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Managing Global Transitions

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Managing Transformation with Creativity: An Introduction to the Thematic Issue

Doris Gomezelj Omerzel
Bojan Nastav

International journal *Managing Global Transitions* has been known for years to embrace the up-to-date topics in international research, focusing primarily, but not exclusively to, business, economics and/or management. This thematic issue is no exception. Following the 13th Management International Conference 'Managing Transformation with Creativity,' we are proud to provide an insight into a topic that is most needed in contemporary global economy, management, and society.

The five selected papers from the conference outline the variety and broadness of the topic of MIC 2013. General shift has been made from the need and ability of societies or companies to adapt to the ever-faster changing business environment, through determining the micro factors or carriers of transformation, creativity, innovation, and eventually to pinpointing the proper transformation techniques, management approaches, support environment and institutions to implement managing transformation with creativity. Selected five papers on the transformations present and needed, how the processes should be managed, and how to implement new, creative solutions, bringing about efficiency and success, provides, in our view, a compact yet comprehensive overview of the research in the field(s).

We are pleased and proud to present to our readers this thematic issue of *Managing Global Transitions,* shedding light on vital parts of the contemporary economies and societies, not only in Europe but also at a global level: transformation needed, urged also by the current economic crisis in most of the Europe and the US; researching and applying the tools and techniques of management to bring about sustainable development, innovation, and creativity; and the need for interdisciplinary research and its application in real life cases. The selected papers are merely tip of an iceberg of the research in the field, yet we are certain that they will spur further vital ideas, valuable research, and ultimate success.

Transition to Sustainable Employment: Using Backcasting Technique for Designing Policies

Alexandra Köves
Gábor Király
György Pataki
Bálint Balázs

The article presents the experience and results of a research project that used the technique of backcasting. Backcasting is a preferred method in transition management – especially with regard to sustainability issues – as it facilitates the deliberation of complex socio-economic issues and enables participants to think freely outside the realms of present cognitive frames and still find adequate, future-oriented policy answers. In the case of this particular Hungarian backcasting experiment, a sustainable employment scenario was developed and policy recommendations were determined for reaching such a desired future. The article attempts to demonstrate that applying future-oriented methodological approaches can indeed lead to the design of feasible sustainability policies even when dealing with path-dependent systems burdened with lock-in effects.

Key Words: backcasting; deliberation; future studies; sustainable employment; transition management
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Introduction

Sustainability has become a widely used and popular term both in management and in policy studies. However, when it comes to devising and

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implementing feasible strategies and policies that lead to strong environmental and social sustainability, difficulties arise. This especially holds true when sustainability demands alternative visions that leave the realms of currently reigning paradigms. In recent years, debates have strongly resurfaced whether it is at all possible to approach sustainability within an economic, social and political system that places the idea of growth in the centre of attention. Many envision – including the present authors – that solutions to such complex issues can now only be handled by deliberating about suitable transition paths to alternative paradigms and institutional settings.

These alternatives must critically look at how we currently define human needs and especially the means and methods of trying to satisfy them. Economic success should be assessed by its contribution to the communities' normative definition of well-being and this will inevitably include values other than monetary ones. The idea of a steady-state or degrowth economy does not project the idea of a stationary state. In such an economy, the combination and ratio of the four value-producing capitals (natural, social, human, and man-made) would also be continuously changing, only well-being would rely more on the qualitative gratification and less on the quantitative expansion of material and energy-intensive transformations.

However, the question remains how to conceptualise the change towards such a sustainable economy and society? How the transition, or perhaps more precisely, the transformation could be managed? Are there theories and techniques available to guide the transition/transformation process? In the relevant literature, one of the approaches has been termed 'transition management.' Transition management (TM) attempts to determine policies that are able to facilitate such transformation under conditions of uncertainty, complexity, and need for continuous learning and adaptation. Backcasting is one of the techniques applied by TM. As opposed to extrapolation from the present to the future exercised in forecasting, backcasting starts with the establishment of a normative vision of the future and designs its way back to the present. Backcasting thus supposes that decisions made today do influence our prospects and hence provides opportunities in moving towards a desired future. Backcasting exercises are necessarily participatory and deliberative.

The article presents the experience and results of a research project funded by the Hungarian National Council for Sustainable Development that used the technique of backcasting in order to explore the issue of

sustainable employment. Backcasting is a preferred method in transition management – especially with regard to sustainability issues – as it facilitates the deliberation of complex socio-economic issues and enables participants to think freely outside the realms of present cognitive frames and still find adequate, future-oriented policy answers. In the case of this particular Hungarian backcasting experiment, a sustainable employment scenario was developed and policy recommendations were determined for reaching a desired future of sustainable employment in 2050.

The paper consists of three major parts. The first part presents the approach of transition management in tackling sustainability issues. The second section introduces the relevant literature on sustainable employment, while the last one summarises the experience gained from the Hungarian backcasting experiment on sustainable employment policies. Finally, some conclusions will be drawn.

Transition Management

Many social and natural scientist dealing with sustainability issues agree that in order to sustainably fulfil the needs of society among others for mobility, food, shelter, and clothing; it is insufficient to solely adjust the current systems (Grin et al. 2010). It is becoming indispensable to radically redefine the current systems and their functions or establish completely new ones. Hence, the issue of handling social and technological transformations that lead from one system to a radically different one has come to the forefront of scientific and public discussions (Kemp and Loorbach 2003). This experience would not be unique in the history of humankind as such transitions had taken place before but experience shows that no relevant stakeholder had been capable of forecasting, let alone influencing such major changes (Takács-Sánta 2008; Tenner 2011). However, transition management attempts to determine policies that are capable of facilitating such transformations. As neither the timescale, nor the direction of such transitions can be easily determined in advance, this 'management' differs slightly from its traditional meaning. Rather than directly trying to influence, it supports the handling of uncertainty; facilitates continuous learning and trial and error endeavours (Van der Meer, Visser, and Wilthagen 2005).

Transition management is not only a theoretical background used merely in the academic field. From the beginning of the 21st century, the Dutch government has been using transition management methods to determine sustainable public functions (Kemp and Loorbach, 2003).

Most examples are available regarding the issues of energy, transport and mobility as they incorporate technological elements (like infrastructure or equipment); social patterns (such as habits or institutions) and cultural factors (like norms, values, rules or cognitive models). According to the theory of transition management, all these issues would have to be considered with equal weighing (Grin et al. 2010).

Backcasting

A deep and unsettling question, which is raised repeatedly in the course of human history, is what will happen in the future. Of course this is not (just) a philosophical question since it is closely connected to the question of what we should do today and how we should choose from a varying set of alternatives. Our vision of the future will determine how we act and make decisions not only at an individual but also at a social level. Consequently, it is essential to be reflexive on the issue how these 'visions' of future come into being and whether we can construct a different type of 'vision' effecting norms, decisions, and actions.

Backcasting is one of the methods in future studies which attempts to elaborate prospects for different levels of social organisation such as companies, cities and societies. Backcasting is part of a bigger category of methods called normative scenarios (Vergragt and Quist 2011, 748). The notion of normative scenarios stands for the idea that when one attempts to create a vision of the future there should be certain values and basic normative assumptions determining what a desirable future would look like. So, instead of attempting to decipher from a large pool of data what is the most likely future, normative scenario-building moves along a different path identifying acceptable and desirable futures instead (Robinson 2003). The distinguishing feature of backcasting is that it starts with a normative future vision and attempts to create links between these desirable conditions of the future and the present. Consequently, it works backwards by strategising and planning the necessary steps to achieve the given set of goals embedded in this future vision (Miola 2008).

Usually the end-point of the future vision falls between 25–50 years. The reason for this is twofold. Firstly, a longer timeframe is needed in order to create the necessary distance from the present and to allow for enough space for envisioning a qualitatively different future (Vergragt and Quist 2006; Vergragt and Quist 2011). Secondly, for most people the future they are able to imagine is constrained by their lifespan or that of their children's (Robinson et al. 2011).

The question may arise why anyone would use backcasting when usually forecasting is available as an alternative and is seemingly a more exact and less ambiguous way to predict the future. The very fact that the expression of backcasting is generated by wordplay (substituting 'fore' with 'back') implies that the original idea was to create an approach fundamentally different from forecasting. While forecasting is a method based on the present extrapolating present conditions and trends to the future, backcasting has a reverse approach starting from the future and moving backwards to create a bridge between future and the present (Miola 2008).

However, there is not only a methodological issue being at stake here but also a different understanding of human agency and of the possibility of change.

Forecasting attempts to delineate the most likely future in order to help actors adjust their strategies, plans and decisions to this future. The keyword is *adjustment* here since it is presupposed that it is what actors could and should do at different levels of social organisation. Forecasting, therefore, is first and foremost preparing for the future. Backcasting has a different starting point since it allows for actors a certain space for manoeuvring as far as the future is concerned. Their role is more than just 'passively' adjusting to or suffering from the changes ahead. They can get into a constitutive relationship with the present circumstances thereby becoming active participants in forming future outcomes.

It should also be mentioned that forecasting works well and is really useful in simple environments where it is enough just to use a few variables and assume that the rest of the system remains constant. However, for complex systems forecasting is rarely enough. As Robinson (2003) argues, as our ability to predict the future is limited, it is a better solution to develop alternative scenarios with different outcomes rather than to predict its changes in a very quantitative and exact way. Moreover, many problems our societies face are often complex and call for a multi-levelled and multi-disciplinary (even trans-disciplinary) approach to tackle them (Robinson 2003). Such an issue is sustainability, as the next part of this paper on sustainable employment will show. However, it is easy to miscomprehend the function of backcasting when discussed together with the approach of forecasting. Backcasting is not a method to predict the 'true' or 'real' version of the future but to form it, or in other words, to create a constant dialogue between the desired conditions of the future and the present.

Sustainable Employment

When the opportunity arose to apply backcasting in the Hungarian sustainable policy context, a sufficiently complex policy field with fundamental importance needed to be identified that incorporates the technological elements, social patterns and cultural factors and requires the deliberation of people with many different viewpoints. The choice fell on the topic of sustainable employment that is high on the public agenda in Hungary.

Sustainable employment as a phrase is relatively rarely discussed in the literature on alternative economics. Even environmental social scientists are divided on the issue whether an economic transformation into a more sustainable world would involve less or more work. Some academics believe that we maintain our current levels of consumption just to provide employment, hence only less work can lead us to a more environmentally conscious way of living (Schor 2005), while some believe that the 200 years of environmentally damaging economic activity would require significant human labour to clean up (Cato 2009).

The connection of sustainability and employment in the current literature is made along two paradigms. The first reflects the technologically optimistic scenario of ecological modernisation where new innovations will enable the current economy to reduce its adverse effects on the environment while, at the same time, producing new 'green jobs' in the growing 'green economy.' The second one is the 'radical change paradigm' that abandons the ideals of an economic and social system based on growth, consumer society and full employment and advocates fundamental changes in the way we define work and welfare (in this case in its sense of well-being) in order to achieve environmental and social sustainability.

ECOLOGICAL MODERNISATION

The greening of the economy that nowadays often appears in global, European and national strategies imply corresponding solutions to both the environmental and the employment crises. Ecological modernisation encourages investments into environmentally friendly technologies and developments that lead to greener production or low-emission consumption. This technological fix does not only reduce environmental damage per unit of production but also boosts economic growth and at least in its investment phase demands significant human labour. This concept is especially appealing to the current major economic players as it opens new markets as well as reduces operating costs (e. g. energy costs)

and can be easily reconciled with the current mindset. In the process of such greening of the economy, less environmental harm and more labour would also be supported through ecological tax reforms that produce a 'double-dividend' by making the use of scarce resources more expensive and labour cheaper (Kiss 2010).

However, such ecological modernisation only enhances eco-efficiency and leads to relative decoupling (decreased environmental strain per units of consumption) but does not involve reducing the overall scales of consumption. Absolute decoupling would only occur if the overall throughput of the economy would be decreased or, at least, maintained over time (Jackson 2009). Hence, strong environmental sustainability cannot be achieved by ecological modernisation alone and these solutions incorporate the risk of believing that we can go on business-as-usual without major changes in our ways of thinking and acting. Moreover, ecological modernisation attempts to address social sustainability only by boosting employment but not at all addressing the questions of social justice.

In terms of employment, the green economy is controversial. Green investments can lead to new 'green jobs' (Getzner 2002; McEvoy, Gibbs, and Longhurst 2000). However, the increase in employment occurs mainly in the investment phase and as the main driving motivation behind technological innovation is cost cutting, it is possible that their introduction will further reduce human labour demand in the long run. Another problem that may arise is that the capital intensity of these investments will be satisfied through cost reductions that are likely to occur by saving on labour costs.

Consequently, the concept of the green economy is only helpful as long as it is treated as a transitory phase with all its limitations acknowledged while the quest for solutions beyond current paradigms continues. Ecological modernisation is in line with mainstream economic concepts and hence subjugated to the necessity for ever-lasting economic growth failing to deal with the limits of the biosphere's supporting capacities, hence not achieving strong environmental sustainability. In terms of social sustainability, this paradigm fails to address the problems of unequal distribution and the widening of the social gap.

THE RADICAL CHANGE PARADIGM

Representatives of the radical change paradigm go beyond the boundaries of neoclassical economics and refuse to accept its definition of welfare solely in terms of levels of consumption; its characterisation of work

as purely paid labour and its seemingly problematic attachment to the ideal of full-employment. Their theories are based upon the idea that new foundations can be built through the redefinition of human needs and work. Mainstream employment theories and policies handle work purely in relation to income-generating activities. All unpaid efforts that people engage in – such as community work, household jobs, homecare, or self-actualisation activities – are now considered beyond the economic concept of employment. As Beck (2007, 75) asks in his book *The Brave New World of Work,* if we presume that the volume of income-generating jobs is in decline, what other leading concepts can take the central role of paid employment in society?

In redefining work, we cannot surpass discussions on questioning the currently reigning paradigms of human needs. As Cruz, Stahel, and Max-Neef (2009) remark, consumption in the current economy has become an end in itself and has not only moved away from genuine needs but has also transformed them. As soon as it is accepted that human needs are finite and are of a significantly wider range that do not focus solely on monetised material needs, the effects of work itself on the well-being can also be rediscovered. Torgler (2011) in his empirical study of European countries finds that one of the main driving force behind the well-being of a person – besides the satisfaction with family and marital background – is work satisfaction. Relating to work, motivations like participation, understanding, creativity, self-actualisation, or affection appear alongside subsistence and security (Max-Neef 1992). Hence, it is possible to redefine work in light of these needs from a purely income-generating activity to something that adds to the well-being of the individual and the community. From here onwards, besides paid work, household activities or home farming can also become aspects of employment that fulfil subsistence and security. Community work or social deliberation activities can be linked to participation; the acceptance of learning and self-development as work to understanding; and activities ranging from gardening to music playing to creativity. If we add the need for affection to this, besides community work, child-rearing and elderly care can also be seen as an accepted work activity. The redefinition of work along these lines can make way for the recognition of new approaches within the radical change paradigm.

The cornerstone of environmental and social sustainability through the radical change paradigm is the unavoidable transformation of consumption and work patterns. Even though current employment theories

and policies avoid handling the interconnectedness of consumption and work, this perspective can give significant insights into achieving more sustainable employment. In mainstream economics, consumption and work are the two sides of the same coin: consumption is the yield (positive utility), while work is what we have to 'endure' in order to be rewarded (negative utility). However, they continuously reinforce each other, and we are not only working more in order to consume more but consume more once we have worked for it (Sanne 2002). Røpke (1999) explains that with the increase in labour productivity, employers – in line with the current economic rationale – have chosen to increase the wages of employees and produce more rather than provide more leisure time. This has meant that employees have got used to increasing levels of spending that demanded increasing time spent at the workplace. At the same time, in the appreciation of the workforce (i. e. in promotion and wage increases) time spent at the workplace (including 'natural' overtime) started to play a major role (Røpke 1999). In addition, Sanne (2002) mentions the 40-hour working week that by now for society has become the only recognised 'true employment' as one of the most significant drivers of consumption. However, if needs and values that present alternatives to monetary well-being are recognised, a cutback of consumption through the reduction of the working week may become widely acceptable (Sanne 2002; Schor 2005).

One of the tools to accommodate such radical changes is the introduction of the guaranteed basic income. One of the contemporary advocates of the basic income approach, Philippe Van Parijs believes that a transfer payment provided to every citizen in his/her own right regardless of one's employment or social status could, on the one hand, ensure basic subsistence for each individual enabling the redefinition of work and, on the other, would mean an end to the unemployment problem Europe faces (Van Parijs 2000). In mainstream economic theory, the only solution to unemployment is a boost in economic growth, which is now encountering numerous environmental and social limits. Consumption taxes would cover for the funding of such transfer payments in line with ecological taxation systems.

The redefinition of work, a stop to overconsumption, and a guaranteed basic income together would pave the way for a whole new concept of working in and for the community. Currently, working for the community is either done on an unpaid volunteering basis, or – like in the case of public work schemes or the social economy – is done under

subsistence pressure. In a society where diverse forms of work are recognised as employment, working for the community would become just one type of employment among many. Within the radical change paradigms, the different structures of the social economy could play significant roles. As Cato (2009) argues, cooperatives are organisations where one's self-actualisation and enhanced work motivation can really flourish as together with responsibilities, people share their abilities and values. The author takes this reasoning one step further, saying that if we considered business as part of the community, the issue of social responsibility, service levels, the quality of goods and the protection of the environment would just become the norm.

Both in terms of environmental and social sustainability, the issue of local production and consumption going hand-in-hand with the reinforcement of local communities comes to the forefront. Eco-localism focuses on the locally available capital (including environmental, social, physical, financial and human) and encourages its use towards self-sustenance. This economic vision with its conservation of local resources for long-term purposes as opposed to the current short-term profit-maximisation tendencies is significantly closer to the Aristotelian concept of oikonomia (Curtis 2003). Similarly to eco-localism, bioregionalism envisions the operations of the economy on a 'local production – local consumption' basis but while eco-localism does not define what 'local' is, bioregionalism states that political and economic boundaries should respect the boundaries of ecosystems. Bioregional visions accept only two levels of governance: bioregional and global. On the bioregional level, decisions are taken by participative, deliberative means. The trading of knowledge, ideas, culture, certain services and locally unavailable raw materials would happen also on a global basis and the import of goods would also be possible but local goods would have a significant comparative advantage (Grey, 2007). Even though there is no extensive research on the employment effects of eco-localism or bioregionalism, some assumptions can be made. Local production and consumption would facilitate the utilisation of local labour while reducing unemployment, and the negative environmental and social effects of mobility and migration. There is some experience to such local employment initiatives all over the world in the form of LETS (Local Exchange and Trading Systems).

The radical change literature on sustainable employment – sceptical to the ideals of full employment and boundless globalisation of markets – focuses on reinventing the conceptual framework of employment. By

broadening the range of human needs and the recognised forms of labour, work is redefined in a global network of local economies. Employment no longer means solely paid work but activities that serve the purposes of the well-being of the community and the self-fulfilment of the individual are also acknowledged.

The Results of the Hungarian Backcasting Experiment

The Hungarian backcasting experiment provided us with some insights on how the normative vision created by the participants overlap with the theories raised in the academic literature. When selecting the participants to the workshop, the organisers opted for an approach that targeted the involvement of 'experts' in the field of employment. This limited the randomness of the selection process as they had to be selected from a pool of experts known to the researchers on the basis of their background in employment, and their geographical location. The homogeneity of the group ensured that the exercise remained intense, problem focussed and it clearly simplified the process as it required less time and costs from the participants. The main criteria for recruitment were suitability and willingness to take part in an exercise working on the science-policy interface on a voluntary basis. The 16 participants came from varied backgrounds and from different sectors (four each from academic, business, civil, and public administration), equally from the capital and the countryside representing both the East and the West of Hungary facing different employment problems. It was ensured that there would be a representative of the Roma community as well as someone from an NGO assisting people living with disabilities in finding employment. We realise that the results of the backcasting experiment reflect only the views of those people present at the workshop, but they nonetheless give valuable insights to how sustainable employment can be conceived.

