LAW AND ECONOMICS YEARLY REVIEW

ISSUES ON FINANCIAL MARKET REGULATION, BUSINESS DEVELOPMENT AND GOVERNMENT'S POLICIES ON GLOBALIZATION

Editors

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The "Law and Economics Yearly Review" is an academic journal to promote a legal and economic debate. It is published twice annually (Part I and Part II), by the Fondazione Gerardo Capriglione Onlus (an organization aimed to promote and develop the research activity on financial regulation) in association with Queen Mary University of London. The journal faces questions about development issues and other several matters related to the international context, originated by globalization. Delays in political actions, limits of certain Government's policies, business development constraints and the "sovereign debt crisis" are some aims of our studies. The global financial and economic crisis is analysed in its controversial perspectives; the same approach qualifies the research of possible remedies to override this period of progressive capitalism's turbulences and to promote a sustainable retrieval.

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CONTENTS

NEW MEANS OF ORGANIZATIONAL GOVERNANCE TO REDUCE THE EFFECTS OF EUROPEAN ECONOMIC CRISIS AND IMPROVE THE COMPETITIVENESS OF SMES

Vladimir Uskov and Nunzio Casalino[*]

ABSTRACT: *This article is aimed at researching an organizational concept of informal learning, which can be described figuratively as an iceberg: mostly invisible on surface and immense in its mostly submerged informal aspects. The main goals of this research are 1) to better understand and improve a recognition of non-formal and informal learning acquired through work experience in Small and Medium Enterprises (SMEs), and 2) to overcome, or, at least, reduce economic crisis' effects on European SMEs. Traditional models of on-job training are often not sufficient for continuous skills' update and upgrade as they are cumbersome and limit learners to prescribed and closed educational/training systems. There are many methods and a variety of techniques to collect evidence to provide a basis for judgments about whether learning/training outcomes (skills and competences) have been acquired or not. Learning and knowledge support systems have to transform professional knowledge to non-specialists. Current*

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[*] Although the article is the result of joint observations of the two authors, the abstract and the paragraph 1 have to be attributed to Vladimir Uskov, while the paragraphs 2, 3, 4, 5, 6, 7 to Nunzio Casalino.

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contents and learning systems, enhanced by Web 2.0, provide a viable solution to fast-paced and multitask-oriented patterns of learning and working today. They enable learning in small steps and with small units of content through social interaction. Learning modules aligned with formal learning and embedded in online communities have a potential to support on-going professional development. As corporate learning departments seek various new ways and options to more efficient and effective cross-training of employees, informal learning has become an increasingly valuable alternative.

SUMMARY: 1. Introduction. - 2. Designing a recognition methodology. - 3. The research and the investigation method. - 4. Aspects that effect non-formal and informal learning in SMEs. - 5. Organizational issues and social media adoption to better manage European financial crisis effects. - 6. Remarks and advices for SMEs managers. - 7. Conclusions.

1. Informal learning and/or training (further: *informal learning*) can be defined as a learning process which occurs at the workplace and is neither organised nor designed by an organization[1]. This definition helps to distinguish between goals of the learning and a process of learning. It also emphasizes that an organization should be involved into an informal learning and facilitate an occurrence of learning without making it formal.

In general, an informal learning emerges from specific worker's needs. For SMEs, an effectiveness of a learning event is determined by a relation between

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[1] MARSICK, V.J., WATKINS, K.E. (2001). *Informal and Incidental Learning. New Directions for Adult and Continuing Education*, issue 89, pp. 25-34.

learning content and worker's needs. Formal learning may vary from extremely relevant to completely irrelevant to workers' needs. New roles of workers demand outstanding technical knowledge (that is abreast with modern technologies) as well as perfect skills in interpersonal communication and teamworking. High-performance jobs usually require non-stop continuous learning about emerging technology, business relationships, and perspectives of all members in working community, including management, customers, and suppliers[2]. The main drive for informal learning at the workplace is a need to meet organizational goals that cascade to workers in a form of incentives, such as increased worker participation in decision making and expanded job responsibilities. Another drive for informal learning is a desire to meet individual goals such as financial and psychological goals of recognition and personal achievement[3]. Through cross-training, trainees learn a) new job-specific skills, b) a character of co-worker or co-workers (personality and work ethic), c) how to integrate feedback, and d) effective social skills. Also, cross-training expands employee's horizon of observation - when an employee learns another task within the entire production process, particularly when it takes place out of his/her department, the employee's understanding of the task is redefined

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[2] WALTON, R.E. (1985). Toward a strategy of eliciting employee commitment based on policies of mutuality. in R. E. WALTON & P. R. LAWRENCE (Eds.), *Human resource management: Trends and challenges*, Boston, Harvard Business School Press.

[3] LIVINGSTONE, D.W. (1999). *Exploring the Icebergs of Adult Learning: Findings of the First Canadian Survey of Informal Learning Practices*. Canadian Journal for the Study of Adult Education, 13, pp. 49-72.

within the context of the whole process[4]. It is important to identify also employers, employees, SME owners, SME managers, HR managers and SME consultant's needs, because each of them is involved, from the organizational point of view, in informal learning from a different aspect.

