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Human Resources Required for the Age of Global Economy: A Brief View

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Human Resources Required for the Age of Global Economy: A Brief View

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Abstract

Global economy, first emerged in the 1970s, refers to an economy based on the economies of countries throughout the world. It is characterized by the following features: first, communication now plays a significant role in the economies of all nations. Second, the economy relies heavily on computers and networking. Finally, societies have transformed themselves into those based on "diverse cultures and local traditions." In the light of the features of a global economy, current employment has fallen into three categories: routine-production services, in-person services and symbolic-analytical services. Among the three categories, that of symbolic-analytical services has become the working mainstream in the 21st century. To become successful symbolic analysts, people need more highly developed working skills in the areas of knowledge, English, technology and communication. In response to the human resources required for the age of global economy, one perhaps should re-examine his/her personal value at first.

1 Introduction

Global economy, first emerged in the 1971s, refers to an economy based on the economies of countries throughout the world (Wikipedia). It is based on the assumption that a global economic system can be a key to improving the lives of people in both poor and rich countries. For developing countries global trade means that people have access to essential goods such as food, clothing and fuel. For developed countries, global economy signifies the possibilities of gaining goods with lower prices and offering more choices of products for consumers. According to Castells (1996), computer technology has had a great impact on global economy. Thus, he termed global economy as Informationalism. Technology accelerates the transfer of wealth and information throughout the world. Boundaries that once protected a nation's economy are slowly disappearing. Resources flow to nations with a skilled work force. Thus, Toffler (1991) held that "nationals are [tightly] linked by threads of [a] global web" (p.274). They "are losing their economic autonomy and becoming transformed into economic regions" (Reich, 1991, p.274).

Due to the impact of technology on global economy, economic activities have changed. First, economic activity has bifurcated into "mass, standardized products" and "flexible, customerized products" (Dupriez, 2003, p.2). Firms with high technology produce flexible goods (i.e. high-value goods) whereas factories with low technology produce mass, standardized goods (i.e. high-volume goods; Reich's terms). According to this economic activity, products can be planned in one firm, designed in another one and produced in a factory. Toffler (1990) pointed out that high-volume goods, requiring only basic manipulations, are massive-produced in factories, where only a low wage is earned. High-value goods, requiring innovation, planning and skills, are produced in companies, where high pay is earned.

Second, rapid transfer of information allows companies to be more accurately aware of cost and productivity. Companies strategically change their management into decentralizing management, customizing products and differentiating works (Dupriez, 2003). These changes imply that "works are gradually being defined less by the long-term job . . . than the 'portfolio of knowledge' that they have acquired through study and work" (Dupriez, 2003).

1.1 Consequences of Global Economy

Global economy, or Informationalism, brings with it the following consequences. First, communication plays a significant role in the economies of all nations. That is, English has turned out to be a requirement for international communication (Warshauer, 2000). For example, Crystal (1997) reported that 85% of international organizations use English as their official language. Moreover, as a lingua franca for economic and scientific exchange, people use English to project their identities and values. They emphasize their own varieties of English rather than a standard norm (Warschauer, 2002). For example, Crystall (1999) reported that Euro-English speakers insist on using their lexical patterns of Euro-English and speak English with the syllable-based intonation pattern of Euro-English rather than the stress-based intonation pattern of British and American English.

Second, economy relies heavily on computers and networking (Dusterstadt, 2000). In other words, applications of technology are the key elements of productivity and economic growth. For example, developing countries use information and communication technologies to "leapfrog" (Robin's term) directly from being an agricultural society to an information society. In highly developed countries, technologies have shifted societies from manufacturing industries to information and service-based industries. However, inequality still occurs between those who control technology and network resources and those who lack the "know-how" access to technology (Corney, Castells, Cohen, & Cordoso, 1993). Finally, societies have changed from those based on "the geopolitics of [the] nation-state" to those based on "diverse cultures and local traditions" (Duderstadt, 2000, p.2). That is to say, business is "relocalized" to meet the diverse and changeable global economic market (see the discussion in Graddol, 1997). The highlight of "relocalization" allows each region or local area to project its identity and values to attract different customers.

