I have been asked to say some things about the futures of work.

Especially Smart Work.

But before I do that, I need to remind us all about some features of the history of work.

A lot of which is Stupid Work.

I. Why do we work?

It is the duty of the future to make the present remarkable.

The way we live now will seem unbelievable 50, 100, 1000 years from now. The most ordinary things about our daily lives will seem strange and exotic.

(And perhaps stupid and mystifying)

So also does our ordinary present look exotic from the past. Most people living in Korea 50, 100, or 1000 years ago could not imagine how we live today.

Similarly, many of us today find it hard to understand that for most of our history, humans lived very well WITHOUT working.

It would seem absurd to our hunting and gathering ancestors that we now waste so much precious time working, because they spent almost all of their time in leisure, but with more than enough food, clothing, shelter and material goods around them.

The truth is that for most of human history, humans lived lives of abundance and leisure without working.
As the early futurist and science fiction writer, Arthur C. Clarke, said some time ago: “Work was an invention. And it is time we dis-invent it!”

If our hunting and gathering ancestors lived lives of abundance and leisure, why aren't we doing the same now? Why are we working so hard in jobs we may not enjoy? And why does the government and our boss demand we work even harder?

When and why did it all change?

After **200,000 years of “subsistence affluence”** in small, nomadic, peaceful hunting and gathering tribes, something began to **change about 30,000 years ago**.

The number of humans began to grow because the evolution of speech enabled us to organize ourselves much better than ever before.

As the natural supply of food diminished and abundant environments decreased our ancestors either went locally extinct or developed new technologies for trapping and then taming animals and for saving and domesticating edible plants.

**Between 5,000 and 10,000 years ago**, our ancestors began to settle down. For the first time, ownership of land and of material goods became both desirable and possible.

Small, egalitarian communities relied on “Big Men” to organize ceremonies for the social redistribution of food, land, and possessions. Some of the Big Men transformed themselves into hereditary chiefs, and began to raid and steal from their neighbors, acquiring more land and slaves in the process.

With the invention of writing, about **6,000 years ago**, the centralized control of huge geographical territories became possible for the first time.

Divisions of labor appeared: Kings, Priests, Clerks, Scholars, Soldiers, Craftsmen, Peasants.

Cities, surrounded by supporting farm lands.

Cities, expanding into vast empires.

And for the first time, **the invention of work**. The invention of money and credit; the gap between rich and poor; between free and slave; and between ruler and ruled (typically in the form of feudalism) that had never existed before.

Most people worked in the "primary" industries of farming, fishing, mining, timber providing for the rulers living in the cities.

**Several hundred years ago** new ways of thinking and new tools for acting emerged: the scientific-industrial revolution, spurred by the invention of the printing press.
Farmers and peasants were forced from the land to cities and factories to work for wages for the first time. Also for the first time, men had to go to work in "secondary" industries that required extensive human labor and new forms of energy to turn "raw materials" into industrial products.

Most people began working in factories or related jobs.

Mass production for a mass society began flooding markets with material abundance. There was so much abundance that advertising was invented to force people to consume of the surplus products of the factories.

About sixty years ago, America was the first country to become a “post-industrial society”, later called an “information society”. Jobs shifted from factory to offices; from blue collar to white collar; from producing material goods to producing words and services.

Machines increasingly did most manual labor. Automated factories and industrialized agriculture dominated. The local craftsman and the family farm were destroyed.

"Tertiary" labor--"a service economy"--of two kinds developed: Some "service" jobs were professional and well-paid: government, law, administration, education, advertising, entertainment.

Most "service" jobs were menial and poorly-paid: waiters, store clerks, hair dressers, fast food workers, hotel maids.

Almost everyone lived and worked in cities and suburbs.

Advertising became ubiquitous and seductive, creating ever-increasing demand for ever-increasing products.

Every nation in the world from the mid 19th century onward went on a binge to “develop” to “grow”--to become an industrial society and then an information society.

They followed the models first of the UK and the US; then Europe or the USSR; then Japan, followed by Korea, Taiwan, Hong Kong, and Singapore.

However, in the 1970s a crisis hit.

