I’m guessing that most of us have been bombarded by fantastical visions of the future – where we no longer need roads, machines take care of every need, and if someone has heart disease, a doctor can replace her heart with one freshly printed from a 3-D printer.

We’re already seeing the outlines of that future. At the World Bank Group, we’re working to ensure that economies in developing countries can harness innovation to end poverty, and not simply be further impoverished because they can’t compete in the technology-dominated economy of the future.

For more than 70 years, we have invested in everything from roads to renewable energy; we’ve worked to improve outcomes in nutrition and education; designed financial instruments to help stop epidemics, to prevent famine, and to host refugees. And we’ve created markets to build the private sector – even in countries embroiled in fragility, conflict, and violence.

Over the past three decades, the percentage of people in the world living in extreme poverty – less than a dollar, ninety-cents a day – has gone from 35 percent to less than 10 percent. Nearly 1.1 billion people have lifted
themselves out of poverty since 1990. But today, nearly 800 million still live in extreme poverty, and hundreds of millions more are at risk of falling back into it.

At the entrance to our headquarters, our staff pass this sign every day. When I became president of the World Bank Group, I asked, “Why does it have to be just a dream?” Soon thereafter, we established two goals: to end extreme poverty by 2030, and to boost shared prosperity among the poorest 40 percent around the world.

You – mobile operators – can and must play a critical role in achieving those goals. I believe that if we work together, we can tackle the biggest global challenges of our lifetime such as poverty, inequality, pandemics, famine, and climate change. Together, we can help countries unlock new drivers of economic growth, and make the global market system work for everyone and the planet. This is an urgent task, and we have no time to lose.

Here’s why.

Nearly everywhere I travel, even in the poorest countries, I see this – people, especially young people, on smart phones. Thanks to smart phones, the internet, and social media, soon nearly everyone will know how everyone else lives.

Our World Bank economists have found that your relative happiness depends on where you are in the income distribution. It also depends on how your income compares to your reference income – the income to which you compare your own.

Looking at data on satisfaction with standards of living, we found that if your reference income goes up 10 percent, on average, your own income has to go up at least 5 percent just to maintain the same level of satisfaction. The trade-off is even larger for poorer people – for the bottom 40 percent, if their reference income goes up 10 percent, their actual income has to go up 20 percent just to maintain the same level of satisfaction.
And there’s little question that aspirations will continue to rise. Some studies estimate that by 2025, all 8 billion people around the world could have access to broadband – and that’s a great thing for developing countries. By that time, nearly everyone will likely have access to a smartphone, which we know is a powerful accelerator of aspirations.

At the World Bank Group, we’re constantly asking ourselves, how can we give everyone a chance to reach their aspirations?

That’s a central question for the development community, and an increasingly important question for those concerned with peace and security. I was just at the Munich Security Conference, and when I met with generals, it was clear that they understood the implications for peace and security of our failure to create jobs and economic growth in developing countries.

Last week, there was an article in the Wall Street Journal about German-made robots replacing workers in garment factories in Bangladesh. Many knitting factories, which used to employ hundreds of people per factory, are becoming fully automated. As the article noted, “There’s little for humans to do.”

Bangladesh alone needs roughly 2 million jobs per year to keep up with its growing labor force, but World Bank data show that new jobs in the garment and textile trades are falling. Between 2003 and 2010, 300,000 jobs were created annually, but this year, just 60,000 jobs were created. Our lead economist for Bangladesh calls it “a social time bomb.”

And this is an issue throughout Asia. A study by the International Labor Organization predicts that the spread of automation could cause some Asian countries to lose more than 80 percent of their garment and textile manufacturing jobs.

So if everyone’s aspirations are going up, and technology is replacing cheap labor in developing countries, we’re going to have to answer some very difficult questions – what on earth are people going to do? How will they
support their families? How will they spend their time? Will they be more likely to be recruited by on-line extremist groups?

I believe that we must work together to help answer those questions. At the same time that you’re accelerating access to broadband, you can help us ensure that these technologies will create new markets, new jobs, and new drivers of economic growth, even in the poorest countries.

In my view, there are at least two very different scenarios for how this could play out:

If we do little to use your technology to build new drivers of economic growth, and aspirations are met with frustration, many countries may go down the path of fragility, conflict, violence, extremism, and migration.

But there’s another scenario: we begin – right now, with a tremendous sense of urgency – to rethink in a fundamental way how connectivity, big data, and new technologies can create new drivers of economic growth and opportunities for all.

We will need to give people the chance to learn the new skills needed in a rapidly changing market. But beyond education, people will need access to capital, markets, and information.

