

**Good Things Happen Podcast\_Season 3**  
**Episode 7: Asia's Digital Renaissance**  
**Guests: Jan Metzger and Larry Summers**  
**FINAL TRANSCRIPT**

**Jorian (00:11):**

Welcome to Good Things Happen, the podcast series that celebrates the human side of banking and finance. Today our focus is on Asia and the region's remarkable, and in many ways unique, application of digital technology.

Asian adoption and use of communication technology especially differs so much so that a recent report from Citibank considers Asia as a time machine to the future. To help explore this intriguing concept, we are joined by Larry Summers and Jan Metzger. For many listeners, Larry will need no introduction, having served both US President Clinton and President Obama's administrations. Considered to be one of America's and the world's leading economists, Larry has also served as the president of Harvard University.

Jan is Asia Pacific Head of Investment Banking for Citi, the publishers of the aforementioned GPS report. Jan, born in Germany, raised in Sri Lanka, educated in the UK, and now living in Hong Kong, can give us his own on-the-ground personal perspective of the report's insights.

Before we jump into the time machine, we will begin, as always, by hearing our guests' formative stories. Larry, thank you so much for joining us today. I'd love for you to give our listeners who may be just starting out on their own careers, some insight into your early years. Did you imagine when you were a precocious young man that you were going to be joining future presidents with economics or did you have other ambitions?

**Larry (01:43)**

I thought I would be a mathematician or a physicist when I was in a high school, and I went to MIT. And then I took economics courses, and I took math and physics courses, and I realized both that I was much better at economics than I was at math and physics, and that I was ultimately interested in doing work that bore on public policy issues and that directly made people's lives better.

And I had the insight one day, I don't remember how it struck me, that if you as an economist do something that makes the unemployment rate 1/10th of a percent lower for one month in the United States, that's 150,000 extra kids who can see their parents go off to work rather than be at home, discouraged, whereas a doctor can see only individual patients.

And so, it was the ability of economic reasoning and economic thinking to permit impacts on a macro scale that first drew me into economics. I also came to be enormously impressed with the power of data to resolve arguments and to decide what was a better and a worse approximation to truth. And I thought those kinds of understandings could contribute importantly to a better world.

**Jorian (03:31)**

So, you were a data time machine yourself by all accounts. Jan, how about you? What did you want to do when you grew up?

**Jan (03:41):**

Yeah. Well, look, I studied computer science and artificial intelligence at university and I had a huge passion for software engineering. So, I followed that passion. I went and worked on the world's first commercial voice recognition system and poured my heart and soul into this thing.

It was unfortunately, probably 25 years too early. The hardware wasn't powerful enough yet. So, via various twists and turns, I ended up as a banker, which I also really enjoy because the learning curve here never ends and you get to work with great new companies with great technologies all the time. And thank you for letting me share that.

**Jorian (04:29):**

I love both those intros. It sums up what this podcast is all about. Economics isn't just about dry data and banking isn't just about money. It's so many more things.

Let's jump straight into the report, Larry. What's your explanation for this intriguing title, Asia As A Time Machine? Give us an overview for that please.

**Larry (04:51):**

I remember being struck around the turn of the century that it had been called the Industrial Revolution because for the first time in human history, life expectancy at the era, or living standards at the end of a life were greater than living standards at the beginning of a life.

And so, in Britain in the 19th century, perhaps at the end of a 40- or 45-year lifespan, the economy had grown to the point where living standards were 50% greater, 1.5 times as large as they had been at the beginning of a life. And then I realized what was happening in China, that in China living standards at that time were doubling every decade, and with living standards doubling every decade and a human lifespan of 70 years, it was reasonable to think that living standards could increase not by 1.5 times, not by 15 times, but by perhaps 50 times over the course of a human lifespan.

