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THE ROLE OF AN ENTERPRISE CULTURE FOR RISK MANAGEMENT

Nowadays, the business environment is a highly changing one. The complexity rises in relation to economics, organisation, and technology. To be successful, each enterprise has to know and to manage its opportunities and risks. In this paper, we will focus on cultural risks related to management and leadership, with the notion to stay successful on the free market. According to Henry Ford, success arises when having exactly the capability that is asked for in the moment. Therefore, an enterprise has to be organised agile, called AOE. Agile enterprises have trust-based relationships with their customers and suppliers. Human productiveness is the essential resource for agile enterprises, not the technology, not the work, not the equipment. Agile enterprises handle changes and challenges in a dynamic and energetic fashion. In order to be able to cope with these new realities it is necessary for the employees to have a sense of safety and appreciation at work. There is a need to feel safe from workplace bullying or inadequate pressure. Communication and cooperation are the bases for a comfortable workspace – more so than corporate identity or financial/seasonal/promotional ways of motivation. Educating a specialist or finding a proper team member costs money and time, if you even find them on the market, so we have to avoid the departure of team members. The favoured culture within an enterprise has to eliminate bullying, gossiping, and other kinds of illicit behaviour – but also to establish teams that are diverse in capabilities and personalities to aid one another and respect everybody. We have to take into account that there won't be enough time to settle all details and changes in writing, nor to be angry if something is going differently than planned. To capture opportunities there is also the need to think about improvement continuously. All these necessities have to be configured for a long-time perspective. The main question is how we can support all these upcoming changes. In our paper we will discuss the content of the guidelines, the formation and changing processes to adapt guidelines, methods and techniques, the strategies of communication and the necessity for the members of the management to exemplify these values within their own life. At last, we will show the expected impacts on enterprises, on human beings and on society.

Introduction

It is not enough to recognise changes and risks correctly, but also necessary to decide how to act and react as written in (Kuhn – Voigt, 2010). Decisions have to be realized in real time. This provides a behaviour pattern. In conclusion we see that risk management doesn't only mean to identify, analyse (e.g. in regard to costs of

damage or probability of occurrence) and evaluate the risks as seen in (Auckenthaler – Gabathuler, 1997), Spedding – Rose, 2008). To counteract risks appropriately the responsibility and competence within the enterprise has to be confirmed (Kuhn 2010). KPMG-TERM (as has been shown Auckenthaler – Gabathuler, 1997) – distinguish between 3 levels: cultural risks, strategic risks and operational risks. Within an agile enterprise the cultural risks are minimized by introducing guidelines for the behaviour within and without the enterprise. So the enterprise has the capability to be quick, flexible, active and adaptable to the market if changes happen as defined in (<http://www.onpulson.de/lexikon/agilitaet/>). The guidelines are also called enterprise culture. This means (Hofstede, 2016) “Organisational Culture is defined as the way in which members of an organisation relate to each other, their work and the outside world in comparison to other organisations. The Dimensions enable a tangible alignment of Organisational Culture and Strategy“. In our paper we will discuss the content of the guidelines, the formation and changing processes to adapt guidelines, and give long-time orientation for staff-members.

Approach

To figure out the best possible individual enterprise culture, – in detail to form the behaviour of team members within the enterprise and to adapt the culture if there is a need, to obtain the result to minimize the risks and to augment the chances we choose this approach:

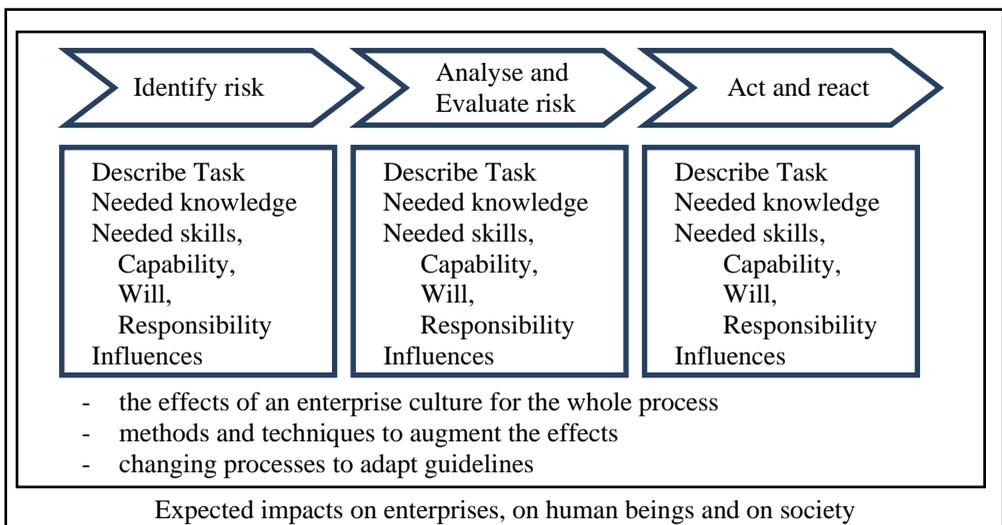


Figure 1: Methodology to see the effects of an enterprise culture for risk management

