



ASSESSMENT CRITERIA OF PROJECT RISK MANAGEMENT IN LANGUAGE TRANSLATION SERVICE COMPANIES

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Received 31 January 2016; accepted 11 February 2017

Abstract. Risk management in translation service companies is an effective, integrative, proactive way to handle risk. Such companies must integrate defined long-term risk management into their strategies, decision-making, and daily processes; top-management must fully support the risk management system; risk factors, management benefits, and processes require articulation amongst employees; job roles, responsibilities, performance evaluation, and motivation systems must incorporate risk management practices. Risk management in project-based companies might also account for changing clients' requirements, tight deadlines and budgets, different participants, and high IT use. However, this requires identifying the critical success factors. The research method builds upon the analysis and systemization of the scientific literature – from risk management, emphasizing the underlying strategic approach and effective management, to deriving the focal-points of effective risk management of translation projects. This work unifies the gathered knowledge and results in a conceptual model that integrates the specific assessment criteria for project risk management in translation companies – process definiteness and versatility, responsibility definiteness, top-management involvement, and risk management communication. The operationalisation of the model may lead to the companies' critical success performance. To the best of our knowledge, this work is one of the first contributions addressing risk management assessment criteria in this industry.

Keywords: risk management, assessment criteria, language translation service companies, project risk management.

JEL Classification: D81, L84, G32.

Introduction

The relevance of risk management to the success of companies' daily operations is widely accepted. If properly managing risks, companies may ensure more stable activity and better financial results (Gates 2006; Gordon *et al.* 2003; Nielson *et al.* 2005; Lam 2003; Nocco, Stulz 2006, as cited in Zhao *et al.* 2013; Wieczorek-Kosmala 2014; Mirela 2012; Ingley, van

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der Walt 2008). In the case of project management, holistic risk management helps ensuring that projects are completed in time, within budget and according to the clients' quality requirements (Zwikael, Ahn 2011; Zou *et al.* 2010; Datta, Mukherjee 2001; Toader *et al.* 2010). Considering the benefits of risk management and the ever-stricter requirements of the business environment, capabilities to manage risk properly have become crucial.

Project risk management as a complex system, which much more than a simple activity involving a lonely translator behind his stack of dictionaries (Sere 2015), is analysed in the scientific literature mainly from the view of other industries, among others, rather extensively from the view of the construction industry (Zeynalian *et al.* 2013; Spalek 2014; Zhao *et al.* 2013; Choudhry, Iqbal 2013). Similar to other industries, language related projects involve a certain level of uncertainties and call for risk management; however, risk management in such projects is typically given only a low level of attention, as opposed to e.g. healthcare, manufacturing or finance (Dunne 2013). In the language industry, projects are the norm of the companies' daily activities and usually budge in terms of scope and complexity (Matis 2014). In particular, the existing risk management research in the language translation industry focuses, to a great extent, on translator's risk management, including translation and language problems that translators face rather than translation project management processes and their optimization. To be more specific, it touches translation *per se*, i.e. translation risk management issues and strategies such as translator decision-making in terms of risk management (Pym 2015), translator's risk management as a theoretical framework for analysing translation strategies used in news and journalism-like sector (Matsushita 2014), and similar ones. Apart from the fact that the few publications and blogs addressing this topic are similar in the sense that the production processes described correspond, more or less, to the standard project management processes described in "A Guide to the Project Management Body of Knowledge (PMBOK guide)" (2013), or short – PMBOK, the available literature covering project management in translation is still scarce, as highlighted by Dunne (2013) "the near-total absence of literature and training on risk management specific to translation and localization projects", and the application of project management techniques to the field of translation needs to be studied in depth (Sere 2015). Due to the specifics of translation companies and the scarcity of literature about the related translation project risk management, it is highly desirable to analyse the peculiarities of risk management and factors for its effectiveness applied to translation projects.

The *problem* here is formulated as "How to define effective project risk management in language translation service companies?" with the *object* of project risk management criteria that reflect the most advanced practices in these companies and with the *goal* to identify those criteria and how they ensure the project results. The *research method* consists of the analysis and systemization of the scientific literature. This results in a conceptual model of the assessment criteria for project risk management in language translation companies. *Research limitations*: the current research study does not focus on or include an analysis of translation problems from a linguistic point of view *per se*, i.e. it does not cover risks that may be caused by translation and linguistics-caused errors and misunderstandings, their management and assessment of their management.

1. The essence and contents of risk and risk management concepts

The traditional concept of risk is mostly associated with probability theory. Risk may be perceived as an expected value (Aven 2012), the probability that a certain event will happen or not (Aven, Krohn 2014), or an indicator of the probability of occurrence of the negative event and its effects (Aven 2013). Recently, researchers broaden such a perception to the concept of uncertainty and state that uncertainties should be approached from different perspectives (Aven 2013). Aven (2012) suggests that the concept of probability, or the expected value, could be used as one of the indices for risk assessment, but one must seek a more detailed picture of each probability distribution.

