

TACIT KNOWLEDGE AS A RESOURCE FOR ORGANIZATIONS AND ITS INTENSITY IN VARIOUS VALUE CREATION MODELS

Sumeer Chakuu

Abstract: *Tacit knowledge continues to play a challenging role in any type of industry and is no doubt an everlasting resource. So it is important to realize the intensity and impact of tacit knowledge in an organization at various stages. Doing so will help us to achieve a conceptual consideration about the concentration of tacit knowledge capturing techniques, technologies and methodologies at a specific stage in the business. The main aim of this article is to explore the tacit knowledge as an inimitable resource and its intensity in all types of organization which are becoming more and more knowledge intensive by time.*

Keywords: *Knowledge Management, Tacit knowledge, Knowledge in Value configurations, Knowledge discovery, Knowledge as resource.*

ACM Classification Keywords: *K.6.3 Resource Allocation, I.2.4 Knowledge Representation, I.2.6 Knowledge Acquisition.*

Introduction

Tacit Knowledge Management is a young emerging discipline with plenty of topics to be researched, many theories and ideas yet to be tested, many issues yet to be resolved and much learning yet to be discovered. As the name suggests it implies managing tacit knowledge to be a leader in today's competitive age. In context to the today's leveraging knowledge economies its implementation area is vast encompassing big economies to small scale industries. Due to its importance and cohesiveness its now-a-days considered as the back bone of going to be globalised world. Being a borderless discipline now onwards I have narrowed my research only to its micro economic aspect. All the organizations in today's era are aware of the effectiveness of usage of tacit knowledge in their business processes but none is able to recognize its intensity at the base of their organizations. By effectiveness of usage I mean storage, transfer, retrieval, application, and visualization of knowledge. Though Knowledge is embedded in the organizations from the instant the industrial revolution started but its emergence as an independent subject was unknown due to lack of resources.

Advent of Information Technology had a great and impact on tacit Knowledge Management. The first and foremost level of impact of Information Technology was on the explicit knowledge at the point where work got done and transactions (e.g., orders, deposits, reservations) took place and were being used for future references. Later, the management information systems were used to aggregate data into useful information reports, often prescheduled, for the control level of the organization .Now-a-days Information Technology has started to facilitate the management of tacit knowledge. One of major issues which are in existence is the design of systems which can capture and disseminate tacit knowledge. As the scope is flourishing, strategic changes in Information technology for tacit knowledge management and redesign of Knowledge Management Systems has become a must be factor. In addition to this the transfer of tacit knowledge has always posed challenges to the knowledge workers and designers. There are many factors which tend to hurdle the tacit knowledge transfer especially cultural context in the organizations. There were large number of techniques employed in order to overcome it but all the techniques are theoretical with no or minimum usage of emerging technologies.

Tacit knowledge has been and will be always an imperishable resource for any type of organization. According to the resource-based theory of an organization tacit knowledge is considered as a valuable, unique, and difficult to imitate resource and in context with activity-based theory of an organization it is considered as a driver of all activities which provides basis for organization's performance and thereby providing organization a competitive advantage over others. Tacit knowledge is an intangible and dynamic asset of any organization. [Alavi, Leidner,2001] suggest that the long-term sustainable competitive advantage comes from the firm's ability to effectively apply the existing knowledge to create new knowledge and to take action that forms the basis for achieving competitive advantage from knowledge-based assets [Gottschalk,2004]. Tacit knowledge acts as an intangible resource or driver for an organization.

Based on discussion above the objective of this article is to determine the effectiveness of tacit knowledge and its intensity in company value analysis; main goal is to enhance the throughput of knowledge capturing systems through proper selection in accordance with the intensity of the tacit knowledge. Doing so will make it easier for knowledge workers to use their resources at par and generate the solutions which are economically and technically feasible. The conceptual map of the article is shown in figure 1.

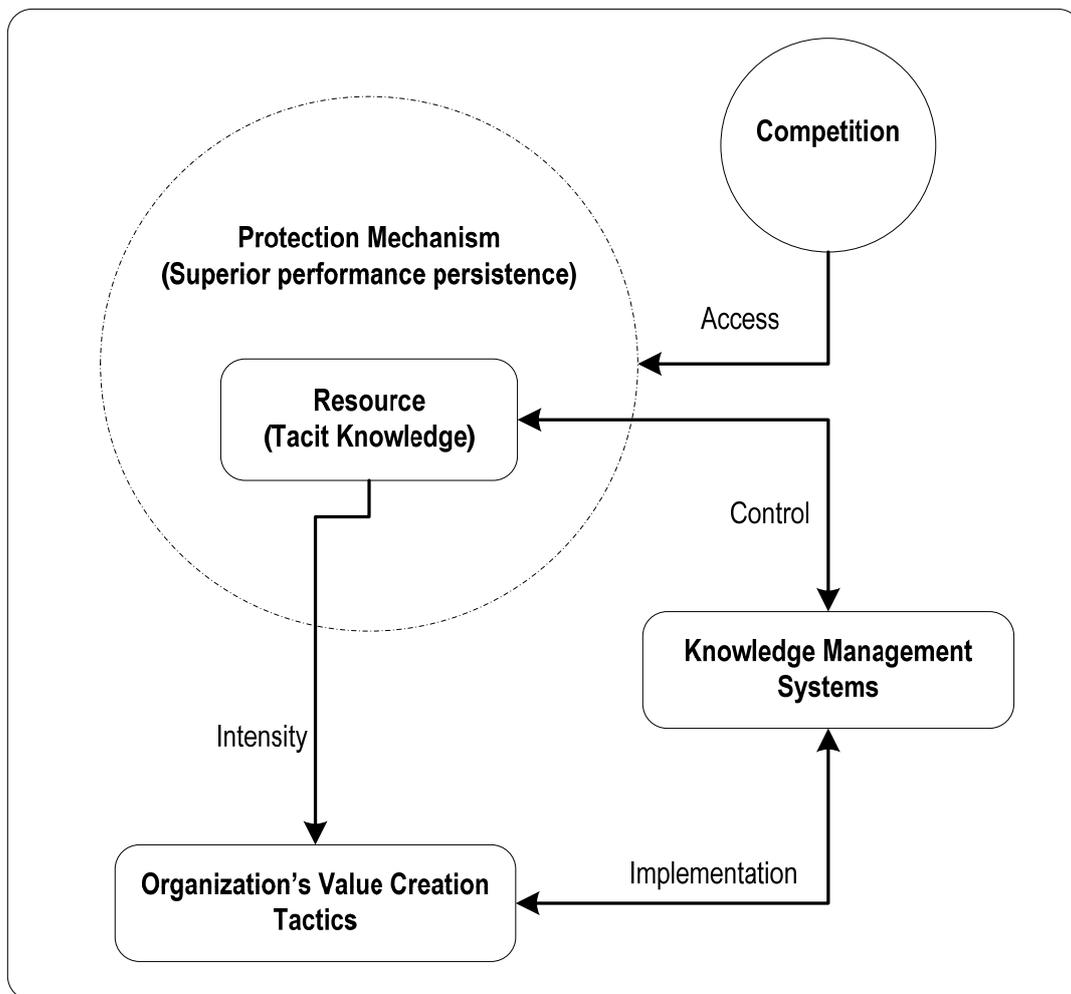


Fig. 1. Conceptual Map

The conceptual map highlights the tacit knowledge as a resource for an organization and its interaction with the value creation tactics and knowledge management systems. Tacit knowledge should be always protected from the competition as it can be fatal for organization's operation if it will lose its tacit knowledge to competition. For avoiding such a scenario a protection mechanism should be provided. Protection Mechanism involves all the necessary actions which are supposed to be taken by an organization to keep its tacit knowledge inaccessible for competition. This is due to the fact that the resource is valuable only as long as it is unique from others. In other words the protection mechanism is for the persistence of superior performance in comparison to the competition. The required intensities of tacit knowledge (as a resource) at each stage of organization's value chain will enable knowledge workers and designers to use proper techniques and resources necessary to design knowledge management systems for managing tacit knowledge. This will enable them to increase the throughput of operations, solve the time complexity, proper budgeting of projects and skill requirements required at particular phase of value creations models. In addition to this, tacit knowledge directly controls the type of knowledge management system and technology which is needed according to the nature and complexity of tacit knowledge to be captured, stored and disseminated. Once we have all the above mentioned strategies accomplished we can design and implement knowledge management system which will serve the purpose of fulfillment of organization's operations tactics.

So, in accordance with the objective, the first part of this article justifies tacit knowledge as a imperishable and valuable resource for organizations and second part focuses on the impact of tacit knowledge in the various value creation models viz. Porter's value chain, Value shop and value network.

Tacit knowledge in organization performance

The resource-based view of the firm has emerged as a major paradigm in the strategic management field [Barney, 1991]. At the basic level, the resource-based view of an organization is based on three straightforward propositions. The three propositions are as follows;

- Organizations differ on the basis of their resource endowments
- Resource heterogeneity gives rise to differential performance
- Superior performance persists as long as there are various mechanisms incorporated to protect the valuable and rare resources

As the theory has developed and research was performed to justify knowledge as a resource it was being concluded that tacit knowledge is an organization's intangible resource. Similar arguments concerning role of tacit knowledge as resource has diminished the valuability of human capital.

