



Connecting Higher Education
Institutions with Small
and Medium-Sized
Enterprises

Edited by
Igor Rižnar
Klemen Kavčič





*Connecting Higher Education Institutions with Small
and Medium-Sized Enterprises*

Faculty of Management
Monograph Series

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Edited by · Igor Rižnar and Klemen Kavčič

Reviewers · Mislav Ante Omazić and Jana Suklan

Design and Typesetting · Alen Ježovnik

Published by · University of Primorska Press

Titov trg 4, 6000 Koper

www.hippocampus.si

Editor in Chief · Jonatan Vinkler

Managing Editor · Alen Ježovnik

Koper, October 2017

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<http://www.hippocampus.si/ISBN/978-961-7023-45-9.pdf>

<http://www.hippocampus.si/ISBN/978-961-7023-46-6/index.html>

<https://doi.org/10.26493/978-961-7023-45-9>



Kataložni zapis o publikaciji (CIP) pripravili
v Narodni in univerzitetni knjižnici v Ljubljani

COBISS.SI-ID=292791808

ISBN 978-961-7023-45-9 (pdf)

ISBN 978-961-7023-46-6 (html)

Contents

- 7 Preface
Igor Rižnar and Klemen Kavčič
- 11 Collaboration between Small and Medium-Sized Enterprises
and Universities: A Perfect Fit?
Robert Rybnicek
- 23 The Co-Creation of Competitive Knowledge between
Higher Education Institutions and Small and Medium-Sized
Enterprises
Aleksander Janeš, Roberto Biloslavo, and Armand Faganel
- 49 Corporate Social Responsibility Disclosures
in the Republic of Slovenia
Danila Djokić
- 61 Thinking Globally, Acting Regionally with Simplified Logistics
Aleksander Janeš, Roberto Biloslavo, and Armand Faganel
- 79 The Maturity of Project Management in Slovenian Companies
Igor Grofelnik and Tanja Grofelnik
- 95 Internal Audit in the Financing of Companies
Tatjana Horvat and Franko Milost
- 117 Intellectual Capital Report of the University
Franko Milost, Klara Dodič Pegan, and Tatjana Horvat
- 135 Neuro-Linguistic Programing and Language Teaching
Tatjana Koropec
- 143 Is Higher Education in Dire Straits?
Igor Rižnar

Preface

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This is a second monograph on the complex topic of collaboration between higher education institutions and small and medium-sized enterprises edited by Igor Rižnar and Klemen Kavčič from the University of Primorska, Faculty of Management.

In the monograph, one of our intentions is not to use big words or pompous bluff, because it restricts, rather than aids, our understanding. The increase in the number of students, professors and higher education institutions does not, it seems, bring an increase in quality research that would encourage the collaboration between universities and industries. The ever-narrower academic specialization with its niche vocabularies seem not to contribute enough to establishing mutual understanding between the worlds of higher education and businesses.

The aim of this monograph is to foster, enhance, encourage and maintain a productive dialogue between universities and businesses. Collaboration between universities and businesses is necessary for skills development (education and training), the generation, acquisition and adoption of knowledge and for the promotion of entrepreneurship as well as for expanding the relevance of research carried out at HEI.

We believe that companies lacking close relationship with the academic community are likely to advance slower. On the other hand, universities not offering state-of-the-art lectures, valuable knowledge and groundbreaking methodologies and who do not implement research in the real world are most likely to lose their customers. In addition, universities have an important role in helping students understand the opportunities that are available in the business sector or in self-employment.

SMEs – companies with up to 250 employees – account for a significant amount of European (and Slovenian) economic activity, thus it is vital that universities understand motivations and modus operandi

of these small enterprises when developing collaborative project plans. In 2006 the Commission of the European Communities published a communication to the Council and the European Parliament entitled 'Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation' saying that European universities have enormous potential, which 'is not fully harnessed and put to work effectively to underpin Europe's drive for more growth and more jobs.' (Commission of the European Communities 2006, 2). It looks that the situation has not improved considerably during the last ten years.

The contributing authors in this monograph would like to show their full awareness of the importance of knowledge triangle, i.e. the relationship between education, research and innovation, and the need to connect all stakeholders: teachers, students, researchers, employers and businesses. The first contribution, written by Robert Rybnicek, is about the increasing importance of the collaboration between universities and companies. The author is aware that both the private sector and higher education institutions have to increase collaboration in order to remain internationally competitive. After a short review of the literature, the author shows how SMES and educational institutions can profit from collaboration in the areas related to equipment, staff, financing and knowledge transfer.

In the second contribution, authors Aleksander Janeš, Roberto Biloslavo and Armand Faganel, discuss a strategic project designed to promote business innovation in the light of sustainable development and to support competitiveness of SMES in the border area between Slovenia and Italy, with the main objective to increase the effectiveness of knowledge management system and strategic innovation of SMES through cross-border participation of SMES, universities, innovation centres and enterprises associations.

In 'Corporate Social Responsibility Disclosures in the Republic of Slovenia,' Danila Djokic writes about socially responsible decision-making and reporting of non-financial information that has become a central issue for the future development of the corporate governance in the EU. She believes that Slovenia should follow the European legal framework on CSR more diligently and that, in future, companies will need to disclose information on policies, risks and outcomes as regards environmental matters, social and employee-related aspects, respect for human rights, anti-corruption and bribery issues, and diversity in their board of directors.

In the article entitled ‘Thinking Globally, Acting Regionally with Logistics Simplified,’ Aleksander Janeš, Roberto Biloslavo and Armand Faganel discuss the aim the EU cross-border programme Italy-Slovenia to develop and test methodologies and instruments for creating strategic-cognitive maps of small and medium sized enterprises (SMEs).

Igor Grofelnik and Tanja Grofelnik write about project work by presenting two methods for measuring the maturity of project management, namely ‘Portfolio, Programme and Project Management Maturity Model’ and ‘Project Management Maturity Model.’

Tatjana Horvat and Franko Milost write about internal audit in financing of companies. They come to the conclusion that the internal auditor should be independent and objective according to internal audit’s professional standards. Financing the companies should be according to the law – if it is not, the consequence is the insolvency and bankruptcy of the company. In their second contribution, Milost and Horvat write about intellectual capital report of universities. They define intellectual capital as intangible assets that enable the growth and development of an organization and focus on the state of intellectual capital at the University of Primorska. Based on their findings, they propose a model for disclosing intellectual capital at the University of Primorska.

Tatjana Koropec from the University of Maribor, Faculty of business and economics writes about NLP in language teaching. As a teacher of business English, she tackles the issue of successful language learning from the point of view of neuro-linguistic programming (NLP) as a possible source for improving students’ language learning goals. She believes that neuro-linguistic programming in teaching is a viable practice in teaching in general as well as in teaching foreign languages both on primary, secondary and tertiary level of education.

Igor Rižnar writes about higher education in terms of a highly complex system, with a number of multi-lateral interactions between teachers, students, policy-makers, parents, different professional associations, politicians, economy and the society in general. After a brief encounter with the Bologna reforms, it focuses on several key issues in education. First, it discusses learning and teaching in the context of brain science. Second, he briefly discusses learning and teaching myths – misconceptions about how we learn and think – which are still widely believed by teachers in many countries around the globe. Third, he mentions biases in both teachers and education policy makers. Fourth, the

conditions under which academics in social sciences are working are discussed. And in conclusion, the author gives some pragmatic recommendations for the improvement of the present situation in higher education.

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1 Collaboration between Small and Medium-Sized Enterprises and Universities: A Perfect Fit?

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In recent years, collaboration between universities and companies has become increasingly important. Due to internationalisation, globalisation and competition, companies and other institutions are under pressure from both high costs and the need for innovation. As a consequence, many institutions collaborate and use synergetic effects to reduce their prices and keep up with competitors. Not only in the private sector but also in the higher education sector, organisations have to increase collaboration to be internationally competitive. Recently, collaboration between universities and companies has gained enormous significance and both can benefit from this partnership. In the course of this article, we conducted a literature review on university collaboration to identify the most common benefits. In particular, we focused on collaboration between universities and small and medium-sized enterprises and analysed how they can profit from such collaboration, for instance regarding equipment, staff, financing and knowledge transfer. However, our review strongly suggests that collaborations between SMEs and universities should only be realised if there is a proper fit between both collaboration partners and their requirements and goals.

Ključne besede: collaboration, SME, universities, benefit

Introduction

In recent years, collaboration between institutions – private or public – has become more and more important. Globalisation, international markets, the pressure for innovation and a fast-changing and highly competitive environment have made it necessary to collaborate in order to face these challenges. For many companies, collaboration with a university seems to be valuable. First, universities are serious partners with a wide knowledge base and a tendentious focus on fundamental research – a topic that is often neglected in the private sector. Secondly,

universities pursue, in contrast to profit-oriented companies, different (presumably non-economic) goals, which makes them a good counterpart.

Therefore, it is no wonder that collaboration between industry and universities has become increasingly relevant in the last few decades. On the one hand, it allows companies to develop new innovation capabilities (Flores et al. 2009) and gain access to highly qualified researchers (Myoken 2013), as well as technology and knowledge (Barnes, Pashby, and Gibbons 2002). On the other hand, universities benefit from the collaboration too, for instance through additional funding, industry equipment, licensing and patenting income as well as from knowledge and technology transfer (Barnes, Pashby, and Gibbons 2002). It is hardly surprising, that governments are also interested in such fruitful collaborations as they create wealth and regional innovation (Barnes, Pashby, and Gibbons 2002) and of course – as a pleasant side effect – the additional private resources decrease the need for governmental funding for universities.

A special form of such a university-industry collaboration is the collaboration between universities and small and medium-sized enterprises (SMES), which can be both advantageous and challenging. Universities and SMES are both important for the economy and have a huge impact on the prosperity and development of a country and its society. In many countries, SMES are designated as the ‘backbone of the economy’ as they are responsible for an essential share of the gross domestic product and national employment, while at the same time they often feel more obligations to the region than large concerns. In this sense, there are some similarities to universities. These institutions are also strongly associated with the region and important factors for (direct or indirect) employment and innovation. However, besides these similarities, there are also some differences between SMES and universities in terms of size, management, flexibility and others. Nevertheless, the collaboration between universities and SMES can be beneficial for both institutions as they can fill in for each other any gaps and/or blind spots either of them may have.

Reasons for Collaboration

In the course of this chapter, we elaborate on the reasons why collaboration between SMES and universities makes sense. We therefore analysed the relevant literature on industry-university collaboration and

paid special attention to SMES and their requirements. In the subsequent sections, we present five of the most mentioned reasons for collaboration. It has to be emphasised that these five reasons are neither complete nor valid for all situations. As investigated by Rybnicek and Königsgruber (2016), the importance of these factors can vary depending on the phase of the collaboration. One factor, for example, can be more important in the planning phase of a collaboration, while another factor should be more strongly considered in the implementation or establishment phase.

The five reasons we are going to discuss are achieving completeness, financing, equipment, staff and knowledge, as well as technology transfer. The order in which they are dealt with should not be misunderstood as an indication of their importance.

Completeness

One of the main reasons for establishing a collaboration is to find a partner that will supplement one's strengths and help address one's weaknesses. SMES are often niche players with a strong focus on specific tasks, knowledge, processes or products. They have excellent experiences in these areas but as a consequence of this specialisation, and due to the fact that they do not have unlimited resources, there are some gaps that must be filled by partners.

Therefore, when it comes to collaboration between a university and an SME, it is an essential task to find an appropriate partner that fits one's own needs. However, there exist many obstacles to choosing the right partner with concordant interests and goals (Arvanitis, Kubli, and Woerter 2008). A wrong partner can increase the costs of collaboration when there are different perspectives on important issues or when there are difficulties in working together (Banal-Estañol, Macho-Stadler, and Pérez-Castrillo 2013). Despite the fact that the selection and fit of the partners will certainly affect individual and shared outcomes (Gunn and Mintrom 2013), it is a common mistake to collaborate without first conducting adequate research into potential partners. As mentioned by Gunn and Mintrom (2013), a beneficial collaboration is dependent on how well the partners fit together.

To overcome this issue, a partner evaluation method with specific criteria should be established to enable the selection of a suitable partner (Barnes, Pashby, and Gibbons 2002). Similarly, Baba, Shichijo and Sedita (2009) emphasise the importance of applying appropriate search

strategies so that the partners match each other's expectations. The basis for these strategies and criteria are their own needs, so it is indispensable for both parties to be clear about their own requirements. The partner selection process is also influenced by other aspects, such as previous and interpersonal contacts, having already had a good relationship or a shared history, since universities and companies often prefer to collaborate with well-known partners (Hong, Heikkinen, and Blomqvist 2010).

A collaboration with partners that fit each other well can be advantageous. On the other hand, a collaboration should never be realised when partners do not meet each other's expectations (Borgia, Bonvillian, and Rubens 2011). SMEs in particular must bear this in mind when they are looking for a partner university. The size, power and 'grand style' of a university might be too overwhelming in some situations to resist the temptation of what may turn out to be an unfavourable collaboration. Universities, too, with their need for practice orientation, might be overhasty in agreeing to a disputable collaboration.

Financing

Assuming that there is a good fit between a university and an SME, one main benefit involves finances (e.g. further resources or cost sharing) and the division of financial risks. With respect to this matter, it is recommended to accurately estimate costs and revenues and to settle binding commitments as soon as possible (Borgia, Bonvillian, and Rubens 2011).

For SMEs in particular, access to further financial resources is sometimes difficult. University collaboration increases the possibility of additional financial resources that would not otherwise be available (Atia 2015). This applies, for example, in the case of many governmental sponsorships or resources from the European Union, which are allotted through various scientific programmes. In connection with this, it is interesting that according to Ryan (2009), long-established universities receive more financial funding from the government than younger ones.

For universities, a main factor for collaboration with industry – irrespective of whether it is an SME or a larger company – is also to gain financial support. Today many universities are forced to increase their third-party funding and even the performance of researchers is sometimes measured in terms of their potential to acquire such projects. These third-party funds are of special use to universities and

researchers as they allow them to exceed the basic (governmental) financing of universities and, furthermore, are often far less demanding (and certainly less strict) in terms of regulations that have to be met, compared to the demands that accompany governmental funding. However, for many departments or disciplines, the access to larger concerns is limited, for which reason SMEs are popular partners. In addition, third-party funding brings good publicity and a good standing within the university (Attia 2015).

Despite these advantages, the costs of a collaboration can be greater than the potential savings if the partners have different opinions about, and approaches to how to work together (Banal-Estañol, Macho-Stadler, and Pérez-Castrillo 2013). Therefore, universities and SMEs are well advised to consider this before entering into a partnership.

Equipment

Besides the monetary aspects, the access to laboratories, libraries and other highly expensive university equipment is another reason why firms are interested in collaboration with universities (Flores et al. 2009). This infrastructure is often unaffordable for companies, especially for SMEs, which may not have sufficient R&D budgets to acquire this equipment otherwise. Universities often have expensive and rare special tools whose acquisition value can exceed millions of euros (e.g. equipment in natural sciences, like MRI scanners). SMEs are often unable to invest so much money in research infrastructure. Likewise, universities may well be dependent on the specific manufacturing facilities of companies. This may be the case in highly specialised niches, where an SME could be a big player.

Consequently, the mutual use of equipment has some advantages for both sides. Firstly, it allows a knowledge and technology transfer (see also the sections below) between practical questions and theoretical solutions or vice versa. Secondly, it ensures the better utilisation of expensive infrastructure. And thirdly, it enables, as a consequence, the sharing of running costs when a long-term relationship is planned. Another less common possibility is the shared acquisition of equipment, which primarily makes sense for enclosed or independent long-term projects.

Staff

Another important factor that positively impacts on the benefits of a collaboration is staff. In a quantitative analysis, Myoken (2013) found that about 70% of the analysed companies saw highly qualified human

resources as the most essential benefit of a collaboration with a university. In this sense, qualified staff is even more important for companies than new ideas or product development.

There are various ways by which SMEs, universities or the staff itself can profit from a collaboration. Firstly, SMEs can acquire talented students involved in the collaboration at a relatively low price (Ford, O'Neal, and Sullivan 2010). Secondly, it is a chance for students to start a career straight after graduation (Gunn and Mintrom 2013). And thirdly, the know-how from highly qualified (practical) specialists from SME or (theoretical) researchers from the university can be mutually used (Ryan 2009).

In various sectors and regions, the search for qualified employees is challenging. Universities might not have the financial resources to pay wages that are typical on the market and SMEs in turn might not have the reputation to recruit the necessary specialists. Therefore, particularly in innovative sectors, a collaboration can suffer due to a lack of skilled persons on both sides (Mingji and Ping 2014). Another issue that needs to be considered when it comes to the exchange or mutual use of staff is cultural differences. For example, Schofield (2013) and Sturbeck (2001) highlighted those cultural differences between universities and companies regarding their structure, management, communication or objectives. Borgia, Bonvillian, and Rubens (2011) in turn emphasised the significance of understanding cultures in different countries. They recommend using intermediaries, who can assist in the collaboration process and help gain an understanding of different cultures.

Nevertheless, and besides all these challenges, by combining the differing skills of qualified staff from both institutions, new opportunities become available and weaknesses or substantial gaps in each of the partners' own resources may be overcome.

Knowledge and Technology Transfer

Finally, yet importantly, universities and companies can enhance their knowledge and technology transfer between theory and practice through collaboration (Al-Ashaab et al. 2011; Lee 2011). According to Bayona Sáez, García Marco and Huerta Arribas (2002), companies use the international knowledge networks of universities to enhance their market position. In general, the access to or development of new knowledge/technology is one of the main reasons for universities and companies to engage in collaboration (Newberg and Dunn 2002; Perkmann,

Neely, and Walsh 2011; Bodas Freitas, Geuna, and Rossi 2013; Indarti and Wahid 2013; Piva and Rossi-Lamastra 2013; Franco and Haase 2015). Knowledge and technology transfer between the partners is crucial for the success of the collaboration (Philbin 2010). Here, it is interesting to note that the explicitness of the university's knowledge is positively related to the knowledge transfer between the university and the company (Santoro and Bierly 2006).

There are different ways to ensure knowledge transfer. One popular method is to use internship programmes (Ford, O'Neal, and Sullivan 2010); another way is to actively educate potential employees (Rodriguez, De Giurana, and Elías 2005; Peças and Henriques 2006). At this conjunction, collaboration with a university can complete the company's education programme or can add strength and credibility to it. In particular, SMEs with lower budgets for training and HR development can benefit from such collaboration. But the university can also profit, for instance with on-the-job training for employees, particularly researchers.

It is important to acknowledge that the intense knowledge transfer in a university-industry collaboration can enhance the innovation performance of both partners (Mingji and Ping 2014). As already mentioned in the introduction, SMEs and universities have their strengths and weaknesses. This applies in particular with regard to their knowledge. On the one hand, there is the highly practical knowledge of the needs and problems in 'real life.' On the other, there is the highly advanced theoretical knowledge of new scientific developments. Knowledge transfer therefore might create new opportunities (Gunn and Mintrom 2013). But knowledge and technology transfer is not as easy as it sounds. Cultural differences (De Medeiros Rocha et al. 2012) or different knowledge bases (Hong, Heikkinen, and Blomqvist 2010) can hinder this process.

Conclusion

Collaboration is currently a very relevant topic. The challenges of the international market can often only be handled in collaboration with strong, or better still, the right partners. This trend is observable for all institutions - public and private, small and large. At the same time, and due to internationality and modern ways of communication, the possibilities for collaborations have become multifarious and their implementation has become easier.

In recent years, the importance of collaborations between the industry and universities has been enhanced, and collaborations between SMEs and universities are a special case. With respect to these collaborations and based on our literature review, we want to conclude with the following four thoughts:

1. *Opposites attract.* Despite the fact that universities and SMEs are often very different (e.g. structure, size, leadership, goals), they are virtually predestined for mutual collaboration precisely because of these differences. In this sense, SMEs and universities can form a perfect fit to overcome weaknesses and blind spots. This contrast might be the main strength of a collaboration between a university and an SME. Universities have the characteristics that SMEs are looking for (e.g. reputation, political power, highly qualified researchers) and SMEs have characteristics universities are looking for (e.g. flexibility, niche players, practical experience). This leads to both partners being important to each other and they can follow the same interests without being competitors. This contrariness may be the true strength of such a collaboration.
2. *Why collaboration?* The collaboration between a university and an SME can be advantageous for various reasons. In the course of this article, we identified five important motives, namely completeness, finance, equipment, staff and knowledge/technology transfer. In all these areas a collaboration can be beneficial as it allows the sharing of costs and risks, access to expensive equipment and highly qualified experts, and the transfer of knowledge between practical problems and theoretical solutions or vice versa. These aspects are, of course, not exhaustive and there are many other reasons to collaborate in specific situations.
3. *Collaborate only if the partner meets your requirements.* Besides all these advantages, collaborations can have some drawbacks as well, for which reason it is highly advisable for each of the parties to know precisely what their own requirements are. Subsequently, on the basis of these needs, an adequate search strategy for potential partners should be established. It has to be emphasised that a collaboration should not be agreed upon when there is no appropriate fit between the SME and the university. An unsuitable collaboration can even increase the costs as well as the workload.
4. *Collaboration is challenging.* There are various challenges when col-

laborating. Some of them start even before the actual collaboration. One challenge for SMEs might be that they often have difficulties getting in touch with universities as they do not have any contacts at the universities or do not want to devote enough time to finding an appropriate partner (Howells, Ramlogan, and Cheng 2012). Therefore, it seems beneficial to establish long-term relationships with universities on the basis of research projects, internships or contributions to teaching. Another obstacle might be financial resources, either on the side of the SME or on the side of the university. Here it is important to have a clear picture of one's own requirements and concordant expectations. It is also noticeable that some aspects carry more importance than others in the different stages of a collaboration.

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2 The Co-Creation of Competitive Knowledge between Higher Education Institutions and Small and Medium-Sized Enterprises

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The strategic project ‘Co-Creation of Competitive Knowledge between Universities and Small and Medium-Sized Enterprises (SMES) – Know Us’ was designed to promote business innovation in the light of sustainable development and to support the competitiveness of SMES in the border area between Slovenia and Italy. The main objective of the project was to increase the effectiveness of the knowledge management system and the strategic innovation of SMES through the cross-border participation of SMES, universities, innovation centres and enterprises associations. In the paper, the company Fonda.si is presented as an exemplary case study of business model innovation.

Ključne besede: aquaculture, business model, canvas, co-natural processes, sustainable innovation, co-branding

Introduction

Aquaculture is probably among the fastest growing food production industries accounting for about half of the total fish supply (Food and Agriculture Organization of the United Nations 2012; Fischer et al. 2015). Fish is traditionally considered a healthy diet. Although there are some uncertainties about the precise health benefits of some nutrients in seafood, it is generally accepted that seafood consumption is important for a healthy human diet – e.g. Omega-3, which protects against cardiovascular diseases. In most countries around the world,

the health benefits of eating fish are recognised by experts and public alike (Schlag and Ystgaard 2013).

Europe represents the largest fish market in the world. Over the past decades, consumption has increased to 13.2 million tonnes. There are many reasons that have led to an increase in fish demand, and there is a general opinion that most of them will persist in the future. First, population size has increased. Second, the price of fish has reduced overall, making the product more attractive to consumers. Third, real incomes have been increased, causing greater demand for fish. Finally, consumers have become more health-conscious, causing a positive shift in demand as fish consumption is known to have important health benefits.

Therefore, these contingency factors offer considerable possibilities for the EU aquaculture sector to grow. Aquaculture is defined as the cultivation of marine and aquatic organisms including fish, molluscs, crustaceans and water plants. Reported data suggests that in the EU28, the total number of companies with aquaculture as their main activity is between 14,000 and 15,000, and production reached 1,108 million tonnes and €3,365 billion of revenue in 2012 according to Eurostat. Compared to 2011, the production value and weight increased by 3.4% and 3.8%, respectively. The profitability of the EU aquaculture sector was positive in 2012 and the Gross Value Added of the sector increased by 4% (GVA ≈ €1.5 billion in 2011). The EU aquaculture sector gave direct employment to more than 80,000 people in Europe, with an annual average wage of around €22,100. Women accounted for 24% of these jobs (Scientific, Technical and Economic Committee for Fisheries 2014, 17–8).

In 2010, the research project Know Us started within the EU's Italy-Slovenia cross-border programme with one of the aims being to develop and test methodologies, instruments and procedures for creating strategic-cognitive maps of small and medium sized enterprises (SMES).

The methodology that was developed within the project originates from a pre-existing model based on the review of knowledge competencies (Competitive Knowledge Audit), developed by the University Ca' Foscari of Venice, in cooperation with companies from Veneto and Friuli Venezia Giulia in Italy (Bagnoli 2012; see www.know-us.eu). The Slovenian project partners designed strategic-cognitive maps for 30 Slovenian companies in the sectors of tourism, construction, logistics, food and agriculture, and the wood industry. The strategic-cognitive

maps were based on the business model canvas developed during the project.