Although researchers agree that a purely probabilistic risk assessment is too narrow for a modern society, there are no conclusions on a universal definition of risk. Aven (2012) provides examples of how international organizations treat risk (e.g., ISO standard defines risk as the effect of uncertainty on the goals). Other authors provide indefinite ideas: risk could be associated with the probability of uncertain events (Gökmen 2014), or openly admit risk being a difficult, complex and multi-dimensional phenomenon (Choudhry, Iqbal 2013). Aven (2012) interchangeably uses the concepts of risk and uncertainty and provides “uncertainty representation” as a goal of risk assessment. A similar view of risk as uncertainty is also provided by other researchers. Barkhuizen *et al.* (2012) examine risks in the context of innovation and name risk-taking and risk management essential elements to realize innovations. Throughout the article, “managing uncertainty” is the focus and uncertainty is presented as an integral part of risk. It can be argued that there are many different synonyms to define risk; it would be logical to approach risk as a broad phenomenon, encompassing different perspectives.

Most commonly, risk is assessed from a negative perspective, emphasizing possible damage or negative impact of the unknown, uncertain events on business and its actors. Bierc (2003) argues that risk is traditionally seen as something to be avoided or mitigated (as mentioned in Lai *et al.* 2011). The probabilistic perspective also emphasizes the probable occurrence of negative events or the negative effect of events (Aven 2013).

Risk can be also defined as an opportunity or a chance. It can be any event that will have an impact (avoiding to indicate its direction) on goals and their attainment (Zou *et al.* 2010). Logically, unpredictable events should also include the possibility of a positive outcome. Risk itself could be perceived negatively or as uncertainty and unpredictability; however, it is often stressed that one may benefit from uncertain events if risk is managed properly. Meagher and O’Neil (2000) treat opportunities not as a positive side of risk but as a separate phenomenon; they argue that effective risk management has to integrate both possible results and utilize them in order to develop the businesses’ competitive advantage (as cited in Lai *et al.* 2011). One may also argue that risk itself is neither positive nor negative; it is the outcome of the collision between an organization and the risk factors and uncertainties in its surrounding environment that can have positive or negative results (Sobel, Reding 2004, as cited in Ingley, van der Walt 2008). Companies should seek to minimize negative potential consequences and at the same time to maximize potential positive results (Zou *et al.* 2010). Thus, it is possible to have a risk duality approach when

risk factors include positive and negative potential events, as well as a risk management duality approach, whereby properly managing risk helps to both mitigate its negative consequences and achieve positive results.

In summary, it may be concluded that there exists a multi-dimensional approach to risk. Table 1 provides a simplified overview of risk from a traditional, probabilistic assessment to a broader one that recognizes the multi-dimensionality of risk factors and possible linkage between risk and other business areas of decision making.

Table 1. Comparison of different risk concepts

Author, year	Risk concept	Comment
Aven 2012	Expected value	Based on probability theory
Aven, Krohn 2014; Aven 2013	Probability of event occurring; combination of probability and (negative) outcomes	Based on probability theory
Aven 2012; Aven 2013	Uncertainty, uncertain events	Probability theory as one of many risk perception and assessment methods
Barkhuizen <i>et al.</i> 2012	Uncertainties (and their management)	In the context of innovations, undertaking uncertainties as part of innovation creation; undertaking uncertain results
Zou <i>et al.</i> 2010	Events that may have an impact on the goals	Direction of the impact of events is not indicated – positive and negative impact is possible – risk duality is admitted
Meagher, O'Neil 2000 (as cited in Lai <i>et al.</i> 2011)	Risks and opportunities exist in parallel	Realizing opportunities as a result of effective risk management
Sobel, Reding 2004 (as cited in Ingley, van der Walt 2008)	Positive and negative results of risk factors	Risk is not positive or negative; outcomes of the encounter between a company and the factors of the environment may be positive or negative

The definitions of risk management are less diverse; it is primarily understood as a process. This concept may vary depending on the level of detail and the context in which its goal and environment are evaluated. Raber (2003, as cited in Ingley, van der Walt 2008) broadens the description of risk management (in a sense of objectives and stake-holders) and identifies it as a systematic process for controlling the company's position in terms of the necessary risk to achieve the goals without harming and transgressing public interest, human safety, environmental requirements and laws. Mirela (2012) refers to ISO 31000, 2009 standard and describes risk management as a cyclic five stage process, which in a real organization's life merge into one continuous and consistent activity. Zou *et al.* (2010) distinguish risk identification, risk analysis, risk response & communication, monitoring, review and learning but present them as typical risk management processes, while the latter is defined as culture, processes and structures, the goal of which is to utilize opportunities while properly managing adverse events and their consequences.

The process of risk management is multistage. There are different ways how sub-processes may be distinguished, varying from three up to six or more steps in the overall process.