The following synopsis of the vision is the result of qualitative data analysis. The analysis used was a combination of meaning-condensation; categorisation and meaning-interpretation (Kvale 1996). The discussions during the workshop were recorded and notes were taken by two researchers. The participants themselves organised their conclusions on flipcharts and sheets and the results were photographed. After the workshop, the notes were crosschecked with the recordings and together with the photographed written results organised into a database where they were broken up into pieces that reflected different notions. These were then sorted into 13 different categories (such as definition of work; com-

munity; role of the state, etc.) and labelled with 43 topics (for example working time; work ethics; the relationship of individuals to the community; trust; etc.). After labelling, the notes were regrouped into different topics and a synopsis was written on the basis of the content of these groups. Hence, this synopsis reflects the notions discussed by the participants but in the words of the researchers.

REDEFINITION OF WORK

The participants found the redefinition of work crucial in their vision for sustainable employment. According to their vision, work in Hungary in 2050 is not merely a tool for basic subsistence but also a 'source of well-being.' Work does not consist only of a paid job and does not only exist in institutionalised forms. As work is no longer just a struggle for survival, people have an internal motivation to do what they do skilfully. They can be proud of their jobs independent of their status or scope of activities. Work is meaningful and useful in many different segments of life. People's needs go beyond the physical focus and spiritual needs prompt the existence of new types of work activities. The satisfaction of needs is 'healthy,' putting a stop to patterns of overconsumption. Work motivation changes accordingly: prime motivation is no longer subsistence but self-actualisation, self-development and the feeling of social usefulness. As one of the participants phrased, 'work is happy self-actualisation in a socially beneficial manner.' Such redefinition of work stipulates the broadening of the different employment forms. In Hungary of the 2050s, employment is not purely part of the market economy as people also do work that are 'not necessarily monetised.' One can engage flexibly in many different work activities, in many different legal forms and hence retains more control over one's life. The non-monetised forms of employment such as barter or LETS become legally acknowledged. Learning is a recognised form of employment. Work is performed predominantly locally, or even from home but so-called 'office café' solutions also exist where people can work outside their homes. Technology supports this type of evolution as it transforms most arduous and monotonous work and 'there is nobody digging trenches in 2050.' However, if someone performs such demanding jobs, society fully appreciates them.

WORK EMBEDDED IN COMMUNITIES

Participants envisage the Hungarian society in 2050 where the role of communities is of rising importance and builds on values of coopera-

tion, trust, and solidarity. Community ties of individuals are strong and communal events are frequent. The network of trust is operational and trust itself is treated as a prime social asset. Community plays two different roles in employment. On the one hand, community provides a framework and motivation to work, on the other hand, work serves community purposes. As 'people cannot have their work appreciated in larger spaces and large societies,' society operates as a network of many smaller communities. Hence, both working in the community and working for the community becomes important.

NON-PROFIT AND FOR-PROFIT ORGANISING OF WORK

The participants envision the economic actors of 2050 not merely for-profit or non-profit organisations. For-profit actors are sensitised (or coerced) being environmentally and socially responsible organisations that build these aspects into their everyday decision-making and represent unambiguous community values. Management culture embraces empowerment, where employees have certain degrees of self-determination. Bonuses include solutions that facilitate the new, diverse types of employment such as sabbaticals or work-time allowances for volunteering activities. Consultations with workers' associations are based on trust and dialogue, where both parties are present as partners. In case of inevitable downsizing, outplacement services are provided on a wide basis to employees. Different co-ownership schemes for workers are common, cooperatives are rediscovered and many work in the predominantly non-profit social economy. However, as in the for-profit sector social responsibility becomes the norm, at the same time corporate governance becomes widespread among non-profit organisations. Hence, non-profit approaches are built into the operations of for-profit companies, while non-profit organisations internalise the essentials of economic operations.

TECHNOLOGICAL OPTIMISM

Participants revealed outstanding technological optimism. 'In 2050 technologies will be widely accessible that we have no knowledge of today.' Even though in 2050 less work is available due to technological advances, this does not imply higher unemployment but rather more opportunities for redefining work. Technology supports flexible working arrangements, improvements in quality of living, substitution of arduous and monotonous jobs, equal access to work and public services and partici-

pative decision-making. The wide-ranging research and development activities do not only cover technological advancement but also social innovations. While not questioning technological advances at all, much emphasis is also laid on the preservation of traditional cultural values, and the safeguarding of those who work with traditional technologies. (However, this preservation should not at all mean separated reserves.) This way, besides modern technology, traditional knowledge has a legitimised role in society.

EDUCATION AND TRAINING

Participants envisage a knowledge-based Hungarian society in 2050. Hence, education and training in many different forms play an outstanding role in all ages. In case of children, the frontal, class-based school system is replaced by education that respects individual talents, is tailor-made, and involves parental guidance as well. Young people have the chance to try themselves in different jobs and get experience under protected circumstances. Adults train themselves regularly but not necessarily in formal institutions. Both formal and informal education and self-development is acknowledged and regarded as standard part of working life. Due to this development, a number of career changes in a person's life are considered the norm.

WORK AND ENVIRONMENT

When discussing environmental aspects in sustainable employment, the participants of the backcasting workshop were present more like lay people as they had more expertise on employment than ecological issues. Nonetheless their commitment towards environmental sustainability was apparent throughout the workshop. According to their vision, in 2050 individuals as well as economic actors are environmentally conscious both due to their inner values as well as due to the regulatory environment. Environmentally friendly workplaces involve energy efficiency as well as aspects of occupational health, including ergonomic perspectives and the increased consciousness of the detrimental effects of work overload. The ecological aspects are taken seriously especially in the agricultural sector, that builds a lot more on human labour than chemicals. Hence, more people are employed in agriculture. (The recurring theme of agriculture during the backcasting workshop was likely to be due to the participants' desire for access to safe and healthy food as lot of discussions revolved around the need for adequate food production and labelling.) In 2050,

the redefinition of work implies a rise in the appreciation of human skills and labour and this leads to 'mending things rather than scrapping' as 'we do not ditch other people's work.' The new approaches to working lives also enable people to take more responsibility for and better care of their own environment.

GLOBAL AND LOCAL

The issue of global vs. local continuously resurfaced in the discussions. Anti-global sentiments did not occur and the concept of the global economy and global society were not questioned once. However, according to their vision, in 2050 globalisation is more of a global network of local economies and societies, where local production and consumption, and hence local employment play a significant role. This does not at all imply that there is any limitation on goods and services imported from the global arena, only that local products and services enjoy certain advantages. Employees are also free to choose whether they work locally or globally (as this adds to the desired diversity of working arrangements) but the pressure on mobility eases. Individuals may have strong ties to a locality but this rather indicates solidarity with a given community than the lack of mobility. (On the necessity of mobility participants were divided.)

DEMOCRACY AND THE ROLE OF STATE

During discussions a vision of the Hungarian state in 2050 also crystallised. The participants envisage that in 2050, Hungary is a democracy but significantly more decentralised both in terms of decision-making and financial resources than today. Even though participative or deliberative democracy as a term never occurred during discussions, the topic of a state where individual, community, and state responsibilities are clearly distinguished and decisions are taken on the levels where responsibility lies often appeared. Moreover, the link between the citizens and the 'central' state is only indirect as there are a wide range of institutions with different authorities. The redistributive task of the central state still remains important as it ensures through the guaranteed basic income the basic subsistence of citizens. The role of the public employment service changes as it no longer deals with the administration of unemployment benefits and the assistance of the unemployed (as due to basic income this concept becomes outdated) but more with the tailor-made supporting and brokering services for all employees.

ECOLOGICAL MODERNISATION AND RADICAL CHANGE MIXED

It is clear from the above, that the participants' vision for sustainable employment in Hungary in 2050 contains mixed elements of the ecological modernisation and radical change paradigms described in the previous chapter. Their vision also abandons the ideal of full employment and makes way for a life where people are free to work not because they are forced by their subsistence but because work is an activity that serves the well-being of both their community and their own. Well-being was defined not only in material terms but also in terms of self-development; self-fulfilment; sufficient time for nurturing family and community relationships and access to a healthy environment. This approach would also enrich the forms of employment and dispose of the idea that employment generally means a 40-hour paid labour week. Even though participants supported the idea of localised employment through the encouragement of local production and consumption patterns, the varied nature of employment would also cover the open opportunities for globalised employment and labour mobility. The issue of globalisation appears in the vision as an aggregate of local networks, where localism weighs more than today but does not mean detachment or impassability.

POLICY TOOLS

During the workshop, backcasted policy tools that serve this normative vision were also identified. These policy tools concentrate around five major objectives.

The first group of policy tools serve the objective that work done beyond the economic sphere (such as community, family, self-development) should get recognition in order to provide people with the choice to work in many different employment forms doing diverse, meaningful and acclaimed jobs. This implies that the legal and social system should embrace and encourage employment forms besides paid labour (such as self-employment, household employment, LETS, barter, and all atypical employment forms). Local employment should be supported but barriers to global employment should also be eased at the same time, leaving the individuals the option to decide. In order to achieve these objectives, the policy tools identified in the backcasting experiment focus on the abolishment of administrative obstacles; introduction of new legislative frameworks for those elements that are currently not available; communication campaigns and financial incentives. It is this group of measures that in-

clude the suggestion on the introduction of the guaranteed basic income that facilitates the redefinition of work.

The second group of policy measures aims at supporting non-profit organisations to become an integrated part of the economy, while at the same time encouraging for-profit companies to take on board social values in order to ensure that people work in an environment that is based on cooperation and trust and embraces true social dialogue. This can be achieved through awareness-raising campaigns and financial incentives. These tools could lead to better cooperation and more solidarity in both sectors but only if trust is established. Social trust can be built up by first introducing trust building elements into public administration, for example by encouraging real participative social dialogue. In addition to positive measures, the participants recommend that later on certain legal sanctions can also play a role especially in the case of the for-profit companies.

The third group of measures aimes at keeping the detrimental effects of work and the environment at a minimum level. The notion of sustainable employment must include that neither the work environment, nor other elements of employment (e. g. overwork, stress) lead to any damages of health. The proposed measures in this category include both awareness-raising and strong legislation to ensure healthy and environmentally friendly working environments, proper work-life balance, and food safety.

The fourth group of policy measures aims at providing opportunities for people to realise and develop their own potentials both in education and training and on-the-job. These measures establish a knowledge-based society that can only be achieved through an education system that facilitates self-development at any age. This includes the introduction of new, innovative forms of learning and new types of learning infrastructure. Life-long learning can be encouraged by legally acknowledging training as employment.

The policy measures in the fifth group serve to establish the role of technology in supporting sustainable employment by encouraging targeted technological and social innovations through financial incentives. They include a wide-range of potential applications from the introduction of trust-building, participatory community decision-making; through boosting the creative industry, until facilitating equal access to employment, locations and services. This group also included policy instruments that prevent the disappearance of traditional professions.

Conclusions

Even though throughout the Hungarian backcasting experiment, numerous conclusions could be identified in how to improve the methodology of backcasting, it demonstrated that this transition management technique is indeed capable of facilitating out-of-box thinking even regarding highly complex issues such as sustainable employment. It has also become clear that feasible sustainability policies can be designed even when dealing with path-dependent systems burdened with lock-in effects. As for the methodological considerations, two main lessons were drawn from the experiences of the backcasting process.

Firstly, it became clear that much more time is needed for the orientation phase in which the participants can get into a mindset where they can devise and think about alternative realities. While for children this 'mental shift' between the reality and alternative realities happens automatically and without effort, most adults learnt to restrict the rich associations of their thoughts to be able to focus more effectively on their tasks at hand (Gopnik 2011). Hence, more time and careful planning is needed to loosen these mental boundaries to be able to aid participants to leave the problems of the present behind and to focus on the possible desired future.

Secondly, our methodology was based on a thematic approach where participants discussed different aspects of a sustainable future of employment (namely, individual, community, environmental, and technological aspects). Even though this approach revealed many facets of the issue, they remained relatively independent from each other in the scenario building exercise. To be able to harness the rich connections and complex interrelationships between social, technological and environmental components in creating the vision of a future society, we shall seek a different, probably more systematic or network-based approach. This would allow for a more encompassing view on society as a whole while at the same time this modified approach could help to disclose how different parts of a system or network mutually constitute, stabilise, and feedback onto each other respectively.

We realise that the composition of the group poses some limitations on generalising the results as they were well-educated people who reflect on employment issues on a daily basis. It would therefore be of a high significance to run this experiment with different groups, consisting of people from different backgrounds and age groups. However, we believe

that the views of the participants emerge from a wider understanding of how employment could and should become more socially and environmentally sustainable and the results can nonetheless constitute a valuable contribution to the dialogue on sustainable employment.

The vision established during the two-day workshop bear certain resemblance to those ideas that are present in the alternative economic literature described in the section on the radical change paradigm. Common ground is that the current definition of work and the employment policies that rely on the notion of full employment are outdated. This crosstalk between the literature and the solutions identified by the participants may be due to a number of reasons. One can be that the reasons behind the economic, environmental, and social crises are perceived similarly and as soon as people are given the opportunity – like in the backcasting workshop – to distance themselves from the complexity of current problems, break-out strategies start to bear resemblances. It is also possible that mainstream paradigms are already so challenged that alternatives that are currently labelled alternative no longer seem unattainable. This seems to be underpinned by the fact that the foundations of many elements in the vision had already been laid. The social economy currently also presents an alternative to those crowded out of the labour market; a number of non-monetised local exchange and trading networks exist; and the legal base for a number of atypical employment forms had been developed. One of the main obstacles of the flourishing of these solutions is that the economic and political system still holds on to certain presuppositions. The rejection or, at least, the questioning of these assumptions could pave the way for a wider use of already existing patterns that enable a better harmonisation of ecological and employment interests and visions.

Transition management techniques such as backcasting can support such approaches. If such methods were to be used more widely, decision-makers could be assisted in facing legitimate and implementable policy options outside the realms of mainstream solutions.

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The Innovative Power of (Industrial) Commons in Managing Creativity to Support Network-Economics

Eva Gatarik
Rainer Born

The main point of our investigations and research is to reflect, analyze and argue for the use of the innovative power of Commons in general, and Industrial Commons in particular, to improve creativity as essential foundation (not only) of Network Economics. The latter should help to overcome some of the obstacles and threats posed by globalization. We shall furthermore provide a theoretical background to explain why it is necessary not only to provide 'tools' or techniques to generate the parameter values stemming from the well-trodden path of classical economics but also – following Lakatos, Soros and others – why it is necessary to change our established attitudes concerning the 'use' of these tools.

Key Words: ecosystems of innovation; industrial commons; network economics; creativity; knowledge management
JEL Classification: O14; R11

Introduction

Taking up the idea that we 'can only adapt and survive by constant transformation,' which is built upon 'creativity and innovation,' we suggest that we investigate why we need both creativity and innovation, e. g. with respect to new business models, and *explain* how the mistakes in decision making we observe in the economy have come about to prevent them being repeated in future. And last but not least, we have to decide what would count as a 'good' outcome.

One of our main points is to show that we use the explanations of economic success in a wrong-headed way. We often think that they can be applied and transferred in an all too straightforward way, i. e. as literally

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action guiding ideas. Giving an example, one can argue that economic, social and cultural images and the economic success of some European regions can be linked *causally* to networking/network economy (Barabási 2002) and digital support as well as to the analysis of the flow of information and knowledge. If one then tries to copy and transfer this *success* by copying the formal techniques to other regions, then, in certain cases, it can happen that one actually is transferring a *wrong explanation of success,* which in the sequel becomes the foundation for decisions guiding our actions (Born and Gatarik 2012). This is what we mean when we argue that one has not investigated the *real causes and means* of the support of success in all its manifestations carefully enough.

In other words, if in the context of *managing creativity* we just improve the technique of, for example, digitally supporting network economy/networking without looking for the real source of success, which can be found in the nodes of knowledge, then we surely overlook the fact that we also have to understand the necessary innovative and reflective extra-knowledge of users and decision makers which allows for some sort of stepping out of the system with respect to the given system of knowledge. The knowledge of the decision makers needs to be extended, or rather improved, i. e. the knowledge to handle the explicated 'rules or routines' must not remain unchanged or static and needs to be enriched/extended.

Summing up, we believe that a paradigm shift concerning the way *we think about economics and its manipulative relation to reality* is necessary just as George Soros highlighted in his speech at Davos 2012 and further elaborated in Soros 2012. We have to re-consider *what* it really is that explains economic success and the ways in which way misapplications in the sense suggested by Soros led to the current economic crisis.

We therefore want to show that it is important to really take into account the specific knowledge which is available in so called 'nodes of knowledge,' for example, of special European regions, and later we will link up this idea with Elinor Ostrom's research concerning Commons (e. g. Ostrom 1990) and 'understanding knowledge as a Commons' (Hess and Ostrom 2007). In effect, we have *to identify and to analyze* (e. g. with the help of the tool LIR++, see below) the knowledge available in knowledge nodes and knowledge networks to use it for good decisions. LIR++ does not just ask people what they think they know but enables to explain the use of their knowledge, and therefore allows to combine a view from within and from outside of a system.

Our approach rests upon our research in *Model Theory, Systems Theory*

and depends on the constructive generalization of case studies to explain the transfer of knowledge by means of *Knowledge Management* (KM) and *Commons* (e. g. Ostrom 1990; Hess and Ostrom 2007), especially *Industrial Commons* (Pisano and Shih 2009; Shih 2012). As already mentioned above, we shall use the model-theoretic scheme of analysis LIR (Language – Information – Reality) and its extension to LIR++ (Gatarik and Born 2012b), which in its new version is explained in detail below.

The Loss of Creativity and Innovation: Its Origins and Economic Consequences

Considering some of the many problems which are facing us today we will start with a problem only recently brought up again, i. e. the anxiousness to lose all industrial (competitive) power in the so called 'West' – essentially due to a loss of the creative and innovative force of Industrial Commons (Pisano and Shih 2009; Shih 2012). Of course, this may sound too harsh but it expresses some mood as far as the current economic crisis is considered.

The example or starting point, which is typical for many similar cases, is the idea that overexploiting the originally theoretical idea of *outsourcing manufacturing* for economic reasons, and implicitly presupposing that an economical control of the world is enough is the source of a decline of our original competitive advantages in the WEST. However, what does this mean in our context? The point is that the ability to innovate gets lost by way of a lack of manufacturing resources, i. e. by missing out intuitions and visualizations, which via generalization can lead to expertise and knowledge.

This links up with the old idea that plainly economic reasoning or parameterizing of the world is not enough or, in other words, it is incomplete (Gödel 1990; first published in 1931) or provides an insufficient map of the world. One should consider it as a sort of task for KM to provide extra knowledge surpassing plainly monetary considerations.

The original idea of KM as a simple means or practical technique to get hold of important knowledge inherent in an enterprise and to transfer it easily does not work in practice, or not with the means available and the philosophy or understanding in use. Taking up the research by Elinor Ostrom and our own practical experience, we propose that it needs to be combined with the idea of Commons. In the end, we shall be able to transform Knowledge Management into a sort of Ecosystems of Innovation to provide flexible, creative, innovative and sustainable problem

solutions, especially in fostering Network Economics (Barabási 2002).

One of the deeper going essential assumptions of our approach is that the initial successes (not only of outsourcing) can be explained by natural, ecologically flexible and justified corrections of the application of rules to producing acceptable results, i. e. we assume that real success (economic or otherwise) does not stem from rigidly applying rules but from using them with foresight or vision whereby it should be clear that the latter presuppose the deliberate introduction and special use of Commons. We assume that a commons-like culture including *motivation, emotion and cooperation* of the people within and inbetween some Commons does support this kind of application of rules (maybe unconsciously) by being still (though perhaps not literally) aware of the simplifications, which underlay the application of our maps, models and theories. To see this more clearly we need to look at the basic theory as explicated below and illustrated in figure 2 and especially in figure 4.

Thus, our empirical analysis resting upon our practical support of firms and long-standing research and teaching of KM as dissertation subject at the University of Linz concerns the idea that the commons-like structure of organizations provides the possibility for local corrections and can guarantee the ecological soundness of innovation and, in the sequel, can produce practical parameter values. Simultaneously, a theoretical analysis of the argumentations to justify the application of the knowledge inherent in Commons needs to be exhibited. Only in this case *Ecosystems of Innovation* can be considered as a follow-up concept of Knowledge Management and even as an extension of the parallel approaches *Ecosystems FOR Innovation* by Aneesh Chopra, the former Chief Technological Officer of President Obama, and the ideas of *Innovation Ecosystems* proposed at Stanford University which go back to research on business ecosystems and business innovation. The point of our theoretically and empirically well-founded approach is to stress that we need a *re-modelling of knowledge-intensive environments* which especially in connection with European pluralistic cultural background may provide an extra competitive advantage, if we learn to handle it properly. In consequence, innovation does not only provide a competitive advantage which will pay off economically but it will also be a real chance to survive in an ever changing world.

