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MAPPING THE CONTEXT FOR TRANSFER OF FINNISH WORKPLACE DEVELOPMENT PRACTICE

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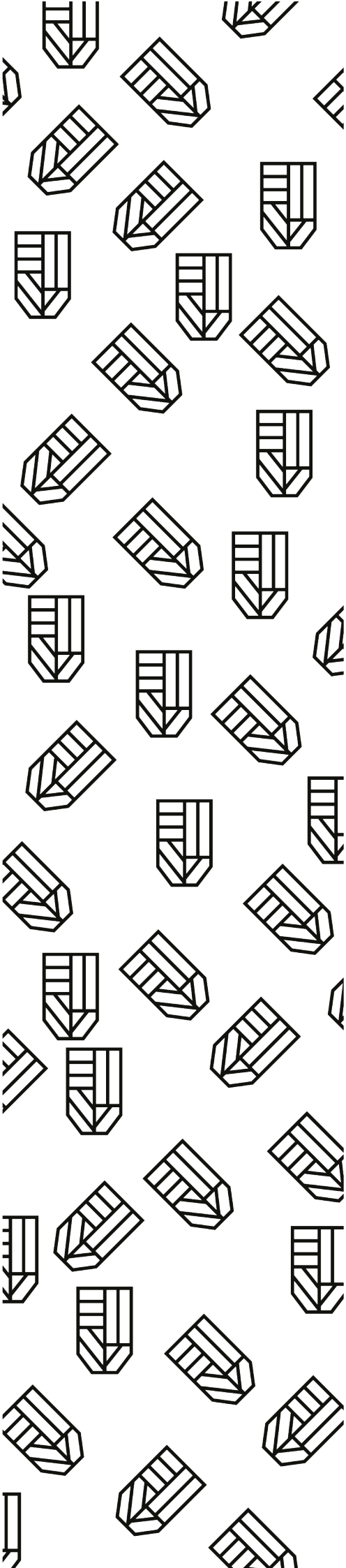

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Mapping the Context for Transfer of Finnish Workplace Development Practice – Finland, Hungary and Romania

Introductory remarks

One of the main economic engines both in Europe and in the Central and Eastern European countries is the small and medium-size businesses (SME) and this sector especially needs particular attention "if the Continent's nascent recovery is to gain momentum". (Anderson–Ott, 2013:3) In this context, there is a growing interest to look at best practices in the group of countries which are outperforming the others in the field of diffusing innovation as a source of sustainable competitiveness of firms operating in the SME sector.

It is a widely shared view that the human capital is the key source of the innovation, but this works only "… if there is an appropriate environment, in particular companies and organizations that take advantage of the talent and innovative capacity of the people they employ. Designing organizations and management practices that are conducive to innovation is part of the challenge." (Green – Lorenz, 2010:3). In this relation it is worth mentioning the OECD Innovation strategy, which indicates the key role of the diffusing practice of the workplace innovation. (OECD, 2010)

This size category of firms are playing key role in all the three Adaptykes countries (i.e. Finland, Hungary and Romania). For example, great majority (more than 90 %) of firms belonging into the SMEs represents the highest share of jobs in these countries. Due to this core importance of the SMEs in the countries surveyed, it is key policy challenge to develop 'innovation-enabling environment' in this sector. In creating innovation capacity of the firm, forms of work organization and their learning capabilities have core importance. For example, according one of the best documented report on the learning and innovation in the enterprises "… relationships exist between work organization, learning and innovation. There seem to be significant positive correlations between learning-intensive forms of work organization and

innovation performance, at least at country level. Countries showing higher levels of learning-intensive forms of work organization tend to rank higher in innovation performance." (Cedefop, 2012:7)

Comparing the innovation performance of the European countries, the best performers are the "Nordic" and "Continental" countries (e.g. Denmark, Germany, Sweden, **Finland**, Belgium, Luxemburg, Netherlands. "Post-socialist" countries are belonging into the "low" performer country cluster. (e.g. Bulgaria, Latvia, Lithuania, **Hungary,** Poland, **Romania** and Slovakia). (Cedefop, 2012: 45).

In addition, it is necessary to note that the innovation capacity of the SMEs is rather weak in comparison with the large firms in all types of innovations (e.g. technological and non-technological) and particularly in the field of organizational innovations (i.e. implementing new marketing methods, new business models, workplace innovations etc.). Knowing the generally observed close relation between the size-category of firm and innovation activity, it is a strategic challenge for the policy makers to improve the countries competitiveness via upgrading the innovation capacity of firms in the SMEs sector.

Due to the rather rich research experiences on technological innovations (Makó-Illéssy-Csizmadia, 2012), this report is focusing on the role of non-technological innovation, and especially on the innovative practices in the workplace. The rationale behind this approach is the general underestimation of the role of workplace innovation within the national innovation system and policy. Though, workplace innovations have significant impacts on the performance both the levels of the national economy and firm. In this relation, it is worth noting that the implementation of various forms of workplace innovation (e.g. High Performance Working Systems, HPWS) may result in 15-30 per cent performance premium in the firm. In this respect a visible divide is characterizing the countries in the European Union. For example, "… ***the greatest lack of investment in Workplace Innovation is in South and Eastern Europe"***. (Dortmund/Brussels Position Paper, 2012,)

Learning and transferring the experiences from the Nordic Countries, i.e. from Finland would conducive to increase the awareness of this problem and improve innovation capabilities of SMEs in the post-socialist countries (i.e. Hungary and Romania). This is the core aim of the

Adaptykes project which is focusing on learning and diffusing the extremely rich Finnish experiences through designing the training curriculum for the actors in the SMEs sector both in Hungary and Romania.

The various waves of the ***Workplace Development Program in Finland*** (TYKE 1996, TYKES 2004-2010, TEKES 2012-2018) have an ambition to "… renew the business operation of the companies through developing management and forms of working and actively utilising the skills and competencies of their personnel. The vision is that in 2020 Finland will have Europe's best workplaces." (Kotonen at. al. 2013: 2-3).

Various forms of learning – including formal and informal ones – might be an important predictor of the firm's innovation performance, because "Innovation sometimes leads to rapid obsolescence of skills and thus calls for regular workforce retraining. This is one traditional reason to support lifelong learning … **countries which are leaders in innovation are also those where companies offer more opportunities of learning and training to their employees**. (Green – Lorenz, 2010:3)

In designing the transfer of the experiences on the Finnish Workplace Development Program, instead of mechanistic benchmarking widely advised and used by the policy makers, the Adaptykes consortium members are using the concept of the intelligent or reflexive benchmarking which "… enables firms to learn from others, not by copying 'show cases', but by gaining a better understanding of one's own solutions, their strengths and weakness, when seen in light of what others do and what options they see. The idea of such a policy is not to achieve homogeneity but enable learning for diversity." (Schienstock, 2012:18) In addition, it is worth remembering the advice of Frederic Winslow Taylor who was one of the most important contributors of the „scientific management" movement or management science. According to him, implementation of a new organization or management system at the shop-floor level requires at least seven years learning process from the actors concerned by the changes. Without **developing the necessary competence and allocating time for learning** both individually and collectively, the anticipated organizational renewal via transfer of the Finnish experiences fail.

In relation with the methodology used, both quantitative and qualitative research methods were combined, that is statistical analysis of the national economies (SMEs) were enriched by

the deeper insight gained from the company case studies carried out in manufacturing and knowledge intensive business services (KIBS) in the countries involved in the Adaptykes project.

The comparative is divided in five parts. The first part is the introduction on the importance and key dimension of the workplace innovation. The second part describes the main features of the Finnish Workplace Development Programme. The third part presents the brief overview of the national economies surveyed. In addition, the regulatory and institutional environments for the SMEs sector are described. The fourth part is focusing on the core topic: comparison of the innovation and knowledge productions practices in the three countries of the research consortium. The conclusion tries to summarize the main lessons of the analysis and the last part of the research report contains the key messages learnt from the comparison of the countries surveyed.