Human capital is no longer been argued as a critical resource in most organizations. Recent research suggests that human capital attributes such as tacit knowledge affect organization's outcomes and leverage their true capabilities [Hitt, Bieman, Shimizu, Kochhar, 2001]. Moreover it's the only resource having increasing returns as it is used. The more it is used, the more valuable it becomes, creating self-reinforcing cycle. To define tacit knowledge as a resource, we can correlate it with the three supplementary methods which exist to identify needs for knowledge. Figure 2 highlights the three methods viz. problem decision analysis, critical success factors and ends means analysis. If we closely refine their granularity we will come to the conclusion that definitely tacit knowledge is a resource which adds value to an organization.

Problem decision analysis involves identifying problems and taking appropriate decisions. Problem decision analysis is very critical for any type of organizations. Tacit knowledge is a valuable resource which enables appropriate, fruitful and precise identification of problems which underlie an optimal decision. Innovation and intuition are considered as the pillars in problem decision analysis which are no more than the tacit knowledge acquired by the decision makers over a time.

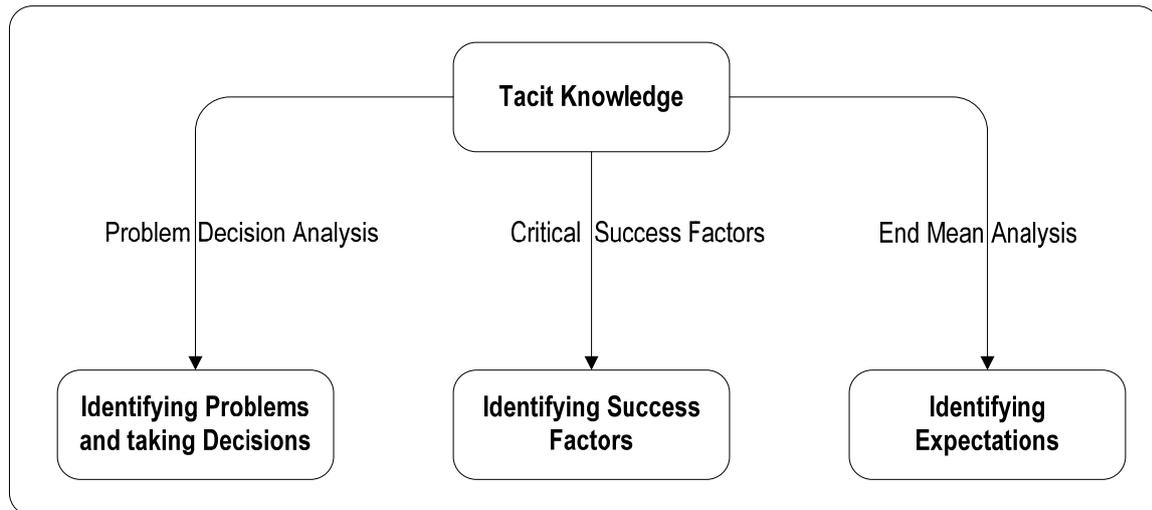


Fig. 2. Tacit knowledge as resource

Tacit knowledge as a resource for problem decision analysis is justified by its usage in:

- Exploring creative thinking in terms of what is required to be initiated and followed organizationally over time
- Looking at the various creative techniques that are useful to decision makers
- Exploring the use of problem finding from the standpoint of turning problems into opportunities
- Examining how problem finding can assist in expanding the wisdom of decision makers.

Critical Success factors play a vital role in means of planning, implementing and reviewing strategy to become industry leader. Tacit knowledge as a resource for identifying success factors is rationalized by various factors which can be applied for success of organizations. Tacit knowledge is used to

- Identify the critical success factors of any business by determining the challenges that may hinder organization's ability to grow and accomplish its target. These challenges can be internal viz. business politics or employee discontent or external viz. economic policies, political climate that affects business.
- Create a strategic plan that will wrap the challenges and help the organization to anticipate them.
- Understand targeted customers which involve learning more about the behavior of your targeted consumers and understanding the demographic of someone who is more likely to avail organization's product or service.
- Compare services with the competition and to assess how to serve the market niche in relation to the direct competitors to find out how product or service is competing among other brands.
- Examine the competition on the basis of how they operate. After looking at how the competitors serve targeted market. Examine quality control, performance and production cycles. Also comparison of these practices will lead to identify the shortcomings of the competition's strategy.
- Adjust the production or service providing strategies as needed. Looking at how competitors produce the same product or service will allow you to determine the weaknesses of organization's own strategy.

Tacit knowledge is a boost in identifying the expectations to be set for the successful operation of an organization. The tacit knowledge connects the goals and objectives attained to identify, clarify and agree to the identified expectations. Tacit knowledge of decision makers facilitates in

- Making employees and co workers understand the impact of their working culture in setting and identifying expectations
- Acknowledgement of the various perspectives set and achieved performance expectations
- Restating and clarifying expectations
- Being specific and descriptive
- Not too subjective expectation performance reviews

Let us consider a situation depicted in figure 3, which will demonstrate how tacit knowledge acts as a resource in correlation with above stated aspects.

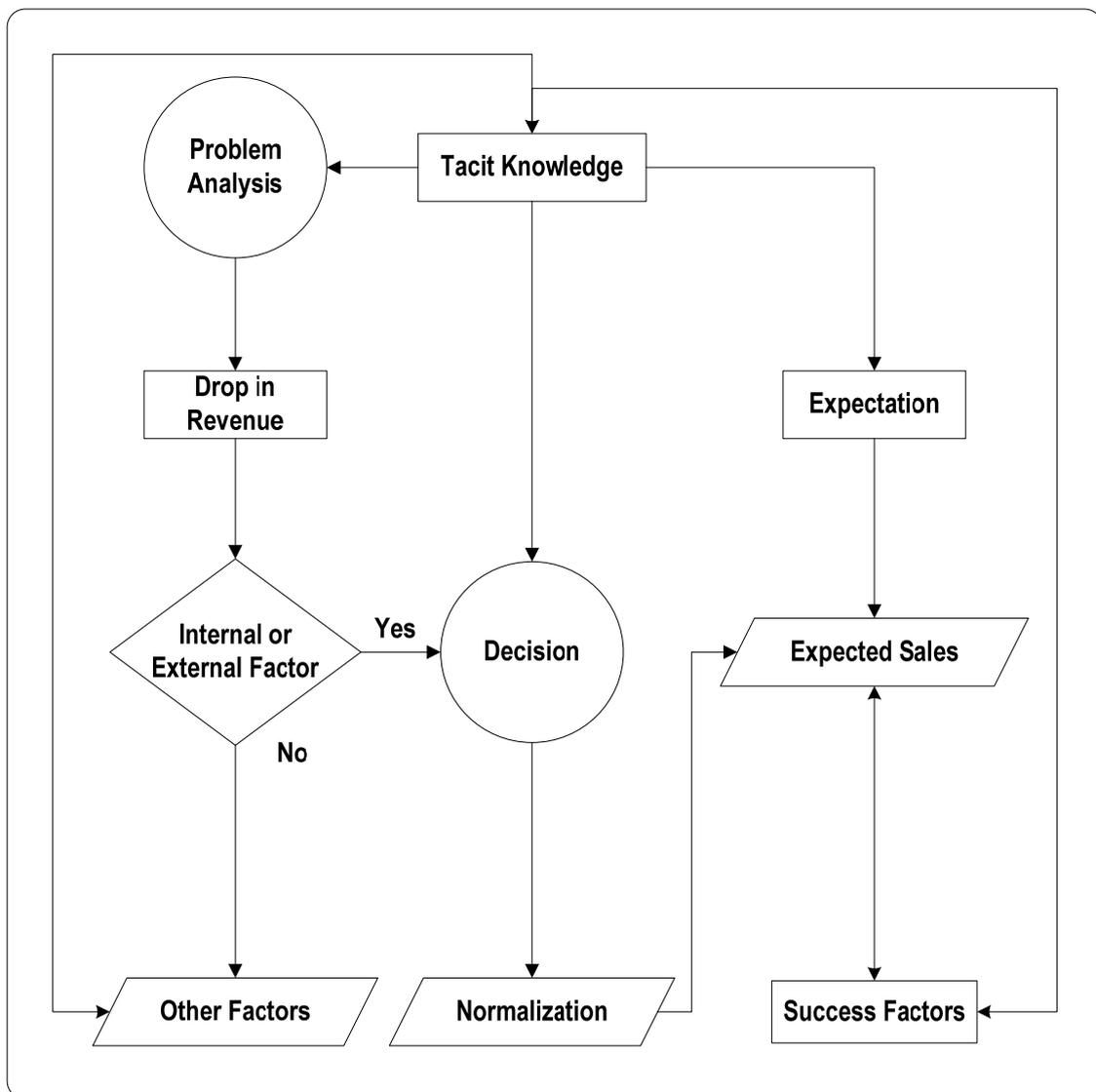


Fig. 3. Analogy Tacit Knowledge as resource

In this illustration I have considered a manufacturing organization which is producing a physical product. After a yearlong work on tactics and finalizing the goals and expectations the business outcome was not up to the mark. The financial statement highlighted that there is a decrease in revenue. Due to the decrease in revenue of an organization the managers will use embedded tacit knowledge and some figures to know the problem which led to such a situation. This is the problem analysis. After analysis it was found that the primarily reason for reduction

in revenue was due to drop in sales. Then tacit knowledge allows decision makers to think over a possible cause which involves factors viz. internal and external factors. Internal factors involve reduction in quality or rise in sales price and external factors involve the competition producing the same product. Depending on the type of factor involved in the drop of sales appropriate decision will be taken in accordance. After the decision is being taken the expected results will be analyzed, if positive, the solution will be incorporated in the list of success factors where tacit knowledge plays a significant role.

