

THE EMERGENCE OF INTELLECTUAL CAPITAL IN A KNOWLEDGE-BASED SOCIETY. INVESTMENT IN PEOPLE AND SKILLS

Marta-Christina SUCIU¹

Motto:

*“Society's most important investment is in the education of its people.
We suffer in the absence of good education: we prosper in its presence.”*

Donald J. Johnston²

Rezumat. Acest articol subliniază importanța investiției în educație ca forță motrice pentru creșterea și dezvoltarea economică sustenabilă pe termen lung. În contextul societății bazate pe cunoaștere se amplifică rolul activelor intangibile de tipul capitalului intelectual, creativității și inovației, ca surse esențiale ale avantajului competitiv. De vreme ce ingredientul secret al succesului în afaceri constă în a investi în capitalul uman, se pune întrebarea de ce atât de puține companii din România răspund provocării de a face astfel de investiții? Să se datoreze cumva explicația faptului că o astfel de investiție este o investiție cu efecte propagate pe termen lung, în timp ce companiile contemporane gândesc predilect pe termen scurt? Investițiile în oameni și în capacitățile și competențele acestora sunt esențiale și la nivelul Uniunii Europene, care a declarat drept țintă strategică prioritară ca, până în anul 2010, să devină “cea mai dinamică și competitivă economie bazată pe cunoaștere”.

Abstract. This article emphasizes the importance of investment in education as a driving force for economic growth and sustainable development in the long term. In the context of knowledge society the role of intangible assets like intellectual capital, creativity and innovation as key sources of competitive advantage is enhanced. As the secret ingredient of success in business is to invest in human capital, the following question arises: why only few companies in Romania meet this challenge of making this kind of investments? Can it be explained by the fact that this investment is an investment whose effects propagate in the long term while companies prefer contemporary thinking in the short term? Investment in people and in their capabilities and skills are equally essential at the European Union level as well by having stated that its strategic priority target is to become “the most dynamic and competitive knowledge-based economy by 2010.”

Key words: knowledge-based economy, knowledge-based organizations, workers who rely on knowledge, intellectual capital, investment in human capital, investment in education, investors in people.

We are living in one of the most exciting times in the history of civilization. In the last one hundred years, the world has rapidly evolved from an agriculture-based economy to a production-based economy and now we are in a *knowledge-based economy*. We have to face a *paradigm shift* towards a new type of society called a

¹Academy of Economic Studies – Bucharest, Member of the Academy of Romanian Scientists.

²Former minister in the Canadian government and OECD Secretary General.

knowledge-based society in which the rules of the game are fundamentally different.

To understand where we are going, we have to know where we came from. A review of the rules of the game in the agriculture and production-based economies can shed some light.

The foundation of the agriculture-based economy was “*land*”. All things being equal, if you had more land, you could grow more crops and the more crops you grew the better off you were. So, the rule of the game in the agriculture economy was “*get more land*”. If you had more land, things would work out.

All that changed in the production-based economy. The production-based economy was all about producing more goods at lower prices. The faster machines you had, the more you could produce. The more automated the manufacturing plant, the less it cost to produce goods. And as the plants got more automated and the cost of production became directly linked to labour, inexpensive labor became critical. So, the rules of the game in the production-based economy were process automation and inexpensive labour.

The *knowledge-based economy* is a different ball game all together. The foundation of the knowledge-based economy is not about land, nor about manufacturing plants. It is about information, it is about *people*, and it is about *the intellect of the people*. It is about *creativity*, it is about *innovation*. The knowledge-based economy is not about cost reduction; it is about *value creation*. In a *global knowledge-based economy*, land does no longer make the difference. Food can be grown in any corner of the world and is available in all parts of the world. In the past, most people ate vegetables that were grown in close proximity of their home, enjoying the regular fare with each season.

Things are different now. Vegetables are being produced in Latin America and Asia and Europe and the U.S., but they are all available in our local grocery stores now. The same thing applies for goods. Production capacity, machines, plant automation and cheap labor are no longer making the difference in a *global knowledge-based economy*. The globalization has created a physical distribution network that is going to make it harder and harder to differentiate your business and your country based on production *capability*. In the global knowledge-based economy we *compete on creating value*. It is no longer a matter of having access to information, but what you do with it. Creating value is about creating new products, creating new solutions, creating new services. And that requires *intellectual capital, creativity and innovation*. Furthermore, the interest different international organizations, such as *OECD* and *the World Bank* are taking into building knowledge-based economies have been demonstrated on different occasions.

I. Knowledge as the main driven force in the new millennium

Knowledge, unlike land, labor and capital is an appreciating asset. The more it is used, the more efficient it becomes. According to **Karl Erick Sveiby**, knowledge has four characteristics: *it is tacit, action-oriented, supported by rules and constantly changing. A knowledge-based company can inject entrepreneurialism into an organization to motivate top management staff and it can enable an organization to capture, apply and develop value from high technologies. Knowledge can transform the whole economy. The human-centred assets a company needs to operate will be rare and expensive. It will take years of investment to create valuable infrastructure and intellectual property assets.*

The emerging importance of *intellectual capital* reflects *the organization's increasing dependence on intangible assets*. Companies based mostly on intangible assets have products that are intangible and that can be distributed electronically in the "*virtual market space*" via *e-commerce* and *the Internet*. *Knowledge intensive organizations* whose products are digital and intangible are considered to be *the third millennium enterprises*.

The world has changed and we have to find new ways of monitoring and managing the organization that reflect those changes. The third millennium workforce is *knowledge-based workforce*-it is participatory, understanding the goals of the company and receiving satisfaction from knowing the part they play in achieving them. To become knowledge driven, companies have to learn how to recognize changes in intellectual capital and ultimately in their balance sheets. A firm's intellectual capital-employees' knowledge, brainpower, know-how, and processes, as well as their ability to continuously improve those processes-is a *key source of competitive advantage*.

II. The emergence of intangible assets and intellectual capital

The third millennium society-seen as *a global knowledge-based society*-has workers who are valuable because of what they know. Intellectual capital is the term given to the combined intangible assets that enables the company to function efficiently. It is *the knowledge of a workforce*; the *training and intuition of a team* or *the know-how* of workers who come up with a thousand different ways to improve the efficiency. It is *the electronic network* that transports information at light speed through a company, so that it can react to the market faster than its competitors. It is the *cooperative working-the shared learning*-between a company and its customers (*customer capital*). It is *collective brainpower*. It is hard to identify and harder still to deploy efficiently. But once you find it and exploit it, you win.

How do we measure a firm's intellectual capital? How can a firm tell whether its *knowledge assets* have increased or diminished over a certain period of time?