Studies indicated that existing tools in many cases are lacking either a solid base in scientific knowledge about organization design or support for a sociotechnical systems perspective on organization design[5]. The research outcomes and presented considerations that are described below could be considered as a first step in this direction, bringing a patrimony of data and practices, with whom it will be easier design upcoming research projects with similar goals.

2. In the context depicted in the introduction, the research has followed a learning centered approach, identified as a distinct stream of research that differs from the psychological orientation of cognitive-perceptual research. This approach has been motivated by educationists addressing the diversity of the environment in which learning takes place[6], and driven by process-based concerns relating to meeting individual differences and learning needs. The focus has shifted from concentrating on the constructs of intelligence and processing of information to an increased interest in learners' active response to the learn-

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[4] AGARWALA, T. (2003) *Innovative human resource practices and organizational commitment: an empirical investigation*, *International Journal of Human Resource Management,* 14(2), pp. 175-197.

[5] MARKUS, M.L., MAJCHRZAK, A., GASSER L. (2002) *A design theory for systems that support emergent knowledge processes*, in *MIS Quarterly*, 26(3), pp. 179-212.

[6] RIDING, R., RAYNER, S. (1998) *Cognitive Styles and Learning Strategies*, David Fulton Publishers, London.

ing task and to the learning environment. The learning centered tradition has grown out of process-based models of learning in workplace such as:

- the learning process as a form of experiential learning[7];

- learners' orientations to learning[8];

- workplace cognitive skills and strategy development[9].

This stream of research on learning style shows that learners are dynamic and open to adaptation according to the particular context of learning. Criticism has been voiced about the learning-centered tradition of research on learning styles, on the basis that it represents an uncertain relationship between learning style and cognition and that concepts are poorly defined and used loosely[10].

First of all the research team has focused on the identification of a taxonomy mainly related to the learning-centered tradition and focused on individual adjustments and approaches that arise while learners are engaged in the learning process. Learning at the workplace should become increasingly more popular for companies to achieve their short and long-term goals[11], but it is essential to address two sets of problems related to recognition of non-formal and informal learning.

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[7] KOLB, D.A. (1984) *Experiential Learning experience as a source of learning and development*, New Jersey, Prentice Hall.

[8] ENTWISTLE, N. J. (1997) *Reconstituting approaches to learning: a response to Webb*. Higher Education, 33, pp. 212-218.

[9] KEEFE, J. W., MONK, J. S. (1986) *Learning style profile examiners' manual*. Reston, National Association of Secondary School Principals, pp. 291-300.

[10] BAERT, H. (2005) *Lifelong learning in a changing working environment*, in Labour Market Research and Policy Making in Flanders, Conference Book, pp. 195-224, Garant.

[11] SARGEANT, A. (1996) *Training for growth: how can education providers assist in the development of small businesses?*, Industrial & Commercial Training, vol. 28, 2, pp. 3-9.

The first group of problems is related to SMEs and their owners. On the one hand, SMEs are poorly informed about the benefits of and need for assessment of competences acquired in a non-formal and informal way. On the other hand, the lack of human, temporal and financial resources very often is a major obstacle in adopting procedures for assessment of competences and skills as practiced by large enterprises. The lack of knowledge on these problems weakens the competitiveness of SMEs and is a barrier for the transition to knowledge based economy.

The second group of problems is related to employees in SMEs. Vocational education and training of staff in SMEs often happens through on the job-training and practically performing a job.

Since the acquired skills and competences are often difficult to transfer, the taxonomy adopted was focused on the scope of project research and was integrated by the following categories:

- creating baseline knowledge;
- improving operational efficiency with collaboration tools and approaches;
- collaborating to create solutions to complex problems;
- improving employee performance with just-in-time resources;
- helping employees quickly resolve real world issues;
- fostering collaboration and innovation;
- expanding learning opportunities beyond what can be provided through formal training;
- addressing common knowledge gaps.

Designing a methodology for identification and recognition of non-formal and informal learning could help managers to give employees a better autonomy and better forms of experiential learning and skills. People tend to develop learning strategies in order to deal with learning materials and therefore learning strategies can be regarded as cognitive tools, which enable learners to complete tasks and solve problems. By relating the research on learning strategies to the design of learning environments it is possible to investigate how learners approach their learning, how they perceive of themselves as learners and what they value in the learning experience[12]. In the last years, validation of non-formal and informal learning has become a key-element in national and European strategies for lifelong learning[13]. More and more countries have moved from a stage of initial testing and experimentation to full scale implementation where validation has become an integrated part of mainstream education, training and learning systems. Lifelong learning is defined as: all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal, civic, social and/or employment-related perspective. Learning is understood here in terms of the social organization of learning activities which facilitate the communication and acquisition of

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[12] VERMEERSCH, L., DE RICK, K. (2008) *SMEs and the participation of workers in formal learning*. Country report: Belgium, Lifelong Learning 2010 subproject 4, Leuven, HIVA, University of Leuven.