Following these ideas, we summarize the line of further empirical investigations in combination with the theoretical generalization of existing research in figure 1, which is based on a modern understanding and com-

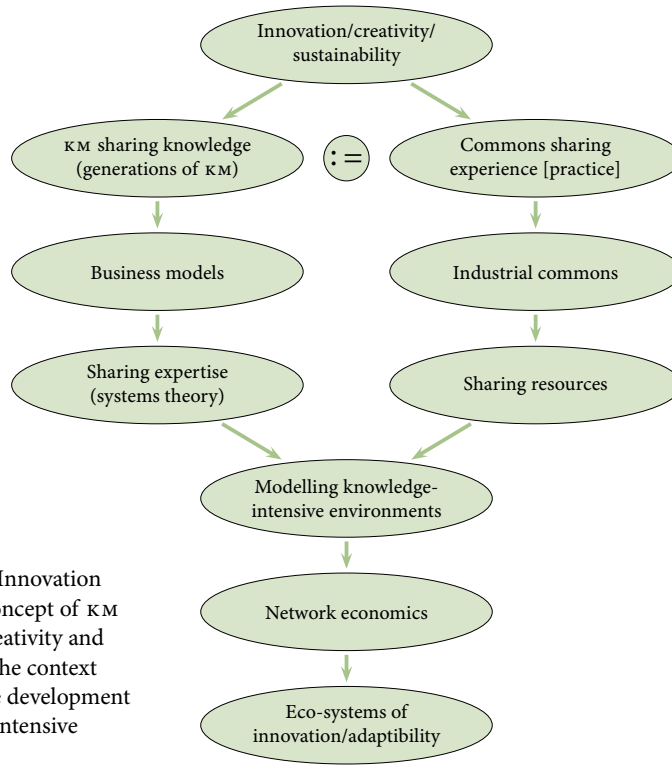

FIGURE 1

Ecosystems of Innovation as follow-up concept of KM to deal with creativity and innovation in the context of fostering the development of knowledge-intensive environments

bination of KM and Research on Commons and gives an idea of possible developments of results so far towards *Ecosystems of Innovation.*

The Original Task of Knowledge Management

One of the oldest problems of humankind is surpassing insecurity in trying to cope with the future either by gaining knowledge about the world, or by being able to adapt or adjust oneself or by changing the environment (a sort of manufacturing approach) according to our interests and possibilities.

But how does KM fit into this 'spectrum' of ideas and approaches? Hopefully somewhere in the middle or, to take up a suggestion by Ostrom (1990; 2009; with Janssen and Janssen 2011), with respect to the role of *Commons:* Somewhere between market (or: blind evolution) and state (in governing the world), i. e. *between deregulation and regulation.*

But that means we might have to reconsider the originally plainly cognitive approach of *Knowledge Management:* Either as Senge et al. suggest

in *The Necessary Revolution* (2008) where they investigate the interplay between individuals and organizations via an ecological path, or in the sense of Ostrom and others as an approach via studying the Commons, i. e. studying *Knowledge as a Commons* (Hess and Ostrom 2007). In both cases, we have to deal with *sharing* resources like expertise, experience, knowledge or natural resources, which are considered to be in common use, and we have to take care not to *overexploit* them because we are aware that it would immediately harm us otherwise.

Before going into detail especially about the necessity to foster *innovation, creativity and sustainability* (some of the aims of 'cognitively biased' KM), the *history of Knowledge Management* and the set of problems *Knowledge Management* was intended to solve we will refer to fairly recent examples brought up into the discussion at *Harvard Business School Association* of Boston in the context of the new term *Industrial Commons.*

Already in July 2009 in *Harvard Business Review* Pisano and Shih concerning the 'Restoring [of] American Competitiveness' discussed the matter of *Industrial Commons* to solve the problems arising from a lack of manufacturing due to outsourcing 'the higher value knowledge worker jobs of the future.' If a company outsources manufacturing too much or too easily, it depletes the *Industrial Commons* (built up by the participants from the companies, who share skills and knowledge and thus contribute to the knowledge base and supply chain) just as surely as e. g. overfishing does in the context of Hardin's analysis of the 'Tragedy of the Commons' (Hardin 1968). 'Innovation depends on a robust manufacturing sector' (Bulkeley 2011). Shih (2009; in Bulkeley 2011) even says: 'The [new] tragedy of the commons is that when a company takes the short-term view, they don't worry about the value of the commons.' Pisano and Shih (2009) also argue that a great deal of knowledge or expertise is transferred in face-to-face meetings. Bulkeley (2011) enforces this fact by pointing out that a 'smaller ecosystem in which manufacturing is delegated to offshore organizations make such [knowledge] transfers more difficult.'

There have been a lot of investigations into *knowledge* as primary source of the economic success of enterprises and how to get hold of that *knowledge as* [an important] *competitive advantage.* These investigations go back to the early nineties with respect to the development of the *Management of Knowledge* (Prusak 2001).

But there are also much older approaches which come back to our mind when we consider common-pool-resources in Europe handled and

investigated as *Allmende* in Switzerland and which can now be understood as an *approach between state and market* (besides the work of Ostrom see also Vaněk 1970; 1971). The inquiries into the working of *Allmende* are a more *ecological approach to knowledge,* i. e. Knowledge as a Commons. Commons in this context appear to provide an *Ecology of Innovation*.

This can lead to re-investigate the chances to reinforce *creativity* as a means to see solutions for some of the acute/prevailing problems in economy, culture and society trying to take the best from both sides and providing an empirical as well as theoretical support to interpolate between the current approaches to handle resources via knowledge.

Therefore we will introduce the idea of *Ecosystems of Innovation* which will deal with new problems referring to the relation between knowledge and human beings. The topic is now quite different since we are concerned with *adaptation* and *changes* of the environment due to recent developments in Cognitive Science and Economics.

Interpolating between Market and State

Taking up some of the ideas that were expressed at the 7th International Forum on Knowledge Assets Dynamics and the 5th Knowledge Cities World Summit (2012), what seems to be essential is to understand innovation, creativity and sustainability by way of a *knowledge-based approach* to reach the aims of modern enterprises. But that means that *Knowledge Management* primarily is expected to offer ways to improve economic success and leave everything else unchanged. We could call this the *approach of local optimization* as it is considered by Holsapple (2002; 2003), Firestone and McElroy (2003), Allee (2003). The theoretical assumptions about the use of 'knowledge' (though not of the underlying theories) concern the idea that one is able to produce innovation in one's own firm just by understanding the knowledge available in another firm. But that exactly means that one thinks that documentation of knowledge is enough. However, already via the *Scissors of Knowledge and Life* (Gatarik and Born 2012a; Born and Gatarik 2012) and much earlier via *model-theoretic investigations* by Rainer Born we could show that this approach is *insufficient*.

What we want to emphasize in this context, however, is that it can happen that we may want to change our evaluation of what characterizes success, i. e. when economic evaluation may not be enough to guide our actions. Our aim therefore is also to reflect the presuppositions of our action-guiding argumentations.

One also has to ask the question which original problem KM wanted to solve, or which problem might correspond to something we consider as a solution. In the case of the so called 'Tragedy of the Commons' (Hardin 1968) as the starting point of many investigations particularly by Elinor Ostrom, we have to consider the aim of Ostrom, namely to refute the argumentations by Hardin as 'lopsided.' In her eyes it is more important to consider the fact and the idea of the so called 'private properties' to overcome the 'Tragedy of the Commons,' in which case it can be shown empirically that Hardin's explanation is unsound.

Ostrom's concerns certainly deserve severe attention, but they might be better addressed by taking a closer look at the following two-fold question: Is it possible to provide solutions to the problems in question by way of applying rules such that we do not have to change our background knowledge H in order to be able to correct the produced results by simple mechanical application of the rules? What kind of *extra knowledge,* innovation, experience/expertise and reflection (in the sense of *Ecosystems of Innovation*) do we need to prevent misapplications of *theories* (or to kill evolution by being driven into some ecological niche to die out)?

Unlike KM, which – as a primarily cognitive approach – can be understood to support innovation within an organization by transferring the 'explanatory' knowledge involved in another organization, the idea of Commons is a more practical and even emotional approach on a democratic basis (the original version of Commons goes back to the common use of Alpine pastures and was called *Allmende* in the sense of 'common use of resources'). Commons also concern the change of our environment and thus the feedback 'into' our (knowledge-intensive) models for acting in this environment.

In considering the interplay between theory and practice (see figure 2) in a broader context we are also motivated to settle the following question: Is it possible to produce solutions Q concerning the problem P in our field of investigation, which can be reduced to the applicability of an internally unchangeable background knowledge F, which – ideologically speaking – will leave everything unchanged in the sense that we do not have to learn anything about ourselves?

In the book *Sharing Expertise als Kern von Wissensmanagement* (2012a) Gatarik and Born tried to show that this is impossible due to the influence of the so called *Scissors of Knowledge and Life* and that a slow change or rather development of Common Sense C (see also Shanker 1992) is necessary, if we want to have our organization to survive and furthermore us in

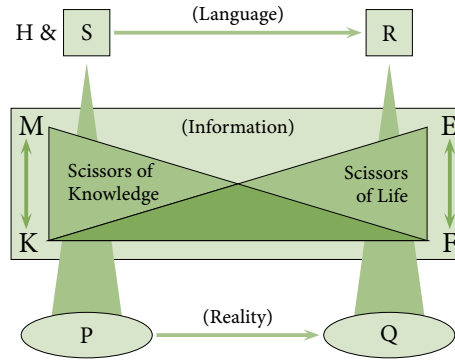

FIGURE 2

LIR with the Scissors of Knowledge and Life

this world. We therefore definitely – as in many other cases – are looking for a better understanding of the relation between perception and interaction of humans within an environment and an ecological niche.

The Theoretical Foundation for the Applicability of (Industrial) Commons as Ecosystems of Innovation

Primary definition: A Commons is 'a resource shared by a group of people that is subject to social dilemmas' (Hess and Ostrom 2007, 3). An Industrial Commons is 'the R&D and manufacturing infrastructure, know-how, process-development skills, and engineering capabilities embedded in firms, universities, and other organizations that provide the foundation for growth and innovation in a wide range of industries' (Shih 2012, 2).

In order to be able to understand the meaningful connection between research on Commons and Knowledge Management, i. e. the realistic meaning of experiences with Commons and the success of Commons, one can look at an essential problem of Knowledge Management especially with respect to research on expertise, which needs to be conveyed with the help of KM techniques. This is the topic of the model theoretic approach LIR (Gatarik and Born 2012a), which we discuss now.

We do think and argue for the case that it is necessary to understand the way in which knowledge mediates between language and reality. Furthermore, in which way knowledge defines/determines our dealing with information, but also how it is codified linguistically and how it determines the relation/reference of language onto reality. In the process of communicating knowledge, one has to take into account the multidimensional background knowledge of an addressee: the knowledge components or rather the knowledge roles in figure 2, i. e. experiences/expertise E, com-

mon sense/user knowledge/folk knowledge F, rules/routines/knowledge by calculi K, structure/explanatory/model knowledge M. If – abstractly speaking – one wants to communicate the changing of state P (e. g. some problem situation in an enterprise) into a new state Q (in the world, in one's attitude, in one's understanding and in knowledge) or even if one wants to make it understandable or wants to establish some insight into the transition in an addressee. Thus to enable their learning, one has to explicate the means of representation in use (e. g. a language) and clarify which *components of the background knowledge* are responsible of relating the signs of the language onto sections of the world, i. e. mapping them onto these sections. The causal connection between P and Q is linguistically mirrored and shows up in the acceptance of the logical/inferential transition from S to R and is a foundation of communication. The state transitions from P to Q correlate with the fact that the transition from S to R in language is logically admissible and semantic ally acceptable. This acceptance of language can be either amplified or weakened by changing the relevant components of background knowledge, which are responsible for acceptance and sense making in language. The real acceptance and therefore the success of the communication of knowledge – especially if we are dealing with building up or transferring new points of view or even new frames of reference – depends on the interplay of the respective knowledge components F, K, E, M of the background knowledge H (accepted hypotheses) enacted as knowledge rôles. The Scissors of Life and Knowledge therefore concern the difference in the acceptance of (problem) solutions Q according to the background knowledge F, E, M applied to the routines K.

Roughly speaking, this means that the classical form and the set of documentations of information and of the rules for handling and using information do not suffice to grasp completely the expertise present in people, e. g. in the case of manufacturing skills, and especially do not grasp the innovative potential of correction depending on experience, which is essential for applying knowledge correctly. This potential of expertise is necessary to prevent that rules/routines are overused in an unreflective manner and therefore can lead to wrong applications of knowledge and especially of explanations as it happened in overexploiting outsourcing where the taking care of ecological aspects inherent in the natural application of commons was eliminated and therefore also the possibility of proper innovations in the sense of new solutions to pressing problems.

Now, if one looks at the interplay between expertise and experience E

and the commonsensical or cultural knowledge F in the framework of the scheme LIR and then introduces Commons to handle this interplay, one can use dialog and sharing experience/expertise to change the relation between E and F and the given background knowledge F into an extended F* (cf. the discussion of Heinz von Foerster to link understanding with experience by acting in von Foerster 1993, especially 101–3). Applying F* to the routines K in the framework of the scheme LIR can produce new problem solutions, which still can be accepted in F by way of applying the techniques that lead to success in Commons. Practically speaking, Commons can – using the logic and its practical instantiation of LIR – enforce the necessary dialogue and the sharing of experiences/expertise between E and F and in this way they can essentially influence the success of problem solutions of a system. We think that this dynamical dialogue can improve developments of a system, especially in *supporting innovation in the realm of routines and rules* K, and in a further consequence it can improve the competitive advantage and the general fitness for survival not only of a specific organization understood as a regional 'node of knowledge' but also of a geographical or political 'region' as a whole.

In this case, one can embed the empirically developed Canvas technique for mapping business models into the scheme LIR. Such an extension and adaptation of the Canvas method gives rise to an innovative scheme of analysis LIR++ which enables to grasp and analyze the regional, practical and locally successful knowledge contained in a Commons. In this way, one can also understand and try to copy the local success of 'knowledge nodes' in a region. The next step would be to link those nodes to build up a successful network economy, not in the least by support of digital means, i. e. we have to be careful about the limits of the application of the identified knowledge. One must not simply draw out the formal flow of information but look for the actual knowledge in the nodes which needs to be grasped and which in fact is the real cause of the success of networking. If we look e. g. at the Emilia Romagna example (Belussi and Porcellato 2012), we will find that it is the flow of real information and the factual combination of carriers of knowledge which is essential for the success of linking knowledge nodes. What is really important and is fairly often overlooked is that there needs to be knowledge in the nodes beforehand. This knowledge cannot be built up by digital networking alone. One could of course analyze these forms of success under the aspect of investigating Commons, i. e. of investigating communities of knowledge as well as rules for the common use and the handling

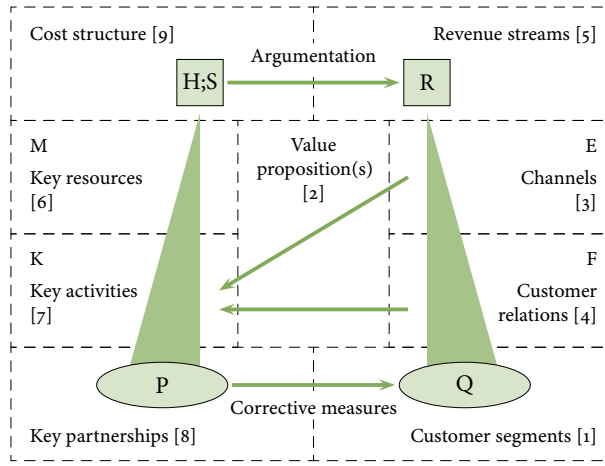

FIGURE 3

LIR++: From 'business modelling' to 'knowledge models in business' as a multidimensional approach in network economy in order to be able to adapt to rapidly changing market conditions and apply regionally available sources of creativity and innovation

of this knowledge. This idea conforms to the conception that the term Commons refers to 'a resource shared by a group of people and it is often vulnerable to social dilemmas' (Hess and Ostrom 2007, 349). It is decisive, as we think, that content needs to be transported. The question is how can this kind of knowledge be grasped locally and be conveyed directly, i. e. if one gives up the idea of a universal common sense.

In using the analysis of Commons, e. g. with the help of LIR++ (see figure 3), we can also reintroduce the importance of responsibility and empathy into Business Administration and go beyond the primarily cognitive aspect of knowledge as it seems to be at the center of e. g. Communities of Practice (Wenger 1998; Rullani 2012) in standard KM.

The Tool LIR++

We are now discussing in detail figure 3 which also contains the Canvas method (Osterwalder and Pigneur 2010) in a short but transformed way to be able to embed it into our model-theoretic approach LIR++.

Our combined tool or – better – framework of investigation LIR++ was both invented and derived from practical experiences and applications. It summarizes a host of approaches and research results from different fields of investigation, ranging from Model Theory, Cognitive Science and Philosophy of Science through to Systems Theory in Senge's presentation to mention just one source with relation to Business Administration, Management and Applied Economics. Besides being well-founded theoretically, it also rests upon our experience of building up the subject Knowledge Management at our university as it grew out of Busi-

ness Informatics, which was developed as a combination of Business Administration, Management and Computer Sciences. The way in which we present our scheme LIR++ here was the foundation for practical work – we call it theory-guided practice – at, for example, the Austrian SME Beham (Gatarik and Born 2012a) in autumn 2011 whose economic results in the current financial and economic crisis after the taking LIR++ as a basis for the run of this enterprise were awarded the Upper Austrian Business Prize PEGASUS in gold in 2012.

The core process of analyzing the business model of a firm in order to be able to improve or change it is now depicted in a deliberately abstract way which allows for more applications and expresses our conviction also shared by Pisano and Shih (2009): top management needs to revise some of its outdated conceptions especially about outsourcing to mention at least one example. The numbers in square brackets below refer to figure 3.

Let us therefore – abstractly speaking – start with an observable, given positive economic result, e. g. a successful event in some region, within a sort of 'customer segment' (1). The customer segment should contain the offer of problem solutions available in the 'knowledge nodes' of some enterprise. In our own analysis, we shall go further and identify knowledge as a driving factor, and not just as a business model as 'explanation' for whatever we investigate. We assume that there are (available) solutions or products, which are *accepted* according to agreed-upon values by customers, i. e. there are 'value propositions' (2) connected with these products. These value propositions – to bring in the systemic approach of Senge (1999; 2006) and Senge et al. (2008) – provide a connection or a link to all other factors/elements of the scheme LIR++ and in a loose way correspond to the fifth discipline (Senge 2006). By 'loose' we mean that we apply the idea of 'family resemblance' of Wittgenstein (1953), which roughly means that the concepts in use stemming from Canvas, Senge and LIR overlap, i. e. they are not identical in the sense that there is one single thread that makes up the 'rope' of argument as such (to use a well-known metaphor of Wittgenstein).

The next step in the analysis is to identify in (3) 'channels of [personal] knowledge [or experience]' E (if we are looking for knowledge-based creativity). Now it is essential to take into account 'nodes of knowledge' which also correspond to the idea of 'personal mastery' (Senge 2006), i. e. we have to find out where and how knowledge is relevant for creative problem solutions (experiences and expertise) and where it is concentrated within an enterprise such that it can be transferred or communi-

cated. We are looking for the knowledge, which we think/identify to be essential for the generation of problem solutions.

Thereupon, we concentrate on 'customer relationships' (4) which we can combine with cultural and social 'folk-knowledge' F as the background knowledge important for the common use of results as well as containing the possibility of cultural corrections with respect to the 'acceptance' of solutions (not just by customers). This is the spot where the practice of Commons or the commons-like structure of an enterprise are relevant. It is also the place, where 'ethics' come into the picture, 'ethics' as a means of understanding the limits of the application of rules, i. e. 'ethics' which 'let us know' how far we can go to realize certain economical aims.

Only afterwards one should analyze the 'revenue streams' (5). They must, however, not become the core or drive of invention. In (6) we introduce a sort of view from outside concerning the 'key resources' which make up the explanatory power M and correspond to Senge's 'mental models.' These make up what we consider as a *European competitive advantage* due to a host of cultural diversity in E and F.