2 Redefinition of Employment in the Global Economy

In the light of the consequences brought about by global economy, current employment categories have been redefined. Castells (1993) noted that in 1990, about 47.4 % of the employed population in the United States, 45.8 % in the United Kingdom, 45.1 % in France and 40.1 % in West Germany were involved in occupations pertaining to information-processing and the population is continuously increasing. This fact reflects that the shift from manufacturing to service industry. Moreover, there is also a change within the nature of the manufacturing and service industries. For example, both industries demand human resources with "information-processing" and "analytic" skills rather than physical strength (Castells, 1996). Thus, Carnoy, et al., (1993) concluded that the new form of manufacturing and service industries largely depend on

> careful application of science and technology; customized production, marketing, and distribution; access to real-time, networked information; and a high level of national and international communication among teams (quoted from Warschauer, 2000, p.517).

2.1 Three Categories of Employment

Reich (1991) pointed out that the employment in Informationalism mainly falls into three categories: routine-production service work; in-person service work and symbolic analytic work.

2.1.1 Routine-production Service Workers and In-person Service Workers

Routine-production service workers comprise factory workers and routine information processors. They are the blue collar workers in the Age of Information. As a result of the use of telecommunication, many factories farm out their routine work. For example, some U.S. firms send data-processing jobs to the Caribbean or to South Asia (Warschauer, 2000). The call center industry in India is a remarkable example. When customers in the United States, England, Canada or Australia call a company to order products, they may actually speak with someone in India. These Indian workers not only are fluent in English but also can understand different varieties of English. The data processing workers as Borruts & Zysman (1992) describes, are "the foot soldiers station[ing] in [a] 'back office' at [a] computer terminal linked to world wide information banks" (p.277).

In-person service workers include waiters, waitresses, housekeepers, child care takers, hotel attendants and taxi drivers. The increasing demands of in-person service works are closely related to women's labor in society. Duderstadt (2000) pointed out that women have already become the pre-dominant gender in many nations. They show great potential in political and professional sectors. The in-person service jobs require direct contact with customers instead of with machines and data information (Toffler, 1990). Thus, equipping workers with skills of good working attitudes becomes significant. One of an eHow contributors, holds that good working attitudes involve patience, making customers feel important, listening skills, willingness to learn and positive manners. Furthermore, with the increase of tourism and international business travel, functional English training is a requirement for in-person service workers. For example, many taxi drivers in Singapore can speak English very fluently.

Reich (1991) made a summary of routine-production service works and in-person service works. He concluded that both types of workers require little education and therefore require "intensive supervision" (p.275). However, unlike routine-production service workers, who deal with lifeless objects, in-person service workers need to interact with people and "their services are not transferable throughout the world" (p.275).

2.1.2 Symbolic Analysts

According to Reich (1991), symbolic analysts include workers such as hardware / software engineers, management consultants, strategic planners, lawyers, network systems and data communication analysts and research scientists. These jobs rely highly on computers. The U.S. Department of Labor (2005) reported that the number of symbolic analytic jobs is expected to grow by almost 30 percent in the next ten years.

These symbolic analysts do not trade material objects; instead, as Toffler (1990) held, they manipulate "symbols—data, words, oral and visual representation" (p.177). Their employments are *thought intensive* (my italics for emphasis) because in them "symbols are exploited and abstract forms of reality are manipulated (Reich, 1991, p.275). The income of thought intensive workers is much higher compared with that of the routine-production service workers and in-person service workers. Reich (1991) pointed out that the success of thought intensive workers in the global economy depends on the amount of value that they can create by utilizing their skills, insights and experiences. Thus, he made a conclusion: a widening income gap has occurred "between those in the waxing high-value [symbolic analytic] industries and those in the waning high-volume [routine production service and in-person service] industries" (p.276).

3 Skills Required for Symbolic Analysts

Among the three categories of employment in the global economy, symbolic analysts are the working mainstream in the 21st century. To become a successful symbolic analyst, new working skills are needed. These skills entail new forms of knowledge, English and communication—involving reading and writing (Reich, 1991; Duderstadt, 2000).