1. A Broad-based Innovation Policy: The Finnish Workplace Development Programme

As Alasoini (2011:23-24) noted, the Finnish innovation policy approach, until the early 2000s, was characterised by "… though 'systematic', as 'narrow' in the sense that its focus was firmly on technological innovations, it concentrated on advances in certain branches and technologies, and it promoted innovation activity mainly by funding leading-edge firms and top universities and research institutes." The new innovation strategy – launched by Prime Minister Vanhanen's Government – "… is based on the idea that the focus of innovation policy should be shifted increasingly to demand and user-driven innovations and the promotion of non-technological innovation." In relation to this development it is worth presenting the main features of the ***Finnish Workplace Development program (TYKES).*** The program (2004-2010) aimed to improve both productivity at the Finnish workplaces and quality of working life (QWL) through supporting the diffusion of new organizational practices, focusing on the SMEs sector. Within the program 1,168 projects were funded to a sum over 71 million euros. The Program aimed to support the development of organisations in the following fields:

1). the *workplace development* projects covered such dimensions of the organizational practices as how to implement new working methods and processes in the working practice, developing management methods and in general diffusing new tools of HRM, improving cooperation and networking within and between firms, etc.

2) projects focusing on the *method development* intended to explore and exploit of the new technological potential, new models of work organization (e.g. High Performance Working Systems (HPWS), project-based organization etc.), implementing new business models (e.g. e-business model), supporting closer cooperation and interaction between suppliers and clients in the process of product and process innovation, fostering partnership and cross-sector cooperation to enlarge the knowledge pool for the SMEs and improve their position in the Global Value Chain (GVC).

3) developing *learning network* represents one of the most original part of the TYKES program which aimed to improve the collective learning/development capacity of the social partners (i.e. universities and their R&D units, private consulting agencies as bridging institutions

between academic and business community, and firms). Network development indicates that the Program developers were aware of the crucial importance of the "collective learning process" of the social actors in designing the program in a medium-term perspective (2004-2010).

Finnish partner (LUAS) in the Adaptykes project – exploiting the results of the Project - "… has developed training materials and training courses in adult education for the SME sector in order to introduce social innovation into the managerial-organizational profile of the enterprises. Short-term training courses have focused on specific needs of SMEs, while long-term development training programmes such as Master's degree programme of Small and medium size enterprises produce in-depth insight and development within enterprises." (Kotonen, et.al. 2013:3)

The following sections outline the main characteristics national economies and the SMEs contexts, with special focus on knowledge development practice and innovation. Knowing these contextual factors, it will be possible to prepare the smooth transfer of lessons learned from TYKES program and elaborate collectively – countries involved in the Adaptykes project – the training curriculum.

2. Brief Overview of the National Economies

2.1. Main Features of the Economy and Employment

Evaluating the various indicators of the Adaptykes countries' economies, we may identify visible differences. Finland has the best position in the majority of indicators (i.e. GDP, GDP per capita, employment rate and share of R&D in the GDP) in both periods: before and after the financial crisis and economic downturn (2008-2009). The position of the two post-socialists countries is different: Hungary has relatively better position than Romania in the indicators of GDP/capita and the share of R&D in the GDP. Spending on R&D has key role in shaping the knowledge development/training and innovation practices in the firm - which are the key topics of Adaptykes research consortium. In this case, Finland leading position is clear: its spending on R&D is three times higher than in Hungary and sevenfold higher in comparison to Romania. In this relation, it is necessary to note the modest improvement of this spending in Hungary. Between 2007 and 2011, the share of R&D expenditure has increased by 25 %. Employment rate was much higher in Romania than in Hungary, while the unemployment rate in Romania was lower - before and after crisis period – than in both in Finland and Hungary.

Table 1: Some Economic Indicators: Before and After Crisis (Finland, Hungary and Romania)

Indicators	2007			2009			2011		
	Finland	Hungary	Romania	Finland	Hungary	Romania	Finland	Hungary	Romania
GDP (md Euro)	**179.8**	99.4	124.7	**172.8**	91.4	118.2	**189.5**	99.8	131.3
GDP/inhabitant	**29 400**	9 900	5 800	**26 900**	9 100	5 500	**28 800**	10 000	n.d.
Employment rate (%)	**74.7**	57.3	58.8	**73.5**	55.4	58.6	**73.8**	55.8	58.5
Unemployment rate %)	6.9	**7.4**	6.4	6.4	**10.0**	6.9	8.2	**10.9**	7.4
R&D expenditure (% of GDP)	**3.47**	0.98	0.52	**3.94**	1.17	0.52	**3.78**	1.22	0.52

Comparing the share of employment by economic activities, we may say that the largest employer – except Romania in 2006 – is the "service and commerce" sector. In 2010, this sector became the largest employer in all countries participating in the Adaptykes project. The employment share of industrial sector is shrinking in the period observed (2006-2010). The share of employment in the industrial sector is the largest one in Romania while in Finland and Hungary is decreasing. Only tiny minority of people employed in the agriculture.

Table 2: Share of Employment by Economic Activities: Finland, Hungary and Romania (%)

Sector	2007			2010		
	Finland	Hungary	Romania	Finland	Hungary	Romania
I. Agriculture	**4.5**	3.35	2.97	4.5	**4.54**	3.16
II. Industry	37.4	32.30	**50.2**	34.2	30.7	**44.4**
III. Service and commerce	58.1	**62.85**	46.82	61.3	**64.75**	52.43
Total	100.0	100.0	100.0	100.0	100.0	100.0

2.2 Organizational Morphology in the Economy

The growing importance of the SMEs must be stressed – particularly – in the post-socialist countries (Hungary and Romania). In these countries, during the shift from the planned-economy into the market one in the 1990's, radical downsizing of the economy took place. To better understand the historical importance of this restructuring process it is necessary to remember the size structure of the former state-socialist firms. The planned economy was dominated by the large state-owned firms. (See the Table no. 34)

Table 3: Size Distribution of Manufacturing Firms: Planned versus Capitalist Economies (1970)

	Planned economy (1)	**Capitalist economy (2)**
All manufacturing firms		
1. Average number of employees per firm	197	80
2. Percentage of those employees by large firm firms (3)	66 %	32 %
Textile industry		
1. Average number of employees per firm	355	81
2. Percentage of those employees by large firm firms	61 %	28 %
The ferrous metal industry		
1. Average number of employees per firm	253	82
2. Percentage of those employees by large firm firms	61 %	28 %
Chemical industry		
1. Average number of employees per firm	325	82
2. Percentage of those employees by large firm firms	79 %	35 %
The food processing industry		
1. Average number of employees per firm	103	65
2. Percentage of those employees by large firm firms	39 %	16 %

Legend: 1. The sample includes Czechoslovakia, East-Germany, Hungary and Romani.

2. The sample includes Austria, Belgium, France, Italy, Japan and Sweden.

3. Large firms employ more than 500 people.

Source: Kornai, J. (1992) *The Socialist System: The Political Economy of Communism,* Princeton: Princeton University Press, p. 400.

Following the almost a half-century dominance of the large firms in the state-socialist countries (i.e. Hungary and Romania), the size structure of the economy changed dramatically during the 1990's and became similar to other economies in the EU-15. For example, the great majority of firms in Hungary (97.3 %) belongs into the category of SMEs and represents majority of jobs (55.8 %) too. The pattern of size distribution of firms is rather similar in Romania: the overwhelming majority of firms (91.6 %) is small and medium-sized, however much lower share of employment (40 %) generated by this sector. In the Finnish case too, SMEs is representing the dominant size category (96 %) within the economy.

In relation with the R&D expenditure by size category of firms, the following international pattern was identified in all three countries: large firms are spending – several times – more resources on R&D than smaller ones.

3. SME Sector in Comparison

3.1. Dominant Size Category, Legal-Administrative Environment and Competitiveness

Comparing the *size structure by economic sectors* in the countries participating in the Adaptykes project, we may say that a more balanced size structure is characterising both the Finnish and Romanian economies compared to the Hungarian one. For example in five sectors, the share of large firms is higher than the share of the SMEs in the Finnish case (i.e. "manufacturing", "water supply, sewerage, waste management and remediation activities", "information and communication", "administrative and support service activities", "public administration and defence, compulsory social security") and in three sectors in Romania ("transportation and storage", "information and communication", "administrative and support service activities). While in Hungary, the share of the large firms was higher (7.84 %) than the SMEs (1.83 %) only in the "transportation and storage" sector. In relation with the size category of firm, there is an almost general consent on the important innovation and

learning potential of the *"middle-sized" firms*. They are the source of the sustainable competitiveness. For example, the Germany's midsized companies ("*Mittelstand")* has a model role for other European countries using a strategy focusing on the market-niches. During the last decades, these firms progressively became global players. "They have provided China's "factory to the world" with its machine tools. The *Mittelstand* dominates the global market in an astonishing range of areas: printing, presses (Koenig & Bauer), licence plates (Utsch), snuff (Pöschl), shaving brushes (Mühler), flycatchers (Karcher). … 80 % of the world's medium sized market leaders are based in Germany and Scandinavia, successful *Mittelstand*-style companies can be found everywhere from the United States (particularly the Midwest) to northern Italy, so the model does seem to be transferable." (Schumpeter- Mittel-management, 2010: 71)

Comparing the three countries, share of the *middle-sized firms in Finland is two times higher than in Hungary and Romania* (8 versus 4).