Tacit knowledge in Value Chain

As stated and elaborated above that how tacit knowledge acts as an intangible resource or driver for an organization, now I have analyzed this resource as a part of value chain.

Porter's value chain framework [Porter, 1985] is presently the accepted language for both representing and analyzing the logic of organization-level value creation or performance builder. In spite of having some limitations which will be discussed in upcoming topic, it maintains its central role as a framework for the analysis of organization-level competitive strengths and performance. The value chain as described by Porter is a two-level generic taxonomy of value creation activities which in turn make organization's highly competitive by increasing their performance level. The framework is based on long-linked topology in which value is created by transforming input into products [Thompson, 1967]. The two levels in porter's value chain constitute primary and support activities of an organization. Primary activities consist of inbound logistics, operations, outbound logistics, marketing and sales, and service and support activities include Procurement, Technology development, human resource management and firm or organization infrastructure. If we speak about the usage or involvement of tacit knowledge in the primary activities, the high involvement can be seen in operations, marketing and sales, service and logistics have minimum involvement. In the same context the support activities all have highly embedded tacit knowledge.

Operations are associated with transformation of inputs into final products. So if we consider change in the market for any product, at that instant tacit knowledge will play a vital role in determination of any change in operations. Concerning marketing, sales and service it is necessary to determine the mindset of customers and market behavior and it is always important to have an exact view of all relating status and during this analysis tacit knowledge provides the intuition and zeal. Regarding support activities all except infrastructure require high intensity of tacit knowledge for proper management. All this is well supported by the above explained effect of tacit knowledge on organization's performance.

Figure 4 below demonstrates the intensity of tacit knowledge in porter's value chain model. The Tacit Knowledge Intensity (T.K.I.) is shown by low, moderate and high levels.

Tacit knowledge in Value shop and Value Network

The topology described by Porter is well suited for traditional manufacturing organizations but this logic is less suitable to activities in a number of service industries like insurance companies, hospitals, educational institutes, banks, telephone companies and organization which are in similar genre of business. For these types of organizations value shop and value network configurations are desirable [Stabell, Fjeldstad, 1998].

The value shop models organizations where value is created by mobilizing resources and activities to resolve particular customer's problem. This model is based on intensive technology approach and these organizations are often called professional service firms or knowledge-intensive service firms [Gottschalk, 2004]. Knowledge is the most important resource, and reputation is critical to organization success. Instances of such organizations

are medicine, law, architecture and engineering. The 'shop' label captures that an organization so configured is directed at a unique and delineated class of problems [Stabell, Fjeldstad, 1998].

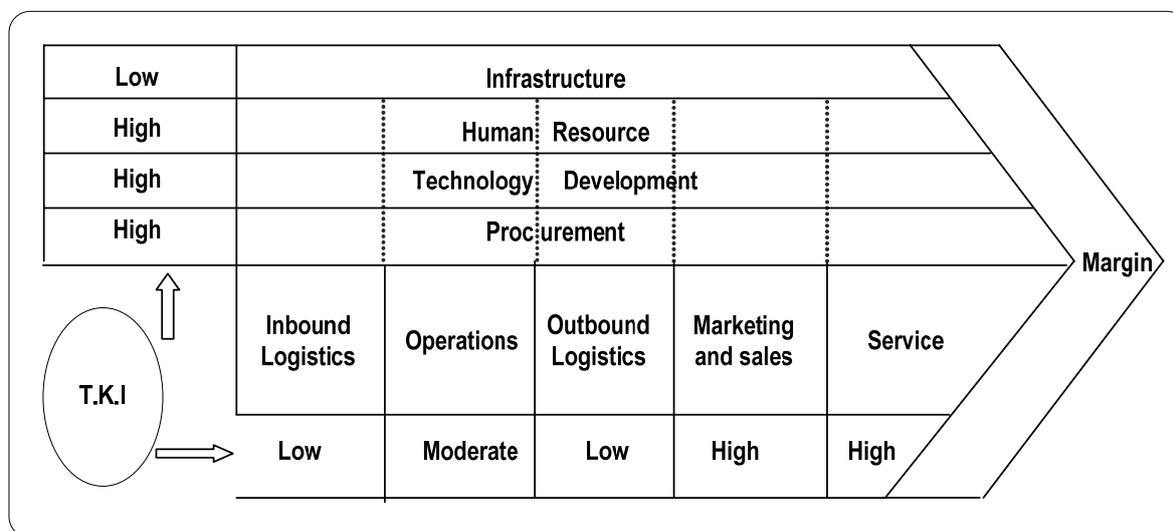


Fig. 4. Tacit Knowledge Intensity (T.K.I.) in porter's value chain

A value shop is characterized by five primary activities: problem finding and acquisition, problem-solving, choice, execution, and control and evaluation [Gottschalk, 2004]. In addition to this the support activities are similar as in value chain. As clear from the primary activities, we can say that they belong to problem-solving and decision-making genre, thereby making tacit knowledge an important aspect of the organization. Due to this reason we can typically find scientists and experts in these types of organizations. The intensity of tacit knowledge requirement is very high in all primary activities while the support activities have same level as described in porter's value chain. Figure 5 below shows the generic value shop diagram where post execution evaluation can be the problem-finding activity of a new problem-solving cycle and it also depicts Tacit Knowledge Intensity (T.K.I.) levels.

A value network is an organization that creates value by connecting clients and customers that are, or want to be, dependent on each other. These companies distribute information, money, products and services. While activities in both value chains and value shops are done sequentially, activities in value networks occur in parallel. The number and combination of customers and access points in the network are important value drivers in the value network. More customers and more connections create higher value to customers [Harrington, Voehl, 2007]. So a value network relies on mediating technology. Examples of organizations using mediating technology are telephone companies, retail banks, postal services and so on. The primary activity description in these organizations is inspired by that used in telecommunication because telecommunication is a rather generic form of mediation and because explicit activity decomposition models are well established both at the micro level of peer-to-peer communication and at the industry level in delineating industry actors [Murray, 2008]. The primary activities of value network are network promotion and contract management, service provisioning and network infrastructure operation and the support activities are the same as in porter's value chain and value shop. Talking about tacit knowledge intensity in value network, it is not as intensive as it is in value shop. Among all three activities, network promotion and contract management has a high intensity of tacit knowledge in it as it involves selling services, evaluating risk and monitoring contracts. As in my view as the activities in value network act in parallel so we can say that service provisioning as a direct effect on network promotion so has the same tacit knowledge intensity enveloping it.

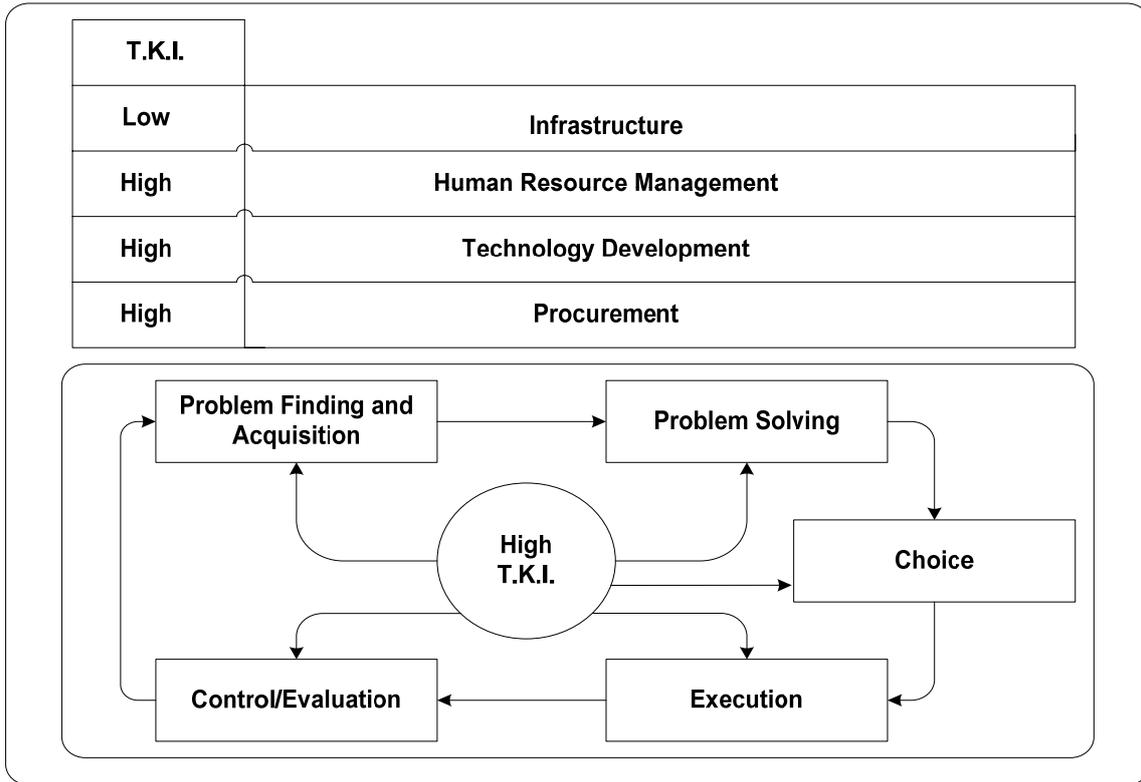


Fig. 5. Knowledge Intensity (T.K.I.) in Value shop

Regarding infrastructure operation the intensity is fairly less as these operations have proper procedures to follow. Figure 6 below depicts a value network [Stabell, Fjeldstad, 1998] and Tacit Knowledge Intensity (T.K.I.) in it.

