

Knowledge Productivity: the 21st Century Growth Engine for Value Creation

Prof. dr. Joseph W.M. Kessels

INTRODUCTION

In the 21-century knowledge economy, knowledge is becoming the most important asset of companies, institutions and countries. The capability of making knowledge productive will be the critical element in the process of value creation. Financial capital, natural resources and labor will remain important assets, however, their capacity of transforming knowledge into competencies for gradual improvement and radical innovation will become the essential fuel for the growth engine of value creation in companies, institutions and countries.

As value creation is one of the prime objectives and responsibilities of leadership in business and governments it is extremely important not only to understand the process of knowledge productivity but also how to put it into day-to-day practice. High levels of education, large numbers of graduates and the availability of financial means are just not sufficient prerequisites. Knowledge productivity as the growth engine for value creation requires an attractive learning climate that encourages boundary less thinking, and an imaginative and entrepreneurial spirit, not only at the top but at all levels in companies, institutions and countries.

For this reason, we will discuss in this session the implications of knowledge productivity and value creation and what this means for leadership. For upgrading knowledge productivity in our organizations to the highest-level just conventional knowledge management is insufficient to maximize value creation for achieving our vision and goals.

How can we build an organizational culture that nurtures knowledge productivity and what are the major roles of leadership in this challenging enterprise?

A KNOWLEDGE ECONOMY

The economy is rapidly being transformed into a knowledge economy. Therefore, individuals, teams and companies need to develop the necessary competencies to be able to participate in a working life that is mainly based on knowledge productivity. Traditional approaches to management, training and development will not provide the learning environment that is required for knowledge work. Therefore, each company needs to design a corporate curriculum that turns the day to day work environment into a powerful learning environment.

The knowledge economy offers the possibility of prosperity to those who can join the new elite of knowledge workers. It also inherently creates new imbalances. The learning environment should help individuals to develop their talents and take part in various forms of knowledge work. The concepts of knowledge productivity and the corporate curriculum raise also the question of how far knowledge productivity can be managed. These concepts may even question the role of managers in a knowledge economy.

Perceptions of the role of human intervention in economic transactions have changed. The emphasis upon individual physical labour and ability to regulate and coordinate transactions has given way to an emphasis upon the potential human contribution to the production and application of knowledge. Of the products manufactured and services rendered by organizations, material items (such as commodities), capital and physical labour, are now less significant than the combination of knowledge embodied in the product or service. It is widely accepted that we are moving away from an industrial economy to a knowledge economy. Of course, traditional economic aspects such as labour and materials are still important, but it is now critical to be able to add value to products and services through knowledge (Drucker, 1993). Economic success requires the ability to improve and innovate.

This slow but dramatic change in the economy will have a tremendous impact on organizing work and the meaning of learning. As a consequence, professionals in the domain of human resource development will have to reconsider their role and their potential contribution to a 'knowledge productive' work environment.

AN ECONOMIC NECESSITY FOR INDIVIDUAL LEARNING

In the current timeframe, it is challenging to investigate the characteristics and requirements of an emerging knowledge economy and its implications for individual development in the context of work-related learning. Such analysis might lead to the fresh hypothesis that externally imposed performance goals, power-based managerial positions and the concept of ownership of knowledge intensive companies in the hands of anonymous shareholders, could well inhibit knowledge productivity.

The defence of such propositions resides in the economic necessity for an individual-centred perspective on Human Resource Development, with a strong emphasis on the emancipated and autonomous professional. Such a perspective is not restricted to the highly educated service worker: even manual workers must be cooperative, responsible, creative and autonomous. It could be argued that the cultural shift from social solidarity and collectivity to individual life styles and independent membership might hamper the socially embedded process of knowing. However, the social context of an organization should counterbalance the potential risk of individual self-centeredness, and should foster networks that find their cohesion through the mutual attractiveness, reciprocal appeal, shared interest and the passion of their members. Traditional virtues like obedience and loyalty do not propel improvement and

innovation. Human capital as a resource for organizational performance will not be enough. It needs to be supported by social capital, based on shared responsibility, integrity, trust, respect for human dignity and environmental awareness. All these elements require high levels of critical individual learning.

KNOWLEDGE MANAGEMENT: AN ANACHRONISM

The managerial tendency of the last fifty to eighty years has been based upon routine work and mass production, an approach characterized by standardization with a focus upon efficient procedures and regulations controlled by the 'brains' at the top of the organization, who set the strategy. The problem with this is that in the knowledge economy, where the complexity of work increases and the role of knowledge creation is gaining importance, (top) management is no longer equipped to direct and control the organization in a traditional way. Management now has to be done at every level, and it also requires a contribution of knowledge from all employees at all levels. As a consequence an entirely new approach to employing and managing workers is called for. The old work contract was based upon obedience and loyalty, in return for a decent salary and the company taking care of you and managing your performance. As soon as employees offer an entirely different input to the company, in terms of contributing ideas and proposals to improve and radically innovate, they become part of the collective ambitions of the organization. This is already happening in consultancy businesses and small knowledge intensive networks.