Authors like Hadjimanolis (2006), Segarra-Blasco and Arauzo-Carod (2008), Zhong, Mei, and Xie (2009) had already ascertained that Research and Development (R&D) co-operation between companies and higher education sector might bring joint benefits. Awuah (2008, 166) found out that collaboration between higher education sector and SMEs could provide the company with access to new technologies, current knowledge, and innovative processes that could improve the company's competitiveness. Peças and Henriques (2006, 54) argued that 'The collaboration between universities and SME companies should be based on a small projects base. These projects must be focused in localised and specific problematic areas in the industrial companies, where the potential for improvement and innovation is large, must diagnose the problematic situation and propose new and efficient solutions supported by technical/scientific methodologies.' There are also some constraints to the co-operation, mainly related to intellectual property (IP) issues, i.e. Deschamps, Macedo, and Eve-Levesque (2013, 33) report three findings: '(i) SMEs do not care about understanding and improving their capabilities concerning IP and are not equipped with adequate tools and best practices for managing IP and the overall collaborative mechanisms in general; (ii) this gap in preparation for open innovation is persistent, since even the intermediaries, whose role is to guide SMEs in university-enterprise collaborations, suffer themselves from a lack of appropriate IP transfer and sharing tools, and do not perceive the need to offer better support in this regard; and (iii) overall, current IP-transfer and collaboration-management tools are not sophisticated enough to provide appropriate support for the implementation of open innovation, by which we mean more open and collaborative innovation in the context of university-enterprise collaborations.'

The purpose of this paper is to contribute to the literature by presenting an in-depth consideration of sustainable development in conjunction with the economic dimension. Despite the substantive complexity of the concept of sustainability, its civilizational communication value is in fact unambiguous: to avoid the entropic snare, we need long-term balanced development. This development can only be sustainable in a dynamic equilibrium between welfare and equity while being naturally harmonised i.e. co-natural. Sustainability is presented as a concept and

co-naturality as a realisation. Sustainability is based on the multifunctionality of each system, which serves for multiple purposes and multiple users simultaneously. These users are not solely and exclusively the people.

Between January 2012 and May 2014, thirty in-depth semi-structured interviews were conducted with entrepreneurs. This paper presents the case study of one of the most innovative aquaculture companies from the food and agriculture sector Fonda.si LLC (Fonda Company) (Janeš 2014b).

Fonda.si is a family-owned company, which has developed into a successful small business. They started aquaculture four decades ago. The business was founded by Mr. Ugo Fonda and after him; his daughter dr. Irena and son Lean have taken over the company. Fonda has created a completely unique niche on the market through the sale of 80% of their products in Slovenia; the rest of sales are done in Austria (10 %) and Italy (10 %). They opened a franchise farm in Croatian Osor on Cres Island and expanded the aquaculture facilities in the Bay of Piran. The Fonda fish brand has been developed to acquire 'the best fish in the world' and improve their market positioning and recognisability (Janeš and Biloslavo 2013; Janeš and Trnavčević 2014).

This paper is organised as follows. In Section 2 we present fish farming in the EU and the Mediterranean region. In Section 3, we described the chosen methodology of the multiple case studies and specifically the case study of the Fonda Company. In Section 4, we present and discuss the co-natural innovation activity of the Fonda Company. The end of the paper, Section 5, gathers conclusions, limitations and suggestions for further research.

Fish Farming in the EU

Fish farming has a long history in the Mediterranean region, with evidence of capture and feeding going back over 2000 years. Sea bass and seabream are produced in most of the 20-plus Mediterranean countries with the main producers being in Greece, Turkey, Spain, Egypt, Italy and France – representing 71% of the volume and 70% of the value of the EU28 totals. Farmed sea bass and seabream producers tend to be SMES; most companies are still relatively small as 90% of the employees are employed in companies with less than 10 employees. These companies are often family-owned and have no or very limited intention to increase production. Consequently, large investments to increase produc-

tion are not possible for many of these businesses due to lack of capital or market demand. However, some larger organisations have emerged as the sector has developed; food supply from aquaculture is expanding while wild fish yields diminish due to overexploitation and migration (Fischer et al. 2015). The aquaculture sector is relatively small and not attractive for the development of supporting industries, which makes investments more expensive. According to the Scientific, Technical and Economic Committee for Fisheries (2014) observation, there are only a limited number of countries that expect a substantial growth in the sector despite the general desire by EU member states to expand production (Schlag and Ystgaard 2013; Scientific, Technical and Economic Committee for Fisheries 2014, 14, 18; Wagner and Young 2009).

In general, European consumers have little knowledge or awareness of the origin of fish. This results in uncertainty in consumers' perception of farmed fish in particular. This case study is in line with other research, suggesting that perceptions of aquaculture and farmed fish are based more on emotions than on rational considerations. Still, the perception of farmed fish is positive in general (Fonda 2013a; 2013b). Consumers do not prioritise the origin of fish as an information cue, although variation is present between different consumer groups. Consumers of predominantly farmed versus wild fish do not have a very distinct profile, which corroborates the only modest significance of fish origin as a product-specific information cue during the fish purchase and consumption decision process (Honkanen and Olsen 2009; Vanhonacker et al. 2011).

Fish farming does not seem to arouse animal welfare concerns among consumers in the study of Honkanen and Olsen (2009). This finding contradicts the generally accepted view that animal welfare issues in food production are becoming more and more important for consumers in the EU (Ellingsen et al. 2015; Thøgersen, Haugaard, and Olesen 2010). However, these issues are mainly related to agricultural practices. The findings of Honkanen and Olsen (2009) also confirm that consumers are much more concerned about general environmental and sustainability problems related to fishing rather than animal welfare issues. The media coverage of fish welfare issues has been quite poor in e.g. Spain, and the issue is new in fish farming.

For example, the Norwegian public is concerned about fish welfare and is willing to pay a premium price for products made from welfare-assured fish. Norwegian consumers do not want to be the only ones

paying for fish welfare, as the main responsibility for fish welfare lies with producers and the Government (Ellingsen et al. 2015). The finding that the consumers are concerned about fish welfare issues in general may indicate that fish welfare and sustainability in farming are an up-and-coming issue among consumers.

The more environmentally concerned consumers are willing to pay a premium for fish products sourced from fisheries that are managed in a sustainable manner. Recently, another important value concept on the market that is linked to sustainability issues has increasingly gained significance. Good traceability systems decrease the probability of certain food safety problems, and would give the opportunity to improve the overall level of food safety. Companies could benefit from traceability systems associated with quality and safety assurance mechanisms, because they have the possibility of proving themselves with a well-documented manufacturing system and practices without a safety risk (Honkanen and Olsen 2009; Mai et al. 2010).

The study of Altintzoglou and Nøstvold (2014) provided evidence that three types of fish consumers exist in Norway (i.e. info seekers, label trusters and info skippers), based on the way they react to information about fish products. Extensive secondary information about fish products is not recommended to be prioritised when targeting all the potential consumers of healthy fish products. On the contrary, more product visibility and simplified product packaging with selective and targeted information for each consumer group will lead to a better differentiation of fish products in the competitive market potentially leading to an increased consumption of health-promoting fish.

The research results of Almeida et al. (2015) demonstrate the consumption of a high diversity of species in Portugal. Differences between more and less knowledgeable consumers related to seafood, show that the former have a more diversified use of species and a high prevalence of small pelagic fish. Convenient seafood products that are easy and fast to prepare act as drivers to change seafood consumption habits in Portugal. Certification schemes that help consumers in the sustainability of their choices are useful in some countries where there is demand for eco-labelled products (Koos 2011; Thøgersen, Haugaard, and Olesen 2010), but in others, e.g. Portugal, it might be more effective to complement it by promoting food traditions that are still good alternatives for the marine resources.

The findings of Pieniak et al. (2008) indicate that European con-

sumers are very interested in health and healthy eating. Health involvement is found to be an indirect driver of both subjective health and fish consumption, whilst interest in healthy eating emerges as a direct driver of fish consumption behaviour. Therefore, reinforcing or confirming existing health beliefs might be important in the development of effective strategies for stimulating fish consumption. Furthermore, people do not perceive a high risk of food poisoning from eating fish. Nevertheless, risk perception is significantly and negatively influencing fish consumption. The research exemplifies need for more effective communication about healthy eating and fish consumption as a part of a healthy eating pattern to the broader public. Additionally, the findings provide cross-culturally validated measures of health beliefs, involvement and risk perception.

In order to promote the food sector at the regional level while addressing prevailing trends towards global markets will require the successful implementation of regional associations, networks and supply chains in which SMES/producers of farmed sea bass and seabream will be associated (Fonda 2013a; Wagner and Young 2009).

Fish farming in net cages is advantageous to other methods as it is relatively easily managed and requires less space and capital investment. Sea bass fry reared under controlled conditions face competition among individuals for food and space leading to uneven growth and causing cannibalism. Optimising the feeding frequency and ration size play an important role in regulating the feed intake, the reduction of size heterogeneity and the waste outputs of fish. All these facts results in higher quality fish and increased production efficiency. The commercial success of aquaculture operation largely depends on the growth and survival of the fish under culture. As feed is the most significant cost involved, it is emphasised to perform farming with the maximum conversion into fish growth with a cost-effective approach (Biswas et al. 2010). Estuaries and shallow coastal areas are among the most productive ecosystems in the world, being recognised as important nursery areas for marine fish. Associated with their high productivity, the availability of different habitats, such as tidal flats, oyster beds, salt marshes and seagrass beds, provides optimal settlement conditions for invertebrates, birds and fish (Martinho et al. 2012).

Different wild fish species are attracted by fish farm cages and other floating structures in the Mediterranean. The accumulation of chemical elements in various fish tissues depends on the function of each tissue

and the physiology and behaviour of each species; e.g. habitat, feeding and degree of environmental contamination. Many studies of sea bass and seabream have demonstrated higher concentrations of metal and other elements in the tissues of wild fish species compared to farmed ones, which was mainly attributed to diet and habitat (water, salinity, temperature) differences (Fonda 2013a; Kalantzi et al. 2013).

Due to natural circumstances, the development of marine fish farming in Slovenia is limited. Mariculture takes place in the Bay of Strunjan, the Bay of Debeli rtič with shellfish farming and in the Bay of Piran with fish and shellfish farming. Slovenian mariculture practice is traditional. Fish farming takes place in cages submerged in the sea, while mussel farming takes place in a standard way with lines of floating buoys linked together, with longline nets hung from them. Mariculture shellfish farming is more extensive than fish farming in terms of the total volume of sales (e.g. the Mediterranean mussel accounts for 82% of the total mariculture production in 2012; European sea bass contributes around 16% to the total mariculture production in 2011) (Fonda 2013a; Scientific, Technical and Economic Committee for Fisheries 2014, 333).

Given the changing business circumstances, companies are confronted with questions: 'Are we building enough flexibility and resilience into the operation that is needed to survive the crisis? Is our business model suitable for successful leadership in a global recession?' The current economic crisis demands deeper reflection. The effects of the most recent recession are expected to last for quite some time, so companies should take into account the long-term initiatives instead of temporary cost reduction efforts. Real opportunities to reduce costs are in changing entrenched structures, mindsets and behaviour patterns in the whole company. In addition, the recession creates opportunities for companies and it is therefore necessary to rethink and review the entire operation (Pigorini et al. 2009).

Methodology

Between 2012 and 2014, among other Know Us research project packages, a qualitative study on business models was conducted in 30 SMEs from four Slovenian statistical regions (Obalno-kraška, Goriška, Notranjsko-kraška and Osrednjeslovenska), and from five industry sectors. Companies that accepted the invitation participated in workshops, in which semi-structured individual in-depth interviews were conducted with executive managers and/or owners of the company.

Table 2.1 Thematic Assemblies and Interview Questions

Thematic assemblies	Interview questions
Establishment and development of the company (mission, vision and values of the organisation)	What is the existing development path of your business so far (idea, effort, investment, areas of operation, promotions, competitors on the market, demand, the crisis in the EU and Slovenia)?
Innovation activity	What are the (innovative) practices in your business? Why do you think this is innovative? How is it different from other practices in the environment? How did you come to it? What are the benefits? How do you intend to develop it further?
Future orientations	What are important future goals and what are the ways (strategies) to achieve them (development, promotion, business results, markets, new niches)?
Business model	What are the milestones, key points in the development of the company and how do you overcome them (eventual integration of organisation, values, required quality, promotion, organisation)?
Socially recognised achievements	Honours, awards, certificates, etc.; importance for the company, name, year ...

Prior to the interview, the interviewees received generic questions by e-mail to guide and adequately prepare them for the interview. The interview included questions about the historical development and key turning points. In particular, the most innovative practices of the company's business model, as recognised by the company itself, were investigated. Using the canvas for business models method, mapping was performed of the vision and strategic knowledge of the company. In order to implement the strategic innovation of the business model, it is necessary to find the answer to several questions, but it is always required to start with the question: 'Why do we exist and what is our goal?' This is followed by the question: 'When should we redesign the business model?' The noted need for business model innovation is followed by questions relating to the characteristics of the existing business model. Questions are classified according to the key elements of the business model (table 2.1). In this way, the canvas was used for a description of the business model with a set of key elements: stakeholders, business partners, key resources, key activities, business processes, products and customer segments and a central part that represents the value proposition (Janeš 2014b; Osterwalder et al. 2010).

The case study of the Fonda Company was one of the companies

that participated in the project and was selected and represented because of its outstanding innovative co-natural sustainability (Yin 1994). Semi-structured individual interviews were agreed and scheduled with dr. Irena Fonda, co-owner and manager of the Fonda Company. Interviews were conducted between January and March 2013. The interviews lasted from 60 to 120 minutes, which is a standard length, as recommended by Kvale (2007).

The first interview was dedicated to the visualisation of the present situation in the company (i.e. the business model 'as-is') and represented a starting point for the second interview, which was aimed at the development of the future desired state and innovation of the existing business model (i.e. 'to-be'). Individual interviews/workshops were therefore conducted twice, for identification of the 'as-is' and 'to-be' models. The interviews were recorded, with the approval of the interviewee(s) using a dictaphone and then transcribed and analysed (Easterby-Smith et al. 2007; Janeš and Biloslavo 2013; Janeš and Trnavčević 2014). The method of semi-structured interviews was supplemented with the participation and observation of the researchers (Angrosino and Mays de Pérez, 2000; Janeš 2014a). The developed business model canvas (figure 2.1 and 2.2) was analysed and reported as a single case study. This was sent to the company-interviewee for confirmation and authorisation (Janeš 2014b).

Empirical Findings and Discussion

Co-Natural Innovation Activity of the Enterprise

The Fonda Company has over four decades of professional experience in developing, perfecting and bringing a new quality to the Slovenian and international fish markets. New ideas that were introduced by marine biologist and pioneer of aquaculture Mr. Ugo Fonda, are the result of dedicated professional work. In-depth knowledge in the field of marine biology is being transmitted to Mr. Ugo's Fonda successors, with which they jointly studied the important factors impacting on the sustainable development and production of Fonda Piran sea bass, which is very recognisable among the plurality of farmed fish providers around the world.

The farm is located in the Bay of Piran, which lies in the far northern part of the Adriatic Sea. Piran's bay is different from other bays especially in terms of clean waters and a strong sea current oriented to the north along the east coast of the Adriatic.

The completely unique climatic conditions in the Bay of Piran are due to a mild Mediterranean climate and the marine ecosystem. In winter, the temperature of the sea drops to between 6°C to 8°C, with the result that in some winter months, the fish do not eat, and thus get physically 'cleaned.' For this reason, the growth of the fish is slower. Piran's bay has natural protection from the northern and southern wind because it is flanked by Cape Savudrija and Piran's Punta. A constant flow of sea water is provided by the form of the Gulf coast; primarily of the Savudrija's coast, where the bottom of the bay reaches 15m in-depth.

In order to have enough space and a continuous flow of water for the sea bass, the fish farm was built in the middle of the sea instead in the offshore basins. The fish farm net cages extend to a depth of 11 m and have a diameter of 8 m to 12 m. These standard rates, which are set by the members of the Fonda family, represent improved aquaculture conditions. In each net cage, there are usually twenty thousand fry, which means that they have a relatively large amount of space for their development, as it could be possible to keep many more juveniles in a cage of this size.

Better living conditions for the fish mean higher costs as they have to take boat trips to the farm every day: 'Economically speaking, everything we are doing is wrong; we have fish in the cage too long, give them too good or too expensive food, do not use chemicals in the cage maintenance, have a volume of fish ten times less than is usual in fish farms. But this is the price you have to pay if you want the best fish in the world and fish that feel good with us,' dr. Irena Fonda believes.

When the fry are delivered to the farm, they are seven months old and weigh an average of 6g. Feed for the fish is made from verified high-quality components. This means that the feed contains many cereals and marine organisms. Feeding of the fish is only performed manually and in moderation, in order to have fish without accumulated excess fat. Fish farm cages are not coated to prevent the growth for marine organisms because such chemical agents are harmful to the environment. For this reason, cages are replaced or cleaned at least four times a year, which represents dangerous and gruelling extra manual work that requires a lot of energy. The fish are nursed in this way for four to five years and gain weight on average from 300g to 500g. Some of them achieve weights up to 3kg.

At the present time, fish is offered that fall into Fonda's 'selection category,' which are reared for 8 years. The result of careful cultivation

can be seen in the great tonus of the meat, which is fat-free. The quality of the fish is harmless, because the quantity of mercury in farmed fish is up to thirteen times lower than in wild-caught fish. This is the result of feed that does not contain mercury, chemicals and even hormones for faster growth, nor antibiotics for prophylaxis. Therefore, such fish is easily digestible and palatable and rich in protein, omega-3, vitamins and mineral substances. Food containing fish has a favourable effect on the development of the human body, particularly the brain in the era before birth and later in the era of growth; therefore it is recommended for pregnant women and babies. For adults, however, it has an impact on the increase in mental and physical characteristics and slowing down the ageing process.

At the same time, care for the environment is expressed through regular veterinary supervision of animal health by the University of Ljubljana, Faculty of Veterinary Medicine and the regular supervision of the inspector for food products, the Veterinary Administration of the Republic of Slovenia.

With all this, Fonda has developed the slogan: 'Natural, delicious and healthy!' That best describes Fonda's farmed fish. Innovativeness is present in the company and its entire approach to the process, including the most influential factors.

One of the important steps of their innovative approach was that they gave the fish a name and raised the brand Fonda Piran sea bass. The Fonda brand is a guarantee of the quality of the product and its founders are standing behind the fish name. 'We decided to give a name to the fish and a brand – Fonda Piran sea bass. This brand has given a guarantee of quality. Behind this name we stand. This means that we are actually doing everything we can to create a really good product. Each fish is tagged with a badge. On each badge is the date of harvest. This means full traceability. This badge has also been given because people should know what it means to have really fresh fish,' says dr. Irena Fonda.

While standing behind the products' quality, dr. Irena Fonda stresses: 'Fish farms are numerous! They all have some inexpensive fish, or not so inexpensive, but there is no one that has been even close to us in quality. Also in terms of the working method, there is no one that has come close. Yet there is still competition with producers who have cheaper fish.' She concludes her thoughts with: 'Geographical location and climatic conditions certainly affect and leave their mark on farmed fish.'

This is true for wine, olive oil and cheeses, as well as meat and fish, but we have to understand it!

The next innovative step was online sales, which still represents a novelty in the world. Such a method comprises sales on the Slovenian coast all the way to Ljubljana and Carinthia and to the west of Trieste and its surroundings.

Deliveries of fish are performed following a sales schedule i.e. on Tuesdays, Fridays and Saturdays. Fish are delivered in a diverse range of gift packages and with protection against temperature and contact with the surroundings. Also, the fish that are delivered at the request of customers can be cleaned, uncleaned or in fillets.

This inventive marketing process is unique in the world and is characterised as being the first fish to be sold over the Internet, and of course by its quality. Dr. Irena Fonda says: 'We carried out a lot of these things that were really different, such as; traceability and guarantees, the first online fish market and customers getting the fish delivered to their home. They place an order over the internet and receive a delivery at home in a very nice, neat package.'

The Fonda Company is unique in the world in terms of its marketing approach, and in particular with its sales method. They have customers who occasionally buy fish and those who have a regular subscription to fish purchase. The latter do not need individual booking for each order, instead regularly receive fish at home every week. This permanent form of orders was also suggested by a customer.

Increasingly, the implementation of a marketing and sales process reflects the strategic direction of 'Sale with zero kilometres.' In this respect, dr. Irena Fonda says: 'Now we have sold more than 80% of our products in Slovenia and we are facing an inverse situation in comparison with past sales. I am extremely proud of it!'

Recognition of the Fonda Brand was largely contributed by the media i.e. 'the Seventh force.' As dr. Irena Fonda says: 'When everybody claimed that what we were doing would not work, the first reporter came to visit. He said that he would like to write our "story." What kind of story, I asked in amazement? And yet we already had a story! Our brand is credible because our story is credible! And it is necessary to tell it to people!' Currently, there are at least 300 reportages about the Fonda Company in Slovenian and foreign media. On the company's website is a special tab named 'Press Room' containing a lot of published material i.e. scanned articles and broadcasts describing the com-

pany activities. It should be noted that some of the main publications from reputable journals are not on the web pages. 'Such a volume of promotion would also be too expensive for our company, if we had to finance it. And I am proud of the fact that these articles are not paid for!' dr. Irena Fonda says proudly. In doing so, she draws attention to an article in one of the most internationally renowned journals in the field of aquaculture, 'Il Pesce' – or in translation, The Fish – which was released in October 2012 and published on the website of the company. This article about the company means that they were noticed in the field of aquaculture because of their excellence. However, every article adds value to the brand. People who came to visit the company have gained information from the media!

From these visits, a new benefit developed for the company, since the initial interest of biologists in visiting the company spread to include attendance from various schools, faculties and pensioner clubs, including people from countries around the world. The visitors were interested in what the company does, how it does it and how such quality farmed fish was achieved. Many people still come from Austria, Italy and the United Kingdom, which are also the best customers. However, the company started to receive visits of people from Australia, Estonia, Japan, Taiwan, etc. Given the initial enthusiasm for company visits, on the basis of a visitor proposal, the idea was developed of a new service of guided tours and working sightseeing of the fish farm! It turns out that the sightseeing significantly contributes to the added value of the brand and sales performance.

As a result of the recession in Slovenia, financial investments dropped, including investments in underwater construction work, so this kind of additional service – sightseeing – is very welcome! And the demand for visits is still increasing. In this way, the search for financial resources, from the EU funds for fisheries through the Ministry of Agriculture, are being diverted to projects that are designed for promotion and tourism. The company is competing for these tenders via the Coastal Action Group – Fisherman (OAS).¹ These resources have enabled projects, which the company called 'green tours' and are made with kayaks and the Greenline hybrid vessel powered by solar energy, which was the 2012 vessel of the year and manufactured by the Seaway

¹ OAS Fisherman is a consortium of 46 members. The group was formed to meet the needs of local coastal communities in early 2012. Part of it is also a Fonda company.

Company. That same company had built a working vessel named Atlas. Atlas has already been used for tours in the role of a real aquaculture boat. The Greenline is intended for tourism and for the first time as a water taxi. Thus, the vessel will be processed precisely to meet the needs of the company.

Cooperation with Slovenian enterprises is very important. Namely, everything that is manufactured, can be used or purchased from Slovenian companies at an affordable price, is also obtained by Fonda. Slovenian companies are promoted at Fonda's own initiative, yet only if the latter have a credible product. For example, for the preparation of the Fonda Piran sea bass, Piran salt is being promoted, which is produced in the Sečovlje salt pans (Faganel and Trnavčević 2012). With consumption of the fish, Istrian wine and olive oil simply must be present. These are products that originate from Slovenian Istria and are natural complements. With the mutual participation of entrepreneurs, promotion of products and sales is reinforced.

An important promotional milestone is when the first restaurant – the inn 'Christopher' from Predoslje near Kranj-Gorenjska – included Fonda Piran sea bass on their menu. This was the first time that the fish had been named on a menu. After ten days, the same thing was done by Mrs. Ana Rož and Mr. Valter Kramar, who manage the restaurant 'House Franko.' During this event, each restaurant was unaware of what the other was doing.

The brand on the restaurant's menu has a great value to the Fonda Company: 'It was the first time that the name of the fish was on a menu. Surely this is a great confirmation! I like it because the Christopher restaurant is one of my favourites. And I gladly say that they were the first. This was followed by House Franko. And when they have a promotion, they always take some of our fish with them. That means a lot to me. I see them as partners, friends, and no longer as a customer.'

'So far, we are the only farmed fish that have gained a place on a menu! If you think about it, normally you get a wine list and the sommelier does all explaining to you, even how the winemaker was thinking. But for the meat or fish, nobody says anything! The menu says only e.g. fish fillet and nothing else. And this does not bother us or we are not interested? Yet manufacturers are so different!' dr. Irena Fonda explains.

Innkeepers have acted in this way because they believe in Fonda's product and they also give a positive boost to the general opinion, which is that caught fish is still somehow better than farmed fish (Ellingsen et

al. 2015; Fonda 2013a; Kalantzi et al. 2013). Their behaviour is undoubtedly a great achievement for the Fonda Company and at the same time contributes to the education of Slovenian and/or European consumers.

Many chefs were impressed by the quality of the Fonda Piran sea bass, to such a degree that farmed fish can be even better than 'wild' ones. Because the wild fish are not necessarily fresh, they can have a taste of mud or can even be sick. The Fonda Company was also invited to the Slowfish Congress in Genoa, Italy, where they were presented as an example of good practice.

One of the latest projects involves the radio frequency identification (RFID) of products. This means that any packaging for the fish is equipped with a chip. These allow computer processing and monitoring of what is happening with the product. In addition, it provides an even better trace for the customer. On the packaging box is a quick response (QR) code, which can be read using a smartphone, so the customer knows where the fish was and how it travelled.

The Business Model of the Enterprise

Through analysis of the 'as-is' business model of the Fonda Company, two strategic themes were identified: the Fonda brand and the sustainable aquaculture processes that embrace all key elements (figure 2.1).

The first of the strategic themes is the Fonda brand, which represents a very positive attitude towards sustainable aquaculture and care for the environment and the competitive advantage of the company. Sustainable processes that result in the 'best farmed fish in the world' is a strategic directive supported by effective and successful business with established and new business partners and modern co-natural sustainable technology, which serves as a support for the natural process of aquaculture.

