Digital Networked Economy and Global Corporate Strategy^{*}

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You know that in life, you can get many gifts. But the best gift you can get is when a dear friend becomes a very good advisor. Dr. SaKong is one of our advisors on our Asian Advisory Board, and I can tell you that that is a great gift for the company and for me personally to have a teacher of that stature, and that nature. I'm very honored to be here today under his leadership to actually show you some possible uncomfortable thinking.

I'm not sure that the subject I'm going to raise today is comfortable to think about, in many ways. We all share that, whether you are in Korea, the US or Europe. If you think about change, and the need for change, it is always uncomfortable. More uncomfortable than not thinking about it is to let it happen, because then you are not in control. So I take some comfort in that, and I will share some of my thoughts to see whether we can find merit in having these discussions.

Change is, of course, in all times. We have seen it over, and over, and over again. To be honest, the fact that the world is becoming very large, when you look to markets and opportunities, and at the same time, extremely small: one click of a mouse on your desk and you know everything you ever wanted to know about a person, subject or product. That trend is making the world so big that you watch the television at night, and see all the news from all corners of the world, you sometimes feel like saying, "Stop. It's too much." At the same time, you can drill down on every subject that you ever hoped to know something about. That trend gives us, as individuals, a toolset: a toolset to choose.

If I take two steps back, and we think about the world after 1950, and we remember that in the '80s the world turned upside down when Japan developed a skillset to develop much better products than the rest of the world, and certainly than the west, something happened. In those days, you could read books that said that this was the end of the world we had known, and the Japanese way of producing products will take over. So what happens? Well, the rest of the world ran into the classroom, took lessons

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in TQM, learned to adapt, and where there was a misbalance, balance came back. But it was a fundamental issue there, because Japan stayed home. They gave the world their products, but intellectually, and physically, they stayed home. They exported their products to the rest of the world, so the rest of the world got time to react, and to compete. In the '80s, it was a revolution, but it was a revolution that gave everybody else time to react.

Now, what happened over the last five years is fundamentally different. If you look back in history, you will find that there have been inventions that have changed the face of the economy, going back to the time of the steam engine, which disconnected physical labor and production. You didn't need to have muscle to produce. That has been proven to be a fundamental shift in the balance of power in the economy.

Now, three of four years ago, something happened. It was not a headline in a paper, but it has fundamentally changed the face of the competitive nature of the economy, in my belief, as radically as the steam engine, because approximately in that period of time, IT capabilities and network capabilities came together, allowing people to work together without a need for physical proximity. That's a fundamental issue, because physical proximity has been, and still is for many people, the reason to organize seamless processes: every search facility, and of course, the factories next door. If you have a research facility, you need every skillset in that corridor, because they have to walk into each other's rooms and talk to each other every day if they want to get results. So what happens is that you ask people to move and come to your facility. In my previous life, I worked with Lucent. And Lucent owned Bell Labs, which was probably the most renowned research institute of technology in the world. If you open the door of Bell Labs in those days, you saw Asia all over: people from India, China and Korea. Today, a Korean is running that organization: Jeong Kim, a young entrepreneur. You should be very proud of that.

But in those days, you had to ask those people to leave their homes, leave their companies, come into the US, go to New Jersey, and to sit in the corridor, because that's the way you organized skills and labor. Now, that has changed. For a long period of time, we could pick up the phone and talk to people to say "Hello." Then we could send telex, and after that, you could send a fax. You could share information. Actually, you could share data. But whatever you had to do with the information, whatever you had to do with the data still required physical proximity, because you couldn't interact.

You couldn't really have data, voice and video at the same time, with the feeling as if you were sitting next door, with the feel as if you were sitting in front of each other. Therefore, there was kind of protection in the inability to reach out, and the protection we all had was that you had to come together in a physical place to work together, so that you could compete by saying "We're better." "We're better in organizing, and we all come together in one physical place, and from there, we're going to battle it out with the competition.