Legal and administrative environments are important source of institutional enablers or constrains for the SMEs. In Finland to start business takes 2 weeks time and the cost around 400 euro and they require the respect of minimum standard of the environmental responsibility. (Doing Business, 2012.)

In the Hungarian case, the high administrative burden (i.e. growing bureaucracy, often changing regulation etc.) is still higher than the EU average, however some progress has been recorded in the recent years (e.g. 4 days is needed to start up a company, which is close to the EU Council target. The cost of the establishing a business is still rather high (400 euro) - similar to the Finland, where the indicator of GDP/inhabitants is three times higher than in Hungary.

Apparently, the administrative burden of company creation is the highest in Romania, " …the number of market entry procedures in Romania is the highest from the EU. They identified 16 procedures that have to be done before starting a business and calculated the cost of the new entities to be 15.31% per capita of GNP (the average in the Western Union being 11.92%)" (Kerekes-Coste, 2013:11) and 10,5 % per capita of GDP in Hungary.

*In relation to the competitiveness of the SME sector***,** we have to stress again the leading role of Finland. For several years Finnish economy was in the top ten position measured by the Global Competitiveness Index (2012). "The most important factor influencing *Finland's*

ranking are the transparency of public institutions, high level of education providing skilled workforce, well run and ethical private institutions and innovativeness, in which Finland is the 2nd most advanced in Europe. (Suomaki, 2013:9).

"*Hungary's* ranking in Global Competitiveness Index is 48 today (2011-12). The country's position has started to improve from 2009, and grows slightly until 2011." In this relation we have to note that "According to World Bank Enterprise Surveys (2009) the top five constraints to firm investment in Hungary are tax rates, political instability, tax administration, practices of the informal sector and corruption." (Kása, 2013:13-14)

According the Global Competitiveness Report, " …the rank of Romania has worsened from 2006 to 2012 for all of the following factors: Overall index, Basic requirements, Efficiency enhancers, Innovation and sophistication factors, Higher education and training, Labour market efficiency and Innovation. (Kerekes-Coste, 2013:13)

3.2. Business Environment: Doing Business, Finance and Internationalisation of SMEs

According to The "Ease of doing business", *Finland's position in overall ranking is 11th*, and "…it can be said, that Finland is, even with complex taxation, strict start-up processes and challenging financing situation, *amongst the easiest countries for doing business."* (Suomaki, 2013:10).

In the period of 2008-2012, *Hungary* has lost nine places (from 45th place to *54th place*), however some improvements were registered (e.g. ease of starting business, from 67th place to 52 places.) The position of Romania is even weaker. According to the World Bank Group's research - it has the *72nd position* within the 185 countries. However, some factors are improving (e.g. "doing business", "construction permit", "registering properties", "getting credit" and "paying taxes ") but other are deteriorating (e.g. starting business", "protecting investors", "trading across border", "enforcing contracts", "closing business"). The following table contains the selected factors influencing business practices in the Adaptykes countries.

Table 4: Ranking of Selected Factors Shaping Business Practice (World Bank Doing Business 2012)

	Finland	Hungary	Romania
Doing business …	10	54	72
Starting business	39	52	68
Dealing with construction permits	35	55	129
Employing workers	n.d.	81	168
Registering property	24	43	72
Getting credit	38	53	12
Protecting investors	66	128	49
Paying taxes	20	118	136
Trading across borders	7	73	72
Enforcing contracts	9	16	60
Closing business/Resolving insolvency	5	70	101

Source: The World Bank Group, Doing Business Ranking, 2012.

Access to the finance is the easiest *in Finland*, even in the current economic situation in which the conditions or procedures are more strict. As Suomaki noted "… if the applicant has a well-grounded business plan (and reasonable requirements) … the access to the finance can be considered easy. (...) Financing is a sufficient, yet in Finland still scarce, form of support for such companies. This is something the Finnish Funding Agency for Technology and Innovation, TEKES, is already providing, but the operations still require developing. (TEKES, 2012) In addition to TEKES, there are several expert organizations and institutions in Finland offering assistance to SME's regarding internationalization. (TEKES, 2012) (Suomaki, 11-13).

Finnish government is creating an enabling environment that facilitates for start-ups to move to global markets. Recent conference[*], at which investors, entrepreneurs and executives from large companies were looking next potential Finnish giant firm from Northern Europe, illustrates in a new turn in the development in the Finnish high-tech sector. "… in the process of shifting its focus from its struggling stalwart, Nokia, to some country's smaller companies

[*] The Conference was held in November 2013 in Helsinki, where Jyrki Katainen, the country's prime minister made an appearance too, reflecting the high priority of events for the government.

… The sector's most recent success is Supercell, the online gaming company … Last month, the Japanese telecommunications giant SoftBank agreed to buy a 51 percent in the Finnish company for 1.5 billion. The deal valued Supercell at roughly the same level as Zynga, an American rival whose games gained popularity on Facebook." (Scott, 2013: 13).

In relation with the access to finance *in Hungary*, it is necessary to note that the overall ranking of the country dropped from average to below the EU average. However, in the last fifteen years the conditions to get access to bank loan improved, in spite to the regular complaints of the entrepreneurs.

"The Hungarian experience – similarly to other transformation (i.e. former state-socialist) countries – is that lack of finances is not an important obstacle to the creation of small firms, which rely on informal sources or, for some firms' parent companies. However, *the inability or unwillingness to access external finance is critical for the development of these SMEs*. Since 1999 financing issues have become increasingly less problematic, reflecting the fact that commercial banks and savings cooperatives increasingly served SMEs with new loan products and services. In the WB-DB ranking Hungary gets a fair 28 in the overall ranking and 10 in that referring to EECA for getting credit." (Dallago, 2012:11)

In the *Romanian case***,** the financial context is quite reasonable. "The financial crisis has created a difficult environment for Romanian companies. However, the conditions for the access to various accesses to finance for SMEs are quite reasonable. The proportion of rejected loans recorded a decrease from 48% in 2009 to 18% in 2011. The share of Romanian business owners who report that they have noticed deterioration in the willingness of the banks to provide loans has remained stable of 41%, which is a high level and well above the EU-average of 30%. (EC, 2012) (Kerekes-Coste, 2013:13)

Beside the regular complaints of the entrepreneurs on the financial conditions of their business in both Hungary and Romania, we have to share again the following diagnosis of the above quoted Italian economist: "The limited financial penetration is due to different factors: ignorance or worry of many entrepreneurs of the existing possibilities and their features and fear or inability of growing; insufficiently developed guarantee and insurance system; weak reputation and trust preventing the matching of demand and supply; fear to weaken or jeopardise the owners' control over the enterprise. These problems require a broad spectrum of financing solutions and education of entrepreneurs." (Dallago, 2012:11)

As concerning the a*ccess to the international market***,** the internationalisation of Finnish SMEs takes time which is necessary for the learning process. For example, internationally successful firms firstly were successful in the local and national markets. In addition, we have to note that *Finland* has top position both in know how and product development, but less advanced in the fields of commercialisation and competences related with the business operation. Although, export is dominated by the ten largest companies. For both the SMEs and the large firms the most important export target region is the European Union.

In contrast, in the *Hungarian* case, the involvement of the SMEs in the international trade is rather high in an international comparison (35.3 % of the national export). "Top barriers include inadequate quantities of, and untrained personnel for internationalisation and limited or problematic access to foreign markets. The latter includes limited information to locate and analyse markets, and identifying foreign business opportunities and barriers belonging in the business environment, like unfamiliar exporting procedures and paper work. Working capital to finance export is apparently sufficient for high-growth SMEs, but is an important barrier for more traditional enterprises … advantages deriving from EU integration, Hungary has an informal knowledge and relational advantage in neighbouring countries in the regions inhabited by Hungarians." (Dallago, 2012:11)

In *Romania***,** the rate of internationalisation of companies is particularly size-dependent: companies with larger size are more active in the international markets, too. "…for the average European SMEs Europe remains the main and key trade partner across all sectors and company sizes and even more so in the case of services. SMEs themselves are showing that internationalisation is growing well beyond just exports and moving into more developed levels of cooperation." (Kerekes-Coste, 2013:15). However, the share in export of the Romanian SME is almost the same as in the Hungarian case.