This method of fish farming not only requires technical competencies but also a relatively large amount of manually worked hours on the farm. Natural farmed fish and seafood with Fonda's own market approach, opened regional and international sales channels for the Fonda trademark. 'At first we were weird. They speak about us as "these foolish biologists." It was horrible. We did something and all that we were told was that it is wrong, that it will not work,' explains dr. Irena Fonda.

Another identified strategic theme is the co-natural aquaculture processes. The professional family tradition in the field of biology is characteristic of the Fonda Company, which is reflected in the respect for nat-

ural processes, as they invested countless hours of manual labour, and for geographical origin. In-depth expertise has brought together influential factors of the fish farming process, which enables superior quality seafood. Geographical origin is recognised through the Fonda brand, who maintains the highest European quality standards. The latter also directs the expectations of customers in enjoying healthy seafood.

The developed aquaculture competencies of the company certainly have an impact on the increasing demand for high-quality sustainable food, which is an opportunity to achieve higher sales volumes and prices. Demand already exceeds production capacity by at least three times. In addition to the inventive technology of fish and seafood cultivation, an opportunity exists for the company in combining complementary products such as creating new culinary-wine-tourism experiences and the enhancement of the customers' awareness. The Fonda Company takes advantage of the Slovenian agricultural sector, which is reflected in the relatively advantageous geographical location, the Mediterranean climate and the geographical origin of the goods. Fonda is aware of its competitive strengths; a long tradition of aquaculture and the regional integration of the company. An important role in the operations of the company advocates the promotion of the geographical location of the Slovenian coastal-Istrian area. Fonda provides an important contribution to the recognition of Slovenian food companies and Slovenia as a touristic destination.

The third strategic theme that was identified on the basis of analysis of the Fonda's desired business model 'to-be' is co-branding (figure 2.2). It is well known that the Fonda brand is relatively fast-growing and recognisable, but the success also brings demands for the consolidation and maintenance of acquired market positions. In addition, the company is strategically embedded in the local region, which, on the other hand, represents a certain physical limitation.

Dr. Irena Fonda: 'I claimed once that everything else is the same, but not fish farming! But it is all the same. It is more difficult to work with fish, because they are a fresh product. What we did pleased people and it came out well and now we are one of the fastest growing and most recognised brands in Slovenia and abroad. In our area of expertise, we are the most recognisable.'

An established and recognised brand can be expanded to other areas of interest, but this requires a certain degree of caution. When considering the use of the 'master brand,' it is a good idea to consider whether

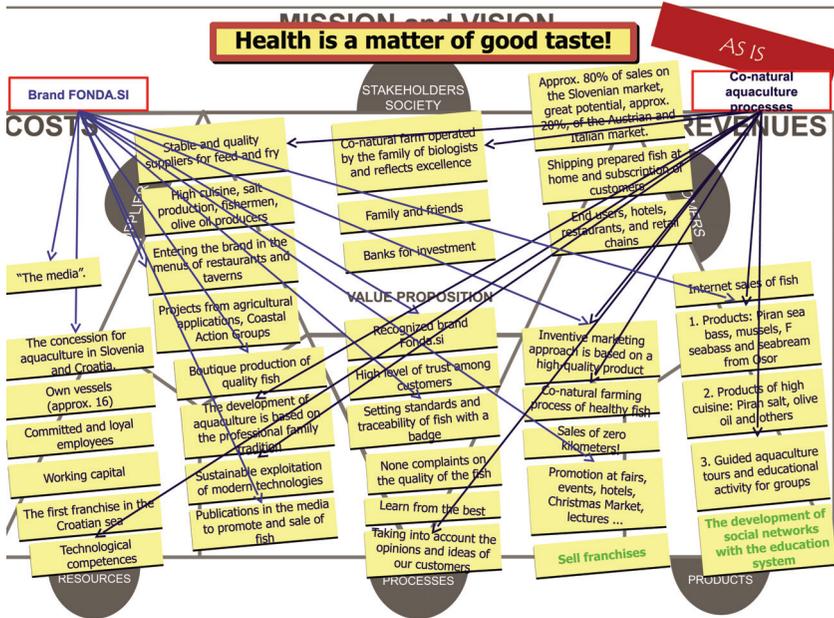


Figure 2.1 The Business Model 'As-Is'

this is not detrimental to the core business. There are also alternatives recommended – for example, the use of co-branding with renowned partners of the company and the joint appearance, for the benefit of all the brands (e.g. Pipistrel, salt, rice, wine, vinegar and olive oil producers, a new offer of caviar, etc.). Such cooperation of enterprises is at least partially used, and this is evident from the website of the company in the 'Fonda store' tab. In this regard, joint appearances, promotions and common sales channels of complementary high-quality products are certainly worthwhile, as well as it is a tight cooperation with the sector of tourism (Nemec Rudež et al. 2014). By positioning Slovenia as a tourist destination of excellence, all the actors involved from high-quality food producers to tourist service providers will gain a lot and Fonda is on the front line of the organisations pursuing this idea.

Sustainability Assessment of the Business Model

The aquaculture that was developed by the Fonda family does not bring quick benefits because 'the duration of the turnover' is relatively long, which represents an important obstacle to obtaining growth financing. As dr. Irena Fonda states: 'Here is the problem of the banks, because

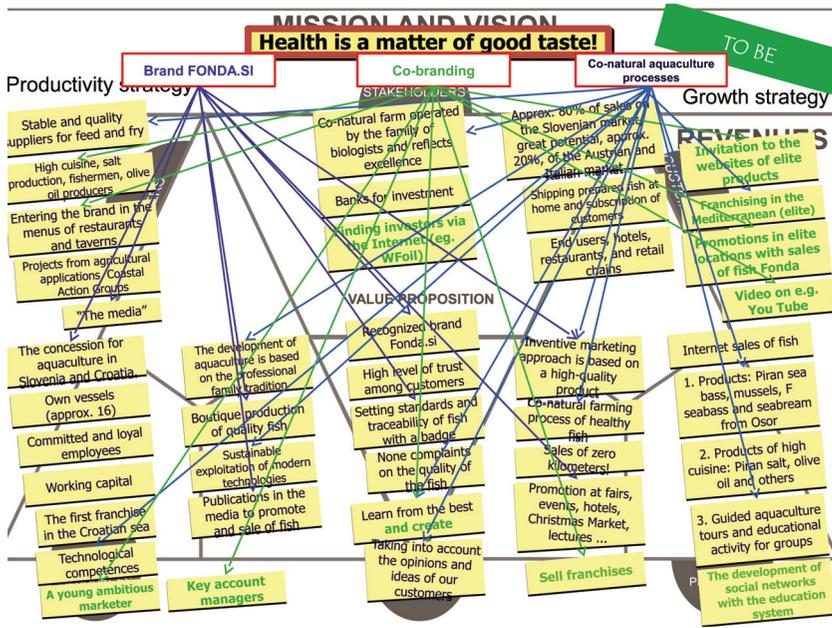


Figure 2.2 The Business Model ‘To-Be’

you need someone to support the growth of the story. Since we are the only fish farm, they do not understand us. When you say that the turnover of the capital is 4 years, you just get askew looks, because it’s too long! However, on average, with the opening of the first franchise in the Croatian sea, the turnover is shortened.’ Therefore, it would be worth carrying out activities to look for franchisees in geographic destinations where fish can be relatively quickly shifted into a period of maturity, and thus suitability for sale. It is appropriate to examine the factors affecting the shortening of the fish farming time and finding suitable nearby locations that can be relatively easy to manage. An example of this is the fish farm in Croatian Osor (Fonda 2013a; 2013b; Šubić 2012).

The Fonda Company cannot compete with large fish farms in the global economies of scale, but it can compete with the boutique quality, sustainable co-natural production of farmed fish and seafood. The latter may be accompanied by additional services. Dr. Irena Fonda states: ‘We sell fish like wine! We annually produce about 50 tons of fish, which can be seen as a lot. One normal, average fish farm has around 500 tonnes of fish annually. Break-even, figuratively; a positive zero is somewhere

around 240 tonnes per year and increasing. Large farms could produce up to 10,000 tonnes per year. Then we are really a boutique. If every tenth Slovenian ate one fish per year, in October if we keep our rhythm, we would remain without fish. This means that we are small.'

This should be worked out well as brand positioning for the various identified target segments of customers. Based on the key differentiating competitive advantages and the specific needs and desires of each target segment, in which it pays to invest and to continue developing, special offers are chosen. Positioning (i.e. the creation of the desired product image with customers) is performed by means of product policy, price policy, distribution and unique marketing communications; with added services at the same time. As the needs of wholesalers, retailers, caterers and groups of individual customers differ, it is necessary to create a unique marketing mix that will focus specifically on each of the target groups.

As a very important aspect of the company is the continued development of networking and complementary activities i.e. guided visits to the fish farm for the education of young people. Therefore, the company want to expand the network of contacts with principals and teachers especially in the field of geography, household and nutritional sciences, as well as with students of all levels (Dravinec 2015). The website of the company might be extended to the field of education – e.g. an 'education tab' with a special portal for distance learning, video clips of events at the fish farm, all of which could provide even more credibility to the sustainable operation of the company.

Another challenge is the shortage of the extensive and intensive joint appearance of entrepreneurs, coastal/Istrian caterers and hoteliers. This is because a small company cannot afford advertising space in tourist catalogues and at major trade fairs. Recently, the hoteliers changed their attitude to Slovenian entrepreneurs and started including them within the offer. However, according to dr. Irena Fonda, much more can be done; especially in terms of connecting innovative entrepreneurs with quality products that complement the offer. The conclusions based on the interview-workshops indicated that interest in the development of joint promotions and complementary cooperation already exists in activities such as fish farming, culinary, tourism and wine.

Continued partnerships with media of all kinds is certainly one activity that supports promotion, recognition and successful products sales.

Public relations, publicity, sponsorship, donations, open days, blogs, newsletters, etc. are the areas that offer many opportunities.

If the Fonda family decides to increase the volume of business, this will certainly lead to organisational changes i.e. the division of tasks and responsibilities with respect to markets, key customer groups and continuous product development in the form of the Key account managers and business processes that will share tasks and responsibilities based on preferences, attitudes and experiences. With the increased volume of business, the company will also reflect the need to establish a system for measuring the carbon footprint and the introduction of 'green' technologies of the next generation.

As major owners besides Mr. Japec Jakopin, in addition to the distribution of responsibilities in the future, Dr. Irena and Lean Fonda also face the issue of preserving family tradition.

Conclusions

In Slovenia, there are about 10 companies dealing with shellfish farming and only one that is engaged in fish farming and breeding. On the question whether there are tourist products on the Slovenian coast that include elements of fish farming, fisheries and tourism, the circumstances point to one provider, the Fonda fish farm.

In addition to direct fish farm sales, they are offering the possibility of visiting the farm by prior appointment. Visitors, who mostly come from Asia and EU countries, are shown the Fonda Piran sea bass farming as well as a culinary offer. Nevertheless, the resources of the company to offer this product in the tourism market on a larger scale is limited by the concession and the company's strategic directions, and thus this product is not available to broader tourist crowds (Janeš 2014b; Mihalič et al. 2013, 43).

In the future it would be reasonable to support research projects such as analysis of potential possibilities in fish farming development in Slovenia with regards to spatial and hydrological circumstances and research into the economic farming of new species. It would also be reasonable to continue investment in the modernization of older freshwater fish farms, especially improvements to the hygienic conditions and the construction of new freshwater fish farms, which have yet unexploited potential and comply with EU legislation technologically and ecologically. It would also be necessary to adopt all the outstanding fisheries legislation and encourage the establishment of aquaculture pro-

ducer organisations with a view to the development of fish farming in terms of SME family fish nurseries. These measures would facilitate the more competitive position of Slovenian fish farming. The natural circumstances and conservation requirements in Slovenia do not allow the development of large industrial fish farms. Establishing the organisation of producers would make it easier to obtain knowledge, new technology and reduce market costs. The future development of Slovenian mariculture is strongly conditioned by the small size of the Slovenian Sea. In 2007, three larger areas were designated for marine aquaculture in Slovenian territorial waters, which were subsequently separated into 22 plots, for which concessions were granted for the use of marine water in 2009. It is expected that these plots will not be expanded, due to the use of Slovenian territorial waters for other purposes. All Slovenian maritime fish and shellfish farms are currently operating at about 50% capacity (Scientific, Technical and Economic Committee for Fisheries 2014, 342). In the future, it can be expected that Slovenian marine aquaculture will increase production to the maximum capacity and then possibly stagnate, while freshwater fish farms are yet to develop their potential, because Slovenia has plenty of clean freshwater resources.

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3 Corporate Social Responsibility Disclosures in the Republic of Slovenia

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Socially responsible decision-making and the reporting of non-financial information has become a central issue for the future development of corporate governance in the EU. This article explores the disclosure of corporate social responsibility (CSR) information by public companies in the Republic of Slovenia (RS) to provide guidelines for the further development of the CSR in Slovenia in accordance with the evaluated EU strategies. Publicly accessible data has been scrutinised in annual and business reports, as well as the articles of association and the other applicable internal acts of Slovenian public companies listed on the Ljubljana Stock Exchange. The 22 companies were analysed taking into the consideration their disclosure of the CSR principles. Research project RS2015 indicates that the content of the CSR information of public companies in RS have not yet been properly developed. In the Republic of Slovenia, it is important to follow the EU legal framework on CSR more diligently. The companies concerned will need to disclose information on policies, risks and outcomes regarding environmental matters, social and employee-related aspects, respect for human rights, anti-corruption and bribery issues, and diversity in their board of directors.

Ključne besede: corporate social responsibility, reporting of public companies, non-financial information; corporate governance

Introduction

Corporate Social Responsibility (CSR) requires engagement with internal and external stakeholders, as well as enabling companies to better anticipate and take advantage of rapidly-changing societal expectations and operating conditions. It can therefore drive the development of new markets and create opportunities for growth. CSR covers human rights, labour and employment practices. CSR is extremely useful in building an organisational identity because of its ability to enhance

the attractiveness of the organisational image and to thereby increase competitive advantage (Martinez, Perez, and Bosque 2013, 15).

Consumers and investors are in a position to enhance the market reward for socially responsible companies through the consumption and investment decisions they make. Public authorities and other stakeholders should demonstrate social responsibility, including in their relations with companies.

The European Commission has previously defined CSR as the concept whereby companies integrate social and environmental concerns into their business operations and in their interaction with stakeholders on a voluntary basis.

This article explores the disclosure of corporate information by public companies in the Republic of Slovenia to be able to provide guidelines for the further development of the CSR in Slovenia in accordance with the evaluated EU strategies.

General Understanding of Corporate Social Responsibility

Various definitions of corporate responsibility can be found in literature. Instrumental theories boast the longest tradition, because they are the most established in practice. Creating economic value is an increasingly dominant motive (Windsor 2001, 226). Certain managers have expressed interest in serving local communities and wider society and supporting philanthropic activities. However, it is believed that corporate social responsibility is only sensible as a strategic tool for achieving economic goals and increasing the value of an organisation. Managers should be dealing with the needs of key (strategically important) stakeholders rather than the society in a wider and more abstract sense (Clarkson 1995).

CSR is explained as the responsibility of an organisation to plan and manage the relations with its stakeholders (Harrison 2000, 125).

The corporate social responsibility of organisations is further perceived as their relation with and answers to questions that go beyond their economic, technical and legal requirements. Such a relationship helps bring about positive effects in society, as well as generate profits, which is traditionally the goal of every organisation (Carrol 1994).

Some authors explain more about the CSR concept. As for Steiner and Steiner, they see corporate social responsibility as the corporate duty to generate wealth. They propose three basic elements of corporate social responsibility (Steiner and Steiner 2003, 145–7):

- market actions;
- externally mandated actions;
- voluntary actions.

Market actions are a response to the competition on the market. They are predominant, because an organisation fulfils its main and the most important corporate responsibility, i.e. normal operation on the market, by responding to market change. The second element encompasses actions that an organisation is obliged to implement owing to government regulations or agreements with stakeholders, e.g. collective agreements. Voluntary actions do not need additional explanation. An organisation opts for them voluntarily, free from legal and other pressures (Steiner and Steiner 2003, 145–7).

Schwartz and Carroll (2003) propose two broad groups of corporate social responsibility. In the first group, operation should only focus on profit maximisation within the legal limits and with minimal ethical constraints. The second group follows the broader duties of organisations towards society, i.e. by helping solve social and environmental issues on their markets.

Schwartz and Carroll (2003, 503) favour the second group and tries to only boost the economic activity of the organisation and the expectations society has of it. To this end, they argue that corporate social responsibility combines economic, legal, ethical and philanthropic expectations that the society holds for organisations in a certain period of time.

Corporate social responsibility is theoretically explained by Garriga and Mele using the following theories:

- Instrumental theories suggest that the basic role of an organisation is to increase the value of the owner's property, which is why they follow the economic aspect of cooperation between an organisation and society.
- Political theories underline the social power of organisations, especially the power that is generated through relations with the wider society and the responsibility arising from political power. As a result, organisations need to assume certain social duties and rights and participate in social activities.
- Integrative theories are based on the conviction that social needs must be taken into account in the business decisions of managers.

The business, existence and growth of an organisation depend on the society and the environment.

- Ethical theories hold that the relationship between an organisation and the social environment is full of ethical values. As a result, understanding corporate social responsibility is exclusively ethical. An organisation should assume corporate social responsibility, because it is an ethical requirement (Garriga and Mele 2004).

In Slovenia, authors see it as the responsibility of all business entities (owners and managers in particular) to develop and implement actions aiming to realise the needs and interests: organisation's environment (natural, social and corporate) and the organisation of internal processes (Potočan and Mulej 2007, 130).

CSR is explained as a cell. The attitude of an organisation or its management towards employees, owners and clients represents the nucleus of the cell. The immediate surrounding area of the nucleus constitutes the attitude towards the local environment, both natural and social, while the wider circle denotes the organisation's global visibility (Zadnik and Šmuc 2007, 3).

According to Bertoneclj et al. (2011, 108–12), these definitions indicate that the concept of corporate social responsibility strives towards the sustainable functioning of an organisation, which also contributes to the prosperity of the society as a whole, taking into account the interests of all stakeholders and its own interests, including profits, and strictly respecting both ethical and moral principles.

The EU Legal Framework of Corporate Social Responsibility

The Green Paper of the EU from 2001 describes CSR as a concept whereby companies integrate social and environmental concerns into their business operations and in their interaction with their stakeholders on a voluntary basis (Commission of the European Communities 2001). The following long-term documents of the EU have a significant influence regarding better understanding the concept of CSR and sustainable development in Europe.

The EU Strategy on Sustainable Development summarised some terms in the following way:

- *Environmental Protection*: Safeguard the earth's capacity to support life in all its diversity, respect the limits of the planet's natural resources and ensure a high level of protection and improvement of

the quality of the environment. Prevent and reduce environmental pollution and promote sustainable production and consumption to break the link between economic growth and environmental degradation.

- *Social Equity and Cohesion*: Promote a democratic, socially inclusive, cohesive, healthy, safe and just society with respect for fundamental rights and cultural diversity that creates equal opportunities and combats discrimination in all its forms.
- *Economic Prosperity*: Promote a prosperous, innovative, knowledge-rich, competitive and eco-efficient economy that provides high living standards and full and high-quality employment throughout the European Union.
- *Meeting our International Responsibilities*: Encourage the establishment and defend the stability of democratic institutions across the world, based on peace, security and freedom. Actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments.

A renewed 2011–2014 EU strategy for Corporate Social Responsibility has been introduced by the European Commission in the year 2011 (European Commission 2011a). Consultations, made on the basis of the 2011–2014 EU CSR strategy showed agreement that the legal regimes differ significantly across the EU Member States. It has highlighted the current regime applicable in the particular country's respective jurisdiction as poor or very poor. For many, the current EU legislative framework lacks transparency. Several respondents think this translates into a lack of balance and cohesion of reporting by companies, making it difficult for shareholders and investors to make a reasonable assessment of the extent to which companies take account of CSR in their activities. With respect to the regime on non-financial disclosure, improvements have been suggested, such as: that the EU should draw on frameworks already developed at the international level rather than elaborate new standards and principles. The sharing of best practices and the need for incentives for companies to report on non-financial issues were also underlined. However, for many stakeholders, developments in CSR needed further reflections, especially on how best to make integrated reporting operational, without unduly increasing the administrative burden for companies (European Commission 2011b).

One of the latest EU activities in the CSR field is the Directive on the disclosure of non-financial and diversity information by certain large companies and groups, which was adopted by the European Parliament on April 2014 (European Parliament and the Council 2014).

The companies concerned will need to disclose information on policies, risks and outcomes regarding environmental matters, social and employee-related aspects, respect for human rights, anti-corruption and bribery issues, and diversity in their board of directors.

Corporate Social Responsibility in the Practice of the Reporting of Public Companies

The CSR Directive leaves significant flexibility for companies to disclose relevant information in the way that they consider most useful, or in a separate report. Companies may use international, European or national guidelines that they consider appropriate.

The new rules will only apply to some large companies with more than 500 employees. In particular, large public-interest entities with more than 500 employees will be required to disclose certain non-financial information in their management report. This includes listed companies as well as some unlisted companies, such as banks, insurance companies, and other companies that are thus designated by Member States because of their activities, size or number of employees. The scope includes approx. 6,000 large companies and groups across the EU.

The Disclosure of the Corporate Social Responsibility of Public Companies in RS

The SEECGAN Research (Djokić et al. 2014) has been realised in the Republic of Slovenia (RS) on the basis of the SEECGAN index. This research provided some results concerning the public disclosure of corporate information, as well as information concerning CSR in practice.

The SEECGAN Index of Corporate Governance (hereinafter the SEECGAN Index) was created and presented in 2014 as a result of the joint efforts of members of the South East Europe Corporate Governance Academic Network. The SEECGAN Index is designed and adapted with regard to the situation and the specificities of the business environment in selected countries of South-Eastern Europe (Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Slovenia and Macedonia) (Tipurić, Dvorski, and Delić 2014).

The seven segments of the Index are as follows:

- Structure and Governance of Boards
- Transparency and Disclosure of Information
- Shareholders' Rights
- Corporate Social Responsibility
- Audit and Internal Control
- Corporate Risk Management
- Compensation/Remuneration

These seven segments are represented by a total set of 98 questions that must be answered in the affirmative (yes) or negative (no), depending on the governance practices in the analysed firms. Affirmative answers imply good corporate governance practices and vice versa. A ponder is assigned to each answer, wherein the minimum value of the weight equals 1 and the maximum value equals 3. The maximum score for each segment is 10 (best possible practice) and the minimum is one (worst possible practice). The overall SEECGAN Index score is the average value of all seven segments with 1 being the lowest index value and 10 being the maximum.

The research sample totals 22 companies with their shares listed on the Ljubljana Stock Exchange, d.d. The samples are divided into two parts. The first part represents the prime quotation of the most profitable companies with the highest traded shares: Gorenje, d.d., Velenje, Intereuropa, d.d, Koper, Krka, d.d., Novo mesto, Luka Koper, d.d., Koper, NKBM, d.d., Maribor, Petrol, d.d., Ljubljana, PS Mercator, d.d., Ljubljana, Telekom Slovenije, d.d., Ljubljana, Zavarovalnica Triglav, d.d. The second group of companies represents the standard quotation of companies with a higher level of transparency: Abanka Vipa, d.d., Aerodrom Ljubljana, d.d., Delo prodaja, d.d., Iskra Avtoelektrika, d.d., Istrabenz, holdinška družba, d.d., Kompas Mejni turistični servis, d.d., Mlinotest živilska industrija, d.d., Nika, d.d., Pivovarna Laško, d.d., Pozavarovalnica Sava, d.d., Sava, d.d., Terme Čatež d.d., Unior, d.d. (Djokić et al. 2014).

To be able to elaborate the CSR Index in the framework of the SEECGAN Index in Slovenia for the above scientific sample, the following criteria have been scrutinised:

- Does the company have and publically disclose a CSR strategy?
- Are the CSR principles explicitly mentioned in the company's value statement or other similar statement?

- Has the company joined or does it publicly support CSR voluntary standards or interest groups such as the Global Compact, The Equator Principles, Voluntary Principles on Security and Human Rights or Industry Best Practice, or other national/international agreements related to environmental and social responsibility, etc.?
- Does the company disclose or publish any non-financial reports?
- Is the company's CSR Report prepared according to the UN Global Compact, Global Reporting Initiative, B-Corporation or other internationally recognised reporting standards?
- Does the company have a code of ethics or a formal policy in relation to dishonesty, corruption or unethical behaviour?
- Did the company develop procedures for financing projects in the local communities and company donations (are there public calls or similar transparent procedures for the election of projects for support)?
- Does the company have a board member/department whose primary responsibility is CSR?
- Does the company hold special meetings to engage with stakeholder groups to solicit their opinions in a formal way?
- Has the company incorporated CSR issues into its purchasing policy/quality standards/supplier code of conduct?

The SEECGAN Research (Djokić et al. 2014) showed that Zavarovalnica Triglav PLC has the highest SEECGAN index of social responsibility, which reached the value 10. The least points were awarded to Kompas MTS PLC and Delo PLC, who did not receive any value. Companies with lower results do not have members of the Supervisory Board/Management Board responsible for Corporate Social Responsibility, do not carry out meetings with interest groups, do not prepare reports on corporate social responsibility and corporate social responsibility is not listed as a fundamental value of the company. The SEECGAN index of corporate social responsibility in Slovenian companies is very poorly developed, as the average value is 3.66.