The situation is impeded by the use of synonyms, such as risk “evaluation” and “assessment”, both of which may imply the same. It is also confusing to distinguish between overall risk management process and risk management as its part because some authors differently use the term “risk management” (Haimes 2012). In the model offered by Linacre *et al.* (2003), risk management as a process is called risk analysis; the strategy of risk analysis is further divided into the stages of risk assessment, management and communication. Barkhuizen *et al.* (2012) provide risk assessment, risk identification, risk analysis, risk evaluation, risk treatment, and risk monitoring and review as the processes of risk management. The above-mentioned ISO standard referred to by Mirela (2012) distinguishes risk factors analysis (a broader analysis of the organizational environment is emphasized), risk identification, risk hierarchy & assessment, establishment of risk response strategies, risk monitoring & control. The stages of risk management process are closely interrelated since, with a constant emergence of new information, the risk assessment cycle repeats itself, so one could make more informed decisions (Linacre *et al.* 2003). Thus, risk management is a steady, continuous, usually cycle-based process. In short, risk management, whatever the number of stages it encompasses process-wise, must ensure that the company continuously analyses the environment to monitor potential risk factors, assesses them, responds and controls the situation. Other risk management activities, such as risk communication, might reflect a more advanced risk management and a more mature recognition of risk in the company. Different and alike authors’ interpretations of risk management are presented in Table 2.

It can be concluded that the main contradictions exist in the fundamental level of risk management concept. It is not universally agreed what terms should be used to define what activities, nor it is agreed on the interrelations of activities and their dependencies. While its understanding is getting complex (when risk management is discussed in the wider context of organization, goals, culture or society), definitions of risk management processes

Table 2. Commonalities and contradictions in the definitions of risk management concept

Author, year	Concept of risk management	Comment
Raber 2003, as cited in Ingley, van der Walt 2008; Mirela 2012; Haimes 2012; Linacre <i>et al.</i> 2003; Barkhuizen <i>et al.</i> 2012	Risk management as a process	Risk management is based on a procedural, systematic structure, comprised of certain activities. Contradictions: there exist different explanations of terms, their interrelations and dependence.
Zou <i>et al.</i> 2010	Risk management as a culture	Risk management is perceived as the basis of organizational culture and structure; risk identification or assessment is the expression or empowerment of that culture, part of the process, one of the means.
Zou <i>et al.</i> 2010	Risk management as a means to achieve goals	Risk management is perceived as embedded in a wider context, as a means to realize organizational goals.
Raber 2003, as cited in Ingley, van der Walt 2008; Mirela 2012; Linacre <i>et al.</i> 2003	Risk management as a cyclic, steady, continuous activity	The continuity of risk management, as an organizational activity, is emphasized, irrelevant of how it is performed.

or stages become less important because the focus is placed on the overall benefits that it is capable of bringing, such as the realization of opportunities or organizational goals. Risk management can further be defined as a continuous assessment and control of external and internal factors that have a certain probability to occur and could have either a negative or a positive impact, that are based on a developed process, with the purpose of achieving organizational effectiveness and goals.

2. The contents of strategic risk management approach

The approach towards risk has changed dramatically over time; the methods for risk assessment and management have improved. Eventually, the dual approach to risk management has developed – a traditional one regards risk as an isolated managerial area, and a strategic one defines risk management as a business area that has strategic importance to the business viability. Both approaches treat risk management as a process but differ in their goals and objects of management. The traditional one perceives it as a process designed to identify, assess and manage the negative impact of risk; probabilities are used to determine the frequency of potential detrimental event and its loss level (Wieczorek-Kosmala 2014).

The strategic approach treats risk as a comprehensive phenomenon and stresses the possible positive effect of risk factors. Some authors incorporate the possibility of positive results in the concept of risk, and use the risk duality as a distinctive feature between the traditional and strategic approaches (Wieczorek-Kosmala 2014). Risk management is seen as a conscious aspiration to maximize the benefits (Zou *et al.* 2010); it is considered appropriate when business participants strive to evaluate the overall company's picture, not only to find ways how to avoid possible trouble, but also to take advantage of opportunities (Aven, Krohn 2014); the purpose of proper risk management is to utilize the opportunities, that exist in parallel with risk factors, to the advantage of business (Gökmen 2014). Risk management should be integrated into other business processes, help the organization grow and develop (Wieczorek-Kosmala 2014). Lai *et al.* (2011) contrast isolated and integrated risk management and claim that risk management should be proactive and exhaustive, associated with the processes, business operations and strategy (holistic view). Risk management must be a part of the strategic decision making which should include all organizational layers and elements.

The enterprise risk management (ERM) model is discussed as a separate strategic risk management concept. Chapman (2003) defines it as a process that identifies and analyses risks on a level of a company (as mentioned in Lai *et al.* 2011). This is an integrated approach, which aims to create such a corporate structure and discipline so that its resources – people, finance, technology, knowledge and skills, are properly used in the identification and evaluation of the uncertainties surrounding the company (Meagher, O'Neil 2000, as cited in Lai *et al.* 2011). There is a transition from the traditional assessment of companies' direct operational hazards to the strategic assessment of factors influencing business success and viability (Stokes 2004, as cited in Lai *et al.* 2011). Risk assessment is integrated into the overall strategy and processes of the organization. Risk management must seek for a more flexible and more universal assessment of risks that may occur in daily business operations.