And it seemed to me that that was probably the largest and most important thing that had ever happened in economic history. And to the extent that it changed in profound ways, the way people lived, in cities rather than in the country, doing mental work rather than backbreaking physical labor. Having access to technologies that could respond to sicknesses. Most people in a population becoming literate. A transformation in things like there being more obesity than there was hunger in the population. People no longer having more and more children so they could be confident that somebody would support them in their old age.

**Jorian (07:11):**

And Jan, in terms of time of this time machine, what's the time lag that we're talking about?

**Jan (07:18)**

Look, we think it's about eight to 12 years that Asia is ahead. And as one of the things that Larry pointed out, an exciting reason for us is, is that the West has a lot of infrastructure developed and Asia is leaping, leapfrogging, right to a future tech state. And it's very, very interesting for investors around the world actually to watch that and use that as a bit of a prediction, what will happen in the developed world.

This leapfrogging actually, and maybe I may be so bold and humbly ask Larry to comment a bit on it. I think some of Larry's colleagues have done amazing work on leapfrogging in the past. And I've heard Larry talk about it with great insight and maybe was going to humbly ask Larry if you were willing to share some of your thoughts on the leapfrogging.

**Larry (08:13):**

It is easier to emulate than to innovate. And so, countries that have lagged can grow more rapidly because they can emulate technologies that have been developed elsewhere, rather than needing to develop their own. So, I think there are substantial reasons to see very great opportunity in what is happening in Asia. To be sure, there are enormous challenges as well, both politically and economically. And I for one, don't expect that China will be able to maintain the growth that it has maintained historically. But I think that, even with much slower growth, what's happening is a truly remarkable historical story.

**Jorian (09:14):**

You talk about landlines, Larry, but what other infrastructure, what might have seen as deficiencies before the emergence of digital media, that there now no longer needs to be the kind of infrastructure building that happened in the developed countries that Asia is now using digital communication to take a lead?

**Larry (09:32):**

Well, I think there are two things to say. The single biggest source of digital divides is illiteracy. And where you don't have universal education, you can have all the iPads and all the technology you want, but there's going to be big limits on how much the population is empowered. And that's, I think, the first thing to say.

I think the other thing is that we just get better at developing ways of communicating electronically. And that's why the cellular revolution, the revolutions that are coming in computing power, quantum computing, will I suspect come. And all of that is going to mean that to achieve a given level of technological competence to be able to solve given problems with the hardware and software that's available in the 2020s, will be vastly cheaper than it was with the hardware and software that was available in the decade of the 2010s. And that creates a great potential for the followers rather than those who went first.

Jan told the story of his voice system from his youth. It didn't really work because it was too expensive because the technology wasn't far enough developed. Well, that's an example that's going to be repeated many times over, where more and more good ideas are going to be implementable and implemented, than was the case a decade before.

**Jorian (11:47):**

Jan, can you give us some examples of specific technologies where Asia's behavior is different?

**Jan (11:55):**

Yeah, absolutely. And I'll build on the foundation that Larry built here. One great example is retail. So, if you rewind the clock a few years ago, in the United States there was about two and a half square meters of retail space per capita for every man, woman and child, a lot of shopping area.

And through the rise of e-commerce, China will never develop such a big physical retail space. And you'll also see, and you're already seeing actually, in the US it reducing as e-commerce is coming. And other great examples are healthcare. There's a lot of telemedicine actually all over the world now, due to COVID. But in China, Indonesia and India were actually quite ahead of that trend for similar reasons and a huge amount in FinTech and mobile wallets in particular. In many emerging economies in Asia, you can pay everything with a mobile phone, much harder to pay everything with a credit card.

**Jorian (13:03):**

Larry, I'm interested in cultural differences. I love different cultures and how people approach service industries. Do you think culture also is influencing how people use technology so that technology inevitably will be adopted in different ways?

