Pandemic and Carbon Neutrality: Prime Opportunities for Reforming Japan

World-leading Social Innovation in an Age of Crisis

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Born in Hokkaido in 1939. Joined Hitachi, Ltd. after graduating with a bachelor's degree in electrical engineering from the University of Tokyo in 1962. Following roles that included Division Manager of Thermal Power Engineering Division, Power Group and General Manager of Hitachi Works, he became an Executive Vice President in 1999. He went on to be appointed Representative Executive Officer of Hitachi Software Engineering in 2003 and Chairman of the Board of Hitachi Maxell in 2007, becoming Representative Executive Officer, Chairman, President, and Chief Executive Officer of Hitachi, Ltd. in 2009, a year after the company had reported its highest ever final deficit, and he presided over the subsequent recovery. After serving as Executive Chairman of Hitachi, Ltd. when the company achieved its highest ever final profit in FY2010, he became Chairman of the Board in 2011. He stepped down from his chairman role in 2014 and served as an advisor until 2016. Other roles have included Vice Chairman of the Japan Business Federation, President of the Institute of Electrical Engineers of Japan, and outside directorships at Mizuho Financial Group, Inc., Calbee, Inc., and Nitori Holdings Co., Ltd. He was also an outside director and Chairman of Tokyo Electric Power Company Holdings, Inc. from 2017 to 2020.

His main publications are "The Last Man" (Kadokawa Corp.) and "Reforming a 100-year-old Company: Hitachi and I" (Nikkei Business Publications, Inc.).

Interviewer

Ayumu Morita
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What the Pandemic Has Brought with It

Morita: While people have already talked about our living in a time of uncertainty, it is as if the impact of COVID-19 has suddenly thrust society forward by 10 or 20 years. With the announcement last fall of the 2050 Carbon Neutral Declaration by the government of Yoshihide Suga, Japan can be said to have reached a crossroads where we can build the future we want.

Today, I am talking to Takashi Kawamura, the man who pioneered the Social Innovation Business concept during his time as Chairman and President of Hitachi, and who has since gone on to oversee numerous companies as one of Japan's business leaders, recently stepping down as Chairman of Tokyo Electric Power Company Holdings, Inc. While I am hoping to hear what you have to say about the current state of society and your suggestions for what companies should be doing in response, could you please start by telling me your thoughts on what impact the current COVID-19 pandemic will have on the world and on society?

Kawamura: The current pandemic has clearly brought a range of negative consequences for society. Alongside the obvious harm to life and health in the form of death or serious illness, in terms of business management, the greatest damage being done would have to be that, out of the four commercial resources of people, goods, money, and information, people are no longer able to travel freely across borders and this is impeding the flow of goods and money, clogging up the lifeblood of the economy. As a result, many companies are being harmed both directly and indirectly, putting the economy as a whole in a difficult situation. Given that it was the free circulation of these commercial resources that enabled economic development and made the global division of labor what it is today, these blockages will pose a serious problem should they continue for any length of time.

In particular, we need to think more seriously about what the consequences will be of impediments to the free movement of people. There is more to this problem than just the superficial issue of using telework as an alternative when people are unable to come into the office.

The importance of people was already on the rise even before the pandemic. That is, the importance of goods and money was on the wane, with these circulating widely in developed nations and, as a result, having a tendency to be oversupplied, while the value of people and information continues to rise. Put another way, societies in developed nations are right in the midst of the transition from the traditional capitalist model, whereby it is capital (money) that makes things happen, toward a post-capitalist society where the source of wealth lies in professional people and information, what Peter Drucker called the "knowledge society."

The post-COVID era will see change accelerating at a faster rate than ever, so much so, that the assumptions of the past will no longer apply. Meanwhile, society is placing a higher priority than ever on people's happiness and quality of life (QoL), as exemplified by how the public's sense of value has undergone a major realignment during this pandemic, away from desiring goods and toward seeking well-being. As a result, we can expect those people who create new value to be prized even more highly.