ERM helps assess risks arising in different business areas and combines them with the overall company strategy. Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004) emphasizes that risk management must help ensure that the company will take only so much risk (will define so called risk appetite, or the acceptable level of risk), so as not to undermine the realization of organizational objectives (as cited in Zhao *et al.* 2013). It is clear that in risk management, the role of not only the company's management in setting up and managing risks but also of all other employees is essential since risk management must operate across the enterprise.

Another concept associated with strategic risk management approach is risk management maturity model. This is a way to evaluate risk management practices in a company. It is based on the assumption that risk management could be divided into several levels depending on how much the company is advanced in terms of risk management and how much risk management practices are integrated into the overall company strategy and daily operations; thus, the risk maturity models are based on a strategic, or holistic, approach to risk management (Wieczorek-Kosmala 2014). This tool enables the company to practically assess the development and effectiveness of its risk management process (Zhao *et al.* 2013). Risk maturity models help monitor the implementation of risk management system, determine the stage the company is at in a given moment and ways to achieve the target, or the exemplary risk management process and practices.

The risk maturity models are based on a generally acceptable assessment of risk management practices and methods used in the company against predefined benchmarks. All risk maturity models divide main risk management practices into several levels according to their maturity and assign to each level certain competencies, which the company must develop in order to reach a certain level of maturity. A matrix form representation of risk maturity models is widely used but different authors offer different risk maturity levels and their corresponding competencies. Thanks to its elemental structure, the models encourage the company to assess the components of its risk management and to identify the strong and weak company's links (Zou *et al.* 2010).

The idea bringing all risk maturity models together is that in the lowest level, the efforts to manage risks are very minimal or void. The need for managing risk is not identified and the company does not know or is not interested in the benefits of the proactive risk management (Wieczorek-Kosmala 2014). Risk management actions are driven by circumstances and individual decisions rather than a formally established structured system. In the highest levels of risk maturity, risk management is systematic, documented, deliberately provided with resources and managerial attention. The need for managing risk is universally recognized, its (in)direct benefits are identified and communicated, and the value of active risk management is measured. Top management deliberately seeks to incorporate risk management into the decision-making process and overall strategy; risk-based business processes are designed and developed and the competitive advantage of risk management is recognized (Wieczorek-Kosmala 2014). Organizational culture is created, employees are aware of the importance of risk management and their potential contribution. In other words, risk management becomes a natural part of everyday business operations.

It could be concluded that the strategic approach to risk dominates the traditional one. The strategic approach is applied to other risk management concepts, which indicates its predominance (see Table 3).

Table 3. Predominance of strategic approach towards risk

Author, year	Dominance of strategic approach	Comment
Wieczorek-Kosmala 2014; Zou <i>et al.</i> 2010; Aven, Krohn 2014; Gökmen 2014; Lai <i>et al.</i> 2011	Replacement of traditional approach with a strategic one	The focus is transferred from isolated risk assessment to holistic approach towards risk mitigation and opportunity utilization as a common goal while managing the enterprise with regards to environment.
Chapman 2003, as mentioned in Lai <i>et al.</i> 2011; Meagher, O'Neil 2000, as cited in Lai <i>et al.</i> 2011; Stokes 2004, as cited in Lai <i>et al.</i> 2011; COSO 2004, as cited in Zhao <i>et al.</i> 2013	Strategic approach as ERM implementation concept	ERM is based on assumptions of a strategic approach to risk. ERM and strategic risk management could be understood as synonyms emphasizing organization as risk management unit from two perspectives: it must encompass the whole enterprise and its environment, not a separate department or area; every member of an enterprise could and should be a risk manager.
Wieczorek-Kosmala 2014; Zhao <i>et al.</i> 2013; Zou <i>et al.</i> 2010	Strategic approach as the basis of a company's risk management maturity model	Risk management maturity in the enterprise could be measured by many criteria but they all are based on the same idea that risks managed strategically ensure better performance results.

Strategic risk management is strongly entrenched as an endorsed response to the factors surrounding companies' activities. The holism of risk management is universally recognized. It is therefore worthy to review the benefits of strategic risk management that include development of a competitive advantage, improving companies' performance (profitability, better informed decisions) (Gates 2006; Gordon *et al.* 2003; Nielson *et al.* 2005; Lam 2003; Nocco, Stulz 2006, as cited in Zhao *et al.* 2013), improving the processes of value creation, reducing the tax burden and cash flow volatility (Wieczorek-Kosmala 2014), reducing companies' volatility and vulnerability in the often changing and dynamic market environment (Mirela 2012).

3. Constituents of effective risk management

In the scientific literature and in practice, there exist models, guidelines and standards as to how risk management should be carried out in a company. However, it is difficult to offer a common, standardized and universally applicable system since risk management depends on the business model, industry and specifics of business operations, market situation and conditions. Extensive research has been conducted to identify common features and elements of effective risk management. Yaraghi and Langhe (2011) calls them critical success factors – areas where it is necessary to achieve good results in order to attain organization's objectives (Rockart 1982, as cited in Yaraghi, Langhe 2011). In their study, the authors approach critical success factors from three perspectives of implementation and maintenance of risk management system, namely readiness, implementation, and administration.