[13] CASALINO, N., D'ATRI, A., FADDA, C. (2005) *Organisational impact and exploitation of the results of an Italian research project for e-health and medical training*. Proceedings of ECIS 2005 - European Conference on Information Systems, Regensburg, Germany.

knowledge and skills, also supported by information systems[14]. While there has been growing rediscovery of informal learning in recent years, it has proved much more difficult for employers to get a grip on its significance in the workplace. During the last fifteen years, networks have provided the basis for the use of e-mail and search software to enhance informal learning[15]. More recent developments include the application of social media to support informal learning activities through the virtual social networking among employees. Individuals in organizations have always exchanged their views, during lunch or informally during work, and after, but both small and large firms are now encouraging their employees to become involved in virtual social networking. This raises a series of ethical questions with regard to the management of social networking as a part of informal learning. Employers now make use of Facebook and such other social networking platforms. Many companies now require existing employees to demonstrate their activities on professional networks such as LinkedIn or distinctive groupware platforms. It is clear that these "social" technologies can also be used for the social control through the tracking of messages in order to verify and disciple individual employees in organizations[16].

According to Markus et al. there are several design problem of providing IT support for emerging knowledge processes (EKPs). They are defined as: "organi-

[14] EARNFILE (2009-2011) project results, in final report *"Evaluation And Recognition of Non-formal and Informal Learning"*, project number LLP-LDV-PA-09-IT-0276, Leonardo Da Vinci Partnership project, financed by EU Lifelong Learning Programme.

[15] JOHNSTON, K., LOADER, K. (2003) *Encouraging SME participation in training: identifying practical approaches*, Journal of European Industrial Training, vol. 27, n.6, pp. 273-280.

[16] OVERWIEN, B. (2000) *Informal Learning and the Role of Social Movements*. International Review of Education, 46 (6), pp. 621-640.

zational activity patterns that exhibit three characteristics in combination: an emergent process of deliberations with no best structure or sequence; requirements for knowledge that are complex, distributed across people, and evolving dynamically; and an actor set that is unpredictable in terms of job roles or prior knowledge". Organizational requirements about the emergent knowledge design are critical processes for manufacturing sector, since it is known to be associated with good or poor performance on such measures as productivity, cost, quality and cycle time[17]. The reflections above have important implications about the development of procedures for the accreditation of informal learning in the workplace. On the one hand, the recognition of intentionality in informal learning offers a number of opportunities to adopt and develop instruments such as learning portfolios and learning diaries which provide opportunities to record the significant learning experiences and accomplishments of individuals. On the other hand, incidental learning, and, in particular tacit learning, gives rise to important issues about the recognition of learning experiences and social control within organizations. For this reason it was decided to apply the well-known model of the learning process derived from the Kolb's theory of experiential learning as the basis for design of traditional learning contents and to combine this with other information gained about the target learners[18]. The core of it is that learners progress through a learning cycle in which experience leads to observation and reflection, which then leads to concept formation.

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[17] SENGE, P.M. (1990) *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York, NY.

[18] JÖRISSEN, B., MAROTZKI, W. (2009) *Medienbildung - Eine Einführung. Theorie, Methoden, Analysen*. Bad Heilbrunn, Klinkhardt.

Kolb's learning theory sets out four distinct learning preferences, which are based on a four-stage learning cycle. In this respect Kolb's model is particularly relevant, since it offers both a way to understand individual people's different learning styles, and also an explanation of a cycle of experiential learning that applies to us all. Kolb includes cycle of learning as an essential principle in which "immediate or concrete experiences" deliver a basis for "observations and reflections". These "observations and reflections" are assimilated and distilled into "abstract concepts" producing new implications for action which can be "actively tested" in turn creating new experiences. Kolb says that ideally this process represents a learning cycle or spiral where the learner "touches all the bases", i.e. a cycle of experiencing, reflecting, thinking and acting. Immediate or concrete experiences lead to observations and reflections. These reflections are then assimilated into abstract concepts with implications for action, which the person can actively test and experiment with, which in turn enable the creation of new experiences. The involvement of SME employees in learning activities means it remains challenging due to several obstacles. Employers and employees have different expectations, while the lack of managerial attention to the subject can lead to confusion among employees about the extent of company support.

3. Regarding the boundaries of the research, the activity included the collection and the study of results of the two year (2009-2011) Leonardo Da Vinci Partnership project, financed by EU Lifelong Learning Programme and entitled "Evaluation and Recognition of Non-formal and Informal Learning" – EARN-

FILE[19]. The partnership involved was composed by a network of research institutions and vocational training organizations to reach the goals established from different perspectives. The research team included the following partners:

- a private consultancy company that provides vocational training to SMEs in quality management systems and implementation of EU financed projects - "European Center for quality" - ECQ, Bulgaria;
- an university research center that studies and adopts innovative learning methodologies - Research Center on Information Systems of LUISS University - CeRSI, Italy;
- a private non-profit research center - MERIG, Austria;
- a private company that provides trainings, adult education and consultancy services related to career guidance - Roemeling Projectleiding - The Netherlands;
- a public non-profit organization – a department within the Ministry of Education of Belgium, French speaking community - CCG, Belgium.

