hodulik** - UBS - Analyst

Great. Thanks, John. Thanks, Dave. We have about 10 minutes for Q&A and I think there are some microphones in the back if anybody in the audience has a question.

Let me just lead off with first I guess for Dave, I thought it was interesting the new packages that you had up on the slides. I guess first -- and this relates to the topics that we spoke about with Time Warner Cable previously. Can you talk a little about what you are seeing in terms of the economy and how that has affected your business over the last couple of months? Then were these packages rolled out a response to that and how broadly and what was the timing and maybe some of the initial response you are getting to them?

**Dave Watson** - Comcast Corporation - EVP of Operations

Thanks, John. We haven't said anything post the third quarter and I won't talk about any trending or any information beyond that. But having said that, even on that call, we said that we had seen a slowdown in terms of the amount of calls that were coming in. We are seeing pressure in the advertising business, seen pressure in Pay-per-View. So those things obviously have not shifted.
So you look at the CDV business, you are taking less telephone calls into your call centers because people just aren't moving as much. You've got less sales pitches that you have, less opportunities to talk about your other products other than video.

So those conditions remain. We're still a little bit of unchartered water. But I do think it's important directly to the packaging. We had the economy data and economy voice out well before this. This is something that we saw partially driven competitively, partially just trying to make sure that we give every section of the service areas that we provide a reason to think about Comcast, anybody want to start off at a package and then move north from there.

So this has been a very active strategy for some time and not directly related to this. But the fact that we have these in place obviously I think the issue will be we may use them a little bit more than what we would have. And I think again, it will come in some cases -- there will be some -- you will see maybe even mixing and matching our core video offer with two of the economy products that could be available. We'll do that in acquisition mode and then also customers that just call us. We're getting a lot of telephone calls right now saying look, this is a tough time and what can you do?

So our goal is to reasonably work with customers and try to address some of their issues and so these packages I think will serve us well under these conditions.

John Hodulik - UBS - Analyst

Great, there's a question here in the middle of the room.

Unidentified Audience Member

Just noting that the Clearwire investment closed a week or so ago, two weeks ago. Looking out five years from now, to what degree do you see wireless as part of the cable business? For those who are not in some sort of -- don't have some sort of Wi-Fi capacity or investment, how will they be competitively five to seven years from now? Is that something that you have -- I know it is still kind of somewhat hard to tell. But is there a sense that that's really, really important right now for a cable company to be really competitive in the future?

Dave Watson - Comcast Corporation - EVP of Operations

Well, it's really -- it's virtually impossible to go out that far. But I do think within the next handful of years our approach around Clearwire Wireless is to extend our existing products and to enable them to become wireless. In particular if you had to pick one would be the Data Prop, not to say that other applications won't take place such as video or seamless voice experience. But the one thing that we are probably most focused on is anywhere data and that whether you get a terrific experience in home and then being able to count on a terrific higher-speed experience outside of that.

So our focus has been and continues to be that and certainly we will keep our eye on other alternative wireless technologies and certainly look at our friends in the Northeast and see how they develop Wi-Fi and pay close attention to it. But I think cable from a defensive standpoint -- and that's why we did this deal with Clearwire -- is important to protect your high-speed customers with an alternative, a high-speed wireless alternative.

So that's why we are in this deal and that's why we will be in short order starting next year will be rolling some early markets out in partnership with that JV.
John Hodulik - UBS - Analyst

I've got another one not sure if this is for -- we will go over here in a second -- for John or Dave. From a -- it might be for you, John. What are the main sort of technology or spending focuses for '09? Where are the real sort of priorities from a capital standpoint? And then sort of what are areas, maybe CPE being one of them that you think that you will be able to spend less?

John Schanz - Comcast Corporation - EVP of National Engineering and Technical Operations

Yes, so just maybe all start off with just a couple of comments. One is we continue to work towards capital spending as a percent of revenue to decline over time and a lot of the things that I talked about are incorporated into that thinking. But I would say the three areas of major spend that I see that are probably inflated when compared to all of the other pieces within a large capital spend, one is clearly around DOCSIS 3.0 and our high-speed data work, and that in fact is in the existing budgets and thinking that we have.