According to **Strassman** (1998), "intellectual capital is what is left over after suppliers, employees, creditors or shareholders and the government have been paid, and obsolete assets replaced" There are other approaches, including those of **Sveiby** (1997) and of **Stewart** (1997). One tool that is now widely used by US companies is *Kaplan and Norton's Balanced Scorecard*, which combines financial with non-financial measures, such as internal business processes, learning and growth, and various customer-related measures (**Kaplan and Norton**, 1996). *Competency models* seek to define and classify the behaviours of successful employees and calculate their market worth.

In the third millennium the organization must put emphasis on encouraging employees' involvement, showing an appreciation for individuals' contribution in the organization. There are many ways to think about people when trying to assess their value, both current and potential, to the organization. Different *modern forms of investment in education* are mostly recommended: training, vocational qualifications, work related to knowledge, work related competencies. As the work force becomes more "global", valuable employers and employees invest more and more in themselves. This may protect and grow *core competencies*. *Knowledge analysts* are required to work with individuals in the organization to identify key *knowledge assets*. In order to increase *people power*, it is necessary to measure *human-centred assets*. *Knowledge means power and profits*. The extension of the intellectual capital asset base can be achieved in the third millennium enterprise if *creativity* and *innovation* abound everywhere in the company. There is a feeling of success and of constant movement and change. The real "heroes" of an organization are those who excel and help the company win and grow in *the long run*. This means also to create and develop a *corporate culture* that promotes and supports the process of *innovation*.

There is a *direct relationship between how innovative a company is and its ability to expand intellectual capital*. The degree to which a company is innovative is a measure of its life force. And not only that, because managing the flood of knowledge is more than ever what determines whether a company succeeds or fails.

III. How companies are becoming more knowledge-intensive. Knowledge workers

More and more people spend their day in the realm of information and ideas. **Stephen R. Barley** from *Stanford University* has calculated that "the share of the American labour force whose jobs primarily involve working with things (farm-workers, craftspeople) or delivering non professional services (hotel and restaurant workers, distribution workers, domestic servants) will have fallen by more than half by the turn of the century, from 83 % in 1900 to 41 %; those who

work with information (in sales, managerial, professional, technical) were 17% in 1900 and at the beginning of the new millennium 59%.” An ever growing percentage of people are “*knowledge workers*”.

According to **Kiichi Mochizuki**, a former executive at a Japanese steel company, a New York City research group: “*These days, with computerized factories and digitally controlled machines, mathematics are very important for factory operations. When you talk about skill-the word «skill» is wrong: It implies manual dexterity to carve the wood or hit something with a hammer. Now skill is mental rather than manual.*”

Companies are in business to make money and ultimately, their success or failure is expressed in financial terms, but the language of management is increasingly *non-financial*. The rallying cry is no longer “shareholder value” but “*values*”.

IV. Investing in human capital

“Whenever possible, invest in human capital!”

World Cultural Report 2000

The world of the 21st century offers a wide range of *investment opportunities*. Buildings, petroleum industry, movies industry, music, football; all call out for investors (and the list could continue). “*Investment*” is usually associated with the idea of money, with “*fat*” bank accounts and probably with a growing reputation in the world of business. But few are those who remember that behind the ever growing fortunes stand the *people* who work hard in order to “*feed*” the bank accounts. The idea of *investing in human capital* was first approached by Adam Smith in *The Wealth of Nations* (1776), who claimed that the differences between the methods of individuals having different levels of education and professional training reflects the differences between the necessary efficiencies for covering the training costs.

The term *human capital* is recognition that people in organizations and businesses are important and essential assets contributing to development and growth, in a similar way with physical assets such as machinery and money. Any expenditure in training, development, health and support is an *investment*, not a cost. For the employer, the gains expected from *investing in human capital* result in the improvement of the company’s performance, profitability, flexibility and innovation capacity, which should have as consequences the enlargement of the basis for skills and aptitudes and the increase of knowledge and competencies levels. The value of human capital is not always measured in money, because in most of the cases it cannot be measured. In other words, *human capital is what people can do, what they know, the qualities they have, including a proper health condition, without which other efforts and qualities could not be fully exploited.*

- **What does investing in human capital mean and who can invest?**

Investing in human capital has several aspects, according to the level at which it appears. The investment begins from the very moment we are born. Not appeasing the little child every time he asks for an expensive toy is a form of *investing in people and in attitude*, as the child learns that in life you cannot get everything you want, that the resources are limited, although our desires and needs are not. So *parents* are the first “*investors*” when it comes to investing in people and their investment is synonym with bringing up the child in a proper manner, offering him the moral principles on which he will later build his career and life. *Teachers* take over the job started by parents and contribute to the investment, by completing their education. *Knowledge-based organisations* are also investors in human capital.

- **Why should one invest in human capital?**

Unfortunately, the results of *investing in human capital* cannot always be seen on the short run. If one attends a training course today, it does not necessarily mean that his skills will improve over the night and from a terrible negotiator she/he will become a specialist in the field. *Investing in human capital* is a *long-term process* and has to be done periodically and continuously in order to obtain some results. Then why should someone invest in human capital rather than in new equipment?

Basically because equipment can become obsolete and if this happens, the only solution is to throw it away and purchase a new one, while with people the situation is exactly opposite: the more time passes by, the more valuable they are to the company for their experience. It is vitally important for a manager to be aware of the potential of the human capital he has to manage in order to fully exploit its capacities in the good interest of the company. And it is even more important for him to understand that in the case of people, the value of the whole is not equal to the sum of the parts, as *synergy* has a strong influence in a company. In other words, the human capital of a company is equal to the sum of the individual human capital plus the way in which they work together, which calls for a proper collaboration between the employees in order to achieve the synergy.

In some cases the state is aware of the importance of human capital and decides to invest in it and decide to help the private sector and so the *public-private partnership* is born. The public-private partnership is an agreement between the public administration and entities from the private sector with the purpose of offering public services. This type of agreement has several advantages for the parts involved and also for the beneficiaries of the partnership. The partners share the investing effort, the risks, the responsibilities and the results.

V. Investing in people and skills. Investors in people

„People do not change with time; they change the time”

P. K. Shaw

People are an important factor in the production process and for the success of a company. This is why it is essential for the modern *knowledge-based organizations* to rethink their strategies, to make investments on the long run, so to *invest in people*. Their success and their survival on the market depend, to a great extent, on understanding this. The *new wealth of organisations* is considered to be *people* and therefore, *investing in people and skills* becomes crucial. It simply means *investing in future*. **Investing in people** includes *investments in knowledge, skills and attitudes*, and the organizations that meet the standard to achieve this objective are usually called “*investors in people*”.

In order to achieve sustainable economic growth and development, world leaders must be aware that investing in people is a strong need. The ways of investing in people are very diverse, but we have to underline the fact that the first step to be followed in trying to achieve sustainable development is what is called basic investments. It is a responsibility of governments to ensure that virtually all members of society have adequate nutrition, primary health care, clean water, safe sanitation, family planning services, and at least a primary education. These basic investments in people are essential not only for humanitarian reasons and for the creation of civilized societies but also as the foundations for sustained economic growth and development. In recent years, research has demonstrated the power of that investment in many different ways.