3.1 Knowledge

Knowledge is one of the necessary skills for the age of global economy. The National Governors' Association of the United States notes that "the driving force behind the 21st century economy is knowledge, and developing human capital is the best way to ensure prosperity" (National Governors Association, 2001). Duderstadt (2000) held that "innovation," "creativity," and "entrepreneurship" characterize the kind of knowledge needed in the global economy. These features of knowledge as Fairclough (1999) indicated can be achieved through education. Thus, he suggested that education should "conceive of teaching people to think [rather than] teaching people to argue" (p.78). The thinking skill, according to Reich (1991), embraces abstraction, system thinking, critical analysis and evaluation (quoted from Warschauer, 2000, p.518).

3.2 English

As a result of globalization, knowledge skills have been increasingly applied in the English context. Not only companies in the Inner Circle (U.S., Canada, and Britain), but also firms in the Outer Circle (Singapore, India, the Philippines and Malaysia) and business corporations in the Expanding Circle (Japan, Korea, China and Indonesia) use English for international communication. Even high-tech workers who do not locate in English speaking countries use English as a communication tool within a company. For example, in the company, Erisson, high-tech Swedish workers communicate with other Swedes in English, which is the company's language of communication (Azam Premji, personal communication, November 2, 1998).

Unlike routine-production service workers, and in-person service workers who primarily use functional English as a communication tool, symbolic analysts need to interpret and negotiate in complex English. Rosen (1999) reported that recently English as a second language (ESL) has surpassed Spanish as the main language taught in U.S. branches of Berliz. The enrollees comprise advanced engineers, information managers and scientist researchers, who need sophisticated communication skill in English to carry out their work.

3.3 Communication

With the fastest growth on the Internet, e-mail has already surpassed face-to face and telephone communication as a means of business communication (American Management Association International, 1998). Diederich (1998) reported that 95 percent of American university students use the Internet to communicate with their friends, conduct research and even search for jobs. Due to the great reliance on the Internet as a communication tool, Warschauer (2000) held that the ability to read and write from the screen should be trained.

Researchers discovered that people who have grown up with computers have shifted their reading practices from traditional page reading to screen reading (Reinking, McKenna, Labbo, & Kieffer, 1998; Snyder, 1998). Skills central to reading from screen include *finding* information to read it effectively, rapidly *evaluating* and *locating* information, *saving* or *cataloguing* located information and *organizing* and *keeping track* of saved electronic information (Warschauer, p.522; and my italics for emphasis).

Additionally, Warschauer (2000) shed light on skills central to writing for the information age. They embrace first, a hypertext genre writing (i.e., an integration of text, graphic and audiovisual materials on a multimedia representation and second, a proper use of pragmatic strategic writing skill (p.523). Warschauer claimed that the traditional emphasis on "authenticity" (following native speakers' norms) is no longer useful in the Age of Information. Instead an identity projection of each nation and recognition of each nation's pragmatic cultural performance become the new forms of writing, "agency." Murry (1997) defined "agency" as "the satisfying power to take meaningful action and see the results of our decision and choice" (p.126). Warschauer (2000) continued that the pleasure of agency comes from "the power to conduct a presentation of reality . . . and to impose [a] reception [of writing] by others" (p.524).

4 Conclusion

To sum up, information processing skills, English proficiency, knowledge and good working attitudes are the prerequisites for current employment in symbolic analytical service work. Although a satisfactory salary can be expected in that field, over expansion of higher education to train these workers can be problematic. For example, Taiwan is now facing a problem—a surplus of symbolic analytical personnel and a shortage of in-person service personnel to take up the jobs of the caring of old people and others who need care in society. Routine-production service works such as basic information processing jobs in factories, construction work and others have to be filled by foreign labors. The results are: first, we have quite high employment percentage for symbolic analysts. Second, local people are reluctant to take up routine-production service work and in-person service work for which they are over-educated. Our government is forced to import a lot of foreign labors. Thus, to find jobs in terms of one's aptitudes and personality is significant. Moreover, a modification of job value should be encouraged. That is, do thought-intensive jobs always guarantee happy lives?

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