Their study revealed that in all of the three stages, strategy is a key factor (measured by arithmetic means and t-test, but without factor analysis). A company should have a clear

risk management strategy, which in turn must be integrated into the overall company's strategy. As a fundamental element to ensure the functioning of effective risk management practices, a company must have a well-functioning internal system and defined internal procedures that would allow determining (both risk management and common) goals, mission and following the company's progress with respect to the achievement of objectives (Lundqvist 2014). Risk management must be an integral part of company's processes, strategy and operations, and their interrelationships should determine how the company reacts and operates in the context of risk factors (Lai *et al.* 2011). Lai *et al.* (2011) present the ERM implementation process of Meagher and O'Neil, as one of the important dimensions distinguishing the identification of risk management objectives and their linking to an organization's strategy. The need for managing risk should be understood internally, by company's managers and employees, and included in the strategy as a relevant competitive factor (Yaraghi, Langhe 2011). The strategy should guide employees towards achieving company's goals and implementing appropriately the planned changes. It must act as a mechanism for constant reminding and checking if actions made do not contradict the chosen direction. The emphasis is placed on risk management continuity (Lai *et al.* 2011), long-term perspective and integrity into the overall long-term strategy (Yaraghi, Langhe 2011).

Strategy in the context of risk management also has a broader, indirect significance. While requirements and environmental trends change, a company's risk management strategy must adapt in response (Yaraghi, Langhe 2011), therefore, risk management must be based on a regular, consistent monitoring and development. Only communication and transparency in a company help ensure the acceptance of a strategy and support at all levels; the strategy integration must act as a mechanism for organizational culture development and promotion. According to Yaraghi and Langhe (2011), to ensure success of companies' risk management system, it is necessary to have a well-planned and well-developed risk management strategy, which is implemented and communicated throughout the company and have complete approval and support from the management. The strategy must ensure sufficient resources for this purpose.

Raber (2003, as mentioned by Ingley, van der Walt 2008) argues that top management must develop risk management policy, and it has the responsibility to understand what dangers and risks may arise from the strategy the company chooses to realize and to design and implement ways to manage them. Knowledge, support and general managerial skills that are demonstrated by top management and that properly orient the enterprise towards successful risk management are significant when designing and implementing risk management system (Yaraghi, Langhe 2011). Its competencies are essential in order to transform theoretical knowledge of risk management and system effectiveness into the plan of risk management system and process design (Yaraghi, Langhe 2011). The top management is able to integrate risk management into the overall company's strategy, to develop an organizational structure and processes favourable to risk management and devote sufficient resources to ensure effective development and functioning of risk management system (Yaraghi, Langhe 2011), resources being money, staff, time, top management's attention. In order to timely identify and properly respond to certain emerging risks or to avoid them,

one must ensure that financial and human resources are distributed properly; the highest link in the hierarchy is responsible for strategic resource planning (Gökmen 2014). In general, monitoring and assessing risk factors should be included in the decision-making processes (Wieczorek-Kosmala 2014) and treated as factors carrying decision weight.

Another factor, inseparable from the management role, is the organizational structure. A more decentralized structure is considered to be superior to a hierarchical one (Yaraghi, Langhe 2011), because in this way communication between different departments and staff levels is encouraged and facilitated. A permeable communication system is necessary to effectively create and maintain a risk management system so that employees would be guaranteed the opportunity to share their opinion and ideas about the risks encountered (Nielson *et al.* 2005). Risk communication is relevant to ensure that both decision makers and those generating alternative decisions and analysing the situation in the company can easily communicate and share information about multi-dimensional risk and its potential effects (Haimes 2012). Communication is necessary so that certain units in the company would perceive their direct responsibility for the control of risk factors. Knowledge about risk management of the employees who work directly with it must be constantly updated and broadened. All workers should be aware of and understand the importance and benefits of risk management (Yaraghi, Langhe 2011). Since every employee could be regarded as a risk manager and each employee's knowledge and skills could be useful for effective risk management (Blaskovich, Taylor 2011), it is necessary to demonstrate and encourage their possible contributions to the management of risks in the organization's everyday life, while positive contributions in this area should be recognized. Since risks can arise both inside and outside of the company, it is essential to include medium and lower levels of managers and employees so that continuous surveillance and control of risk factors would be ensured (Gökmen 2014).

Other human resource-related factors that are important during the stages of implementation and administration of risk management practices are performance reporting, documentation, compensation system, and responsibility (Yaraghi, Langhe 2011). Job positions must be documented and staff should clearly understand their job responsibilities. Clearly defined and distributed responsibility is considered to be one of the elements for the effective implementation and functioning of a risk management system (Lundqvist 2014; Zhao *et al.* 2013). There has to be an employee, department or group formally responsible for risk management, while at the same time each employee must understand his role as a risk manager. The relation between risk management initiatives and compensation and performance evaluation should be obvious, if the realization of a risk management system is to be successful. It is advisable to provide an independent and objective feedback about the implementation of the risk management system because research shows a positive impact on the improvement of the system to exist (Raymond, Bergeron 2008, as cited in Yaraghi, Langhe 2011). In order to properly manage the risk management system established in the company, it is necessary to ensure that employees are aware of and sufficiently informed about its functioning and benefits. One must ensure continuous and consistent development and learning so that a properly implemented risk management system would be supported by appropriate means and it would be possible to attain the greatest possible value (Yaraghi, Langhe 2011).

