

Roundtable Discussion between the Chairman and Two Outside Directors

Today's Global Risks and the Role of MHI



Outside Director, Audit and
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Governance and Management Reform in the Eyes of Outside Directors

Miyanaga: Today, MHI is in the process of transformation, but there are still areas where we remain too bound to tradition. This is why I was eager to hear your views as representatives of Mitsubishi Corporation and NTT: two large companies with long histories that today are robustly taking on new forms of challenges.

Mitsubishi Corporation is a company that we have been doing business with for a long, long time. Significant changes have already occurred in terms of the company's workstyle and business model, and further changes are in the pipeline. Mr. Kobayashi, in your position, you are very familiar with how these changes are being carried out, so I would like to hear your advice and invite your questions on various matters.

Mr. Unoura, at MHI we have long approached information from the standpoint of a manufacturer. Today, though, when skewed information circulates in enormous quantity, I would like to ask your advice as to how we should deal with this information flow. NTT is a company that has carried out changes in

response to its global business environment, and I would like to hear your views on how to handle information, the forms of communication accompanying advances in communication technology, and so on. I'd also like to hear what differences you see between NTT's reforming areas akin to software and our undertaking of reforms in the area of hardware.

Kobayashi: Through our business ties over many years, I have acquired a fair understanding of MHI's history and culture, so I believe that, based on that understanding, I can form views and opinions about today's MHI and perhaps offer something useful in that respect.

From my perspective as an outside director, I think MHI has already changed a great deal. Whereas historically the Company has been involved in heavy industry, recently it has been expanding into all-new areas and has become involved in the solutions business as well. What has changed most is the structural shift from numerous business divisions that worked independently, each pursuing their own best path, to bundling them into a small number of

domains and partially integrating their businesses. Watching how the Company has aggressively undertaken M&A activities and put together its new domains, I truly get a sense that MHI has changed.

I think the social role of all business corporations is to simultaneously pursue three values—economic value, social value, and environmental value; and I think that, when implementing changes, these constitute both goals and standards for all corporations. This holds true too, I think, for all three of our companies, but it's in the way they manifest themselves that each has its own distinctive features. In the case of MHI, I feel the Company is advancing step by step toward a new corporate form, while ensuring it doesn't veer too far from its inherently vital core.

Many of those who work at MHI, a company with a long history and one rich in traditions, are engineers who are experts in their respective fields. I think it is wonderful how they can freely discuss any doubts or concerns they may have regarding aspects of management. It's important, too, how the Company as a whole is dealing with various risks. When people of different backgrounds are able to voice doubts or opinions about issues facing the company, new perspectives can sometimes help identify risks. This, I think, is an important point to keep in mind throughout the Company's evolution.

Unoura: I personally had no experience with the hardware business of the kind undertaken by MHI, but I came to realize that there were aspects in which

I was involved in areas that were closely related. I consider it my mission to help MHI make big changes to its business model in response to the major changes taking place in the industry as a whole. I consciously try to speak from a perspective different from others, which I think ultimately will make a positive contribution to MHI.

Kobayashi: The era has ended when it sufficed for a manufacturer to make products by applying its strengths in technology. Even in the area of power generation, the time has come when survival requires not only the production of boilers and turbines but also the development of a business in power solutions that serve the needs of countries, cities, and large corporations. When the scope of such solutions is expanded to include urban development, it becomes necessary for them to satisfy what the world demands environmentally and socially. Awareness of this kind is beginning to take root in each of MHI's domains, and it's extremely fortunate that MHI has brought Mr. Unoura onto the team at this juncture.

Unoura: Consumer-targeted services are the ultimate result of what MHI does, and it is here I think the time is coming when vast changes will occur in how to create value. How MHI will change as society undergoes major change will perhaps be close to what we at NTT are doing for the general public in targeting "Society 5.0," the society of the future. Let's take up this challenge together.

On the Subject of Cybersecurity

Unoura: Cybersecurity is distinct in that the perpetrator isn't visible, and it isn't possible for a single individual, a company, or even a country to defend itself in isolation against a cyberattack. Potential cyberattacks can be dealt with only when there is a collective security framework in place.

Such a framework requires conscious sharing in three ways. First, information. Second, working together in taking steps to ensure cybersecurity. This involves collaborating in exercises as an entire supply chain. Third—and this is an aspect in which

little progress has been made as of yet—we need to share outstanding, expert human resources.

Collective cybersecurity requires the creation of a network encompassing everyone who is involved in cybersecurity as well as mechanisms that enable diversion of personnel to cybersecurity duties.