But now something has fundamentally changed. If you can work together and you do not have to change your location, or leave your home country, working together seamlessly, with the security of the network guaranteed, the capabilities are such that you can pick the best brains wherever they are on the globe, bringing them together, the fundamentals of the world have changed. Now, that happened three or four years ago. At that time, we talked about globalization. People talked about outsourcing, basically saying, "I have labor to do, and I'm looking for the cheapest place in the world to do it." That is like with every invention: a first step. When TV was invented almost a hundred years ago, they called it a "theater at home," because basically what it did was to take to the home what already existed: the theater. If you see the first TVs, and you see a program, you will still see the curtain at the edge. Because people couldn't imagine what you could do with it. It took almost 15 or 20 years before the first talk shows and news shows were there. So if something is a new invention, it takes some time for people to realize that creativity can be added. The toolset is not just to duplicate what's already there; you can do something completely new. Same here.

So what did we do? We sent our call centers to other places. We asked people to manipulate data, and then to send it quickly back to where we are located in Korea, London, and New York, because the brains were centralized. You decentralized the work, and you bring it back. That's the first step. But quickly people realized that it's much more fundamental. We can do things now that we couldn't even imagine even five years ago. Think about if you want to design the next car, and you want to get the best brains. Well, if you design a car, you do not want to have those "best brains" on your payroll forever. You want to get them on board, get the best designs and the best creativity, to make something happen, and then move on to produce it and run with it. You can do it now. You can have a designer in LA, working with someone in Italy, working with the best software engineers in India, and ask the people in China who have to manufacture the car to work in real time together, and everybody stays home.

I can tell you that I've seen it happening in the movie industry, where an animation was made in real time, and the only thing you saw was a glass table, and you saw hands working together, but the hands belonged to people staying at home, at many different places in the world. Getting the best brains together. If you can do this at the most fundamental intellectual part of any organization, which is the knowledge part, you can do it in any other part.

Now, if you want to be successful today in the world, we have to understand one thing very clearly. Respect for culture, and respect for differences is the key for success in an organization. You can't make a product in one country, and declare this product universally appropriate for everybody on the earth, and say, "This is the way it is." You need to organize yourself very closely to your customers. You need to be part of the society, understand the needs of the customers, and understand what they require, which may be different from other markets. Now in the old days, that was a problem, because it really meant that you had to have the full process and organization duplicated in every country. You know those companies. They have a subsidiary in every country, and they need to have the general manager and a doorman, and everybody in between. They need to duplicate that. It's very expensive, and not very flexible.

Today you can make a choice. You can organize very close to the customer, where you need to be very close to the customer. But where you have to use economy of scale, and the capability to use the best possible brains, you can dissect that part of your organization, and put it on the globe wherever you want. So I can produce where production is done best, I can engineer where engineering is done best, and I can market and adjust very closely to my customer base. It's a different model. It's a successful model, because it does two things: It takes economy of scale on one side, and a recognition of individuality of markets on the other side, and lets that work together.

So what's the problem, if this is so easy? Well, there is a big problem. There is an intellectual problem. There is a cultural problem. If you want to understand that, think about computer technology. What has computer technology to do with people and emotions? Well, there is a very interesting comparison to be made. Not too long ago, if you wanted to build a computer network, you would have a data warehouse, and you

would have big central computers. They would do all the powerful work; they were the center of gravity. If you wanted to distribute it to the rest of your part of the organization, you would have long lines, and you would make what are called "slaves." They were not very intelligent. Those parts of the computer network would do what the central computer said to do. And then the computer industry said, "Wow, perhaps that's not the best way to do it. It's very vulnerable, and if something happens in the center, the whole system goes down." And how much can you do in the center, if you have applications and tasks to fulfill at all parts of the network? So they invented what is called "distributed intelligence." It's not a central computer, but very intelligent units all over the network, which in combination, are much more powerful than the centralized computer could ever be. But the fundamental issue here is that that in the distributed network, all those computers need to work together. They ask and correct each other, and work together in a seamless fashion.