4. Human and Structural Capital Formation and Innovation

There is a general consent among the experts dealing with the firm's innovation that investing in intellectual capital[**] may boost sustainable competitiveness (Villalba, 2006). Intellectual capital is composed by the following components:

1). *Human capital*, represents investment in formal and informal learning (e.g. Continuous Vocational Training, CVTS),

2). *Structural capital* related investments aimed to develop learning-intensive or innovative organisation or technologies in the workplace "… leading to informal and non-formal forms of learning at the workplace. Organisational capital is considered to be the part of structural capital. (Cedefop, 2012:22),

3). *Relational capital* – customer capital refers to the company's relevant external relations to customers, strategic partners and stakeholders. It "…enables the organisation to absorb external capital… It leads predominantly to informal and non-formal forms of learning, but might also result I more formal modes of learning where relations between industrial organisations and educational institutions are concerned."(Op.cit. 2012:22) In this relation we agree with the following statement that "Firms are not islands but are linked together in patterns of co-operation and affiliation. Planned co-ordination does not stop at the boundaries of the individual firm but can be effected through co-operation between firms." (Brusoni – Prencipe – Pavitt, 2001:598)

Our analysis – primarily - is focusing on the roles of the human and structural capital in the development of innovation or dynamic capabilities of the firm.[***]

[**] „Intellectual capital is considered to be an intangible asset that includes, *inter alia,* investment in research and development (R&D) activities, software, marketing and organisation as well as business practices." (Cedefop, 2012:2)

[***] "Dynamic capabilities … are defined, as the ability to change routines and procedures in order to reconfigure and mobilize the more intangible and tacit resources in the firm." (Nielsen, P. 2012:3.)

4.1. Investment in Human Capital: Visible Divide between Finland and Post-Socialist Countries

The analysis of the "*human capital formation"* is focusing on the roles of the *life-long learning and the adult participation in the education and training*. In the countries surveyed, Finland has a leading-edge position, followed by Hungary and then by Romania. The differences between Finland and the two post-socialist countries, Hungary and especially Romania are shocking. In the case of the life-long learning the Finnish participation rate is more than two times higher than in Hungary and almost twenty times higher than in Romania. The gap in the "adult participation in education and training" in the Adaptykes countries is even wider: in Finland more than one fifth of the adults participate in education and training but in Hungary and in Romania less than three per cent of them. It means that in Finland seven times higher the share of adults participants in education and training.

Table 5: Participation in the life-long learning and adult participation in education and training: Finland, Hungary and Romania

Forms of knowledge development	Finland		Hungary		Romania	
	2006	2011	2006	2011	2006	2011
Participating in life-long learning	20.9 %	21.4 %	8.5 %	8.0 %	1.1 %	1.4 %
Adult participation in education and training	23.1 %	23.8 %	3.8 %	2.7 %	1.3 %	2.7 %

Source: EUROSTAT, 2006-2011.

According to the Cedefop (2012) report, instead of the tertiary education, firm-specific *Continuous Vocation and Training (CVT)* is playing crucial role in the innovation performance of the firms. In this field, there is a "… divide between countries in Southern and Eastern Europe and those in Central and Northern Europe. The first are characterised by both low levels of training provision and low innovation performance, while the latter show relatively high levels of training provision and innovation performance." (Cedefop, 2012:40). Focusing the training practice in the countries involved in the Adaptykes project, we may identify the following patterns:

Firstly, following the international trend, the intensity of the company training is shaped by the *size category of the firm*: larger firm provides more vocational training courses to their employees compared with the smaller firms.

Secondly, in the *SME sector*, in all dimensions of the company training practices (i.e. availability of training programs, share of participating firms, share of enterprises having training plan and budget.) *Finnish firms have the "leading-edge" position*, followed by the Hungarian and Romanian firms. However, in the case of "distribution of forms of training" and

"share of employees participating in the CVT courses" Romanian firms have better position than Hungarians.

Thirdly, *in the group of the large firms, company training practice has both similarities and differences.* Similarities were identified in the cases of "enterprises which have CVT", the "enterprises which have any type of CVT" and "enterprises which have any type of other forms of CVT". In contrast, visible differences were found in the field of "enterprises having a training planning/budget": larger share of Finnish (80 percent) and Hungarian firms (81 percent) have such type of activities than Romanians (52 percent). Similarly, in relation with "distribution of forms of training", again, Finnish firms have relatively better position (91 percent) in comparison with the Hungarian (79 percent) and Romanian (77 percent) ones. However, in the post-socialist countries higher share of firms have "CVT courses" and "any types" of CVT" than in Finland.

In relation with CVT courses – presented in the next table – it is necessary to stress the often underestimated impact on innovation of the *informal forms of knowledge development* (i.e. "other forms of CVT). Beside formal organised activities for learning presented above, "… informal learning activities, which constitute the main source for tacit knowledge as well as the conditions in place for knowledge creation, what is here called the knowledge enabling environment." (Villalba, 2006:iv.)

Table 6: Continuous Vocational Training: the Adaptykes Countries in Comparison

Characteristics of training	SME sector						Large firms (250-)		
	Small firms (10-49)			Medium-sized firms (50-249)					
	Finland	Hungary	Romania	Finland	Hungary	Romania	Finland	Hungary	Romania
% of firms having CVT courses	**62 %**	32 %	12 %	**82 %**	65 %	28 %	89 %	**92 %**	**92 %**
% firms having any types of CVT	**70 %**	43 %	12 %	**91 %**	74 %	36 %	90 %	**95 %**	**95 %**
% of firms having any type of other forms of CVT	**51 %**	31 %	31 %	**81 %**	58 %	29 %	**84 %**	**84 %**	**84 %**
% of firms having training planning and/or budget	**31 %**	11 %	6 %	**60 %**	38 %	20 %	80 %	**81 %**	52 %
Distribution of forms of training	**67 %**	47 %	51 %	**76 %**	56 %	62 %	**91 %**	79 %	77 %
% of employees (only firm with CVT) participating in CVT courses	**49 %**	30 %	46 %	**40 %**	21 %	37 %	**52 %**	24 %	42 %

Source: EUROSTAT, 2011.

4.2. Structural Capital Formation: Gap between Finland and Post-Socialist Countries

The other important factor shaping the innovation capabilities of the firms is the *structural capital* which is identified here by the *forms of work-organisation*. Four types of work

organization – representing different learning/innovation opportunities – were distinguished (Valeyre at. al. 2009:9-13). In characterising the main types of work organizations, descriptive statistical and more sophisticated methods of analyses were used. A three-level variable measuring the use of team-work, distinguishing between autonomous and non-autonomous team-work and no-teamwork and on 15 binary variables to measure characteristics of work (e.g. measuring task rotation, measuring autonomy in work (both method and rate), various types of constrains in work (i.e. norm-based, hierarchical, horizontal, automatic), repetitiveness of tasks, monotony of tasks, quality supervision, task complexity and learning dynamics in job (i.e. learning new things and problem solving requirements). Using these variables, multi correspondence and cluster analyses were used to identify the following forms of work organization:

1: *Discretionary learning forms* are characterised by the overrepresentation of the variables measuring autonomy in work, learning and problems solving, task complexity, self-assessment of quality of work etc. These characteristics of work correspond to the features of the learning organization or the "adhocracy" (Mintzberg, 1979) relying on "… more upon individual specialist expertise organised in flexible labour market-based project teams capable of speedy responses to changes in knowledge and skills, and integrating new kind of expertise to generate radical new products and processes." (Lam, 2005:127)

2: *Lean production,* in this type of work organization such variables as teamwork – autonomous and not-autonomous – job rotation and multi-skilling are overprepresented. In addition, this category of work organization requires self-assessment of quality of work and demand driven constraints in work (i.e. indirect indicator of the just-in-time production). This form of work organization has a more limited learning and innovation capabilities in comparison to the "discretionary learning form". For example, the archetype of this form of work organization if the "Japanese-organisation" or "The J-form of organization relies on knowledge that is embedded in its operating routines, team-relationships, and shared culture. Learning and knowledge creation in the J-form takes place within an 'organizational community' that incorporates shop-floor skills in problem solving, and intensive interaction and knowledge sharing across different functional units…tends to develop a strong orientation towards pursuing an incremental innovation strategy and do well in relatively mature technological fields characterized by rich possibilities of combination and incremental

improvement of existing components and products (e.g. machine-based industries, electronic components, and automobiles). (Lam, 2005: 128)

3. *Taylorist form* is characterised by hierarchical structures, various constraints in work, repetitiveness and monotony of tasks, however often teamwork and job rotation used to improve flexibility of production or services (i.e. 'flexible" or 'neo-fordism', Makó, 2005.) Required skills of workers or employees are limited and easily interchangeable either by other workforce or machine. (Arundel et. al., 2007).