Miyayaga: Cybersecurity isn't something to be feared. The benefits to be reaped by dealing with it seriously outweigh the risks so we should take up many challenges together and, especially, do our best to forge synergies among dependable companies.



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Shunichi Miyanaga

Kobayashi: Nowadays, cyberattacks are increasingly carried out by organized criminals. For a company like MHI, connected as it is through a supply chain down to individual workplaces, it's necessary to pursue sharing of human resources and information among companies in order to defend itself.

Unoura: What's quintessentially scary in a society embracing artificial intelligence (AI) is the emergence of false data being treated as true. If someone were to tamper with machines and send totally false data, systems could be brought to a halt extremely easily. In this way, going forward, an unimaginable number of invisible enemies will launch cyberattacks; so unless MHI teams up, for example, with power companies, it will be impossible to know which data is false and which is true. In the United States, there are industry organizations for sharing information known as ISACs—Information Sharing and Analysis Centers.

In Japan too, information-sharing ISACs already exist in the banking and telecom industries, but it's critical that such organizations spread out further. If we are to firmly carry out fundamental defensive measures, it's crucial that we take initiatives collectively, including broad sharing of information.

Miyanaga: Sharing information among companies exposed to reputational risk may not ensure total security. However, I still believe we stand to benefit from creating stable collaborative systems—systems that will contribute in various ways to boosting our cybersecurity.

Kobayashi: The initiatives we take going forward will play a role within our ESG and SDGs programs. If economic and social values evolve and enable the realization of a more efficient society, I believe a time will come when we will be able to allocate more resources to creating environmental value.



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Ken Kobayashi

On the Issue of Climate Change

Kobayashi: Responses to climate change are very much related to the energy policies adopted by each country. In the case of Japan, its inescapable position as an island nation without energy resources has

compelled the government to draw up a future vision on energy and power supplies. And what's important here is how to come to terms with the environment: how to achieve a proper balance among renewable

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Hiroo Unoura



energies, nuclear power, and also gas, oil, and coal. The relative proportion of thermal power is projected to decrease within the power mix of the future. MHI today is making substantial advances in the area of renewable energies, and our response to issues surrounding climate change has been extremely quick and laudable.

Unoura: The issue of climate change, like that of cybersecurity, isn't something that can be dealt with by one company in isolation. It's extremely difficult, while aiming to achieve a sustainable society, to resolve a variety of challenges amid current trends. What's necessary is for people who have traditionally been involved in the energy sector to undergo a major change—transform themselves—a task I see as very important. When I was invited to serve as an outside director at MHI, what interested me most was that, going forward, the energy issue would become a really big focus. Amid this environmental challenge, how does the Company plan to create energy, or how to use it? My hope is that there are areas where I can contribute while offering any questions I might have concerning these matters.

Miyanaga: Compared to other energy sources, coal undeniably isn't a clean energy in terms of its carbon footprint; but if we were to stop using coal immediately, our social and industrial structures would undergo dramatic changes—a situation we must avoid. To my mind, Mitsubishi Hitachi Power Systems' coal-fired power generation technologies are of the highest level in the world. To accelerate moves to incorporate and adapt these technologies to society in the most appropriate form, both environmentally and with respect to energy efficiency, we

have a responsibility to explain how to facilitate use of renewable energies, set a goal, and proceed toward achieving it, including, to some degree, quantitatively.

Inevitably, it will be costly if we deny the future potential of current technologies and bring a halt to business opportunities of the kind we have conceived up until now. For that reason, for MHI Group, the energy issue doesn't necessarily have a bright outlook in terms of the most recent economic values. However, we have businesses in several industrial areas. So, one advantage that will come out of this severe situation will be the emergence of new business opportunities such as distributed power supplies, which represent a technology in a field that differs from conventional power plants.

The issue of climate change and how to respond to it are difficult to grasp as a whole, owing to the long periods of time involved and complex influencing factors. No matter how many projections you make, uncertainties pop up where you least expect them. So, the way to do business worldwide too will inevitably change with each passing year.

Unoura: Dealing with climate change demands innovation, too. Personally, I believe that the central role in driving innovation will be played by companies that have been extensively involved in the energy sector. Technologies will also likely emerge from small entities, but basically I think it's the speed at which these experienced energy-sector companies innovate—companies like MHI—that will set the pace of change for the world as a whole. For this reason, I think it's imperative for MHI to undergo vast changes, and to accelerate the speed at which it changes.