Given the scope of the research and the investigation method chosen (interviews and multiple case study analysis), it was not easy to find suitable SMEs willing to participate in the study. More features of the sources has been identified by the adoption of a research strategy based also on the information available on web-sites and with the performing of an electronic survey.

First approaches to companies led to arrangements to talk to ten SMEs, five in the manufacturing sector and five in the services sector (business-to-

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[19] EARNFILE (2009-2011) project results, in final report "*Evaluation And Recognition of Non-formal and Informal Learning*", project number LLP-LDV-PA-09-IT-0276, Leonardo Da Vinci Partnership project, financed by EU Lifelong Learning Programme.

business). The research team selected two for each partner Country from several business employing less than 50 people (50% of SMEs interviewed in the project); and 50 or more but less than 250 people for a medium business (50% of the remaining SMEs).

Many of the employers contacted initially, stated that they had no information on their employees' informal educational activities. After in-depth interview of each case following also the Yin methodology, the research team understood that there was a complex mosaic of learning issues in that SMEs. The research question was addressed by conducting an exploratory analysis of that SMEs situation and the cases analyzed provided a light, but well differentiated, picture of employer-supported formal training.

Unfortunately, owing to the strict budget limitations of the project, it was not possible to adopt the Markus et al. design theory and its set of six combined design and development principles for emerging knowledge processes. It will be useful in the future for a better analysis of each case and for capturing the richness of design theory in a way that simple verbal guidelines to designers cannot.

In total the project research group has done 125 phone calls and has sent about 250 emails: on average 12,5 phone calls have been made and 25 emails have been sent to each SME. The number of direct contacts needed, testifies the troubles faced in the identification of the exact person of reference and the delay in the return of a filled survey. In most cases the inertia of the process can be addressed to the set of steps necessary to directly interact with the head of the identified person.

The investigation had some important practical implications for the research team, as it furthers the understanding of how to maximize relationship performance in SMEs environments, thanks also to the adoption of online collaboration environments (CMS, emails, e-voting tools, etc.).

4. It is difficult for an SME manager to oppose employee's wishes to improve their education, because there are too many obstacles which delay the participation of employees in education[20]. As any behavioral model, for Kolb's study nevertheless people clearly exhibit clear strong preferences for a given learning style. The ability to use or change frequently learning styles is not one that we should assume comes easily or naturally to many people. Simply, people who have a clear learning style preference, for whatever reason, will tend to learn more effectively if learning is orientated according to their preference. So how much informal learning is actually occurring in companies analyzed?

The project investigation highlighted the following aspects: uncertainty about the return on investments; time pressures; mismatch between training needs and training supply. In terms of the widely accepted "iceberg metaphor" of learning activities, only 20% of learning activities are formal and 25% non-formal, while 55% of other learning activities are informal. Informal learning represents a largely overlooked dimension of learning activities in the workplace

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[20] KOMAR, R. (2008) *Medienkommunikation und Design*. In SCHACHTNER, C. & HÖBER, A. *Learning Communities*. Frankfurt, Campus Verlag, pp. 83-95.

and enhancement of performance on the job[21]. Informal learning is increasingly engaged in the compression of time and space which is results from the rapid and all-embracing development of the virtual media

The outcomes achieved also reveal that the difficulties to participation are often connected to each other.

Removing limitations requires a detailed understanding of all factors, taken not only separately but also as a cluster of arguments that influence the enterprise's training policy or training culture. For instance, a lack of time, funds and other similar constraints might lead to a lack of interest in education for employees. According again to the study, part of the problems relating to SME involvement can be attributed to the different expectations of employers and employees towards lifelong learning. Both employers and employees seem to consider participation in informal education primarily as a way to strengthen knowledge, know-how and productivity and regard such education as goal-oriented. For employees, however, this view is complemented by a broader life-long learning expectation particularly in terms of self-development as well as career enhancement. Because most of the SMEs involved in the study have a rather informal training policy, their managers risk becoming preoccupied with day-to-day concerns and failing to pay attention to learning and education, or becoming reluctant to acknowledge the need for it. Another risk is that, due to the lack of training measures, employees may no longer know what support to expect from the company or where to turn to with their specific learning de-

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[21] SHERIF M., HARVEY O. J., JACK WHITE B., HOOD R. W., SHERIF W. C. (1954) *Intergroup Conflict and Cooperation: The Robbers Cave Experiment*, Strategic Management of Technological Innovation Journal, NY.

mands. Although this project has its time limitations, it adds some new perspectives to current knowledge of the skills and training challenge within SMEs. The most remarkable perspective is that a lack of managerial attention has the additional effect of leaving employees not knowing what to expect in relation to training and showing an increasing lack of interest in the matter[22].