A good example of a company that has revealed its policy of corporate social responsibility is Telekom PLC. This company places an emphasis on corporate social responsibility. 'Efforts in this field extend to the broad field of social activities as we take an active role in various

socially significant campaigns, contributing services, material and financial resources for health, education, culture, sports and conservation of natural heritage. As partners of many programs, organisations and associations from different areas of combining the business and social environments. In this way, we establish reciprocity, which allows us to connect the needs of company, employees, users and the narrower and wider environment. In this way, we create additional value for the wider community. In the future, we will take care of all aspects of comprehensive sustainable responsibility with a balance of the three basic indicators: economy, attitude towards other people (customers, users, employees, business partners and other members) and relation to the natural environment' (Telekom Slovenia 2013).

The disclosure of corporate social responsibility of companies in Slovenia is still in its beginnings. Other authors in Slovenia determine that the 'apparent' increase in socially responsible behaviour is linked solely to the external reporting on corporate social responsibility, communication with the public and the construction of a better public image. Understanding the links between socially responsible decision-making and financial consequences is quite low (Slapničar 2004). The SEECGAN Research (Djokić et al. 2014) confirms previous findings with low SEECGAN values. In fact, the average value of the studied companies is 3.66. This result indicates that the content of the CSR information of the companies in the research sample has not yet been properly developed so far. It is therefore necessary to follow the EU legal framework on CSR more diligently to be able to achieve the goals of 'eco-efficiency' and others that determine the notion of the CSR.

Conclusion

The implementation of the CSR policy by public companies is very important for the shareholders, stakeholders, investors and other interested participants. The principal business risks and opportunities arising from social and environmental issues and how these are taken into account should be explained in the company strategy. Key information on other specific issues regarding CSR should also be explained in the Company CSR Strategy.

The transparency of Slovenian corporations is at a satisfactory level, slightly worse is the disclosed corporate social responsibility. Corporations do not have a policy of transparency, do not have strategies, have no procedures for the disclosure of market-sensitive information,

have no mechanisms for the protection of minority shareholders, do not carry out meetings with stakeholders, do not prepare reports on corporate social responsibility and corporate social responsibility is not a fundamental value of the company, etc.

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4 Thinking Globally, Acting Regionally with Simplified Logistics

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In 2010 the research project Know Us started within the EU's Italy-Slovenia cross-border programme with one of the aims being to develop and test methodologies and instruments for creating strategic-cognitive maps of small and medium-sized enterprises (SMEs). The strategic project 'Co-creation of competitive knowledge between universities and small and medium-sized enterprises (SME) – Know Us' was designed to promote business innovation in the light of sustainable development and to support the competitiveness of SMEs in the border area between Slovenia and Italy. The EuroPacific LL Company (EuroPacific) is headquartered in Koper, Slovenia where the company started its business activities in logistics in 2003. The long-term development of the company is based on the business vision: 'To become a key logistics provider for goods from the Far East destined for the European market.'

Ključne besede: Slovenia, domestic logistics operator, business model, canvas, competence centre, EU, sustainable innovation

Introduction

Transport is a cornerstone of the European integration process and is firmly linked to the creation and completion of the internal market, which promotes jobs and economic growth and enables the free movement of individuals, services and goods. The industry employs around 11.1 million people, accounting for 4.5% of the total employment in the EU and creating about 4.8% – €548bn – in gross value added overall for the 28 EU countries. Smooth transport connections are also vital

to the EU's economy in terms of its exports – shipping carries 90% of the EU's foreign trade.

In the EU, 45.3% of goods are transported by road, 36.8% by maritime transport, 11% by rail, 0.1% by aviation transport and 3.1% by pipelines, based on tonne-kilometres. In the case of passenger transport the difference is even greater, since road transport with a high proportion of cars represents approximately 83% of traffic, railway 7% and air 8%, based on passenger-kilometres.

Economically, road is the main form of transport for freight, where it accounts for the bulk of inland transport in the European Union and has been growing steadily in recent decades, with almost 75% of inland freight being transported by road between Member States (MS). Freight transport alone is expected to grow by 80% by 2050 (European Union 2017).

As Member State (MS) societies become ever more mobile, EU policy seeks to support transport systems in meeting the major challenges facing them: Congestion affects both road and air traffic. It costs Europe around 1% of the annual GDP – and freight and passenger transport alike are set to grow.

Oil dependency – despite improvements in energy efficiency, transport still depends on oil for 96% of its energy needs. Oil will become scarcer in the future and increasingly resourced from unstable parts of the world. By 2050, the price is projected to more than double compared to 2005; Greenhouse gas emissions – by 2050, the EU must cut transport emissions by 60% compared with 1990 levels, in order to limit global warming – a temperature increase of just 2°C; Infrastructure quality is uneven across the EU; Competition – the EU's transport sector faces growing competition from fast-developing transport markets in other regions (European Union 2017).

In 2010 the research project Know Us started within the EU's Italy-Slovenia cross-border programme with one of the aims being to develop and test methodologies and instruments for creating strategic-cognitive maps of small and medium-sized enterprises (SMEs). The strategic project 'Co-Creation of Competitive Knowledge between Universities and Small and Medium-Sized Enterprises (SME) – Know Us' was designed to promote business innovation in the light of sustainable development and to support the competitiveness of SMEs in the border area between Slovenia and Italy. The main objective of the project was to increase the effectiveness of the knowledge management system

and the strategic innovation of SMES through the cross-border participation of SMES, universities, innovation centres and enterprise associations. The Slovenian project partners designed strategic-cognitive maps for 30 Slovenian SMES from the sectors of logistics, tourism, construction, food and agriculture, and the wood industry. The strategic-cognitive maps were based on the business model canvas developed during the project. This paper presents a case study of the third-party logistic provider (3PL) the EuroPacific Company (Janeš et al. 2014; Stake 2000).

In 2009 and 2010, it turned out that, although a breaker of the crisis, EuroPacific is not immune to market changes and nor is it immune to the economic downturn effects. During this period, the company lost a strategic client on which the majority of its revenue relied. The company was forced to drastically reduce the cost, disinvest part of its assets and even dismissed some employees.

In 2010, EuroPacific was funded by family capital, business processes have been optimised and costs minimised to the lowest bearable limits of sustainability. The company become even more focused on its core business and on a number of important customers from Korea, Israel and the United States of America.

EuroPacific's operation is focused on customers and partners, who are offered comprehensive logistics solutions for their business. The client-based strategy has enabled internal reorganisation and diversification in areas that are in the company's best interest in the long-term and will form the basis of current and future business growth. Such a path has required large financial investments and additional risk management. EuroPacific's operations take into account the significant cultural differences between the company and its global business partners. One of the important advantages that is being offered to the partners from Asia is 24/7 accessibility and responsiveness. The company's business model is being continuously improved, in order to maintain the position of an important business partner to significantly larger customers e.g. Samsung, Hyundai, Nokia, LG, Philips, Sony, Tesco, CMA CGM, Posco, KIA and Foxconn (see www.europacific.si).

The paper is organised as follows. The second section presents the third-party logistics provider's strategy and practice. The third section describes the chosen methodology of the multiple case studies and specifically the case study of the EuroPacific Company. The fourth section presents and discusses the 'logistics simplified' innovation activity

of the enterprise. At the end of the paper, in the fifth section, conclusions, limitations and suggestions for further research are gathered.

The Third-Party Logistics Provider's Strategy and Practice

One of the preferred logistics resourcing strategies is to take logistics as a function within a company, the so-called in-sourcing strategy. Once the functions began to be integrated and considered as a supply chain rather than separately, several key themes emerged: a shift from a push to a pull, a demand-driven supply chain; customers' bargain power in the marketing channel; an enhanced role for information systems (ISS) in supporting the supply chain; the elimination of unnecessary inventory; and a focus on core capabilities and the increased outsourcing of non-core activities to specialists/contractors. To achieve the maximum effectiveness of the supply chains, it became clear that integration, i.e. the linking together of previously separated functions and activities within a single system, was required. At about the same time, total quality management, business process re-engineering and continuous improvement brought Japanese business thinking to western manufacturing operations (Fernie, Sparks, and McKennon 2010).

However, nowadays more and more companies, especially those in Europe and North America, are outsourcing their logistics to third-party logistics (3PL) companies in a so-called outsourcing strategy.

A hybrid model between the above two strategies is also possible. A company can purchase a previously 3PL company and make it a subsidiary firm. The importance of logistics has increased and subsidiaries of major shippers have dominated the logistics industry market in several countries around the globe, extending the scope and scale and services. In the EU, most manufacturers have faced various difficulties through the worldwide economic downturn since 2007, likewise in Japan and partly in Korea in the late 1990s. Logistics subsidiaries had to change their strategies and consequently most of them diminished from 2004 to 2010, due to business rationalisation in the direction of profiling as a domestic logistics operator. Consumers demand fluctuation represents a serious challenge to the configuration of the supply chain, resource synchronisation and lead-time management (Ahn, Ishii, and Ahn 2013; Kavčič and Bertoneclj 2010; Janeš and Faganel 2013; Kobal, Dežjot, and Ventin 2013a; 2013b; Lu 2011).

3PL provides a good example of a widely promoted service by the phenomenon of outsourcing in a rapidly emerging intermediate mar-

ket, which is characterized by the increasing use of outsourcing, particularly as organisations have moved into foreign markets and globalized their supply chains and resources of materials and services (Aguezzoul 2014; Anderson et al. 2011; Marasco 2008). These intermediate markets intensify the partitioning of production and shift the focus from the final market of goods and services to the value adding processes in the intermediate markets (Jacobides 2005).

Globally expanding Internet and e-businesses have brought new business models with less distribution intercessors resulting in Internet-based customer logistics, logistics for small-batch production, and zero-inventory logistics. The development of Internet-based distribution channels and other mobile marketing media has made it incredibly easier for consumers to switch their usual brands. For companies, the logic of going global is recognisable from an economic perspective. Manufacturing companies began to outsource part or all of their logistics function to 3PL companies who provided expertise in solutions of logistic systems, transportation, warehousing, freight consolidation, distribution, inventory management, and logistics information systems (Anderson et al. 2011; Govindan et al. 2012; Lu 2011). Aguezzoul (2014) points out the 3PL services also in a JIT context. Sahay and Mohan (2003) argue that the major reasons cited for the usage of 3PL services include cost reduction 27%, strategic reasons 26%, process effectiveness 24%, and lack of internal capability 11%. Anderson et al. (2011) quote a range of other social exchange factors that do not fit easily into the listed categories i.e. reputation, innovativeness and managerial involvement. Leuschner et al. (2014) performed a meta-analysis, which is based on 9,386 observations across 54 samples, and reported a preponderance of support for beneficial performance outcomes associated with logistics outsourcing arrangements—for both suppliers and customers of the services.

The 3PL industry provides a particular challenge to understanding the way customers value different service components i.e. business-to-business (B2B) and consumer-to-business (C2B). Besides that, the key service components (transport, warehousing, etc.) are inherently complex, involving the physical movement of goods, information technology (IT) system support and contact with service personnel. Thus, IT and information sharing can be viewed as antecedents to material flow integration. Information and material flow integration are important for supply chain integration, having significant effects on perfor-

mance. Wang, Sanchez Rodrigues, and Evans (2014) found, through an in-depth analysis of three leading retailers in the UK's grocery sector, that the use of information and communication technology (ICT) solutions in road freight transport has a direct positive impact on CO₂ emission reduction e.g. it reduces the likelihood of 'carrying air' in intermodal transport. ICT in freight transport for CO₂ emission reduction has not been investigated in depth yet and its impact is largely unknown.

However, a 3PL provider must be able to bundle a broad range of services for different customer's needs. The majority of customers consider reliable performance, price, customer service recovery and being easy to deal with as the most critical elements in their choice of a 3PL provider (Aguezoul 2014). From a 3PL's perspective, this suggests that contracts will be acquired by providing evidence to potential customers about unique capabilities and embedded logistics expertise that are not available from their competitors (Anderson et al. 2011).

The term 'supply chain' covers the complete set of value-adding activities involved in the marketing, planning, purchasing, manufacturing, distribution and delivery process, as well as reverse logistics between business partners (Agrawal, Singh, and Murtaza 2015; Lu 2011). These days, the supply chain plays a vital role in the value creation process (Govindan et al. 2012). One of the fundamental characteristics needed for a supply chain to survive and thrive in a turbulent environment is agility. This has been identified as a critical factor influencing company's overall global competitiveness, which synchronises supply with demand. Agility is defined as how fast the supply chain responds to the unexpected and often quite sudden changes in market demand. In the increasingly dynamic global marketplace, developing and implementing an agile supply chain strategy makes sense. Namely, the tough challenges are balancing the 'cost to serve.' In order to maintain a grounded business model, the supply chain may have to be upgraded with investment in facilities, increased productivity or an increased level of inventory. However, in an era of global business, companies no longer compete against each other as autonomous entities, but instead as supply chain against supply chain. A substantial amount of global supply chain management is not about competition and more about collaboration and partnering. Supply chain management is therefore a new perspective on well-known activities (Fernie, Sparks, and McKennon 2010; Gligor and Holcomb 2012; Lu 2011).

At the same time, supply chain integration is a difficult task as it involves many management aspects in terms of information exchange mechanisms in support of logistics integration activities concerning the physical material flow between the involved partners. Such complex implications can be managed if there is a long-term relationship between the supply chain partners (Ellram and Cooper 2014; Govindan et al. 2012; Kim, Hoon Yang, and Kim 2008; Prajogo and Olhager 2012).

The creation of coordinated supply chains is being performed through the voluntary integration of economic, environmental and social considerations. These are supported by key inter-organisational business systems designed to efficiently and effectively manage the material, information and capital flows. The latter are associated with the procurement, production and distribution of goods or services in order to meet stakeholder requirements and improve the profitability, competitiveness and resilience of the organisation over the short- and long-term. This is probably an appropriate definition of sustainable supply chain management (Ashby et al. 2012; Ahi and Searcy 2013).

A supply chain is a dynamic process that includes the continuous flow of materials, funds and information across multiple functional areas within and between supply chain members (Jain, Wadhwa, and Deshmukh 2009; Ahi and Searcy 2013). Considering the fact that the supply chain involves goods from the initial processing of raw materials through to delivery to the end-user, a focus on supply chains is a step toward the wider adoption and development of sustainability (Ashby et al. 2012; Ahi and Searcy 2013). In a broad sense, business sustainability signifies the resiliency of organisations over time where they are closely connected to healthy environmental, economic and social systems so they are better positioned to respond to internal and external shocks. Supply chain management is thus receiving increased prominence (Ahi and Searcy 2013; Fernie, Sparks and McKennon 2010). Marchet, Melacini, and Perotti (2014) ascertained that little attention has been paid so far to sustainability initiatives among 3PLS, and the subjects of 'warehousing and green building.' Besides that, 'internal management' initiatives also seem to be inappropriately addressed. Similarly, the critical issues and benefits achieved following the adoption of sustainability initiatives have received little attention; evaluation and measurement of environmental performance have only been partially explored and a consideration of a holistic perspective is being expected.

Many researches have come to the broad consensus that some significant development trends are influencing nowadays global supply chains. These are the following: supply chain volatility and market uncertainty, dependence on global customers and supplier networks, cost optimisations, risk management involving end-to-end supply chain management, integration and empowerment (Lu 2011).

Methodology

The Slovenian project partners designed strategic-cognitive maps with-in thirty in-depth semi-structured interviews, which were conducted with entrepreneurs between January 2012 and May 2014. Prior to the interview, the interviewees received generic questions by e-mail (Fontana and Frey 2000; Janeš et al. 2014; Kvale 2007; Silverman 2000).

The interview included questions on the historical development and key turning points of EuroPacific. In particular, the investigation focussed on the most innovative practices of the company's business model, as recognised by the company itself. The canvas method for business models was used for mapping the vision and strategic knowledge of the company. In order to implement the strategic innovation of the business model, it is necessary to find the answer to several questions, but it is always required to start with the question: 'Why do we exist and what is our goal?' This is followed by the question: 'When should we redesign the business model?' The noted need for business model innovation induces questions relating to the characteristics of the existing business model. Questions are classified according to the key elements of the business model (table 4.1). In this way, the canvas was used for a description of the business model with a set of key elements: stakeholders, business partners, key resources, key activities, business processes, goods and customer segments and a central part representing the value proposition (Janeš et al. 2014; Osterwalder, Pigneur, and Clark 2010).

The case study of the EuroPacific Company was one among the companies that participated in the Know Us project and was selected and represented because of its outstanding innovative logistic expertise (Yin 1994). Semi-structured individual interviews were agreed and scheduled with Mr. Rok Kobal, owner and manager of the company. The interviews were conducted between March and April 2013. The interviews lasted from 120 to 180 minutes, which is much longer than a standard 60 minutes length (Kvale 2007).

The first interview was dedicated to the visualisation of the present

Table 4.1 Thematic Assemblies and Interview Questions

Thematic assemblies	Interview questions
Establishment and development of the company (organisation's values mission and vision)	What is the development path of your business so far (idea, effort, investment, areas of operation, promotions, competitors on the market, demand, economic downturn in the EU and Slovenia)?
Innovation activity	What (innovative) practices are running in your business? Why do you think that is innovative, how is it different from other practices in the business environment, how did you come to it, what are the benefits, how do you intend to develop it further?
Future orientations	What are important future goals and what are the strategies to achieve them (development, promotion, business results, markets, new niches)?
Business model	What are the milestones and key turning points in the development of the company and how you overcome them (eventual integration of organisation, values, required quality, promotion, organisation)?
Socially recognised achievements	Honours, awards, certificates, etc. (importance for the company, name, year).

situation in the company (i.e. the business model 'as-is') and represented a starting point for the second interview, which was aimed at the development of the future desired state and innovation of the existing business model (i.e. 'to-be'). The individual interviews/workshops were therefore conducted twice, for identification of the 'as-is' and 'to-be' models. At the specific request of the company's owner, a third interview was carried out, which was designed primarily on the use of management tools in the company. The interviews were recorded using a dictaphone and then transcribed and analysed with the approval of the interviewees (Easterby-Smith et al. 2007; Janeš and Biloslavo 2013; Janeš and Trnavčević 2014). The method of semi-structured interviews was supplemented with the participation and observation of the researchers (Angrosino and Mays de Pérez 2000; Janeš 2014). The developed 'as-is' and 'to-be' business model canvases (figure 4.1) was analysed and reported as a single case study. The final report was sent to the interviewees for confirmation and authorisation (Janeš et al. 2014).

Assessment of the Business Model Sustainability

EuroPacific is relatively young, dynamic and flexible company. First and foremost, it certainly excels in its willingness to take the initiative, solve

and find solutions for their customers, who are looking for faster and cheaper transport routes for their goods. So they have developed their own possibilities of organising the maritime, land and air transport of goods. They are distinguished by the developed competencies, which significantly differ from the competitors.

Logistics Simplified Innovation Activity of the Enterprise

A good example of the innovative approach of the company is the setting of its own information system (IS), which is linked to the IS of the Port of Koper, Ltd (Port of Koper) and allows the monitoring of container throughput in real time. This means that IS informs the performers in the transition process on the status and location of the containers. The most important customers are able to use that particular computer application in order to have control over the transportation of containers (Ellram and Cooper 2014; Prajogo and Olhager 2012). The IS ensures the continuous traceability of cargo and faster shipment in road transport, because it significantly shortens the waiting time of truck drivers and optimises operating costs. Interest has already been shown in the purchase of this particular computer application, but because the software represents a competitive advantage of the company it had been decided that the application will not be for sale. In any case, the application is subject to certain conditions under which it can be transferable to other ports for IT support in the throughput of goods (Kobal, Dežjot, and Ventin 2013a; 2013b; Kim, Hoon Yang, and Kim 2008).

Another interesting acquirement is a transit guarantee in the amount of 33.33 million € with a purchased stake in the company of the German partner.

EuroPacific's operations are linked to the only Slovenian throughput port – the Port of Koper. The former's enterprising employees have found a necessary transition guarantee (i.e. transport insurance for all risks) to secure throughput increase. Mr. Rok Kobal states: 'We were looking for an insurance instrument. In December 2012, a subsidiary of the ASCO Company from Austria opened in Slovenia. Thus, we found the solution to a given transit guarantee challenge – a transit guarantee in the amount of 33.33 million euros! And we are agents of the Germans! We are working to find the solution!' This acquisition will support the increase of revenue and also facilitate the growth of cargo transit through the Port of Koper. This last will assure customers that the direction of cargo through the Port of Koper is the right decision.

EuroPacific's advantage in comparison with the insurance companies is negotiation, which allows customers to get attractive premium conditions from the best insurance companies in Slovenia and abroad. Compensation claims by the owners of the goods are resolved much faster as it is not necessary to prove the responsibility of the carrier for the freight insurance (see www.europacific.si).

An important competitive advantage of EuroPacific is its own 'fleet' of trucks and acquired contractors for container transport. To this end, they founded the subsidiary company EuroPacific Transport Ltd., which operates its own fleet of new, reliable and environmentally friendly EURO 5 vehicles and is developing into a facilitator for all suppliers and partners of road transport. EuroPacific transportation is being developed as integrated service for truck drivers so that they lose as little time waiting when handling and arranging transport documentation.

The Business Model of the Enterprise

Through analysis of EuroPacific's 'as-is' business model, three strategic themes were identified: lean service, logistics expertise and profiling as a domestic logistic operator based on key elements (figure 4.1, contains the status 'as-is' (black coloured font) and 'to-be' (green coloured font) of the business model).

The first of the strategic themes was identified as a focus on customers, which was later renamed into a lean service. The latter represents a competitive advantage (Govindan et al. 2012) that is being offered to partners from Asia with 24/7 accessibility and responsiveness from the staff and the provision of comprehensive services within intermodal transport. This, according to Mr. Rok Kobal, is one of the most appreciated values among Korean partner companies. Anderson et al. 2011 established that the majority of customers consider reliable performance, price, customer service recovery and being easy to deal with as the most critical in their choice of a 3PL provider.

Support for the development of such an approach represents the use of management tools e.g. Authorised Economic Operator (AEO), the Slovenia Excellent SME certificate and membership in the associations such as the Transported Asset Protection Association for the geographical areas of the Europe, Middle East and Africa (TAPA-EMEA) and the International Federation of Freight Forwarders Associations (FIATA). The TAPA is a unique forum that unites global manufacturers, logistics providers, freight carriers, law enforcement agencies, and other stake-



Figure 4.1 Business Models ‘As-Is and To-Be’

holders with the common aim of reducing losses from international supply chains.

Another identified strategic theme is logistics expertise, which is characterised by an in-depth knowledge of the business philosophy of Asian companies. Such knowledge and experience are gained through many years of business cooperation, networking and gaining trust from Asian business partners. Experience in the field of logistics has contributed to the identification of the throughput of goods with high added value, which represent high-tech goods i.e. clean cargo from manufacturing companies like Hyundai, LG, Samsung, Sony, Philips etc. Those companies usually practice the outsourcing of logistical activities with a 3PL business partner as discussed with EuroPacific (Anderson et al. 2011; Govindan et al. 2012; Lu 2011; Aguezzoul 2014).

A third strategic theme was identified as profiling for the domestic logistic operator. The company’s profiling for domestic logistic operators was enabled with a focus on the customer and logistics expertise, which stem from the tradition, confidence and knowledge of Asian business philosophy. Namely, when Korean companies trust their business partners, it means long-term business commitment. Beside Korean high-

tech goods, there are potential new customers from fast-growing markets in India, Turkey and South-East Africa.

Obtaining the status of a domestic logistic operator represents a great responsibility, because it is associated with consulting on the optimal implementation of key customer's logistics processes. Consulting services for key customers is EuroPacific's strategic direction, which the company will intensively develop and spread. The company takes advantage of the transport sector, which is reflected in the favourable geographic position of the Slovenian coast and hinterland, transport route profitability, knowledge and skills in the logistics branch and the company's global business integration.

EuroPacific's involvement in the regional business environment is being further developed in cooperation with Intereuropa, Ltd. (Intereuropa), with which a competence centre has been set up for training employees in the field of logistics and transport. For this purpose, funding was gained from the European Regional Development Fund.

Sustainability Assessment of the Business Model

EuroPacific is a modern international logistics company with a tradition of organising land, sea and air transports that arises from the family tradition. Operations are supported by highly qualified employees, well-developed IS with clear guidelines in all possible situations in order to master the complete logistic solution from shipper to consignee. The company's competitive advantages lie in well-established co-operations with the Port of Koper, several Slovenian railroad operators, Intereuropa and reputable shipping agencies in the region (Govindan et al. 2012; Gligor and Holcomb 2012).

Furthermore, the focus on organic growth by EuroPacific has encouraged the owner and director to acquire a strategic partner. Setting up subsidiaries represents the diffusion and further development of integrated solutions for customers with a growing demand for consulting and enforcing the realisation of Key Account Managers (Ahn, Ishii, and Ahn 2013; Anderson et al. 2011; Kopal, Dežjot, and Ventin 2013a; 2013b).

Moreover, it is essential that the responsibilities of the owner and director Mr. Rok Kopal will be delegated to reliable, loyal and professional employees. The growth of business volume will certainly lead to the development of the organisational structure in form of departments and services that will supply different markets, customers and the continuous development of services. Therefore, it is reasonable to establish the

modalities for the material and non-material motivation of employees in key positions (e.g. participation in profits).

With the increasing business volume, all participating business partners will be confronted with the need to establish a system for measuring the carbon footprint and the introduction of 'green' technologies, which will contribute to enhancing the reputation in the business and general public (Ahi and Searcy 2013; Kobal, Dežjot, and Ventin 2013b; Marchet, Melacini, and Perotti 2014).