Actually, that's the problem that we have in real life in our own organizations. We are organized, whether you are in France, China, Japan, Korea, the UK, or America, with a centralized viewpoint. The intelligence is in the center, that's where the bosses are, and they know everything. They think about things. They write it down in a book, and then they distribute it very quickly to the outskirts of the universe, where the periphery will do what the center thought it needed to do. This is the old model of the computer network: A thinking center, and execution everywhere else. I don't think it's a model that will stand the test of time. I don't think it's a model that represents the opportunity that is now created on a global basis. I think, therefore, that we have to think not just in terms of R&D and knowledge, and certainly not in terms of products, but in terms of capabilities, agility, and responsiveness. An organization that is very much centralized, and has a value-set created in one set of markets, has great difficulties adjusting to changes that might take place in all the areas it is operating in.

So here we are. We have fantastic capabilities: technological capabilities, R&D capabilities, and intellectual power. But in order to translate that into economic terms, and in order to make it into products that people really want, you have a translation that is different than we have seen before.

If we had an applauding audience, then life will be easy. We would adjust, and everyone would think we were big heroes, because we are going to adjust to the realities of the new economy. Well, ladies and gentleman, there is no applauding

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audience. There is a booing audience. Actually, there is a very confused audience. In the morning, citizens of the world rise, look out the window, and say, "This is a wonderful day." And they go to the shops, they open the door, and go in, and see the products of the world. If I go to my home, I see many products from Korea. I see products from the US and Europe. It's all coming together. If you look tonight at home, and look on your dish at what you're eating, you will see that the world is coming together. And for you as a consumer, these are great times. You get better quality and more choice for a lower price. But that same consumer comes out of the shop with two big bags in their hands, and turns around and says to the government, "But I am also a citizen, so I strongly protest the consequences of what I just did by taking full advantage of the choice that is in front of me." On one hand, I want the certainty of the world I know as a citizen, and on the other hand, I want the freedoms and benefits as a consumer. So, no wonder policy makers and politicians are confused about what to do. What they do is think that they can have one eye on the benefits, and the other eye on a defensive mode. "Let's stick to what we have."

In the eighteenth century, there was a French politician. He had to advise the ruler of France about the same kind of issue: Change. And he said something to the ruler that I think we should all realize: "Your majesty, if something is inevitable, you better embrace it. It's going to happen anyway." I think that's where we are. It's going to happen anyway. Now, it's not going to happen anyway without consequences. There will be winners, and there will be losers.

So what's my view? It's uncomfortable. There are many other opinions, but this is my opinion. What's the best way to deal with this? The first thing we need to understand is that you need to allow people, individuals to deal with the consequences of change. The first thing to do is to be honest, and tell them that change is happening. There is no way you can compromise with that honesty. The second thing you need to do is to give them the toolsets to react, to be confident, and to allow them to see change not as a threat, but as a factor in life that they do themselves as well. Everybody's changing. If you look to your family, or your private life, change is something that you deal with every day. And you feel comfortable with it, and the comfort is because of your faith in what you can do. I think we should be sure to give people the toolset to react: knowledge, education, information, and flexibility. The third thing that I think we should do is to tell organizations and companies that there is wonderful opportunity. The market, in total, on a global basis is becoming larger. Many hundreds of millions of

people who could not afford to participate in the global economy do so today, and that group will expand. That's a fantastic opportunity. However, they will not be satisfied with just our products, while we close our doors and stay behind our walls. If you want to become a player, you have to open your mind. Opening your mind is not free. Opening your mind is not an intellectual activity, it is a physical activity, and therefore, you need to be willing to do the unthinkable, to argue with yourself about the wisdom of your strategy, and to ask yourself whether you have the right people around the table. Do we just confirm that we are right, or do we have the capability to have a dialog? Perhaps even, an argument? Do we include the diversity of the markets we serve in the way that we take policies to the market? Do we include the diversity of the markets we serve in to our decision process? Do we have around the table the different set of cultures to make the right decisions? Or are we still, as we have been for the last hundred years, actually a domestic company that goes international not with our mindset, but with products, and expect the other markets to accept the products based on our own culture?