Organizational learning is mediated by several factors, both personal and environmental in nature. Everybody learns in accordance with their unique, individualized blend of personal and environmental factors. Few organizations have been able to infuse organization design expertise throughout their standard industrial processes because of the characteristics of emerging knowledge processes (process development, irregular user types and usage frameworks and spread skilled knowledge).

Personal factors measured by the online questionnaires were initially some individual factors like motivation, interests and abilities which predispose an individual towards learning[23]. They are the following aspects:

- interaction aptitude;
- interests;
- readiness;
- experience;
- motivation;
- self-concept;

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[22] MORECROFT, J.D.W., STERMAN, J. (2000) Modeling for learning organization. *Productivity Press*, Oregon.

[23] MINER, A., MEZIAS S. (1996) Ugly duckling no more: Pasts and futures of organizational learning research. *Organization Science,* 7/1, pp. 88–99.

- attitudes;

- values;

- level of aspiration;

- learning style;

- workplace setting.

Environmental factors on the other hand, are those contextual factors which highlight the role of the environment in learning, such as the socio-emotional, social and cultural factors.

For the research, the team identified and formalized some environmental elements that can summarize the different contexts. They can be classified into the following categories[24]:

Available resources. Learning is greatly enhanced when necessary resources are available. Making knowledge available to employees communicates management's commitment to and value of learning and knowledge.

Incentives structure. Providing incentives for learning is one of the most important factors affecting informal learning in the workplace. Incentives reinforce the desired learning behaviors and greatly increase their occurrence.

Promotion criteria and recognition. The criteria by which organizations determine who gets promoted communicates to employees the importance of learning. Organizations that promote on the basis of merit reinforce the value of quality performance. Employees will try to learn and improve if their efforts are recognized.

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[24] CROSS, J. (2006) Informal Learning. Rediscovering the Natural Pathways that Inspire Innovation and Performance, Pfeiffer, San Francisco.

Financial incentives. Learning, that is financially rewarded, is valued and sought out by employees. Also providing incentives for learning communicates the value that the organization places on learning.

Job security. When employees feel their job is secure and the possibility of getting fired is low they may be unmotivated to expand their job scope. When job security is paired with reinforcement for job performance or career advancement, employees are motivated to learn, try new things and explore new opportunities. When job security is low, employees will attempt to perform their job in the best possible way avoiding any risks or standing out in the crowd in any way perceived as threatening.

Management employee relationships. Relationships between management and employees affect the overall atmosphere in the workplace. Management usually wants employees to produce more and employees want higher wages. The extent of the tension between the two depends to a large extent on the mutual understanding and acceptance of each other's goals. The greater the overlap in the understanding and goals, the lesser the tension between the two. The alienation between the individual and the company creates an atmosphere where learning is perceived as contributing to the company and rather than to the individual.

Size of organization. The organization's size contributes to the sense of community level of understanding of one's place within the organization. In small organizations employees will all know each other and sense the community and this will increase the extent to which they can ask each other questions and learn more from one another.

Working environment. The physical characteristics of the working environment should ideally be of such quality that no offence is given to any of the five senses (well-being at work, noise, vibrations, lighting, air quality, work space). Louder noise for example may lead distraction. The concentration on the work at hand may be more or less hampered by the environmental noise. Conversely, extremely low levels of noise may also be experienced as irritating and thereby have an adverse effect on attention.

Social control on work meetings. Learning comes from interaction through personal meetings in which people debate different things. The topics discussed between colleagues can be improved when there is someone who supervises the meeting.

Learning culture. To become a learning organization is to accept a set of attitudes, values and practices that support the process of continuous learning within the organization. Through learning, individuals can re-interpret their world and their relationship to it. A true learning culture continuously challenges its own methods and ways of doing things. This ensures continuous improvement and the capacity to change. According to Senge learning organizations are: "…organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together".

The learner and the learning process can only be completely understood with reference to the interaction of both environmental and personal factors.

5. In recent years a rapid proliferation of forums, blogs, chats, podcasts and similar services has therefore occurred. Knowledge is therefore no longer receptively processed but rather actively acquired[25]. In another recent study about the participation of workers on formal and informal learning in SMEs by University of Leuven, the results showed that: two-thirds of small businesses use social media to promote or improve their activities. Use of social media is becoming more common among SMEs. It's easy to see why it has proved so popular for small business marketers in a recession: they are free to use and have virtually limitless reach. As a result, companies of all sizes need to work harder than ever not just to deliver high-quality user service but to do so in an efficient and timely manner. For SMEs these pressures are particularly intense. It is not easy for them to maintain and develop worker fidelity in the face of fierce competition from larger rivals that have both the manpower and financial resources.