What furthermore is relevant are the routines in (7), K according to LIR, which can be understood as the visible 'key activities' of an enterprise both in the production as well as the relation to the commonsense knowledge F and therefore to Senge's 'shared meaning' (4). The relation between K and F is the real core of our analysis via LIR++.

In the sequel, one should look at the 'key partnerships' (8) where the special knowledge of other knowledge nodes, especially from supplier firms comes in.

The last but not least factor of analysis concerns the 'cost structure' (9), such that one can calculate R from S by using relevant background knowledge H, structural hypotheses and extra knowledge by content, i. e. expertise.

To understand the limits of the applicability of the Canvas method, if it is just used as a means for the identification and analysis of business models, we also need to introduce the ideas basic to the Scissors of Knowledge and Life (see above and figure 2). We are rather looking for an extension of the local background knowledge F to some extended background knowledge F*, which guarantees the successful (and reflective, i. e. open for corrections) use of rule/routines/heuristics to (re-) produce results (products, solutions) with the help of the use of commonsense background knowledge (as guiding our decisions in real life actions). F* will contain the specific knowledge/skills prevalent in a region (cf. in this context the story of Swatch in Switzerland as analyzed e. g. by Schulz 1999

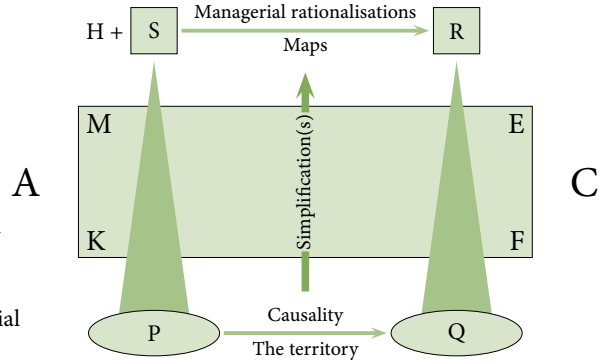

FIGURE 4

'The map is not the territory!' Analysing how oversimplifications can lead to wrong managerial decisions

or Wegelin 1999 as an example), which is more than just a receipt to produce 'results' on the basis of selected/prefixed parameter values. What is created is consciousness about the meaning/sense of the results of our analysis of business and 'knowledge' models (Weick 1995 and 2009; Rullani 2012). The aim is of course to prevent mistakes in the application of rules by evaluating 'results' according to the background knowledge E and F*.

To go on we should identify the necessary problem solution knowledge explaining the local acceptance of results, and to provide the foundation for a 'Geography of Knowledge.' Geography concerns the relation between a map and the reality/territory it refers to, and therefore the reliability of maps in order to be used for our orientation in some world. This idea is depicted in figure 4, which is the theoretical basis for our extension of the Canvas method. C combines E and F as common-sense knowledge and is realized in Commons. A combines K and M and concerns abstracted knowledge as realized in theories.

Summing up, we can use the idea of the *Scissors of Knowledge and Life* to make clear that the Canvas technique as a means to analyze and identify business models is not enough. Actually, it should only be used to find out which specific background knowledge helps to apply the 'rules' correctly and also allows for some reflective correction. Otherwise we would not get hold of the knowledge characteristics for some knowledge node or region, but would get only a general receipt to (re-) produce parameter values.

And this brings us to the important point that it does not suffice to provide techniques to produce the relevant more or less agreed upon (?) parameter values but we also have to re-consider the knowledge and ideas to use those (new) techniques e. g. of *Network Economics.*

Our idea therefore is to propose a new way of looking at an organization, a way that goes far beyond of considering it as e. g. a Complex Adaptive System (CAS) and focuses on re-creating engagement, innovation and sustainability via *Sharing Expertise* (Gatarik and Born 2012a).

Getting back to the importance of manufacturing for innovation and why innovation is killed by too much outsourcing, we will have to reconsider the theoretical/managerial arguments that lead to over-exploiting outsourcing and why one thought it would work. The theoretical backbone was that – at least the cognitive part – of knowledge could be completely grasped and documented by syntactical and semantical technics alone. In contradistinction, the point of *Ecosystems of Innovation* is trying really to understand why, for example, outsourcing as a managerial technique does not work in the long run.

Considerations about Empirical Research

If we want to come to solutions of the problems facing us, we should concentrate and determine two things:

- Firstly, which argumentations and assumptions may have led to long-term ineffective managerial decisions and what could have prevented them both logically and empirically.
- Secondly, in analysing the standard theories from KM on the one hand and research on Commons on the other we found that an empirical investigation will be necessary both to understand and apply the results of research on Commons and identify their influence upon decision making in real-world systems.

This idea finally leads us to a hypothesis (as provisionally accepted basis for further research) concerning further empirical investigations:

Our main idea is referring back to our previously mentioned experience at the Austrian SME Beham was that the sometime short-term economic success of outsourcing, to think again of a concrete example, depended on two essential factors:

- Firstly, in practice the instructions given by the top management have some connection to what the people know and so they understand what they are about to do and therefore the employees usually can correct minor mistakes by themselves. This is of course not the case, if they are neither engaged nor if they do not have any knowledge of what is happening.

- Secondly, a short-term success must not be taken too literally/seriously and arising mistakes need to be interpreted with hindsight and corrected on the sport. All works well, if there is still a commons-like structure in the firm as e. g. in the case of some 'Management Team' as introduced at Beham's.

If however no structure in the firm is available to support this kind of possibility for actions on a basis of dialogue and reflective correction and understanding, e. g. if there is no commons-like structure available, there is no chance to understand realistically what is going on and people (management as well as employees) will stick to the unreflected use of their rules.

So, the first thing is to find out when in an enterprise or a social unit in general it is possible to prevent misapplications of ideas with the help of dialogue (in the sense of Bohm 1996) and communication culture in the system. We also need to identify and investigate commons-like structures and analyze and verify (in a weak sense) the way they work, what they provide, and hopefully identify their causal influence (if available). The main point of this kind of investigation, however, is that one needs a fairly sophisticated tool LIR++ (Gatarik and Born 2012b) to identify the business models in action and their transition into implicit knowledge models, which in some sense are characteristic of Commons.

Conclusion and Outlook: The Innovative Power of LIR++ and Commons

In classical KM approaches, one tries to construct so-called 'knowledge-maps' to manage and support the exchange of relevant knowledge between collaborating enterprises and economic mergers. But fairly often in sticking to formal rules and decisions this approach does not yield the expected operational and economic success. Examples are first the cooperation between Apple and Rank Xerox in developing modern computer interfaces and later on the separation, which led to the success of Apple due to misjudgments of the Rank Xerox management. Another negative example would be the merger leading to Daimler/Chrysler and its economic disaster. In this case the result of classical strategy was a freezing in of innovation.

In order to overcome these obstacles one again needs constructive background knowledge (supported e. g. by Industrial Commons in the sense of Pisano and Shih 2009; Shih 2012) to properly handle the rules of

production and exchange of expertise to understand the limits of plainly strategic decisions. This is the point where LIR++ can step in, both to select and to provide the relevant (explanatory) background knowledge for decision makers as well as helping to build up the latter, well knowing that not everything can be 'grasped' by standard documentation alone.

If we now look back and remember that our original problem was to recognize that *innovation* is a necessary means to regain and restore competitive advantage not only in America (Pisano and Shih 2009; 2012) but also in Europe and that we did suggest to foster *Ecosystems of Innovation* (ESI) (cf. also Bulkeley 2011) as an emergent, i. e. constructive (re-) combination of KM and Commons with new qualitative properties to take up the best of both, then we may wonder what could be the further consequences of our possible approach, i. e. especially with respect to innovation and regarding the loss of competitiveness in the context of destructive outsourcing decisions and the loss of manufacturing skills as source of *capabilities of innovation* in the sense of Creating Capabilities due to Martha Nussbaum but first of all Amartya Sen.

The possible contribution of ESI is to enrich/enhance our human problem solution capacities and at the same time to provide *a better understanding of the limits* of the application of those solutions. This is why it is important to re-model the connection between humans and their environment as a *knowledge-intensive relation* whereby knowledge must not be restricted to cognitive and technological aspects alone but naturally must also contain *social and cultural aspects* as a means for a better evaluation of the consequences of our actions:

1. Whenever we try to reproduce 'results' in practice and try to invent more or less formal rule systems or even expert systems (in the sense of Artificial Intelligence), we must not institutionalize them as means to replace creativity. Instead they should be used as means to take over from 'routines' and create elbowroom to re-enforce real creativity as a necessary precondition for innovation, flexibility and thus sustainability in ESI.
2. Whenever we think we have identified rules to produce results in a strict way we might remember that they rest upon simplifying categorizations of parts of reality and the success of the application depends on our ability to use them with foresight and vision and sometimes hindsight, which explains their real success.

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Intrapreneurship, Competition and Company Efficiency

Jože Kocjančič
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This paper investigates intrapreneurship, competition and company efficiency in large Slovenian companies in order to provide firm-level evidence and management implications on the extent to which companies exploit available internal business potentials. The survey data for the sample of large Slovenian companies and statistical methodology are used to analyse the association between intrapreneurship, competition and company efficiency. The empirical results confirmed the significant impact of the internal business potentials on the operating results of the analysed companies. The utilization rate of internal business potentials was only partially or ill-used, reflecting the internal potential source of unused business opportunities as one of possible ways to improve competitive advantage and company efficiency. The empirical results imply the importance of long-term managerial strategy towards innovation and encouraging creativity as the basis for successful internal corporate business strategy to improve competitive advantage and company efficiency.

Key Words: intrapreneurship; company behaviour; market competition; company efficiency; Slovenia
JEL Classification: L25, M21

Introduction

This article contributes to theory and empirics on the linkage between intrapreneurship, market competition and company efficiency. It is based on the in-depth survey results related to the behaviour of companies, entrepreneurship and intrapreneurship by using advantages of available internal business potentials for company market competition and company efficiency.

The aim of the article is to establish an association in what degree Slovenian companies take advantages of intrapreneurship or internal en-

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trepreneurial potentials within the company. The research is based on the investigation of the willingness of company employees, particularly of the company managers, for re-establishing of favourable internal entrepreneurial climate in searching for individuals and groups of employees, which are willing for intrapreneurial challenges within the company as a way to increase the company's market competition and company efficiency.

More specifically, the scope of the article is to assess the presence of intrapreneurship in the Slovenian companies and how it is recognized among the company employees, particularly among the enterprise managers, as a factor for company market competition in a way to achieve the company long-term success. Findings are important for theory of intrapreneurship, market competition and company efficiency, and for management decision making process to achieve better company business results arising from an existing intrapreneurship in the company or from its introduction to increase company's market competition during restructuring and adjustments to rapid economic changes.

The theoretical background and foundations for this research are economic theoretical insights and empirical analysis of entrepreneurship, intrapreneurship with human resource management, market competition and company efficiency in the ways of functioning of the internal corporate culture in the modern company and its competitive markets (Parker 2011; Kuratko, Covin, and Garrett 2009). The corporate social responsibility to internal employee motivation might also play an important role for intrapreneurship (Koellinger and Thurik 2012). The extent of intrapreneurship is analysed for the sample of the Slovenian companies focusing on how the employees, particularly managers, perceived intrapreneurship as the source of the company's market competition and company efficiency success. We investigate the extent to which intrapreneurship can affect the operating results of the company in competitive markets.

The rest of the paper is organized in the following ways. The next section presents the basic theoretical and empirical knowledge of entrepreneurship (e. g. Schumpeter 1951; Kierulff 1979; Birch 1993; Bailey 1984; Antončič and Hisrich 2003; Antončič and Zorn 2004; Audretsch and Keilbach 2004; Audretsch, Keilbach, and Lehmann 2006; Timmons and Spinelli 2006; Kocjančič and Bojnec 2011), intrapreneurship and the ways of functioning of the internal culture of entrepreneurship in modern businesses on company efficiency in competitive markets (e. g. Scholl-

hammer 1981; Pinchot 1985; Pinchot and Pinchot 2002; Duncan et al. 1988; Garvin 2002: Hisrich 2009; Kuratko, Covin, and Garrett 2009; Drucker 2001; Solberg and Olsson 2010). The following section presents and explains the empirical results of the analysis of the surveys and interviews in the Slovenian companies. The next section presents managerial and policy implications, while final section derives main conclusions.

Theory of Entrepreneurship and Intrapreneurship

In the global market competition to succeed by the business operators it is necessary to develop new products and doing business better and faster than their competitors (Solberg and Olsson 2010). These developments require a different corporate culture, which differs from traditional views of the internal organizational culture. Modern companies need to develop necessary entrepreneurial culture within existing businesses, as part of the innovation process in order to contribute to the competitive survival of existing and growth of new companies in rapidly changing competitive markets.

ENTREPRENEUR AND ENTREPRENEURSHIP

Entrepreneurship as an opportunity for business entrepreneurial activities is mainly pertained with small businesses. Entrepreneurs are creative individuals who are able to connect the ideas of organizational and manufacturing resources to enable them to derive an entrepreneurial venture. The link of ideas, entrepreneurial skills and the means of production can enable a small business to grow quickly into a large organization (Birch 1993; Antončič and Zorn 2004; Audretsch and Keilbach 2004; Timmons and Spinelli 2006). During the recent economic recession period, large companies have faced difficulties and have tried to solve them by labour shading, thus reducing the number of employees. On the other hand, the importance of small businesses for the national economy has been of the utmost importance. Small and medium sized enterprises in harsh economic and financial conditions may play an important role in labour market flexibility. Namely, with growth of their output sales, they may attract labour into employment, particularly those who have lost jobs in large companies and have flow into unemployment. In addition to employment of laid-off workers, small and medium sized enterprises may attract into employment a number of young job seekers. Some of them may even establish own self-employment or small firms. However, it is necessary that small businesses are not only a creator of new jobs, but also

an important source of innovation and entrepreneurial activities (Schumpeter 1951; Kierulff 1979; Bailey 1984; Audretsch, Keilbach, and Lehmann 2006; Zahra, Filatotchev, and Wright 2009).

The reason that economic theorists, with the exception of Schumpeter (1951) focusing on large companies, in the past did not include entrepreneurship in their economic models, mainly lies in the fact that the impact of entrepreneurship on economic growth is difficult to define and even harder to quantify in the production function. Since the 1980s a focus in literature on economic growth and development has changed. Particularly, Birch (1993) conducted the study on the employment of all US firms during the period 1969–1979. His research showed that during this period the companies with one hundred or fewer employees created 81% of jobs.

INTRAPRENEURSHIP

The concept of intrapreneurship is considered as an entrepreneurship within large companies. Employees in large companies generate new ideas and identify new business opportunities that are aimed to be realized within the existing business support mechanisms. The traditional view of corporate entrepreneurship defined entrepreneurship is an internal process where an individual within the existing system is looking for business opportunities, without taking into account the established formal channels (Stevenson 1990). Some researchers have used a narrower definition focusing primarily to corporations, while smaller companies were excluded from the study (Schollhammer 1981; Drucker 2001; Garvin 2002). The advantage of companies that are able to engage the business-oriented individuals or groups within their existing businesses lies in an ability to quickly detect problems and business opportunities in a business environment in which they operate, and then try to creatively solved them, leading to a process of market restructuring in order to improve competitiveness of their products. Internal entrepreneurs have a possibility to use the existing commercial infrastructure and sales networks and the financial stability of companies in which they operate, allowing them considerable advantage over individuals acting as sole proprietors (Pinchot 1985). Later, the need for a new orientation of the internal entrepreneurship or intrapreneurship change in strategic managerial thinking, which is recognized in the older, larger organizations (Pinchot 1985). Such organizations are hierarchically organized and have a bureaucratic structure as an outcome from their historical performance and their size.

Age of the organization and its size have a negative impact on the development of domestic entrepreneurship. Corporations that aim to create a favourable environment in support to an entrepreneurial mode, they need to invest in capable individuals within corporations. They need to change the mindset of employees and stimulate entrepreneurship within a corporate environment (Dollinger 1995; Oden 1997; Garvin 2002; Morris, Kuratko, and Covin 2008). The market successes of companies that are able to successfully innovate provide evidence in favour of intrapreneurship. Such companies are a proof that it is possible to overcome any barriers in a favour to the introduction of intrapreneurship in established companies, in a way that allows the company to develop in a mature stage of development. The internal business potentials are also crucial for early beginners' enterprises in their market competition and survival (Drucker 2001).

Intrapreneurs are persons who are willing to take a risk and responsibility for own decisions in the case of failures, and persons with influence and prestige in the organization, who know how to use the informal relationships within the company. Their goal is not only the development of new technologies and products, but also the best use of all other support mechanisms available within the company in order to increase market competition. All these are doing with the one goal, to penetrate and succeed with innovation in market competition (Duncan et al. 1988). Kierulff (1979) describes corporate entrepreneur as an individual or groups related to the existing team in the corporation who are looking for new potential market opportunities. They are exploiting available existing resources and looking for new ones that enable them to identify current market opportunities, thereby increasing production and sales in market competition.

INTRAPRENEURSHIP, MARKET COMPETITION AND COMPANY PERFORMANCE

Modern companies need intrapreneurship as a source of innovation, which in turn leads to better management of markets and thus more efficient company performance in market competition. The company's success has also association with innovators and creative individuals. This also depends on individuals who have an entrepreneurial approach and ability to implement a good idea into a real product or service, even if they are employed in large organizations. Without widespread distribution of entrepreneurial energy, without a number of individuals or

groups who are able to realize ideas and innovation, many new products would have never occurred to the consumers. Yet, businesses without such persons would get stuck in place (Pinchot and Pinchot 2002).

Jay (1996) described two types of managers that are needed in the contemporary organized company: yogis and commissioners. The yogis have a vision and are creative, but they lack to keep order. The commissioners do not have vision, but they achieve objectives and accurately perform their tasks. Both personal characteristics are rarely integrated in a single person. The idea of intrapreneur promises solution of this paradox between order and innovation. Pinchott (1985) argues that intrapreneur is a visionary, a creative person, who finds a way that an idea is changed in a profitable reality.

Two main problems are related to providing incentives for promotion and maintaining of intrapreneurship within the corporations in competitive markets: question of strategy and tactical questions (Duncan et al. 1988). Among strategic questions, there are necessary measures that directors and other top managers should very often publicly stress the importance of innovations for company, creativity and innovation inside the company. This should have priority due to concrete and symbolic reasons, innovativeness should be supported by awards and bonuses, and top management should recognize that creative employees are motivated by ethical creativity and ethical competition. As a tactical question is how to remunerate intrapreneurs in competitive market environment.

Methodology and Data

The purpose of the research is to investigate to what extent the surveyed companies relied to internal business potentials available within the company as a way for market competition to increase company's efficiency and success. The surveys with a written questionnaire covered seventeen companies of which completed answers to a written questionnaire were returned by fifteen companies. The sample of seventeen surveyed enterprises was selected on the basis of the enterprise size in the enterprises they were willing to participate in the survey and to provide the relevant answers, which can assure investigation of intrapreneurship activities. In each of the surveyed enterprises were selected two respondents in order to assure more realistic picture on intrapreneurship activities in the selected enterprises. The conducted surveys focused on determination of the implementation of intrapreneurship in the surveyed enterprises and how its accelerated internal business processes in order to affect the better

business results in competitive markets. The structure of the questionnaire follows the thematic strands focusing on the key issues faced by the businesses in the introduction and implementation of intrapreneurship:

- To what extent issues of intrapreneurship are known to the company's management, and if known, to what extent it is introduced and implemented in the business processes?
- To what extent intrapreneurship has affected the company's business operation?
- To what extent utilization of internal business potentials has affected the company's efficiency in competitive markets?

Following from these research questions, we set the following three hypotheses:

H1 *Incentives for introduction of intrapreneurial activities are higher in companies in which management is aware of the importance of intrapreneurship.*

Consequently, we expect a positive correlation between intrapreneurship activities and management knowledge of intrapreneurship.

H2 *Active development of innovation culture in the company is positively associated with introduction of intrapreneurial activities in the company.*

Again, a positive correlation is expected.

H3 *Companies with more developed intrapreneurial activities achieve higher gross value-added per employee than companies with less developed intrapreneurial activities in competitive markets.*

The unique in-depth surveys were used to obtain data and to test the set hypotheses. Advantages of the method used are mostly in its anonymity, relatively low costs for data collection and opportunities for comparative analysis of performances between the analysed companies. The sample of seventeen surveyed companies was selected primarily on the basis of their size and ability to obtain all relevant answers regarding to their internal business operations. Two respondents were selected in each of the surveyed companies in order to obtain a realistic picture of the internal corporate operations. Out of the seventeen companies involved, the answers were obtained from the fifteen ones.

