Richard Choe: Hi. My name is Richard Choe. I cover Canadian Communications for JP Morgan. I'd like to welcome Joe Natale, President and CEO of Rogers. Joe joined Rogers as President and CEO in 2017. Before that, he was President and CEO of TELUS. He joined TELUS in 2003 and has been in senior key leadership roles for Canadian communications for over 15 years. Thank you for coming.

Joe Natale: Thanks, Richard. Thanks for having me.

Richard: To start off, since you joined Rogers in 2017, wanted to know what your top strategic priorities have been in the asset base of wireless cable and media. What are you focusing on these days?

Joe: First of all, Rogers has a great set of assets, an enviable set of assets. Number one priority for me was to focus the organization on the continued growth and opportunity in the core business.

We are the largest wireless player in Canada, the largest cable operator in the country. We have the most significant media sports assets as a whole. We've got a thriving enterprise business. The asset collection is very good.

Job one was focus on the core. Job two was keep driving financial performance and capability on that front. In the last two years, we expanded margins by 200 basis points, 130 basis points in the last year alone and more to come on that front. We continue to see good momentum.

We have leading indicators, financial and otherwise, in the wireless business and good initial signs of growth and expansion in other parts of business as a whole. That was really important.

The second thing is a strong focus on customer service. You saw that we hit record postpaid churn of .99 in Q1, the best postpaid churn in the history of the company. We're seeing the double-whammy of improved customer service and improved margin expansion. The two really
go hand in hand. You've heard me say that in the past, Richard. We're seeing that happen as a whole.

Next is just investing in the right network and capability for the future of the business, investing in 5G and what that will bring to the future of the wireless business. Investing in the Comcast Xfinity platform that we've now rolled out and are gaining good momentum on. Investing in the growth available to us in the enterprise business, etc. Then lastly really trying to drive the right culture and focus around accountability, performance, and the customer first and foremost.

We just got back our engagement results. We hit all-time record-high engagement, across 26,000 people, of 85 percent, which is considered best-in-class by almost any measure. Really feeling that we're getting right momentum in the basics and the opportunity ahead of us is as strong as ever before.

**Richard:** Drill down on wireless before we move to 5G and then eventually cable but start it with wireless. 2018 was a very strong year in terms of ads for the industry and for Rogers. 2019, it seems like there's been a little bit of a refocusing and pullback.

Maybe the secular growth on just the pure sub numbers hasn't been as strong, but they're still positive. Something that we're struggling a little bit more with in the US. Given the focus of the company, it seems like there's been a shift from just trying to get ads for ads' sake and a little bit more on the quality of ads, the driving of service revenue.

Then that has reflected in the churn and margin aspect of it. Can you talk through a little bit about what your focus on the wireless businesses is on the top-line aspect?

**Joe:** You hit the nail on the head, Richard. Our number one priority is in driving the economic foundation of that business. We're very proud of the leading financial economic indicators that we have as a business.

Yes, Q1 was quiet from a loading point of view, but if you look at the metrics that really are the foundation of the business, we got 33 percent of the growth in revenue in the industry. We got 33 percent of the gross and EBITDA once you normalize for some of the accounting changes that happened around capital lease accounting as a whole.

The metric that we watch a lot is lifetime value. Lifetime value for Rogers was up 10 percent in Q1. No matter how you measure that, if you measure that strictly as ARPU growth divided by
churn, if you include the cost of acquisition, the cost of retention, or if you even allocate a number of the central costs, in almost every way you look at it, we grew lifetime value by 10 percent. That's the true economic engine of the value of that business.

Loading in the industry, more than ever, is being accentuated into key selling periods. I said to my team that the peaks are getting higher and customers, now more than ever, are expecting promotional activity around the critical selling periods.

Whether it's Black Friday, whether it's before the holidays, back to school period, March Madness are these 40, 50 days in the year where it all happens. In between, there are going to be quieter periods.

We are really focused on maintaining that discipline. In the quieter periods, unless you really believe that you can spark the market and shift those critical peaks, I just believe that we're just throwing money at stimulating a market that is not ready to be stimulated.

We have an obligation to customers to be there when they want to shop as a whole. We think there's great growth potential and subscribers in the market. Last year, as you mentioned, we had 5.7 percent growth in Canada, in subscriber growth.

Our models this year are 4.5 to 5 percent, so still strong subscriber growth. Don't forget that in Canada penetration still sits at about 87, 89 percent vs 120 percent for the US. There's no structural reason why we wouldn't continue to climb that penetration curve.