4: *Traditional or simple structure form*, where the working and managerial methods are not formalised/codified. Informality of working practice dominates. According to Mintzberg's (1975) definition, the "simple structure" characterised by "An organic type centrally controlled by one person but can respond quickly to changes in the environment, e.g. small start-ups in high technology." (Lam, 2005:120).

According to the secondary analyses of the European Working Conditions Survey- 2005 (Valeyre, at. al. 2009), there are marked *differences between the three Adaptykes countries*. In Finland higher share of employees than the EU-27 average (51.6 % versus 38.4 % in the EU-27) belongs into the most innovative (discretionary learning) work organization followed by Hungary (38.3 %) and Romania where the share of the work organisation with high innovation/learning potential is well below (24.0 %) of the EU-27 average. However, in this country the share of "flat organization'' characterised by limited learning capability is above the EU-27 average (33.4 % versus 25.7 %), similarly, the rate of the Taylorist or mass-production work organisation is also above the EU-27 average (27.6 % versus 19.5 %). Beside the good position of Hungary in the share of the innovative/learning organisation, we have to mention that the higher rate (i.e. above of the EU average, 19.5 %) of less-innovative Taylorist work-organization. The existence of this dual distribution pattern of work organisation (work-organisation with high innovation/learning potential versus work-organisation with least learning/innovation potential) indicates the "fragility" or "asymmetric" nature of the innovation potential of the this country.

Table 7: Distribution of Work Organisation Classes by Adaptykes Countries (%)

Countries	**Work organisation classes**	**Total**

	Discretionary learning	**Lean production**	**Taylorist**	**Traditional, simple**	
Finland	**44.9**	29.9	12.6	12.7	100.0
Hungary	38.3	18.2	23.4	**20.1**	100.0
Romania	24.0	**33.4**	**27.6**	14.9	100.0
EU-27	**38.4**	**25.7**	**19.5**	**16.4**	**100.0**

Source: Valeyre at. al. (2009:22)

4.3. Innovation Performance: Strong Position of Finland

In the field of investments in *human* and *structural capitals* Finland visibly has a leading- edge position in comparison with Hungary and Romania. These investments through the development of absorptive capacity[****] of the firms are creating an innovation friendly working environment. As a result, Finnish firms are the best performers in both product and process innovation in all size categories of firms.

Table 8: Technological Innovations in the Adaptykes Countries (%)

Forms of innovation	**Small firms (49-50)**			**Medium sized firms (51-249)**			**Large firms (250 +)**		
	Finland	Hungary	Romania	Finland	Hungary	Romania	Finland	Hungary	Romani
Product	**13.0**	6.0	1.9	**12.7**	10.0	3.5	**15.1**	12.0	6.4
Process	**9.4**	2.0	3.1	**11.4**	9.0	4.6	8.4	**17.0**	9.0

Source: Eurostat, 2010.

In relation with the *non-technological innovation*, the following types of them were distinguished:

- marketing innovation,
- organisational innovation,
- new business practices for organisational practices,
- new methods of organising work, responsibilities and decision making,
- new methods organising external relations (networking).

Comparing these forms of non-technological innovations, the statistical analyses reveal rather different practices. In the cases of "*marketing" and "organisational" innovation Finland* has a leading role. The results on the two post-socialist countries indicate that in case of the

[****]Absorptive capacity generally defined "… as ability to recognise the value of new information, assimilate it and apply it to commercial ends. It is considered to be one of the most crucial aspects of an organisation's innovative ability and refers to the organisation's general ability to use external information and opportunities (e.g. new technologies or new forms of organisation) for its own innovation purposes." (Cedefop, 2012:19)

"marketing" innovation, Romanian firms are in slightly better position, however in the medium and large firms, their performance is rather similar. Romanian small and medium sized firm are more active in implementing "organisational" innovation, but in the large firm's category Hungarian firms have better results.

In the case of the *remaining categories (i.e. "new business practice", "new methods of organising work" and "networking") post-socialist countries are better performer..* Between the two post-socialist countries the following differences were found. In relation with the "new business practices", in the group of small firms no differences were registered, but the Hungarian medium and large-sized firms have better position. Implementing "new methods of organising work", in all size-category, Romanian companies are the better performers. Finally, in the case of "networking" Hungarian small firms, but in the case of "medium" and "large" firms Romanians have better position.

Finally, we intend to compare the Adaptykes countries by such complex indices as the Innovation Union Scoreboard (IUS) (Note: IUS is composed by 25 indicators containing enables, firm activities and outputs. See in details: Cedefop, 2012:103). Both before and after the global financial crisis and economic downturn, we may say that Finland performed better than Hungary and Romania. The following table is putting these countries results into a wider European context.

Table 9: Significant Varieties in the Innovation Performance of the EU-27 Countries (IUS – Eurostat)

	Before financial crisis (2007)	**After financial crisis (2010)**
Above EU-27 average	Continental countries (Except France), Northern countries - **Finland)** Anglo-Saxon countries	Continental countries, Northern countries – **Finland)** Anglo-Saxon countries
Below EU-27 average	Mediterranean countries, Post-socialist countries (**Hungary, Romania)**	Mediterranean countries, Post-socialist countries (**Hungary and Romania)**

Source: Makó, 2013.

5. Enablers of Workplace Innovations: Dual Commitment, Improved Communication and Knowledge Management (Lessons from the Company Case Studies)

5.1. Short description of the cases

CosmRo

The first Romanian case study, CosmRo, is about a Cluj Napoca-based cosmetics producer company established in 1945. At present the company offers over 200 types of cosmetic and domestic use products including cosmetic and domestic-chemical ones. CosmRo is a joint-stock company having over 850 shareholders. The 45% of the total shares are owned by the employees, 39% is owned by previous employees, and 15% is owned by the so-called collaborators. CosmRo is the biggest producer of cosmetics in Romania and detains national and international renowned brands. The products are exported on all the world market, the main international markets being Japan, Liban, Arabs Emirates, and European countries such as Hungary, Spain, Italy, or Greece. The company has 586 employees, 398 of which are blue-collar workers. The innovation practice investigated was the implementation of an employee performance evaluation system. The most important positive impact of this change was the improved communication between employees and supervisors. In some cases it even lead to an increase of productivity. Due to the implementation of the evaluation system, the whole organization went through positive changes with regard a better planning and upgrading strategy by improvements in setting priorities.

IntegraHR

The second Romanian case study is a micro firm established in 2009 having 6 employees: the 3 founder members, a marketing specialist, an HR specialist, an assistant manager and an unqualified worker. IntegraHR offers human resources services for both individuals (B2C) and

organizational (B2B) clients. The company competes on the local market, their main competitors are similar micro and small firms. IntegraHR has its distinctive value in the integrated character of their services provided and in their customer orientation. This is well reflected in the fact that after the first two years of activity the company had over 49 clients, out of which 42% were customers with whom IntegraHR delivered more than two collaboration contracts. The innovation practice investigated was the establishment of an assessment centre which became part of the services with the aim to hire the best fitted candidates to the vacant positions. It represents a step in the selection process of the future employees and includes exercises, situational tests, aiming to emphasise the candidates' competencies. The establishment of the assessment centre is an innovation extending and improving the quality of services, this is the most important direct outcome. An indirect outcome was that the role of the customer also increased. For designing the assessment centre, the client had to offer a clear picture of the vacant job and their requirements. This helped in better understand and satisfy customers' needs. (and consequently supported the company in fulfilling them.)