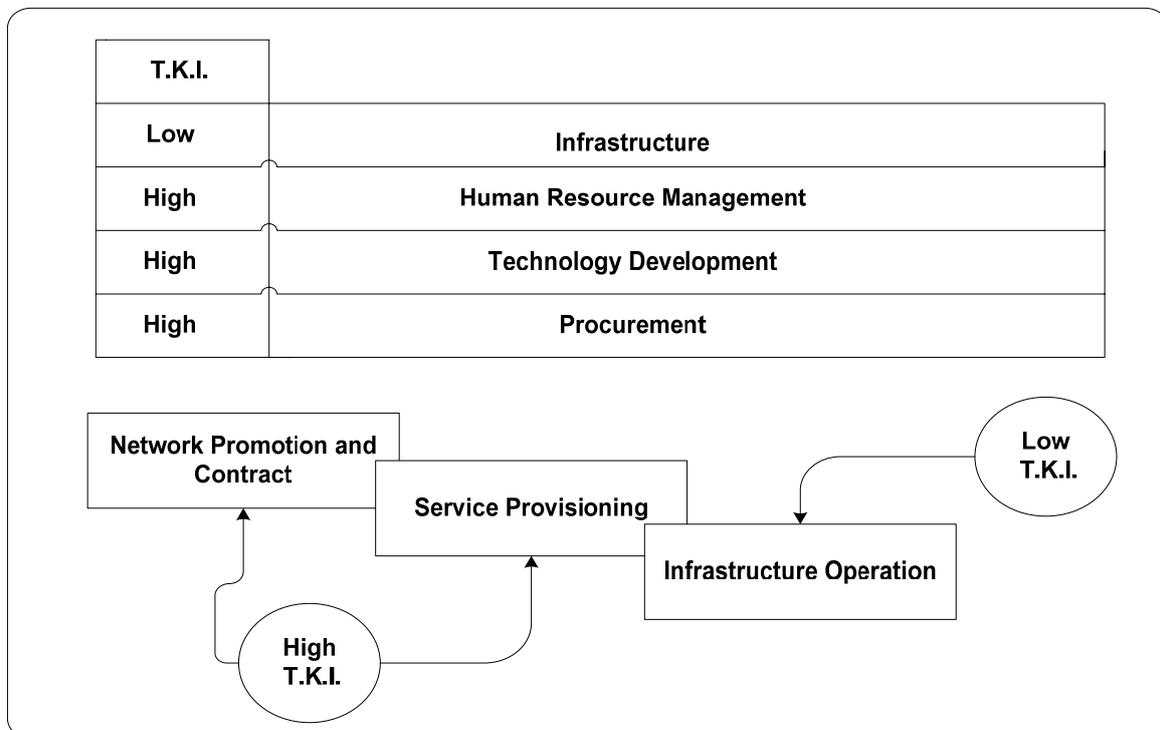


Fig. 6. Tacit Knowledge Intensity (T.K.I.) in Value Network

Overall Tacit Knowledge Intensity

Value chain, value shop and value network are alternative value configurations that determine the intensity of tacit knowledge in an organization. Table 1 shows comparison between value configurations [Stabell, Fjeldstad, 1998] with an overall Tacit Knowledge Intensity (T.K.I.). Table 1 below shows the comparison between Value Configurations.

Table 1. Comparison between Value configurations

CHARACTERISTICS	VALUE CHAIN	VALUE SHOP	VALUE NETWORK
Value Creation Logic	Transformation of Inputs into Products	(Re)solving Customer or clients Problems	Linking Customers
Primary Technology	Long-Linked	Intensive	Mediating
Primary Activities Categories	Inbound Logistics Operations Outbound Logistics Marketing and Sales Service	Problem-finding and Acquisition Problem-solving Choice Execution Control/Evaluation	Network Promotion and Contract Management Service Provisioning Infrastructure Operation
Main Interactivity relationship Logic	Sequential	Cyclical, Spiraling	Simultaneously, parallel
Business Value System Structure	Interlinked Chains	Referred shops	Layered and interconnected Networks
Overall T.K.I.	Moderate	High	Moderate
Examples	Car Manufacturer	Law Firm	Telephone Company

Conclusion

Tacit knowledge has always played a vital role in the successful business organizations and will continue to do so in future; only change will be the increase in intensity of its usage and applicability. Tacit knowledge as a significant and integral part of knowledge management has always been a challenge for an organization hence requires a special consideration. With the old workforce retiring and new ones highly fragile due to highly competitive markets it is important to take care of the tacit knowledge involved at various value creation stages in an organization so that knowledge and experience never expires and is readily available to the people requiring it at any moment of time as an imperishable resource. In this article, “**Tacit Knowledge Intensity**” (T.K.I.) is devised in order to highlight the significance of tacit knowledge in the form of its intensity at various value adding stages of an organization so that while incorporating mechanism to address tacit knowledge using knowledge management systems we are taking in account type of organization and intensity of tacit knowledge in it.

Bibliography

- [Alavi, Leidner, 2001] Maryam Alavi, Dorothy E. Leidner, knowledge management and Knowledge management systems: Conceptual foundation and research issues, MIS Quarterly Vol. 25 No. 1/March 2001
- [Gottschalk, 2004] Dr. Gottschalk P., Strategic Knowledge Management Technology, Idea Group Publishing, UK 2004
- [Barney, 1991] Barney J., Firm resources and sustained competitive advantage, Journal of Management, 17:99-120, 1991
- [Hitt, Bieman, Shimizu, Kochhar, 2001] Michael A. Hitt, Leonard Bierman, Katsuhiko Shimizu, Rahul Kochhar, Direct and Moderate effects of human capital on strategy and performance in professional service firms: A resource based perspective, The academy of management journal, Vol. 44, No.1/ Feb. 2001
- [Porter, 1985] Michael E. Porter, The Value Chain and competitive Advantage: Creating and sustaining Superior performance: With a new introduction, Free Press, New York 1985
- [Thompson, 1967] Thompson J.D., Organization in action, McGraw- Hill, Irwin 1967
- [Stabell, Fjeldstad, 1998] Stabell C. B., Fjeldstad D., Strategic Management Journal, Vol.19, John Wiley and Sons Ltd., USA 1998
- [Harrington, Voehl, 2007] Harrington J., Voehl F., Knowledge Management Excellence, Paton Press LLC, USA 2007
- [Murray, 2008] Murray E. Jennex, Current Issues in Knowledge Management, Information Science Reference, USA 2008
-

Authors' Information



Sumeer Chakuu, M.Phil. –University of Information Technology and Management in Rzeszow, ul. Sucharskiego 2, 35-225, Rzeszow, Poland. ; e-mail: schakuu@wsiz.rzeszow.pl

Major Fields of Scientific Research: Knowledge Management systems, Methods to capture Tacit knowledge, Role of Knowledge management in future aviation.

KNOWLEDGE MANAGEMENT AS ACTIVE LABOUR MARKET POLICY DEVELOPMENT FACTOR

Tatjana Bilevičienė, Eglė Bilevičiūtė

Abstract: *European Union gives priority to social policy, labor and employment, human resource development. The growing unemployment figures in most of European Union countries provide the need to overview possibilities to strengthen control and more efficiently regulate unemployment. Recently, active labor market policies (ALMP) are increasingly applied to the broader macro-economic, employment and social policy objectives. Active labor market policy measures include vocational training, employment promotion, direct job creation, business support for new entrepreneurs. Investing in ALMP measures is one of the most effective investments in labor market policy. Knowledge society and knowledge economy challenges change management models. Knowledge management could help to increase productiveness of employees, expanding sources of reachable for them knowledge. Human resource development and effective human resource management theory of mobility models for the coordination and efficiency of their practical application depends on the ability of organizations to integrate human resource management and knowledge management models. ALMP measures*

are directly linked to the learning process, innovation, ideas and competencies. Active labor market supports the management of individual or group learning. Research indicates that vocational training is closely linked to job skills and employment promotion subsidies. The principles of knowledge management (knowledge construction, knowledge embodiment, knowledge dissemination and use) disposed of the active labor market system. It can be argued that the only successful model of knowledge management can ensure the success of ALMP. In his article the author examines ALMP and knowledge management model, communication and applications.