**Larry (13:27):**

I'm sure there are cultural differences. I'm sure that it's not a complete accident that the ratio of cellphones to adult population is higher in Hong Kong than it is in almost any other city. So, I'm sure there are cultural differences, but I'm someone who prefers to think in terms of human universals. And I think that in many ways, these technologies are going to come to be pervasive. They're probably going to come to make different parts of the world a bit more similar if you take the longest view of things.

But that's going to be a process that's going to take a long time and it's going to be a process that's shaped by the fact that some people and some places have become habituated to certain things and other places have become rather less habituated to things. There are important parts of the world and important populations where the habit of having a large library never developed. In those kinds of worlds, the world of the eBook is going to be that much more important.

**Jan (14:58):**

And Larry, if I could ask you one thing that you talked about with us the other day was you had some great observations on the entrepreneurship you've observed in Asia during some of your visits here. And if I could humbly ask you to maybe share some of those?

**Larry (15:14):**

Look, I don't know why it is in some ways it goes back a very, very long time, but Chinese populations, Indian populations, other Asian population groups, have very long traditions of individuality and of entrepreneurship and of being prepared to take substantial risks. I think now, you're seeing both large cadres of trained entrepreneurs, a really strong work ethic on the part of those entrepreneurs. And we're seeing with the work that institutions like Citi is doing with purely local institutions as well.

We're seeing more and more capacity for those entrepreneurs to get financing, to get the assistance that they require as they seek to scale. So, I think as we look at what might be called unicorn incubating regions, I think we're going to see much, much more of that in Asia than we see elsewhere.

**Jorian (16:48):**

I'm interested in this notion of the leapfrogging. Does that mean the developed markets will look at what's happening in Asia and there's an opportunity with new emerging technologies, AI, for example, for them to leapfrog? Or are we going to go off on different paths?

**Jan (17:06):**

Yeah, it's a great question, so thanks for letting me answer it. I think on the leapfrogging, I'd say two things. One is you will see leapfrogging in things like retail, healthcare, or mobile payments, and you will see the West looking at the East and copying, mentioning, learning from it because of that leapfrog.

Really, if you want a very popular news example and you listen to Elon Musk talking about X and the things ... everything that he wants to do in it. He's actually talking about Asian communicators as an example of some of the things he wants to emulate. And that's a famous business personality looking out here for things to learn. On your question on AI, it's a little bit leading and is more likely to be impacted by geopolitics than the discussion we are having here. But what is interesting within that is the data that's being generated by a lot of the digital leapfrogging that has happened and how that will be used to feed AI systems to further help mankind move forward.

**Jorian (18:29):**

Larry, I'd love your take on AI. It seems to be the subject that's on everybody's lips. I think there's a lot of ignorance, there's a lot of scare stories, there's a lot of optimism, it depends who you talk to. But it seems that you've been, as you said in your introduction, you've been fascinated with data right from the beginning of your career. What's your take on artificial intelligence and how might it serve humanity?

**Larry (18:57):**

My general sense is that with respect to these technologies, things take longer to happen than you think they will, and then they happen faster than you thought they could. So, if you think about, for example, electronic readers, I think many people 25 years ago would've expected that they'd be reading the newspaper on an electronic reader five years later. And it didn't happen that way.

I think many, many people a decade ago thought that they'd be being picked up in the airport in an autonomous vehicle within a few years, and that hasn't happened either. So, on the one hand, I think it often takes a very long time for these technologies to go the last mile until they're ultimately useful and become pervasive. On the other hand, once those things happen, the transformation can be extremely fast, as it's been extremely fast with respect to electronic reading of publications, since it's been extremely fast with respect to streaming, displacing traditional cable. As it's been extremely fast in the e-commerce area. So, I think you are going to see AI have a huge impact over the next 25 years, but I suspect over the next few years, the impact's going to be a little bit less than many people imagine.

**Jorian (20:53):**

Jan, do you think Asia, considering what the report says about the time machine and their adoption of technology being advanced in many ways, do you think they'll have a data advantage, or do they have a data advantage?