Lahden Autokori

The *first Finnish case study* concerns the company called Lahden Autokori Oy (LAK) which manufactures buses and coaches for Scania: Scania delivers a chassis to LAK and LAK builds a body on the chassis. The product is called OmniExpress and belongs to Scania's product family. The company has approximately 200 employees, 143 of which are blue collar workers. The company was established in 1945. The workplace innovation performed at the company is a visual tool called TITO, which enables the operators to observe and raise deviations and react accordingly. It also creates data for analysing and is a basis for continuous improvement. As an outcome of the organisation innovation, meetings were held twice a week where employees from all functional units concerned were involved and revised the production process looking for causes and possible solutions for the deviations. The most important impact of the implementation of this tool was the decreasing number of late deliveries. As a side effect, we can mention the improvement in internal communication and the creation of a new organizational culture where deviations and warnings are encouraged to be announced

by having a structured, common simple visual tool[1] for reactive and proactive actions in order to have a basis for continuous improvement.

Infocare

The *second Finnish case* is about a large IT company having approximately 400 employees in 10 local offices throughout Finland. Infocare Oy is a comprehensive IT-solutions provider with more than 25 years experience in the field. Company provides services for both B2B and for B2C segments. Company (brand) is independent provider of IT-services for both customer segments. The company's annual turnover is 31 million euro. The workplace innovation examined consists of the deployment of teamwork at all levels of the company. The project was started after Infocare Oy first tried to develop their operations through changing their operating system (OS). At early stage after the implementation of the new OS, the company realized that the change of OS, which delivered the work orders for the technicians, didn't solve their problems or increase the company's productivity. This lead to the point in which the employee satisfaction was all time low and productivity started to suffer. It is worth noting that the project was driven from bottom to up in the organization, not as traditionally from top to bottom. As we mentioned earlier, the main drivers of the innovation were low employee satisfaction, weak financial performance and weak service quality. The implementation process was still ongoing during the field work but the results were already visible at all these three levels.

PaySoft

The *first Hungarian case study* was carried out at PaySoft, a company offering comprehensive software applications and services. The company was founded at the midst of the 1980s and has a unique portfolio of complex solutions for payroll, labour and human resource (HR) management for companies operating in Hungary. By now, PaySoft provides services for 3000 clients and therefore supports smooth payroll management for approx. 1 million employees in Hungary (the total number of employees in Hungary is below 4 million). As regards the

[1] This was a white board divided into 4 parts according to the production flow: delivery, production, purchase and design. Each coach or batch of coaches had its own card and the response time as well as any deviations detected for each production phase was indicated on the board. This tool made it easier for the employees to visualise and locate the problems and encouraged them to find a solution together.

annual turnover in absolute terms, PaySoft has been performing surpassingly since its foundation. (In 1989, the firm realised HUF 4 million, this amount reached HUF 650 million seven years later, and it was HUF 2.9 billion in 2010 (approx. EUR 10.5 million)). The organisational innovation investigated was the establishment of an independent project management directorate. The aim of this re-organisation was to improve internal communication, to improve the quality of resource planning and management in order to diminish delays in service provision. The outcome of the innovation was a higher quality of services and improved customer satisfaction.

Bihar Co.

The *second Hungarian case study* was about a Hungarian medium-sized manufacturing company. Bihar Co. was founded in the 1950s. By the 1980s it had grown to become a medium-sized industrial firm. In 1993 the company was transformed into a joint stock company – but still state owned - and in the course of the privatization Hungarian private investors became the owners. The privatisation was a typical case of the Management By Out (MBO). Bihar Co. as a vehicle industry supplier manufactures parts, characteristically sheet metal fabrication, sheet metal formation. The company offers a full range of services in order to meet the supplier requirements of the extremely demanding automotive industry. The technological and organisational innovation carried out at the company was a project aimed to extent the product and the competence portfolio of the company. The core activity was the production of the sheet-metal components by compression and this was extended by the tool development and manufacturing activity. A separate organisational unit was set up. The main driver of the workplace innovation was to save the company's market position and the employment. The implementation was successful; a new, additional competence was created that improved the competitiveness of the company.

Table 10: Main characteristics of the case studies investigated

	CosmRo	IntegHR	Lahden Autokori	Infocare Oy	Bihar Co.	PaySoft
Country	Romania	Romania	Finland	Finland	Hungary	Hungary
Year of est.	1945	2009	1945	1987	1950s	1980s
No. of employee	586	8	200	400	153	150
Ownership	Employees and collaborators	Management	Family	Investors	Management	Hungarian
Sector	Cosmetics producer	HR services (B2B & B2C)	Manufacturing	IT solutions	Manufacturing	IT solutions
Markets	International	Local	International	National	International	National
Innovation	Employee performance evaluation system	Assessment centre	TITO: detect problems in the production process	Introduction of autonomous teamwork	Extension of the product and competence portfolio	Establishment of a project management directorate

5.2. Common lessons learned

In this report we can give only a short overview on the case studies carried out, therefore we would like to call attention to the most important common elements between the cases. We will present these communalities by regrouping them into three main areas: commitment, communication and corporate culture and knowledge management.

Dual Commitment

In each case it was a necessary condition of the successful implementation of the organisational innovation that the commitment of both the employees and the top management was ensured. It was important that the management was well aware of and agreed upon the targets, timetable and costs of the projects. They understood the importance of the innovation and ensured the necessary resources needed by the project. In lack of this commitment, most of the organisational innovation can not be successfully implemented. In

parallel with this, successful organisational innovation requires that the rank-and file employees were also committed toward the project. This was ensured by a much more open way of communication within the company. In most of the cases companies introduced regularly held meetings where employees from all levels and all departments were present. This is a decisive factor especially in the case of larger companies with functionally separated organisational units.

Companies reached this aim using various tools. In the case of Infocare the innovation project was driven by a bottom-up approach which yielded to employees' relatively large autonomy. Thus, employees were not only informed on a regular basis about the progress of the project and the company, but they were actively involved in the design of the project. In the case of Lahden Autokori, employees' commitment was ensured by encouraging workers to take more responsibility. These steps decreased the resistance to the changes from the part of the employees. It is interesting to note that in the majority of the cases such resistance affected more the older worker groups and the innovation process revealed inter-generational conflicts within the company. However, significant differences were identified in the way how the companies tried to solve these problems. The Finnish company, Infocare increased the autonomy and the commitment of its employees, while its Hungarian counterpart, Bihar Co. simply fired some of their older employees and hired younger ones. This caused significant problems later on as some part of the knowledge of this employee group was also lost.

Corporate Culture based on Improved Communication and Collective Learning

Another type of conflict revealed by these innovation projects was detected between blue-collar and white-collar workers. The so-called TITO-project[2] served as a connective tool and method between blue-collar and white-collar workers. In addition, before the implementation of the project, employees tended to hide the problems, while TITO-project encouraged to raise them. A special attention was paid on not to blame anyone for any delay or deviation as the aim of the project was to detect them and to find a solution. Before the project, the deviations were used to be handled behind the "closed doors" and there were no experience of using visual tools. Most of the operators relied on their own Excel-files and the old methods

[2] The abbreviation stands for the Finnish words "tilauksesta toimitukseen" (in English "from order to supply").

being used for years. Thus, an unintended outcome of these projects was a kind of forced cooperation between functionally separated working groups which improved the reliability of deliveries.

This issue leads us to the next common feature of organisational innovations investigated, namely to the changes required in the corporate culture. Open and intensive communication is one of the most important elements of this change. In the case of Bihar Co., an intensive communication campaign was initiated by the management at the beginning of the project. It took form in both formal and informal meetings designed with employees. A system of regular formal weekly meetings was developed, where the managers informed the employees about the planned changes.(their aims). The deputy CEO, who was responsible for the change management process has been consulted with the employees before any decision making. In the opinion of the interviewees, without involvement of the staff, the action plan wouldn't have been a result of joint efforts of management and rank-and-file employees, which have accelerated the created positive impacts on the expected outcomes.

In the case of PaySoft, the informal human relations and knowledge sharing have been long traditions in the firm that supported the implementation process. Software developers regularly held informal meetings where professional issues were discussed. The developers should possess a heterogeneous competence-mix that contains both IT-related skills and a relatively deep knowledge of the HR administration processes (including payroll administration). As a result developers are traditionally open for external knowledge sources and are forced to cooperate with other business units. On the other hand this very specific knowledge created a closed internal labour market where the human relations of the different actors are very stable and predictable. In case of the payroll specialists the instability of the external (legal) context caused a strong pressure towards cooperation and collective learning that is an important prerequisite of the internal knowledge flow.