The respondents in the surveyed companies were employed primarily in senior managers' positions such as managers of individual business

units within the company system, while the administration and their professional staffs were not included in the sampling procedure as their answers would be less relevant for our analysis. The surveyed companies were selected primarily on the basis of their minimum size, which allows internal business operations. The surveyed companies were selected from different economic activities, which covered trade, other service activities and manufacturing production activities.

As a sample limitation, it is not stratified on all population of large companies in Slovenia. In terms of achieved average gross value-added per employee, it is biased in direction of more efficient companies, in which intrapreneurship processes are not a new phenomena as they are in a high degree already used. While this sample limitation and relatively a small sample size are limitation for making general conclusions for all Slovenian population of companies, the results are indeed useful for understanding the phenomena of intrapreneurship in the studied companies and its role for company's market competition and company efficiency in newly emerging market economies.

Among the surveyed companies, 46% of businesses belonged to the group of companies with over one thousand employees per company, 27% of companies with five hundred to one thousand employees, and 27% of companies where the number of employees ranged from two-hundred-and-fifty to five-hundred. Figure 1 presents the structure of the surveyed large companies in Slovenia. Total employment in the surveyed companies was 30,124 employees, which means on average 2,008 employees per the surveyed company. In the comparison with the number of employees in the Slovenian companies in 2003, this means 4.9% share, while 13.5% share among all employees in the Slovenian companies with more than 250 employees.

Among the surveyed companies by main economic activities, 27% were in services, 53% were in manufacturing and 20% in trade activities. The surveyed fifteen companies represented 4.6% of total population of the Slovenian companies with more than 250 employees. By gross value-added per a company, the surveyed companies (37,218 euros) exceed the Slovenian average by 95%: 27% of the surveyed companies were below the Slovenian average, 27% of the surveyed companies were close to the Slovenian average, and 46% of the surveyed companies were above the average for the Slovenian companies. The surveyed companies generated 37% of net revenues from sales of goods and services in the domestic market and 63% in the foreign markets.

TABLE 1 The correlation between the passing of ITS and ITS processes

Question	(1)	(2)	(3)	(4)	(5)
The frequency of encounters with ITS	2	2	18	8	2
Implementation of processes necessary for the operation of ITS	2	1	22	3	2
Correlation coefficient			0.96		

NOTES Column headings are as follows: (1) never, (2) rarely, (3) occasionally, (4) frequently, (5) mode. ITS – Intrapreneurship. Likert scale, 1–5.

Analysis of Intrapreneurship in the Surveyed Companies

KNOWLEDGE OF INTERNAL BUSINESSES

The analysis of the frequency distribution of the encounters with the intrapreneurship shows that 59% of the respondents occasionally faced with intrapreneurship. This result suggests the relatively non-intensive use of internal business operations. The degree of linear correlation between the degree of implementation of internal business processes and internal rate of encounters with entrepreneurship is 0.96 indicating a strong linear dependence between the variables (table 1). The high value of the correlation coefficient indicates a strong linear relationship between the level of respondents encountering intrapreneurship and the level of intrapreneurship process, which is logically associated with the fact of the presence of knowledge of the conditions of the internal business planning and implementation of internal business processes.

The analysis of the employees' awareness of the advantages and disadvantages of the intrapreneurship confirmed that 73% of the respondents were not familiar with the strengths and weaknesses of intrapreneurship. A corresponding result was achieved in only 20% of the surveyed companies. An interesting finding was that the companies from so-called new technologies largely responded to these questions positively.

IMPLEMENTATION OF INTERNAL BUSINESS PROCESSES

The assembly, which refers to internal business processes, gives an insight into the relationships within the company. This should enable the development of innovative processes that support the corporate hierarchy in a search for competitive market positions. Table 2 presents the availability of necessary resources and use the business plan, which demonstrates the maturity of the internal entrepreneur venture.

The analysis of the quality of relationships that enable the development

TABLE 2 Analysis of responses regarding internal business processes

Question	(1)	(2)	(3)	(4)
Development of innovation processes	3.6	4.0	4.0	0.96
Support in the corporate hierarchy	3.7	4.0	4.0	0.92
Means for the realization of the project	3.2	3.0	3.0	1.06
Assistance of external partners	3.5	3.5	4.0	0.97
Application of business plan	3.7	3.0	4.0	1.02
Average	3.5	3.5	4.0	0.99

NOTES Column headings are as follows: (1) average value, (2) median, (3) mode, (4) standard deviation. Likert scale, 1–5.

of internal business processes indicates that these relationships were sufficient to allow for internal business operations. This finding was confirmed with the most common answer 4 'often allow' (Likert scale 1–5). The level of support in the corporate hierarchy, which allows the realization of the project, was found at a satisfactory level because 40% of respondents believed that they had the adequate support that was often available, while 30% of them had occasionally support. The results of the use of a business plan for an appropriate application suggest that 60% of the respondents believed on their often used in a practice, of which 20% were required to be used. The most common response was concentrated at 4 (frequently, Likert scale 1–5).

THE INTRODUCTION OF INTRAPRENEURSHIP

The assembly, which refers to the introduction of intrapreneurship in the Slovenian companies, covered the fields of corporate culture, innovation goals, guiding entrepreneurs to understand their role and training of internal entrepreneurs to realize the business opportunities in competitive markets (table 3).

The analysis of corporate culture and support systems that do not hinder innovation has shown that 47% of the respondents believed that the companies in their corporate culture were defined only partly and 27% were clearly defined. The aims of innovation in 35% of the surveyed companies were clearly defined, while 54% were only partially defined. The surveyed companies believed on a fairly importance of internally guided entrepreneurs in understanding the importance of intrapreneurship and its rules. The average rate of introduction of intrapreneurship in the surveyed companies was concentrated at 3.4 (Likert scale 1–5),

TABLE 3 Analysis of responses regarding introduction of intrapreneurship

Question	(1)	(2)	(3)	(4)
Defining corporate culture and support systems	3.6	4.0	4.0	0.84
Defined objectives of innovation	3.7	4.0	4.0	0.76
Recognition system for ITS	2.4	3.0	2.0	0.94
Understanding the importance of ITS	2.8	3.0	3.0	0.73
Training for business opportunities	2.6	3.0	3.0	0.80
Average	3.0	3.4	3.0	0.82

NOTES Column headings are as follows: (1) average value, (2) median, (3) mode, (4) standard deviation. ITS – Intrapreneurship. Likert scale, 1–5.

indicating insufficient importance of intrapreneurship in the surveyed companies.

RELATIONSHIP BETWEEN THE EMPLOYEES' ATTITUDES AND INTERNAL CORPORATE PROGRAMS

The analysis of the relationship between the employees' attitudes and internal corporate programs provides the evidence on the extent to which managers emphasized the importance of innovation, creativity and innovation in the enterprise on one hand, and the relationship between the employees attitudes and volunteer assistance on the other with tasks and projects that helped to increase market competition and company efficiency. The survey results suggest on the appropriate situation in the surveyed companies: 60% of the respondents answered that managers in their companies often emphasized the importance of innovation for the company, and in 27% of the surveyed company's innovation was a continuous process. The appropriateness of the individual awards for their innovation was only in 15% considered as the appropriate reward, while the others believed that the material and moral incentives in their companies were not enough and too little to sufficiently promote innovative practices of creative individuals. The average score was 3.4 (Likert scale 1–5). In short, the results of the relationship between the employees attitudes and internal corporate programs were ranged with the average score value of 3.6 (Likert scale 1–5) and the most common rating was 4.

Intrapreneurship, Market Competition and Company Efficiency

The impact of intrapreneurship on the business performance of the surveyed companies and the influence of utilization of internal business po-

TABLE 4 Analysis of responses regarding influence of ITS on the business

Question	(1)	(2)	(3)	(4)
ITS as a source of innovation	3.8	4.0	4.0	0.85
ITS-consumer-products	3.9	4.0	4.0	0.90
ITS-sales increase	3.5	4.0	4.0	0.90
ITS and success in the future	4.0	4.0	4.0	0.96
Average	3.8	4.0	4.0	0.90

NOTES Column headings are as follows: (1) average value, (2) median, (3) mode, (4) standard deviation. ITS – Intrapreneurship. Likert scale, 1–5.

tentials on the competitive market position of these companies are analysed to determine the extent to which corporate intrapreneurship affect business performance and to evaluate the impact of utilization of internal business potentials on a competitive market position.

IMPACT OF INTRAPRENEURSHIP ON INTERNAL BUSINESS OPERATIONS

Set of five questions relate to the identification of the impact of intrapreneurship on internal business operations of the surveyed companies (table 4). The analysis of the responses provides the insights into the extent to which business-oriented individuals and groups of individuals influenced the success of the company through the influence of internal corporate focus on increasing sales and the importance of internal corporate organization for business success in competitive markets.

The analysis of the impact of entrepreneurial individuals and groups of individuals on the company's success confirmed that 24% of the respondents believed that business-oriented individuals had a direct impact on the company's success contributing to new products and services, which would not be possible without them. Yet, 50% of the respondents believed that the intrapreneurs had a significant impact on the success of their businesses.

It is interesting to note that although only 20% of the survey companies conducted intensive internal business processes, the results suggest that in 74% of the surveyed companies employees considered that intrapreneurship had a significant impact on the number of new products and services. The average score of total responses to the question lies at the value of 3.9 (Likert scale 1–5). The analysis of the impact of intrapreneurial orientation on the increased domestic sales confirmed that

TABLE 5 Analysis of responses regarding influence of unused ITS potentials

Question	(1)	(2)	(3)	(4)
ITS and competitiveness	3.9	4.0	4.0	0.78
Unexploited ITS	2.7	3.0	3.0	0.75
Average	3.3	3.5	3.4	0.77

NOTES Column headings are as follows: (1) average value, (2) median, (3) mode, (4) standard deviation. ITS – Intrapreneurship. Likert scale, 1–5.

only 10% of the respondents believed that their internal business operation had a very significant impact on increasing sales and consequently their business results. On a significant impact of intrapreneurship on sales growth believed 50% of the surveyed companies, while as important by 23%. How important was the internal corporate structure for the surveyed companies to operate successfully in the future in competitive markets, this is confirmed by the concentration of the results at an average value of 4 (Likert scale 1–5). The majority of the respondents believed that the internal corporate structure was one of the basic conditions that the surveyed companies achieved successful performances in domestic and foreign markets.

MARKET COMPETITION AND UNUSED INTERNAL BUSINESS POTENTIALS

The analysis of the responses to a set of questions related to the impact of utilization of internal business potentials assessed the extent to which the internal business potentials were unused (table 5).

The results suggest that 73% of the respondents considered that a better internal corporate structure affected the market competition of the companies on both domestic and foreign markets. Yet, 23% of the surveyed companies believed that the impact of intrapreneurship on the company's competitive position was of the great importance at the average value of 3.9 (Likert scale 1–5).

In the final part of the questionnaire the respondents were asked the question to what extent they believed that their companies were in the inner untapped intrapreneurial potential. The answers confirmed that the surveyed companies had on average 54% of unused internal business potentials. This means that the optimal utilization of their results can be improved significantly. Most of the surveyed companies (57%) believed that their internal business potentials were only partially utilised. There-

fore, better internal corporate structure would contribute to better performance and market competition of the surveyed companies.

Statistical Analysis of Causalities and Hypotheses Testing

The statistical analysis is conducted on the basis of the survey data. Our focus is on three associations to test the set three hypotheses: between knowledge of intrapreneurship and introduction intrapreneurship in the analysed company; between impacts of intrapreneurship on company business performance and implementation of intrapreneurial processes; and between implementation of intrapreneurial processes and knowledge of intrapreneurship and gross value-added per employee that the company achieved in market competition. The results are biased to the sample selection and the conduction of the questionnaire used for the surveys. However, we are aware of this shortcoming in the interpretation of the results.

Dependence between the Internal Knowledge of Intrapreneurship and the Introduction of Intrapreneurship

Linear association between the internal knowledge of intrapreneurship and the introduction of intrapreneurship in the surveyed companies is investigated by the correlation analysis. The results of the analysis confirmed the set H1 on the interdependence of the variables studied. Both curves of the respondents responses are situated in the range of values from 1.3 to 4.0 (Likert scale 1-5). The degree of linear correlation between the studied variables is 0.75 suggesting the strong presence of the knowledge of intrapreneurship and the introduction of intrapreneurship. This holds for 56.2% of the surveyed companies employing the linear dependence: $0.752 = 0.562$.

Dependence Between the Impact of Intrapreneurship in the Business and the Implementation of Internal Business Processes

The results present responses regarding the impact of intrapreneurship on the internal business operations and the introduction of the intrapreneurship. Both curves of the respondents' responses fall in the range of values between 2.2 and 4.7 (Likert scale 1–5). The degree of the linear correlation between the studied variables is 0.59. This confirms the set H2 on the presence of the knowledge of intrapreneurship and the introduction of intrapreneurship in the surveyed companies. The linear dependence is of 34.8%.

Dependence between the Degree of Implementation of Internal Business Processes and Knowledge of Intrapreneurship, and the Gross Value-Added per Employee in the Surveyed Companies in Market Competition

The degree of the linear correlation between the average value of responses to a set of questions about the level of knowledge of the intrapreneurship within the company and gross value-added per employee in the company amounted to 0.44. This implies a 19.6% linear dependence between the pair of variables. The correlation coefficient between the average value of responses to a set of questions about the level of implementation of internal business processes and gross value-added per employee amounted to 0.27, indicating a 7.3% linear dependence. Therefore, the correlation coefficients between the pairs of variables are low. This does not confirmed the set H3 on the strong relation between intrapreneurship and the company efficiency in market competition.

RELIABILITY OF THE RESPONSES

The reliability of the responses in estimating the dependencies between the variables is tested by employing the chi-square (χ^2) test in order to prove the set of assumptions used. Developing an innovation culture in companies, intrapreneurship in businesses and the degree of utilization of internal business potentials were those variables that significantly affected the adoption rates of intrapreneurship in the surveyed companies. Variables such as knowledge of intrapreneurship, intrapreneurship process and attitude of employees to internal corporate programs do not show a statistically significant effect on the introduction of intrapreneurship in the surveyed companies.

The results suggest that the impact of independent variables on the adoption rates of intrapreneurship is only partly confirmed. Only some of independent variables such as developing of innovation culture have impacts on the internal business operations and the level of untapped business potentials has affected the decision in the surveyed companies up to the stage of the introduction of intrapreneurship.

Managerial, Policy and Research Implications

The comparisons of the empirical results between the degree of the implementation of the internal business processes and the achieved value-added per employee show rather small 7.3% linear association, but more

in-depth investigation confirmed that the companies with the higher degree of the implementation of the internal business process or the intrapreneurship achieved higher value-added per employee. This implies an importance of the intrapreneurship in corporate organization for company's performance in competitive market environments.

Employees of the surveyed companies were sufficiently aware of the internal corporate stance as an essential element of a new organization allowing to deals with global market competition. Long-term strategic and policy orientation of management, highlighting the importance of innovation with encouraging creativity were the basis for successful internal entrepreneurial orientation of the surveyed companies. The empirical results suggested that the degree of emphasis on the importance of innovation by management was at a satisfactory level, indicating that the surveyed companies were aware of the importance of innovation. However, this has not played yet adequate importance. The level of creativity and innovation within the company suggested a slightly weaker result, indicating both the lack of long-term orientation of management that would allow the creation of appropriate conditions for the development of innovation culture. One of the major advantages over conventional internal business enterprise was an individual mobilization of existing resources, which should be available to an internal entrepreneur. The results confirmed that the surveyed companies perceived availability of resources, as satisfactory, while at the same time confirmed the lack of detectable and established, quick and informal ways of obtaining and using available resources of the company. Very low utilization rates from internal business potentials confirmed that the majority of the surveyed companies believed that their internal business potentials were only partially used, or ill-used, suggesting the internal potential source of untapped business opportunities and its potential as one of possible ways to achieve advantages in market competition.

By examining the forms of intrapreneurship in the surveyed companies, the empirical results provide a useful information tool for research and practice of a degree of recognition, establishment and implementation of internal business processes. The sample was biased towards more efficient Slovenian large companies by the gross value-added per employee. Yet, the studied internal business processes were not a new phenomenon in the surveyed companies. Among the limitations are the sampling procedure and a relatively small sample size. Although the empirical results do not allow making generalisation of the surveyed companies

to the whole Slovenian company population, the results are to a greater extent relevant for the large sized Slovenian companies.

Conclusion

The mainstream literature on intrapreneurship argues that enterprises, which are able to provide incentives to entrepreneurial oriented individuals or groups inside the existing enterprise to identify opportunities and threats in the enterprise in order to resolve them in a creative way, this assures to enterprises to improve competitive position in the market as well as provides opportunities for better business results and faster growth (Pinchot 1985; Pinchot and Pinchot 2002; Duncan et al. 1988; Drucker 2001; Garvin 2002; Hisrich 2009; Kuratko, Covin, and Garrett 2009).

The empirical results suggest that corporate intrapreneurship in the surveyed companies was not a new phenomenon, but on the contrary, in most of the surveyed companies they were familiar by intrapreneurial activities and their benefits have already successfully exploited. To summarize, the intrapreneurship was found important as in the surveyed companies the role of the internal business operation played importance in implementation activities. A comparison of detection of intrapreneurship in the surveyed companies with the most successfully organized domestic businesses as global companies confirmed that the surveyed companies still placed greater emphasis on the existing product and services than on new product development, marketing and distribution activities in market competition. The change of business culture with at least equal emphasis on developing new products and services and innovative marketing approaches would have significantly greater impacts on their market competition by increasing sales. The greater utilisation of untapped, internal business opportunities of the Slovenian companies, would largely contribute to better performances in market competition by better results in the domestic markets and more effective penetration in the foreign markets. Under-utilization of internal business potentials suggests a lack of long-term strategies and managerial policies and practices with insufficient market targeting in more competitive market environment in order to exploit the companies advantages that can be offered by intrapreneurship. Long-term orientation of management with the companies' abilities to define the mission and vision-oriented businesses with sufficient emphasis on innovation, entrepreneurship and intrapreneurship developments are the ways allowing creating the appropriate corporate culture for increasingly competitive market environment. An in-

trapreneurial culture is necessary to be created within the existing companies as a necessary part of the innovation process to contribute to the survival of the existing companies in market competition and potentials for growth of new companies in rapidly changing markets.

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Talents, Creativity and Innovation in Austria and the Czech Republic: A Cross-Border Empirical Investigation

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A comprehensive cross-border empirical investigation has been carried out in the framework of an intercultural European Union Project (The Czech Republic/Austria) in the border regions of South Bohemia and Northern Austria. The aim was to gain knowledge in terms of the status-quo of creativity and innovation, as well as the situation and requirements in terms of working and living in the region. Thereby, emphasis is placed on the needs and requirements of young people (talents) in order to see who would be willing and able to stay in the region and promote creativity, and social/regional innovation and transformation.

Key Words: regional management and development; cross-border cooperation; quality of life and living; creativity and cooperation of talents; regional and social innovation

JEL Classification: A11; R11

Introduction

The proposed qualitative cross-border fieldwork study was conducted in the framework of an intercultural European Union Project (the Czech Republic/Austria) in the border regions of South Bohemia and Northern Austria. The aim of the project 'RegioTalent' is to gain knowledge of the regional requirements in terms of Working & Living in the region. In this context, we consider the key success factors of regional, respectively cross-border development in talent, technology and tolerance (Florida 2008). We regard 'technology' in the context of work, which means to identify new regional job opportunities to use new technologies or to

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even develop new technologies in the region. 'Tolerance' refers to learning to ignore any kind of borders, especially theoretical borders, which limit our imagination of alternative ways of cross-border cooperation. 'Talent' concerns the terms of qualified people, who enable regional innovation and development. Those talents are the source of regional innovation and development. Innovation can be induced, where individual talents aspire to create something new and are open-minded to meet and therefore get involved. A supporting factor for generating creative potential is the geographical closeness of talents (Florida 2008), which is realized in the research by the cross-border region of Northern Austria and South Bohemia.