You add to it the fact that we've got about two percent immigration growth in Canada and that there's more and more opportunity to monetize the growth of data. Data's still growing in relatively strong way.

The average Canadian uses about two and a half gig of data versus over eight for the average US customer, so an opportunity to monetize that growth along the way as well.

**Richard:** It seems like there's a...

**Joe:** ARPU. Sorry. ARPU is still growing for us. We posted ARPU growth of roughly one percent. That's a substantial contrast to our largest peers and competitors, a delta of roughly three percent between ourselves and our peers. We continue to see opportunity in growing that fundamental.
Richard: Is that ARPU growth being driven by your plan tiering, or is it increased usage of data? How are you monetizing that increased usage? How do you see that being monetized as you go from the two and a half to a five and higher rate?

Joe: It's a number of things. One is we've done a better job of keeping the customers that we have -- you see that in the churn number -- and keeping especially the highest-value customers in terms of maintaining their contribution to our economics.

Second thing is around base management. We're just getting that muscle developed as a company, doing a better job of reaching out to customers as they reach end of promotion or end of a contract, and making sure that we have a great value proposition that meets the needs of the customer and does a good job of managing the ARPU and what it means to our base as a whole.

Then just really working that up-tiering component. There are still a number of tiers within the base, whether it's from prepaid to postpaid, the low end of postpaid to the higher end of postpaid, the share plan construct, etc. We're really happy with our ability to drive up that ladder and that growth opportunity as a whole. You'll see that reflected in our economics.

Richard: In terms of the jump ball, call it, of that 40, 50 days of selling, Canada is still largely on a subsidy model versus the US, which has largely moved away from it.

Is it more handset promotions that are being used to go after those customers during their selling days, or do you still see plan promotions that tend to reprice the base and create some of the service revenue pressures that generally want to be avoided?

Joe: It depends on the particular period. It depends on whether there's a new and exciting handset in the market that people want, in which case handset sales tend to spark the opportunity during that period of time.

We have, yes, a subsidy-based equation, but effectively, it's a form of financing that comes at different tiers based on whether you want to pay more and get less of an upfront cost for the phone. Then some other periods, it depends where it goes. You'll see data bonuses come into the mix, and data bonuses being attached to different parts of the base.

We really look at the lifetime economics before we launch one of those particular strategies, whatever it might be. Then at the end of the day, those are critical periods, and you have to be on the ready for what might evolve. As the largest player in the industry, I think we play an important
role in driving through those promotional periods that provide good value for customers but provide good economic sense.

**Richard:** I guess this will lead up to the 5G discussion, but something that AT&T stressed earlier was how their putting spectrum to work and it's really going to increase their capacity. I think we are seeing on just the 4G basis. The amount of data being used, and customers are adopting bigger and bigger plans. In the 600-MHz auction, you purchased significant amounts of spectrum.

Can you talk a little bit about how you see your current Spectrum position and capacity, what the 600 is going to bring you, and I guess we'll move to how you see 5G rolling out. Let's start with the 4G aspect of it.

**Joe:** We're really happy with the outcome of the 600-MHz spectrum auction. There is in the history of wireless, in 35 years of wireless, there have been three low band spectrum auctions as a whole. I don't see anything on the foreseeable future that would somehow magically create more low band frequencies available to the marketplace. Low band spectrum, as you know, is kind of the workhorse of the wireless network. It really is the capacity workhorse.

It has two features that really matter. One is it has the ability to traverse very long distances. When you consider that Canada covers five time zones with a population density of about four people per square kilometer, distance matters. There's no better formula for valuing the importance of low band frequency spectrum than in a country that's shaped and geographically dimensioned like Canada.

Second thing is that 70 percent of the Canadian population lives in the major cities. The major cities are even more densely populated. You look at the number of condo towers going up in Toronto is kind of staggering. The same could be said of the other major cities. Given the less than perfect weather at times, a lot of Canadians live underground as they traverse to work or make their way shopping. There are these underground communities that have developed.

600-MHz spectrum is fundamentally important like other low-frequency spectrum to bust through concrete, glass, etc., really provide the capacity required as a whole. We're going to put it to work right away. As soon as it's released, we are ready to deploy it across the country. We think it just makes good sense.

Go back to what I said a few minutes ago, at two-and-a-half gig of consumption per Canadian, fast forward the movie, at some point we might be sitting here in 5 or 10 years' time, whatever
that might be, and we'll be at US levels in terms of consumption or more.