Keywords: *knowledge society, knowledge management, active social policy, labor market, active labor market policy.*

ACM Classification Keywords: *K.4.2. Social issues – Employment.*

Introduction

Social policy is one of the economic adjustment measures, as a fundamental tool for the creation of the welfare state. Economics are open systems. They receive inflows of energy and materials. Economics use that incoming energy to develop and build new structures. Economy is primarily a social process, involving social factors: people, social groups, institutions and the state. These social entities: the first – an active force depends on economic growth, the second – a force that is closely connected with all areas of public life – politics, law, culture, ideology, family management. Social constraint reflects social aspect of system and added values that improve the quality of human life [Rudzkiene, Burinskiene, 2007]. European Union (EU) gives priority to social policy, labor and employment, human resource development. Social processes are not separated from economic change, they affect each other.

EU citizens' live and work is progressing rapidly, increasing the risk that the Social Security system is unsustainable. This process is linked to European and international economic integration, the new, particularly in information and communications technologies, the demographic aging of societies is still relatively low average level of employment. European Committee of Employment and Social Affairs acknowledged that the conditions of EU ground development should to be modified so that it reflects on today's political, economic and social realities [European Commission..., 2006]. In order to ensure prosperity and reduce the risks of social exclusion, it is necessary to modernize the social security system, more people to attract and keep active labor market policies.

Active labor market policies (ALMP) are very important in facilitating the most rapid employment of the unemployed and creating the right conditions for some economically inactive people back into the labor market, as well as addressing the problems of disadvantaged workers in the labor market. Major tasks of Small and Medium Enterprises (SME) promotion are to maintain the necessary jobs and create new jobs. This coincides with the active labor market policy objectives: promoting self-employment, structural unemployment and regional disparities in demand and supply deflection stop.

Knowledge management is optimal application of theoretical and practical knowledge in business processes – with purpose to reach durable advantage against rivals and bigger benefit of all shareholders of enterprise – investors, employees, managers, so common state benefit would be implemented [McGinn, 2001]. Transformation of modern society to knowledge society originates the absolutely new global social and economical contexts that require different management principles, skills, abilities and competences. The main factor of development of European economical space business organizations and economy would be the knowledge, generation of innovative products, perfection of production and management's methods.

Active labor market policies

D. C. Vaughan-Whitehead [Vaughan-Whitehead, 2003] considers that the European social model can be defined as the EU and its Member States a set of legal rules and legal measures implemented to promote a coherent and comprehensive social policy in the EU. The key elements of the European social model are the current labor law, employment, equal opportunities, non-discrimination policy, employee participation, information and advice, and recognition of the social partners in decision-making process, social dialogue and collective bargaining, civil society, public services, fair earnings, social protection, social inclusion, ensure employment and social rights (workers and citizens in general), regional cohesion, social policy and international instruments [Melnikas, 2010]. Traditional universal welfare state hardly withstands globalization, liberalization and privatization influences and the different features of the traditional welfare states have a tendency to weaken.

Passive social protection is not effective in the sense that people returned back to the job market or at least maintain their ability to take care of themselves at home. The social reintegration of the results is important to show the real degree of effectiveness of social protection. Social reintegration is a key argument for the indisputable need for an active social policy and active social protection. Social policy, focused on increasing employment and reducing unemployment, wages and personal income growth is one of the most important investment and growth factors. In order to maintain an economically strong, stable and competitive position in the region, the European Union has formed a general policy, implemented in all EU member states. In 2010 the EU Commission has prepared the new ten-year economic recovery strategy. It provides innovative, sustainable and inclusive economic growth based on improved member states and the EU policy coordination vision [The Lisbon..., 2010].

Changing the system of unemployment insurance benefits and basic income support as well as the repertoire of active labor market policy instruments and making benefit receipt more conditional upon job search and acceptance of job offers was a major issue on the political agenda [Eichhorst et al., 2010]. *Passive* labor market policies are concerned with providing replacement income during periods of unemployment or job search, *active* policies emphasize labor market integration. Passive policies include unemployment insurance and early retirement measures; active measures include training, job creation measures, support for active job search, hiring subsidies and support for enterprise creation among the unemployed [Meager, 2009]. The European Commission recommends that the [European Commission, 2008] to ensure an integrated active inclusion policies work, in order to effectively address multiple dimensions of poverty and social exclusion.

Active labor market policies (ALMP) aim at enhancing labor market mobility and adjustment, facilitating the redeployment of workers to productive activities, and generally enabling people to seize new job opportunities as they arise [Armingeon, 2007].

Lithuania active labor market policies

Welfare of state depends on its economic and labor market policies, the ability to per capital income. Employment is the most important way fully, actively and equally to participation in public life. The more people are participating in full-time or part-time labor market, the greater are their contribution to the availability of adequate social protection in that country. The expenditures for social welfare and unemployment regulation are every countries decision. S. Stoškus and D. Beržinskienė [Stoškus, Beržinskienė, 2002] define the employment model as the development of each individual and society concerning whole needs to find economic and social cohesion. Market economy, certain sections of the population in employment is becoming more vulnerable to failure to

adapt to changes in market relations. Growth of employment rates is the most efficient measure for economic growth and social inclusion, both to promote the economic protection for persons who can not work.

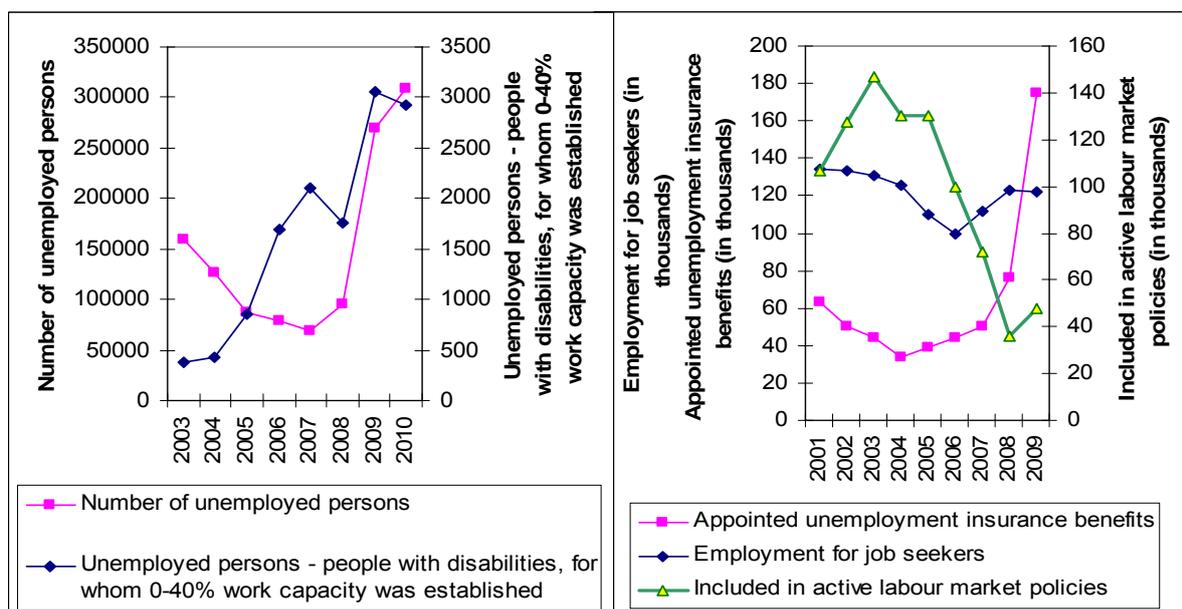


Fig. 1. Unemployment dynamics and dynamics of employment factors (Source: Statistics Lithuania www.stat.gov.lt)

EU employment policy is focused on socially vulnerable groups (e.g. long-term unemployed, people with disabilities), problem solving and quality of employment services and increasing the availability of closer cooperation with employers and social partners in development. All dimensions of sustainability should be considered in the process of strategic sustainable development planning. Strategic plan helps create management and planning systems of municipalities, based on the principles of sustainable development, democracy and market economy, and to assist for more rational use of limited resources of municipal budgets and for better coordination and implementation of programs in various sectors. *Lithuania for 2007–2013 EU Structural Assistance Strategy* proposes that it is important to the Lithuanian economy to create more new and better jobs. Such job growth would create more additional values to the Lithuanian economy and stop the drain of skilled manpower to foreign countries [Čiegis, Gineitienė, 2008].

However, the analysis of the Lithuanian Labor Exchange registered unemployed persons' metric (see Figure 1) we could see the continued growth in 2008. It is also a growing number of registered people with disabilities employment office, which determined 0 to 40 % work rate, the number of a relative decrease observed in 2008 and 2010. This indicates the need for more effective employment support measures.

The variety of tools used in different countries allows make a choice from the alternatives that could be useful in nowadays economic situation. Active labor market policies (ALMP) measures are an important tool in the implementation of the Lisbon Strategy. Lately, they are increasingly subject to the broader macro-economic, employment and social policy objectives. In the scientific literature noted that active labor market policies must cover all the objectives of diversity. These are: job creation, job reallocation of skills and human capital deepening, behavior (with) change, overcoming the timidity of job-seekers and the alienation of labor income increase, the broader macro-economic objectives, such as the potential labor supply, structural reduction of unemployment [Moskvina, 2008, Lapinskienė, Tvaronavičienė, 2009, Meager, 2009].