Since few people in the “advanced” nations of the world produced anything but words or services how could they be paid enough to buy the goods being produced without their labor?
Unemployment, caused by automation first of manual labor and then of mental labor that once only humans could perform created a crisis: There were not enough consumers earning incomes to buy the endless new products.

What to do?

The answer was the invention of mass consumer credit and easy bankruptcy in 1970s.

Also an increase of national and corporate debt. The end of the gold standard and then the silver standard. Governments printed money without any underlying material basis.

People were encouraged to go into debt which forced them to keep working not for their labor (their labor was and is not needed) but to keep them busy and to require them to consume the things made without their labor and could not afford without easy credit.

That way of life is now about fifty years old, and since 2008 is in great danger.

Can the old economy be revived? Is the old economy basically OK? Or is a new economy needed? If so, what might a new economy be?

What is next?

II. What is futures studies?

To answer that question, I first need to say a few words about what futures studies is and is not

I first became interested in futures studies while I was teaching for six years in the College of Law and Politics of Rikkyo University in Tokyo, Japan, in the early 1960s.

I taught the first officially-recognized futures course while I was at Virginia Tech in the late 1960s.

I went to the University of Hawaii in 1970, just as something called "Hawaii 2000" was being formed by the governor, legislature, business community and university. One of the invited observers was LEE Hahn Been, who did many wonderful things in Korea, not least of which was helping introduce futures studies into the country.

One of the many outcomes of that process was the creation, by the Hawaii State Legislature, of the Hawaii Research Center for Futures Studies, placed at the University of Hawaii, in 1972. I have been Director of that Center since then.

In the mid 1970s, the Department of Political Science, of which I am a member, created a two-year academic and internship MA program in Alternative Futures, and since then has
produced a stream of people who have earned very good livings as consulting futurists. Many also stay on for a PhD in political science with a focus on alternative futures.

During the 1980s and 90s, I was first Secretary General and then President of the World Futures Studies Federation. As such, I got to see what "the future" looks like in over forty countries of the world.

During the 1970s and 80s, I also taught futures courses every spring in the InterUniversity Center for Postgraduate Studies in Dubrovnik, Yugoslavia. Most importantly, during the 1980s and early 90s, I went to almost every Communist nation and talked with people who were interested in a different future from the one then ahead of them.

*I can assure that the future is very different when seen from different culture and places.*

So it is out of forty years of work around the world that I bring you this summary of what futures studies is and is not:

Futures studies is related to but different from planning and policy making, just as planning and policy-making are related to but different from day-to-day administration.

Just as day-to-day administration is be guided by planning and policies, so also should planning and policies be guided by prior futures foresight activities.

Policy-making and planning without prior futures foresight is at best worthless, and most likely harmful.

Here are some fundamental principles about futures studies:

Futurists cannot *predict* THE Future (no one can).

A *prediction* is intended to be a true statement, an accurate statement, about the futures. Once we lived in communities where prediction was possible. Not now!

But futurists can and do *forecast* Alternative FutureS (and so should you).

A forecast is intended to be a logical statement, a useful statement, about the futures. Futures are plural, alternative, diverse, possible: futuribles. Not THE future but Alternative FutureS.

Most importantly, futures studies helps you invent Preferred Futures.

But to be effective, the process of forecasting and envisioning must be done continuously and not be a one-shot activity.

So: Do not *Predict "THE Future"*
We live in a world of rapid social and environmental change.

The major cause of social and environmental change is technological change.

New technology enables us to do things we could not do before. New behavior causes new ideas and values. New ideas and values challenge old ideas and values based on old technologies, and cause social and environmental change.

People who invent and diffuse new technologies are the real revolutionaries in the world today, causing profound social and environmental change.

We are forever moving into a new world beyond anyone's past experience or understanding.

If a large part of "the futures" may be novel, then there are several important implications we need to keep in mind:

We must understand what the major novel, cyclical, and continuing forces are, and how to utilize them to create and move towards preferred futures. In other words, we need to identify and strive "to surf the tsunamis of change" rushing towards us from the futures.