According to the analysis of the logistics sector, the segment of goods with high added value being transported through the ports in the northern Adriatic and the Middle and Far East has been increasing in recent years. This fact confirms the sustainable aim of the company's organic growth (Kobal, Dežjot, and Ventin 2013a; 2013b).

Due to the general economic situation in Slovenia and the region, it is typical for logistics providers to implement a range of services in this complex area. However, with the return to positive economic growth in the country, it is expected that EuroPacific is 'profiled' according to its mission – 'Logistics simplified.'

Conclusion

Analysis of the transport sector has shown that, due to the continued growth of the economy and the increased number of cars, the transport system is being increasingly choked. The result is congestion, particularly in the case of road transport, which reduces economic efficiency and increases fuel consumption and environmental pollution.

It is therefore important to revitalize rail transport and other alternatives to road transport: the diversion of goods transport to the railways, sea routes and inland waters, to encourage people to travel by train instead of plane on short trips, to promote transport modes that combine the transport of passengers and goods, to establish an inter-modal transportation centre, to link the national rail networks and to establish the optimal payment system for users of the transport infrastructure. It can be asserted that the generator of development of the transport sector in the Coastal/Karst (slo. Obalno-kraška) region, where EuroPacific is headquartered, is the port of Koper, where the tradition of maritime throughput has always been a driver of economic development and the life and work of the inhabitants. Port activities are in fact a lever for the development of other forms of transport, such as road and rail, as well as warehousing and logistics services.

EuroPacific's logistic activities are being developed in direction of strengthening the market position, which are: a significant provider of logistics solutions for goods on the transport route from Asia to the EU markets through the northern Adriatic ports, by expanding international network and strengthening presence on the markets of the Central and Eastern EU, by strengthening the partnership with the Asian market with a flexible approach based on the needs of customers and to allow simplified logistics. Although EuroPacific's strategy and practice is an excellent example in the field of logistics, the findings cannot be generalised to the entire logistics industry.

A major challenge for 3PL service tenderers has been in determining the value that customers place on their comprehensive solutions, so they can then focus on delivering the right service to the right customer segment. One implication is that 3PL managers and especially Key Account Managers should monitor the segment profiles of their customers to avoid misalignment between these segments and their service proposals. The logic of segmentation suggests management strategies that definitely involve a 3PL, or a team within a 3PL, focusing on a particular customer segment (Anderson et al. 2011; Kobal, Dežjot, and Ventin 2013b).

Many reliable management research projects have come to the broad consensus that some significant development trends in supply chain management that are worth of further in-depth researching are: supply chain volatility, dependence on global customers and supplier networks, cost optimisation, end-to-end supply chain management integration and empowerment (Lu 2011).

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5 The Maturity of Project Management in Slovenian Companies

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Project work can bring many advantages to companies. With project work operations in companies, they can indeed adapt more quickly and easily to customers' needs and desires. Consequently, they improve their market position. Therefore, the main goal of the study was to research the maturity of project management in Slovenian companies. In the following article, we present two methods of maturity of project management, namely the 'Portfolio, Programme and Project Management Maturity Model (P3M3)' and the 'Project Management Maturity Model (ProMMM)'. Moreover, by using a questionnaire, we obtained information on six Slovenian companies. The questionnaire was composed of questions related to basic information about the company and questions related to the above-mentioned models. We have analysed the obtained information and graphically presented the results. Furthermore, the analysed results showed us that on average, Slovenian companies are mature from the project management point of view. According to the evaluation of the P3M3 questionnaire, the companies were classified between the 3rd and 4th levels. In other words, the companies on average have evaluated their companies and endorsed as well, to be the one where the power of knowing is defined process by project management. The following process within the organisation has the role of a standardised business process. Partly, companies have evaluated the organisation as an organisation in which they have established their mastered process of project management. We have also arrived at similar results by using the questionnaire ProMMM, which showed us that Slovenian companies are classified in the 3rd level of maturity. In this case, we are talking about the organisation category named 'Normalised.'

Ključne besede: project management, maturity, P3M3, ProMMM

Introduction

Nowadays, plenty of organisations acknowledge project management as the main support for the implementation of the company strategy. Using project management is the key to the successful business operations of an organisation. Kerzner (2006) claims that from the beginning of 21st century, the perception of project management has changed. Moreover, due to rapid changes in the global market, project management has become a constant practice in organisations. Therefore, organisations cannot allow mistakes. Because of that, the smart usage of time and the quality management of funds is more than necessary for the existence of organisations. Čuček (2008) discusses the project approach, which has started to develop due to the need for the higher responsivity of organisations to changes in the environment. Thus, exposure to the pressure of the globalised environment has helped in the rapid increase in the usage of the project approach for implementing business activities. The practical experiences of the organisation have shown that for the successful development of project management culture, more factors are needed. Additionally, key factors include training project managers, to use advanced tools as well as rules and standards, which has to be coordinated according to the strategic goals. In addition to that, factors have to be developed in coordination with other management systems in the organisation. Equally important is an organisation's awareness that project management culture cannot be implemented overnight. For this reason, time is needed for the implementation of a program for improvements, whose main goal is the gradual institutionalisation of good practices.

Heerkens (2002) claims, that the maturity of an organisation in the field of project management defines the adequate regulations of the organisation. It is necessary to consider the compliance with conditions, which employees in the organisation follow and have deep knowledge of. It is also necessary from the beginning of a project, to take into account the ability of teams and their capability of a realistic assessment of project implementation. The assessment of realistic conditions and efficient execution are key factors for good project implementation. At the same time, the company has to be able to learn from its practical experiences and constantly improve its own project approach. Furthermore, the systematic allocation of experiences and the advancement of methodology and regulations are very significant for an organisation.

According to Čuček (2008), the concept of maturity is a very important tool for mastering the development of project management culture. This concept offers an efficient approach towards the development of project management culture in organisations. Also, an advanced approach to achieving conditions for the successful realisation of projects on the level of the entire organisation.

Ibbs and Kwak (2000) state that organisations are applying project management and they are becoming even more successful in doing so. The most important reason for using new approaches and tools is pressure on managers, who with efficient improvements in the organisation on daily basis deals. However, the authors claim that many organisations are insecure and that they use the applications of project management in an incorrect way. They do not implement the concept of project management well enough. In particular, in the eyes of the owners, financial investments in tools for managing projects, practices and processes are often not justified. Moreover, one of the reasons for this is the lack of generally accepted methodologies and well-defined procedures for impartially measuring practices of project management in an organisation. The authors claim that many companies have difficulties with the implementation or improvement of procedures for managing projects.

We can define the maturity model of management as a relatively new concept. Moreover, this concept comes from the development of the Capability Maturity Model for the field of software. Furthermore, it was formed as a methodology for measuring the maturity of the supplier's processes of American government. Because of the continual upgrade of the model, the institute has developed a framework for the structured definition of specific activities with which an organisation can make progress related to the levels of maturity in the different areas of its activities (Software Engineering Institute 2008). Kerzner (2001, 41) discusses that organisations with the support of project management want to achieve excellence and a higher level of maturity. However, due to the usage of actual business systems for project management, mistakes occur and, in long term, organisations keep making the same mistakes. By using the maturity model, we can continually develop and upgrade systems for project management. In addition to this, organisations learn from their own experiences from practices in the past. It is also possible that organisations learn from mistakes made by other organisations. Couture (2003, 347) claims that because

of the interest organisations have in project management, the interest in maturity models for managing projects increases as well. The author states that organisations have recognised the benefits of maturity models and their significant contribution to the success of individual projects. Steyn (2007, 31–4) states that if an organisation has a culture of excellence, then it is possible to achieve a high level of maturity in managing projects. Čuček (2008) defines the maturity model as a collection of elements that describe the characteristics of effective processes. The maturity model creates a conceptual framework, which by showing best practices, helps organisations define the current maturity of the processes. Also, by introducing the model, the organisation establishes the most appropriate and logical way to improve processes, together with a vision for progress and language for the coordination of dynamic progress. The organisation can define priorities during the implementation of improvements and identify the need after establishing project offices. It can monitor progress according to the improvement plan and build a culture of project excellence. According to *The New Lexicon Webster's Dictionary of the English Language* (1988, 3), an organisation is mature when it achieves a state of total development. Maturity means quality or the state of being mature. An organisation is mature when it achieves its own objectives and is in perfect condition. In the above-mentioned situation, the organisation is in complete readiness to deal with its own projects.

It is obvious that the organisation does not need to measure the maturity of project management in all fields in order to find an opportunity for improvement. Every organisation has to decide, according to their business needs, what is the optimal need for maturity in project management (Crawford 2007).

Presentation of the Maturity Models of Management

The Portfolio, Programme and Project Management Maturity Model (P3M3)

The 'Portfolio, Programme and Project Management Maturity Model (P3M3)' is a generic model that is known and spread world-wide. It was ordered by the Government of Great Britain and was developed in 2006 in the Office of Government Commerce. This model is based on five levels of maturity and has been upgraded and amended many times. Peak model P3M3 is built from three sub-models: portfolio management, program management and project management. Sub-

models are connected, even though they are not dependent on each other. In other words, every model allows separate judgement, according to the selection and needs of every organisation. When evaluating, the P3M3 model concentrates on seven main processes-questions within the three above-mentioned models (Vrečko 2011, 132–5). These processes-questions are (Office of Government Commerce 2008, 6):

- management control,
- benefits management,
- financial management,
- stakeholder management,
- risk management,
- organisational governance and
- resource management.

As mentioned, the P3M3 model is based on the usage of five levels of the maturity network, which means that during judgement, it predicts five levels of maturity that we have to take into consideration when measuring the maturity of the organisation. In the Office of Government Commerce (2008, 10), the levels are defined as follows:

- level 1: awareness of process;
- level 2: repeatable process;
- level 3: defined process;
- level 4: managed process;
- level 5: optimised process.

The P3M3 maturity model is known as the basis for improving the project management processes and program management. The developers of the model state that it can be used in many ways (Office of Government Commerce 2006, 3–4):

- for understanding key practices that are part of efficient processes of managing portfolio, programs and projects;
- for defining/identifying the main practices that are needed to be introduced in an organisation as a whole with the purpose of reaching next level of maturity;
- for organisations that want to understand and improve their abilities for managing programs and projects and make them more efficient;

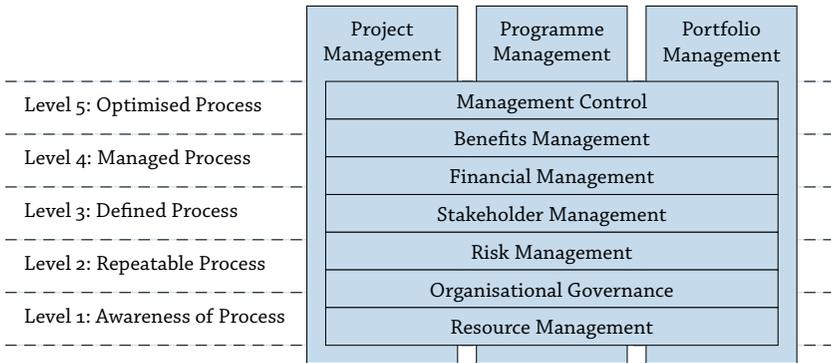


Figure 5.1 Model P₃M₃ (adapted from the Office of Government Commerce 2008)

- by customers who want to evaluate the risks obtained from questions about processes and capacities associated with a specific service provider, as well as managing their programs and projects;
- by user groups, advisory and accredited training organisations that use it as a basis for the development and creation of evaluative questionnaires about maturity;
- by accredited service providers that use it for the preparation of teams for evaluating the processes of managing programs and projects or capabilities.

As we have already mentioned several times, the P₃M₃ model includes five levels or stages of maturity. Viewed from the process perspective, Krajnik (2008, 32) states the main emphases thorough questions of the individual levels that we set them when judging the maturity of project management in an organisation:

- **Level 1 – Awareness of the process:** This represents the ability in an organisation to detect the germ or initial phase of forming a process of project management. This process is often chaotic and formed only for a specific purpose (ad hoc). In an organisation, projects are mostly not managed formally and a standardised process does not exist. Also, there is no business system for monitoring progress.
- **Level 2 – Repeatable process:** This represents the ability in an organisation to detect already implemented procedural arrangements. It means that the process of project management is repeated many times. Here we find the first signs of coordination between specific projects.

- Level 3 – Defined process: This represents the ability in an organisation to identify a properly defined process that the organisation has confirmed. This process already has the role of a standardised business process within an organisation.
- Level 4 – Managed process: This represents the ability in an organisation to identify the implementation of project management and the measurement of the process.
- Level 5 – Optimised process: The organisation of the process of project management is continually optimised and upgraded.

The main disadvantage of the P3M3 model lies in the fact that there are no systematic studies about it that confirm benefits for the organisation that use it. Nevertheless, by using this model, organisations should be able to achieve a higher rate of return, higher production efficiency, lower production costs, better quality results, improved customer satisfaction and improved morale of employees (Goldenson and Gibson 2003).

The Project Management Maturity Model (ProMMM)

The 'Project Management Maturity Model' or the Maturity Model of Project Management (ProMMM) was developed with the purpose of fulfilling an organisation's needs and is an advancement of the CMM maturity model. The ProMMM model is an upgrade of the EFQM quality model and maturity risk (the Risk Maturity Model). The maturity model of project management describes four levels of project management ability. The objective of ProMMM is to secure a structural path towards excellence for project management. Moreover, it allows companies to compare (benchmark) processes of project management and to support effective project management. Specific levels are defined in the way the organisation measures its own stage or level that this model defines (Hillson 2001):

- The first level presents organisations that are 'Naïve' about project management (ProMMM level 1). In this level, the organisation is not aware of project management, and does not have a defined structured approach towards projects. Processes within an organisation are repeatable and reactive. The organisation does not try to learn from the past and does not prepare for future threats and uncertainties.
- The second level presents organisations that are 'Novices' in project management (ProMMM level 2). Organisations on this level exper-

iment with project management with the support of a small number of participants, but do not have its own processes structured in a generic way. Although, in the organisation, they are aware of the potential benefits of project management, the 'Novice' organisation does not efficiently implement processes of project management, which is a disadvantage for an organisation.

- The third level presents organisations that are 'Normalised' concerning project management (ProMMM level 3). Many organisations want and seek to reach this level. In this case, project management is implemented in all aspects of a business. The generic processes of project management are formalised and widespread. The organisation is aware of the benefits of project management in all levels of an organisation; even though it cannot fully achieve all these benefits.
- The fourth level presents organisations that are 'Natural' at project management (ProMMM level 4). In this kind of organisation, the culture is based exclusively on project management. The organisation has a proactive approach to project management including all aspects of business. All projects in the organisation are based on information that is actively used for improving business processes and acquiring a competitive advantage.

Hillson (2001) states that each level individually is defined from more thorough perspective by four attributes: culture, process, experience and usage. These attributes allows an organisation to evaluate the current processes of management with the agreed criteria. In addition to that, the organisation can measure and determine realistic objectives for improvements and at the same time measure the progress of its organisation towards strengthened abilities by the usage of project management.

When collecting data with the ProMMM questionnaire, it is desirable to have a personal interview. The main purpose of this is to update, improve and support the final results. The main restriction of the questionnaire is that it is subjective opinion, because the questionnaire only evaluates the understanding of the respondents and their perception. The approach using the questionnaire is limited in scope; however, it can address the difficulties mentioned concerning the questionnaire. Often, differences can occur in the interpretation or the importance of questions between respondents, especially, when concepts for respon-

dents are not known or because of language differences (Hillson 2003). Jugdev and Thomas (2002) state that the model can easily become inflexible when an organisation requires a flexible model for managing changes and improvements.

Methodology

By studying and examining the theoretical part, we have acquired insights into project management and maturity models of it in organisations. In this context, we have examined two known and widely used maturity models of project management. Firstly, we introduced the 'Portfolio, Programme and Project Management Maturity Model (P3M3),' which is dedicated for self-assessment of the maturity of project management in each organisation. We have also focused on the 'Project Management Maturity Model (ProMMM),' which enables an assessment of the organisational abilities for managing projects.

Based on the two above-mentioned models, we have prepared a questionnaire that includes questions about two models and general questions about the organisation. Therefore, the questionnaire was in two parts:

- The first questionnaire is based on self-assessment of the maturity of project management. It consists of nine questions that are mainly related to an organisation, as well as questions related to monitoring management, the advantages of managing an organisation, engaging stakeholders, risks management, organisation management and sources management. Evaluation of responses gave a clear picture of the maturity level of the organisation regarding project management.
- The second questionnaire was created for the evaluation or comparison of the processes of project management in an organisation and was composed of seven questions. This questionnaire enabled the identification of the current position of an organisation in relation to project management.

The questionnaires were forwarded to different organisations and we asked them to give only one answer to each question. At this point, we had a time limit and collected data between 8 and 16 January 2016. In the same way, we limited the survey questions to those in the questionnaires presented in the two models and to Slovenian organisations. We received only 6 questionnaires that were completely answered.

Furthermore, we analysed the acquired data in a systematic way using the software tool Excel (Microsoft Office). We prepared graphs that were numerically evaluated and based on the results. The latter were later the basis for interpreting the results and arriving at the conclusions of the research.

Analysis and Interpretation of the Results

Between the six surveys that were completely answered, four (4) companies were medium sized. This means that according to the Companies Act ('Zakon o gospodarskih družbah' 2009), the average number of employees in one business year did not exceed 250 employees. The other two (2) companies were categorised among the large companies, where according to the Companies Act, they have more than 250 employees in one business year.

The analysed companies were established between 1950 and 1991, which means that young companies were not included in the research. The companies gave an assessment of the number of projects during a year. These numbers fluctuated between 30 and 3000 projects annually.

Two (2) companies were from the professional branch, scientific and technical activities, while the other companies were from branches such as transport and warehousing, information and communication activities, manufacturing and other business activities (according to the Standardised Classification of Activities).

Figure 5.2 shows the P3M3 questionnaire results. From the graph, it is clear that on average (Office of Government Commerce 2008):

- Companies define their organisation as demonstrators of mature handling with specific procedures that managed quantitatively. In an organisation, there are also monitoring metrics, as well as quantitative evidence of the objectives of quality and process efficiency. The measured information influences the success of an organisation and enables analysis of the portfolio. Helps in determining the current capacities and detection of restrictions. The top management level actively seeks innovative approaches for achieving the objectives. Using metrics in an organisation offers leadership efficient monitoring and determining processes. The average assessment in defining an organisation is 4.17 points.
- Companies evaluate their organisation in terms of monitoring the management in conjunction with project management in which a

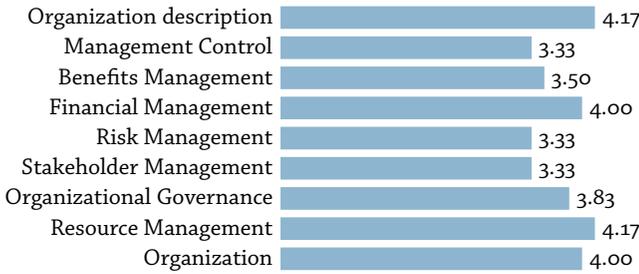


Figure 5.2 P3M3 Questionnaire Results

consistent and coherent approach towards project organisation is established that is based on standardised approaches and methods. The project life cycle is not concentrated only on the initial part of the project but it also includes developing activities and activities after finishing the project, inspection, verification, implementation and the delivery of project. The average assessment of management control is 3.33 points.

- Companies evaluate their organisation in terms of benefits management in relation to project management, which has a projected central framework for defining and tracking achieved benefits from project results; partially like an organisation that has benefits management also embedded in its framework of approaches to project management. With this latter, the organisation emphasises assuring successful business activities from the project results. The average assessment of benefits management is 3.50 points.
- Companies evaluate their organisation in terms of financial management and are able to efficiently exploit investment opportunities in relation to available funds and other resources. Business cases are evaluated and investment decisions are ratified in relation to the business activities. The budget management of projects is efficient. Project implementation is taken into account from the cost perspective and is also compared with previous plans. Moreover, the cost model is used in order to demonstrate the efficacy of the projects. The average assessment of financial management is 4.00 points.
- Companies evaluate their organisation in terms of risk management, in which risk management is a centrally defined process and

the awareness of the organisation related to risk management policy is significant. The average assessment of risk management is 3.33 points.

- Companies evaluate their organisation in terms of stakeholder's management, in which the management and communication with stakeholders of the project are consistent and centrally managed approaches. The average assessment of stakeholder management is 3.33 points.
- Companies evaluate their organisation in terms of organisational management in relation to project management, where decision processes that are related to project implementation are adapted and integrated in the wider environment of the management of organisational excellence, reporting and general management. The average assessment of organisational governance is 3.83 points.
- Companies evaluate their organisation in terms of resource management, in which managing project resources is treated on a strategic level. There exists evidence of resource capacity management and capacity planning. In this way, the organisation can satisfy its needs for project implementation. The average assessment of resource management is 4.17 points.
- Companies acknowledge their organisation to be one that can acquire and retain specific measurements about its project management performance and resulting quality management, the main purpose of which is improved predictability and monitoring of the future per success/performance of project management. The average assessment is 4.00 points.

Based on the acquired information from the calculation of the average mark, we found out that the average mark of the seven core processes or questions is 3.64 points. This means that the respondents can be classified in the 3rd level of maturity and also partially in 4th level of maturity of project management. On average, companies have evaluated their company as one where the power of knowing is a clearly defined process of project management. This process in an organisation has the role of a standardised business process (Level 3). Partly, companies have evaluated their organisation in which they have already established and managed a project management process (Level 4). In an organisation, there is a strong desire to learn about the implementation of project management and process measurement.



Figure 5.3 ProMMM Questionnaire Results

Figure 5.3 shows the ProMMM questionnaire results. From the graph, it can clearly be seen that companies on average (Hillson 2001):

- Claim that project management is welcomed and significantly contributes to the business success of an organisation. The average assessment is 3.83 points.
- Claim that the organisation has a consistent management policy in relation to the commitment to proactive and systematic project management. The average assessment is 3.17 points.
- Claim that the formal processes of project management in an organisation are adaptable to the business requirements. The average assessment is 3.67 points.
- Claim that the processes of project management in an organisation are stable and mature. The average assessment is 3.17 points.
- Claim that employees have a basic understanding of the core principles of project management. Partly, there are signs of a fundamental understanding. The average assessment is 2.50 points.
- Claim that employees have a basic knowledge of the standardised techniques from the practical perspective of using techniques of project management. The average assessment is 2.33 points.
- They routinely use processes of project management in all projects. The average assessment is 3.00 points.

Based on the previously presented information from the ProMMM questionnaire, we have obtained the results shown in the ProMMM level graph (figure 5.4). We have thematically grouped the questions (7) into four groups: culture, processes, experiences and application. From figure 5.4, it can clearly be seen that (Hillson 2001):

- The average assessment of the culture is 3.50 points. This means that the organisation has an approved system of project management, recognises and expects benefits from it and is ready to in-



Figure 5.4 ProMMM Level

clude all the resources needed for reaching incomes (Level 3). Partially, the organisation is connected to project management from the top level of management to the lowest level, where leaders are role models, proactive project management is promoted and thus encouraged in the organisation (Level 4). Partly the organisation is committed to project management from the top down, where the leaders are an example, and the proactive management of projects is awarded and encouraged by the organisation.

- The average assessment of processes is 3.42 points. This means that generic processes in an organisation are applied in many or all projects. Formal processes are related to the same quality system. Active allocation and managing the budget of projects takes place at all levels. The need for outsourced support is also mentioned.
- The average assessment of experiences is 2.42 points. This means that individuals who have a little or no formal experience with project management are a limitation for an organisation.
- The average assessment of application is 3.00 points. This means that the organisation is routinely and consistently using them in all projects and allocates the resources for them. It also has an integrated group of tools and methods.

The overall average assessment for ProMMM is 3.08 points, which tells us that on average we can classify the interviewed organisations as 3 level. This represents a 'Normalised' organisation of project management.

Conclusion

Organisations are increasingly acknowledging the usage of project management as one of the crucial advantages in business. Awareness of implementing the approaches of project management is a successful path for doing business for organisations.

Based on our research, we have find out the level of maturity of project management in Slovenian companies. We have come to the con-

clusion that the maturity of project management is at a high level; however, there is still space for improvement. According to a self-assessed P3M3 questionnaire, organisations have been evaluated, averaged and classified at the 3rd level of maturity and partially at the 4th level. Based on this, we can conclude that organisations have a defined process of project management. Partially, there is also a controlled process where the implementation of project management and process measurements can be seen. According to the ProMMM questionnaire results, we can conclude that Slovenian companies can be classified in the 3rd level as 'Normalised.' Most of the companies want to achieve this level, which the interviewed companies have already reached. The interviewed organisations already implement project management in all facets of their business. Generic processes of project management are formalised and widespread. Organisations are aware of the benefit of project management at all levels of organisation, even though the benefits cannot be fully reached.

In the examined research, it would be more appropriate to expand the number of companies and thus have a greater number of interview responses. Consequently, we could have more precise results and could thus generalise these results based on the entire population. Furthermore, after few years, it would be interesting to monitor and evaluate the development of project management in some Slovenian companies a second time. Given that companies are different, it would be meaningful to think about other models or questionnaires, which could help finding out even more information and results with huge relevance.

Besides the positive results of the research, we have mentioned that there is still space for improvements. We want to emphasise the fact that if Slovenian companies continue on their current path, they can achieve even greater results and improve their business activities even more.