At first we will describe the tasks of each sub process of the risk management and the needed knowledge, which includes the needed skills, capability, will and responsibility. After this we discuss the influence of organisational culture. Then we describe the effects of an enterprise culture for the whole process, as well as methods and techniques to augment the effects concerning the enterprise culture and then, finally, the necessity of changing processes to sometimes adapt the guidelines, with a description of these changing processes themselves. At last, we will show the expected impacts on enterprises, on human beings and on society by having such enterprise culture as we propose. The steps of our approach are shown in figure 1.

Description of Sub Processes of Risk Management

The underlying definition of our approach for Risk Management is that it is a process separated in three sub processes as we have determined with the help of the Jacobson method (Balzert, 1998). Each sub process has a name and one start and end point. Our sub processes are called at first “Identify risk from first signals to description”, second “Analyse and evaluate risk from description to ultimate causes”, and thirdly “Act and React from causes list to establish measurements”. Now we describe each sub part of the Risk Management process in the aspect separation you have seen in fig.1.

Identify risk from first signals to description

This sub process can be divided in the tasks “Sensitization to recognize that something is going on”, “Finding out the rules of the talk about this detection”, “Description by the way or writing to somebody who will be concerned”, “To ensure the right steps for handling this identified risk in the future”. Therefore, the necessary knowledge for this sub process is knowing the desired strategies and future position on the market, about the ergonomic workplaces and interest to recognize technical possibilities to augment performance of the staff, knowledge of who the right contact person for a specific situation is, or perhaps to recognize the exigency to change his own handling, as well as social and psychological knowledge to recognize i.e. capacity overload or underload, no or not enough communication between staff, fatigue or boredom, necessity for further education. Skills: For the first step in this process there is no need for methodological competence. There is a need for a high personal competence with characteristics like personal responsibility, decision-making ability, and ability of self-reflection, creativity or motivation. But the mobilisation competence as well as the transfer competence are needed, too. This means in this case especially client orientation, the use of knowledge and information, the disposition to initiate changes. Thirdly, we need social competences

like empathy, the disposition to communicate or to cooperate. Capability: The person has to be sensible of how they can talk about the identified risk and to recognize in which way something has to be handled – privately or publicly, unofficially or officially, hidden or open, in writing or verbally. Will: Approach to support (depending on the culture) everybody’s freedom to say whatever they desire to help the economic wellbeing or social wellbeing. Also, there has to be the will to change and advance existing views. Sometimes it will be hard to survive conflicts. Responsibility: The responsibility is often handled in different ways: by the whole staff or only the management, by a special person in the role of a risk manager with the assignment to observe the environment or a group or a special department, having the responsibility to recognize the relevant changes. But there are necessarily many “sensors” and right interpretation sometimes happens on a visceral level. This cannot just be postulated but also has to be lived and supported by the right behaviour. Influences: If the Risk Management is integrated in the normal work, so that everybody will see beyond the end of one’s own nose. Everybody knows that their information is important for all. To be on fire for the job is another important feeling and has a wide influence on observing the surrounding environment and is therefore the first sensing element that there may be a risk or chance for the enterprise on the market (outside watching) or there may be a risk or chance for the workplaces (outside and inside watching) or there may be a risk or chance for persons (inside watching). To decide whether there is something wrong (or a chance) for the enterprise you need a description of strategies and future visions.