Risk management must be used to monitor and timely assess the factors having possible negative effects, at the same time trying to maximize potential benefits (Zou *et al.* 2010). Organizations need to define a company's risk profile that is as comprehensive and exhaustive as possible (Ingle, van der Walt 2008). Risk management should include monitoring and assessment of both internal and external sources of uncertainties (Gökmen 2014; Lundqvist 2014). In other words, such an extended approach to risk factors relevant to a specific enterprise may be described as "risk portfolio" (Blaskovich, Taylor 2011). Risk management practices must also ensure that different stakeholder perspectives are given due consideration (Blaskovich, Taylor 2011). Strategic approach to risk management avoids isolation, where mainly financial and operational hazards are considered; instead, one must pursue a comprehensive approach towards the factors that may not only hurt but also enhance the overall business success and realization of the objectives (Ingle, van der Walt 2008).

Effective risk management practice must be defined and developed process-wise. Members of the company must know and unanimously agree on how risks and risk management concepts are defined and identified. It also requires a cyclical and continuous set of actions, procedures and methods, covering activities most important to risk management; there exist different versions of decomposition of risk management processes, with the main focus on the identification, assessment, treatment, control, monitoring of risk factors (Lai *et al.* 2011; Mirela 2012; Haimes 2012; Wiczorek-Kosmala 2014). Monitoring and identification of risk factors must be thorough and specific, encompassing areas such as financial, compliance with laws, economic, and corporate image; one needs to plan and document primary and secondary methods to respond to risks identified as most important to the company's activity; system and processes must be designed to ensure the provision and distribution of as up-to-date and significant risk management information as possible (Lundqvist 2014). Even though it is advised to monitor risks in a holistic manner, sometimes it is barely possible to ensure that all or most of the potential uncertain events are monitored; in such a case, one should define what risk factors matter most to the company, taking into consideration the specifics of its activity, relations with suppliers and customers' inputs (Lindo 2013). In this way, having defined the risk factors that have the most significance on business operations, data collection, organization, and analysis are prioritized.

In summary, the effectiveness of risk management is related to the strategic approach towards risk. Risk management should be part of company's activities, strategy and culture, when managers and employees consciously strive for realization of risk management practices and their potential value in the company's daily operations. To do so, a systemic and methodical structure of risk management practices must be created and formalized, which would enable a comprehensive risk assessment, monitoring and control in regards with various aspects of company activity and relationship with its environment, not only to reduce and mitigate the negative effects of risks on business performance, but also to be prepared to take advantage of emerging opportunities.

4. Specific features of project risk management in the language translation service industry

The language industry is still in its infancy; it is heavily project-based, performed on a global scale, and very dynamic; however, “at the same time much of it remains hidden and unknown to outsiders, like the submerged portion of an iceberg” (Dunne 2013). The language service market is not widely researched, mainly specialized publications and organizations provide information about it (such as the magazine *Multilingual* published by “MultiLingual Computing”, or the Annual Reviews of Translation and Localization Market, published by “Common Sense Advisory”).

The most important aspect of translation service companies is their method of project management-based work. Translation and project relation is frequent in the titles of the periodic publications for language services market (e.g. “Project management and machine translation” (Arenas 2010), “Case study: TM economics in project management” (Orfall 2010), “Managing translation as a secondary job” (Starkman 2008), “The Changing Face of Translation Project Management” (Freivalds 2005); these discuss translation orders as projects and provide examples of applications of project management discipline in translation business (“setting expectations and the scope of the project before it begins”, Freivalds 2005; the process of planning and execution of machine translation editing project with regards to cost, expected quality, linguist productivity and terminology, Arenas 2010).

Furthermore, apart from the general principles and aspects defined in common standards, such as in the project management standard “A Guide to the Project Management Body of Knowledge” (PMBOK guide) (2013), which are applied to translation orders, the project-based work nature of translation agencies is defined in the EN 15038 standard meant for the language services market and issued by the European Committee for Standardization (CEN) in 2006. In order to comply with the standard, translation agencies must have (including, but not limited to), besides sufficient technical resources and quality management system, a project management system; a translation request is identified as a translation project in the standard (assuming that the author used the original terminology of the standard; Bonnet 2006). The Language Industry Certification System certification system offers a certification in accordance with EN 15038 requirements to translation service companies. In the procedure of certification, terms such as project and project management are used – it is clear that translation service companies work on the basis of projects and must consider the same and similar factors and issues as denoted in common project management theory (feasibility of the budget, price setting, legal agreements, quality control and assurance systems and techniques).

