HUMAN CAPITAL DEVELOPMENT AND EDUCATION IN KNOWLEDGE-BASED ECONOMY

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ABSTRACT
Admitting the fact that the most important organizational resource is the human resource is a long time reality. Beginning with the fact that in this new millennium the human capital is management's strategic element, the experts in this area unanimously agree that during the next period, competition will no longer focus on products, but on organizational human resource quality.

KEYWORDS: *human capital, knowledge, education, knowledge dissemination*

Introduction

A characteristic of knowledge-based economies is that the ability to generate and use knowledge represents not only the basics source of wealth, but also the key to acquiring comparative advantage. Greater economic activity in sectors that intensively involved knowledge and technology leads to higher production and employment in high-tech sectors such as computers, electronics and communication. Success in knowledge-based economy depends on the ability to innovate. The sectors that are likely to succeed are those that introduce new ideas, use new operations, produce new products and provide improved services. Generally, the knowledge-based economy is characterized by the following aspects:

- knowledge is becoming increasingly available to all, in a way that suits both individual and social needs.
- every individual is a consumer of information but also a creator of information

The macroeconomic environment in a knowledge-based economy must encourage investment in the fields of knowledge as well as promote innovative ability. Future investment in such domain where the rate of returns may be initially low or limited are necessary to guarantee the continuity of a knowledge-based economy.

Traditionally, knowledge is viewed as the basic determinant of success. However, in the context of knowledge-based economy, knowledge is viewed as the basic determinant of success. Practical evidence reveals that in such economies successful firms are those with global orientation, investing intensively in the development of knowledge and expertise. The keys for strong performance lie in the effective generation, possession, dissemination and utilization of knowledge.

Knowledge dissemination

New technologies will not lead to increased productivity and improved competition on the international level unless disseminated at different levels within the economy.

New technologies are insufficient by themselves although they represent an important part in the process of innovation and adjustment to new international advances. Disseminating knowledge is significant because restricting technology to isolated sites limits its overall economic benefit. In a knowledge-based economy, knowledge spreads among firms, public research centers and across different geographical areas within the state.

Organizations in knowledge-based economy are characterized by a culture of sharing knowledge both within and outside the firm. From this point of view, the different parts of the firm do not work in isolation from one another. Through the process of disseminating ideas to product designers, these are converted into practical applications.

Knowledge as strategic asset

Traditionally, economic research literature on source of growth has relied on production functions based on using labor and capital as inputs, and in some cases energy and other variables. Knowledge has been viewed as something exogenous in so far as its impact on production is concerned. However, recent approaches to dealing with this issue have directly introduced knowledge as a specific input to growth. As a matter of fact, knowledge investment may lead to an increase in productive capacity of the other factors of production. It can also change these factors into new products and services. Since knowledge investment is conducive to increasing returns, it is now viewed as the key to long term economic growth. According to the modern theory of growth, investment returns can be increased by promoting new production methods and introducing new products and services. Knowledge can be disseminated from one firm or domain to another, employing and applying new ideas and low costs. In its turn, growth can be achieved without an attendant drop in investment returns on education and training. This is possible because knowledge investment will guarantee increasing rather than diminishing returns. Also, technological change leads to increasing the marginal productivity of capital via teaching and training the labor force and investing in research and development and creating new management structures and labor organizations. Building knowledge structure will encourage growth, especially when we consider the need for constructing new systems of communication and for supporting existing ones.

About education in knowledge-based economy

Education plays a fundamental role in economic, social and political development in the different countries of the world. It is the key to upgrading the quality of the goods and services we produce and to improving the kind of productivity that we urgently need. It is the means by which levels of employment are raised and a high-quality labor force is created.

All states faced major challenges in their attempts to find political and technological policies to improve their innovative efforts. These challenges are most evident for East-European countries where scientific base is weaker in comparison to advanced countries and this weak scientific base is a directly result of the reduced financial resources allocated to developing knowledge and technologies of information communication.