As we get to that place, and this is going to be the spectrum that carries the capacity at that extent overall as the workhorse as I said. I think in terms of 5G to put it in context of 5G, it's been tagged as the 5G low frequency spectrum.

Our view is that the 700-MHz frequency will only come later in terms of 5G, it won't be readily available at 5G. If you don't have any 600-MHz spectrum, you're going to have to re-farm 850. 850 right now in Canada is being used for 3G and for non-VoLTE voice services.

That mean simulating that base of customers, and that means saying "Hey, we need you to move, and here's a new handset," which drives COA costs and disruption drives churn, so that that band can be freed up for 5G purposes.

Having 600 gives us what I've been calling sort of hopscotch spectrum, the ability to be ready-made for 5G, and then layer 3500 and millimeter wave on top of it. That's the mindset, and you look at the players in Canada, all except one have invested in the 600 MHz for a number of fundamental reasons that I've talked about.

We think it's a great investment. It came in at a buck 71 per MHz per pop, which is far less than the 430 and change the 700 went for. We think it's of great benefit to our organization, very pleased with the outcome.

**Richard:** Just for people who are unfamiliar, can you give us a sense of what's being used for 4G and then how do you see your 5G spectrum plan playing out? You mentioned the 3500 and the 600, what else will be used? I know there's a 3500 auction coming, but the rules haven't been set. How should we lay this out over the next five years, 4G versus migrating to the 5G.

**Joe:** First of all, we have been working to invest in 4G LTE advanced infrastructure for the last couple of years. We've been deploying a radio access network that is 5G ready. As 5G capability comes along with Ericsson as our partner, we'll just light up those cell sets through software upgrade, frankly. All the hardware and the civil engineering work will have been done, because we're replacing the radio gear as we speak.

It is compatible with both 4G and 5G, so there's an economy there that is significant and important to us. We invested in LTE Advanced late in the cycle. That's why you saw our CapEx intensity in that 12 to 14 percent range versus 8 or 9 percent a few years ago. What it allowed us
to do is have radio gear that was 5G ready as opposed to having to rip and replace the early LTE Advanced gear that came to the marketplace as a whole.

I think that's been a great move for us and makes it very capital efficient. What you're going to see happen is we're going to use 600 to boost the capability and performance of that network and add capacity ready-made for LTE Advanced, but also ready-made for 5G as the baseband. 3500 is going to come along in an auction we believe in about a year's time. In the next little while we're going to hear about the outcome of the direction around that, and the timing of the auction specifically.

We currently have a significant amount of 3500 MHz spectrum already. That spectrum has been tagged for fixed wireless in a 4G world. We'll have to give some portion of it back for reauctioning. Then we'll pitch up at the auction and get what we need to kind of complete the second of the three tranches.

Then at some point in the future, there'll be millimeter wave auctions that happen. There's already a lot of millimeter wave spectrum that's been purchased or being deployed in the US. We hear about it from our US peers as they've been deploying fixed wireless. None of that's been auctioned off in Canada yet.

Part of your question is, where does 5G go from here in Canada? I think the first real focus of 5G will be coverage, speed, and capacity as a direct evolution of 4G. That'll happen with 600 and 3500. Eventually, as 3G goes away, we'll reform that 850 and make it available to 4G and 5G.

But right now, there's still a substantial portion of the Canadian market that relies on 3G. There's still a substantial portion of the market that has non-VoLTE voice. That is not going anywhere soon, if you want, from that perspective.

I think the next major applications we'll see in 5G in the short to medium term will be in the enterprise space. Very specific vertical applications, kind of the natural extension of machine to machine or the IoT world.

But with some of the capabilities around 5G, narrow band technology, longer battery life, just kind of the ability to have coverage and capacity on a broader basis across any application in a particular vertical, whether that's transportation, health care, smart communities, all the things that you hear us talk about.
Then the long term. The long term, we'll look at fixed wireless access, kind of watching carefully to see what Verizon and AT&T are doing on that front. Then we'll look at some of the low latency applications that are out there with the advent of edge computing.

Richard: In terms of, I guess, the wireless CapEx spend, it seems like between the amount of 4G network spend that was done and now the spectrum purchase, it seems like you're in a good spot where you were not spending as much a few years ago, kind of ramped up.

But at this point, do you expect to see it kind of moderating on maybe holding firm on Canadian dollar basis, but down in intensity? Do you think the 5G and 4G continued rollout of the new spectrum will keep it at the higher level, or do you actually see it coming down?