In the case of Bihar Co. when older employees left the company in an increasing number, the management had (also) to find a balance or a "right mix" between the knowledge profiles of the younger and the older generations. The older employees lacked the necessary IT knowledge, while their younger colleagues learned it fast. Therefore the company implemented a semi-autonomous team work system. Based on the Toyota Production System (TPS) principles creating a mentality of team-work, was an appropriate method to improve

the mutual learning of young employees with excellent IT skill and older ones with developed practical knowledge. The teams coordinate the work, motivate their members, and learn from each other. While teamwork became critical for the successful knowledge transfer, the group did not diminish the importance of the competent and higher performer individuals have key motivational role in the working teams. Years were devoted to help individuals to develop depth of technical knowledge, a broad range of skills, and a reflexive thinking in adopting the teamwork philosophy.

Focusing on Knowledge Management

After the problems related to how to increase the commitment of the management and the employees, the introduction of an open way of communication and other changes in corporate culture, the third main area of problems to be handled is the issue of knowledge management. (This was of course partially covered by some of the previous points but it worth dealing with it more explicitly.) Firstly, in order to run successfully such innovation projects (in companies) some basic skills are required from the part of the management. These are the followings: cross-functional managerial skills; process control and follow-up; skills required for efficient team-working and communication. It was an important gain in most of the cases that the top management was trained to ensure that they possess these core competencies. As we mentioned earlier it was also very important the engagement/commitment of top management in the designing aims, timings and the resources needed for the innovation projects. Some companies, like Infocare, even contracted an external consultant company who was responsible for the implementation and the supervision of the project.

In the case of Bihar Co., it became clear that the most challenging problem was not the renewal of the technology itself but the renewal of the company's knowledge pool required by the new technology. This problem led these companies to spend more on training of their employees and to modernise their internal knowledge management and knowledge sharing system. At Bihar Co. for example, the number of training participants increased by more than 130%, while the number of employees increased within the same period of time with 48%. In the case of Infocare, the company decided to build an internal learning academy in order to strengthen its knowledge development and knowledge sharing system. This academy is also provided by an outside company, but it's been built together with Infocare Oy. It includes what

is called knowledge passport for workers. The trainings provided through the academy are published in company's internal website and all personnel have the possibility to participate to these trainings. In the end, it's between employees and superiors together to decide whether employee needs the training provided through the academy. One of the trainings provided through this academy is the superiors' training, mentioned earlier. Many of the interviewed persons welcomed IC Academy and saw it as an opportunity to improve their know-how.

It is also interesting to note that previous project experiences have important impact on the implementation of workplace innovation initiatives. This may represent both advantages as well as disadvantages for the ongoing project. In the case of Infocare, employees' commitment towards the innovation project was low at the beginning and then it has been gradually improving during the project lifetime. In contrast, in the case of Bihar Co. previous bad experiences of similar projects served as important lessons for the innovation investigated. This phenomenon calls the attention to the importance of the necessary social time and collective learning process required by designing and implementing organisational innovation. The management secured five years for the implementation of the project with the aim to develop new business practice.

Finally, we have to stress the experiences of company case studies which called our attention to the numerous previously hidden problems of the organisations. These may include the followings:

- Lack of a shared social identity
- Problems arising from different areas of expertise
- Internal conflicts (e.g.: professional borderline – job title)
- Generational differences/tensions
- Problems developing sharing beliefs, assumptions and cultural norms.
- Impacts of the previous working experiences
- Misconceptions and anticipations on the planned changes
- Heritage of the previous organizational culture
- Maintaining motivation of employees
- Creating trust between employees having different skills and experiences.

It is also important that the management has to be open to identify such problems and seek continuously for their possible solution.

6. Summary

Workplace innovations have positive impacts on the economic performance measured at both national and micro (firm) level. Being aware of the long-term social and psychological consequences of the high unemployment rate in the EU – especially in the young population – it is worth stressing the importance of the inclusive growth conditioned by the innovation. According to the experiences of the methodologically well prepared systematic empirical research carried out by the World Bank researchers "… more innovative firms hire a larger share of unskilled workers relative to non-innovative firms … the share of the workforce that is unskilled contribute more to employment growth for firms that innovative (in products and/or process) than for non-innovators." (Dutz-Kessides-O'Connell-Willig, 2011:25)

This comparative report aimed to map the context for the transfer of the *Finnish Workplace Development Program (FWDP)(TEKES)* experiences and to design the training content (curriculum) for the SMEs in the adopting countries (Hungary and Romania).. By doing so, we analyzed the the following issues:

1. Main features of the national economies,
2. Characteristics of the SMEs
3. Interplay between human, structural capitals and innovations,
4. Company case study experiences

Before describing the key economic indices of the countries participating in the Adaptykes project, it is worth to stress the key lessons learnt from the *FWDP (TEKES)*. The strategic characteristics of this program are the broad-based innovation policy and the shift from the exclusive focus on the technological innovations to the non-technological and user driven ones. In addition, the *FWDP(TEKES)* aimed to create and diffuse learning networks between the academic and business communities and the government agencies with the ambition to improve the "collective learning" capabilities of the social and economic actors involved into the Program.

Comparing the national economies in the three countries of the research consortium, Finland has the best position – only exception is the employment. In relation with the size structure or organisational morphology of the economies, it is necessary to call attention to the long-dominance of the large firms in the former state-socialist economies (Hungary and Romania). However, in a historically short period of time, the size structure of firms became rather similar to the Finland and to other core member states of the EU.

Identifying similarities and differences in the SME sector, we have to stress the strength of the Finnish economy, which has the largest share of the middle-sized firms characterised by the internationally recognised high innovation potential in comparison with the post-socialist countries. In spite of the usual complaints of the Finnish entrepreneurs on the difficulties of creating and running business, the legal and administrative environment is the friendliest in Finland for SMEs, followed by Hungary and than Romania. Looking at the competitiveness of the national economies, Finland has a *leading edge* position and belongs to the ten most competitive countries. Hungary (ranked 48.) and Romania (ranked 78.) with a weak performance, these two countries have a *trailing edge* position. In order to describe the business environment in the countries participating in the project, we used the World Bank's country level *Doing Business Indicator*. Using this indicator, in the sample of the 185 countries worldwide, *Finland has the leading 11th position* and the two post-socialist countries in the Adaptykes project under-achieving with *Hungary 54th and Romania 72nd positions.*

The core section of the comparative report outlines the *interplay between human and structural capitals and innovation.* In the field of investments in both human and structural capital, again Finland is the leader within the group of consortium members. Human capital investment was identified with the rate of participation in life-long learning and education/training plus with the form of informal training (e.g. "other forms of Continuous Vocational Training").

Rate of investment in structural capital is measured by the share of the "learning/innovative work organization", indicating the firms' "… capacity to adopt and compete through learning" (Green – Lorenz, 2010:9). In this field, Finland – similarly to other Nordic countries – has a leading position within the EU-27 countries. The position of the two post-socialist countries is rather contradictory. For example, on the one side, Hungary has a rather high share of the

learning/innovative form of work organization - i.e. around the EU-27 average. But, on the other hand the share of the least innovative work organizations based on low-skill work is also high (i.e. much higher than the EU-27 average). In the Romanian case, the share of the learning/innovative work organizations is well below of the EU-27 average, while the share of the low-skill based work organization of mass production (Taylorist form of work organization) is well above the average. However, we have to note the higher share of "flexible version" of Taylorist work organization (or "flat organization") in Romania than the EU-27 average. The share of the traditional Taylorist work organization in Romania – similarly to Hungary – is much higher than the EU-27 rather high rate in the Romania, too.

Finally, assessing the *innovation performance of the countries surveyed,* various indicators of innovation were compared. In the case of "technological innovation" (product + process innovations) Finland has a clear leading position, similarly with such types of "non-technological innovations", 'organisational' and 'marketing innovations. While, in the case of the remaining types of non-technological innovations "(e.g. new business practices, new methods of work, external relations) – surprisingly enough – Hungary and Romania have better position. In addition, using such complex innovation index as *Innovation Union Scoreboard (IUS)* – composed by 25 variables – Finland (before and after the global economic downturn) has better position than the two post-socialist countries.

From the company case studies we have learned four important lessons concerning the implementation of workplace innovations. Firstly, the commitment of both the employees and the top management was a necessary condition of the successful implementation of the workplace innovation. Most of the case formal occasions were organised that ensured the opportunity of mutual dialogue between the different actors who had been involved into the changes.