When capital is displaced by the capability to create knowledge the legitimate base for a company shifts from ownership by anonymous shareholders to knowledge workers. This leaves managers in an insecure position: the traditional role of middleman between capital and labour becomes obsolete, and controlling brainwork is hardly possible any more. Many recognize the importance of organizational knowledge and the capability to develop new knowledge, but they often apply the traditional management principles to exploit this potential resource. From a classical business perspective it was inevitable that 'knowledge management' entered the organizational area. Yet, the move to the knowledge economy has been accompanied by an *engineering* approach to knowledge management, based upon building knowledge systems, extracting knowledge and making it explicit - which is far from *knowledge sharing*. When in the new economy knowledge comes to be regarded as an individual capability that cannot be directed, handled, controlled and assessed in a manner familiar to managing financial capital, commodities and physical labour, then knowledge management will appear to be an anachronism, using an outdated term to facilitate a new phenomenon.

However, the concepts of knowledge productivity and the corporate curriculum do raise the question of how far knowledge productivity can be managed. These concepts may even question the role of managers in a knowledge economy. Managerial ability to develop strategies, procedures and control work processes turned top management

into the ruling business class of the twentieth century, a position that they inherited from the company owners. In exchange for security and material support employees carried out their jobs in a disciplined and obedient fashion. As knowledge productivity becomes the driving force in the twenty first century, and as this knowledge production will be found at every level of economic activity, knowledge workers and autonomous professionals will take charge. The corporate curriculum, as a collective learning space, might become the binding force of knowledge networks, and smart communities that heavily depend on shared intrinsic motivation and personal affinity with the content of the job.

AN ENVIRONMENT FOR KNOWLEDGE WORK

For organizations, knowledge becomes productive when the creation and application of knowledge results in gradual improvements and radical innovations of operating procedures, products and services. These processes take place in collaborative work relationships. Knowledge work and learning cannot be enforced on the basis of power, control or contract. It requires a shared ambition that is attractive, comprehensible and meaningful for both employees and the organization. New ways of organizing work for knowledge production need to be developed. The idea that management does not set the goals nor determines the direction of employee development, is central to the concept of knowledge production and the supporting learning. Knowledge workers and autonomous professionals take charge of their own development. The main principles for this concept are self-control and self-organization, integration of working and learning, coaching, leadership and collaboration. Such learning processes take place among staff members and clients in the course of their work. In addition, people are becoming increasingly aware that learning for knowledge work may be stimulated and supported through a variety of means other than formal training programs. Options include issuing special assignments, changing positions or seconding staff members, and actively participating in quality teams and discussion groups. Alternative possibilities entail organizing the work through project management and equipping the workplace with electronic performance support systems.

Given the vital importance of the learning processes involved, leaving the necessary learning to random opportunity would be imprudent. A systematic approach with a clear purpose therefore appears necessary. Yet the feasibility of managing such learning processes is open to question and is hardly possible in the manner in which we are accustomed to running other industrial processes. Ascertaining knowledge creation appears far from simple, as the necessary learning processes will not appear on command. Adopting a socio-constructivist approach, new terms may be used such as a 'rich landscape for learning' where learners become motivated, not on the basis of hierarchy and power, but through relevant, authentic and meaningful work, in collaboration with colleagues. Instead of 'managing' the required learning processes, nurturing and supporting the learning ecological system is advised.

PRINCIPLES FOR WORK-RELATED LEARNING IN A KNOWLEDGE ECONOMY

The traditional approaches to management, training and development will not provide the learning environment that is required for knowledge work. Therefore, each company should consciously develop an integrated plan for learning, 'a corporate curriculum' that turns the day-to-day work environment into a powerful learning environment. On the basis of the argument made in the previous sections, participants in a knowledge economy who wish to integrate the necessary learning in their actual work, need to adopt a number of learning strategies, that involve reflecting on the meaning of their actual work in relationship to their talents and capabilities. These learning strategies also include regular discussions on how to turn the work environment into a rich and interesting setting. As teamwork is so important, members need to confer on how to improve their collaboration and making it more appealing. Individual professionals will search for the hidden factors that inhibit and support their motivation, involvement and commitment. In fact, these strategies aim at enhancing the learning infrastructure of knowledge work.

In a knowledge economy, where improvement and innovation is required for long term survival, standardization is not the goal, but rather the extraordinary, the surprising, the artistic. This assumption not only affects managerial thinking, but influences our perception of the characteristics of almost every employee and knowledge worker. As a result, one of the arguments in the upcoming debate is that the required knowledge for improvement and innovation is basically an individual, subjective competence. Team learning and organizational learning provide the context for individual knowing. The knowledge economy will probably require the autonomous, independent individual to undertake learning for personal growth. Here the paradox of emancipation comes into play. When workers become active participants in process improvement, they also take on more and more responsibility. Doing so, they inevitably start questioning whether their interests match the interests of the organization.

Knowledge development, improvement and innovation require a high level of personal involvement from employees. This capability cannot exist without critical reflection and emancipation. Emancipated employees will critically examine the corporate goals, the ethics of governance and shareholder property of their knowledge work. In a knowledge economy, corporate success and individual emancipation will be difficult to separate. Are top managers and shareholders able and prepared to pay this price for sustainable economic growth?