ALMP program of the Lithuanian Labor Exchange are subject, from its earliest beginnings in 1991. These measures serve job-seekers of employment growth, unemployment reduction and mitigation of negative consequences of a labor demand and supply-side alignment to maintain balance in the labor market and job

seekers through the working-age population in employment opportunities will be provided. Active labor market policy measures and procedures in terms of specification [Dėl aktyvios, 2009] provides the unemployed and those facing redundancy of working age employees in vocational training, supported employment, assistance for job creation and promotion of territorial mobility of the unemployed, the conditions and procedures. Active labor market policies include: unemployed and those facing redundancy of working age workers vocational training; supported employment (employment subsidies, job skills promotion, job rotation, public works); support for job creation (job creation subsidies, local employment initiatives, projects, self-supported employment); unemployed territorial mobility support.

Active unemployment regulation tools are more efficient and provide long-term effect. Vocational training, professional skills upgrading, consulting unemployed and employers can ensure work places in the future. The greatest attention should be paid towards entrepreneurship and support for small and medium business because that causes possibilities for some unemployed people to become self-employed and open some more new work places [Sakiene, 2010]. Lithuanian Labor Exchange, on behalf of *Active labor market policy effectiveness study* [Aktyvios..., 2007] showed ALMP measures of economic performance indicators of the fluctuations of 19.7% to 48.1%. This showed that investment in ALMP measures is one of the most effective investments in labor market policy.

In the most recent works on sustainable development, the social environment is looked upon as an absolutely equivalent factor, which influences social development to the same extent as economic growth or environmental sustainability [Misiūnas, Balsytė, 2008]. Equal opportunities are one of the key objectives of a democratic society. Additional choices include political, economic and social freedoms and opportunities to develop and manufacture, to live with respect for oneself and with human rights guarantees. While the significance of human resource development increases, the role of human resource development within the organization decreases, because a part of the work is transferred to specialized organizations, managers and colleagues participating more actively in the human resource development work [Kumpikaitė, 2008].

Dynamics of recruitment's factors in Lithuania (see Figure 1) indicates the necessity of active labor market policies' improvement. According data of Department of Statistics every year the number of employed persons differs just a little. Since 2005 designated by a growing unemployment insurance benefits, particularly noticeable in 2008 and 2009. At the same time, the steady decrease in active labor market policy number (the slight increase seen in 2009).

Analyzing the range of unemployment and total LMP measures dynamics (see Figure 2) we could see that unemployment range decreases (strong negative correlation $r = -0,88$). Although the employment range depends on education level (see Figure 2). As higher education, so opportunity to be employment is higher. It confirms the necessity of ALMP application. The positive effects of ALMP vary by program type.

Raising the average educational level has economic and non-economic effects on society. A better educated population is not only able to perform higher-skilled jobs, but is also more likely to participate in the labor market. In this paper the potential benefits of investment in education are estimated. This estimation is based on three possible effects of an increase in the average educational level: improvement of the average earned salary, improvement of the average probability to find a job and positive non-economic effects, for instance on health and criminal behavior [Zandvliet at al., 2009]. The unemployed and those facing redundancy working life of employees training goal – to qualify, or (and) to acquire skills, needed employment.

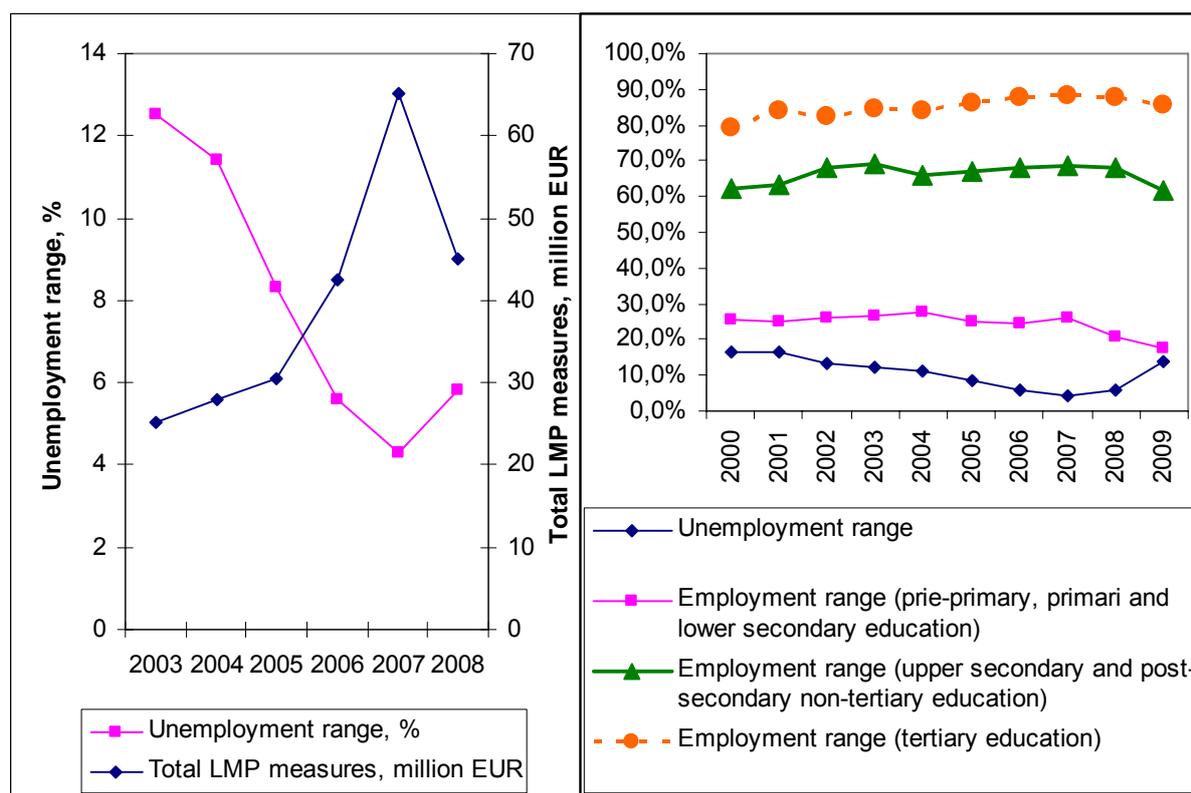


Fig. 2. Employment range and total LMP measures dynamics (Source: European Commission, 2010)

The examination of the Department of Statistics data shows that, people start working in the profession or occupation, number of dynamics coincides with the dynamics of vocational training (see Figure 3). It is the purpose of staff preparation is an important and useful.

Employment by subsidies aim – to help the labor market, further supported by the persons registered in the employment exchange, enter the labor market or temporary employment, and individuals who set up the level of 40% of capacity or severe disability rates, create special conditions in the labor force. Support for job skills to is to provide opportunities for job seekers to acquire skills gaps directly in the workplace. It can be argued (see Figure 3) that vocational training is closely linked to job skills and employment promotion subsidies, because of their similar behavior. It is important that the employee is prepared according to the program ordered by the employer, and that his employment would be based.

D. Gallie [Gallie, 2007] highlights the need to foster, through strong initial vocational training systems, specialized skills across the broad spectrum of the workforce (skilled manual workers, technicians, and engineers). Such skills should combine both industry-specific technological knowledge with company-specific knowledge of organization, processes, and products.

Training increases the expected productivity of the worker. The government can stimulate training by subsidizing training costs. We also take into account an alternative route to higher productivity. The government can stimulate the on-the-job training route by subsidizing the creation of vacancies. Simply because there are more vacancies, unemployed will flow more quickly into jobs and through learning by doing they flow from low productivity to high-productivity jobs (hence the transition from unemployment to high-productivity jobs happens more quickly) [Boome, Van Ours, 2009]. An increase in expenditures on labor market training causes unemployment to fall. The effect of expenditures on labor market training is larger the higher unemployment benefits are.

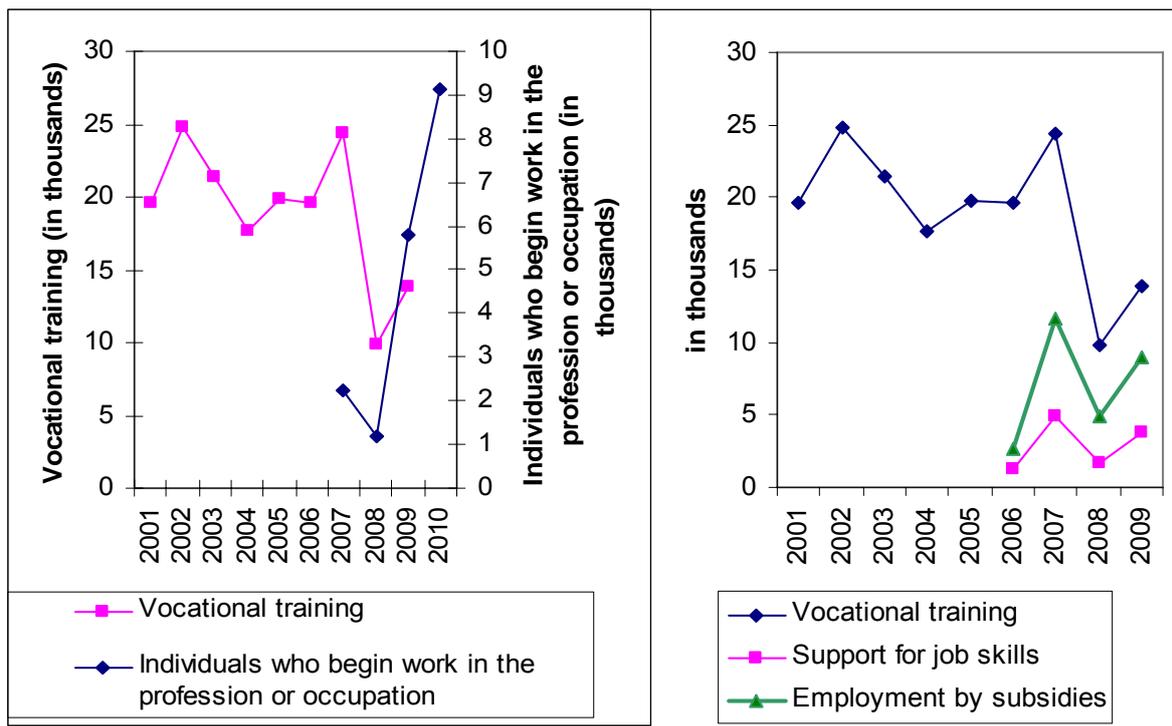


Fig. 3. Vocational training, job skills and employment promotion by subsidy dynamics (Source: Statistics Lithuania www.stat.gov.lt)

