

2050: The Odyssey Begins

At the Heiligendamm G8 Summit earlier this year, Japan put forward a strategy to combat global warming called Cool Earth 50 (CE50). Next year's summit will be held at Toyako in Hokkaido, Japan. We spoke to Special Advisor to the Cabinet Kurokawa Kiyoshi, who has served as president of the Science Council of Japan and currently heads the Innovation 25 Strategy Council, about the direction of Japan's CE50 long-term vision and efforts to nurture the human resources needed to carry it through.

The Japan Journal: Innovation 25 is a long-term policy that deals with changes on a global scale toward 2025. The CE50 global warming strategy is an even longer term strategy that looks forward to 2050. What are your thoughts on the present direction of CE50 as Japan prepares to host the G8 summit next year?

Kurokawa Kiyoshi: CE50 sets out the universal target of halving global CO₂ emissions compared to current levels by 2050. The fact that it was included in the agreement at the end of the summit shows how much of an impact it had, especially considering that a specific agreement at the summit had previously looked doubtful. In that sense, it would be fair to say that the rest of the world has exceptionally high expectations from Japan at the moment.

At this year's conference in Davos prior to the summit, all eighteen sessions on topics such as preventing global warming and energy issues were full. Governments and companies were really discussing their roles passionately. In terms of the world's major countries, European Union members have agreed to reduce greenhouse gases by 20% compared to current levels by the year 2020. The United States meanwhile continues to actively invest in environmental technology, but has not been so forthcoming with regard to setting specific targets for reduced emissions.

The agreement is of particular significance in light of concerns that, despite active discussion regarding the major issue of global warming within the business sector in Davos, the G8 leaders would do something irresponsible such as failing to reach an agreement. I also attended a meeting of G8 scientific advisors in Slovenia roughly two weeks after the G8 summit. I genuinely believe that the tremendous gratitude shown by advisors from the United Kingdom, United States, Canada and other countries at that meeting can be taken as further proof of the significance of this agreement.

As we continue to promote this approach on a worldwide basis through events such as the WHO commission

meeting in January 2008 and the Global Health Summit with the World Bank and others in February, it is my hope that we will be able to sustain the same level of momentum through to the Tokyo International Conference on African Development (TICAD) in May and into the run-up to the Toyako summit.

At the close of the G8 summit, I feel that it will be essential for Japan to clearly specify what needs to happen next from the perspective of "G8 and beyond." That



Kurokawa Kiyoshi, special advisor to the Cabinet and head of the Innovation 25 Strategy Council

will mark the beginning of our journey onwards towards 2050.

Having come into the spotlight by setting out the CE50 strategy, what will Japan need to do after next year's summit in order to lead the way forward on the environment and measures to combat global warming?

We need to nurture human resources from a medium- to long-term perspective. In the past, during the country's period of rapid economic growth for instance, Japan has been content to follow a model based on

consensus-oriented human resources. Times have changed however. Things are different now that pretty much everything is interrelated on a global scale. If you think of the growth years as being like a tournament, then the current era is more like a league campaign. We need human resources that are capable of winning league matches.

We need to nurture people like the late Sony founder Morita Akio, people who will go out and make their mark on the world and at the same time send out a message to the rest of the world.

It's a question of nurturing "nails that stand out," as stated by the Innovation 25 Strategy Council.

What sort of specific action are we talking about?

It is crucial that we engage in long-term human resource development initiatives, especially investment in younger generations. Specifically, we need to expand exchange and homestay schemes in order to get young people involved in genuine international exchange. In 2008, fifty fifteen- to sixteen-year-olds from around Asia came to Okinawa for a month to live together and engage in exchange with fifty young people apiece from Okinawa and the Japanese mainland. Investment in this scheme is set to continue for three years. Whilst the aim is obviously to expand the sphere of exchange of the young people taking part, we are also hoping that this will serve as an example that will encourage the likes of private companies and educational institutions to increase investment in young people. The key to human resource development lies not with government subsidies but with the voluntary participation of other parties in exchange. It all depends on implementing reform, particularly at universities. I'm talking about possibilities such as abolishing the entrance exam system and departmental structure whereby humanities and sciences are kept separate or promoting international exchange from the standpoint of university departments or graduate schools.

What about education in schools?

The Japanese education system has remained more or less unchanged throughout the postwar period. The world as a whole meanwhile has gone through some major changes. Living in such a diverse era, we can no longer teach our children that there is only one correct answer to everything. The key question is how to adapt to changes in the world around us.