In fact, the human capital (*Talent*) influences, to a large extent, the value or worth of a region. Thus, successful regions are those, which are able to attract qualified people not only to live in the region, but also to work there and to invest their talent into the development of new products or services. The correlation between the degree of *Belonging* to the region, the willingness to work in the region (*Working*), and subsequently to consume (*Consuming*) in the region, are the things we are focusing on in this field research. 'RegioTalent' focuses on the human capital as the most important resource of the region. Moreover, individual talents are in the centre of attention – their needs, their creativity and their innovation potential, being the main resource of the region. The matching of the individual innovative potential of several talents differs from traditional forms of cooperation. The project develops several approaches to support the individual creativity and to implement talent networks.

We are speaking of 'talents' in terms of qualified employees or graduates, high potentials with creative minds, who are motivated to make efforts for the region and seek for advancements and transformation. We suppose that focusing on the human factor (talent) is a condition precedent to develop the region further. Therefore we aim at defining the qualification requirements of the cross-border regions and finding ways to promote joint qualification and training facilities.

Purpose and Aim of Research

The purpose of the research is to:

- gain knowledge of the human capital in the border region – development of a talent map,
- gain knowledge of the individual requirements in terms of working and living in the region – development of a life quality index,

- gain knowledge of the innovation potential of regional companies and resulting qualification needs,
- gain insight into the innovation potential of regional small and medium-sized enterprises SMEs,
- gain knowledge of the (pre)conditions for cross-border cooperation,
- initiate pilot projects that illustrate the potential of the region in terms of regional working and living,
- communicate those pilot projects in order to raise awareness concerning working and living in the region.

AIM OF RESEARCH

Accordingly, we aimed to explore the perception of the status-quo of the quality of living and quality of working in the border region of North Austria and South Bohemia, including research questions concerning the needs and requirements of young people (talents) in particular, in order for them to be willing and able to stay in the region and to promote creativity and innovation.

Furthermore, with the research we wanted to find out the starting points for cross-border cooperation and want to generate awareness with respect to the acceptance of certain values (e. g. health, solidarity, cross-border cooperation and especially lifelong learning).

RESEARCH QUESTIONS

The research questions derived from the aim of research are:

1. What makes life livable (factors of the quality of living and subjective well-being)?
2. What makes people stay in a specific region?
3. What are the requirements of people in the future regarding living and working?
4. Which kind of human creative potential (talents, creative minds) is available in the region?
5. What are approaches for cross-border cooperation of regional units/areas?

Methodology and Empirical Research Design

The overall aim of the investigation was to gain insight into the personal experience and subjective perception of the interviewees in terms of the working and living conditions in Northern Austria and South Bohemia.

According to Brymann 'qualitative research stresses on the understanding of the social world through an examination of the interpretation of that world by its participants' (Brymann 2012, 380). To enable us to meet the requirement of examining the social world of the interviewees, a qualitative research design fits best.

In order to answer the research questions seeking a holistic in-depth understanding of social reality of the explorative-descriptive nature of the investigated issue, a qualitative approach as a first step of a comprehensive research design, including a quantitative study, has been chosen (Patton 2002). As a qualitative research approach is theory elaborating/evolving, inductive, interpretative and holistic (Lamnek 2010), the aim was to build propositions and hypotheses, which will be tested in a quantitative investigation in order to gain representativeness.

METHODOLOGICAL MIX AND TRIANGULATION

The methodology and empirical research design is characterized by a methodological mix and triangulation, namely data triangulation (use of a variety of sources: data is derived from face to face interviews and focus groups), investigator triangulation (involvement of different researchers in data collection, analysis and interpretation) and methodological triangulation (mixed methods approach using MAXQDA and in the next step combining the qualitative study with a broad quantitative study in Austria and the Czech Republic).

DATA COLLECTION

All in all, 58 in-depth semi-structured face-to-face interviews were conducted in the cross-border region of Northern Austria and South Bohemia. The target groups were the same in Austria and the Czech Republic, namely inhabitants of the regions, companies in the regions, young people (talents) and representatives of the regions (mayors) in order to combine different perspectives/views on the cross-border region.

The personal in-depth interviews have been conducted in accordance with an interview guideline consisting of the main topics and some constitutional questions. As the approach is explorative and open, there is the possibility to alternate the sequence of the topics/questions and to add questions in order to enhance the opportunity of genuinely revealing the perspectives of the interviewees (Brymann 2012).

Moreover, two focus groups (each one in Austria and the Czech Republic) with pupils and students (talents) were conducted to emphasize

TABLE 1 Description of target groups in Austria and the Czech Republic

	Austria		The Czech Republic	
Face-to-face interviews	Entrepreneurs (SME's up to large-scale, sectors involved: information systems and engineering, metal, handcraft, production of textile, windows)	12	Entrepreneurs (SME's, sectors involved: trade, production, services, marketing, personnel management, agriculture, construction)	10
	Talents (pupils, students, apprentices, employees, artists)	12	Talents (pupils, artists)	4
	Inhabitants of Northern Austria	7	Inhabitants of South Bohemia	9
	Representatives of the region Northern Austria (Mayors)	3	Representatives of the region South Bohemia (Mayors, social welfare)	5
Focus group	Young people (pupils, students, employees aged from 17–28 years)	12	Pupils (from a secondary school)	16
	Total Respondents	46	Total Respondents	44
	Cross-border investigation with 90 respondents altogether			

the needs and requirements of young people in both countries. Methods used with the focus groups were the World-Café-Technique Fish-Bowl-Technique, the Walt Disney Strategy, the Q-method and intensive discussions.

The benefit of the focus group method is the interaction with the group. Besides the specific topic of the focus group that is explored in depth, 'the researcher will be interested in such things as how people respond to each other's views and build up a view out of the interaction that takes place within the group' (Brymann 2012, 501).

The research design of the qualitative investigation was two-tiered. First, face-to-face interviews were conducted in both border regions (Northern Austria and South Bohemia) with the target groups of entrepreneurs, talents, inhabitants and representatives of the regions. All in all, there were 58 face-to-face interviews, whereby 27 interviews were on the Czech side and 31 on the Austrian side. The number of respondents is not exactly the same as the number of interviews due to the fact, that some of the interviews were performed in pairs or small groups. Therefore, there were 28 respondents from South Bohemia with 27 interviews (1 interview was performed with 2 persons) and in Northern Austria there were 34 respondents with 31 interviews (2 interviews were made with groups of pupils at the same time).

In the second step, 2 focus groups with a facilitator were conducted – one in Austria and one in The Czech Republic – with a new participant sample consisting of young people (pupils, students and employees).

SAMPLE DETERMINATION AND SELECTION OF RESPONDENTS

The participants of the face-to face interviews were selected by using a purposeful sampling strategy (Yin 2003; Patton 2002). Selection criteria were mainly the regional condition, meaning that the respondents are either living or working in the rural region of Northern Austria or South Bohemia or living in the rural region, but working in urban areas, commuting there. In any case, there had to be a certain factor of bonding to the rural areas. To maximize information-richness, the selection was done with regard to a best possible plurality regarding age, gender and occupational categories. The interviewees were selected with personal references of peers and according to their regional belonging to the analysed region. Therefore, the snowball sampling method (Brymann 2012) was applied to a moderate extent, particularly within the target groups of talents and inhabitants.

The interviews were conducted in a personal face-to-face setting following an interview guideline covering the core issues:

- General information (demographic information including education and profession).
- Assessment of the quality of living and factors of subjective well-being (quality of life index).
- Infrastructure, transport and mobility requirements.
- Characteristics of the region (strengths and challenges).
- Social cohesion, social capital and belonging.
- Values regarding working and living.
- Assessment of working conditions.
- Working and living in the future – wishes and visions, new forms of working.
- Innovation potential and talents, competencies, skills.
- Regional economy and consuming patterns – sustainability.
- Status quo of the cross-border cooperation Austria–Czech Republic.

The sampling strategy used in the recruiting of the participants of the focus groups with young people in Northern Austria and South Bohemia is called 'researcher-driven recruitment,' 'whereby the researcher with the

support of an organization with interest in the research uses email, letters, flyers, and telephone calls to solicit interest in participation' (Brymann 2012, 511). In Northern Austria, participants were selected from a regional youth association and in South Bohemia a group of people from a secondary school were involved. The approach for the recruiting of the group participants was 'natural groupings' – these are people who know each other, a kind of a 'pre-existing group' (Brymann 2012, 510). The reason being, that structures of the pre-existing natural groups enable the discussions and interactions to be as natural and realistic as possible.

DATA PROCESSING AND DATA ANALYSIS

The data processing was supported with the software MAXQDA for qualitative data and content analysis (Kuckartz 2007; Flick 2006). Data analysis was based on the written transcriptions from the interviews and the transcripts/extracts, audio recordings, written material and field notes of the focus groups and followed the methodological approach of the qualitative content analysis introduced by Mayring (2008). Transcripts and field notes were coded in line with qualitative research guidelines according to Mayring (2008). Besides, due to the large number of respondents for a qualitative survey, the mixed methods approach within the MAXQDA software analysis tool was used. Therefore, the results and findings gain a higher explanatory power and value.

In terms of investigator triangulation, the research team performed data analysis and interpretation jointly. Furthermore, the strategic partners of the project 'RegioTalent' (labour market services, regional management agencies and economic chambers in Austria and the Czech Republic) project have been involved for interpreting and verifying the data for each of the cross-border regions.

The goal of the qualitative data processing was to develop propositions, which will be advanced and tested in the following quantitative step of the whole comprehensive empirical investigation. The process of generating propositions presented in this paper is graphically represented in figure 2.

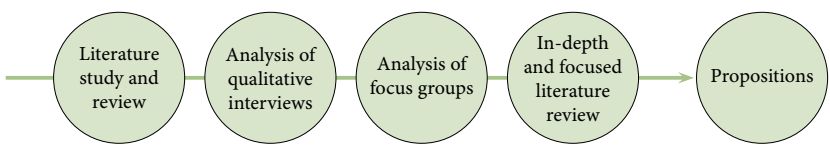

FIGURE 1 Development of propositions

Results and Main Findings

This section presents and discusses the findings of the fieldwork study and the derived propositions.

TALENTS, INNOVATION AND CREATIVITY

The research revealed that there is a high potential of creativity and innovation in the cross-border region of Northern Austria and South Bohemia. Interests, skills and competencies are manifold and are in the wide range of the areas of sport, music and culture, language skills, agriculture, science, engineering and entrepreneurship.

PROPOSITION 1 *There is a high potential of creativity and innovation in the cross-border region of Northern Austria and South Bohemia.*

One more finding is that creativity requires a climate of appreciation, respect and acceptance. Thus, talents need a climate of tolerance, openness and acceptance and also structures (infrastructure and education) to foster them in order to unfold their potential and use it in and for the region. In comparison to Austrian young talents, there is the tendency, deriving from the study, that Czech young talents, especially in the cross-border region, face more difficulties and lack certain requirements regarding new forms of cooperation and entrepreneurship.

Therefore, the most crucial challenge for the border regions of Northern Austria and South Bohemia is to hold and bond with the future creative and innovative minds because they are able to foster social and regional innovation. In order to do so, on the one hand the region has to offer basic needs like adequate habitation and childcare possibility, infrastructure concerning high quality public transport systems, high-speed internet, cultural events and a broad range of gastronomy and meeting locations which enable young people to establish contacts and networks. On the other hand, the region has to meet the requirements of the talents in terms of mobility, education and training in the region in particular, because these have been detected as major factors for bonding young and qualified people as well as talents to the region.

THE QUALITY OF LIVING

The findings of the fieldwork study concerning the quality of living in Austria show a positive picture, meaning that people like to live in their region and assess their quality of living as high.

PROPOSITION 2 *The quality of living benefits strongly when related to the quality of the environment, the working situation and the social net (family, friends, associations).*

PROPOSITION 3 *The most influencing factors of the quality of living in Austria are: (1) nature and peacefulness in the countryside, (2) family and social contacts and networks, (3) (regional) working situation and (4) infrastructure and habitation.*

The results show the most important factors of the perception of the quality of living, mainly the living conditions (quality of direct surroundings), the working conditions (with a relation to regional working opportunities), the social net and the infrastructure and habitation possibilities. The assessment of the quality of living in the Czech Republic is slightly lower than in Austria due to certain aspects of the quality of living conditions, such as housing regulations, infrastructure, a high rate of unemployment, in particular affecting young people, and a lack of cooperation of educational institutions and the labor market policy.

The respondents of the investigation in Austria and the Czech Republic underlined the significance of the social net in the region. This is on the one hand their family, friends and neighbors and on the other hand, contacts from involvement in associations and clubs. In rural regions, such as the border region of Northern Austria and South Bohemia, people know each other personally in their place of residence, hence having social contacts, experiencing a strong feeling of belonging and social support influencing their perception of the quality of living in a positive way.

SOCIAL CAPITAL

Certain aspects of the concept of Social Capital have been investigated, namely belonging to social groups and networks, voluntary involvement, social contacts and trust. Theories state that the amount of social capital has an impact on the perception of the quality of living.

A remarkable finding is the strong feeling of belonging of inhabitants and a high identification with the region as well as a high level of voluntary engagement in regional associations. The social capital is a distinctive factor in Northern Austria as well as in South Bohemia, where the people also reported that living together works very well. Social cohesion, solidarity and activities in regional associations or clubs are essential parts of their quality of living.

The results concerning Austria and the Czech Republic highlight that the participation of inhabitants in social groups is high. Most inhabitants

are part of at least one social group as for example, associations or clubs in different areas (relief organizations, music and culture, health and care, religion, etc.).

Oxoby (2009, 1136) presents the following definitions of social capital and social cohesion:

> Social capital is an individual's sacrifices (time, effort, consumption) made in an effort to promote cooperation with others' and social cohesion is a characteristic of society which depends on the accumulated social capital.

Therefore, the proposition based on the definitions of Oxoby (2009) and the insights of the empirical survey in Austria and the Czech Republic, is stated:

PROPOSITION 4 *The more people take an active part in social groups, the more cohesion and identity the society features and thus the perception of the quality of living is effected in a positive way.*

The study showed a high level of trust, voluntary engagement, participation in regional social groups and neighbourly help in Northern Austria and South Bohemia. Social contacts are established and a feeling of belonging develops leading to a positive perception of the quality of living. Therefore, the 'bonding' aspect of social capital pointed out by Wallis, Killerby, and Dollery (2004) 'bonding social capital refers to the intra-community ties that members can depend on in situations of need' is addressed.

A former empirical study conducted in Austria regarding social capital and voluntary engagement found a significant correlation between voluntary engagement and social capital. People engaged voluntarily, thus taking on responsibility and being able to cooperate, mainly contribute to strengthening social cohesion. In addition, the researchers stated that the more voluntary engagement and social capital in a region, the better the quality of life and the economic power of a region is (Fredersdorf 2010). Within our investigation in Northern Austria and South Bohemia, this relation also has been identified.

EMPLOYMENT AND WORK

PROPOSITION 5 *Regional work is a major factor of the subjective perception of the quality of living and thereby the quality of work is important.*

The main result from the Austrian data is that regional work is a major factor of the subjective perception of the quality of living and thereby the quality of work (that is to say challenging content, career opportunities, training and qualification and remuneration) is important.

Regional working opportunities and jobs enhance the quality of living and enable people living there to stay in the region. According to many respondents, there is a direct connection between the quality of living and having a job in the region. It has to be considered that, besides the regional aspect, the requirements regarding working conditions are multilayer and therefore the survey investigated the main values of employees. The most frequently mentioned answers are in the categories of:

- having sole responsibility, working independently,
- room to manoeuvre and scope for development,
- advancement in one's position and career perspectives,
- flexibility concerning working time and scheduling,
- flexibility concerning work content (interesting and challenging),
- working atmosphere (relation to colleagues, seniors, working environment),
- creativity, challenge, manifoldness, job variation,
- continuing education and lifelong learning,
- pleasure and enjoyment with work.

Respondents stressed that values, such as creativity and room to manoeuvre contribute to their individual fulfillment. This finding is in line with a statement of Bergmann, that 'the spirit and sense of one's activities, a job which we absolutely want to have, is better than any kind of therapy' (Bergmann 2004, 119). According to the respondents, the main point is the mixture between the adequate content of work, the working atmosphere and appropriate reward.

Regional work is the key for regional and economic development and innovation of sustainable regions. Therefore, in order to attract and hold regional workforce, it is crucial for local entrepreneurs and employers to focus on meeting the expectations of the employees regarding the values of career advancement possibilities, flexibility, continuing education, working atmosphere and reward.

PROPOSITION 6 *New forms and concepts of work will be required in order to meet the challenges of the future.*

Another important result is that the term 'work' has to be reconsidered and new concepts and forms of work will be required in order to meet the challenges of the future, e. g. tele-working, qualification in firms, life-cycle-oriented work models allow more flexibility and self-determination. Flexibility in working time will become more important in the future and there is also a need for more flexibility in terms of working forms, especially considering the situation of families with a duty of childcare and well-established employees. There is a huge potential of creativity drowsing in women, who stay at home due to childcare. Overall, new models of work should be considered as for instance life-cycle-oriented work models for women as well as for men taking into account the private, family situation and the age.

The working situation in Northern Austria is characterized by certain issues discussed intensively during the fieldwork. Challenges are the lack of skilled workers and apprentices and a lack of adequate working possibilities for young and qualified persons and a high rate of commuters. From the South Bohemian point of view, the above-mentioned issues are also true as well as a low wage level and reduction of public and social services affecting the people in the region. Additionally, the necessary construction of infrastructure and buildings is an issue in the Czech border region.

PROPOSITION 7 *In addition to regional work, regional education and training, infrastructure and habitation are essential in order to bond and keep skilled workforce and in particular, young talents.*

Supplementary to regional job opportunities increasing the quality of living, regional education and training is one more factor making life interesting for people in Northern Austria and South Bohemia. Especially young respondents highlight that sufficient infrastructure and appropriate habitation is essential for their quality of life. Infrastructure pertains to adequate public transport in order to guarantee mobility and notably different locations for young people to meet each other, entertainment opportunities, cultural events and sport options. In addition, for the respondents, adequate and affordable habitation possibilities in rural regions are fundamental for the decision of the place of residence, especially for young people.

PROPOSITION 8 *Employer branding is of high importance for regional and local entrepreneurs in order to be visible in the labour market and to attract (regional) workforce.*

Derived from the qualitative data, talent management and employer branding is of high importance in particular in remote rural areas. There are special conditions for entrepreneurship in rural regions as they seek for skilled and specialized labor force. One main advantage of firms in rural areas is that they use small and medium sized structures and thereby foster trust in their customers. A point is, enterprises in urban areas can learn from enterprises in rural areas in the framework of the information society, where anonymity in business is common.

According to Mandhanya and Shah 'Talent Management refers to the process of developing and integrating new workers, developing and keeping current workers and attracting highly skilled workers for the company' (Mandhanya and Shah 2010, 43). According to Backhaus and Tikoo 'employer branding represents a firm's effort to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer' (Backhaus and Tikoo 2004, 501). Overall, employer branding is the effort of attracting potential employees, retaining current employees and communicating the employer brand internally as well as externally. Employer branding makes it possible to differentiate from competitors and to win the war for the scarce resource called talent.

To sum up, according to the results of our study, regional work is regarded as crucial when it comes to the perception and assessment of the quality of living. Indeed, regional work (meaning that people work within a small radius of the place where they live) is one of the three main factors of the quality of living observed in our study. Moreover, commuting is regarded as a negative criterion concerning the perception of the quality of living. Thus, commuting rates can be decreased by fostering regional work opportunities. New forms of working and innovative approaches towards work and entrepreneurship have to be considered in both rural and urban regions in the future.

CROSS-BORDER AND INTERCULTURAL COOPERATION

There is a good cooperation in the fields of tourism, culture and communities/municipalities and cross-border project activities between Austria and the Czech Republic. The challenge is to foster cross-border cooperation in the business area.

Generally speaking, there is a strong willingness from both sides of the border for cooperation and networking, yet there are still some barriers, stereotypes and cultural differences which are challenges, showing us the need for a climate of learning, openness and understanding.

Cross-border cooperation should be fostered with common activities (projects, events, marketing) – as this is the only way to gain deep understanding and tolerance for the mentality, culture and values of both countries. Some of the effects of the transformation process, which happened in 1989 in the Czech Republic, are noticeable in terms of regional, social and technical innovation management.

SUGGESTIONS FOR MEASURES AND SOLUTIONS

The high potential of creativity and talents in the regions of Northern Austria and South Bohemia need to be fostered in order to be able to induce social and regional innovation. The project 'RegioTalent' and the proposed research raise sustainable awareness of the challenges and chances of regional, as well as cross-border cooperation.