Human capital has a major role to play in the innovative ability of a knowledge-based economy. The human factor become central as a source of competitive advantage and as an indispensable asset for developing this advantage by increasing growth and productivity and creating greater job opportunities.

The system of education and training represents a basic constituent of the infrastructure designed to meet the needs of a knowledge-based economy. As we all know, the labor force must have easily access to the sources required to upgrade its skills and to adapt to the new requirements of changing labor market. The quickly changes anticipated in the labor market in the knowledge-based economy demand workers who are very well prepared and are essentially versatile. So it is imperative to promote long-life learning, sharpen individual skills and strengthen relations between the educational system and industry to ensure the availability of required skills.

Challenges confronting Education

Modern developments on both local and international levels challenge the whole network of our educational institution. In addition, they challenge our general educational policies, which have been formulated at the time when knowledge enjoyed a less importance as a strategic resource. Although the shift towards a knowledge-based economy means a rice in economic standards, it also brings with it major challenges for individuals, firms, educational institutions and governments.

In general, what do these changes entail for the East-European region?

The success of Romania in adopting a knowledge-based economy will depend on the quality of the education systems and the institutional structures that facilitate the process of shifting from work to learning and vice-versa. In the context of a knowledge-based economy, it is possible to summarize the cluster of challenges confronting Romania as follows:

1. Providing suitable expertise and skills: The first challenge for the Romanian educational system is to provide a suitable supply of expertise and skills that fulfill the requirements of knowledge-based economy, and ensuring that the supply thus provided is constantly upgraded.
2. Developing human capital: As the second challenge, it lies in boosting the commitment of different community institutions to developing human capital in order to maintain high levels of productivity, growth and employment.
3. Adopting new formats for education programs: this relates to the necessity of adopting new formats for education programs, provided that the syllabus of such programs is relevant to the new era and is based on developing the innovative abilities of pupils. Modern digital methods provide teachers with great advantage, as well as benefit the education system in general. These methods provide education with modern techniques and vast learning capabilities since they store infinite quantities of information.
4. Improving teaching quality: undoubtedly, professors will face formidable challenges since the professional standards required of them will be very high because of high expectation generated in the context of the knowledge-based economy.
5. Solving academic and administrative problems faced by educational institutions and examining how these problems may be complicated by the governmental control exercised through bureaucratic set-ups on the educational system. Policies and programs designed for effective learning may not be implemented in the context of the financial, administrative and practical problems faced by those institutions. This will slow down the reform process within the educational system.
6. Solving problems affecting universities – In addition to the low allocations in research budgets, universities face problem such providing educational services on a large scale to an increasing number of citizens and simultaneously maintaining a high standard of

training and research projects, whether at the undergraduate and postgraduate levels. Universities are expected to provide constantly quality education as well as conduct research and provide training while their financial resources are diminishing. Thus universities are clearly facing challenges in adapting to their role as producers of knowledge via scientific research and carrying on their function as "vehicles" for disseminate knowledge through education and training. Financial constraints may trap universities in the dilemma of striking a balance between scientific research and education.

Tackling these challenges is not the sole responsibility of governments. Rather, this must be accomplished through cooperation between governments, institutions and individuals. Each has a vital role to play in this problem-solving process. As mentioned earlier, the challenges posed by knowledge-based economy are markedly different from the challenges experienced in the past.

Conclusions

Admitting the fact that the most important organizational resource is the human resource is a long time reality. Beginning with the fact that in this new millennium the human capital is management's strategic element, the experts in this area unanimously agree that during the next period, competition will no longer focus on products, but on organizational human resource quality.

The Romanian educational system, beside the European one, has to be restructured, so that it can play its role in a Europe of knowledge, Romania paying attention to changes that take place in the continental educational system and promoting the necessary measures for harmonizing the regulatory framework in the domain, in order to build the single European educational system.

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