If much of the futures may be novel, then there is a second implication we need to understand:

"ANY USEFUL IDEA ABOUT THE FUTURES SHOULD APPEAR TO BE RIDICULOUS." (This is Dator's "Second Law of the Futures")

One example of how technological change causes social change (while any technology could be used, this is an example of change in communication technologies):

Each new mode of communication technology allowed humans to think more systematically and to have greater influence over ever-wider areas of time and space. As a consequence, humanity--fast approaching seven billion of us--totally dominates and influences all once-natural processes of the entire Earth, and beyond.

III. So what's next?

The answer to the question, "what's next," is always:

There are four generic alternative futures.
Continued Growth
Collapse
Disciplined Society
Transformational Society

So what's next?

There are many possible futures.

Here is one: "A Dream Society of Icons and Aesthetic Experience".

The "Place" industries (Construction, architecture, transportation)

And the "Words" industries (Government, law, business, education)

are giving way to

The "Image" industries (Entertainment, sports, military, space)

The way to be rich and famous now is to be a professional athlete, or actor, or singer, or dancer--or better yet, to be a master story-teller via movies, videos, animation, and interactive games.

Hollywood, Bollywood, Mickey Mouse, and Hello Kitty are all early examples of that.

A few years ago, someone in Korea also discovered the secret and convinced decision-makers that Korea should begin developing and exporting dreams via its own pop-culture industries: movies, soap operas, K-pop, and especially electronic games.

Korea has been so successful that I claimed that Korea is rapidly becoming the first official "Dream Society" and a leader producer of entrancing dreams globally.

IV. What about Smart Work?

This conference is about "Smart Work". Smart Work is called "A lifestyle revolution in the knowledge and information-based society". It aims to have 30% of public workers--eight million employees--telework by 2015 in wireless broadband-enabled Smart Work Centres located in areas outside of Seoul. This will decongest the capital, raise productivity, and make Korea greener, it is hoped.

Korea is already heavily saturated with IT services. Many Koreans already use smartphones for private purposes. Daum's Place and Yozm, and Naver's Social Web, allow access to Foursquare and Me2Day as well as the recently popular Facebook and Twitter. The transition from using these devices for personal purposes to professional purposes
could be easy and seamless, as long as money and time is not wasted on specific hardware and software.

Policies should make telework easy, fun, and rewarding, and should allow seamless movement across platforms if new communication technologies continue rapidly to replace old ones as is happening in IT services now.

I have had some experience with telework. The Hawaii Research Center for Futures Studies, with the Hawaii State Judiciary in 1993, conducted a "telejustice" project. All aspects of the judicial system were to be digitized and performed locally, similar to your Smart Work Centres. All records would be on electronic files accessible anywhere. Even trials could be held anywhere with all parties linked by video and not physically present.

The project died when the Chief Justice supporting the project retired, and his successor killed it.

This was with 1993 technology!

Image what is possible now with 21st Century technology!

The US federal and state governments have frequently called for more telework, and yet only 10% of federal employees telework.

Interestingly, in some US states, public telework is performed in foreign countries, such as India!

Telework need not boost local jobs.

A few weeks ago, the US Congress passed by a vote of 254-152 and sent to the President H.R. 172 entitled "An Act to require the head of each executive agency to establish and implement a policy under which employees shall be authorized to telework."

Telework is still mainly in the future for many reasons, mainly political and psychological.

Bosses want to "see" their employees and, strangely, employees want to be seen!

And yet these people freely share their deepest secrets and naked bodies on You Tube, Twitter, and Facebook without the slightest care in the world.

People ought to be insisting on telework, rather than resisting it!

**V. Futures Beyond Smart Work.**

Nonetheless Smart Work and Telework are still work.
Why is work necessary in a society where automation, robots, and artificial intelligences can do most work for us?

Instead of "Smart Work" our goal should be 100% Full UNemployment.

All work today can be done with only 10-20% of the "workforce" actually working. This work can be fairly rationed among everyone. Or people too full of the Confucian work ethic to know any better can do the work for everyone.

The rest of us can just play and pray.

The Knowledge Society. The Information Society is over.

The Dream Society has begun.

And it began in Korea which seems now to have forgotten about it or lost its nerve as it retreats to a Knowledge Society full of Smart Work.