Joe: In the short to medium term, you can expect it to stay in that 12 to 14 percent range. In the longer term, we'll see where this all goes and where it leads. But there'll be some moderating in the longer term. It all depends how technology advances or moves.

Like, one of the things we're very excited about in terms of 5G is this whole notion of network slicing and the ability to create virtual wireless networks for specific applications, whether it's for first responders or for a port or a factory or things of that nature.

There might be specific capital investments to go after very specific opportunities in enterprise space. But I think, if you're looking for what to model, I'd say model in the 12 to 14 percent range for the next few years and then we'll keep you posted as we kind of make our way through that.

Richard: But you don't see it spiking up for any reason?

Joe: No, everything that we see says that the evolution of 5G will be exactly that, an evolution as the layers of capability come along.

3G to 4G was much more of a monolithic build, let's rip and replace the whole thing and let's go to 4G. Whereas, I think, especially with our 600 MHz position, we've got the capacity. We can take a much more thoughtful view as to how to evolve the capability as the 5G applications come along and as they're proven.

Bear in mind that in the scheme of the globe, Rogers, in fact, the entire Canadian industry is only a few points of the global turnover in telecom. More than ever, I think our job is to look closely at what's happening in different parts of the world and find the right partners in terms of technology.
We've done that with our cable business and being a partner of Comcast and really driving the Xfinity platform. We'll do the same thing in the different application areas around 5G. We'll watch carefully what's happening in Europe and the US and really figure out when is the right time for us to jump in.

That more evolutionary approach, I think, will give us a much smoother wireless CapEx intensity.

Richard: Moving to the cable side, I guess, let's start with video and then we can talk about broadband more in terms of, it seems like it's getting more important. But video is still a key driver and a big focus.

Can you talk about what you're seeing in the video landscape competitively? Then how the X1 trials are going, and then the eventual launch, and what advantages that gives you versus the current competitive positioning.

Joe: Well, first of all, we're really happy with our, what we call Ignite TV, it's the Xfinity IP version, the latest version from Comcast. Really happy the way it's going.

We surpassed 100,000 subscribers in Q1, and our goal is to migrate our entire base over the next few years. That will be done sort of in a thoughtful stepwise fashion to make sure that we continue to maintain the benefits that we're seeing as a whole.

We're seeing three types of benefits so far in the march towards the full replacement of our legacy solutions and systems. Number one is a very significant lift in average revenue per household, just because content discovery, content consumption is so much easier.

I see it in my own household. Right? I used to get mad at my kids when they would go to some other platform to buy a movie. I said, you're taking money out of Rogers, and therefore... [laughs]

Now, I kind of watch the behavioral change with Ignite TV, like it's discovery, the voice command, it's a lot easier to use as a whole, and which is showing up in ARPA.

The second thing we're seeing is our net promoter score is up dramatically. It's just a great product, a great interface as a whole. Third thing we're seeing is early life cycle churn is down dramatically. The churn that you would see in the first six months of getting a video customer on legacy versus our new solution.
I think those are all the right fundamental metrics to keep kind of driving at as a whole. Then with it, of course, the CPE footprint is fundamentally different. Right? The average home is closer to $400 of capital in terms of insulation and CPE, whereas the legacy home was closer to $1100 as a whole.

On all levels, this is the right solution from a customer point of view and from the fundamentals of our business as a whole. We're very pleased with it.

The most exciting part of all of it is the road map that's ahead. I think we've future proofed our business from a road map point of view. We don't have to keep scrambling for the next idea that might come along and say, I wonder how we're going to deliver on that idea.

There are 10,000 plus engineers sitting in Philadelphia at Comcast that have put together a road map that I think is very compelling around video, around the connected home, around home security, around the ability to curate and stream OTT services, around electronic storefronts, and keep going.

I really am quite excited about what we're doing already, but if you look forward at the capability drops over the next couple of years, I think it'll continue to drive the value proposition.

Fundamentally, we're a broadband business. We're a broadband business and all of our economics and growth are going to come from broadband. Broadband revenue was up seven percent in Q1, it's 15 straight quarters of penetration growth.

Despite our biggest competitor having spent a lot of money on fiber to the prem, in the last eight years, we continue to drive Internet penetration. We've got leading Internet capability of DOCSIS across our entire footprint, 1Gbps DOCSIS capability across 4.4 million homes.

You couple that with the excitement around Ignite TV and the connected home where it can bring this, I think it's a very powerful combination. The economics of the business are tuned that all we have to do is keep driving the economics of broadband and we become almost indifferent to the economics of the video business.