The survey revealed the importance of fostering consciousness in terms of cross-border cooperation and cultural understanding in the business sector as well as considering private human relations between the Austrian and Czech people. Intercultural competence and appreciation can be reached by active exchange and cooperation in different forms, e. g. projects, exchange programmes and language training addressing people of all ages. The process of releasing 'borders in our minds' is long-lasting and demands tolerance. Intensive awareness and marketing play important roles. One measure considered is to raise awareness in the cross-border region regarding the existence of interesting enterprises and firms offering promising jobs. For entrepreneurs in a rural region, employer branding measures are recommended. Moreover, a change in attitudes in the direction of values such as closeness to nature, sustainability and regionalization can be a possibility for improving the situation in the cross-border region.

Regional work opportunities are the decisive factor for bonding people, especially young talented people, to the region. The settlement of companies and entrepreneurship has to be fostered, also taking into account the regional requirements and the support of small and traditional structures. New forms of work and the cooperation of local companies and schools in order to merge employers and employees will contribute to enhance the situation in the cross-border region. In addition to work opportunities, education and training specifically in the region is required.

One more pre-condition for attracting and bonding creative minds and fostering regional and social innovation and cooperation is social security and a well-organized social economy (including childcare and welfare).

Furthermore, measures in the areas of infrastructure and environment are essential to meet the requirements of young talents in Austria and the Czech Republic.

Main Conclusion and Prospects

The regions of Northern Austria and South Bohemia are characterized by a high degree of commuters (up to 65%), people who leave their home every day in order to work somewhere outside their hometown. According to the results of this empirical investigation, the commuting behaviour results not only from missing regional job opportunities but also from the ignorance of actually having available job options. Ignorance is on both sides, employees as well as employers. Asking graduates, they often do not even think about searching for regional job opportunities. Besides, employers do not see any need to be present on the regional job market. They think it is sufficient to announce the job as the need arises but do not invest in anything in advance. Employer branding in terms of presenting on the regional job market, cooperating with local education facilities, and gaining a good reputation, is not always considered to be important. These companies are more likely to be affected by skills shortages than those who invest in employer branding measures.

CREATIVITY AND INNOVATIVE POTENTIAL

The success of a creative economy depends on the people and their ability to be aware of available talents, and to offer them the kind of environment they need in order to develop (Gatterer 2010). According to the empirical investigation, there are some enterprises which are indeed aware of the innovative potential of the region, in terms of skilled, creative, and motivated people, and which invest resources to attract those people. They establish their own employer branding strategies, especially focusing on regional reputation and early involvement of future employees. Skills shortages is not a problem they have to deal with, as they are known as valuable employers who invest in their innovative potential, in terms of personnel development.

Nevertheless, the company structure in the investigated regions consists mainly of small and medium sized enterprises, which cannot supply the demand for regional work. Thus, commuting seems to be the most obvious alternative. According to Florida (2008, 151), commuting is the one thing which makes us most unhappy in life. Interpersonal relationships (family, friends), a high quality of living (nature, infrastructure),

and regional job opportunities are those things which raise our feeling of well-being, trusting the results of the available qualitative survey.

TALENT-2-TALENT COOPERATION & INNOVATION

With the objective of raising the quality of life in the border regions of Northern Austria and South Bohemia, this research aimed at developing approaches, which support the well-being component 'regional work.' Besides enhancing regional employer branding, the research thinks about new forms of cooperation between individual talents. 'Innovations are in most cases less the product of individual firms than of assembled resources, knowledge, and other inputs and capabilities that concentrate in specific places.' (Experience the Creative Economy Delegation 2008 2009, 4)

Considering the situation in the region, a concentration of skilled people already exists. Talents, who need support to realize their ideas and to get together, build a kind of clustering force (Florida 2008, 66). In this context, we have to consider that regions almost act like companies. Creativity, innovation, the combination of different ideas and people as well as the willingness to learn and develop further each day, are the success factors of companies and regions (figure 2).

According to Belussi and Staber (2012, 7), 'creativity, in fact, involves novelties related to nonlinear and often illogical personal expression, innovation represents a calculated (and measurable) creation of new knowledge.' Focus of this research was to connect regional talents in order to use the creative potential of individuals, in terms of novelties and personal ideas/beliefs, and to establish a cooperative innovation process. The main challenge in this context is not to connect those talents but to go beyond formal cooperation and to enable an exchange of ideas and experiences. In order to support successful cooperation within groups, a

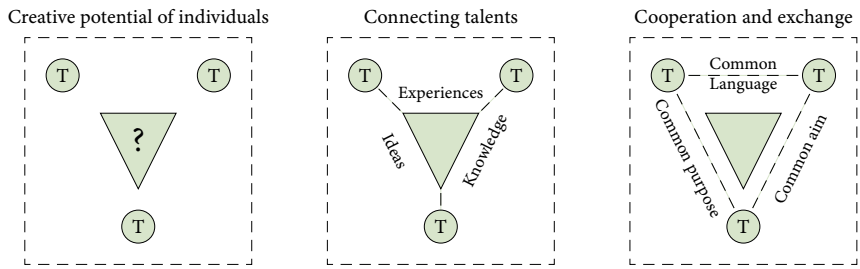

FIGURE 2 Preconditions for Talent-2-Talent cooperation and innovation

common language (expression, wording, vocabulary of concepts) as well as a common purpose and aim are the main preconditions. Applying methods of cooperation, communication and innovation are necessary to support this exchange process and to keep it alive, despite local distance.

SOCIAL COHESION (BONDING) AS PRE-CONDITION FOR COOPERATION

This project assumes that the potential of a region, rural as well as urban, is not only defined by the number of talented people (inhabitants) but their willingness to cooperate and to establish the necessary social relationships, thus a high social capital. In this context, we mainly refer to the 'bonding' aspect, in terms of linking individuals or groups and establishing a kind of cohesiveness in order to achieve a collective goal (Adler and Known 2002). The small and flexible structures in rural regions (small enterprises) support the development of such tight connections between individuals and groups. The establishment of this kind of social cohesion is something urban areas can learn from rural ones (figure 3).

TALENT MAP

In this research, the representation of the creative potential of the border region of Northern Austria and South Bohemia is supported by a talent map. This map includes skilled people (talents) of the region as well as existing projects, initiatives, networks or social businesses. It contains talents' representations, i. e. visions, ideas, projects – built upon experiences, and serves as a platform to externalize knowledge/experiences and talents accordingly with their individual skills. Thus, it helps towards establishing an exchange of talents (experiences), focusing on the externalization

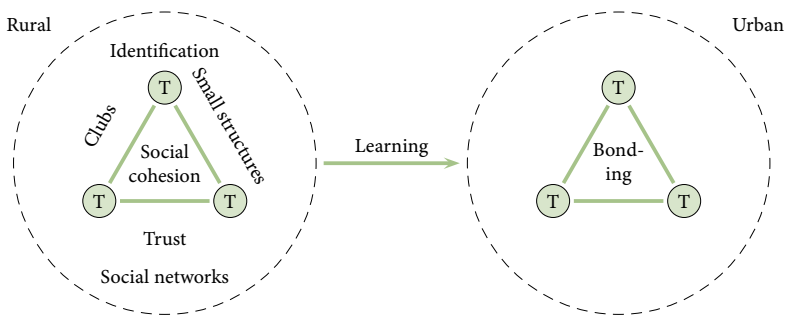

FIGURE 3 Social cohesion (bonding) as pre-condition for cooperation

process as one of the four basic steps to create knowledge (Nonaka 1991), and further enhance the innovation processes in the region.

PILOT PROJECT – TRAINING

The design of a training course which provides a certain creative space and supports the exchange of individual ideas and the creation of new knowledge, thus innovation (talent-to-talent, T2T), is a further measure to be developed within this research project. According to Schumacher (2001), the main duty of work is to help people reduce egotism and to offer them a possibility to connect and exchange with each other. The above mentioned training course focuses on people who are searching for possibilities to realize their ideas, to exchange experiences and concepts with others and to conjointly generate new working opportunities and in the best of cases, to build up one's own small business. In cooperation with coaches, mentors, and like-minded people, not only professional skills, like project management, marketing or financing are supported, but the personal-/self-development is in the primary focus. Precondition to participate in this training is a creative project idea, which aims at developing the border region (Northern Austria and South Bohemia) further.

According to Simon (1986, 68), 'Acts are judged to be creative when they produce something that is novel and that is thought to be interesting or to have social value.' Both aspects 'to be interesting' and 'to have social value' are considered in this training concept. Thus, sustainable economic development initiatives in the field of social entrepreneurship, meaning to focus on social problems, are supported. The innovative potential, clustered in this training initiative, should also be a good possibility for regional enterprises or organisations, to benefit from this pool of creative ideas and to exchange knowledge and experience with the participants. Those external partners can act as mentors, coaches, current or future customers, or even project partners. The integration of regional partners is a further possibility to intensify the cross-border cooperation and to make a contribution to enhance openness as well as tolerance on both sides.

Limitation and Further Research

The research findings are restricted to a certain kind of region, namely the middle European area of Northern Austria and the Czech Republic. Obviously, the results from the qualitative research are not representative of a population. According to Brymann 2012 instead, the findings of qual-

itative research are to generalize the theory rather than the populations. It is the quality of the theoretical inferences that are made out of qualitative data that is crucial to the assessment of generalization (Brymann 2012). This view of generalization is called 'analytical generalisation' by Yin (2009).

Further research concerning the assessment of the quality of life is applied at the moment in the form of a quantitative investigation in the region of Northern Austria and South Bohemia. Furthermore, a life quality index will be developed, which is created to apply for more regions. In fact, the results of the survey are relevant only to a specific differentiated geographical area. Despite this, similarities to other border regions in Europe have been found and these same regional issues, challenges and trends have also been uncovered and discussed. In order to enhance the utility of the findings and derived conclusions to a broader audience, a further regional expansion and application is aimed. Directions for future research topics could be for example comparative studies concerning the investigation of 'Talent-2-Talent Cooperation and Innovation' in different interregional European border regions as well border triangles.

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Creation of Sustainable Leadership Development: Conceptual Model Validation

Judita Peterlin
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Conceptual paper addresses the research question: How can leadership development be managed within organizations? Our proposed answer is presented in the form of conceptual model of sustainable leadership development, based on the theory of multiple intelligences by Howard Gardner and applied to leadership through appreciative inquiry, meaning that leaders possess multiple intelligences which differentiate in their individual profiles and are able to develop a wide span of intelligences during their life span. The main developmental and analytical method that enables the sustainable leadership development through multiple intelligences is action learning where as expected results of the appreciative process participants are creative seekers of positive learning opportunities in active learning environment. Sustainable leadership development model proposes a new creative way in providing for the process and content of leadership development that has sustainability as its core component.

Key Words: sustainable leadership development; multiple intelligences; action learning; managing transition
JEL Classification: J24; M12

Introduction

> The future is not to be forecast but created. What we do today will decide the shape of things of tomorrow.
>
> *Ervin Laszlo*

Global business environment is increasingly met with challenges that demand effort from a collective entity; therefore, leadership field is set

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on a new endeavor of how to accommodate the rising needs of human resource experts and developing leaders. The leading international institution for developing leadership – The Center for Creative Leadership has come to the conclusion – based on their global developmental efforts – that leadership perspective is under transition from leader to leadership development, globally. This means strategic changes, not only in methodology but also in content of leadership development, therefore the first part of the paper deals with distinction between leader and leadership development as it is stated in contemporary literature and the second part is elaborating on the methods of leadership development for contemporary business environment where we develop and propose a creative sustainable leadership development model.

Leadership is the process of social influence in which a person is able to enlist support of others in the accomplishment of a common task (Chemers 2002). It is the relationship between leader and followers that is based on trustworthiness and legitimized through the competence of a leader. The leader provides the followers with supervision, extrinsic motivation and tools for effective performance that is only possible if the leader knows the followers' needs and capabilities that is as we determine in this paper the role of multiple intelligences. Leadership needs an efficient resource deployment that is achieved in two layers (Chemers 2002): (1) each organizational member must effectively use his or her personal resources (intelligence, creativity, skills, tacit and explicit knowledge); and (2) leader coordinates and deploys the resources, according to the task environment in a way that makes the most efficient usage of organizational resources.

Development involves a wider range of activities with less specific ends than training. It is focused more on the individual than the occupation and is concerned with long-term personal growth and career development (Winterton 2007). Leadership development emphasizes links with organizational strategy, innovation, creativity, individual development, organizational learning, knowledge management, adaptability and maintainance of core competence. In turbulent business environment organizations need to go beyond the existing model of learning organization which we develop and demonstrate by using the theory of multiple intelligences (Gardner 1983) in a broad spectre of sustainable leadership development. At leadership development the focus is on interpersonal intelligence – strengthening skills, such as social awareness, empathy, service orientation, social skills, building bonds, team orientation, con-

flict management and at leader development the focus is on highlighting the intrapersonal intelligence – strengthening skills, such as self-awareness, self-confidence, accurate self-image, self-regulation, adaptability, intrinsic motivation, proactivity, optimism and commitment (Day 2000). Leadership development therefore perceives a leader as one integral part of the leadership equation where other stakeholders hold equal part in the process of influencing others – the leader influences others – followers but all stakeholders are the ones who exchange leadership roles, depending on their multiple intelligences and the situation at hand.

Individuals at the workplace are not equal and the perspective of leadership development enables that different profiles are complementary in a holistic formation of entity. Leadership development is grounded in setting a shared vision, strategy and decision-making by acknowledging people's potentials in the network. Leadership development is embedded in strong narrative (Gardner and Csikszentmihalyi 2011) where established leaders build community through sharing their experiences in an engaging manner. Storytelling is well developed in indigenous communities or in contemporary working environment in organizations that have a strong informal organizational culture and that are based on strong emphasis of right-brain hemisphere development (intuition and whole picture perception). For developmental experts to establish community where leadership can develop, storytelling is embedded in daily meetings and into the system of internal communications (such as internal newspapers or e-mail weekly news). Leadership development needs intelligent and reflexive transfer of best practices, according to role modeling where individuals set their own implicit theories of ideal leadership prototype. Reflexive consideration of how individuals in the community perceive an ideal leadership type is integral for future developmental efforts in order to define in which direction to guide developmental efforts. Cooperation is the next step in evaluation of leadership development, meaning that developmental experts and developed leaders share their expectations and needs of outcomes. Results of meeting the demands of business environment are best met by connecting the expertise of didactics with the narrative of potential leaders.

Conceptualization of leadership development is based on the notion that developmental didactics derive from strong narrative that encompasses the developmental process and in this paper we propose that sustainability is the strong narrative that enables holistic leadership devel-

opment that is sustainable: (1) as an never ending cycle – developmental process and (2) as content – focused on a wide spectre of well-being of stakeholders of organization. There has been great interest in the academic arena for the sustainability from the first 1972 UN Stockholm meeting on the environment, UNCED report Our Common Future in 1986 (Brownson 2011), which introduced sustainable development and that made it essential to be able to detect the mechanisms that offer the proper incentives to incorporate sustainability into leadership development.

Leadership as management function is embedded into the broader framework of business community, society and nature. Sustainability as a term has its roots in the concept of sustainable development, associated with the final report of the World Commission for Environment and Development, the so called Brundtland report, under the auspices of the United Nations, and published under the phrase 'Our common future.' According to that document, the term sustainable development (Kras 2007) refers to the fact that humanity has the ability to make development sustainable, to ensure that it meets the needs of the present without endangering the ability of future generations to provide for their own needs. Consideration of future generations bounds the behaviour of contemporary leaders to act within the limits of nature to regenerate and provide social and business opportunities for future generations to be able to have a decent life-style (Kras 2007) and this is what distinguishes sustainable leadership.

United Nations 2002 resolution designated the period 2005–2014 as the Decade of Education for Sustainable Development (Vann, Pacheco, and Motloch 2006) and highlighted that education for sustainable development needs to provide specific skills such as learning to know, to live together, to do and to be which we try to provide in the form of created conceptual model of sustainable leadership development that highlights multiple intelligences through the process of appreciative inquiry. Key sustainable principles are in the system of ecology, society and economy (Whately 2011). Sustainability is defined as humans surviving indefinitely into the future with a reasonable quality of life (Vann, Pacheco, and Motloch 2006). The three dimensions of sustainability (Steiner and Posch 2006): economic, social and ecological development are equally important to contemporary leaders and it it necessary to accommodate them with the knowledge and skills that will enable them functioning in the business environment that has sustainability as its core value.

Elements of Sustainable Leadership Development

In this paper multiple intelligences (Gardner 1983) – according to the theory of multiple intelligences – are considered as the theoretical background for sustainable leadership development. Leadership development (McCauley and Douglas 1998) is an activity of expanding the collective capacity of (organizational) members to engage successfully in leadership roles and processes. Similar to development, Gardner and Hatch (1989) view intelligence as the capacity to solve problems or to create products that are valued in one or more cultural settings. Through studying other cultural definitions of intelligence (Chen, Moran, and Gardner 2009), anthropological studies and his own experimentation, Gardner (1983) originally devised seven categories of intelligence: verbal, logical, musical, spatial, kinesthetic, interpersonal, and intrapersonal, to which latter naturalistic intelligence was added (Chen, Moran, and Gardner 2009) and existential intelligence is under consideration into theoretical framework. Future implications for implementing multiple intelligences into sustainable leadership development research field are stated in our work. Our purpose is to offer propositions for sustainable leadership development through consideration of multiple intelligences. These propositions consider contextual and individual influences in sustainable leadership development.

Action research (Checkland and Holwell 1998; Zuber-Skerritt 2002; Zuber-Skerritt 2005) states that researchers are part of the transformation process while doing the research as with asking questions we change the way participants of our research perceive their organizational reality, in our case the(ir) leadership development. The flow of thoughts is opened to new possibilities and implementation of new practices. Lewin (1946) constructed the term action as a cycle of planning, acting, observing and reflecting; therefore, it is the aim of this paper to invite scientific community in the search for sustainable leadership development. Zuber-Skerritt (2002) defines action research, action learning and process management (ALARPM) in its multifunctionality as philosophy, theory of learning and methodology, method and technique that is closely connected with action learning as an international field (Zuber-Skerritt 2002) dealing with learning as a process of gaining new insight and implementation of the gained knowledge into practice and wider community.

Action researcher is obliged in order to provide for the validity of his action research to provide information for recoverable research process,

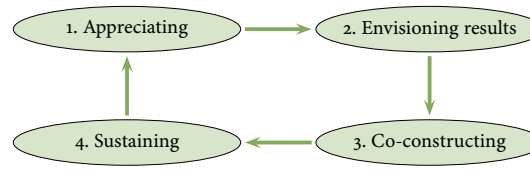

FIGURE 1
Appreciative inquiry process

with stating the epistemology – the ideas and the process in which they were integrated, and to define what is considered as acquired knowledge as the action researcher is responsible for stating when the action research is completed and enough knowledge was gathered (Checkland and Holwell 1998).

Appreciative inquiry (figure 1) as a subset of appreciative action research is suitable for stimulating creativity in sustainable leadership development. The process derives from appreciating the past and present and builds upon appreciating successful practices that are sustained in a constant reflective process.

Appreciative inquiry (Cooperrider and Whitney 2005; Dunlop 2008) methodologically and theoretically incorporates sustainable leadership development in four stages: (1) Appreciation (Discovery phase) means investigation into the positive core of the organization, its employees and its symbiotic functioning. Stated long-term developmental endeavor: 'How can creativity of leaders be managed within organization?' stimulates the appreciative inquiry research and learning into enhancing the creativity in the sustainable leadership development in contemporary business environment; (2) Visualization of results (Dream phase) is the process of envisioning future desired vision of the organization through the participation of all the stakeholders; (3) Co-construction (Design phase) is the articulation of practices and means to achieve the desired vision. Sustainable leadership development (figure 2) connects individual leadership development with relational, collective leadership development through action learning, 360-degree leadership, job-shadowing, mentoring system, executive education, workshops, seminars, training and formal education. One of the most efficient individual leader development initiatives, based on authours' action learning and literature review (Dimovski, Penger, and Peterlin 2009) is coaching, where an individual is in constant contact with his/her coach and learns from his/her own mistakes and tasks; (4) Sustaining action (Destiny phase) means creating systematic means that empower, enable life-long learning and improvisation.