Analyse and evaluate risk

Now we start with the second sub process, called “Analyse and evaluate risk from description to ultimate causes”. Tasks realizing this sub process have to analyse the surrounding conditions of the risk described, and to classify expected or unexpected situations, then in the next step to choose the right analysing method, to appoint the appropriate people or groups as candidates for locating the exact problems for reduction, to use the right method or sometimes more than one – and finish the sub process with describing or jotting down the ultimate causes. Needed knowledge: To assert the effects of the enterprise’s future success you need knowledge of methods for problem analysis, like fish-bone techniques, Data Mining, statistics or scenario techniques. To do this, the person will also take into account some strategic parameters, as well as the influence of behaviour inside or outside the company. To find out the effected tasks and roles within an enterprise and to list the ultimate causes, you have to know much about the organisation and the personalities of the enterprise (as seen in Mullins, 2007). Skills: To execute this sub process, you will need of many competences, firstly expertise in mathematics, in strategic

management, in the processes of enterprise and in human resources management. In addition there is the necessity to sum up the future situation as well. So you have to be able to develop strategies to analyse, to communicate. Skills from sociology or psychology are welcome. Capability: The most important capabilities are embodied in analytical skills and operating with empathy. Will: If you have a motivation to help your enterprise you will work in better ways and will find more possibilities in both directions – for best case and worst case by analysing the situation. Responsibility: In most cases we find out that there are specialists in addition to the leadership. Influences: In order to get the best result you have to be creative and apply the methods written above. Also please deploy experts.

Act and React

Our third sub process is “Act and React from causes list to establish measurements”. Within this sub process are the following tasks: To think about measurements, to communicate the necessity, to decide the actions, to prioritize and to adapt a catalogue with measurements, to control the effects and to make sure that all of this will happen in the best way for the enterprise. This may mean to influence the behaviour of people inside or outside of the company. Needed Knowledge: The first step is using and exploiting the portfolio analyses, SWOT analyses or other instruments of business economics. Also, you need knowledge in informatics, experience in change management as well as in coaching. To support the change process you also need knowledge in human resource management, in controlling, as well as in project management, as has been shown in (Klimmer, M. 2016, p. 230 ff). Skills like the business process model and Notation (BPMN), technological support by workflow management systems (WFMS) as a process oriented approach, methods in change management like systemic organisation are necessary, as well as strategic management to prioritise the measurements. The skills concerning the personal competence are most important to own individual responsibility, decision-making ability, creativity, motivation and diligence. In order to realize the ideas materialized in measurements, the following activities- and implementation oriented competences are necessary: capability to analyse, capability to judge, conventional capability, client orientation, but also the use of information, capability of organisation, capability of problem-solving, if necessary also readiness to assume a risk, initialisation and fulfilling the determined changes. Capability: Social competences like empathy, communication skills, capacity for teamwork, willingness to cooperate, capacity to negotiate and reliability are requirements to handle this sub process. Will: The motivation and willingness to help the company is crucial to find the best measurements catalogue. Only exemplifying an orientation towards the future (like visions and guidelines), as well as the entries culture in

addition to diagnosing problems the sustainability of an enterprise will be given. Responsibility: In order to influence and to change processes and human resources you need respect. This may be based on your position in the company, but also it is dependent on your personality. Influences: The agreement with all actors, watching the problems, recognizing the necessity of the chosen measurements, is very important to be successfully. Also, internal or external change agents to aid the staff members affected by changes will be helpful.

Effects of an enterprise culture for the whole risk management process

Before we can discuss the effects an enterprise culture for the whole risk management process can have, we will start with a description of our understanding of an enterprise culture. We follow the definition of an enterprise culture seen in (Hofstede, 2016): “Organisational Culture is defined as the way in which members of an organisation relate to each other, their work and the outside world in comparison to other organisations. The Dimensions enable a tangible alignment of Organisational Culture and Strategy. The term culture refers to the typical way of behaving within an organisation or in society as a whole. An organisation therefore with an enterprise culture is one where people are imaginative and creative, rather than being reluctant to take risks” And in (businesscasestudies, 2016) we found this description: “An enterprise culture is made up of enterprising people who are prepared to challenge existing ways of doing things, and to come up with new ideas and solutions to the benefit of society as a whole. The term ‘thinking out of the box’ refers to being able to think beyond the straightjacket of existing ways of tackling problems or arranging activities. It requires some form of original thinking.” There exist different cultural models like the Organisational Cultural Model (also called Hofstede’s Multifocus Model), 3-levels-of-organizational-culture from (Schein, 2013). In (Mullins, 2007, p. 808) we found a contrary definition of an organisational culture as “the collection of traditional values, policies, beliefs and attitudes that constitute a pervasive context for everything we do and think in an organisation.” We don’t think that this is the right understanding in view of organisation change. It is rather the need and means to seek for a better way of cooperation with the focus on speed and not to having collection of traditional values. As we have considered in our risk management process shown before, all these terms – creativity, arranging activities – are important aspects of personality in the whole staff. Guidelines are to be defined and to be communicated to achieve all of what we have shown above. The guidelines should be considered in every situation, private and professional and not only written on paper, not only by management, devised in a hidden corner. Rather, it is necessary to work together on the guidelines. So not the rites, ceremonies, organizational myths as seen in (Schein, 2013) are the triggers for a

