

Knowledge Society: Outdated or New:

"Knowledge Creates Economic Strength"

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In Japan's high-growth period, the importance of a knowledge society was not fully appreciated for at least two reasons. The first stemmed from Japan's industrial position. Though Daniel Bell and Machlup had already presented the concept of a knowledge society in the post-industrial world, Japan was in the midst of industrialization and the development of an industrial society was our primary target.

This seems understandable, as Japan stood to gain a great deal from industrialization. At that time, the ratio of output to input in Japan was one to one, and the concepts of reproducibility, zero reproduction cost and increasing returns were not understood.

The other reason that a knowledge society failed to develop in Japan was that the core ethic of Japan revolved solely around hard work. While this ethic was conducive to the industrialization of society, it did not pay adequate attention to the importance of knowledge in society. Japan's current situation with respect to knowledge has changed dramatically, primarily as a result of the rapid rise of the Chinese economy. In today's economy, Japanese enterprises cannot make profits producing goods both domestically and in China.

As a result, Japan's enterprises have begun to think differently about the various ways to use knowledge. Knowledge comes in two varieties. When it is used in industrial production, knowledge comes from experience and research and development in the form of innovation and new technologies. In this context, knowledge creates economic strength.

However, when it is used in service sectors, knowledge comes from a diversity of interpretation, or the ability to distribute and use information. Consider the case of the capital market. Only diversity of information and a large pool of investors can produce and sustain an efficient market in which, on the basis of the same information, investors will both buy and sell equities and bonds.

Without this much needed diversity of information and investors, the market will not have the necessary liquidity to function; in such a market, limited liquidity will mean fewer transactions and more inefficiency. Japan is pursuing this diversity in its capital market.

While we have faced many obstacles in this endeavor we have also had some success - more equities were traded on the Tokyo Stock Exchange than on the NY Stock Exchange in the first half of 2004, breaking a record set in 1989 at the height of the bubble. We now have a diversity of investors in our market, which represents a profoundly significant transformation in Japan's capital markets over the past decade.

If we can conceive of a society based on knowledge, what does it look like? Indeed, what is the difference between a knowledge society and an industrial society? I will point to two

decentralized access to information. In a society in which information is centralized, it is intrinsically limited and the capacity to interpret that information will be the exclusive privilege of the limiting authority.

The formation of a society of knowledge depends on both the capacity for diverse and contradictory interpretation and debate. In such a society, decentralization of information is a prerequisite for the formation of a society of knowledge.

Decentralization alone, however, is not sufficient for the formation of such a society. Coherence, required for the creation of ideas, is necessary to create a society of knowledge. Around the world, there is a mixture of both decentralization and cohesion, but the two are rarely to be found in the same society.

In Japan, we had such a combination in the age of industrialization after the Meiji Revolution in which Japan managed to attain this delicate balance. Indeed, because this balance existed in the context of a society focused on industrialization, we can see the capacity for a similar balance in societies around the world as industrialization spreads.

We are now entering into a networked age in which the Internet plays a very important role for the formation of a knowledge society. The freedom of information implicit in the embrace of the Internet is indicative of the importance of access to information in a knowledge society. However, the Internet's contribution to a knowledge society is more limited with respect to its commitment to diversity of interpretation. New kinds of algorithms will be needed to create new search engines and Google's success in this field highlights the importance of this effort.

Indeed, they are leading the field in this area, one in which semiotics will play a very important role. However, in these circumstances, the concept of a knowledge society is expanding and now a division is appearing before us. In this divide, those who provide the foundation for and facilitate the operation of the exchange of information will have the power to interpret the present and to predict the future development of world affairs.

Syntactic and semantics programs will be the new tools for the new knowledge society. In this context, a new hierarchy of power may emerge. In the 20th century, we faced the divide between the rich and the poor. In this century, we will discuss the digital divide, and how to use our experience, technologies and skills to bridge it.

However, as we enter this new stage, we may be forced to consider the diversity and decentralization of knowledge and who possesses the capability to interpret it. Indeed, this debate may be a prerequisite for new conceptual wisdom.

In the United States, especially on the West coast, American information technology has focused on new algorithms and semiotics. On the contrary, Japanese society has focused on the opportunities to interface with the individual. Broadband, mobile Internet and digital convergence are all designed to facilitate these connections, and are three prominent examples of the focus of Japan's IT sector, which is rooted in the inexhaustible search for new and improved infrastructure.

Building this infrastructure has been the cornerstone of Japanese society for many years, but

In Japan, outsourcing has been effectively non-existent. As a result, Japan has not engaged in the enrichment and development of new ideas necessary in a society centered on knowledge. Instead, Japan has developed technology of interconnection between materials and new functions and between mechanics and electronics. It is these technologies that have become the basis for economic growth and innovation in Japan.

To put it another way, while in the United States, the liberation of the power of imagination is priority number one. In Japan, strengthening the industrialis the primary objective. It is these kinds of activities that make Japan less vulnerable to outsourcing, but also inhibit a knowledge society. This situation suggests both the benefits and the liabilities of Japan's knowledge society when compared to that of the United States.

Having respect for knowledge is unquestionably very important for sustaining a society built on knowledge. However, sometimes respect for knowledge obstructs and basic human needs as is demonstrated in the case of intellectual property rights.