For instance *The British Government* funds a number of special programs such as “*Investing in People*” (*IP*) launched in 1990. “*Investing in People*” program is based on “*Investors in People Standard*”-a *National British Standard* introduced in the wake of the “*Training in Britain Survey of 1989*” which has raised major concerns about training in the UK. *IP* has not only made managers more aware of the importance of training but also encouraged them to develop a more systematic approach. **Ruth Spelman**, a chief executive considers that “*contrary to expectations, Investors in People is not about spending more on budgets for training. Rather it is a mechanism for assessing whether or not an organization’s training fits its business needs.*” This program brings real benefits. In an independent report called “*Building Capability for the 21st century*” **Rujan Chapple** and **van Eupen** (1999) spoke to over 2000 organizations and 42 business leaders who said that the key benefits of being *Investors in People* were:

- improved productivity (70% of the organisations);
- greater competitiveness (70%);
- increased customer satisfaction (80%);

- better corporate image (80%);
- team-working (90%).

The Investors in People Standard “provides a framework for improving business performance and competitiveness”. It encourages excellence in the field of human resource development and creates a *culture of continuous improvement*. The *Investor in People Standard* is built on four principles:

- **Commitment**-an IP is fully committed to developing its people in order to achieve its aims and objectives.
- **Planning**-an IP is clear about its objectives and what its people need to do to achieve them.
- **Action**-an IP develops its people effectively in order to improve its performance.
- **Evaluation**-an IP understands the impact of its investment in people on its performance.

Michael Howard, Secretary of State, had launched the name *investors in people* at a conference in Glasgow in November 1990. Organisations are encouraged to meet the *IP Standard* and that means that organisations will consider *training as an investment*, not as a cost.

For those individuals who are members of professional institutions, there is a specific concept that is familiar-the *continuous professional development (CPD)*. *The Investors in People* offer support in improving and developing the individual, the unit and the organization in line with business objectives.

VI. Investing in education

“Employees don’t depreciate. Their value to the organization, when they are well-maintained, only appreciates”

David Decenzo

One important ingredient of *investments in people* is considered to be *investment in education*. It means that organizations have to invest in knowledge, skills and attitudes.

Education and training have become crucial in the process dedicated to build the so-called “*Europe of knowledge*” and a knowledge-based society. Intelligent organisations are those who *invest in people considering that they invest in future and get a long-run sustainable competitive advantage*. In a global knowledge-based world the rivals are no longer just around the corner; they are around the world both in the real and virtual marketplace. Competing is therefore as natural as breathing and winning welcome *the competitive intelligence age* where *investment in people is a strategic investment!*

Part of education results are expressed in terms of *diplomas* and *abilities, qualifications*. Although the two seem to be similar, the truth is that they are not the same. The diplomas show what the employee is supposed to know theoretically, while *the abilities* are a proof of what they actually know. The differentiation between diplomas and abilities is an important issue related also to *lifelong learning, for continuous improving the qualifications and abilities*. Why is this necessary? Because we live in a world in which “*the single constant of the Universe seem to be change*”. Radical changes take place from a minute to another, not to speak from a year to another and what is “*fashionable*” and required now may be undesired and outdated in the following minute. Jobs may disappear, being replaced by other jobs, the skills demanded by the employees may change, so the individual must be able either to prevent being caught by surprise by these changes, continuously improving his/ her qualifications and enlarging the sphere of interest, or to be prepared to respond promptly to any changes in the work environment, by switching to the newly sprung types of jobs.

- **Private returns to education**

It is necessary that the employees should have an adequate education so that the managers could thus appreciate them at their right value. The amount of education acquired by workers has an important impact on their earnings. The more education individuals acquire, the better they are able to absorb new information, acquire new skills, and familiarize themselves with new technologies. The amount of education an individual receives not only affects his earnings, but the quality of his employment as well. In his book, “*Studies in Human Capital*”, **Jacob Mincer** stated: “*Educated workers have at least two advantages relative to less-educated workers: higher wages and greater employment stability.*” Another aspect worth mentioning and which is closely connected to education is represented by the quality of our life. Persons with higher levels of education tend to have better health than those with lower levels, because they have made an investment in themselves, an investment that they protect by taking preventive measures to increase the probability of better health.

- **Public returns to education**

Economists have been interested in economic growth since *Adam Smith* made his inquiry into the wealth of nations. The contribution of education to economic growth occurs through two mechanisms. *The first*, and most highly publicized, is *through the creation of new knowledge*, known as *Schumpeterian growth*. More highly educated individuals will translate into more scientists, and investors working to increase *the stock of human knowledge* through the development of new processes and technologies. *The second way* in which education affects economic growth happens through the *diffusion and transmission of knowledge*.

Schools provide the education level necessary to understand and digest information. Increases in educational levels helped the invention and innovation in the computer industry over the past 30 years, yet without schools to teach how to use computers, the effect of such innovations would have been reduced. Education benefits society in ways that cannot be measured by economic growth. Education enables people to be better mothers, fathers, children, voters and citizens. In his 1962 work, *Capitalism and Freedom*, Nobel Laureate **Milton Friedman** described the effects associated with education: "A *stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of the citizens and without acceptance of some common set of values. Education can contribute to both.*"

One major component of education concerns strategies for making ***lifelong learning*** a reality for all. This includes work on barriers to *investment in lifelong learning*, strategies for making learning accessible in terms of pedagogy and the location of learning and ways in which educational institutions can develop their students' skills and motivation for lifelong learning.

E-learning is said to have great potential for improving quality, increasing access and reducing costs in post-secondary education and training. Furthermore, a cost/benefit analysis of e-learning compared to other delivery modes is often inconclusive.

- **Learning paradigm is centred on search and discovery. It emphasises creativity and initiative, interaction and collaboration**

The advent of a *digital knowledge-based society* has brought about significant changes in many ways. These changes call for a paradigm shift in education to one that is *search- and discovery-centred*, emphasizing *creativity* and *initiative*, and valuing *interaction* and *collaboration*. This digital-knowledge-based era calls for a new paradigm in education, which emphasizes *learners' active acquisition of knowledge* through the search for various information and sources, useful for everyday or specific situations. This new paradigm in education thus focuses on *learners' self-motivated and self-regulated learning activities to obtain knowledge* that is *practical* in the individual contexts and circumstances faced by learners. To acquire such knowledge is to *actively participate in the progress of personal development* both through *interactive education* and *application*, rather than passively absorbing knowledge developed by others.