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6 Internal Audit in the Financing of Companies

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We will focus on the internal audit engagement and internal audit assignment, with which the internal auditor ensure that the company performance is legal. Specifically, we will focus on financing of the company. The purpose of the paper is to present the steps of the internal audit assignment, to review whether the corporate finance is legal. For this purpose we will use audit methods COSO II as the operational framework or a tool for setting up and evaluation of the internal control system in the organisation. With audit methods we will check if internal controls are working in preventing mistakes and frauds in process of financing of the company. Through audit methods of internal auditing in financing companies we found out that auditor should try to be independent and objective according to internal audit's professional standards.

Ključne besede: internal auditing, financing, COSO framework

Introduction

Among the most critical challenges for managers of companies is determining how much risk the entity is prepared to accept as it strives to achieve its objectives and create value (Committee of Sponsoring Organizations of the Treadway Commission 2004).

The management needs a reasonable assurance regarding the achievement of the objectives in the following categories (Committee of Sponsoring Organizations of the Treadway Commission 2004):

- operations should be effective and efficient,
- financial reporting should be reliable,
- the performance should be applicable with the laws and regulations.

‘The first category addresses an entity’s basic business objectives, including performance and profitability goals and the safeguarding of resources. The second relates to the preparation of reliable published financial statements, including interim and condensed financial statements and selected financial data derived from these statements, such as earnings released and reported publicly. The third deals with complying with those laws and regulations to which the entity is subject’ (Committee of Sponsoring Organizations of the Treadway Commission 2004, 1).

In providing assurance on these three areas, the internal auditor has an important role. We will focus on internal auditor engagement and internal auditor assignment, with which the internal auditor ensures that the company performance is legal. Specifically, we will focus on one part of the company, which is the financing of the business. We will present the steps of the internal auditor assignment, to review whether the corporate finance is legal, meaning that it is in accordance with the laws and the external and internal rules of the financing company.

Financing

The financing of the company is one of the most important areas of the company, since it must provide both short-term and long-term smooth business operations. The financing of each company must be designed, forward-looking and, of course, very carefully controlled. Directing the management of cash flows in the company and its environment are captured in the financial policy (Filipič and Markovič-Hribernik 2000, 96–97). Cash flows are planning with a financial plan which is more than a one-year plan, these plans are daily, ten-days, month or several months plans.

Due to the extent of the concept of financing, we have focused more narrowly, mainly on the use of external funding sources (inflows from financing):

- capital,
- long-term and short-term bank loans,
- credit lines,
- vista deposits,
- borrowing from suppliers and customers,
- leasing,
- factoring,

- from companies in the group,
- subventions . . .

Regulations and Rules on Financing

Any management is responsible for the legality of operations and the prevention and detection of business that is non-compliant with the legal norms. In so doing, the management can help with the following policies and procedures (Koletnik and Kolar 2008, 110–1):

- monitor the regulatory requirements and provide methods that enable compliance with the legal regulations;
- caring for the proper arrangement and operation of internal control;
- develops, publishes and respects a code of business behaviour for all employees in the company;
- ensure staff development and an understanding of and respect for the code of behaviour;
- monitor compliance with the code of business behaviour and disciplinary action against employees who do not abide;
- employ appropriate experts to assist in setting up and monitoring the prescribed solution;
- caring for an updated list of important rules and interpretations that must be respected in the business.

Laws and rules include the following:

- Legal rules: laws and related regulations such as a code of corporate finance principles . . .)
- Special regulations: the principle of financial policy, funding rules . . .
- Internal rules and policies: internal policies, financial plan, strategic plan, contract . . .

The regulations for financing a company ensure that the company avoids insolvency. The internal rules for financing ensure that financial funds are provided and used to that extent and for such purposes as was planned.

The Scope and Objectives of an Internal Audit

Before starting the internal audit assignment, the internal auditor should determine the scope of the audit. The scope of internal auditing can be defined as (Lah 2003):

- investigation and evaluation of the adequacy, effectiveness and quality of the internal control system,
- providing reliable and credible information,
- ensuring compliance with policies, plans, laws and regulations,
- the protection of property,
- ensuring the efficient and effective use of resources,
- achieving the aims and objectives relating to operations and programs and the continuous improvement of the implementation of the basic business functions of the organisation.

For the purpose of the internal audit of the legality of the financing activities, we use the definitions and subjects in the preceding paragraph. We can emphasise ensuring compliance with policies, plans, laws and regulations in the process of financing.

In our assignment, the scope of the internal audit legality of the financing activities is to ensure compliance with the policies, plans, laws and regulations in the process of financing.

We can say that the objectives are derived from the purpose. In our assignment, the objectives of the internal audit engagement are:

- to verify whether the existing internal control in a company in the process of financing activities are carried out in accordance with the legal and professional standards and the internal legal business and organisational rules,
- whether internal controls are effective and efficient so that the key risks are controlled, and
- to provide an independent opinion on the legality of the financing activities of the company.

Process of Financing

How can we theoretically define the financing process? It is important for the internal audit, because the finance process is the scope of our internal audit assignment. The internal auditor should understand the area under review.

There are many definitions and the focus was on one of them that is most commonly found in the literature. The financing of the company refers to the following stages (Rebernik in Repovž 2000, 67–8):

- the provision of resources (funding), which means any cash inflow into the company that is the result of the transformation of mate-

rial or other forms of assets. This can involve money from outside sources or money from business operations;

- the use of acquired cash (investment) represents the transformation of cash in non-monetary forms;
- the management of funds, which means the sensible and intelligent use of acquired assets in order to maximise the impact through earnings or through cash flow, which the company makes smoother in operation – it comes to ensuring the liquidity and solvency of the company;
- the return of the funds received (the loan – principal plus interest), which is the conclusion;
- circular movement of funds which is one of the fundamental tasks of the financial function;
- allocating financial results, which is allocating business results expressed in cash at individual participants (owners, employees, state ...).

These definitions point to the fundamental importance of the financing of the company, which is providing the necessary funds at the right time and ensuring its rational use. For each stage of the financing process, we plan internal audit activities.

Planning an Internal Audit

The planning of an internal audit is carried out on three levels. At the first level, the internal auditor is engaged in the strategic planning of the internal audit in the company; at the mid-level, it determines what will be audited and how its capabilities will be deployed in the areas of auditing; and at the lowest level, planning the layout of their work within the audit task (Chambers 2004, 56).

The accuracy of the defined areas of auditing and the audit objectives increases, as far as possible, when we move from strategic planning to annual planning. However, it is most precise in the planning of individual audit engagements. Besides the plans for the interim period, the responsible internal audit manager, for the revised scope or task, made an Implementation Plan for the particular audit's task (Koletnik 2007, 153). It is a detailed plan of works that the members of the internal audit group carried out in a particular audit assignment (Koletnik 2007, 153). As follows from Standard 2200 – Engagement Planning, internal auditors must develop and produce a plan for each engagement within

the assignment, including its objectives, scope and time/resource allocations.

When planning the internal audit assignment, internal auditors should take into account the 'International Standards for the Professional Practice of Internal Auditing' (2012). This means that the internal auditor should consider:

- the objectives of the activity to be reviewed and the means of controlling execution;
- significant risks to the activity, its objectives, resources and operations and ways to maintain the potential impact of the risk at an acceptable level;
- the adequacy and effectiveness of the organisation's risk management compared with the control framework or model;
- opportunities for significant improvements to the organisation's risk management and control.

The planning of internal audit tasks comprises the following steps (Koletnik 2007, 186):

- obtain basic information on the audited company or the auditee;
- recognise the business policies, objectives and organisation of the company and to carry out an initial assessment of the business risks at the company level;
- recognise and perform an initial assessment of the significant risks in a revised field (a unit of Audit) and the existing methods of their control;
- set targets for the internal audit task;
- develop a roadmap to the audited task.

Regardless of whether the company has an internal audit department or of the internal audit was outsourced, it is necessary to have a Strategic Plan of what will be audited in the coming years. After that, we check our capacity, how many auditors are available and the costs of auditing. Then we focus on a specific internal audit task – in this case an internal audit of the legality of financing.

In order to conduct the internal audit assignment, the company has to do the following:

- Describe how the financing process is carried out, while keeping in mind the fact that we are interested in the legality of the vari-

ous stages of the process of financing the company, not all possible matters.

- Determine the risks in the process of financing.
- Develop a plan to provide internal audit engagement.

A well-prepared work program of the internal audit assignment (Vežjak 2011, 11):

- gives a general overview of the work that will be carried out and facilitate an understanding of the audited entity;
- provides evidence that the work was properly planned;
- offers a document for review by the management;
- gives an assurance that all the risks are adequately addressed;
- assists in monitoring the work;
- governs and connects the audit.

The Planning of the Internal Audit Assignment: Work Programme

The Engagement Work Program is a document that lists the procedures to be carried out in the business to realise the plan (International Internal Audit Standards 2013, 19).

The work program can be divided into introductory, main and final parts. The introductory section contains basic information on the internal audit assignment, namely the type of internal audit (regular, irregular), labelling, the name and surname of performers, the subject of the internal audit, the aim and the audit procedures.

The central part contains:

- management objectives (questionnaire)
- audit procedures,
- assessment of the adequacy of the existing internal controls (key controls are operating effectively: yes, no, partially)
- types of materials,
- notes of the internal auditor.

The final part of the work program contains a summary of the findings.

Planning the Internal Audit Assignment: Risk Assessment

The internal auditor should plan and describe the key risks within the scope of the audit. The initial assessment of risks for the legality of financing the activities of the company is carried out using:

- a risk model,
- a risk matrix and
- using COSO 2 methodology.

Risks in the risk matrix are assessed in terms of likelihood and impact, whereby the assessment of the likelihood (probability) of a particular event is low, medium or high. While the assessment of the impact (consequences) of the individual risk/event is expressed as low, moderate or significant.

When assessing the risks and the impacts (consequences) of risks in finance process, the internal auditor has the following options:

1. the probability of the risk:
 - a high probability means a probability that the event occurs more than once a year;
 - a medium probability means a probability that the event occurs once in a period of 1 to 5 years;
 - a low probability means a probability that the event occurs once in a period of over 5 years;
2. a value assessment of the impact (consequences) of individual risks measured in terms of the amount of damage:
 - a significant consequence to the legality of the financing activities of the company is damage worth over 160,000 euros;
 - a moderate consequence to the legality of the financing activities of the company is damage with a value of € 7,500 to € 160,000;
 - a low impact on the legality of the financing activities of the company is damage worth up to € 7,500.

When determining the amount of damage, we started with the total revenue of the company, which for the year 201X amounted to 3,244,736 EUR. This means that 160,000 euros of damage is 5% of the revenue, while 7,500 EUR represents 0.25% of the revenue.

Implementation of the Internal Audit Assignment

The internal auditor shall perform the internal audit on the basis of orders resulting from internal audit planning, as shown in table 6.1.

Planning is followed by the implementation of the internal audit engagement. Internal auditors should identify, examine, evaluate and document enough information to achieve the scope and objectives of busi-

Table 6.1 Example of a Work Order for the Internal Audit Assignment

Name and address of the internal audit department	Common internal audit of the company
Work order No.	...
1. Name of auditee:	The name of Company
2. Name of audited task	Internal audit legality of financing
3. Type of task	According to the work plan
4. Contractor of tasks	The manager of the company
5. The scope and the aim the auditor's work	Scope of work is legality of the financing process of the company. The aim of the internal audit engagement is to verify whether the existing internal control in the process of funding activities of the company carried out in accordance with the legal and professional rules and internal legal business and organizational rules, whether internal controls are effective and efficient so that key risks are controlled, to provide an independent opinion of legality funding activities.
6. The extent of the auditor's work	Using samples
7. Time of commencement the tasks	...
8. Completion date of tasks	...
9. The estimated value of the internal audit	... EUR
10. Description of the internal audit activities	Acquiring, reviewing and studying documentation, inquiring, verification, testing on samples using non-statistical methods, interviewing, observation and use of computerized tools.
11. Date of orders	...
12. Head internal audit department	Name and signature

OPOMBE Adapted from Koletnik (2007, 156).

ness ('International Standards for the Professional Practice of Internal Auditing' 2012, Standard 2300).

The internal auditor carries out internal audit tasks in the following steps (Koletnik 2007, 196–7):

1. introductory meeting with the manager of the audited area;
2. obtain reliable and sufficient information or evidence needed to

achieve the scope and objectives of the internal audit on the whole revised area with statistical or non-statistical samples; where we cannot obtain sufficient evidence, we restrict decisions;

3. testing and evaluating the information obtained in accordance with the objectives of the audit (for example, testing and evaluation the internal controls within the audited entity) and in accordance with the initial identification of key risks and the possible re-evaluation of risks; the individual and overall results of the auditor shall be disclosed in the working material;
4. fact-finding – conclusions: findings, opinions and recommendations of the internal auditor.

In the specialist literature, the most commonly mentioned methods of obtaining information and evidence are:

- interview,
- talk,
- analysis,
- calculation,
- observation,
- summarising,
- statistical sampling,
- analytical procedures,
- reviewing business documents and records,
- re-calculating the quantities and values
- confirmation of positions and more.

The following audit activities will be used:

- acquiring,
- reviewing and studying documentation,
- inquiring,
- verification,
- testing samples using non-statistical methods,
- interviewing,
- talk,
- observation, and
- use of computerised tools.

In our case, identifying information and obtaining sufficient evidence means:

- obtaining information about the process, and
- recording the process of financing activities.

In our case, the evaluation of the information obtained and audit evidence means:

- assessment of the adequacy of controls,
- new risk assessment (the first risk assessment was in planning the internal audit).

Findings and proposals for the internal audit are prepared as working material using the components of COSO II¹ and the scoring of internal controls after the stages of the finance process. Below, we present the components of COSO II.

For example, in our case, the internal auditor found out that the company has a high risk of inadequate control activities and there is a risk that the company does not prepare interim analysis of financing the company.

The Operating Control Framework of the Auditor

COSO is an operational framework or a tool for setting up and evaluating the internal control system in the organisation. It is developed by the Committee of Sponsoring Organisations of the Treadway Commissions.

As Cohen says (2007), the best practice of internal financial controls within finance spending is to use COSO II as a framework for checking internal controls. Other EU member states also have in place an internal and external control of finances (Cohen 2007, 34).

Koletnik and Kolar state (2008, 112) that a company with a high-quality internal control and better auditing has greater opportunities for development and existence.

¹ According to Wikipedia (see https://en.wikipedia.org/wiki/Committee_of_Sponsoring_Organizations_of_the_Treadway_Commission), 'The Committee of Sponsoring Organizations of the Treadway Commission (COSO) is a joint initiative of five private sector organizations, established in the United States, dedicated to providing thought leadership to executive management and governance entities on critical aspects of organizational governance, business ethics, internal control, enterprise risk management, fraud, and financial reporting. COSO has established a common internal control model against which companies and organizations may assess their control systems.'

COSO II identifies the eight key components of internal control, namely the control environment, setting business objectives in accordance with the strategy and acceptable risk, the identification of events, risk assessment, responding to risks, control activities, information and communication, monitoring. In the revised field, the internal auditor trials and evaluates these eight basic components of COSO II.

The theoretical aspect of the limited ingredients that are usually needed for a practical demonstration of the implementation of an internal audit will be presented below.

Assessment of Control and the Internal Environment

The control environment is the main platform on which the rest of the control framework is placed (Spencer Pickett 2005, 194). 'The internal environment encompasses the tone of an organisation, and sets the basis for how risk is viewed and addressed by an entity's people, including risk management philosophy and risk appetite, integrity and ethical values, and the environment in which they operate,' (Committee of Sponsoring Organizations of the Treadway Commission 2004, 3). It primarily contains informal (soft) controls such as management style, business ethics, moral values and others; some of these controls are formal, such as organisational policy, the training of employees and others (Koletnik 2007, 181). The control environment includes integrity, ethical values, philosophy and management style, method of defining powers and responsibilities, organising and developing the skills of employees (Cukon-Mavec 2006, 5–6). Assessment of the control environment is the starting point for evaluating other components of the system of internal controls.

Assessment of the Determination of Business Objectives

Risk management ensures that the management has implemented the process of setting objectives and that objectives are chosen that support the company's mission and are consistent with the degree of acceptance of risk (Vežjak 2011, 9).

Identifying Internal and External Events

The company's ability to achieve the objectives affects internal and external events, which must be identified by the management through the risk management process.

Events that have a negative impact are risks the management must respond to with appropriate evaluation and the introduction of activities for its control. Events that primarily have a positive impact are opportunities that the management must re-consider in the process of goal setting (Committee of Sponsoring Organizations of the Treadway Commission 2004, 49). Events vary from the almost incredible to the regular, their impact from significant to insignificant. The events are affected by external and internal factors, such as (Committee of Sponsoring Organizations of the Treadway Commission 2004, 43): economy (price growth), natural environment (natural disasters), policy (changes in laws), social (demographic changes), technology (increasing influence of e-commerce), infrastructure (lack of equipment compared with the resultant demand), employees (accidents at work), processes (delay in delivery) and technology (inadequate technology for increased production volumes).

Risk Assessment

'Risks are analysed in terms of likelihood and impact, as a basis for determining how they should be managed' (Committee of Sponsoring Organizations of the Treadway Commission 2004, 4). As the legal and business conditions constantly change, a permanent risk assessment must become an iterative process (Sawyer, Dittenhofer, and Scheiner 2003, 66).

Risks are assessed on an inherent and residual basis (Committee of Sponsoring Organizations of the Treadway Commission 2004, 47). Risks on an inherent basis are the risks in an organisation or unit, of an event and so on, without the management initiation of any action that would reduce either the likelihood of its occurrence or its impact. When the management adopts risk minimisation activities, we can talk about remaining (residual) risks (Committee of Sponsoring Organizations of the Treadway Commission 2004, 49).

In addition, we present the four main steps of risk assessment in the organisation (Internal Control Standards Committee 2004, 19–23):

- First, we have to identify the risks to the organisation. The identification of risk based on the core purpose of the organisation, which should be considered and evaluated, results in a smaller number of key risks. The organisation is exposed to risks due to internal and external factors that are reflected at the organisational level, as well as the level of activities. It is important that the detection

of the risk is extensive, since it is necessary to take into account all of the risks. It must be a continuous and iterative process, which is often associated with the planning process. The most common tools for risk identification are commission review and the self-assessment of risks, which do not exclude each other;

- Second, we have to evaluate the risks, whereby the methodology for analysing risks can vary. Risks can be identified by numbers (e.g. financial risks), while a subjective view of the risk is all that is possible for those that are difficult to measure (e.g. reputational risk). One of the things that can mitigate the subjectivity in the process of providing a framework for assessment is using the systematic application of the criteria for classifying risks. One of the main purposes of risk assessment is certainly to inform the management of risk areas where actions should be taken. This is one of the reasons for developing a framework for identifying risks that usually denotes them as high, medium or low. Thus, we can determine the benefits of the management and the decisions about the risks that they should be given;
- Third, we have to define which level of the risks are acceptable. Assessing the level of risk acceptable to an organisation means defining the 'amount' of risk that the organisation is ready to accept and varies according to the perceived significance of the risk. We can talk about the style of risk for the organisation. Thus it is necessary to establish the level of risk, for both operational (inherent) and residual risk, which is acceptable for the organisation. Operational risk is the risk to the organisation, if the management does nothing, which could change either in terms of possibility or impact. Residual risk is the risk that remains after the management responds to the risk;
- Finally, we need to decide how we should respond to the risks. Responses are developed, wherein a response can be divided into four categories: transfer, admission, restriction and control. Among them, the most important is risk management, while internal control is the main mechanism that helps to manage risk and maintain it at an acceptable level. Internal control procedures are procedures regulated by the organisation to manage risk. Each control brings costs, so each control activity must offer benefits for those costs in relation to the risks they address. The risks and associated controls

should be continuously reviewed in order to ensure the effective operation of the mechanisms.

Risk cannot be eliminated entirely because some events cannot be predicted or anticipated. Moreover, in the operation of controls, it is necessary to take into account the human factor (it may be a good control but we are not protected if a responsible person is not assigned) (Toman Pfajfar 2011, 30). We emphasise that internal auditors must have sufficient knowledge to assess the risk of fraud and the manner of its treatment in the organisation, but they are not expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud ('International Standards for the Professional Practice of Internal Auditing' 2012, Standard 1210.A2).

Recognizing Management Responses to Commercial Risks

When the company evaluated the risks of fraud, it needs to decide on a strategy of risk management according to its risk appetite. The strategies can be divided into four groups (Committee of Sponsoring Organizations of the Treadway Commission 2004, 53):

- Avoidance – the company decides to avoid the risk, to withdraw from risky situations or not to enter into it. An example of this would be the sale of a department or the suspension of a production line.
- Reduction – the company reduces the likelihood of the occurrence of risk or its effects, or both, to introduce appropriate control action.
- Transfer – the company decides to transfer a part of risk to other participants. Common forms of this response to a risk are transfers to the insurance funds and the provision of services to others.
- Acceptance – the company does not take any action in relation to the risk.

When determining the adoption of an appropriate strategy for responding to the risk, the management must:

- Evaluate the potential responses to risks – often companies find that they can use a number of different responses or a combination thereof for a single risk. It is also possible that a single response may be used for several different risks. Therefore, there is no need for additional activities and the existing one only needs to be improved.

- Evaluate the impact of the risk response – the company must be aware that the response to a risk may be different in its effect on the probability of an event and on the result of the event itself.
- Assess the costs and benefits of the risk responding – the assets used in the company's responses to risks are limited, so it is necessary to examine the costs and benefits associated with each response.
- Consider that the risk can represent an opportunity in the enterprise's operations.

The internal auditor would not take on the following responsibilities (The Institute of Internal Auditors 2009, 5):

- determine the acceptable level of risk,
- instead of the management, taking on the responsibility for the risk management processes for the effective and efficient functioning of risk management system,
- instead of the management, making decisions on risks responses and their implementation.

Assessment of Control Procedures

Control activities are policies and procedures that help the management achieve its goals. In other words, to help the management to ensure the implementation of the right things at the right time and in the correct manner (Committee of Sponsoring Organizations of the Treadway Commission 2004, 32).

Control activities include the following policies and procedures (Internal Control Standards Committee 2004, 25–7):

- *Procedures for approval and confirmation*: Carried out by authorised persons only. Approval procedures must include the specific conditions and terms under which approval is carried out. Ensuring attention is paid to the certification of approval means that employees comply with the regulations and act within the restrictions introduced.
- *The separation of task areas* (approving, implementation, recording, reviewing): To reduce the risk of errors, any individual or group should not control all the key stages of the event or transaction.
- *Control over access to records and facts*: Access is limited to authorised persons who are responsible for the custody and/or use of facts (minimising the risk of unauthorised use or loss).

- *Verification*: transactions and significant events should be monitored before and after the project.
- *Harmonisation*: the test results should be periodically reconciled with the appropriate documents.
- *Reviews of business success*: they must be regularly reviewed according to a set of standards by assessing their effectiveness and efficiency. Based on this, we see whether they have all been implemented as they should be.
- *Reviews of operations, processes and activities*: They must be periodically reviewed to ensure that they comply with the applicable regulations, policies, procedures or requirements.
- *Surveillance* (assessment, review, validation, guidance and training): Helps to ensure the proper achievement of the purposes of internal control.

Control activities theory covers three groups, namely preventive, detective and corrective control activities. Preventive controls are controls designed to prevent or limit errors, omissions and unauthorised use (Turk 2002, 548). Detecting control are checks designed to detect errors, omissions and unauthorised use and reporting on that (p. 396). Corrective controls are controls designed to help eliminate errors, omissions and unauthorised use and to take immediate action (p. 474).

Among the mentioned control activities, the first three are preventive, the following three are detective, and the last two have both preventative and detective roles. It is very important that the costs of the control activities do not exceed the benefits that they bring (Internal Control Standards Committee 2004, 8).

Assessment of Information and Communication

Since information comes from many different sources (internal and external) and in a variety of formats (qualitative and quantitative), the biggest challenge for the management is to obtain data that is important or useful (Committee of Sponsoring Organizations of the Treadway Commission 2004, 68).

Successful communication is carried out in all directions – upwards, crosswise and down in the organisation and throughout all the components of the entire structure. It is very important that communication is implemented bidirectionally between the management and employees. It is also important that the management successfully communi-

cates with the external stakeholders as this kind of cooperation can have an important influence on the degree to which an organisation accomplishes its objectives (Chambers 2004).

We identify and assess how the systems of reporting and communication flow between employees in the company, so that they can re-align labour assignments among themselves, and with business partners (customers, suppliers and others) in the environment (Koletnik 2010, 5).

The Assessment, Monitoring or Control of the Efficient and Effective Operation of Internal Controls

The risk management process is constantly changing. Responses to risks that were sometimes appropriate, may become irrelevant; control activities become less effective, or are no longer active, the company's objectives are changed. Therefore, the management must determine whether the operation of each component of the risk management process is effective (Committee of Sponsoring Organizations of the Treadway Commission 2004, 79). This assessment can be carried out through the current activities or through separate evaluations.

Auditor Reporting and the Monitoring of Measures

The 'International Standards for the Professional Practice of Internal Auditing' (2012, Standard 2400) said that internal auditors should communicate the results of the internal audit assignment. The steps for reporting are as follows:

- final discussion with the management of the audited entity,
- preparation of a draft report,
- review of the comments and opinions received from the management of the audited entity,
- preparation of the final report,
- sending the audit report.

The objectives of final meeting are: discussion on the conclusions and recommendations, resolving any misunderstandings or misrepresentations of facts and allowing the subscriber to specify the interpretation of specific areas of the audit, delivering views and observations, conclusions and recommendations, agreeing on possible solutions to the problems given in the report, giving estimates for cooperation and providing information (Jagrič 2011, 64).