**Jan (21:07):**

In certain areas, I certainly believe so because if you look at mobile payments, you have mobile payments by volume in excess of a hundred X the rest of the world. And in terms of actual individual transactions, massive amounts in healthcare and retail as well. So, there is a huge store of data that's available. And so, in some sense, in areas where that matters, that can be very, very helpful. There are telemedicine providers in China who are doing 600,000 plus consultations a day. Every single one of those consultations can be extraordinarily helpful if you're training an AI doctor.

Clearly there will be big regulatory and data privacy considerations around that that need to be worked through and solved. And many countries are developing, quite sensibly, strict rules around this. But intrinsically, there's a huge amount of data available the earlier you digitize.

**Jorian (22:14):**

Larry, I'd like to ask a really basic question. Obviously, it's very often the basic questions that may be the more difficult, but I think you'll have this. Just for those who may not be so initiated with economic development and the connection between these technologies informing economic growth, can you give us an explanation as to why the advantages Asia have will be so fundamental in the speed of their growth?

**Larry (22:48):**

Look, I think that exponential growth is the most rapid growth that fuels anything is a very powerful law. The law of 72 says that if something grows at 2% a year, it will take 36 years to double. If it grows at 4% a year, it will take 18 years to grow, to double. If it grows at 10% a year, it will take only 7.2 years to double. And so, how many doublings take place within a generation, or how many doublings take place within a

human lifetime, or how many doublings take place within a century depend very profoundly on rates of growth.

And what Asia has going for it is a number of different things. Asia has an entrepreneurial culture, we already talked about that. Asia has a deep commitment to education. And if you look at measures of educational achievements of young people on a global comparative basis, they're extremely strong in Asia. And Asia in many places has a tradition of high saving and therefore high investment rates. And if you're prepared to put more aside for the future, that other things equal, tends to make for a better future. And those are all reasons why Asia has over the last couple of decades, even with all the challenges outgrown other parts of the global economy. How long will that continue? That remains to be seen, but I think there's a very strong platform for accomplishments of a great deal in Asia.

**Jorian (25:07):**

Jan, we're talking about a whole region. And obviously, that region has many different countries within it. Can you give me some examples from some of these technologies from different countries? Because not saying Asia as a proxy for China. I think you've got examples in the report from Korea and other parts of Asia.

**Jan (25:28):**

So, look, one thing which is interesting around that is a lot of Asia is very young, so that's very similar. But to hone into your question about different things from different countries. In Korea for example, it's a country that embraced high speed internet faster than anybody else and has more broadband penetration. And there, you have a phenomenal penetration of eSports. You have a great amount of consumption of cultural things, like comics and K-pop. So, that's phenomenal in inside Korea.

If you flip over to India, you have really interesting things happening in e-commerce that's really quite unique to India and quite exciting about how they've managed to penetrate also some of the smaller cities. In Indonesia, one of my favorite examples is transportation as a service is done on the back of a motor scooter, so not in a car. The guy shows up in a motor scooter, hands your helmet and you do it. because that's much less CapEx compared to other things. And then in China, you've got phenomenal things happening in telemedicine. So, each country in Asia has slightly different things happening with slightly different definitions, but it is also interesting how fast Asian countries learn from each other and how much they embrace each other's innovations.

**Jorian (27:13):**

Larry, I was very taken in your introduction about the fundamental changes that were happening in the so-called second industrial revolution. And you were taken by those shifts, like once in a lifetime shifts. What's happening now and how do you, as a macroeconomist, how do you keep tabs on this? How do you follow these trends?

**Larry (27:40):**

I think part of what's remarkable about this moment is that around the science of information, you have profound changes in computing. You have profound new insights in the life sciences. You have profound new approaches to material science, and you have of these profound new capacities to create learning systems, to create artificial intelligence. And so, I think that if there is such a thing as a uniquely general-purpose technology, I wonder if the digital understanding we now have is an even more general-purpose technology and general purpose approach than ones we had earlier.