The second lesson was that the implementation process in most cases requires changes in the corporate culture that has to be managed carefully. Open and intensive communication is one of the most important elements of this change.

Thirdly, successful changes require investments in the related basic skills of management, such as cross-functional managerial skills; process control and follow-up; skills required for efficient team-working and communication.

The fourth important lesson is that the implementation of workplace innovations takes time, albeit this aspect of the changes is often neglected.

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APPENDIX I: RECOMMENDATIONS FOR THE CURRICULUM DEVELOPMENT

Based on the results of the Comparative Report one may say that there are rather significant economic and institutional differences between the Adaptykes participating countries. The most important differences we have learned from the comparative study that may influence the entrepreneurs' attitudes and motivations towards the training courses to be offered are the followings:

There are remarkable differences concerning the regulatory environment of the firms operating in Finland, Hungary and Romania. In the latter two countries firms have more complex administrative and financial duties than their counterparts in Finland. It means that Hungarian and Romanian companies, especially the SMEs, have to appropriate more resources to such activities than the Finnish ones. The very fast changing regulatory environment may also imply a serious barrier for their long-term perspectives.

Other different issue is the role of training and learning in the companies' everyday operation. Finnish firms invest more in both formal and informal training activities of their employees than the Hungarian and Romanian companies do. Besides its impact on the skill and competence level of employees this phenomenon also implies visible differences in the learning culture and 'climate' of the various countries. Both the Finnish entrepreneurs and employees are more socialized in the way to treat learning as a very important prerequisite of value creation.

The third important difference is noticeable in the incidence of various work organisation models. In the two post-socialist countries Taylorist/Fordist and traditional work organisation are more prevalent than in Finland. These types of work organisations can be characterised by low learning and innovation capabilities and require less investments into the competence development of both management and employees.

From the company case studies we have learned four important lessons concerning the implementation of workplace innovations. Firstly, the commitment of both the employees and the top management was a necessary condition of the successful implementation of the workplace innovation. Most of the case formal occasions were organised that ensured the

opportunity of mutual dialogue between the different actors who had been involved into the changes.

The second lesson was that the implementation process in most cases requires changes in the corporate culture that has to be managed carefully. Open and intensive communication is one of the most important elements of this change.

Thirdly, successful changes require investments in the related basic skills of management, such as cross-functional managerial skills; process control and follow-up; skills required for efficient team-working and communication.

The fourth important lesson is that the implementation of workplace innovations takes time, albeit this aspect of the changes is often neglected.

The lessons presented above have various implications both for the development of training content and the training methods should be used.

Training content

As for the training content the different institutional setting, different socialisation and different preferences of entrepreneurs and employees should be taken into account. Also the difficulties of implementation process have to be treated.

In more concrete terms it means that training materials have to reflect to the following issues:

- The diversity of the cases call attention to the importance of developing training materials that are tailored to the various customer needs
- Development the ability, openness and skills of the different actors for dialogue and participation
- Development methods and techniques that support enhancing of the commitment of both management and employees to changes in the context of mutual dialogue
- Tools that broaden and enrich entrepreneurs' skills to manage changes successfully
- Managing changes in the organisational culture

Teaching methods

Concerning the teaching methods training should be interpreted as a development process, where the process is not purely output-oriented, but learning is a mutual process wherein the actors take responsibility for the outcomes collectively. The aim of training/development process is not merely to transfer knowledge but to create suitable environments and possibilities that support learners in constructing knowledge for themselves and to make them members of "learning communities" that are capable to solve various practical problems. Within this framework learning process should be reflexive where reflection and dialogue is part of competence development. It means that only the desired results and/or outcomes should be preliminary fixed on a consensual basis, but trainers/developers have to enjoy freedom in choosing the appropriate training methodology. Taken into accounts the consideration presented above briefly, we suggest the followings for the methodology:

- Instead of traditional teaching the training should be treated as a development process
- The aim of the process is not a mechanistic knowledge transfer but the creation of a vital and sustainable learning environment
- The development process should have a mutual character, e.g. it has to incorporate the knowledge and experiences of the participants, as well, instead of one-way communications

The practical components of training materials and learning should be in the focus, therefore we suggest to use the company case studies as materials for demonstrating the importance of collective learning and cultural environment in implementing and managing workplace innovation.

APPENDIX II: CASE STUDY GUIDELINE

The case studies that should be carried out in the project are neither explanatory, nor exploratory ones, but should serve as model case that illustrates the various difficulties, advantages/disadvantages an organisation has to face with when introducing workplace innovations. It means, that in the case study research we do not intend to investigate fairly new social phenomenon or provide detailed explanations of social mechanisms, but should focus on the detailed descriptive analysis of the various practical issues that are related to effective implementation of workplace innovations. When compiling the case study, please bear in mind that our aim is to share the lessons learned so that they can applied more widely.

In order to avoid one-sided interpretations we ask you to carry out semi structured in-depth interviews both at the management and employee-level. If possible please make interviews with the CEO, the HR manager, one senior representative of the professional or line management and with representatives of the different employment groups at the shop floor-level. If there is trade union or any other representative body of employees at the company, it would be a value added to know their experiences, as well. We would like to ask you to carry out 8-10 interviews at least. The issues to be investigated are listed below.

Case study findings

Please provide a brief description of the organisation described around the following issues:

Brief history of the firm

Main activities

Ownership structure

Main characteristics of its market position (B2B, B2C, local, national, international, main competitors, etc)

Number and structure of employees (e.g. age, gender, education, skills, work experiences, etc)

Please select a case of workplace innovation implemented in the last three years. By workplace innovation which could serve as a subject of investigation, we mean – amongst others – the followings:

- Planned job rotation
- Various forms of teamwork
- Systems for collection of employees' opinion or ideas
- Various forms of quality control
- Delegation of responsibility
- Interdisciplinary working groups
- Multitasking/Multiskilling
- Mobile work
- Flexible working time arrangements (part time, distributed work)
- etc.

1) The implementation process

Please describe the aim(s) and driver(s) of the introduction of the given workplace innovation and the problems encountered during the implementation and how were these resolved. Item to be covered:

1.1 Organisational unit(s) concerned

1.2 Number and share of employees concerned

1.3 Aims and drivers (i.e. improvement in the quality of products/services, productivity/efficiency gains, better customer service, improved competitiveness, cost efficiency, etc.)

1.4 Enablers and inhibitors of the changes (such as government initiatives/programmes aimed at fostering innovation, tax advantage, resistance of the management and/or employees, lack of appropriate knowledge pool, etc.)

1.5 Outcomes of the changes (what has been achieved in comparison to the aims above)

2) Changes in work organisation

2.1 Content of work, cooperation, managerial control, spatial aspects (distributed work, workers‘ mobility), role of customers (including changes)

2.2 Organisation of working hours, differentials in working hours between companies, temporal flexibility (including changes)

2.3 Functional flexibility, teamworking (including changes)

3) Changes in skills, knowledge and learning

3.1 Formal skill structures (including differences between men and women) and actual skill needs

3.2 Knowledge intensity of the different tasks, standardisation and formalisation of work

3.3 Learning opportunities, training policies: internal vocational training courses (that is, training activities principally designed and managed by the enterprise itself), external vocational training courses (that is, training activities principally designed and managed by a third party organisation), any other forms of training (on-the-job training, planned learning through job rotation, self-directed learning, consultation with managers and colleagues, etc.)

4) Quality of working life and labour relations

4.1 Forms of workers’ representation (social dialogue)

4.2 Information and consultation, issues of negotiations

4.3 Employee commitment and satisfaction

4.4 Work-life balance of employees

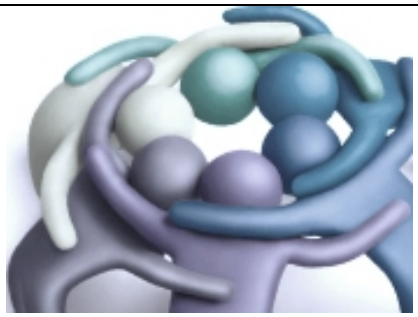
5) Conclusions

5.1 Basic characteristics of the case

5.2 Importance of the case for the research questions

5.3 Impact of the workplace innovation on the performance of the firm

5.4 Impact of the innovation on the quality of working life



Lifelong Learning Programme

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