In addition to communication technologies, there are many other technologies transforming Earth and Humanity:

Robots, Artificial Intelligence, and the emergence of Cultures of Autonomous Beings.
Genetic engineering, clones, cyborgs, and the emergence of Post-homo sapiens.

These technologies--and more--all contribute to the possibility of a Dream Society replacing current Information and Industrial Societies.

But a Dream Society is not inevitable. There are many other possible futures.

The overwhelming majority of people when they think seriously about the future (which is not often) unquestionably assume continuation of Industrial and Information Societies.

This is the Official View of the Future found in the plans and policies of every government and organization on the planet: We must keep growing Forever!

But more and more people question whether growth can or should continue.

They fear Economic and/or Environmental Collapse. There are many good reasons to feel that way:

Global population growth remains a major challenge for the very survival of life on this planet.
And yet population decline in Korea and many other countries in Asia, Europe, and North America remains an equally daunting, thought opposite, challenge.
The very **short era of cheap and abundant oil is over**. In spite of many plans and fantasies, there is *nothing available to replace oil* before it becomes prohibitively scarce and expensive.

The world's **supply of food**—largely dependent on plenty of cheap oil—is dangerously low and increasingly expensive.

Fresh **water** is scarce almost everywhere.

**Global climate change**, including sea level rise, is real. Its impacts range from divertingly annoying but manageable to catastrophic.

We must not "solve" our energy problems by making our environmental problems worse!

After many decades of "development", the **gap between rich and poor** has not narrowed. In many parts of the world the once numerous middle class has dwindled sharply. Some have become temporarily rich but many more have become desperately poor.

Yet, the **global economy is teetering on the brink of collapse**. We currently hear a lot of people saying that the economic recession is over and Good Times will begin again. That is possible, but not likely in my view. Prolonged recession is more likely, I believe, because of the end of oil, environmental changes, and debt-bound governments.

Unless these and related challenges are quickly and honestly addressed, there will be no Dream Society in the future—and perhaps no Information or Industrial Society either.

We may all have to become **farmers and hunters again**.

**VI. Korea as a Survival Society?**

No one can be sure what THE future WILL BE. Certainly I don't know.

I do know this.

As important as they may be at the moment, "Smart Work" and "Green Growth" are brief, flicking nanoseconds at the end of both Industrial Society and Information/Knowledge Society. Whether a Dream Society or a Survival Society is about to emerge, I do not know.

The future has never been more uncertain.

Korea is better able to face this future and chart a positive path through it than are most other places. Koreans have a stunning historical record of overcoming adversities quickly and well. Koreans are hardworking, honest, and caring. They want to do what is right and fair.

Most Koreans are also coming to see the value of creativity and imagination, as well.
My Korean students at the University of Hawaii have always been among the best prepared and the hardest working. But recently they have also become the most imaginative and daring.

If Korea's educational and political systems can come quickly to recognize the necessity of both hardworking and imaginative young people and leaders, I am sure Korea will be a world leader towards a new future, whatever that future might be.

I am counting on you.

**I have a specific suggestion.**

For a short period during the 1970s, when energy and environmental issues were for the first time coming to the fore, I worked for two years with the educational television station, TV Ontario (Ontario Educational Communication Authority, in Toronto). I helped them produce television programs dealing with the nationwide "Conserver Society" project sponsored by the national government and coordinated by the national Science Council of Canada.

For a few years, most agencies at all levels of government, many researchers and academics, and most media outlets produced very impressive documents and programs intended to transform Canada from a "Consumer Society" into a "Conserver Society".

The project was unfortunately killed during the heady days of the 1980s when North America and the world went on a three decade-long wasting and spending spree, just ended.

I think the time is ripe for Korea to take the lead now in doing research and producing the media content that can help Korea and the world move towards what now might better be termed a "Survival Society".

While I very much hope that our dreams of a high tech Dream Society will come true, we will be irresponsible if we do not also devote equal time, talent, and money to assessing the contours of a Survival Society as well.

I challenge you to accept that mission!

So learn to identify and surf the tsunamis of change. But while doing so, be sure to remember: "Any useful idea about the futures should appear to be ridiculous."

Surf's up!