Expected return on investment from leadership development inter-

FIGURE 2 Sustainable leadership development according to developmental focus

ventions ranges from a low negative return on leadership development investment to over 200% (Avolio, Avey, and Quisenberry, 2010). Too many leadership development initiatives are partial and short-term oriented into developing technical skills that are not supported with long-term developmental efforts and reflection. Sustainable leadership development needs to be embedded into a new academic and professional culture (Juarez-Najera, Dieleman, and Turpin-Marion 2006). Day and Harrison (2007) recommend for the development of collective leadership identities, developmental activities that engage aspiring leaders across functional, hierarchical and geographical boundaries. It needs to include a holistic focus on the development of multiple intelligences, competencies, abilities, knowledge, skills, perspectives and values, related to sustainability (Vann, Pacheco, and Motloch 2006).

Specifically, competencies (Boyatzis 2009; Visagie, Linde, and Havenga 2011) are abilities to use knowledge and to implement learned concepts into practice. They are the underlying characteristics of a person that lead to an outstanding performance. There are, broadly speaking, three domains of capability (Boyatzis 2009): (1) Knowledge: What a person can do? (2) Competencies: How a person can do? (3) Motivational drivers: Why a person feels the need to do it? We distinguish among attaining two integral sustainable leadership competencies, on the one hand: intrapersonal abilities: adaptability, emotional self-control, emotional self-awareness, positive outlook and achievement orientation; and on the other hand: interpersonal abilities, such as conflict management, empathy, organizational awareness, inspirational leadership, influence, coaching and teamwork as sustainable leadership is functioning in a system of different stakeholders.

We propose that conventional leadership needs to be developed and advanced into sustainable leadership development direction through

multiple intelligences strengthening by applying action research methodology of appreciative inquiry in order to gain long-term prosperity and avoid the toxic elements in leadership development that hinder sustainability, therefore one approach is either to first identify the negative factors, so called problems and focus on them with the aim of not repeating them and enable the development, or another developmental approach to sustainable leadership development is through appreciative process of acknowledging and highlighting the positive past successes and building on them where problems are reframed into developmental – improvement opportunities.

Conceptual Model

Sustainable leadership development scholars and practitioners are in constant search for creative developmental approaches and have different strategies of integrating sustainability into their leadership development programs through enhancing multiple intelligences in appreciative inquiry process. According to authours experiential learning, creativity and innovation happen at the intersection of different fields and practices which was also a stand point of one of the most successful business thinkers of our time – Steve Jobs who led his company Apple with the purpose 'Think Differently' and established his philosophy of connecting humanity with technology. Adding to the holistic development we state in our conceptual model (figure 3) that appreciative inquiry enables open and safe environment, free of negative judgment that hinders opening underdeveloped areas and enables realization of ideas in the form of innovation implementation. We propose that appreciative inquiry frees people of fears from failure and possibility of admitting underdeveloped areas of their personality or professional skills through focusing on positive psychological capital and past successes that become the foundation for developmental effort of developing multiple intelligences which are necessary for challenges of sustainable leadership that represent a demanding leadership practice as it is not only focused on the well-being of the organization but strengthens through its actions also wider stakeholders (individuals, organization, society and natural environment).

Sustainable leadership development needs to integrate a partial re-education of participants, as much of what they have previously learned does not fit into the sustainability paradigm (Juarez-Najera, Dieleman, and Turpin-Marion 2006). Interdisciplinary scholarly collaboration is a valuable source of information for participants, combined with courses,

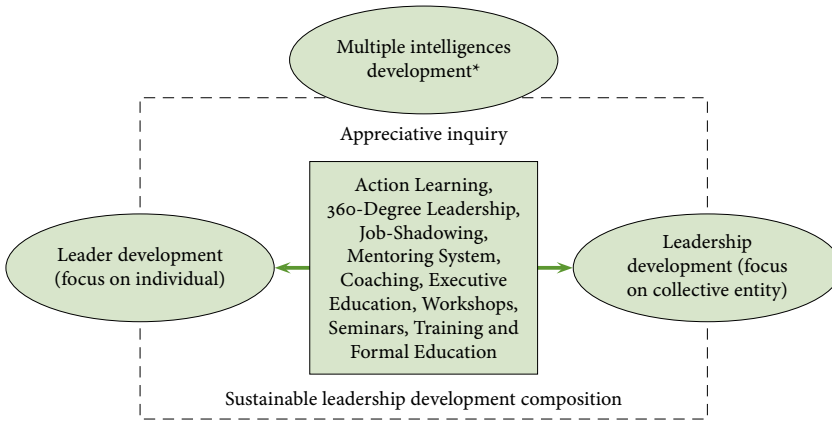

FIGURE 3 Conceptual model of sustainable leadership development (* verbal, logical, musical, kinesthetic, intrapersonal, interpersonal, naturalistic, existential, spatial)

such as environmental economics, environmental sociology, business ethics that clearly demonstrate that we cannot continue to focus on growth, without focusing on sustainability. Encouraging participants' research towards sustainability broadens their awareness and establishes grounds for future leadership behaviour. Teaching sustainability in the higher education institution and corporate leadership development programs demands (Steiner and Posch 2006) interdisciplinary approach, trandisciplinary problem-solving, self-responsible learning, action learning, redefinition of teachers' and student's roles, creativity, 'greening of the curriculum' (Evangelinos, Jones, and Panoriou 2009) social and emotional competencies, crossing borders between science and practice through connection to real-world problems and actors that can be achieved in transdisciplinary case study approach. Four dimensions for sustainable leadership development (Juarez-Najera, Dieleman, and Turpin-Marion 2006) are: basic education, reorienting existing education programs, raising public awareness of sustainability and training.

Creating Sustainable Developmental Environment

First step to creating sustainable leadership development demands the establishment of the development expectations, needs and priorities, therefore we have carried out a preliminary qualitative research through open questions survey at the Workshop 'Future Organization' at the Management International Conference (MIC 2011), 24 November 2011 in order to

TABLE 1 Conceptual model of sustainable leadership development

Multiple intelligences (adapted from Gardner 1983):
Linguistic: proficiency of language. Logical: ability to notice numerical or logical patterns and make abstract assumptions. Spatial: ability to create mental images as well as remember facts most appropriately by visualizing. Kinesthetic: ability of physical expression. Musical: ability of recognizing non-verbal sounds in the environment, sensitivity to pitch, melody, tone, and rhythm. Interpersonal: ability to understand and relate well to other people. Intrapersonal: ability to identify, understand and demonstrate one's own emotions. Naturalistic: ability to relate to the natural environment. Existential: ability to locate oneself with respect to the furthest reaches of the cosmos
Apreciative inquiry (Dunlop 2008):
Initiate, inquire, imagine, and innovate.
Sustainable leadership development:
Self-development (Day 2000), development of others (Schyns et al. 2011; Bolden and Gosling 2006), awareness of implicit leadership theories (Doh 2003), improvisation, and positive psychological capital.

advance and validate originally presented developed conceptual model. Ten international experts on management and sustainability returned the in-depth questionnaires. The results are presented in table 2.

The first phase of external validation of our conceptual model was based on open questions regarding sustainable leadership development. The experts highlighted and confirmed the need for interpersonal development through experiential learning, learning teams, mentorship, coaching in the organizational environment that is dedicated to life-long learning.

The second phase of the external validation of the conceptual model was carried out at Roskilde University (Denmark) at the international conference Humanities Perspective 2012: Empowerment in a Globalized Society, where the model was presented at the Section Education – Teaching Competencies for Empowerment on 6 October 2012. The participants of the conference were given closed questionnaires, based on literature review and previous qualitative work and stated their expertize on sustainable leadership development, intelligence that is most vital for sustainable leadership development and methods that enable its developmental success. The results show that according to the experts' validation the most

TABLE 2 Qualitative research findings on sustainable leadership development

Expert	What are the key competencies an aspiring leader needs to develop?	Through what kind of initiatives and activities can sustainable leadership skills be developed in an organizational context?	How can developed competencies of a leader be sustained?
Nr. 1	Fitness of leader's personality to the organizational culture.	Experience learning (show people how sustainable actions can have a real impact).	Show the leader the benefits of his/her competencies (recognition from the top management that current leader competencies are valued and then rewarded).
Nr. 2	Emotional intelligence; expertize.	Teambuilding; personal and business coach; workshops of emotional intelligence; learning through reading literature.	Formal education (msc, phd); role-modeling; workshops/seminars on emotional intelligence.
Nr. 3	Functionalist company perspective: to influence the employees; individual perspective: abilities to lead people.	Individualistic approach.	Life-long learning.
Nr. 4	Ethical and moral responsibilities for the world, not only for the organization or own interests.	Coaching/mentoring.	Ongoing developing activities; activate stakeholders of the organization; open organizational borders to exchange ideas and activities; everyone involved in the activities that serve each other's needs.

Continued on the next page

suitable definition of sustainable leadership is: 'Leadership that is directed towards future generations, taking into account well-being of society and nature.' From all the multiple intelligences offered (verbal, logical, spatial, bodily, musical, interpersonal, intrapersonal, naturalistic or any other intelligence that the respondent wished to state) the interpersonal intelligence was chosen by experts to be the most important one to be devel-

TABLE 2 *Continued from the previous page*

Nr. 5	Individual's actions in construction of the reality.	Develop the mind set – attitude of the employees; team development.	Executive education/training program; Workshops; performance review; coaching sessions; learning by doing – action learning.
Nr. 6	Networking; emotional intelligence.	Innovativeness; entrepreneurship.	Authentic leadership development.
Nr. 7	Teamwork.	Training program.	Knowledge management; corporate social responsibility.
Nr. 8	Mental skills; leadership skills; team organization skills; good evaluation of his/her emotions.	Workshops/organized educational sessions; recommended readings; learn from other people mistakes; case studies.	Everyday usage; constant education and learning.
Nr. 9	Authentic leadership skills.	Acknowledging that organizations are people and that organizations are not only in the search for profits but serving all the stakeholders.	Constant improvement of oneself and one's surroundings – the bases of authentic leadership.
Nr. 10	Self-sacrifice for the collective good; goes against alpha male characteristics of leaders.	Affective, social and cognitive development activities; integrating short-term project goals and processes.	Constant personal and professional improvement.

oped in sustainable leadership development which is, according to the literature review and since the second most important intelligence is verbal intelligence this confirms the notion that sustainable leadership development derives from a strong narrative that the leader establishes and that is sustained through developmental didactics. Project work was chosen to represent the initiative and activities that enable the optimal sustainable leadership outcome in an organizational context. Project work is best oriented towards promoting sustainability in teamwork that stimulates multiple intelligences in the working environment through action learning where business challenges are being met and transformed into learning opportunity that can create an original product or service.

The third phase of external validation was carried out at the Manage-

ment International Conference – MIC 2012 in Budapest that was taking place on 22-24 November 2012. The definition of sustainable leadership was confirmed as focused on future generations with taking into account the well-being of society and nature. The most important intelligence for sustainable leadership was recognized as interpersonal intelligence, followed by verbal intelligence, whereas the mentorship was exposed as the most suitable sustainable leadership development framework, which can be interpreted that mentorship as interpersonal relationship is a well-established part of educational and organizational culture and coaching is slowly being implemented into organizational environment of multinationals and larger organizations.

Based on all three phases of external validation of the model we can summarize that sustainable leadership is developed in interpersonal relationship – in interdependency, be that in coaching, mentorship, learning teams, project work or any other developmental method that enables the development of interpersonal intelligence, according to Gardner's theory of multiple intelligences which experts validated as the integral component of sustainable leadership development which motivates one to develop multiple intelligences in order to create products or services that will benefit others and are desired by wider environment.

Conclusion

Sustainable leadership development is unique in its conscious decision to take into consideration in its decision-making the well-being of future generations. Multiple intelligences are integrated in sustainable leadership development in a way that they produce by applying appreciative inquiry extended synergies for which the top management's commitment is essential. The paper first establishes the link between the content, process and practices of multiple intelligences and sustainable leadership development through appreciative inquiry and theoretical action learning approach and then defines sustainable leadership development model. The sustainable leadership development is focused on actual needs of the stakeholders and is proactively recognizing and implementing business practices that enable their well-being.

From the expert validation of the proposed conceptual sustainable leadership development model it is seen that intrapersonal and interpersonal intelligence skills development is essential to sustainable leadership development, meaning that leaders need to be developed to nurture their own personality and others. Our western society is dualistic. Older gen-

erations since scientific/industrial revolution have not been educated in the curriculum that is designed to develop a broad awareness of high interdependence of humans upon the natural environment (Kras 2007). Sustainable leadership development however needs re-structuring of its educational framework towards sustainable approach to knowledge and skills development through multiple intelligences development. Business environment is embedded in society that is a part of wider natural system, therefore future business leaders need to be developed, according to the principles of sustainability and in order to do that educationalists need to question longstanding assumptions about human-nature relationship (Kras 2007) and promote inter-relatedness in sustainable leadership development. Sustainability in leadership development is a way of directing leadership development according to the long-term perspective and focusing on integrating individual and relational component of leadership development.

Sustainable leadership development over time is only possible if leadership development is considered as a complex process, combined of leader, relationships with followers, organizational culture and wider environment. Individuals and teams need to perform leadership tasks together in a way that integrates different perspectives and acknowledges areas of interdependence in order for organizations to demonstrate sustainable leadership (Day and Harrison 2007). Constant changes in the contemporary turbulent business environment demand much of the leaders' attention and may take away their long-term focus. If the world is to be sustained in all its diversity sustainability needs to be incorporated in leadership development and implemented into action. Sustainable leadership development that we propose has its developmental core based in sustainability, meaning that it is focused on well-being of wide stakeholders and at the same time puts emphasis on sustaining the learning outcome of developmental experiences, therefore sustainable leadership development is both content and process oriented which distinguishes it from all other leadership development model conceptualizations.

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Prehod k trajnostnemu zaposlovanju: uporaba metode vzvratnega razvijanja pri načrtovanju politik

Alexandra Köves, Gábor Király, György Pataki in Bálint Balázs

Članek predstavlja rezultate in izkušnje, pridobljene ob izvajanju raziskovalnega projekta, pri katerem je bila uporabljena metoda vzvratnega razvijanja. Pri tranzicijskem managementu je to najbolj priljubljena metoda – posebej kar zadeva vprašanje trajnosti –, olajša namreč obravnavo zapletenih socialnih in ekonomskih vprašanj ter omogoča raziskovalcem svobodno razmišljanje zunaj sedanjih kognitivnih okvirov, pri čemer pa jim vseeno omogoča poiskati primerne, v prihodnost usmerjene odgovore. V tem madžarskem primeru poizkusa vzvratnega razvijanja so bili razviti scenariji trajnostnega zaposlovanja, oblikovana pa so bila tudi priporočila za njihovo uresničenje. Članek skuša prikazati, da lahko uporaba v prihodnost usmerjenih metodoloških pristopov zares privede do oblikovanja izvedljivih trajnostnih politik, tudi kadar gre za zaprte sisteme, v katerih veljajo utečeni postopki.

Ključne besede: vzvratno razvijanje; študije prihodnosti; trajnostno zaposlovanje; tranzicijski management
Klasifikacija JEL: E24
Managing Global Transitions 11 (2): 119–139

Inovativna moč zaposlenih (v industriji) pri vodenju kreativnosti v podporo mrežni ekonomiji

Eva Gatarik in Rainer Born

Osrednja točka našega raziskovanja je premišljevati, analizirati in dokazovati v prid uporabe inovativne moči zaposlenih nasploh in še posebej zaposlenih v industriji, z namenom spodbujanja ustvarjalnosti kot najpomembnejše podlage (ne samo) mrežne ekonomije. Slednja bi morala pripomoči k premagovanju nekaterih ovir, ki jih postavlja globalizacija, in nevarnosti, ki jih povzroča. Poleg tega moramo priskrbeti teoretično podlago, s pomočjo katere bi razložili, zakaj ni potrebno le priskrbeti »orodja« ali tehnike, s katerimi bi iz uhojenih poti klasične ekonomije potegnili najboljše, ampak tudi – sledeč Lakatosu, Sorosu in ostalim –, zakaj je treba spremeniti naš uveljavljen odnos do »uporabe« teh orodij.

Ključne besede: inovacijski ekosistemi; zaposleni v industriji; mrežna ekonomija; ustvarjalnost; management znanja

Klasifikacija JEL: O14; R11
Managing Global Transitions 11 (2): 141–160

Notranje podjetništvo, konkurenca in učinkovitost podjetja

Jože Kocjančič in Štefan Bojnec

Prispevek analizira notranje podjetništvo, konkurenco in učinkovitost v velikih slovenskih podjetjih tako, da poda evidenco na ravni podjetja in implikacije za management, v kolikšni meri slovenska podjetja izrabljajo notranje podjetniške potenciale, ki jih imajo na razpolago. V kvantitativni raziskavi uporabljeni podatki temeljijo na izbranem vzorcu velikih slovenskih podjetij,analizirani pa so s statističnimi metodami o povezanosti med notranjim podjetništvom, konkurenco in učinkovitostjo podjetja. Empirični rezultati so potrdili sorazmerno pomemben vpliv notranjega podjetništva na poslovne rezultate in konkurenčni položaj podjetij, ki so sodelovala v raziskavi. Ugotovitve stopnje izkoriščenosti notranjepodjetniških potencialov kažejo, da so le ti delno ali slabo izkoriščeni, kar kaže na dejstvo, da je notranje podjetništvo potencialni vir neizkoriščenih priložnosti in ena od možnih poti za izboljšanje konkurenčnih prednosti in učinkovitosti podjetja. Na osnovi rezultatov opravljene raziskave predlagajo nekatere rešitve problemov, ki temeljijo na dolgoročni naravnanosti managementa, poudarjanu pomembnost inovacij in spodbujanju kreativnosti kot osnovi za uspešno notranje podjetniško naravnanost podjetij, s čimer bi se izboljšale konkurenčne prednosti in učinkovitost podjetja.

Ključne besede: notranje podjetništvo; obnašanje podjetij,
tržna konkurenca, učinkovitost podjetij, Slovenija
Klasifikacija JEL: L25, M21
Managing Global Transitions 11 (2): 161–179

Nadarjenost, kreativnost in inovativnost v Avstriji in na Češkem: čezmejna empirična raziskava

Barbara Ehrenstorfer, Tanja Peherstorfer in Jan Nový

V okviru medkulturnega projekta Evropske unije (Češka/Avstrija) je bila v obmejnih območjih južne Češke in severne Avstrije izvedena obsežna empirična raziskava. Njen cilj je bil ugotoviti trenutno stanje na področju ustvarjalnosti in inovativnosti, pa tudi položaj in potrebe na področju delovnih in življenskih razmer na tem območju. Da bi ugotovili, kdo je pripravljen in zmožen ostati na tem območju in spodbujati ustvarjalnost ter družbeno inovativnost in spremembe v regiji, je bil poudarek raziskave na potrebah in pričakovanjih (nadarjene) mladine.

Ključne besede: regionalno upravljanje in razvoj; čezmejno sodelovanje; kakovost življenja; ustvarjalnost in sodelovanje nadarjenih; regionalna in družbena inovativnost
Klasifikacija JEL: A11; R11
Managing Global Transitions 11 (2): 181–200

Razvoj trajnostnega vodenja: validacija konceptualnega modela

Judita Peterlin, Vlado Dimovski in Sandra Penger

Konceptualni članek se posveča raziskovalnemu vprašanju: kako razvijati vodenje znotraj organizacije? Predlagano rešitev avtorji predstavljamo v obliki konceptualnega modela razvoja trajnostnega vodenja, osnovanega na Gardnerjevi teoriji mnogoterih inteligentnosti, ki je praktično aplicirana prek pozitivnega povpraševanja. Vodje se med seboj razlikujejo v posedovanju mnogoterih inteligentnosti in so hkrati sposobni razviti širok spekter mnogoterih inteligentnosti tekom celotnega življenjskega poteka. Ključna razvojna in analitična metoda, ki omogoča razvoj trajnostnega vodenja prek mnogoterih inteligentnosti, je akcijsko učenje, kjer so pričakovani rezultati pristopa vodenja pozitivnih sprememb ustvarjalni iskalci pozitivnih učnih izkušenj v (pro)aktivnem učnem okolju. Konceptualni model razvoja trajnostnega vodenja predlaga nov, ustvarjalen način zagotavljanja procesa in vsebine razvoja vodenja, ki ima trajnostno komponento v samem jedru modela.

*Ključne besede:*razvoj trajnostnega vodenja; mnogovrstne inteligence; akcijsko učenje; obvladovanje tranzicije
Klasifikacija JEL: J24; M12
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