While current practice is to value companies based on criteria such as their current market valuation and interest-bearing debt, I expect these indicators will be augmented by the equivalent future value of the talent within the company.

In other words, how people and information resources are put to use will be more important than ever in corporate management. Companies need to put greater effort into the recruitment and fostering of talented staff. How to coordinate the available talent so that it can be put to good use in actual business will also be crucial.

This will require innovation in how information is used, where it will no longer be enough for managers simply to read the reports put together for them by their subordinates. There is a need for rapid progress on the sort of innovations that come under the banner of digital transformation (DX), making appropriate use of techniques like artificial intelligence (AI) screening to monitor what is happening inside and outside the company, collating information from around the world in an instant, and then using this as a basis for issuing immediate instructions. In this era in which people are crucial, the ideal is to be able to make decisions in an environment of fast-moving information, receiving reports directly from the individuals concerned when the content justifies this.

Industrial Disease of Complacency: Its Spread and How to Overcome It

Morita: I very much like the idea that we live in a time when it is people who are important. In such an environment, what are the problems facing Japanese companies specifically?

Kawamura: My primary concern is for the spread in Japan of the "industrial disease of complacency," meaning a lack of dynamism in the workplace. Whereas the need is for people capable of generating new value, most Japanese workplaces are trapped in existing practices and feel no desire to try out new things. This disease afflicts all layers of the company, including senior and middle management as well as younger staff. When you go and look at companies in Europe and America, you find researchers enthusiastically promoting ways in which their work can contribute to the business and move it forward. In contrast, the impression you get from Japanese workplaces is one of complacency.

I believe that the reasons for this can be found in the rapid economic growth that Japan experienced up to the 1980s and the bubble economy that followed. Having achieved that high level of success, Japanese society allowed itself to relax. This memory of past success persists to the present day, leaving people complacent in the belief that the current state of affairs can be maintained simply by sticking to how things have always been done, whether it be business models, products, scope of activities, or commercial practices.

Unfortunately, the world has not stopped changing and, whether it be companies or people, adopting a defensive approach of sticking with the tried and true only leads to decline. Companies are obliged to paddle the boat upstream, having to move forward in an environment of constant change. Now more than ever, we live in tough times when even a venerable old firm like GE can lose its place in the Dow Jones index. If Japanese companies with only a fraction of that company's revenue remain unable to adapt to change, they will find it difficult to survive in the post-corona global marketplace where the prospect is for a slump in demand greater even than that during the Global Financial Crisis of 2008.

To overcome this industrial disease of complacency, all corporate employees need to shift their mindset to that of the "Last Man" (final decision maker) whereby they actively think about and take action on how their organization can best position itself in our changing world. Senior and middle management need to face up to making painful changes and get started on reforming existing businesses and entering new ones, and we should be fostering the "Last Man" mentality among younger workers through small-group improvement activities.

In one example of small-group activities at Tokyo Electric Power Company that were modeled on reforms at Toyota, a group of around 10 young staff agreed among themselves to work on the topic of scheduled inspections at hydroelectric power plants. The goal they set for themselves, and subsequently accomplished, was to shorten the time taken for this work from the current 35 days down to 25 days. As the plants are able to go back to generating electric power during the 10 days saved, their work has contributed to the company as a whole, bringing in additional income amounting to hundreds of millions of yen. The participants themselves were also delighted with what they accomplished.

Consciously creating opportunities like this where staff can take on ultimate decision-making responsibility increases the number of people in the workplace who in their own small way have this "Last Man" attribute, leading subsequently to the emergence of even greater "Last People." Through the accumulation of workplace initiatives like this, companies become genuinely stronger.

Earning Power Underpins National Strength

Morita: Restoring dynamism to the workplace should also help revitalize Japan as a whole.