I think that model will come quickly to an end, and I think that only companies that are willing to open their minds and become an integral part of the market they serve by having the people and the backgrounds around the table that allow them to think on a totally different level of globalization. Very uncomfortable. Very necessary. Therefore, diversity is not a corporate social responsibility as some people say; it's a business necessity. In my company, when I started five years ago, 99.7% of the people around the table at the top level were British. Today, we have seventeen different passports, and 40% are women. We have people from all different walks of life, from all continents around the globe, interacting with each other, because it is the only way to understand your own DNA in an organization, what it is to serve different markets. You can't learn out of a textbook. You have to feel it day to day. It's a massive change. It's very uncomfortable. It's very rewarding. And I think that companies have to think about that.

But governments also have to think. Policy makers have to think. If I look to Korea, I see that Korea has done terrifically: it has a fabulous set of world-class companies, capabilities and products. They are, on a product basis, absolutely able to compete. But on a corporate basis, on a structural basis, they are very much embedded in a cultural inheritance that served Korea extremely well, but perhaps, will have to be rethought on certain levels going forward. The question is not, "Do I have the intellectual capability to produce today?" or, "Do I have the cost-base for tomorrow?"

but, "Do I have the flexibility and agility to adjust to markets that are changing so quickly, and can I do that with the human organizational structure that I have today?" That is the uncomfortable thinking. Companies and individuals can react. BT changed, not because we saw the light, but because we had a crisis, which is the best gift you can get. Because, in a crisis, you need to do something and radical ideas get a better chance.

But I don't know whether I would say to you all, "Please get a crisis." I think I would say to you, "Imagine that you have one." Don't feel the pain, but imagine the pain. See whether you have the capability to react. To a country, it is exactly the same. The comfort of today may be the discomfort of tomorrow. Therefore, the ability to dialog early is way better than to wait for the necessity to come.

So, ladies and gentlemen, these are a few thoughts. I'm pretty sure that many of you think that I've been smoking something; that this is not real. Perhaps not the smoking part, but the other part, is right. But there is one thing that I would like to leave you with as a thought: YouTube, at eighteen months old, is being sold for 1.6 billion dollars, not by a bunch of fools, but by people who see change happening. When opening the paper to see the new toolset of the Internet and the changes that are happening rapidly, isn't there a very, very loud voice in the back of everybody's mind that says, "Oops! There is change. I'm not sure I fully understand it." If that is taking place, ladies and gentlemen, I think we have a very good chance of becoming very successful going forward. Thank you very much.

Questions & Answers

Q We'd like to hear more details of your experience with BT in the transformation to cope with the fundamental changes in this new century. Please speak more on organizational change and the changing business model, in addition to the national diversity at the top level of the company.

A Organizational change is people change. In many organizations, if you are working at the front lines, for example in a factory, in a coalmine, or in a service organization, change happens every day. The higher you go in the organization, the less change

happens. If you go to the boardroom, everybody is patting each other on the back, and saying, "Aren't we doing terrific?" The next thing we have to do is make a change again, and we go down the organization to make the change. I fundamentally disagree with that. If you look for problems, they are always caused at the top, and if you look for solutions, there's only one place you can find solutions, and that's at the top. So if you want to change, you have to start at the top. You have to start with yourself. I don't know too many people who go to the office with the idea to make a massive mess of their work everyday. Most people try to do the right thing. The problem is, what is the right thing? They have in the back of their minds a kind of projection of what the boss wants. That's what they do.

So, if you want to change, the first thing you have to attack is the formulation of success. What is it that makes us successful? If you open the minds of people, you will see that most people have an old fashioned vision of what success looks like. They struggle to cope with the new success. If we haven't shared that with each other, and if we haven't explicitly said what success was, how could you expect the rest of the organization to do what you want them to do.

So the first thing is to formulate success, look around the table to see whether we are capable to bring success, and then translate that into things that people can relate to. If I look to BT, we have 135,000 people around the globe. If I formulate success as the earnings per share, and if I go to Allen Ma's organization in Asia and take a single engineer, trying to help a Korean company stay in business, and I say to that person, "Earnings per share!" I would be talking out of a textbook that that guy has never seen. No relationship, no idea what it is. Zero emotional value. You have to relate success to the capabilities of individuals to do something with it. I think that is the most fundamental thing you need to do. Am I able to communicate what success looks like, and therefore what to do, and how to make it relevant?