In this context, the arrival of social networks as a way to real communication and interaction with users should be seen as an opportunity. SMEs need to modify the idea that many of their users are not only online and in the cloud but are talking about their products and services while they are there. If they have a problem, they are likely to post a comment on Facebook or tweet about it on Twitter. So businesses are now having to engage with their users wherever they are and find a solution in real-time before potential problems escalate. In essence, SMEs who are not engaged in social networking risk being left behind

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[25] CASALINO, N., DI PERSIO, F. (2004) *Integrating medical services, training and education: the HERMES project platform*, in ATL - Advanced Technology for Learning Journal, ACTA Press Anaheim - Calgary - Zurich, Vol. 1, Issue 2, pp. 71-80.

and losing business to competitors who respond to issues more quickly. These can then be used to proactively address any future issues arising and can even be posted as part of specially developed "answers" or "ideas" forms, which can be published on the company website to support user self-service. Today, however, by using applications to manage all user interactions, the situation has been reversed. Social networking activity is now rightly perceived as a potential opportunity by most businesses, including many SMEs. Learning pills, in the context of Web 2.0, is viewed as part of a dynamic, open and fragmented digital environment, in which information can be individually produced, aggregated, used and reused. Social software may be viewed as a major component of Web 2.0 and can be characterized by its capability to support social interaction. Learning supported by social software enables not only short and flexible formats or rapid delivery of content, but also social interactions based on that content. This aspect is also an integral part of online communities, where learners connect as they create, aggregate, share, use and re-purpose content, including smaller content chunks. Learning pills is also related to work-based learning with the term individual training used to describe short work-based training formats. It can be used as a component of formal blended learning, as means to support informal learning at the workplace, or as self-contained training. As such learning pills can add value to organizations, as it enables flexible learning and requires less investment in terms of time and resources. However, the real value-added of training combined with Web 2.0 and social software is its capability to integrate short formats with user-generated content and social interaction. Employees should use the accreditation process in order to get their

newly acquired skills certificated so that they can take their achievements to provide evidence for formal qualifications or for entry to new programs of study or to new employers. There are several methods and techniques to collect evidence to provide a basis for judgments about whether learning (skills and competences) has been acquired. Web 2.0 provides to different learning skills (structuring, research, cooperating, producing, presents Ireland) their appropriate technologies. Media is not to be understood only as a tool in the learning process, but it is such an integral part of modern society, that its use has become an active part of social participation[26]. Even nowadays it still seems difficult to integrate the use of media in teaching and training situations. The competence to use media is not seen as one of the most important skills by teachers, trainers or tutors[27]. Here, educational institutions should support the continuing professional development of their staff members. Since media literacy of teachers/trainers is a key for higher quality in lifelong learning all over Europe.

Learning is becoming an active, self-directed, useful, social and situational process; current technological, economic and social changes are producing the need for new concepts and strategies to support lifelong learning. Education, including work-based learning, is in need of transformations, requiring renewal

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[26] MCLOUGHLIN, C. (1999) *The implications of the research literature on learning styles for the design of instructional material*, *Australian Journal of Educational Technology*, University of New England 15 (3), pp. 222-241.

[27] CASALINO, N., D'ATRI, A., MANEV, L. (2007) *A quality management training system on ISO standards for enhancing competitiveness of SMEs, Proc. 9th International Conference on Enterprise Information Systems – ICEIS 2007*, Funchal, Madeira, Portugal, Cardoso, J., Cordero, J., Filipe, J. Eds., INSTICC, pp. 229-235.

and innovative ways of relating appropriately to the way we live, work and learn today. Social media bring about such socio-cultural changes as the do-it-yourself-culture, with individuals becoming actively involved in co-creation of cultural assets beyond formal structures, changing from consumers to producers, thus becoming so-called "pro-sumers". These new digital technologies enable the design of user-generated content and have given rise to a trend towards small formats, i.e. short, simple and targeted information[28].

Together with personal publishing systems, such as blogs or wikis, it has become fairly easy for anyone to create own content. Small contents, i.e. information published in short form, relate more to a formal approach of how to present content rather than the inherent quality of the content itself. Examples of small content include podcasts, blog posts, wiki pages or short messages on Facebook or in Twitter.

Creating, publishing and sharing of informal contents on the Web open up new possibilities for implicit, informal and incidental forms of learning, such as learning pills, the term referring to short learning activities. The smartest SMEs and the executives who work for them recognize the value to capture the best answers and the most innovative ideas. Often, instead of calling the supplier directly, users will simply access Facebook, comment on the problem they are having and ask for input, or alternatively they will tweet about it on Twitter in order to draw on the expertise available in the online community. SMEs need to be aware of discussions on sites, such as Twitter and Facebook, monitoring and tracking them. Where appropriate, they also have an opportunity to intervene,

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[28] LAUDON, K., LAUDON, J. (2011) *Management Information Systems*, Kindle.