Kawamura: That's right. If companies could restore vibrancy to the workplace, and by doing so achieve their underlying purpose, it would provide the motive force for a rejuvenation of the Japanese economy. The role of companies, as I see it, is to create added value and feed it back into society. The revenue they earn is returned to society as taxation, payments to suppliers, bank interest, and staff wages in the form of new employment. Companies also build up social capital through their investment in equipment, research, and human capital. What matters most with this recycling of profit is how it helps with eliminating poverty in all its forms everywhere and with saving people from hunger, as expressed in the first and second of the United Nations' Sustainable Development Goals (SDGs). While "earning" is a stark way of putting it, because a high operating profit in itself equates to a large amount of value being delivered back to society, focusing on earnings is extremely important.

A simple way of defining "added value" is "income from sales minus cost of inputs," and the sum of this added value across all companies equates to Japan's gross domestic product (GDP). Japanese businesspeople need to be more aware of how it is companies that shoulder the burden of Japan's GDP, which is to say our strength and economic competitiveness as a nation. Japan as a whole still has a serious lack of earning power.

Having renounced military power and nuclear weapons, there is no way that Japan can lead the world in strength of arms. Instead, by keeping up our earnings and maintaining an economy on a par with the nations of Europe and America so that we are able to help out the world in financial ways when needed, while also contributing to the resolution of worldwide challenges such as climate change and the global environment, we will be able to retain our position as a nation and have the presence and influence to ensure that our voice is heard in such a way that this also helps ensure national security into the future. Unless companies are able to strengthen their earning power in the world of the future, Japan is destined to become a backwater with little say in matters regardless of what it does.

Achieving Carbon Neutrality and the Practicalities of Renewable Energy

Morita: As a major company that has been in business for more than 110 years, playing its part not only in Japan, but also operating as a global corporation engaged in the Social Innovation Business, Hitachi is seeking to step up its contribution to overcoming worldwide challenges in terms of social, environmental, and economic value. In parallel with this, the Carbon Neutral Declaration announced last fall by the government of Yoshihide Suga represents an urgent common challenge confronting global society as a whole. In your role up until last year as one of the key actors in the energy supply sector, can you please give your thoughts on how this might be accomplished.

Kawamura: As the electricity industry is currently responsible for about 40% of carbon dioxide (CO_2) emissions, achieving carbon neutrality by 2050 will require all electric power generation to transition to non-carbon-emitting sources. Also essential will be for other sectors such as general industry and distribution to adopt electrification or hydrogen wherever possible. Likewise, there is a need to use DX to balance supply and demand for electricity across all of these industries in an optimal manner.

There appears to be a belief among the public, including among politicians and the media, that renewable energy is something we could adopt quickly if only the cost issues could be resolved. Compared to places like the USA or China, however, Japan has a small land area with a very high population density and the reality is that, even if we want to install photovoltaic panels, for example, this is made difficult by the limited amount of land available for doing so. To cut down forests for this purpose would be counter-productive and even if we were to install more capacity, events like unexpected snowfalls would restrict electricity supply. Also being resource-poor, Japan faces difficulties in all sorts of areas and it is fair to say that, unless we pursue innovative technologies such as artificial photosynthesis or the direct air capture (DAC) of CO_2 from the atmosphere, achieving carbon neutrality will prove much more difficult than in the rest of the world.

Morita: Transmission capacity poses a major problem for renewable energy. Estimates by the Hitachi-UTokyo Lab indicate that the current transmission grid can only handle one-third of projected future electricity generation. The structure of the system for achieving this is also an issue. As you said, a hydrogen economy will become essential in the future.

Kawamura: The government fully comprehends this situation. While the "Green Growth Strategy towards 2050 Carbon Neutrality" produced by the Ministry of Economy, Trade and Industry at the end of last year in response to the declaration by Prime Minister Suga includes the aim of installing as much renewable energy capacity as possible, it also recognizes that, in practice, this can only account for 50 to 60% of the total. As you pointed out, the problem of transmission capacity as well as geographical and cost considerations mean that supplying all electricity demand from renewable sources would be difficult.