Today we need individuals with the capacity to utilize *creativity* and resourcefulness to apply *innovative solutions* in order to meet complex challenges. Our modern knowledge-based society requires extensive *interaction* and *collaboration* for completion of complex tasks. Individual instruction designed to meet the needs and expectations of individual learners through planned interaction

between the learner and computer technology has been less than adequate in the digital learning environment. The opportunity for interactive and collaborative learning enriches the learning experience by providing learners with the opportunity to learn by presenting them with actual aspects of real problems, diverse viewpoints on various subjects and experiences of sharing and living together in a community.

The paradigm shift in education is from one of *a teaching paradigm* to one of **learning**. This means that education is no longer about how to deliver information and knowledge to the learner but about *how to help learners to search and discover information for themselves to create knowledge useful to their own contexts*. Teachers are responsible for how learners acquire information and knowledge. In a rapidly changing society, they should have clear visions themselves as to the creation and application of knowledge that is to be presented to learners. The job of teachers is of course to educate. On a social level however, another major task is *to inculcate learners with a sense of morality and ethics*. The new roles for teachers as change enablers, knowledge incubators, and learning consultants will become crucial.

Change management refers to not only passively responding to changes but also *active and intentional planning of changes*. Teachers' role should be *shifting from the role of "answer provider"* to that of *"change enabler"* - a person who helps learners find knowledge needed to confront changes and actively deploys *self-development strategies*. More specifically, teachers' roles in the new era should include mitigation of the potential shock from changes, guidance to help learners establish new visions for the future, and encouragement of leadership for learners to help them initiate their own roles and to continue self-development. *Knowledge creation by a few creative people* has come to its limit and must give way to **knowledge creation by a network of people** who *share ideas* based on *their own creativity and imagination*. In this changing environment, the role of a teacher should be one of *a knowledge incubator* that serves as *a network navigator* or a director to the useful sources of knowledge. Thus, teachers in digital society should teach the methods of finding where and in what manner information and sources can be determined, as well as ways to process knowledge and apply them to problems encountered in everyday experiences. The quality of teaching is determined not just by the quality of teachers but also by *the environment in which they work*. Policies aimed at attracting and retaining effective teachers need both to recruit able people into the profession, and also to provide support and incentives for on-going performance at high levels and professional growth. The last decade of educational research has attested to the importance of *investing in teachers* to attain any significant changes in terms of student learning. International organizations such as OECD or World Bank are really concerned

about education policies. For example, *Education for the Knowledge Economy (EKE)* is a three year analytical program, initiated by *the Human Development Network of the World Bank*, to understand and articulate how education and training systems need to change in order to meet the challenges of *the knowledge economy*, and to offer *practical and sustainable policy options*.

Investment in education yields its dividends in many other forms. It modernizes attitudes and builds confidence in change. It stimulates broader participation in real life. It assists the process of allowing what is good in the new to replace what is bad in the old. It brings an awareness of new ideas and new choices. It raises the average age of marriage and makes family planning more likely. Decades of research findings have regularly demonstrated that *investment in primary education* yields significantly higher returns in both *social progress* and *economic growth and development*.

- **European Union educational policy**

Nowadays world leaders' concern is to find ways of ensuring sustainable economic growth and development. A good example is that of *the European Union*.

The EU leaders imposed to themselves a very ambitious target: "*to build the most competitive and dynamic knowledge-based economy in the world, capable of sustainable growth with more and better jobs and greater social cohesion*" (*Lisbon' Agenda*). One of the ways in which EU is intending to achieve this goal is to encourage *investment in people and training*, which are Europe's chief assets. The European Union recognizes the importance of education and lifelong learning, the need to learn several languages and to have technological skills. *Investing in people is a priority for the European Union*, because it is one of the main points in implementing the *Lisbon' strategy*.

On the 12th of February 2001, based on contributions from the Member States, the Council adopted the "*Report on the concrete future objectives of education and training systems*". This important document outlines a comprehensive and consistent approach for national policies on education in EU based on:

- improving the quality and effectiveness of education and training systems in the EU;
- facilitating the access of all to "lifelong" education and training;
- opening-up education and training systems to the wider world.

But there is a very important difference between what a government (in this case the European Council) establishes as policy and the way of implementing this policy. The most important are the concrete actions taken by the European Union leaders to meet the educational challenge.

VII. Investing in people and skills at the level of a knowledge-based organisation. People development inside a company. Career management & development

“Sending men into war without training is like abandoning them”.

Confucius

Any company having as a long-term objective the development and maintenance in a dynamic and competitive economic environment is aware of the only resource that can make the difference: *people*. And the human resources experts have, among other things, the generous mission to keep and enrich *the company's human wealth*. If a company does not feel the real value of the human capital, in order to use it effectively, it might lose it. It is known that the workplace is enormously significant as a site for learning, both for accessing formal learning opportunities and for many informal learning opportunities which result from the nature of work and from social interaction with work groups. Within organisations, the weak role of training and development within corporate structures, the tendency for training and development to be seen as an operational rather than strategic issue, all contributes to the difficulties of operationalising workforce *learning strategies*.

Investment in education has a main dimension inside an organisation: it means to *invest in future*. Moreover, employers and employees should be aware of the mutual interest in investing in training and in developing workforce skills, as in proportion to the evolution of an individual, there is an evolution of the company. A company is like a FAMILY where every individual makes the strategic difference.

- **Learning organisations versus telling organization**

“Change is a process, not a goal; a journey, not a destination.”

Robert Kriegal and David Brant

Things are changing so fast today that it is difficult to keep up with the pace. People who cannot keep up with changes may find themselves “*downsized*” or, in term of other euphemism, they will be “*out of work*”. A business that cannot change in tune with the global marketplace probably has no future. What is the proper answer? The answer is *investing in people*. It is one of the few, if not the only long-run sustainable competitive advantage available today. Moreover, it is the healthiest response in a world of rapid change. The key *benefits* of being *Investors in People* (IP) are: improved productivity, greater competitiveness, increased customer satisfaction, better corporate image and more team working. The organizations considered to be *Investors in People* exhibit many of the characteristics of *a learning organization*. A *learning organization* is an

organization that prioritises learning. Learning is simultaneously both a process and a value. Every individual in the company, regardless of position or length of service, is committed to being better tomorrow than they are today – through learning. Instead of homogenous training classes (managers with managers, secretaries with secretaries), learning groups have *diversity* in both title and responsibility.

The organization as a whole is committed to continual improvement of every facet of itself, its products and its services-by *learning about learning*. As both the individual and the organization develop, employees will feel a renewed connection to their work, customers will be better served and the organisation will create a future for itself.

At the other pole is *the telling organization*, where learning is like ice, rigid and frozen. Training is an event that takes place when times are good. It is often for select groups of employees, perhaps salespeople and managers. It may even be perceived as either a perk or a punishment. One gets the chance to go, or is required to go. There is not room for wanting to go. Consequently, when learning occurs, it is in isolated pockets around the organisation. Hence while some individuals may learn, the organization does not.