Table 6.2 The Example of Part of the Internal Audit Report: Internal Audit Recognized Opportunities for Improvement

Result of the audit assignment	The company does not have a regular analysis of the financing of subject and does not respect the principles of financial policy and financing rules.
Recommendation of the internal auditor	Preparation at least quarterly analysis of financing and cash flows and reports on compliance with the principles of financial policy and financing rules, which allow immediate action in case of failure to achieve the objectives and clearing up problems.
Action of the company	Installation of system solutions in a computer program to output at least quarterly analyzes and reports on compliance with the principles of financial policy and funding rules, which are a financial analyst regularly sent to the chief financial manager.
Due date	60 days from the issuance of the final report.
Responsible person for improvement	Chief financial manager.

The internal auditor shall establish and maintain a monitoring system of response to the findings, which are delivered to the management ('International Standards for the Professional Practice of Internal Auditing' 2012, Standard 2500).

The chief audit executive must establish procedures for subsequent monitoring and ensuring that the management's actions have been effectively implemented or that senior management has accepted the risk if not (Standard 2500.A1).

The aim of the internal audit is realised when all the irregularities and measures have been removed. If one of them is not eliminated, for example because of the unacceptable costs of realisation or other reasons, this means that the auditee adopts a certain risk that it is not controlled. If the level of risk is not acceptable to the auditor, the supervisory authority must be informed (Koletnik 2007, 201).

Table 6.2 shows an excerpt from an example internal audit report.

Conclusion

The internal auditor should be independent and objective according to the professional internal auditing standards. Operations in the company have financial consequences. Financing the company should be according to the law – if it is not so, the consequence is the insolvency

and bankruptcy of the company. To avoid this, the role of the internal auditor is relevant in assessing the risks and internal controls.

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7 Intellectual Capital Report of the University

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Intellectual capital can be defined as intangible assets that enable the growth and development of an organisation. Our research aimed to provide an in-depth insight into the state of intellectual capital at the University of Primorska. To this end, the components of intellectual capital and the indicators of the disclosure of the components were defined; moreover, an intellectual capital report model was designed. The research was designed as a case study and its results showed that all three basic components of intellectual capital – human capital, structural capital and relational capital – are present at the University of Primorska (UP). The fundamental documents of the university contained indicators for the disclosure of all the mentioned components. Based on the study's findings, a model proposal for disclosing intellectual capital at the University of Primorska was designed.

Ključne besede: intellectual capital, reporting, indicators, models, the University of Primorska

Introductory Definitions

In modern society, the assets managed by organisations – by which they create their competitive advantage and their market value – are becoming increasingly intangible. What is more, the objectification of the intangible is a special challenge for the companies' management in modern economies. What is tangible is measurable and what we can measure we can also manage. In the period between the mid 60's and the mid 80's of the previous century, a new term for intangible assets was coined – intellectual capital (IC). During the last thirty years, numerous non-monetary models have been developed to measure and disclose IC.

In this way, organisations measure the intangible assets that are not disclosed in classical financial statements but contribute significantly to business success. The first report of this type was created in 1994 in the Swedish insurance and finance company Skandia. The report was called the Navigator. The author of the report, Leif Edvinsson, became the head of the first department for the development and management of IC. The reports on the companies' IC and IC report models have begun to be consecutively produced.

Measurement and disclosure of IC aim at improving the management of IC. IC brings better business results, creates added value and contributes to the greater competitiveness of a company.

The first studies on IC are thus related to companies. However, in the last decade there has been an increase in studies related to the public sector (Cañibano and Sanchez 2009; Cuganesan and Lacey 2011; Borin and Donato 2015; Chiucchi and Dumay 2015; Vagnoni and Oppi 2015; Veltri and Silvestri 2015). It is important to study the phenomenon of IC at the universities because knowledge organisations, such as universities, are definitely the richest in IC. The employees' knowledge, which is included in the organisational structure of the university, the university's curriculum and its relations with the environment, is the main product creator and at the same time the result of the overall activity, respectively the main final product. Therefore, IC is undoubtedly important for the university. A high concentration of IC at universities may create the impression that the existence, operation and management of IC is self-evident, however, this is inaccurate. The tools that would enable the disclosure and management of IC at universities are only in their early stages. The modern, knowledge-based 21st century society expects the university to play a key role in the process of constructing socially useful and necessary knowledge. However, in order to achieve this, the university has to modernise its organisational structure, core activities and management processes.

The University of Primorska (UP), established less than a decade ago, has a unique opportunity to start its development by accepting the challenge and forming its own specific management model based on IC management. However, to manage IC successfully, the university must know how to identify, measure and disclose it.

In the continuation, the term IC is explained and the study design is presented. This is followed by the analysis and interpretation of the study results and the presentation of the model and report design on IC at the UP. Finally, the conclusions are presented.

The Term IC and the Components of IC

Different authors define the term IC in different ways. Edvinsson and Malone (1997, 44) define it as knowledge, applied experience, information technology, relations with clients and professional skills that provide a competitive advantage. Brooking (1998, 12) defines it as a combination of intangible assets that enable a company's operation. Stewart (1997, xx) defines it as intellectual material that can create wealth, as collective brain power and as all the human knowledge in a company that provides a competitive advantage. Roos et al. (2000, 19) define it as the sum of the company employees' knowledge and as the practical application of this knowledge. Harrison and Sullivan (2000, 34) define it as knowledge that can be turned into profit. In contrast, Rastogi (2003, 228) defines it as the holistic meta-level capability of generating value by using knowledge as the main resource. However, besides the term IC, some authors use other expressions, such as invisible assets (Itami 1987), core competency (Hamel and Prahalad 1990), intangible resources (Haanes and Lowendahl 1997), intangible assets (Sveiby 1997), etc.

In terms of components, IC is also defined in different ways. Stewart (1997, 253) defines it as the total human capital of a company and its organisational structure. The same definition is provided by Edvinsson and Sullivan (1996, 358) and Edvinsson and Malone (1997, 11). In contrast, Petrash (1996, 366) defines it as the total human capital of a company, its relations and its organisational structure. This definition is also stated by Lynn (1998, 14), as well as in the following studies: The Society of Management Accountants of Canada (1998, 13) and Financial and Management Accounting Committee (1999, 6). Furthermore, Brooking (1996, 13) defines it as the total human capital of a company, its relations, its organisational structure and industrial property rights. Chen, Zhu, and Xie (2004, 202) define it as the human capital of a company, its relations, innovation, clients, etc.

The Purpose and Objectives of the Research, the Research Question and Assumptions, and Limitations of the Research

The purpose of the research was to provide an in-depth insight into the state of IC at the UP, to define its components, the indicators for the disclosure of its individual forms and to use them to design an IC reporting model.

The primary objectives of the research are:

- to investigate, present and analyse the existing models and the guidelines for measuring and reporting IC at foreign universities in order to compare foreign experience in this area;
- to identify the three fundamental components of IC (human capital, structural capital and relational capital) at the UP;
- to identify a wide range of indicators of the three IC components at the UP by analysing the university's fundamental documents (annual work programmes, annual reports and self-evaluation reports), its strategy and its main objectives;
- to establish the perception of the IC concept at the UP by interviewing the main representatives of the university's management and representatives of one university member/faculty (a chancellor or vice-chancellor, a chief secretary and a dean of a faculty);
- to design an IC reporting model (on the basis of the previous phases of the research) taking into consideration a university's particularities and thus complement the classic annual financial statements of the university (balances).

The fundamental research question, arising from the defined research problem, is: 'Is it possible to design an IC measurement and disclosure model, specifically for the needs of the UP, on the basis of the existing models' analysis and the identification of the three components of IC and the indicators?'

The data for our research was gathered using three different methods of data collection: analysis of the contents of the documents, semi-structured interviews and surveys.

Our purpose was to identify the indicators of each IC component (human, structural and relational) – which could be included in the reporting model on IC at the UP – by analysing the UP's fundamental documents (strategy), business reports, annual work programmes and self-evaluation reports for four consecutive years (2008, 2009, 2010 and 2011). For this purpose, the adding of content analysis in line with Hsieh and Shannon's (2005) classification was used.

The semi-structured individual interviews (our primary source of data) were conducted with the representatives of the university's management and the management of one university member (faculty), in order to provide an insight into the university management's perspective on IC. The data from the interviews was analysed using the method of content analysis; a few elements of the reasoned analysis were taken

into account (Easterby-Smith, Thorpe, and Lowe 2005; Patton 2002).

A survey with representatives of the university's management and the management of one university member (purposive sample) was conducted electronically (via e-mail). By analysing the results of the survey questionnaires, we obtained a narrower set of indicators that were included in the proposed model. A simple statistical analysis was used for the analysis of the survey questionnaires.

The research includes primary and secondary data sources. Primary data sources were obtained through interviews and surveys, while secondary data sources contain data on IC found in the literature, the data on different models and guidelines for disclosing IC, and the data contained in the UP's fundamental and strategic documents (strategy and vision, self-evaluation reports, annual business work reports and annual work programmes).

The research is based on the following assumptions:

- the UP operates in a similar environment to the universities in comparable European countries and has the same social role;
- in Slovenia, the importance of IC and its impact on the operation of the university is similar as in foreign countries;
- in terms of IC components, the Slovenian higher education and research area is the same as in comparable European states.

The research is limited in terms of contents and methodology. The limitations in terms of contents result from the lack of research and the few examples of IC reports designed in higher education and research institutions such as universities. On the other hand, methodological limitations result from the fact that the sources or documents – on the basis of which the set of organisationally specific indicators of individual IC components is designed – are limited.

Methodological limitations are largely due to shortcomings in the data collection methods (survey and interview) and case study. The greatest methodological limitation is related to the fact that the case study was conducted in only one higher education institution. This means, that the obtained results cannot be applied to other Slovenian higher education institutions or to the Slovenian higher education area. Furthermore, to increase the credibility of the research, a testing survey should be conducted on a larger test sample with more respondents. At the same time, the set of indicators would be different if the survey was conducted on a larger sample; the choice of respondents and inter-

viewees is limited according to their position at the university (managers) and their knowledge in the area of IC in higher education and research institutions. Other employees at the university do not have much knowledge of this area.

Another limitation of the research could be the investigators' biases, which can result in a one-sided interpretation of the results. The biases are due to the investigator's several years of employment in higher education and at this particular institution.

Analysis and Interpretation of the Research Results

In the continuation, the collected data is analysed and interpreted by means of document analysis, interviews and the survey. We aim to provide an answer to the research question, to highlight the possibilities regarding the design of an IC report at the UP, as well as to expose the significance of such reporting.

Analysis of the UP's Fundamental and Strategic Documents

By analysing the UP's fundamental and strategic documents, we aim to answer the question of whether we can prove the existence of all three fundamental components of IC (human capital, structural capital and relational capital) on the basis of the analysis of those documents.

We analysed:

- strategic documents, which include the following fundamental documents with addresses: University of Primorska Development Programme 2004–2008 (Univerza na Primorskem 2005), Mid-Term Development Strategy of the University of Primorska 2009–2013 (Univerza na Primorskem 2009) and Education Strategy of the University of Primorska 2011–2015 (Univerza na Primorskem 2011);
- business reports, which include the UP's annual reports for 2008, 2009, 2010 and 2011;
- planning documents, which include the UP's work programmes for 2008, 2009, 2010, 2011 and 2012 and
- self-evaluation reports on monitoring and quality assurance, which include fundamental documents entitled: Monitoring, Assessment and Quality Assurance – self-evaluation reports of the UP for the academic years 2007/2008, 2008/2009 and 2009/2010.

Table 7.1 The Main Coding Categories of IC

Structural capital	<ol style="list-style-type: none"> 1. intellectual capital 2. managerial philosophy 3. organisational culture 4. management processes 5. information/network systems 6. financial flows
Relational capital	<ol style="list-style-type: none"> 7. trademark 8. buyers/clients/users 9. satisfaction of buyers/clients/users 10. name of the company 11. distribution channels 12. business cooperation 13. licences
Human capital	<ol style="list-style-type: none"> 14. employees 15. education 16. training 17. work experience and knowledge/expertise 18. entrepreneurial orientation

OPOMBE Adapted from Guthrie et al. (2004, 286).

The analysis of the contents of the UP's fundamental documents leads us to a generalised conclusion, namely, that in these documents, we could identify data on all three IC components.

Identification of the Indicators of the Three Components of IC at the UP

The identification of the indicators of the three components of IC in the UP's fundamental documents was done using the adapted coding system by Guthrie and Petty (2000) – they used it as a tool for their analysis of the organisation's fundamental documents in order to classify its IC. According to this coding system, the organisation's intellectual capital consists of:

- internal IC, which includes organisation, politics, culture and other 'organisational' skills (structural capital);
- external IC, which includes the organisation's relations with its partners from the outside (relational capital) and
- the IC of employees, which includes the employees and their knowledge, competencies, abilities and skills (human capital).

These relations are presented in table 7.1.

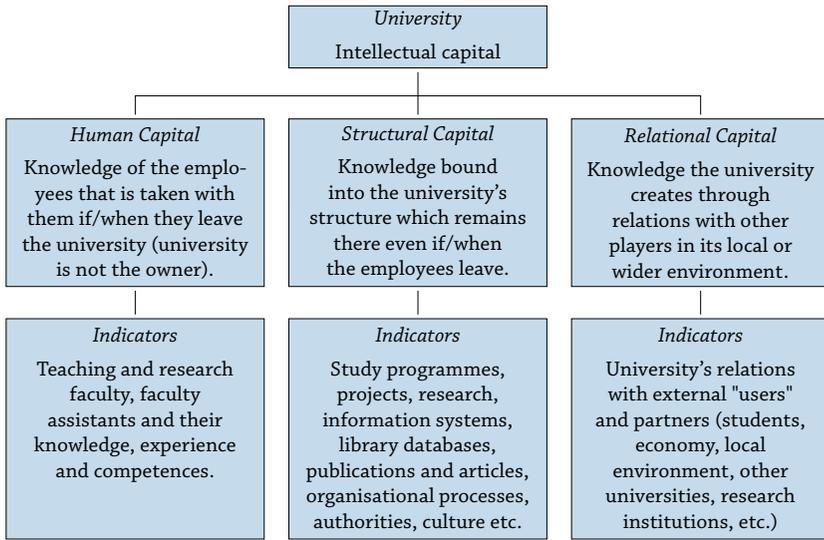


Figure 7.1 Components of IC at the University of Primorska

The coding system is adapted to the needs of the company in the first place. Therefore, we adapted the coding system to a non-profit organisation such as a university. In our case, we do not refer to trademarks, company names, distribution channels, etc. as they are in companies. Our purpose was to establish, by means of the content analysis of the UP's fundamental documents, what represents the university's IC, its strategy and vision, what its employees are like, what its relations with the environment are like and which indicators disclose these components of IC. The results of the content analysis of the UP's fundamental documents are presented in figure 7.1.

We can establish that the above-mentioned components of IC appear in the fundamental strategic objectives of the university. Hereby, these components define the practice of its basic activities and are also disclosed in the results of these activities.

Human capital is undoubtedly the most important component of IC at the UP. It includes all the employees of the university together with their knowledge and abilities. They are very highly educated – 662 employees out of 752 (Univerza na Primorskem 2012, 373) hold a BA (university degree of the pre-Bologna system) or BSC. The labour costs related to them represent almost 70 % of the total costs of the university.

Structural capital is the so-called materialised knowledge bound into

the organisational structures and processes. It is composed of study and research programmes, projects, expertise, certified knowledge, systems of lifelong learning, international integration, information systems, specific databases, awards of titles to teaching and research faculties and faculty assistance (also called ‘habilitacija’), publications and articles, the results of research activity, etc. Structural capital was created and brought into the organisation by former and current employees, and other players in higher education (students, visiting scholars and others) through work, or it was acquired by the university from the outside. The analysis of the UP’s fundamental documents showed that the indicators of the disclosure of structural capital are found in all annual reports, annual work programmes and the self-evaluation reports of the university since its establishment.

Relational capital is intangible capital created by the university’s operation in the environment and through the university’s relations with different players in that environment. These players are users of its services (students, companies, institutions issuing calls for tender, the state, partner universities, local and national economy, local and national social environment) and other partners. Relational capital is extensively disclosed in different sections of the UP’s fundamental documents. The most important indicators of relational capital in the UP’s fundamental documents are:

- the indicators of international activity in education and research,
- the indicators of the forms of lifelong learning,
- the indicators of common projects with the economy and local environment and
- indicators of the scholarships from the UP scholarship fund and the awards for teaching and research excellence.

Indicators of IC Components

Indicators of the organisation’s IC are closely related to the organisation’s vision and strategy. Therefore, they are the criteria for measuring the organisation’s success in achieving the goals. The indicators, disclosed by means of the analysis of the UP’s fundamental documents, were classified on the basis of the previously mentioned coding system (Guthrie and Petty 2000): the indicators of the university’s capital in employees, organisation and relations. Within each type of these indicators, we designed (according to the PRIME model, see Observatory

of European University 2007, 19) indicators that reflect the dynamics within the individual components of IC, such as:

1. human capital:

- performance indicators (e.g. the total number of assets for the research/the number of all researchers),
- indicators of the openness to the home and international environment (e.g. the number of students in doctoral study programmes from other universities (home and foreign)/the number of all students in doctoral study programmes);

2. structural capital:

- indicators of autonomy (e.g. the amount of assets intended for R & D/the total amount of all assets),
- indicators of codified knowledge in publications (e.g. a number of copyright works by scientific fields/all the publications of the university),
- indicators of codified knowledge in the form of intellectual property (e.g. a number of patents owned by the university),
- strategic decisions (e.g. the presence of the strategy for the development of research and education activity);

3. relational capital:

- corporate spin-off (a number of spin-offs created and financed by the university),
- contracts of the university with the economy and other organisations and common research and development projects,
- knowledge transfer through technology transfer institutions,
- knowledge transfer through human resources (e.g. a number of PhD students with scholarships provided by companies/the number of all PhD students),
- participation in social and cultural life,
- the so-called 'public understanding of science' (e.g. organisation of events for science promotion – media, forums, etc.).

The set of indicators is designed in such a way that they disclose all three basic activities of the UP (education and study activity, scientific research and art activity and socio-economic role of the university) which represent its business process and its 'production.'

The indicators were designed on the basis of different role models – we have taken into account several models and considered numerous

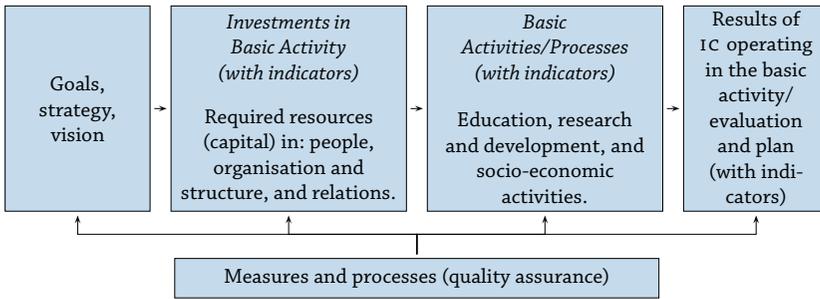


Figure 7.2 IC Report Model at the University of Primorska

guidelines and recommendations regarding the indicators' properties in order to achieve their objectivity. Such models are e.g. MERITUM (Cañibano et al. 2002) and RICARDIS (European Commission 2006). The designed indicators are financial and non-financial.

Model Proposal and IC Report Design at the UP

IC Model at the UP

Designing a model is about presenting reality in a certain way. Models are designed by way of deduction on the basis of real-life events, processes or states.

The basis or basic stages for designing the IC model proposal at the UP have been represented by the attempts at drawing up such reports in four European countries, namely in Spain (Ramirez, Lorduy, and Rojas 2007; Sanchez, Ellena and Castrillo 2009), Great Britain (Bezhani 2010), Austria (Leitner 2002) and Hungary (Bodnar et al. 2009). European directives and recommendations for measuring IC at universities (Cañibano et al. 2002), as well as the Austrian model of drawing up a report ('Wissensbilanz – Verordnung' 2010) – which is enforced – have also been taken into account. The model proposal was designed on the basis of the research results (the analysis of the UP's fundamental documents, the interviews with the UP management representatives) and the specific features of the UP. An IC report model is shown in figure 7.2.

To realise its vision and execute its fundamental activity, the university requires – besides investment in tangible assets – all the elements of IC, i.e. human capital, structural capital and relational capital.

On the right side in the model are the results of the entire process, shown by indicators. Education activity indicators refer to e.g. the num-

Table 7.2 Indicators Included in the IC Report at the UP

I. Human capital indicators		
I.1 Teaching and research faculty and faculty assistants		
1	NFI	The number and share of teaching and research faculty and faculty assistants at the UP (full-time equivalent – FTE)
2	NFI	The number and share of employees at the UP by the type of job (full-time and part-time employment, supplementary employment and employment by contract)
3	NFI	Employee education profile
4	NFI	The number of teaching and research faculty and faculty assistants at the UP employed by the UP (primary employment) who also work for other universities and institutes in Slovenia and abroad.
5	NFI	The ratio between research and teaching FTE (by university members and the UP as a whole)
6	NFI	The number of employees who were involved in professional training in the calendar year: the teaching and research faculty and faculty assistants in the calendar year
7	FI	The volume of resources or funds allocated to employee education (teaching and research faculty and faculty assistants)
8	NFI	The share of employees (the respondents to the questionnaire enquiring about employee job satisfaction) who are very satisfied and satisfied
I.2 Students and graduates		
9	NFI	The number of students in the study level as for 31. 12.
10	NFI	The number of new students (enrolled for the first time) in the study level as for 31. 12.
11	NFI	The number of students per teaching and research faculty and faculty assistants
12	NFI	The number of graduates by degrees (undergraduate and post-graduate: first, second and third degree) as for 31. 12.
13	NFI	The number of doctoral candidates/the number of registered researchers
14	NFI	The number of students in the doctoral study programme in the academic year/the number of doctoral graduates in the academic year
15	NFI	The number of students in the doctoral study programme from other (home and foreign) universities/the number of all doctoral students

Continued on the next page

ber of graduates in undergraduate and postgraduate programmes, the number and of employed university teachers and their education profiles, collaborators, researchers and specialists. Research and development activity indicators refer to e.g. the number of published monographs, the value and the number of projects in progress, etc.

Table 7.2 *Continued from the previous page*

II. Property indicators in the structure and organisation	
16	NFC/R The number of study programmes by the number of study fields (ISCED) of the first, second and third degree
17	NFI The number of interdisciplinary study programmes
18	NFI The number of international study programmes
19	FI Income structure of the study activity by sources
20	NFI The number and type of programmes of lifelong learning
21	NFI The number of the registered projects and programmes by university members in the calendar year
22	NFI The number of approved projects and programmes by university members in the calendar year, namely the accomplishment of the project and programme applications
23	NFI The number of academic conferences and meetings organised by the members of the UP
24	FI The income share of the research activity by the type of sources: budgetary resources and non-budgetary (market) resources/in the total income of the university's research activity
25	FI The total of all annual assets for the research activity/the number of researchers
26	NFC The number of published works (articles) in indexed journals (SCI, SSCI, A&HCI with an influential factor (IF) > 1, e.g. Science, Nature) by study fields (ISCED)
27	NFI The number of pure citations in the Web of Science (TC)
28	NFI The number and type of awards
29	NFI The number of published works by fields
30	NFI The number of certified patents, licences and certificates that are owned by the university
31	FI The income of the university from its patents, licences and copyrights
32	NFI The existence of a strategy for the university development (description), how its strategy differs or is distinguished from other universities' strategies
33	NFI The existence of mechanisms for the evaluation of accomplishing the university's strategy in the basic fields of its operations

*Continued on the next page***IC Report at the UP**

The IC report has a dual function. On the basis of its information, the management of the university makes the decisions required to meet their strategic objectives. It is also a document that provides information aimed at the general public. The main part of the report is the indicators. Table 7.2 shows the indicators included in the IC report at the

Table 7.2 *Continued from the previous page*

III. Relational Capital Indicators		
Inclusion into the environment		
34	NFI	The number of projects in progress in cooperation with companies
35	NFI	The number of projects in progress where other knowledge users are involved
36	NFI	The representation of the representatives of the economy and other knowledge users in the university bodies and vice versa
37	NFI	The number and type of the received initiatives proposed by the UP representatives in the competent authorities and organisations
38	NFI	The collaboration of the university in designing the national long-term development policy for higher education and research activity
39	NFI	The number and type (branch) of spin-off and start-up companies that were established by the university
40	FI	The total resources the economy allocates to the university's basic activity and the sponsorship of academic and professional meetings, summer schools and other university activities
41	FI	The total resources the economy allocates to the university bursary fund
42	FI	The resources the economy dedicates to or spends on awards for the UP's innovative projects
43	NFI	The existence of special events that promote science (in the media, forums, happenings) at the university
44	FI	The university income share from the so-called market activity in the total (all) income of the university
45	FI	The income share of the university deriving from executing the programmes of lifelong learning and certified training
46	NFI	Summer schools with international attendance

Continued on the next page

UP. This set of designed indicators should be considered as a first attempt and a proposal that can be further completed and changed to achieve the purpose of the university IC report.

Conclusion

In general, it is a fact that due to the nature of its activity, the IC at universities exists as something in itself and does not have to be developed and managed separately (Fazlagić 2007, 3). However, the reality is quite different. Universities function non-transparently and often do not find their role in contemporary society.