If the activities of a translation company are perceived as an activity of translation project management, then risk management could be extended and analysed from the perspective of project management. The scientific literature mostly focuses on project risk management of services sector companies, but the examples provided usually depict construction (Zeynalian *et al.* 2013; Spalek 2014; Zhao *et al.* 2013; Choudhry, Iqbal 2013) and information technology (Spalek 2014) businesses. The efforts to find specific cases of translation project risk management in the scientific literature have not revealed relevant

publications, apart from a few research pieces, in particular the works by Dunne (2013) and Sere (2015); examples of other areas of the services sector have been reviewed and interpreted in a more general sense, tailored to the language translation service area.

Managing project risk increases the probability of successfully completing a project and reduces a potential negative impact of those risks that cannot be avoided in its process (Addison, Vallabh 2002, as cited in Reed, Knight 2013). In the PMBOK standard (2013), risk management is distinguished as one of the nine knowledge areas, or factors to be planned, evaluated and monitored during project execution; risk is recognized as one of the factors determining a project's success; it is awarded the same weight as budget or time dimensions. Risk assessment at the very start of the project is important in that many of the decisions taken prior to its start could then be barely modified; therefore, project managers must evaluate project risks holistically and, doing so, seek to prevent successful execution of the project from further obstacles (Datta, Mukherjee 2001). Risk management has to be one of the main activities of the project manager, otherwise, a project's successful implementation may be jeopardized in terms of technical, financial and time aspects (Toader *et al.* 2010); as well as the opportunity to utilize positive aspects of risk factors is diminished (PMBOK (2013) shows that risk is dual).

Project management is characterized by processes with clear start and end. Project risk management may be defined as a process consisting of several stages: risk identification, risk assessment, risk response planning, risk response application (Toader *et al.* 2010); or risk management planning, risk identification, risk assessment (quantitative and qualitative), risk response planning, risk monitoring and control (PMBOK 2013). Project risk management may be favorable to the development of risk management processes, as project managers work on a specific project and may analyse risks specific to it. The representatives of industries such as building and construction (Zou *et al.* 2010) would be firmly against this and although PMBOK defines a project as a temporary activity, which creates a *unique* product, service, or in general – result, if projects are repetitive, one may distinguish certain groups of projects with similar instructions and requirements (what is common in case of translation projects) and identify the main risks. More defined processes could be distinguished in project management, such as project preparation, release and execution. Risk management stages could be modified to fit each process so as to analyse risks at an individual step. Project managers need to monitor potential risks and opportunities in each stage (it is easier if the specifics of the projects are similar), resulting in knowledge accumulation and continuous learning.

What distinguishes project risk management is project specifics determining aggravating circumstances of risk management. Regardless of their nature, projects are usually carried out in strict time frames (Spalek 2014). Immediate project completion is often of interest to a number of stakeholders: managers, customers (Spalek 2014). Project requirements and instructions are subject to change in the process (Zou *et al.* 2010). Execution of projects involve different parties with different skills and competencies; project implementation methods may also vary (Zou *et al.* 2010). According to PMBOK (2013), in the project management, risk directly depends on the project specifics and complexity and may be both internal (e.g., lack of project management skills or resources, or unreliable

information technologies and systems) and external (e.g., relationships and contracts with third parties). Projects often involve interrelated elements that influence one another; in order to harmonize them, a compromise is needed with regards to risk management (e.g., between deadline and cost) (Zeynalian *et al.* 2013). Although these examples were used to discuss construction development projects, the same logic may be transferred to general project management practice, including translation projects.

The project risk management-related literature analysis allows to distinguish the most common risks. Project management risks were applied to translation companies in line with their job specifics. The most common risks are associated with technology or software failures (Reed, Knight 2013), third-party involvement (Datta, Mukherjee 2001) and managerial decisions regarding planning and allocating resources (Zeynalian *et al.* 2013).

Besides, one should bear in mind that projects related to translation have salient features and properties, which in turn may lead to specific difficulties when managing project risks. Among others, translation-related projects are typically short, run on low budgets and are not prominent. The shorter duration of a project, the lesser time for risk managers and their teams to get focused on risk management. The smaller the project, the more difficult is to justify the cost of risk management to the client and the service provider's upper management itself. Translation projects are often seen not as a primary product, services or result, but instead as ““add-on” feature or support element relative to the main product”, e.g. to a piece of software (user interface) or a piece of equipment (instructions manual, marketing materials) (Dunne 2013). Furthermore, extra difficulties can rise from the fact that such projects are often heavily outsourced, possibly involving a long subcontracting chain. They also come from the fact that the very nature of language and translation means dealing with intangible resources that themselves produce intangible outputs. Being less visible than the main product, service or result, the language services increase the level of uncertainty for the project and lose the risk managers' attention. While language is deemed to be barely a supportive feature to the main product, it directly results in how the product or service will be evaluated by its buyers. All these specificities call for both changes in existing processes or customised ones (Dunne 2013). Risk management in translation companies must help effectively manage and prevent or minimize the chance of risks and their adverse effects.