For an *IP organization*, training may come in different packages: internally developed programme, “*off the shelf*” (in other words, the company purchases a prepared programme), hiring outside experts, public seminars, off-site executive programmes, customized books/videos, computer-based training, computer-aided instruction.

Training investments transform the performance potential of employees and managers, serving the constitute employees as strategic resources. Training is said to have the effect of increasing employee motivation.

Organizations should be concerned with training, mostly with *continuous professional development* (CPD). Nowadays, *attitude* is a key concept in the human resources domain. It was concluded that what matters in a selection interview, and further on, in the organisational gearing, is not by all means the professional experience (which may be obtained in a certain period of time) but the attitude of the one that agrees to enter in a specific work-system. With an adequate attitude, a person may learn immensely, may develop rapidly, may interact with one's colleagues, may be an exceptional leader and evolve in direct proportion with the organization. The employee is not seen as a static entity, as one comes with one's own experiences and enters a game of relations with others who modify one's conduct and, implicitly, attitude. Therefore, an IP organization should adapt its employees' attitudes to its requests, as: *attitude counts in investments!*

- **How to keep valuable people in your company?**

“If you think training is expensive, try ignorance.”

Old saying

The ideal employer is the one who invests in the long run in a company's most valuable capital: *people*. The unilateral focus on short-term objectives and results is not in the “vocabulary” of an IP company. An IP company is *visionary*, training today's workforce for tomorrow's needs. **Nancy Alrichs**, the author of the book “*Competition for Talent*”, wrote: “*Ten years ago, the interviewer would have asked: «Why would I hire you?»; today the potential employee asks: «Why would I come to work for you?»*. Nowadays, the persons with potential choose the organization which guarantees them recognition of results, promotions and the possibility of professional development, the culture that “*smiles at them*”, the manager they want to work with, the projects they are interested in.

- **Ways of investing in people inside the company. Internship versus Trainee**

“For the most part, careers do not just happen, they are made”.

Patrick Forsyth

At first sight these two programs, *internship* and *trainee* seem to have nothing in common, as the internship programme addresses to students in the 3rd and 4th year of study and the trainee program has as target the graduates looking for a job. But in fact they do have something essential in common: the aim-*investing in people*. For example, *Procter & Gamble* means, besides a trustworthy producer also an excellent chance to attend an internship. Under the slogan “*Your Development, Our Touch*”, the company organizes monthly meetings with the students, in order to share them some of its knowledge about Marketing, Creativity and other subjects of interest. These meetings, as well as the “*P&G Business Week*”, which takes place every spring, draw a lot of applications for internships within the P&G framework. Which is, in fact, the “*philosophy*” behind the internship?

The students receive important projects that have immediate feasibility in business. This way, the same environment is created for every new employee and so the employee has a significant contribution starting with the first day. The “*interns*” are integrated in the organization and benefit from *guidance* continuously. Briefly, the *P&G* employee has to show talent in all regarding “*Power of People*”, “*Power of Minds*” and “*Power of Agility*”.

The benefits resulted from an internship are significant for both parties. The private companies enjoy the influx of enthusiasm and motivation for performance, which are characteristic to those that live the first contact with a “*job*”.

The implied students get, in an unrisky way, *procedural knowledge* regarding the way in which things happen in practice, completing the theoretical information obtained during the lectures. The main advantage is that the trainees can enter the “*real*” world ready, and will be able to offer performance more quickly than those that are fresh graduates. Moreover, they are tempted to stay in the “trainer” company, because they perceive this training as an *investment in them* and as a *sign of trust*. They see that the company also offers, not only asks from them, as happens in the great majority of companies.

- **Training & development**

It was **Mark Twain** (in “*Pudd’nhead Wilson’s Calendar*”) who stated that, “*Training is everything. The peach was once a bitter almond; cauliflower is nothing but cabbage with a college education.*”

There is no doubt that training is important. First, we need to define what we mean by training and development. **Pepper** defines *training* as “*that organized process concerned with the acquisition of capability, or the maintenance of capability*”.

Where the objective is *to acquire a set of capabilities* which will equip a person to do a job sometime in the predictable future, which is not within his present ability, that person is often said to undergo a process of *development*.

- **Investing in and developing human capital**

“*Don’t expect others to help you, help yourself*”

Friedrich Wilhelm Raiffeisen, founder of Raiffeisen Group

Today’s workplace, with its focus on managerial skills and technological innovation, imposes higher educational demands on the labour force of developing nations. Lower labour cost is no longer sufficient to attract investments. In its place, the “*human capital of the local labour force*” is gaining momentum as labour cost differentials or proximity to raw materials become less important in decisions to locate technology-intensive facilities. *Strong human capital* attracts and encourages growth.

Although easier to be said than to be done, an investment in human capital should be *a part of any economic development policy*. The availability and the prevalence of a nation’s human capital determine the rate of growth of its economy and integration in world markets. Sustainable development requires an investment in human capital. Although human capital requires constant support, its returns are fundamental for improvement.

Treating money spent on people as *an investment* in an important asset is a far more appropriate mindset than treating such expenditure as an expense. If people

are valued, and all management and leadership actions demonstrate that, then every effort should be taken, whether formally or informally, to *develop skills and abilities* and to *provide opportunities for people to maximize their contribution*.

- **The new economy is a knowledge and competencies-based economy**

In *the new economy* knowledge is related to the person. It is embedded in the individual or in a specific organizational context. The creation of knowledge is related to *a social interaction process*. The company is not anymore a simple portfolio of products or services, but a *portfolio of resources, competencies and knowledge*.

The competitive advantage rests with the company's capacity to make use of its resources, mostly on the intangible one. Therefore, the sources for the competitive advantage must be searched within the company. The starting point of the entire strategy is *to clarify the identity of the company* and to determine the competitive advantage. In *the classical approach*, the company tries to identify its clients and the needs it tries to satisfy. But in the context where the tastes of the consumers evolve rapidly, it is *peremptorily to formulate a long-term strategy*. The resources and competencies are offering a better level of stability than the needs of the customers.

The evolutionary theory, resource-based theory, is the work of several economists like Nelson and Winter, Teece, Dosi. The main object of this school of thinking is to offer a general theory of the economic change. This theory lies mostly on three elements:

- a “*genetic*” patrimony under the shape of experience which is an element of permanent state; they correspond to the *know-how* and to *the competencies*;
- the companies suffer in the same time *changes* which can be translated through *research*, which finds itself at the basis of *innovation*;
- a “*selection mechanism*” which acts on these changes. The selection is made randomly on the environment where the evolutions will be an advantage for certain companies to the detriment of those that did not evolve correctly.