The process of education is not the sole responsibility of teachers and other educational staff. Although teachers are responsible for lessons during school, this commitment should shift to human resources from the local community after school hours. This makes it possible to use schools as an arena in which different generations can share both knowledge and the joy of learning. A wide range of human resources could be selected from the local community, such as from students through to senior citizens, with each person volunteering to take part in educational activities for ten hours over the course of each year. I'm sure that would bring about some substantial changes.

There are actual examples of local entrepreneurs helping to revitalize local communities by taking part in community education or providing support for child health care or working women. Such innovative models are far from uncommon.

It is the government's job to help develop the necessary infrastructure in order to expand such initiatives. Private sector operators meanwhile need to voluntarily make an effort to expand such networks alongside their main businesses.

I assume that there are also examples of larger companies participating in community education...?

Airline companies for example run three-day residential schemes to give first and second grade senior high school students the chance to experience maintenance work. In some cases, children have returned from such schemes with a newfound gleam in their eyes and ambitions of becoming engineers. I can't help feel that all private companies have a responsibility to promote self-help initiatives such as this. They are effectively intangible assets. Companies should be promoting such efforts from a global perspective. The rest of the world rarely sees this sort of approach from Japan, even though it is the world's second largest economic power. The time has come to think about Japan in terms of its global visibility. If Japanese companies take in overseas en-

gineers as part of training schemes and teach them new skills, it is fine for them to then go back to their own countries, even if the company would prefer them to remain in Japan. If companies continue such initiatives for ten or twenty years, they will end up with considerable assets. This is something that the private sector should be doing though, not necessarily the government.

Japan's industrial structure has also undergone changes, especially those revolving around IT. What sort of human resources do you think Japanese industry will need in the future?

With companies having to implement reforms almost continually in response to globalization, the time has come to leave behind the practice of lifelong employment [long-term employment]. Although it goes without saying that there are still some professions in which lifelong employment is feasible, such as transport related positions on railways or at airports or professions requiring high levels of experience, industries in which greater importance is placed on individual abilities are set to grow at a faster rate in the future. Japan needs to produce companies like Yahoo!, Google or Linux. It is a question of how Japanese companies and entrepreneurs regard the world market. They need to pinpoint where they can best market the value (or set of values) that they have to offer and map out where in the world they can make the most profit. We need human resources that are capable of doing just that.

So it's not a question of skills or experience...?

Even if you make a living by making prototypes for high value-added products, that doesn't necessarily mean that, in the grand scheme of things, you will be able to make a living on an assembly line basis. To put it another way, it is essential to also think about business, rather than placing your belief entirely in technology. With emerging countries catching up in terms of technology, if we get drawn into low-cost competition, we will be forced into a war of attrition. Customers want more than just technology. Games consoles are a prime example. Sony's PlayStation 3 (PS3) may boast outstanding technology, but it is the Nintendo Wii that is flying off the shelves. That is not to say that the Wii isn't outstanding in its own way of course. Take Apple's iPod as another example; despite its popularity, it is just an assembly line product on the inside. It is the concept that Apple uses to make its money.


The Japanese have always been skilled at finely crafting items. So that must mean that a paradigm shift in line with the changing times is also needed with regard to human resources. What would be the essential nature of such a shift?

Japan is full of people who meticulously perform detailed tasks irrespective of whether or not they will be of any real use or who work with great patience. This is evident in the industrious nature of Japanese people and their reliable approach to manufacturing. You could even say that such characteristics are one of the positive things to have come out of Japan's isolation from the Edo period [1603–1867] onwards, as the product of a stable society. As a result of Japan being isolated whilst the rest of the world was experiencing the age of discovery however, coupled with Japan's position as an island country, the Japanese didn't develop a feel for direct competition with other people and became somewhat introspective. Whereas the Japanese have all the advantages of an ant's eye view of the world, there is a lack of people with a bird's eye view, capable of taking everything in. Japan also has relatively few people capable of adopting a fish's eye view in terms of reading the immediate situation, getting a feel for the atmosphere and then acting accordingly. That has always been one of Japan's traditional weaknesses.

Whereas Japanese people tend to worry about failure, just take a look at Silicon Valley. Failure is inevitable. If anything, it's more of a question of still being able to take risks even after failing at something. That is something truly worthwhile. Learning from failure is quite important. In the same way, Japanese industry needs to break away from the past and nurture "nails that stand out."

I know that it is difficult to sum everything up succinctly with so many different layers, but what do you consider to be the key concepts when it comes to human resources and human resource development?

The most important concepts from here on in will be heterogeneity, adaptability and diversity.

As the process of globalization continues, we need human resources capable of resolving global warming, climate change and all of the other issues facing mankind and establishing a sustainable society on a global scale. 

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