The second thing that you have to do in organizational change is to be absolutely harsh at the top, and very lenient, and very forgiving at the frontline of the company. Most companies do it the other way around. They are very considerate to the people who make it, and very harsh to the people who they don't know. The third element is to question yourself.

Let me tell you a story. At BT, innovation is at the heart of what we do. One day, I

thought, I'm going to invite 800 of our best brains under 35, put them in a room, and be their hero. Big mistake, but I did it. So I asked 800 people to come into the room, and I said to those guys, "You are the future of the company, and your ideas are truly important, and absolutely vital for what we do." I thought I made a pretty good speech, so I thought, let me offer them something: "I will help you. What is the biggest hurdle you have in the company?" There was dead silence in the room. At the back of the room, someone raises his hand. A young guy of 25 stood up, and said, "The biggest hurdle in the company is you." So. Excellent point. So in my defense, I always ask why. I said, "Why?" And he had a fantastic answer. He said, "People try to please you in the organization. So, your understanding of what good is a kind of guideline for everybody. How can you judge whether what I have in my mind is good or not?" And he was 100% right. So the leader has to know the art of letting go. You set parameters, but I don't take the assumption that only my judgment of whether something will fly or not is good.

We do many businesses that I do not understand. We do "podcasting." Young people make their own information and share it through "podshows," and I have no idea what it is. To me it's all... well, I wouldn't spend my time on it. But it's a phenomenal success. I shouldn't be the yardstick of success, and that art of letting go, I think, is the third important part of leadership.

Q Mr. Greenspan, during his FRB chairmanship, praised the US economy by saying that productivity in the US economy improved remarkably by applying IT technology to the service and manufacturing sectors. Other countries, including Europe and Japan, are lagging behind in using IT technology in the rest of the economy, and reaping the benefit by improving their productivity. This problem is particularly visible in Korea. Korea is very advanced in IT production and building up the IT infrastructure, but the productivity of our service sector is very, very low. So, listening to your presentation this morning, the cause might be our lack of flexibility in changing the organization like that. But I would like to hear more from you about this problem in the world economy.

A One of the benefits of working in the US (I worked there for six years or so) was to understand how cultural change is important. If you go to the doctor in Europe and the doctor gives you three different pills for each day, the average European takes the pulls out of the box, puts them next to each other, and makes sure that every day they take

the pills while eating. The average American takes all the pills and eats them immediately, because they want an instant solution. That is a cultural difference.

I think it's the same in the economy. In America, you go on with life. So in an American average, if there's something that's unpleasant, you don't postpone it. You don't try to avoid it. You take it immediately, get the pain behind you, and get on with life. It's a different set of criteria, but if you use ICT (Information and Communication Technology), you make people redundant. You have to find something new for them to do. In itself, this happens at all times. Skills have changed; it's nothing new. In certain parts of the world, and certainly Europe, we have been masters of disguise. So do we say to someone, "You've become redundant; here a new set of things you have to do"? That's not what we say. We say to them, "Continue to do what you do, but slightly different."

That's not what America has done. They have embraced the positives and the negatives faster than we in the rest of the world have. In its competitive nature, that has been a big benefit to them. They have a huge market, and they have the entrepreneurial skill set that is as important as costs or knowledge. Cost and knowledge are wanting. But if you don't have the entrepreneurial skill set to make it relevant to others, you have a big problem. I think that the triangle of cost, knowledge and entrepreneurial spirit is very well developed in the US. I think that we should not copy it. You have to put it in your own culture. But we should look for the lessons you can take from that, and for ways you can apply it here.

Q What is the CEO-level leaders' role in the globalized role? Globalization certainly brings benefits, but it also has downsides, particularly displaced workers and income Odisparity. Globalization brings about a trillion dollars of benefits each year, but on the other hand, the US government is spending only about one billion dollars on displaced workers. What would you suggest to deal with the downsides of globalization?