Video becomes a reason for customers to choose us, a reason to add value to the broadband connection. But the economics are all going to come from driving the ARPU and then driving costs out of the business and increasing the cash margins.
Richard: Unpackage that a little bit in terms of the upgrade or the road map. I assume part of that is because you waited for the IPTV version of the X1 platform for Ignite TV versus the previous version. Does that make it easier to just kind of software upgrade, not having to reinstall or change out CPE, and that makes it a very cost-efficient way to enhance service?

Then traditionally, I think, churn has been created by the bills getting too large, or bill shock, call it. But this seems to be changing the discussion a little bit in terms of functionality and ease of use and convenience. Are you seeing that in the trials?

Joe: 100 percent. The whole point of going to IPTV was to stay on that future road map and not be a generation behind in terms of where it was going. Then there's all kinds of economic benefits in the CPE, as you mentioned.

Also, as we move our network to more of an all IP hybrid fiber/coax network, a passive network, it will allow us to reform some of that capacity and spectrum that sits in our coax network as a whole, but also take a lot of the complexities out, a lot of the amplifiers and other devices that sit underground throughout the entire network.

The full IP version of where we're going is a far more cost effect plant for us as a company.

On the customer side, you're bang on, the customer side, there is an excitement factor around all of the stuff that's there. You'll see us move to a place where we give customers more choice. The cable business on video grew up where more channels, more services was better. Right? The new consumer is completely the opposite, more choice is better.

You'll see us do things like let's just sell the playoffs. If you're a basketball fan and you haven't subscribed to our sports service, maybe you just want to watch the Raptors through the playoffs, and we'll sell that as a package. Which would be a very entertaining kind of show right now.

You might want to buy just an episode of something. Just creating that flexibility and that choice, I think, will just help to bring more customers back to a mode where they can graze TV services as they see fit, and not feel like they're being held to buying a bunch of channels they don't watch. We see it going in that direction. The key is to tune in the business so that it actually supports that value proposition and enhances the lifetime value of the broadband service around it.

Richard: Let's hit that before we run out of time. The broadband service continues to do really
well, both in penetration, but it seems like also in speed. Can you talk to us a little bit about, you mentioned the 1 gigabit capability, but where that goes over time and then where are consumers and how are they migrating, whether it is speed or usage up?

**Joe:** First, I think it’s important to bear in mind that for about the last six or eight years in new developments, new condos, new single-family homes, and don’t forget, population growth and housing starts in Canada have been growing by about two percent per year. We’ve been running fiber to the prem, so we have a bit of a hybrid network that goes on.

All of that construction growth I talked about is all fiber to the prem, or fiber to the basement of the condo with connection to each suite. The second thing I’d say is DOCSIS roadmap is still very encouraging. The time we’ve spent with CableLabs, we’ve got confidence that one gig will lead eventually to 10 gig full duplex.

Along the way, there’ll be some evolutions to three or four gigabit per second, much more of an uplink capability, etc. I think there’s still a lot of room on the path on coax. It's still a far superior technology than copper as a whole. Therefore, we can be more success based in our investments and notch up our capability as we’re more successful at penetration and up tiering customers.

The majority of our base roughly is in the hundred megabits per second range. Think of it that way. There’s not a lot above 250 right now, but the majority is like 100 megabits or less. We still feel we have a lot of headroom in the current technology, and then when you add to it where DOCSIS is going, there's a lot of life left in this.

Along the way, will keep looking at other opportunities and technologies. We'll keep pushing more fiber into node segmentation. Don't forget, our entire network is already fiber-fed. Fiber-fed to the node as a whole. We’ll look at fixed wireless as we believe the technology is ready for prime time.

**Richard:** Then, just to end with CapEx spend on the cable side, how should we think about it? Steady, coming down?

**Joe:** I think you can look at it as coming down. I'd say if you want to put a label on the cable business in the last little while, you put the label under construction. Like a website, under construction.

We've been making investments in product and capability, we've been making investments in
proactive maintenance, we’ve been making investments in tools for our workforce, etc. We’ve hit CapEx levels of 30 percent plus. You’re going to see that moderate in the next few years ahead. We think our resting heart rate, our resting CapEx intensity, is somewhere in the low 20s. In the next few years, you’ll see us get there.

You’ll see considerable growth in cash margins as we continue to drive Internet RPU up, drive a better set of services in video and other areas that continue to drive lifetime value, taking cost out and therefore having a much better complexion to this business in the next few years ahead.

Richard: Great. I think that's it.