The second is around all digital and moving the type of capacity and capability that we described today. The third is improvements around customer service and the types of tools and infrastructure that I gave you a glimpse of today to not only allow us to basically raise the stakes around reliability and video experiences, but in fact to provide a better customer experience when someone calls the call center. In fact, they may have an issue that we have not detected. We want to detect as many of them through our tools and process proactively.

But once they do call us, then we want to make sure that we provide a better experience as well through our tools and capabilities that we began rolling out a few years ago and we are going to continue to rollouts more directly in the video space here in 2009.

Dave Watson - Comcast Corporation - EVP of Operations

I think it’s an important point. John said even the other one, even bandwidth expansion, our focus, Comcast, as John kind of walked everyone through, all digital, even with the all digital efforts that we have, our CapEx spending as a percent of revenue declining I think is positive.

Unidentified Audience Member

Just on the Tru2Way, I was just trying to get a sense -- and I know it’s early on. If there's any -- you've got any sense in the Denver and Chicago markets what kind of -- what the response has been thus far or what the sales pick up has been?

Dave Watson - Comcast Corporation - EVP of Operations

Yes, so it's obviously very, very early and it's a brand-new capability unlike anything that I think the industry has seen where you walk into a retail store, you buy a high death flatscreen TV and embedded in this set top box capabilities where in fact you just provision a coax cable to the back of the TV and all of the experiences and things that you would normally enjoy through a set-top are embedded. But more importantly, the experience is even more advanced because the software that we built to run in the Tru2Way environment is a Java-based guide. So it is the first entree into our new video experience.

And in Chicago and in Denver, what I would say that we've seen in terms of customer feedback in a lot of where I look is the blogs, where they kind of write some things unfiltered, unedited. It's been very, very positive in terms of the picture and picture quality, the experience with the guide, the simplicity of mounting it on the walls. So I think the experience early that I've seen has been very, very positive.
John Hodulik - UBS - Analyst

Just on TiVo, I was just curious in terms of introducing it in Chicago, I think you guys have said first quarter, first part of next year. Just trying to get an idea if you will be doing anything different there than you did in the Boston market as far as selling it, pitching it, anything different there?

Dave Watson - Comcast Corporation - EVP of Operations

No, it will be very similar to Boston. So the goal there is to give customers a choice. It’s a very simple thing. We learned early on that customers wanted the ease and simplicity of one box, not having to worry about a couple of different devices. And so we will give the customer the choice and it has been very effective in Boston. So that’s why we are going to be rolling it out in some of the larger markets next year. But it is the same value proposition, a couple of dollars more and you can elect to get the TiVo capabilities.

John Hodulik - UBS - Analyst

Just lastly, have you indicated any other markets for TiVo besides Chicago next year?

John Schanz - Comcast Corporation - EVP of National Engineering and Technical Operations

None announced, not yet. We haven’t announced. I think there will be a couple more markets though that we will be rolling out early part of next year.

John Hodulik - UBS - Analyst

Okay. I think we have time for one more question.

Unidentified Audience Member

Can you give us a -- I may have missed, I don’t think I did -- I ducked out for two minutes, but can you give us a U-verse and FiOS update? And also give us the numbers again in terms of coverage of homes FiOS versus U-verse. And is Qwest doing anything?

Dave Watson - Comcast Corporation - EVP of Operations

Yes, the coverage right now, they are between -- we are overbuilt functionally by the end of this year 20%, 25% and we expect that to go anywhere as low as 10 additional points, probably closer to 15 points next year.

Unidentified Audience Member

(Inaudible question - microphone inaccessible)

Dave Watson - Comcast Corporation - EVP of Operations

Total, the two, between the two. So it’s -- I think there is a little bit more activity on the AT&T side versus just because of some of the market there later and some of the larger markets that they have. So it’s -- from a telephone over builder perspective, it’s -- we’ve obviously seen it. We competed against it, understand it and a lot of things that we’ve talked about today are -- will
help us in terms of innovation, in terms of improving service, improving choice, and packaging. All these things are directly connected to the competitive strategy.

John Hodulik - UBS - Analyst

Great. I think that's all we have time for today. John and Dave, thank you very much and thank you all for attending. Thanks.