According to this theory, the company has at its disposal a range of answers more or less programmed to face the evolutions of the environment. It can be distinguished between the “*static experience*”, which constitute the simple repetition of the past practices, and the “*dynamic experience*” or “*research experience*”, which represents the basis for a change within the company. Practices are specific assets of a company; it is them that differentiate companies among themselves and that constitute the essence of their performance. It is the nature of the competencies and the nature of experience or practice that determines to a larger extend the

evolutionary process of the company. If we are to consider the company as a *portfolio of competencies*, we can come to the conclusion that the companies that are more adapted and more likely to be chosen by the environment. The *survival* and the *competitiveness* of the company depend on its *patrimony of its solid competencies* and on the nature more or less adapted to the changes of the environment of its competencies.

Competencies are also allowing companies to respond in a more flexible way at the transformation of their organizational structures which are taking more and more the configuration of a matrix and in which the project management come to change the traditional hierarchical structure. Faced with the instability of the environment in the companies and with the difficulty encountered in adapting the human resources in the new structures of the company, *competencies* characterizes the employee's capacities which allow her/him to exercise a function and/or to improve his performance at work. Competencies designate the organizational capacity to express the resources under different combinations in order to achieve an objective.

There is a hierarchy between resources and competencies. A *resource* is an asset, while a *competence* is a knowledge that results from a combination of more resources. Among all the competencies of a company, some have a *strong strategic value*. These are the "*distinct competencies*" also called "*core competencies*".

- **Identification of core competencies. Creating, keeping and developing competitive advantage**

Competencies have been defined as the fundamental characteristic of an individual who guides her/himself in order to obtain or improve his performances at work on the basis of precise criteria. Some competencies can be easily developed, they are knowledge and skills. Others, more numerous, are more difficult to be identified and developed; they are traits, self-concept and motives.

Most companies which implement a *management of competencies* believe that the competencies are a necessary, but sufficient condition for performance. The competence is defined as a *validated operational know-how*, and the *logic competence* which sustained leads to:

- take into account knowledge and the employees' experience in different jobs in different fields, not the qualifications required by the performed functions;
- create the necessary conditions so that the employees could put into practice their competencies;

- draw the conclusions, for the employees, in terms of qualification, payment and career.

A competence is considered to have a strong strategic value if it constitutes a source of lasting competitive advantage. The problem is to identify and to evaluate *core competencies*. In order to do that, a chain of five tests can be used; they will allow an appreciation of the strategic value of competencies.

- *The first test* is interested in how “strong” the competencies are. If a competence allows a company to notice an opportunity in the environment or to escape a danger, then it may be considered as being strong or pertinent.
- *The second test* is the “rarity” test. It separates the common competencies from the ones owned by a small number of competitors. The more rare is the competence, the more its value is a strategic one.
- *The third test* determines the “imitative” character of the advantage gained from the competencies. The more the competencies are intangible, the less they are visible and imitative. Three reasons can explain the imperfect imitative character of a competence: the competence depends on the unique historical conditions; the relationships between the competitive advantage and the competencies are based on the ambiguous relationships; the competence is socially complex (the complexity of the interpersonal relationships; the complexity of the company’s culture; the complexity of the reputation).
- *The fourth test* evaluates the “re-display” character of the competence or better said checks to see if the competence can be used in another context.

The more a competence is specific to a context, the less it can be used in another context and the more its value is strategic. This criteria measure the degree of control the company has over the competence. For example, the qualification owned by an employee is used by the company, but the latter can lose this competence if the employee leaves the company. The *investment in human capital* can be easily transferred. If the competence rests on a single individual, that competence is transferred by a simple participation of the individual.

- *The fifth test* identifies the existence of a “substitute” for a competence. If a competitor can obtain the same competitive advantage by using a similar competence, it is obvious that the strategic value of the competence is small.

By cumulating the results of these five tests, we can place the competencies on a level between a *weak* (not that strong competence, rich, imitative, easy to transfer, changeable) or a strong strategic value (strong competence, rare, difficult to imitate, non transferable, without substitutes).

Based on these tests, the company can establish a global conclusion by classifying the competencies according to two criteria:

- “*the degree of superiority*” over the competition. In this way, it can be distinguished between “*different competencies*” (the strong points of the company), “*undifferentiated competencies*”, meaning the ones that do not represent an advantage against competition and “*missing competencies*” (the weak points of the company);

- “*the degree of accessibility*” that depends on the existence of qualitative and/or quantitative barriers. *The qualitative barrier* is the capacity of the company to be different than its competitors because of a rare competence or to an accumulation of a non-transferable experience. *The quantitative barrier* represents the difficulty for the competitors to obtain comparable price levels.

The different competencies are a basic element that constitutes the *company’s reputation*. The well-known companies are usually known for their excellent work in a specific area. These competencies could be related with different areas such as human resources, marketing, research and development. Table 1 offers an idea over different competencies associated with well-known companies.

Table 1. Examples of different competencies

<i>Areas</i>	<i>Example of different competencies</i>	<i>Example of companies</i>
<i>Human Resource</i>	<ul style="list-style-type: none"> • <i>Know-how</i> in relation to the creation and development of rare human resources 	<i>IBM</i>
<i>R&D</i>	<ul style="list-style-type: none"> • The capacity to develop entirely new products 	<i>Sony</i>
<i>Creation</i>	<ul style="list-style-type: none"> • The originality of design 	<i>Apple</i>
<i>Logistics</i>	<ul style="list-style-type: none"> • The capacity to optimize the costs of logistics and supply 	<i>Carrefour</i>
<i>Production</i>	<ul style="list-style-type: none"> • The tools’ flexibility and the speed of the answer • Mass-production for a mass-service 	<i>Benetton, McDonald</i>
<i>Sales and distribution</i>	<ul style="list-style-type: none"> • The excellence of an own suppliers network 	<i>Louis Vuitton</i>
<i>Marketing</i>	<ul style="list-style-type: none"> • Creation and management of brands 	<i>L’Oréal</i>
<i>Service</i>	<ul style="list-style-type: none"> • Complete service that accompanies the product • Service after sale 	<i>Decaux, Darty</i>

Source: Adapted after **T. Atamer & R. Calori**, *Diagnostic et décision stratégique*, 1993, p. 364.

The global result of competencies has to facilitate the identification and evaluation of the strong and weak points of the company compared to the competitors. In the same time, it must indicate the actions that must be taken for development, acquisition.

• Classical approach versus competencies-based approach: The conditions for success of the competencies management

In order to implement *a real management of competencies*, it is not enough to redefine the old practices. It also means *to implement an innovative system* that will remain coherent with the company's culture in order to avoid the difficulties and the lack of understanding which sometimes might lead to incredible failures (table 2).