Training interventions are effective tools for integrating the unemployed and inactive into the labor market. The notion that skills-based measures might have an important role to play is intuitively plausible. At an aggregate level, there is a strong relationship between levels of initial education and continuing vocational training on the one hand and employment performance on the other [Meager, 2009]. Similarly, at the individual level, there is a strong relationship between training experience and the probability of being in work.

Job creation subsidy is organized labor of registered job seekers in employment support for an indefinite period. Subsidy paid to employers who employ people on permanent contracts for these belong to the labor market, further supported by the different categories of persons with disabilities of working age, employment office registered job seekers, who set up 25% of capacity or severe level of disability, level of working-age people, registered with the Labor Exchange unemployed people who set the level 30–55% of capacity or mild or moderate disability level. Support for job creation subsidies is provided to the employers creating new jobs or adapting the existing ones to the disability needs and hiring unemployed people under open-ended employment contracts, to former unemployed people within 36 months of the date of company registration or to entities implementing local employment initiatives to create jobs for unemployed registered with territorial labor exchanges.

If the problem of inefficient management and insufficient institutional quality is not properly assessed, and no attempts to solve it are made, it may lead to a situation when it is impossible to achieve the general country's sustainability either in the present or in the future [Misiūnas, Balsytė, 2009].

The role of Knowledge Management in active labor market policies

Knowledge economy and knowledge society in terms of human resource development and effective human resource management theory of mobility models for the coordination and efficiency of their practical application depends on the ability of organizations to integrate human resource management and knowledge management

models. Conjunction of different knowledge parts to management of strategic intellectual capital brings people to new practice of management in information age. Knowledge of the different parts into a strategic management of intellectual capital brings people to the new boundaries of knowledge management practices in the information age. Knowledge management's essence becomes the management of individuals with particular skills and experience, with purpose to encourage particular behavioral models in organization and interaction of individual employees – socialization.

Knowledge Management (KM) comprises a range of strategies and practices that deal with how knowledge is acquired, transferred, and shared with all the members of the organization. Such strategies and practices seek to achieve the organization's objectives. Knowledge Management System (KMS) refers to a comprehensive information and communication technology platform used for managing knowledge in organizations for supporting creation, capture, storage and dissemination of information [Aktharsha, Anisa].

Knowledge management is a management discipline that seeks to increase aid effectiveness by adapting the business people, processes and technology synergies. Modern organization should comprehend knowledge management and implement it inside. Knowledge management is manage mental instrument supporting by different measures to create working environment in that seeking the best result they optimally create, spread and use their and others knowledge. The main result of knowledge management is environment stimulating employees to create, spread, keep and apply knowledge and consisting of all processes, roles, measures and structures that let to implement it.

In today's information society and turbulent environments all citizens have to be engaged in lifelong learning and self-development. Personal Knowledge Management as a concept based on wide range of individuals skills and competences undoubtedly can be a support of employability. Skills and competences are the crucial factors leading to success in self management including knowledge management, career management and employability management [Świgoń, 2011]. The ALMP analysis shows that there is the necessity for new programs, procedures, staff training, acquisition of new competencies, so there is the necessary of human resources management and knowledge management models for synthetic application.

In the knowledge society, a high level of economic performance and good living standards can only be achieved if an increasing share of the population attains a high level of education. Knowledge management is a complex process. Sandra Rodney McAdam and McCreedy [McAdam, McCreedy, 1999] proposed modified version of Demerest's knowledge management model. This model takes a balanced approach between scientific and socially constructed knowledge. Also the uses of KM are viewed as both emancipatory and as business oriented. Analysis of ALMP confirms that its main elements are closely connected with main KM model elements: knowledge construction, knowledge embodiment, knowledge dissemination and use. So, we can apply the McAdam and McCreedy KM model for realization of ALMP. Model suggested by authors is presented on Figure 4.

In this model we can distinguish *Vocational training* element. All ALMP measures are based on purchase of new knowledge and skills. Training programs are the most widely used active labor market measure in Europe. The assessment of their effectiveness shows rather mixed results; treatment effect estimates are negative in a few cases, and often insignificant or modestly positive. The training programs for unemployed may enable individuals to develop new skills and provide possibility increase their income in the future comparing to their current market wages and also facilitate labor market flexibility as the economies are being transferred to services and high technology [Sakiene, 2010, Bergemann at al., 2009].

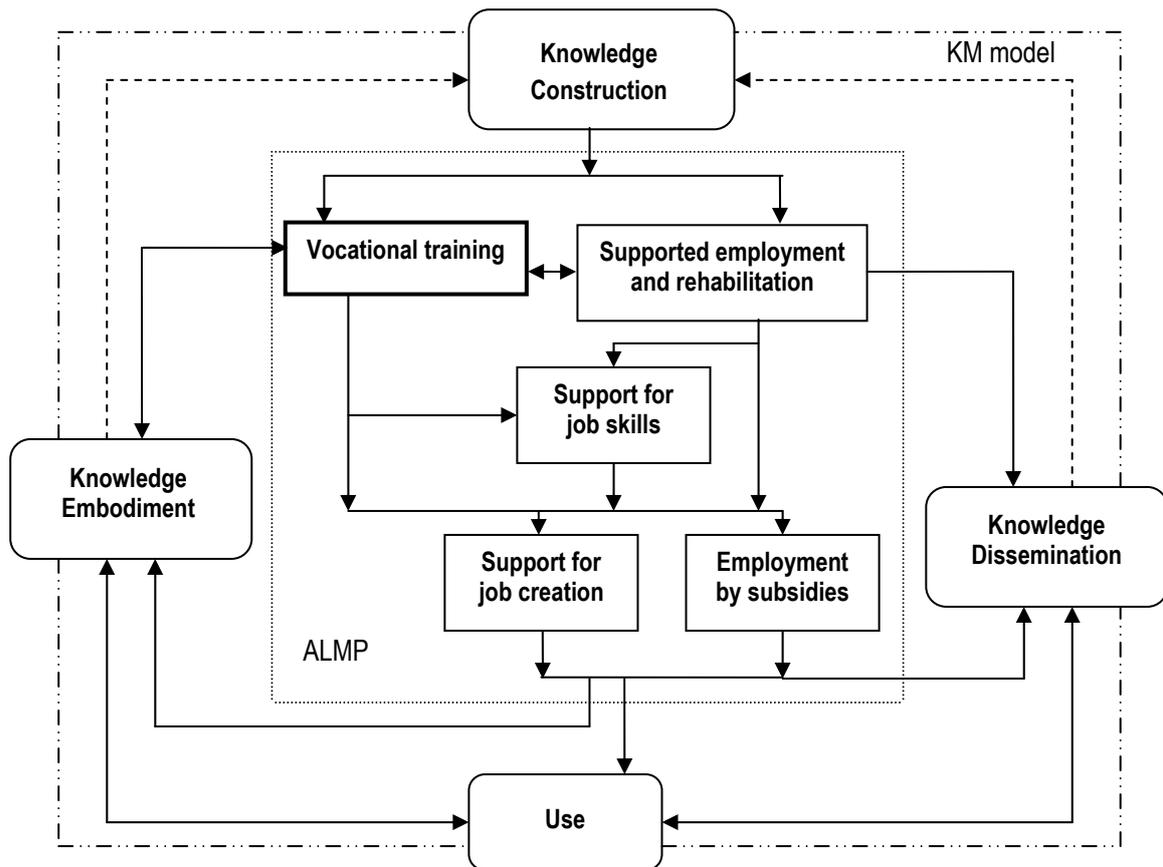


Fig. 4. ALMP and knowledge management model

Training programs involving private sector placements with on-the-job training are seen as having *strong* market orientation, while classroom-based schemes have *weak* market orientation. Similarly, on the demand side, traditional direct job-creation measures are weakly market oriented, while indirect measures subsidizing jobs in the private sector are strongly market oriented. In particular, programs with a stronger market orientation led to higher placement rates, longer job durations and higher earnings, than schemes with weak market linkages. Thus, the specific skills training program has far more positive impacts than the general training programs or the job-creation schemes. Their results also highlighted a need for targeting on the most disadvantaged groups [Meager, 2009]. The model provides continuous feedback for all stages.