The introduction of IC reporting at the university does not exclude

Table 7.2 *Continued from the previous page*

International and inter-university collaboration		
47	NFI	Home and foreign universities, institutes and research organisations that have cooperation agreements with the UP
48	NFI	The number and type of common programmes with other universities by degrees of study
49	NFI	The number and type of common research projects and programmes with other universities, institutes, research organisations
50	FI	The resources acquired from the European projects and programmes by the university members
51	NFI	The number of students of the UP who fulfil some of their graduation requirements at other home universities/independent higher education institutions – by degrees of study
52	NFI	The number of students from other home universities/independent higher education institutions who fulfil some of their graduation requirements at our institution – the UP (by degrees of study)
53	NFI	The number of students at the UP who fulfil some of their graduation requirements in a foreign country
54	NFI	The number of foreign students who study at the members of the UP
55	NFI	The number of foreign citizens among the graduates of the UP
56	NFI	The number of foreign visiting scholars who are involved in the teaching at the UP
57	NFI	The number of the teaching faculty from a higher education institution who are involved in teaching at foreign universities as visiting scholars
58	NFI	The number of foreign visiting researchers and faculty assistants who are involved in the research process at the higher education institution and are not involved in teaching
59	NFI	The number of researchers and faculty assistants who are involved in the research process at a higher education or research institution in a foreign country and are not involved in teaching

OPOMBE FI – financial indicator, NFI – non-financial indicator.

other forms of obligatory reporting, it merely complements them. We are of the opinion that the research results show that the introduction of such a method of reporting is sensible. At the same time, by designing the IC measurement and disclosure model at the university, we reply positively to our research question.

The research presents the first attempt of this kind in the Slovenian higher education area. Our aim is to contribute to an in-depth understanding of the significance of IC for the university and spur further activities in designing the model for IC disclosure and management.

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8 Neuro-Linguistic Programing and Language Teaching

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This article looks at neuro-linguistic programing (NLP) as an effective tool for improving students' language learning goals and as a possible source of more successful and efficient teaching. In our article two practical examples of classroom activities are presented. These activities will clarify how the effectiveness of educational process can be achieved through neuro-linguistic programming.

Ključne besede: coaching, language, NLP

Introduction

There are many variables that contribute to successful language learning, e.g. a diversified learning concept, the variety and quality of learning materials, a hands-on learning approach, inquiry-based learning, etc. (Rižnar 2009a; 2009b; 2016; Skela 2013; Vičič 2011). This article tackles the issue under discussion from a slightly different perspective: it looks at neuro-linguistic programming (NLP) as a possible source for improving students' language learning goals. NLP has been discussed by a number of authors (Magaard 2015; Salma 2015; Seitovaa et al. 2016; Wao 2015; Kong and Farrell 2014) and in many different fields, including education (Ziedenisberg, Iris, and Asher, 2016).

NLP (Neuro-Linguistic Programming) is based on the search for and the study of the factors or elements that account for either success or failure in human performance. Its creators, Richard Bandler and John Grinder (Dilts et al. 1980), claim a connection between the neurological processes ('neuro' – referring to the thought processes and our physiological reactions to ideas and events), language ('linguistic' – using language to order our thought processes and communicate with others) and behavioural patterns learned through experience ('programming' – the way we choose to organise our ideas and actions to produce results) and that all these can be changed in order to achieve specific goals in life.

In our article, we discuss what NLP has to offer to language teachers. I have been teaching English to students of Business and Economics for quite some years and their level of the language in different groups varies from B1 to C2 referring to the Common European Language Framework. According to both theory and practice, the most important goal for them is to become fluent, efficient and confident speakers of the English language.

NLP is one of those feeder fields from which one can get enormous inspiration and numerous ideas for the tasks implemented in the class work in order to create an appropriate environment and conditions for students to accomplish their language learning goals.

Pedagogical Implications

We firmly believe that NLP can help language teachers in their efforts to develop action plans aimed at creating an atmosphere of interest, improved learning motivation and, last but not least, improved learning effectiveness. In addition, by implementing the NLP techniques, students are likely to improve their creative thinking, collaboration skills, rapport and communication skills. The practical examples of activities described below will clarify how the effectiveness of educational processes can be achieved through neuro-linguistic programming.

Sample Activity: Knowing Where You Are Going

- Aim: setting well-formed goals about students' foreign language future performance.
- Skills: speaking, writing.
- Time: 60 minutes.

The idea for this task comes from the book *In Your Hands* written by Jane Revell and Susan Norman (1997, 57).

A very good way to start thinking about well-formed outcomes is to think in terms of the present state, the desired state and actions to link the two. Our present state is where we are now and our desired state is where we want to be. Usually the two states are different and we want to take action to change our present state into our desired state.

1. I ask students to take a piece of paper, divide it into three sections and write the titles in table 8.1.

It is possible to choose any topic and work on it by going through these three sections. In the class, one can ask students to iden-

Table 8.1 Knowing Where You Are Going

Present state	Action	Desired state
_____	_____	_____
_____	_____	_____
_____	_____	_____

tify their present state in terms of learning English. What is their desired state? What will they need their language knowledge and skills for? (For example: meetings, business travel, writing emails, etc.)

Then I ask them to write or draw anything in the middle section that they think will help them achieve the desired outcome. Go with the flow.

2. Look at the three sections. What actions are suggested in the centre?
3. How soon can you start any of the actions?
4. At this point, a teacher may also remind students about the basic rules of writing well-formed goals.

Sample Activity: Setting Smart Goals

Students have probably heard of SMART goals. But do they always follow the rules? The simple fact is that for goals to be powerful, they should be designed to be SMART. There are variations of what SMART stands for, but the essence is this – goals should be:

1. *Specific*. Your goal must be clear and well defined, in a written form, in the present tense, in a positive form.
2. *Measurable*. Include precise amounts, dates, and so on, so you can measure your degree of success.
3. *Attainable*. Set realistic goals. You must believe that you can reach your goal and that it is possible to reach it within a reasonable length of time.
4. *Relevant*. Goals should be relevant to the direction you want your life and career to take. When setting goals, it is very important to remember that your goals must be consistent with your values.
5. *Time-bound*. Your goals must have a deadline. This means that you know when you can celebrate success.

And – this is the most important part – write down your goals, because writing down one’s goals creates a roadmap to their success. As Revell and Norman (1997, 57) point out: ‘Once you know what it is you want, you can begin to imagine what it would be like, to rehearse it in your mind and to think about what steps you need to take. Then you can begin to move towards it. You have, in fact, already begun to move towards it.’

Sample Activity: Timeline

- Aim: telling a story (in the future tense, in the past tense), writing/telling an autobiographical story.
- Skills: speaking, writing.
- Time: 60–90 minutes.

Timeline is a similar exercise. The idea for this exercise comes from the Possible Selves Theory (Markus and Nurius 1986), which emphasises the impact a student’s self-definition has on school behaviour. The special contribution of the Possible Selves Theory is its focus on the motivational power of students’ views of themselves in the future. Students’ views of the person that they hope to become, fear they will become, and expect to become can be powerful motivators for present school behaviour. In parlance of Markus and Nurius (1986, 954):

Possible selves are the ideal selves that we would very much like to become. They are also the selves that we could become and are afraid of becoming. The possible selves that are hoped for might include the successful self, the creative self, the rich self, the thin self, or the loved and admired self, while the dreaded possible selves could be the alone self, the depressed self, the incompetent self, the alcoholic self, the unemployed self, or the bag lady self.

With students, we often discuss the different possibilities suggested by Markus and Nurius in the above quotation and the students come up with many exciting scenarios. I ask them to think about their future job, their dream job, or simply to imagine themselves a few years into the future. I sometimes suggest going ten years into the future and ask them to imagine the place where they are working, their office, the interior design, co-workers, the tasks they need to complete. Then they imagine a foreign business partner visiting the company, and they have to speak to him/her in English! Imagine the conversation. How is your ideal self acting in that situation?

Table 8.2 Timeline: My Milestones

Now – September 2016

Task 1 Writing my diary in English.

Task 2 Reading an article in English, every day, i.e. BBC news.

Task 3 Once a week skypeing with my Australian friend.

Task 4 Reading one book a month in English.

Task 5 Baby-sitting in England for 3 months.

My desired goal – January 2020

The Timeline Process

1. Think of a future situation and the outcome that you want. Step into the future at the point when you want to have it (i.e. January 2020). Imagine yourself in the situation and feel it – the language you are using, fluency, voice, how are you dressed, your workplace, your colleagues, etc.
2. Look back from that future point to the ‘now’ and imagine the steps and stages that you would have to have gone through in order to get from one point to the other and finally achieving the skills and knowledge of your ideal language speaker self. These steps are your milestones (table 8.2).
3. Come back to the present with that knowledge of how to achieve your outcome.

Additional ideas for practising:

1. Telling or writing an autobiographical story in the past tense as a recollection – retelling their language learning story starting with the present situation and leading up to a successful mastery in the future (suggested beginning of the story: It is September 2016 and I ...).
2. Make an action plan – students can write down the individual steps from the Timeline, following the SMART formula.

Conclusion

Neuro Linguistic Programming or NLP explores how we think, feel and behave, and examines the inner language we use to present our experiences.

Using NLP gives us more conscious choice over what we do and the ways we act. The NLP tools and techniques can help us increase the ability to achieve our goals and objectives. And one of the most powerful

life skills that we can possess is the ability to control our responses to people and events around us.

Every situation in life involves an interwoven system of people and a sequence of events, thoughts, words, feelings and interactions. Using NLP, we begin to see the different elements in each situation that make up the whole system. We can be trained to realise, understand and know which of the elements are working for us and supporting our plan and which ones are not. By understanding this process, we are able to take actions to change things that are not working for us.

NLP techniques are based on the concept that we already possess all the internal resources and capabilities we need to effect a change in our life. Many people have difficulty maintaining a focused state of concentration, enthusiasm, inspiration, motivation and learning. NLP techniques allow us to automatically access any state we choose and to be flexible enough to achieve any desired goal.

By applying NLP, students are able to set their goals and precisely define what they want to achieve. They take actions to achieve their goals and evaluate the changes produced by their actions. Students are able to change and modify their action plan if necessary to achieve better results.

Teachers, trainers and educators who are using NLP techniques can quickly build rapport and grab the attention of students, instantly identify and overcome learning disabilities, communicate clearly with ease and inspire learning. By stimulating the desire to learn and motivating students to do so, teachers consistently increase the students' involvement. They develop a greater understanding of different learning styles and they are able to be more creative, imaginative and stimulating in their teaching styles.

Neuro-linguistic programming is a viable practice in teaching in general, as well as in teaching foreign languages on the primary, secondary and tertiary levels of education. Our contribution focuses only on the postsecondary level of education, where the so-called multi-sensor teaching can easily be applied.

We can derive wisdom from our adventures through the time zones (future, past). For going in-and-out of those time zones, we can make valuable learning from the past. We can also learn to do more consequential thinking about where our current actions will take us in the future.

The resulting wisdom empowers us to take more effective action in

the here-and-now to create well-formed outcomes that we desire and that will pull us into a positive and fruitful future.

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9 Is Higher Education in Dire Straits?

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The article is written with the full awareness that higher education is a complex system, with a number of multi-lateral interactions between teachers, students, policy-makers, parents, different professional associations, politicians, economy and the society in general. After a brief encounter with the Bologna reforms, it focuses on several key issues in education. First, it discusses learning and teaching in the context of brain science. Second, the author discusses learning and teaching myths, common misconceptions about how we learn and think, which are still widely believed by teachers in many countries around the globe. Third, biases in both teachers and education policy makers are discussed. Fourth, the conditions under which academics in social sciences are working are discussed. In conclusion, the author gives some pragmatic recommendations for the improvement of the present situation in higher education.

Cljučne besede: biases, brain science, higher education, learning myths, social sciences

Introduction (Communiqué)

The reform of the European higher education system started with a meeting in Bologna in 1988, when a number of university rectors met at the University of Bologna to celebrate its 900th anniversary. Ten years later, four education ministers met in Sorbonne and produced the Sorbonne Declaration, in which they declared that we ‘owe our students, and our society at large, a higher education system in which they are given the best opportunities to seek and find their own area of excellence’ (‘Sorbonne Joint Declaration’ 1998). The Bologna Process gathered pace in 1999 when the Ministers of Education from 29 European countries met in Bologna to further discuss educational reform.¹

¹ Dire Straits’ album *Brothers in Arms* was released in 1985, roughly at the same time when the Bologna reforms started. It was the band’s fifth studio album. All previous albums were released in vinyl format. It was the first album to sell one million copies in the CD format and to outsell its vinyl version. In 1996 it was remastered, released in

The quality and extent to which the reforms have so far been implemented differ from country to country, and range from minor structural adjustments to major cultural shifts in education philosophy (Crosier 2007). Frequently, good ideas are poorly implemented, and sometimes, due to the national higher education policy choices, academics have become entrepreneurs, knowledge is seen as a commodity and higher education institutions as mere market players. During the last 25 years, big words have been used by advocates as well as by critics of Bologna reforms.

Our contribution does not aim at giving a definitive picture of higher education arena in Slovenia. We would much rather point out some important issues, which should be either avoided like the plague or given more emphasis during our daily practice of teaching and learning. It seems that during the transition period, especially the one that lasts for a quarter of a century, it is sometimes difficult to retain common sense.

Learning/Teaching and the Brain (*Money for Nothing*)

Education should be about facilitating learning. In 2016, there is little quality learning/teaching possible without the full awareness of the role of neuroscience, which is about understanding mental processes involved in learning and teaching. Education is most certainly not only learning facts and skills in isolation, but above all about learning how to learn. Yet, only few students at all levels of education were lucky enough to learn how to learn at school or are willing to pay for 'the secrets of effective learning' on Udemy or Coursera. Education, we all know, is not limited to school years, but should be extended throughout the lifespan of individuals. Speaking about the lifelong education it is good to know that our brain is constantly changing, because connections between neurons are strengthened when they are activated (the so-called neuroplasticity). On the other hand, plasticity decreases with age, which is why it is slightly more difficult to start learning a second

XRCD2 format in 2002, issued in Super Audio CD in 2005, released as DualDisc format with DVD-Audio 24 bit/96kHz track in August 2005. In 2006, a half-speed-mastered vinyl version appeared, in 2013, a hybrid SACD mastered from the original tapes was released. In 2014, a new master was released in Japan on SHM-CD and in 2015, the album re-entered the UK Album charts. We may expect a new vinyl release in 2016. It seems like everything was better back then when everything was worse. The author of this contribution does not consider himself a fan of Dire Straits.

language at the age of 50, especially for people who are not mentally fit. Education – not coffee or Ritalin – is also the most successful cognitive enhancer (Bostrom and Sandberg 2009), because it provides strategies for abstract thinking and problem solving and increases our mental flexibility. In addition, exercising and sleep both have a profound effect on our memory, motivation, concentration and other mental functions (Dang-Vu et al. 2010).

Deans for Impact (2015) identified six key questions about learning that are relevant to educators. Students acquire new knowledge and understand new ideas by reference to knowledge and ideas they already know. In order to learn they must transfer information from working memory to long-term memory. As all people, students have limited working memory capacities that can be easily overwhelmed by tasks that are cognitively too demanding. In order to learn and retain new information, students have to organize the material in a meaningful way. During this phase effective feedback (clear, specific, focused on the task and improvement, and above all, not merely verifying performance) is essential. Acquired knowledge and skills are useful only if they can be transferred to a novel problem or situation in or outside of the classroom. Students become more motivated and successful if they know that intelligence and ability can be improved through hard work.

According to Deans for Impact (2015) teachers should be able to recognize common misconceptions of cognitive science that relate to teaching and learning. Three most damaging of them are mentioned in the next section and two need mentioning here: (1) novices and experts cannot think in all the same ways (Glaser and Chi 1988) and (2) cognitive development does not progress via a fixed progression of age-related stages (Willingham 2008).

Before I proceed, let the reader be warned about an important thing: if you type words ‘learning,’ ‘teaching’ and ‘brain’ in Google, you will be surprised by the number (about 67.500.000 on December 12, 2015) of results, many of them of a purely commercial nature. In addition, there is also a myriad of books, games and training courses, which claim to improve learning and to be backed by neuroscience. What they really have on offer is the production of neuromyths (Geake 2008) and the proliferation of pseudo-profound bullshit, which both have a damaging effect on the credibility and impact of neuroscience. No wonder that at present neuroscience is rarely included in teacher training courses or has not yet become a tool for science-based education policy despite

the fact that a growing corpus of neuroscience evidence already exists, which can help assess the performance and impact of various educational approaches.

Learning/Teaching Myths (*Why Worry*)

Among the common misconceptions about how we learn and think, the following should be mentioned: people use only 10 % of their brains, debunked by Boyd (2008), people are preferentially ‘right-brained’ or ‘left-brained’ in the use of their brains, debunked by Nielson et al. (2013), and students have different language styles, debunked by Pasher et al. (2008). As of October 2015 ProQuest social science journals search reveals 808 results for the search on ‘learning+style,’ of which the majority speak positively about the concept of different learning styles and only a few question its validity. No wonder why neuromyths are still widely believed. In my profession, there are charlatans, who would try to convince desperate language learners that they should start learning a language by listening to a foreign language while they sleep. It is true that we are not certain what the sleeping brain is doing (most likely processing information, consolidating memories and the like), but it is certainly not firing the way the conscious brain does.

The history of teaching/learning myths is a long one. Even the TeachingEnglish website published by the British Council and the BBC (2014) states: ‘Your students will be more successful if you match your teaching style to their learning styles’ – this includes, they claim, being: right- or left-brained, analytic vs. dynamic, and visual vs. auditory.

Over the past few years, there seems to have been an insidious pandemic of nonsense neuroscientific claims creeping into the education system. In 2013, the Wellcome Trust (2014) commissioned a series of surveys of parents and teachers, asking about various types of educational tools or teaching methods, and the extent to which they believe they have a basis in neuroscience. Worryingly, 76% of teachers responded that they used learning styles in their teaching, and a further 19% responded that they either use, or intend to use, left brain/right brain distinctions to help inform learning methods. Both of these approaches have been thoroughly debunked, and have no place in either neuroscience or education.

Biases Galore (*On Every Street*)

Both beginners and seasoned teachers are prone to a number of biases, as a general ‘law of least effort’ applies to teachers as much as to other

human beings. Following the work of Kahneman (2011) who writes in his outstanding book *Thinking, Fast and Slow* that ‘as we navigate our lives, we normally allow ourselves to be guided by impressions and feelings, and the confidence we have in our intuitive beliefs and preferences is usually, but not always, justified. We are often confident even when we are wrong, and an objective observer is more likely to detect our errors than we are’ (p. 39), it is easy to believe that both teachers and education policy makers are prone to employing System 1 (which is fast, automatic, frequent, emotional, stereotypic and subconscious) when System 2 (which is slow, effortful, infrequent, calculating and conscious) should be employed. According to Kahneman, our minds do not naturally rely on logical, rational and critical thinking processes.

One of the most frequent biases teachers are faced with is confirmation bias, which forces teachers to believe what they already think. After years of practice it is easy to believe that what one has always done is the right way of doing something. One real life example of confirmation bias, combined with the status quo bias (the tendency to like things to stay the same way) is the imperfect fine-tuning of Business English courses at Slovenian business and economics higher education institutions discussed by Rižnar (2009) that aimed exclusively at maintaining the status quo.

Another example of confirmation bias is the one which makes teachers look for evidence to support a theory and ignore evidence to the contrary. Teachers, too, love to be right, so they make sense of the world by seeking patterns they are familiar with. This may explain why so many teachers are keenly interested in one, and one only, method of teaching, say, project work. While project work can certainly help students learn certain things more effectively, it cannot be considered the only method for teaching all subject matter for all courses taught.

Maybe some teachers (and considerably more education policy makers) are victims to Dunning-Kruger Effect, according to which the less one knows, the more likely one is to perceive oneself as an expert, which means that some people have illusory superiority, and some experts have difficulties explaining how they do things because they assume that what they do is easy or obvious to all. Many students at all levels of education are familiar with the illusory superiority of some of their teachers, who either fail to recognize their own lack of skills necessary for effective teaching or fail to recognize genuine skill in their students.

The tendency to be overoptimistic and to overestimate favourable and pleasing outcomes is called optimism bias. Although unrealistic op-

timism of preservice and beginning teachers has been a topic of a number of studies (Weinstein 1980; 1988; Kulik and Mahler 1987; Kearns 1995) and unrealistic performance expectations among low scoring students have also been discussed by researchers (Richman 2010), too little has been written about the overoptimistic bias of education policy makers and seasoned teachers.

In this context, examples of framing bias (using a too narrow approach and description of the situation or issue) and substitution bias (being prone to substituting a difficult question with a simpler one) can be easily found in educators and education policy makers.

On Bullshit and on Learning to Write Badly (*Industrial Disease*)

Today, many professors often have too little incentive to focus on teaching, because if they do not publish they will most likely perish. So they focus on the production of papers with little genuine insight in thousands of obscure periodicals that are covering their tiny sub-sub-discipline almost no one is really interested in.

We live in the world in which, it seems at least occasionally, bullshit reigns supreme. 'One of the most salient features of our culture,' writes Harry G. Frankfurt (2005), 'is that there is so much bullshit.' We are all aware of it and we all contribute our share to it. But because we take the situation for granted, very little work has been done on the subject. According to Frankfurt speech emptied of all informative content 'is unavoidable whenever circumstances require someone to talk without knowing what he is talking about' (p. 63).

Pennycook et al. (2015) focused in their study on pseudo-profound bullshit, i.e. statements with correct grammatical structure but no discernible meaning. In my first draft of this paper I was toying with the idea that a suitable title for it might be 'From Oprah² to Chopra.'³ Chopra gained an interview on Oprah in 1993 and sold 400,000 copies of his infamous book (Chopra 1993) which partly explains how bullshit reproduces. As clearly stated in the conclusion of the 2015 article, bullshit sells, Chopra has more than 2.5 million followers on Twitter and has written more than twenty New York Times bestsellers. It is therefore high time we started teaching our students 'real-life' critical thinking

² Oprah Winfrey, famous for her talk show The Oprah Winfrey Show.

³ Deepak Chopra, an author famed for his 'woo-woo nonsense' (a direct quote from the Pennycook's et al. (2015) paper).

skills necessary to identify what is profound and what is lacking any concern for truth and meaning. Chopra, unfortunately, is just one example, as lack of meaningfulness is present also in political discourse, marketing language and even academia (Sokal 2008).

In his Introduction to *Language, Cognition, and Human Nature*, Steven Pinker (2013) stresses the importance of clarity and intellectual rigor in both popular and academic writing. He mentions Helen Sword, who in her *Stylish Academic Writing* (2012) showed that, after studying the literary style of five hundred academic articles, only a minority of them were well written. In the same vein, Billig (2013) starts his book by saying: 'This is a book which complains about poor writing in the social sciences.' His witty and highly entertaining book analyses two things: the conditions under which academics in social sciences are working (massive expansion of higher education institutions, the number of students and teachers, self-promotion, competition between disciplines, which are divided into smaller and smaller circles) and the linguistic nature of their work (technical terminology becomes superior to ordinary language, noun-based style of writing i.e. reification and nominalization, passivization, etc.). Ever-narrower academic specialization together with the growth of higher education (with the increase of both the number of students and teachers) have led to turning actions into lofty abstractions, which, in turn, have made academic prose incomprehensible and difficult to grasp. The multi-syllabled pomposity and obscurity found in academic writing is, alas, the result of much hard labour to learn the practice, because the empty jargon has to be learned in order to write and publish articles even if you have little or nothing to say. In Billig's words: 'Just like the learning of a foreign language, so the acquiring of academic language occurs gradually over time' (p. 58).

Conclusion (Walk of Life)

Is this a make-or-break-it moment for higher education institutions? Maybe, because too little has changed despite numerous reforms at all levels of education around the globe since the University of Bologna was founded in 1088. What we need in higher education is creative destruction; we have to start innovating, by, once again, embracing teaching and learning as fundamental missions of universities. We have to rethink the preference of research over teaching in defining academic merit. We most certainly have to invest more in education, but there is little evidence that money makes much difference in the absence of

other reforms and experimenting with school curriculums has so far done more harm than good. Perhaps we need student-loan accountability to stay afloat in higher education. And what about students? They certainly need long-term value, they need critical skills if they want to thrive in this dynamic and global world, they need skills for the rapidly changing economy (not skills in order to pass the exams), and, last but not least, they sometimes only need more homework. Appropriate amount of study time and homework are far from banal. Education experts have long realized that learning is in no small measure a function of time. In addition, both teachers and education policy makers should be aware that poor literacy and poor numeracy are expensive and education systems, private or public, which are unable to facilitate learning, are much too dear to be economically viable.

Something has to be changed, we all agree. But it is difficult to mend something that has been in dire straits for decades albeit a number of reforms education institutions in Slovenia at all levels have experienced. What can teachers do? We should keep doing what we believe is good for our students: give them specific and clear feedback focused on possible paths for achieving improvement in order to reach certain learning goals. Convince them that an active brain is a better brain, that they are not stuck with the brain they were born with, that they should repeat and review what they have learnt. If our students don't hand in an assignment, we should notice, if they are not prepared for the lesson, we should care, if they do not grasp a concept, we should help. Often both teachers and students have to rethink and unlearn the old rules imposed on them by their teachers. Then, we have to learn new ones, which requires questioning old assumptions, challenging old paradigms, and relearning what is relevant for our jobs, careers and our life. Many of us do not possess any special talents, but we nevertheless have to try hard to be curious. I believe that having a hungry mind is a good thing, which is too often lost in the process of formal education, so teachers need to do their best to retain student's inquisitive and open minds. As a matter of fact what teachers should do is inform, inspire, surprise and delight their students, because what students also need is a fulfilling experience during the process of learning.

Even if you are not enthusiastic about the dual-process theories of cognition, you should return to Kahneman once again to say that undergraduate level education should perhaps focus more on teaching disciplined thinking, decision-making skills, principles of probability, choice

theory and statistics and learn how to approach problems methodically and avoid jumping to conclusions.

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