Table 2. Comparative analyze between the “competencies”-based approach in comparison and the “classical” approach

	<i>The classical approach</i>	<i>The competencies approach</i>
<i>Function</i>	<ul style="list-style-type: none"> • Tasks • Activities • Qualification 	<ul style="list-style-type: none"> • Required competencies • Professional route
<i>Employee</i>	<ul style="list-style-type: none"> • Personality • Skills • Behaviour 	<ul style="list-style-type: none"> • Owned competencies • Development

As it can be seen from table 2, there is a clearly established difference between the classical approach and the competencies-based approach. In the classical approach, the function is described by taking into account: tasks, activities and qualification. *The competencies-based approach* is based on required competencies and professional route each employee must develop in the company. In what in concerns the employee, the classical approach is counting on personality, skills and behaviour. On the other hand, the competencies-based approach focuses on *improving the owned competencies of the employee* and in the same time to improve them.

The competencies-based management cannot be implemented in an organization without taking into account *the company's culture*. The implementation of a competencies-based management in a company has several advantages for improving the working of a human resource system, but its success is obtain with the price of numerous efforts. Its consequences are translated through payment readjustments and through the implementation of new actions for development. In order to stimulate people presumes the existence of an evaluation and remuneration system that recognizes and valorises the development of new

competencies. The competencies can then contribute to improving the payment methods. The wage is based on the evaluation of *the proved competencies*. It refers to encouraging the employees, by putting into relationship the payment with the validation of the competencies. The competencies put into practiced by an employee are revised in a “*competencies passport*” that is kept for the entire working period.

Career management & development comprises the processes of *career planning* and the assurance of *managerial succession*. *Career planning* refers to the way of advancing of the employees in the company according to the company’s necessities, employees’ performances, their potential and preferences.

Career Development Program

Companies today have *a new vision* in what it concerns the new economy. It is related to *the intellectual capital* and the importance of *intangible assets*. The human resources must be taken into account, as people increase the company’s value through their competencies. The importance of *people development* (mostly *personal development*) in a company forced the appearance of career programs and competencies tracking. **Career management** is the process through which the aspirations and abilities of employees are assessed and their *personal development* is planned and guided, in line with the opportunities available in the organization. It involves a range of techniques such as *mentoring, training, appraisal and competency assessment*. For the organization, *career management* allows talent to be identified and employees to be placed in jobs where their skills can be used effectively. **Career management** has three main goals:

- to ensure the compliance with the company’s necessities in what it concerns the managerial succession
- to offer the employees with potential a training and a practical experience in order to prepare them for the responsibility level they could reach;
- to offer the employees with potential the guidance and the encouragement they need in order to have a successful career, in the same company or not, according to their talent and own aspirations.

The way a career evolves:

- *the expansion in the beginning of the career*, when new skills are obtained, when the volume of knowledge is rapidly increasing, the competencies are developing in an accelerated rhythm, and the aspirations and the personal desires are identified and expressed;
- *establishing the career path*, when the skills and the knowledge obtained at the expansion level are applied, tested, modified and consolidated through

practical experience and when the complete levels of competence have been achieved, and the aspirations are confirmed or corrected;

- *maturing*, when the individual is well paced of his career path and is evolving according to his own motivations, skills and opportunities.

The study of *the career dynamics* is necessary before formulating *the career management politics* and the preparation of the managerial succession plans. The study is made by analyzing the path of an employee in the company, taking into account the performance evaluations results. The tracking of the career dynamics could indicate the necessary actions for modifying the trends in the case of the employees with potential, with the help of some activities specific to career management. The large companies are continually working to implement their visions. Among their visions, is a commitment *to organization excellence and people*. Such a relationship develops *a partnership between the company and its people* in focusing on the development of all individuals to support the growth of the business.

Companies are working with programs that support the development of people. Among these programs are:

- *Continuous Performance Improvement* that allows for annual assessment of performance against a set of specific objectives agreed upon by an individual and the manager
- *Global Staffing* which focuses the company's efforts on recruitment, assessment and selection of the right people into the right jobs
- *Education and Training*
- A *Career Development Planning Process* that addresses an individual's need for growth
- *Succession Planning* which enables the organization to have the talent necessary for meeting its current and future strategic business goals.

The tools serve as a basis for defining skills, development actions, and growth opportunities and create people development programs.

In a *global knowledge-based society* the human resource (personnel), representing the organization, play a critical role in its development. When companies invest abroad we notice a confrontation with new organizational cultures and new managerial philosophies.

Under such circumstances, people become both common and key resource, a vital resource, of today and tomorrow, for all the organizations, that assures their development and competitive advantage.

In the knowledge-based society the development of high levels of skills and knowledge in the population are critical. People will need to be more *polyvalent* or *multi-skilled* sometimes working in *multidisciplinary teams*. Thus, we can say that the duty of a society based on cultural diversity is that of particularly *investing in education*, in protecting the health and in other programmes of social nature. The key principle which must govern the investment policies, either private or public, in the modern societies, should be the one that would allow and promote *investment in human and social capital*. This principle can be applied both to the systems of ensuring the welfare and the quality of life and to other aspects of the social and economic development. The *welfare approached* traditionally, based on the system of transferable payments, bureaucratic services and on the so-called social engineering, must make room for the new approaches regarding *the active welfare, the continuous education and the development of systems of ensuring the quality of life* by making use of a set of *investment priority programmes*, such as those connected to *investment in education*. Education and implicitly investment in education must represent key components in ensuring an authentic long-run human development, not only all over the world, but in Romania as well.

- **Investment in people and skills in Romania on the way to become a knowledge-based society**

As *an investment, education* is an end in itself, or an intermediate end with knowledge gained from education as the ultimate end. The proportion of education services used increases when per capita income is higher because of the declining marginal return on other marginal things. Therefore, higher education in a knowledge-based economy consists of the following three characteristics:

- a. Academic excellence*

There are a number of institutions that are qualified research universities capable of creating new knowledge and be major sources of technological progress, which is indispensable to modern economic growth

- b. Higher education public awareness campaign*

In a knowledge-based economy, higher education is no longer a luxury that only the rich can afford and is restricted to the elite of society. Higher education is required not only for the continuous growth of the economy, but also for reasons of equity

- c. Diversification of higher education*

What are the implications of the “*knowledge divide*” for Romania in terms of regional disparities, social exclusion and the urban–rural divide?

The main aspects regarding the knowledge divide (both as cause and effects) refer to the following aspects:

1. Social polarization
2. Social marginalization of persons with disabilities
3. Limited access to the culture of the population in rural and suburban areas
4. Economic discrepancies between and within the regions

Unlike the pre-industrial and industrial societies where knowledge was acquired especially through experience-“*learning by doing*”-, in the knowledge-based economy, people must learn both before entering the labour market, in school and afterwards as well, adapting themselves to the more and more complex demands of the worldwide dynamics.

The implementation of the knowledge-based economy in Romania is a process that can have significant benefits. One of them is the innovating type of learning which can bring about renewal and reorganization of problems so that we could survive on the long run in times of change. Students, adults will have to be taught, in time, how to react in an environment of new, unpredictable conditions of partial or total uncertainty. Moreover, if in the professional adaptation there exists the tendency to see the future looking at the past, in the process of innovating learning, present must be rethought in terms of the future. Another very important consequence we might witness here in Romania due to becoming a knowledge-based economy is represented by *a change in mentality and attitude*.