A As I said, change is happening in everybody's lives. Some change is self-inflicted, and some change happens without you wanting it. You deal with it. If it rains, it's very unfortunate, and you probably don't want it, but you buy an umbrella. So, in the same way, we have to look at the issues here. Of course we need to take action to help people cope with the idea that change has consequences. If you keep telling people that they have lifetime employment, you will create a problem that is bigger than life,

because lifetime employment is not a concept that will stay. And everybody can tell you that. They may not want to tell you that, but if they are honest, they will say that it is very likely to happen. Change will happen in everybody's life.

Knowledge from people in universities is old and irrelevant in certain professions after five years. They have to go back to school. And sometimes we have teachers that have not been back to school in 35 years. What do they teach? We have to say to teachers, "You have to adjust and adapt. You need to go back and refresh. That's a necessity." It's not just the poor guy who can't defend himself; it's the mental framework in which you place people. If you create an entitlement culture: "Well I can sit can sit back and let the organization take care of me," that's a different philosophy than if you ask people to become a participant in their own lives, and be their own guide.

You have to give them tools. You have to give them access to reeducation. You have to give them access to the capability to relocate, if necessary. But what you have to do in the first step is to start being honest, and ask them to play a role in their own lives. Then you need to support. You need to be very creative in support. What works for me may not work for you, and vice-versa. What the first step is to say that we are in this boat together.

Comment I fully agree with what you just said. In that connection, I think this income disparity, which is really polarization, is a global phenomenon. Many people argue that it is primarily to do with globalization, but I would contend that it has more to do with the knowledge-based economic era's characteristics. As Ben just said, the salary difference between high school graduates and college graduates is widening, because the value that new education can add today is much larger than before. In the industrialized era, those who could read a manual, and those who could not, had a substantial value-added difference. Today, however, the value-added difference is much wider between those who can use the Internet, and those who cannot. This knowledge-based economic era tends to have a wider income gap. The solution is education, training, and retraining. I think that the anti-globalizers worry that income distribution has to do with globalization, meaning that we go back to protectionism and inward looking policies. But that is not it. It has more to do with the knowledge-based economy that we are living in today. I think that once you see it from that perspective, the policy prescription will be much different. I think the important thing is education, training, and retraining, and giving proper tools to the people.

Q Do you think that in the next couple of years, there will be revolutionary change in America's political governance? What will this change lead to?

A That's change. You have very different forms of change. Some of them are very easy to comment on, and others are very difficult to comment on. The good thing is that a lot of change is not managed. Change sometimes happens in the back of a garage, where somebody has a bright idea, and all of a sudden, it changes the face of the universe. We all know what it is "to Google." Now it's a word in a dictionary. It was an idea in the back of a garage, by two young kids. It's changed the face of the earth. You can plan, because planning is good for a kind of platform or podium. The players on the podium are all individuals who create most of the change. Big events happen, and you can plan and see what's going on. But I think that the real change that we have now is the individuality of a creative idea that can spread so fast: faster than ever before.

Dr. Kim: When you started, you said that you would say something that probably would make us uncomfortable. I thought you made the universal audience, representing the universal company. I didn't realize that the discomfort you speak of is specifically addressed to the Koreans because of two factors: One is the fact that we are the most homogenous country in the world. We are 100% Korean, while even Japan is only 99% Japanese. We are thus tremendously disadvantaged in having multicultural indigenous knowledge.

Secondly, the recent developments are very much top-down, and CEO-driven. You emphasized that while the CEO is important, total participation is even more important. I almost had a question when you said that improvement and mistakes could only be made at the top. At the same time, the fundamental change was the network development, which was top-driven. It was the top that opened up the platform, and the universal contribution made this happen. While Lucent, AT&T and IBM had wonderful technology and teleprocessing, they did not even scratch the surface of the world until it became an open platform. Initially, I was trying to reconcile this top-driven change vs. universal participation, but you answered it with your wonderful anecdote that the top has to open the path for the bottom to contribute the ideas.