culture to support a risk management procedure but the organizational values expressed through “unwritten rules of the road” as well as through explicit description taking into account the 4 Core Cultures: Control, Collaboration, Competence, Cultivation from (Schein, 2004), (Schneider, 2000) or the six dimensions from (Hofsted, 2016): “Means-oriented vs. Goal-oriented, Internally driven vs. Externally driven, Easy going work discipline vs. Strict work discipline, Local vs. Professional, Open system vs. Closed system, Employee-oriented vs. Work-oriented, Degree of acceptance of leadership style, Degree of identification with your organization”. With the values of these dimensions you can achieve the needed agility. The less control, self-organized teams, skills and qualification, a lot of confidence, to talk things out as well as a familiar atmosphere are the most promising values here (Schneider 2000). So we chose a mix between collaborative und cultivation cultures, whereat the cultivation culture predominates. By acting in such away the effect will be that staff members are interacting more trustfully. They have a high responsibility and they decide by themselves what to do. The authorities arise from the competences. That’s why everybody respects the leadership. The leader is like a mentor, he motivates and supports the staff, he is seeking for conflict resolutions and he clears the way for changes. So the effects for the risk management are that the procedure advances in an open atmosphere, and the decisions are made corporately (Agile Unternehmenskultur, 2016). Likewise, (Beedle, 2015), emphasized on the following characteristics of a truly agile organization: “Management pyramid is inverted, greater liberty and freedom to accomplish the task at hand, constant learning, knowledge creation and knowledge sharing, a more enjoyable and humane work environment, a hyper-productive cooperative work mode, emergent planning, architecture and requirements, new values that generate a cooperative culture” and also he sees the augmentation of the quality of life. Mike Cottmeyer suggested a list of patterns that he has observed across organizations, which are essential for success, according to Mike Beedle (see more in characteristics-agile, 2011) “humanity pays”. So we conclude that such an enterprise culture is necessary for the risk management process described above.

Methods and techniques to enhance the effects

As we have shown the effects of an enterprise culture are capable to improve the success of the risk management process. For increasing the effects, we have found in (Schein, 2004) some methods and techniques, and special methods for the strategies of communication in (Schneider 2000),(Happ, et al., 2015),(Drucker, 2016):. As we have considered we want to concentrate on process changes and the risks concerning these. Many staff members are involved. Shared projects across all teams for changing company processes are introduced. Organisation of the risk management

process will be established similar as in Scrum, with one manager promoted by all employees, authorities remain in the background during prioritization in phase 3 of our risk management process. The staff is not only so motivated, but also on fire for their company. We understand brand management as to giving everything at work, while feeling exceptionally well by doing so. Supporting factors are as follows, seen in (kriterien-guter-arbeitsplatz, 2016), wohlfuhl-faktoren, 2016): Comprehensive information about goals and the accruing tasks, information about the relevance of internal and external contact- and relationship situations, development of acceptance in the teams, establishing a frame of relations. With the help of personal training the education of psychosocial competences will be enforced with the goal to have relationships with minimal conflict. Also there is no need to feign to be somebody you're not. The personal management facilitates the staff members and doesn't ignore the psychical constitution. The personal interaction culture is essential for the enterprise. Without interaction no feedback is possible. As a result, the needed personal culture is working and handling issues without anger, uncertainty or beeriness. The biggest obstacle in the modern business environment is the slowly ever increasing pressure either self-inflicted or deriving from bad management. In addition we have found (Accountants for business, 2012) that decisions should not be based upon the personal interests of the decision maker. In addition, it is necessary to give people the means to accurately access the own capabilities, allowing them to act in a self-confident fashion. Only then we are capable to rapidly respond to unexpected challenges, events, and opportunities. Risk friendly people are always willing to learn, no matter what they need to take advantage of new opportunities. The offensive change is the essential core of any agile enterprise. So we have a look at what is named in their culture. Here we find the need for trust-based relationships with their customers and suppliers. Agile enterprises are central human productive resources, not the technology, not the work, not the equipment. The necessity of having a good feeling during the work is given. There is a need to have a home, a family, to feel safe, no workplace bullying and no pressure. Communication and cooperation are necessary – we are seeking a feeling as comfortable as a home, more than corporate identity, more than monetary stimulation, or other secondary motivations like more holidays, better support of family. And also it is necessary to concentrate different capabilities in one team, to aid one another and respect everybody. Today there is no time to be angry if something is going awry. This is the subject of personal management. Bonds between company and employee can be created on multiple levels, enabling a trustful, responsible and with the feeling of freedom of one's own initiative entrusted work environment. In conclusion we have found out many possibilities to augment the effects of risk management by leader stile, clear communication of vision and strategies, both being kept volatile. Common decisions on chances and