If in the past the emphasis was put on the classical factors of production, in the context of the new economy, the qualitative aspects of the human factor must be rediscovered. The knowledge-based economy gives birth to many other benefits which can be grouped together and they represent people's ability to understand and accept cultural differences, think critically, approach problems from a global perspective, and change their life-style in order to protect the environment as much as possible.

Romania is a country with great potential and at the same time with many problems to solve, but I believe in its power to overcome them, because “*If during your life time you find a road without any obstacles, you will know for sure that it leads nowhere.*”

• **Romania on the way to the alignment process to the EU norms. *The European Higher Education Area & Bologna Process***

The University system has started to change by applying important changes imposed by the alignment to the EU standards. Thus, the majority of the students will obtain their degrees only after 3-4 years, and afterwards they can have *Master Courses* lasting 2 years.

These changes are imposed by the application of *the Bologna Declaration*, signed by Romania in 1999, which stipulates the alignment of the Romanian University System to the European one.

In addition to that, an important aspect derived from *the Bologna Process* refers to the necessity of establishing a list with all the specializations in which the students can get their degrees. All faculties will have to adapt their curriculum and reach 180 credits, for 3 years of study (the exams for one year summing 60 credits). One of the most important motivations for this reform has been the international recognition of the Romanian graduates. *“This change is a crucial step that needs to be taken in order to make sure that the Romanian system is compatible with the European one, in view of the creation of the European Space of Higher Education, starting from 2010 according to the Bologna Declaration”*, the Minister of Education underlined. The integration of the graduates will be much easier because they will study in the same way as their European colleagues.

This entire process of alignment to the EU norms is a very important step taken by Romania in the transition process towards a knowledge-based society, taking into consideration the powerful impact of globalization on the entire world, and the changes each country needs to make in order to deal successfully with the new challenges.

In a knowledge-based economy companies will have to rethink their entire business processes as they embed knowledge into their business processes. In a knowledge-based company it is very easy to share knowledge with any employee at any level. The value of the employee is not whom they know, but what they know. The traditional models of the information hierarchy no longer apply. And that means that there is an opportunity to flattened organizational hierarchy. So, at the very least a shift to a knowledge-based company will present an opportunity to flatten organization charts and hence become more efficient. Some or a lot of operation processes may become unnecessary. A while ago people used to write memos and make carbon copies. Nobody does that anymore. In fact business processes have changed and a lot more people get involved in sharing, thanks to e-mail technology. If customers can share in the knowledge of a company, with things like: outstanding issues with the product they are using, promotions being planned in their region, training programs for the service they use; this can fundamentally alter business processes in the company. The business process that was earlier a push model with information being pushed out to the customer now becomes a pull model with the customer pulling relevant information. This is also true on the supplier side. The supplier can see the inventory levels and fulfil automatically without the intervention of the company. They can see the defects that are being logged with the parts that they supplied and pro-actively fix the error in the part before it becomes a big issue. So, a company has to rethink

business processes, as they become *a knowledge-based company*. What does this mean? The knowledge-based economy is here and is rapidly changing the way we do business. It is driven by globalization and the key success factor is *Human Capital*. To be successful in the knowledge-based economy, countries must invest in education, competencies, and information networks, attracting global talent and *creating a culture of creativity, innovation and risk taking*.

The knowledge-based economy will have a profound and positive impact on individual businesses as they embed knowledge in their business processes and focus on their human capital. It is a challenge that is global in nature. Investing in people and skills is crucial also for a country like Romania on its road to a knowledge-based society.

REFERENCES

- [1] Becker, G. S., *Comportamentul uman. O abordare economică*, All Publishing House, Bucharest, 1994.
- [2] Becker, G. S., *Capitalul uman – Analiză teoretică și empirică*, All Publishing House, Bucharest, 1997.
- [3] Blöndal, S.; Field, S.; Girouard, N., *Investing in human capital through post-compulsory education and training*, OECD, Economics Department Working Papers, No. 282, Paris, 2002.
- [4] Bonciu, C., *Introducere în managementul resurselor umane*, Colecția Economică, Credis Publishing House (University of Bucharest), Bucharest, 2002.
- [5] Braham, B. J., *Creating a Learning Organisation*, Kogan Page Ltd, 1996.
- [6] Brooking, A., *Intellectual Capital, core asset for the third millennium enterprise*, International Thomson Business Press, 1998.
- [7] Cortada, J. W., *Rise of the Knowledge Worker, Resources for the Knowledge based Economy*, Butterworth, Heinemann, 1998.
- [8] Forysth, P., *Developping your staff*, Kogan Page Ltd. Publishing House, 2001.
- [9] Lefter, V.; Manolescu, A., *Managementul resurselor umane*, Didactică și Pedagogică Publishing House, Bucharest, 1995, *Les Cahiers français*, juillet-août 2004, Paris *Comprendre le management*, pag. 52-57
- [10] Marinescu, C., *Educația. O perspectivă economică*, Economică Publishing House, Bucharest, 2001.
- [11] Rainbird, H., *Training in the Workplace*, Macmillan Press LTD, 2000.
- [12] Stewart, T. A., *Intellectual Capital. The New Wealth of Organizations*, Nicholas Brealey Publishing House, London, 5th edition, 2000.
- [13] Suci, C., *Economics. New Economics & Knowledge-Based Society*, Part I, ASE Publishing House, 2002.
- [14] Suci, M. C., *Economics*, part II, ASE Publishing House, 2004.

- [15] Suci, M. C., *Investiția în educație*, Editura Economică, București, 2000.
- [16] Zamfir, C., *Dezvoltarea umană a întreprinderii*, Academiei Publishing House, Bucharest, 1980.
- [17] *Cariere*, 3rd year, no 49, 50, 51
- [18] *Human Capital Investment – An International Comparison*, OECD, Paris, 1998
- [19] *Internship vs. Trainee*, *Young Money*, no 1, 2005
- [20] *The Investor in People Standard. How to get started?*, UK, London, 1995
- [21] National Progress in Implementing the ICPD Programme of Action 1994-2004 *Investing in people*, global survey of the United Nations Population Fund (UNFPA), online version.
- [22] http://europa.eu.int/pol/educ/index_en.htm
- [23] <http://europa.eu.int/scadplus/leg/en/s19001.htm>
- [24] www.derekstockley.com.au/newsletters-05/018-human-capital.html
- [25] www.mier.org.my/mierscan/archives/pdf/elayne4_10_2004.pdf –
- [26] www.hku.hk/cepc/
- [27] www.britannica.com
- [28] www.cambridge.org
- [29] www.stanford.edu