**Jorian (28:49)**

Could you explain that a bit more when you talk about general purpose?

**Larry (28:54):**

There's an idea that historians have stressed in talking about technology, that there have been a small number of general-purpose technologies that find very widespread application in a lot of areas. Fire, the wheel, the steam engine, electricity, computing would all be examples of general-purpose technology. And what I'm suggesting is that as general as they were in their purposes and their fields of application, the digital information mode of thought may be that much more pervasive in terms of its ultimate impact on how we all live.

**Jorian (29:47):**

Fascinating. Jan, what are your observations on that? I love the stories of the unintended consequences of technologies. They're inventive for one thing, but then humanity finds ingenious ways to use them for other reasons. What's your view on the exponential development of these technologies and the influence of digital?

**Jan (30:10):**

Yeah, so the one thing that's really been fascinating to observe in Asia and in particular in Southeast Asia, is that many of the great innovating companies start with one application, so ridesharing in Indonesia, then realize they have hundreds of thousands or even millions of riders and consumers and then say, "Hey, why don't we give them a way to pay each other?" And so, it's interesting how a use case can morph and encompass other useful things in ways that you did not necessarily expect. And that's been really fascinating to watch here.

**Jorian (30:54):**

Larry, I'm interested as an economist, would you consider yourself to be an optimist when you see these huge shifts and you look at this data or can economist not be optimists? Are you going to give me that answer of you're a realist?

**Larry (31:10):**

No, I think I'm basically someone who believes that trends are 75% or 80% good, and events are 75% bad. And we naturally focus on events rather than trends because the newspaper never has a headline of the form, "Digitization continues." And so, I think we're led to be too pessimistic. I find it helpful often to look back at things not today versus last month, but today versus 10 years ago, or today versus 20 years ago. And by seeing things that way, I think one becomes more and more optimistic.

**Jorian (32:09):**

Same question to you, Jan. Are you optimistic about what you learned in the report? I know the world is tricky in many ways, to Larry's point, of there's lots of events going on, getting bad headlines. But is the report give you confidence that good things are going to happen, to coin a phrase?

**Jan (32:32):**

I'm relentlessly optimistic absolutely. I once listened to a speech Larry gave at Xinghua University, which was part of my reason for relentless optimism. I hope I don't misquote you, Larry, but you were talking about that poverty has never been more reduced, there have never been more opportunities, there have never been less violence in the world than there is today. And those are all trends that we hope continue. Even with some bad events here compared to a hundred or 150 years ago, mankind is in much, much better shape. And the other really interesting point is the speed with which mankind has gotten better over the last 150 years.

**Jorian (33:17):**

I'm delighted to hear that. Jan, I often say about this podcast, if we could convince one liberal arts undergraduate to consider banking as a career ... and I say that because when I was graduating, I just assumed banking was for mathematicians and economists. So, to Larry's point, is EQ an important thing in your industry?

**Jan (33:38):**

The most important thing, the biggest reasons M and A deals fail is the ego of two founders, and one doesn't want the other to be chairman, or what will the new company be called? Somebody with a lot of EQ will find the compromise that makes some magical combination happen. So absolutely, EQ will be much more important than IQ.

The other thing which will happen, to build on Larry's point, is today a vast amount of work for younger bankers is processing things. And that is such a workload. They have little time sometimes to think about great new solutions, and I think a lot of the processing will be done by AI, giving more time to think strategically, to think about emotional intelligence and other things and what clients care and need. So, it will be an even more fun industry to work in.

**Jorian (34:47):**

Thank you so much gentlemen. Sadly, we've run out of time. Thank you so much for your time and your insights. Yeah, and for anybody who wants to read the whole of the Asia is a Time Machine to the Future report, you'll find it on the Citi website. Thank you and goodbye.