risks and follow up measurements to realize these, transparency of internal and external communication flow, respect, common values, self-oriented groups with high responsibility, waiving of micromanagement are the foundations for a successful risk management.

Discussion

In order to initialize the risk process as well as its self-changing faculties you need personal competence, an appreciating and save workplace and a well-functioning Communication Flow.

Changing processes to adapt guidelines

Take into account that changes are necessary in the enterprise culture, albeit not as often as the environment will change. If you monitor the risk management and you determine modifications for it, it might be that instead of merely improving the tasks a rectification of the risk culture itself is useful. Sometimes you can interpret the risk response of the management to make better judgements concerning in tolerance and risk appetite. A risk response may be avoiding, accepting, reducing, or sharing risk as seen in (Happ, et al, 2015). As we have shown, we can establish within enterprise culture that the management is backing every team member all the way. That's why a control of the enterprise culture is also necessary to ensure the best risk response is carried out for each case.

An appreciating and save workplace

If you find these conditions at your workplace: To work without anger or fear, to feel at home, no overload or upload, then you can work with pleasure. With the intent to uphold this feeling you may be more poised to avoid or reduce risk or if necessary to take a chance or risk. In addition you gain ground for advancement of each, and with this also learn the handling of chaos instead of only following rules exactly. From this it follows that the well feeling cannot be decreed but must be lived.

Communication Flow

The right Communication Flow as seen (Kuhn, 2001) is essential to find competent help in an unknown situation or to find the right and actual information to decide in real time how you to act or to react. But the handling will base on the vision and the plans of an enterprise. The construction of measurements and the

realisation will follow the enterprise culture as well as the inclusion of the environment. This means to include all points of view dealing with business plans and the orientation towards relationships rather than transactions for controlling the changes. Easy adaptation to new situations is only possible by the team itself if the environment is considered and contains decision criteria for the strategy, measures, situations and possible behaviour. The support by the information technology minimizes the problems when coordinating changing processes. Every member of the team gets to know about occurring changes at the same time and their attention is drawn to changes in the certain processes. In (Happ, et al., 2015) we speak about the necessity of common understanding for changes and an open, fair and cooperative communication, which is the most important way of interaction. We deal with the direct and personal way of communication as a form of socialisation. Also the transportation and the way of how the communication acts within an enterprise are dependent on the enterprise culture (Happ, et al., 2015, p. 102 ff.). There may be a communication flow between chief and team members in direct or indirect way, open or hidden, restrictive or cooperative. The Manager can determine time and date and room, he may give order to come to his room at a certain time or he always lends his ear to the teams, he gives actual information to the team or not. All of this should be fixed in the enterprise culture.

Personal competence

As we have shown above we need as personal competences the capability to analyse, to evaluate, to create concepts, to organise, all these in the sense of enterprise and oriented towards clients. Also the use of knowledge and information, the capability to solve problems, the capability to take on risk as well as the will to initialize and to realize changes are necessary. The disposition to cooperate, to communicate and to be negotiable are the conditions to survive conflicts. When recruiting staff you have to look to these characteristics.

Expected impacts on enterprises, on human beings and on society

All processes are designed in the sense of enterprise. The staff is more than satisfied, it is happy, and willing to risk something if necessary. The enterprise culture will grow up to a control instrument without forces to obey. Therefore, the impact on the enterprise of having an enterprise culture is a participative change management within the company with shared projects across all teams for changing company processes. A special aspect concerning the impact on human beings is that employees decide how far they want to participate. And last but not least the impact on society is happiness and as a result an improved health.

Conclusion

To work within an enterprise all of the involved people have to help to fight against risks and to seize chances. This is an iterative process and not strictly a serial process. One task can influence another.