If Japan is to achieve carbon neutrality under these conditions, our only option is to adopt a mix of energy sources. Utilizing renewable energy alongside nuclear power and thermal generation with carbon capture utilization and storage (CCUS), and also hydrogen-based power generation in the future, we will use DX to optimize the balance of electricity supply and demand in Japan that varies day by day with the weather, a process that will also include the establishment of digital platforms.

Morita: We have reached the point where we need to be thinking seriously about how exactly we will accomplish this in terms of the real challenges it poses. I am conscious of the need for further initiatives on how to win over public opinion, including among the general population.

Energy Security of Supply, Growth Strategies, and Societal Reform

Morita: What do you see as the main considerations to bear in mind with regard to achieving a mix of energy sources?

Kawamura: Along with DX considerations about how best to establish the digital infrastructure for using AI or big data to control supply and demand as it fluctuates from day to day, I am also concerned about the security of energy supply.

As I noted earlier, if we are to maintain reliable supplies of energy at the same time as decarbonizing, then we still have no choice but to rely upon nuclear power, which is still a major source of electricity generation in Japan. The problem with the thermal generation and CCUS option mentioned earlier is that we have nowhere to dispose of the captured CO_2.

It is out of concern for security of supply that countries like China and Russia are actively pursuing nuclear power at the same time as they are installing large amounts of photovoltaic panel and wind power generation. They are likely considering a wide variety of risks, such as what to do if they are unable to import oil from overseas or if their own fossil fuel resources run out.

There are many people in Japan who believe that we can remain at peace without arming ourselves. No doubt this is because they believe that someone else will defend them. Likewise with energy, many people in Japan have never given any thought to what might happen in a crisis where we are unable to import oil or natural gas. Improving our energy self-sufficiency, low by developed-nation standards, is an obvious priority, and maintaining economic competitiveness and contributing internationally are also essential to maintaining security of energy supply. Japan needs to rely on its economic competitiveness as a means of ensuring that access to energy resources is not placed under threat.

In this respect, I believe that the government of Yoshihide Suga is right on target with its idea of a virtuous circle of the economy and environment, having this as a central pillar of its growth strategy. The philosophy of actively pursuing policies for achieving carbon neutrality at the same time as engaging in world-leading social innovations through fundamental reform of the business models and industrial structures of the past leads to what we have just been talking about, namely a unique way forward in which adapting to change and overcoming the vice of sticking with the status quo will allow Japan to restore its vitality and thrive in the wider world. We are facing a time of self-reformation. While it is by no means an easy path, it is a challenge we need to engage with resolutely.

Morita: In the face of the greatest crisis it had faced in its history, the 2008 Global Financial Crisis led Hitachi to come up with its Social Innovation Business concept. Meanwhile, global trends have since shifted in the same direction, as exemplified by the SDGs and environmental, social, and governance (ESG) investment. As the person who proposed this concept, was this change something you anticipated? Could you finish by saying a few words on this subject?

Kawamura: The heart of the issue is for companies to earn a steady income that cycles back into society. In the current situation, however, where companies have become such a major presence in society, my belief is that companies will only gain public approval if the ways in which they earn that income are of benefit to society. That said, I never imagined there would be so much activity around global initiatives such as the United Nations' SDGs and carbon neutrality where government, business, and civil society work together to enable people and the planet to coexist. Given all this, it is most reassuring to see that Hitachi, having been ahead of its time by engaging in its Social Innovation Business, has expressed a resolve to help the world as a whole achieve carbon neutrality, appointing Executive Vice President Alistair Dormer as Chief Environmental Officer and committing to carbon neutrality in its own activities by 2030. I hope in the future that you will continue to be a leader in reforming society with enthusiasm and resolution.