initiate insightful debate, and capture relevant knowledge that makes them look smarter and allows them to harness the innovative potential of the community. They can search by keywords that allow them to identify relevant discussions. They can then develop suitable answers that can be posted on Facebook and sent to whole communities via Twitter. These answers can subsequently be used to help in the development of knowledge bases - essentially repositories of key information about a particular issue. These can then be used to proactively address any future issues arising and can even be posted as part of specially developed "answers" or "ideas" forms, which can be published on the company website to support user self-service[29]. However, to be successful from the organizational point of view, companies need to be able to respond quickly. If users have a problem with a product or service, any delay in responding may result in lost business. It is important too that organizations are able to obtain direct feedback on the quality of the content they create or approach they develop. They need to ensure that they have a mechanism in place to allow their user community to provide relevant feedback and comments, and vote to promote or demote files, web links, documents or ideas. The organizational result will be a more active and involved community and, for the SME, clearer insight into what their users and prospects are thinking. In the past, the ability to deliver the kind of approach outlined above would have been well beyond the reach of most service organizations, particularly SMEs. Indeed, many such businesses would have seen this kind of activity as a potential threat to their reputation

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[29] WATTS, D.J., MUHAMAD, R., DODDS, P.S. (2003) *An experimental study of search in global social networks*, *Science*, 301, pp. 827-829.

and brand. Today, however, by using applications to manage all user interactions, the situation has been reversed. Social networking activity is now rightly perceived as a potential opportunity by most businesses, including many SMEs. Short learning activities with a length of a few seconds up to about fifteen minutes and can be easily and flexibly integrated into everyday activities. Small content as input and output of learning can be created and used in the transition from learning communities through communities of practice to learning networks, bridging the gap between formal and informal learning. Learning pills can either take place within emergent small content structures such as blogs or blogs, or it can take place within a designed setting in form of e-learning. E-learning 2.0 can be described as a new approach to e-learning facilitated by Web 2.0 and social software. Unlike e-learning 1.0 focusing on composing, organizing and packaging content, E-Learning 2.0 enables learners to syndicate, aggregate, remix and repurpose content according to individual aims and needs. Learning activities, especially in context of informal learning, can be integrated into individual learning environments[30]. They can be described as a collection of interoperating applications. In this way they support learners in aggregating small chunks of content, such as feeds and widgets, in a personal learning center by pulling external content, combining different content units and distributing the result within the organization.

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[30] CASALINO, N., DI PERSIO, F. (2004) *Integrating medical services, training and education: the HERMES project platform*, in *ATL - Advanced Technology for Learning Journal*, ACTA Press Anaheim - Calgary - Zurich, Vol. 1, Issue 2, pp. 71-80.

6. Starting from the main organizational studies, organizational learning addresses ways in which information processing affects the behavioral capacities of organizations[31]. Organizations also learn "vicariously" by picking up information from external sources, for example by adopting technical solutions practiced by competitors or advised by regulators. Frequent repetition of activities leads to acquisition of tacit knowledge. The literature has also discussed whether learning is incremental or radical. However, Miner and Mezias have argued that it is no longer an issue of concern and pointed that there is a consensus that learning can be both incremental and radical. Among the recent debates in the field was also the distinction between organizational learning and learning organization[32] very close to SMEs context.

A first outcome regards if employees should use an accreditation process in order to get their newly acquired skills certificated so that they can take their achievements to provide evidence for formal qualifications or for entry to new programs of study. In the validation process there are different methods to collect evidence of learning, skills or competences. They can be divided into five categories:

Examination. Candidates answer questions (oral or written) on a domain of study. They can focus on a domain or be interdisciplinary in nature. Questions can be open or closed (essay, multiple-choice). The evaluator can be a third par-

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[31] EARNFILE (2009-2011) project results, in final report *"Evaluation And Recognition of Non-formal and Informal Learning"*, project number LLP-LDV-PA-09-IT-0276, Leonardo Da Vinci Partnership project, financed by EU Lifelong Learning Programme.

[32] MORECROFT, J.D.W., STERMAN, J. (2000) *Modeling for learning organization*. Productivity Press, Oregon.

ty. Apart from the classical regular (written and or oral) examination (which can take various forms, from tests to essays), there are cases in which non-formal and informal learning are taken into consideration.

Declarative. Candidates declare and justify (orally and in writing) that what they can do corresponds to certain parts of the curriculum taught in the education or training program for which they would like to obtain credit. A panel (third party) gives the final judgment. Once evidence is collected, it needs to be documented. Examples have been examined for non-formal and informal learning and have been classified into three categories: the check-up of competence; the portfolio and the certification of competences. The portfolio presents a synthesis of the personal, social and occupational experiences to highlight competences. It contains elements from the Curriculum Vitae, relevant information on the career, education, training and other experience. A good portfolio is needed to showcase one's work and to help to demonstrate one's skills to prospective employers.

Observation. Following certain rules and strict methods, an evaluator (third party) observes candidates in situ and judges whether they have the competence described in a standard. Observation is a more demanding exercise than one can imagine. Methodology and training are required for the assessor to properly collect relevant and reliable observations. Direct observation of competences is used for the assessment in practical work situation. So, the observation of activities can take place in real work settings, or it can be based on past experience with the candidate or on a simulated work situation.

Simulation. Candidates are placed in a context that presents all the characteristics of the real work (or other) situation and are then able to demonstrate their competences. Simulation requires a large amount of studies and job analysis to be prepared properly. Often judgment is by a third party. The major difficulty is the job analysis needed to support a simulation to be valid and reliable.