I’m here with you in Barcelona for the first time because we need you – more than ever – to step up your efforts in building that brighter future. The World Bank Group currently partners with many mobile operators, co-financing investments or helping improve regulatory environments. And we have seen great successes in our partnership.

For example – before 2009, Eastern Africa accounted for 0.07 percent of the world’s international bandwidth capacity. That year, we brought together public and private partners to run a submarine fiber optic cable to link East Africa with global fiber optics networks. Later we ran fiber optic cables to Central Africa and connected West Africa to Europe.
The cost of broadband dropped by 90 percent, and with subsequent cables, capacity increased – first to several gigabits, now to several terabits. But we also know that broadband is just one of the foundations that countries need to build a digital economy.

We’re convinced that we must build a strong global coalition of governments and industry leaders. And I’m here to encourage the mobile industry to join us. To deepen our partnership, we are announcing two new initiatives with the GSMA. First, we’re joining forces with GSMA’s Big Data for Social Good.

At the World Bank Group, we’ve had some experience using mobile data with our clients:

- We’ve helped Haiti rebuild its transit system after the earthquake;
- We’ve tracked the flow of refugees in Africa;
- And we’ve reduced traffic congestion and pollution in Manila.

But we’ve only just started to tap the potential of mobile data. Our ambition for our partnership with Big Data for Social Good is to harness mobile data to improve every one of our health, environment, energy, transportation, and urban projects across the globe.

Second, we’re creating a new IoT Big Data Initiative with operators, convened by GSMA. Just as the smartphone brought an unprecedented level of new opportunities for the poor to access markets and finance, we believe IoT can bring us closer to our goal of ending extreme poverty.

Governments are asking for our help to harness this disruptive technology and not be left behind. With GSMA, we will work with governments and the mobile industry to harness IoT data and ensure developing countries realize its full benefits.

We’ve already started seeing IoT’s potential to solve intractable problems. For example, 3 billion people cook and heat their homes with stoves that burn wood, animal dung, or coal, creating indoor air pollution that kills 4.3 million people per year – more than malaria and HIV/AIDS combined.
In India, we provided IoT devices to find homes with toxic levels of air pollution, and then we intervened with cash incentives to save lives. We believe this is just the first of many problems IoT can help to solve. We’re already seeing IoT play a role in helping –
  o To vaccinate children by monitoring the supply chain;
  o To mitigate the impact of natural disasters;
  o To respond to epidemics;
  o To improve education.
Through this partnership on IoT data, we will work with you to use IoT and other disruptive technologies to create markets and solve critical development problems.
And to help you extend your reach, we’re willing to use all of our tools to de-risk investments, support governments as they reform their policies, and create a better enabling environment. Helping your industry grow in developing countries is part of our mission, because we know that your technologies are essential to ending poverty.
I believe that this Mobile World Congress is a critical gathering to shape not only the future of the industry – but also the future of the global economy. Today, we’re expanding our partnership with these two new initiatives that will put your data to work and increase the adoption of promising new technologies in developing countries.
And let me repeat: our work together is urgent. I’m worried that the traditional path to economic growth – agriculture, then light manufacturing, then heavy industry – a path that my own country of birth, South Korea, followed – may be closing for all but a handful of developing countries.
It comes back to this. I see children all over the world just like this who simply want the kinds of opportunities they see on the smartphones that you enable them to use.
I’m reminded of my own story. I was born in 1959, when Korea was one of the poorest countries in the world. My parents, both of whom were refugees, had high aspirations for themselves and their children. But Korea was so poor, the country did not qualify for even the lowest-interest loans from the World Bank. Last year, I visited a school in Tanzania and talked with some 11-year-olds. As I often do I asked them, “What do you want to be when you grow up.” Two children stood up and said, “I want to be president of the World Bank.” Just like you, some people laughed, but here’s what I told them: when I was a four-year-old in preschool in one of the poorest countries on earth, if George David Woods, the President of the World Bank at the time, had visited my classroom, I doubt he could have imagined that one of his successors was sitting in that room.

I told those girls and boys in Tanzania, “Don’t let anyone tell you that you can’t be president of the World Bank. Don’t let anyone tell you that you can’t be anything you want to be.”

But to make that statement come true, there’s so much work that we must do together. We have no choice. We cannot fail. Otherwise, fragility, conflict, violence, extremism, and migration will be the final common pathway for too many countries.

We must act together – as one of my heroes Martin Luther King said, “with the fierce urgency of now,” knowing that “there is such a thing as being too late.” The time is now to give every person, in every country, the chance to achieve their highest aspirations. Working with you, we know we can do it.