Summary and outlook

By helping the staff to feel at home – without any anxiety – when working the company will be able to execute strategy faster, with more flexibility and adaptability and to stop the loss of staff as well as to lose the readiness to assume risk. Culture design is a very important factor to influence these. As we have shown psychological and sociological knowledge is necessary for the leadership. Not only the functional qualification but also the personalities of team members are essential for risk management. Cooperation, communication and trust are common values. Mutual support and mutual acceptance are alive. Success is separated in hard and soft factors. Hard factors are economical key figures in relation to quantity or quality: Revenues, costs, failure rate, output, percentage of morbidity in staff, and fluctuation rate. Low factors are criteria of satisfaction and working atmosphere: motivation, acceptance, behaviour, fairness, engagement. The soft success factors are the crucial factors for risk management.

References

- Auckenthaler, C. – Gabathuler J. (1997): *Gedanken zum Konzept eines Total Enterprise Wide Risk Management (TERM)*, University of Zürich.
- Balzert, H.(1998): *Softwaremanagement, Software-Qualitätssicherung, Unternehmensmodellierung*. Spektrum Akademischer Verlag, Heidelberg.
- Beedle, M. (2015): humanity pays, *Enterprise Scrum Executive Summary*, Version 2.1.
- Drucker, P. (2016): Strategy or Culture: Which Is More Important? – *Strategy+Business*, <http://www.strategy-business.com/blog/Strategy-or-Culture-Which-Is-More-Important?gko=26c64>, called at 09.03.2016.
- Happ, C. – Kuhn, E. – Maier, E. – Schladt, O. (2015): *Unternehmenskommunikation*, Verlag Die Blechschachtel Edition Glasperle.
- Hofstede, G. (2016): *Organisational Culture*, <http://geert-hofstede.com/organisational-culture.html>, called at 09.03.2016.
- Klimmer, M. (2016): *Unternehmensorganisation*, 4. Auflage, nwb StudiumNWB Verlag Henne.
- Kuhn, E. (2001): *Workflowunterstützung robuster Unternehmen*, Akad.Verlag Berlin.

- Kuhn, E. (2010): Methodik und IT-Unterstützung zur Optimierung der Anpassbarkeit von Geschäftsprozessen an neue Rahmenbedingungen, proceedings WIWITA 2010, 7. Wismarer Wirtschaftsinformatik-Tage, Hochschule Wismar, Juni 2010, *Wismarer Diskussionspapiere, Sonderheft 01/2010*, Hochschule Wismar.
- Kuhn, E. – Voigt, W. (2010): Influences of Decision under Uncertain Information on IT-Management, proceedings of 2nd iNTeg-Risk Conference: *New Technologies & Emerging Risks Annual Topic: Dealing with multiple and interconnected emerging risks*, European Virtual Institute for Integrated Risk Management Stuttgart.
- Mullins, L. J. (2007): *Management and organisational behaviour*, eighth edition, mateo cromo artes graficas, Spain, FT, Prentice Hall.
- N. N. accountants_business (2012): Accountants for business Rules for risk management: culture, behaviour and the role of accountants, 2012 www.accaglobal.com/accountants_business, called at 09.03.2016..
- N. N. Agility (2016): <http://www.onpulsion.de/lexikon/agilitaet/> called at 09.03.2016.
- N. N. Agile Unternehmenskultur (2016): <http://www.aoe.com/de/services/agile-unternehmenskultur.html>, called at 09.03.2016.
- N. N. Businesscasestudies (2016): <http://businesscasestudies.co.uk/business-theory/strategy/enterprise-culture.html> called at 09.03.2016.
- N. N. characteristics-agile (2011): <http://www.infoq.com/news/2011/01/characteristics-agile-org> called at 09.03.2016.
- N. N. kriterien-guter-arbeitsplatz (2016): <http://www.absolventa.de/karriereguide/tipps/kriterien-guter-arbeitsplatz> called at 09.03.2016.
- N. N. wohlfuhl-faktoren (2016): <http://www.sonja-mannhardt.de/die-wichtigsten-wohlfuhl-faktoren-am-arbeitsplatz/> called at 09.03.2016.
- Schein, E. H. (2004): *Organizational Culture and Leadership, Third Edition*. New York: Wiley Publishers.
- Schein, E. (2013): <http://artsfwd.org/3-levels-of-organizational-culture/> called at 09.03.2016.
- Schneider, W. (2000): *The Reengineering Alternative*, McGraw-Hill Companies.
- Spedding, L. – Rose, A. (2008): *Business Risk Management Handbook, a sustainable approach*, CIMA Publishing – Elsevier, Amsterdam. Boston, Heidelberg, London, New York, Oxford, Paris, San Diego, San Francisco, Singapore, Sydney, Tokyo.



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