Evidence extracted. Based on the descriptions of assessment standards, candidates collect evidence of skills and competences in the real work situation.

The research group has noticed also a certain degree of approximation and incompleteness of the information provided by the workers, but clearly understand that they need to be co-participants in learning, not simply receivers. In a recent study a researcher explained the training industry interest in informal learning[33] saying: "Training professionals are paying attention to informal learning because formal learning has run out of steam. Workers don't have time for the inefficiencies of old-style training. For years, we've talked about giving people what they need, when they need it. Internet makes it feasible to deliver on that promise. Learning often is distributed and includes both general expertise and local context knowledge. The essence of many jobs is routine and doesn't offer any challenge to the employee. So it is important to give employees challenges, problems to solve, new activities in their existing job which challenge them to learn new skills and knowledge. Non-formal and informal learning creates interest and commitment of employees and leads to formal learning as

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[33] MINER, A., MEZIAS S. (1996) *Ugly duckling no more: Pasts and futures of organizational learning research, Organization Science*, 7/1, pp. 88–99.

well. Another idea is to give employees the opportunity to have their skills, knowledge and competencies recognized, initiate procedures for this, encourage employees to be involved in this, give support to the process and when finalized, reward employees appropriately (salary, job level, position). Allow employees to have access the required resources like time, opportunities, material, money, Internet access.

Social media have an important role in the learning and development of today's business professionals. Ignoring social media's informal learning influence is equal to ignoring the fact that a new generation of workers adept at and immersed in social media are beginning to flood the market. So it is important to identify the social media tools you feel are most beneficial to enterprise and endorse them as workplace-friendly learning resources. If employees know that LinkedIn is considered a work-friendly workplace tool, but not MySpace or Facebook, they have guidelines for their informal learning choices. Some businesses especially those with heavy regulatory restrictions will choose to create internal collaboration and social media applications that allow for the rich networking and information-sharing abilities while minimizing security and confidentiality risks[34]. Others will align social media sites and tools with their industry and guide employees to the resources that offer the most learning potential. Mailing software applications are main tools often used for "official" communications in the organizations. Sometimes the mailing communication is a time consuming activity. In such cases the instant messengers software can be

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[34] CROSS, J. (2006) *Informal Learning. Rediscovering the Natural Pathways that Inspire Innovation and Performance*, Pfeiffer, San Francisco.

preferred. A way can be to install and use a groupware in an organization. Many of these solutions for managing corporate knowledge are also open-source.

7. Learning at the workplace takes place in different settings and contexts, in formal, non-formal as well as informal environments, and can be conceived as the social organization of learning activities. Learning that takes place in formal education and training environments is the most visible and have dominated educational policy and practice for a long time. In recent years, however, there has been a growing understanding that learning in non-formal and informal settings are equally fundamental for the lifelong learning achievement, thus requiring new strategies for identification and validation of more invisible learning environments[35]. Besides it is nearly impossible to envisage in advance in each case who will take part in the process and which platform they will adopt.

From the perspective of lifelong learning it is essential that key competencies are learned, updated and retained during life.

Over and above the business benefits, today's employees appreciate the personal and professional development informal learning can lend to their lives and careers, through tools such as instant messaging, e-learning support groups, expert communities, mentor and coaching networks, personal learning portals and moderated chats. It is important to promote an incentive structure of learning culture in the company trying to communicate to all employees in the organization that new ideas are highly valued and that each new idea shall be

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[35] *Feutrie, M.* (2009) *Validation of Non Formal and Informal Learning in Europe, comparative approaches, challenges and possibilities*, Université des Sciences et Technologies de Lille, France.

responded to, regardless of its worth to the organization. Innovative employees have to be promoted when teams find a way to improve the information processes in an organization.

Employers should be open-minded and assure their employees that their door is always open for new suggestions and opinions. So it is needed to improve transparency by implementing a better horizontal and vertical communication in management skills and especially by explaining career development opportunities. The major purposes of downward communication are to advise, inform, direct, instruct and evaluate employees to provide organization members with information about organizational goals and policies. While the main function of upward communication is to supply information to the upper levels about what is happening at the lower levels[36]. This type of communication have to include progress reports, suggestions, explanations and requests for supports or decisions. At the European level, the Commission stated that there is a need to develop a set of common principles regarding validation of non-formal and informal learning with the aim of ensuring greater comparability between approaches in different countries and at different level.

The availability of a patrimony of experiences, among which some possibility similar to the new one to be designed, can contribute as an incentive to the governance of non-formal and informal learning, together with knowledge management systems and, at the same time, to the improvement of organizational learning issues. The research described and the first considerations

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[36] AGARWALA, T. (2003) *Innovative human resource practices and organizational commitment: an empirical investigation, International Journal of Human Resource Management*, 14 (2), pp. 175-197.

transpired might then be considered as a first step in this direction, bringing an important set of data and practices, with whom it will be easier design upcoming researches with similar goals.