Conclusion

EU social policy is focused on improving the European social model. Social risk of social benefits is often the only one feasible mean of social protection, but active social policy helps to persons who want to work. European Employment Strategy provides to reach the full employment, quality and productivity and social cohesion of it. Active labor market policies could ensure the unemployed for people with disabilities to participate in the labor market. Create the necessary productive employment opportunities and ensure continued livelihoods is one of the most important and difficult task of every society. EU employment policy is focused on improving the European social model. Lithuania active labor market policies are described as the domestic legislation provides for measures to help job seekers improve their employment opportunities and improve job and prepare a balance between the ratios of skilled workers.

ALMP Department of Statistics data shows that people start working in the profession or occupation, number of dynamics coincides with the dynamics of training and preparation of the target employees is an important and

useful. However, training does not affect the activities of the dynamics of a business license, do not encourage entrepreneurship. Vocational training is closely linked to job skills and employment promotion subsidies, similar to their behavior. The employee is prepared according to the program ordered by the employer, and that his employment would be supported.

Knowledge management is connected with innovations, inter-connections, ideas, competences, structures. This management supports individual or groups' education, stimulates and enhances spread of experience, distribution of failures and good practises, choice of optimal solutions. Knowledge management technologies could be used for stimulation of dialogues, bargains, communication, but it is not essence of such management.

Analysis of ALMP confirms that its main elements are closely connected with main KM model elements: knowledge construction, knowledge embodiment, knowledge dissemination and use. So, we can apply the McAdam and McCreedy KM model for realization of ALMP. Model suggested by authors collects not only support of the feedback system, but after each cycle to assess the performance and result in a higher improved level of knowledge creation.

Bibliography

- [Aktharsha, Anisa] U. S. Aktharsha, H. Anisa. Knowledge Management System and Learning Organization: An Empirical Study in an Engineering Organization.
<http://www.iupindia.in/411/Knowledge%20Management/Knowledge_Management_and_Learning_Organization_26.html> [visited 2011 05 25].
- [Aktyvios..., 2007] Aktyvios darbo rinkos politikos priemonių efektyvumo tyrimas. IV-ojo mokslinio tyrimo etapo ataskaita. 2007. <<http://www.idb.lt/Informacija/Apie/Documents/ADRPP%20efektyvumo%20tyrimas.pdf>> [visited 2011 05 20].
- [Armingeon, 2007] K. Armingeon. Active labour market policy, international organizations and domestic politics. *Journal of European Public Policy*, 14:6, 2007, p. 905–932.
- [Bergemann at al., 2009] A. Bergemann, B. Fitzenberger, S. Speckesser. Evaluating the Dynamic Employment Effects of Training Programs in East Germany Using Conditional Difference-In-Differences. *Journal of Applied Econometrics*, 24 (2009), p. 797–823.
- [Boome, Van Ours, 2009] J. Boone, J. C. Van Ours. Bringing Unemployed Back to Work: Effective Active Labor Market Policies. *De Economist*, 157, No. 3, 2009, p. 293–313.
- [Čiegis, Gineitienė, 2008] R. Čiegis, D. Gineitienė, D. Participatory Aspects of Strategic Sustainable Development Planning in Local Communities: Experience of Lithuania, *Ūkio technologinis ir ekonominis vystymas – Technological and Economic Development of Economy* 14(2), 2008, p. 107–117.
- [Dėl aktyvios..., 2009] Dėl aktyvios darbo rinkos politikos priemonių įgyvendinimo sąlygų ir tvarkos aprašo patvirtinimo. Lietuvos Respublikos Socialinės apsaugos ir darbo ministro įsakymas Nr. A1-499, 2009.
- [Eichhorst at al., 2010] W. Eichhorst, M. Grienberger-Zingerle, R. Konle-Seidl. Activating Labor Market and Social Policies in Germany: From Status Protection to Basic Income Support. *German Policy Studies*, Vol. 6, No. 1, 2010, p. 65-106.
- [European Commission..., 2006] European Commission and Council of the Union. A European social model for the future. 2005/2248(INI). <http://www.socialeconomy.eu.org/spip.php?article1296&debut_articles_rubrique=7> [visited 2011 05 25].
- [European Commission, 2010] European Commission. The Social Situation in the European Union 2009. Directorate-General for Employment, Social Affairs and Equal Opportunities – Unit E.1. Eurostat – Unit F.4. Manuscript completed in February 2010.
- [Gallie, 2007] D. Gallie. *Employment Regimes and the Quality of Work*. University of Oxford, 2007.
- [Kumpikaitė, 2008] V. Kumpikaitė. Human Resource Development in Learning Organization, *Journal of business economics and management* 1(9), 2008, p. 25–31.
- [Lapinskienė, Tvaronavičienė, 2009] G. Lapinskienė, M. Tvaronavičienė. Darnusis vystymasis Centrinėje ir Rytų Europoje: pagrindiniai ekonominio augimo aspektai, *Verslas: teorija ir praktika* 3(10), 2009, p. 204–213.
- [McAdam, McCreedy, 1999] R. McAdam, S. McCreedy. A critical review of knowledge management models. *The Learning Organization*, Vol 6, Issue 3, 1999, p. 91-101.

- [McGinn, 2001] N.F.McGinn. Knowledge Management in the Corporate Sector: Implications for Education. 2001. <http://www.norrag.org/db_read_article.php?id=734> [visited 2009 04 05].
- [Meager , 2009] N. Meager. The role of training and skills development in active labor market policies. International Journal of Training and Development, 13:1, 2009, Blackwell Publishing Ltd, p. 1-18.
- [Melnikas, 2010] B. Melnikas. Sustainable Development and Creation of The Knowledge Economy: The New Theoretical Approach, Technological and Economic Development of Economy 16(3), 2010, p. 516–540.
- [Misiūnas, Balsytė, 2008] A. Misiūnas, I. Balsytė, I. The Essence of Sustainable Social Development and Possibilities for Measuring It, Intelektinė Ekonomika – Intellectual Economics 1(5), 2009, p. 61–71.
- [Moskvina, 2008] J. Moskvina, J. Aktyvios darbo rinkos politikos priemonių vertinimas. Probleminiai klausimai, Filosofija. Sociologija 19(4), 2008, p. 1–9.
- [Rudzkienė, Burinskienė, 2007] V. Rudzkienė, M Burinskienė. Assessment of Transformation Processes in The Complex Socio-Economic System of Transition Period, Intelektinė Ekonomika – Intellectual Economics 1, 2007, p. 74-81.
- [Sakiene, 2010] H. Sakiene. Analysis of Unemployment Regulation Tools in Lithuania. Economics and Management, 2010. 15, p. 219-225.
- [Stoškus, Beržinskienė, 2002] S. Stoškus, D. Beržinskienė. The Influence of Human on the Structural Labour Market Changes, Inžinerinė ekonomika – Engineering Economics 2(28), 2002, p. 57–60.
- [Świgoń, 2011] M. Świgoń. Personal Knowledge Management (PKM) and Personal Employability Management (PEM) – Concepts Based on Competences. Proceedings of The 3rd European Conference on Intellectual Capital held at University of Nicosia, Cyprus 18-19 April 2011, p. 432-438.
- [The Lisbon..., 2010] The Lisbon Review 2010 Towards a More Competitive Europe? World Economic Forum. <<http://www.weforum.org/en/initiatives/gcp/Lisbon%20Review/index.htm>> [visited 2011 04 05].
- [Vaughan-Whitehead, 2003] D. C. Vaughan-Whitehead, EU Enlargement versus Social Europe? The Uncertain Future of European Social Model. Cheltenham Northampton: Edward Elgar, USA, 2003.
- [Zandvliet et al., 2009] K. Zandvliet, T. Berretty, M. Collewet, O. Tanis. Activating Potential IC: Effective Addition to Active Labour Market Policy in Rotterdam? Proceedings of The European Conference on Intellectual Capital held at INHolland University of Applied Sciences, Haarlem, The Netherlands 28-29 April 2009, p. 581-588.

Authors' Information



Eglė Bilevičiūtė – Mykolas Romeris University, Faculty of Law, Department of Administrative Law and Procedure, PhD, Professor, Ateities 20, LT-08303 Vilnius, Lithuania, e-mail: eglek@mruni.eu

Major Fields of Scientific Research: Processing of data and statistical methods for social scientific researches. Her current research interest includes law of research and studies, management of research, administrative law, forensic science, legal informatics, implementation of IT in law.



Tatjana Bilevičienė – Mykolas Romeris University, Faculty of Economics and Finance Management, Department of Business Economics PhD, Assistant Professor, Ateities 20, LT-08303 Vilnius, Lithuania, e-mail: tbilev@mruni.eu

Major Fields of Scientific Research: The e-inclusion problems of disabled persons is the main scientific research field of Tatjana Bilevičienė. In 2008 Tatjana Bilevičienė readied the equivalency doctoral dissertation that firstly in Lithuania presents the organisational model of telework of disabled persons and evaluation methodises of disabled persons' employment's quality.