For evaluating the effectiveness of risk management, a certain measure should be chosen. Since translation companies work on projects, the effectiveness of risk management might be assessed in terms of project result. In the scientific literature, an abstract concept for projects' success is sometimes used to examine the outcome of the project execution (Neverauskas *et al.* 2013; Lech 2013; Mir, Pinnington 2014). Identifying universal indicators of a project is complicated as projects vary in scope, specifics and level of complexity (Mir, Pinnington 2014), not to mention that projects in general are carried out in very different industries. As a result, a wide set of criteria is offered to measure project success, such as client's satisfaction with the project, realization of design and planning objectives, or effectiveness of teamwork (Mir, Pinnington 2014). A consensus exists that project success is a multi-layered and multi-dimensional phenomenon but it is disagreed as to what specific criteria could be used to measure it (Thomas, Fernandez 2008, as cited in Lech 2013).

Traditionally, the project is considered successful if it is carried out in time, within budget and according to the client's requirements (Neverauskas *et al.* 2013). Recently, this trinity has been criticized for an overly simplified view and ignorance of the interests of the parties, especially of end consumers (Zwikael, Ahn 2011). As a consequence, efforts are exerted to broaden the concept of success, distinguishing between project management success and project product success (Neverauskas *et al.* 2013; Lech 2013). Project management is deemed successful when a project is executed in terms of assigned time-frame, budget and quality requirements, whereas this is valid for a project product when a project is executed in terms of the set objectives, and/or clients' expectations regarding the project results. Having modified this approach a bit, it was suggested to supplement the traditional indicators of project success with the quality of project management process and satisfaction of stakeholder needs (Neverauskas *et al.* 2013). A similar broadened model of project success is found in the PMBOK standard (2013), where success is evaluated from the perspective of the project objectives (risk in PMBOK (2013) is defined as an uncertain event which, in case of occurrence, would affect at least one of project objectives, i.e., scope, deadline, budget and quality). To summarize, project result interpretation is very diverse; it could be evaluated by both quantitative and qualitative, or subjective metrics. Considering the project area, efforts should be made to combine various indicators and to consider the overall picture of project execution and its result.

5. A model for the assessment of language translation project risk management

Combining the literature analysis about the risk management effectiveness and the ideas about project risk management, it is possible to identify factors that, if adapted in translation companies, should help the company to successfully manage projects' risks.

- Definiteness of project risk management process (Raber 2003, as cited in Ingley, van der Walt 2008; Haimes 2012; Linacre *et al.* 2003; Barkhuizen *et al.* 2012; Zou *et al.* 2010; Mirela 2012; Wiczorek-Kosmala 2014; Lai *et al.* 2011). Translation project risk management must be based on a well-developed – cyclical, procedural approach. Such a process could be simplified as follows: the identification of risks of a specific (unique) project and of their groups (in case of translation projects, projects could be divided into groups according to the same or similar client requirements and instructions) in the different stages of the project execution; assessment of the identified risks by the methods selected according to the company's risk appetite; application of actions to mitigate the potential consequences of risks that exceed the company's risk appetite; regular monitoring of project progress and responding to the uncertainties that emerge.
- Versatility of project risk management practices (Wiczorek-Kosmala 2014; Aven, Krohn 2014; Gökmen 2014; Lai *et al.* 2011; Lundqvist 2014; Ingley, van der Walt 2008). Effective translation project risk management should be a holistic, multi-dimensional process, reflecting the complexity of the projects. Project risk management must include internal and external risk factors, focusing on the key aspects of the

practice of their management. Translation project risk management must ensure that the impact on project progress and success of all involved parties in a general sense (of both managers, employees, linguists and technological equipment) is assessed. Project risk management has to enable the company to take advantage of potentially positive outcomes of risk factors and of emerging opportunities to complete the project favourably in terms of the position of the company and the client, and realization of the objectives.

- Definiteness of project risk management responsibility (Yaraghi, Langhe 2011; Toader *et al.* 2010; Lundqvist 2014; Zhao *et al.* 2013; Zou *et al.* 2010). Translation project risk management should have clearly defined responsibilities. Employees should be aware of the scope / boundaries of their responsibilities and consciously accept their risk manager role when executing the project. Project team members must feel and proactively take responsibility for project result. Such a distribution of responsibility would help create an organizational culture of risk management (Zou *et al.* 2010). Translation projects are the basis, so exclusive attention of the top management should not be expected for each project. The responsibility for project risks belongs to the project manager and all the project parties. The responsibility of top management for risk management is more general and strategic and therefore is distinguished as a separate criterion.
- Involvement of top management in project risk management (Yaraghi, Langhe 2011; Raber 2003, as mentioned in Ingley, van der Walt 2008; Gökmen 2014; Lai *et al.* 2011). Its role in project risk management in translation companies should be strategic. It should treat project risk management as a valid part of the overall corporate strategy and decision making process and ensure that adequate resources would be allocated and appropriate staff competencies and skills are developed to effectively manage translation project risks. Top management should be involved in project risk management so that it perceives the need for holistic risk management and creates proper conditions and opportunities for project managers to manage risks during translation projects.
- Risk management communication (Yaraghi, Langhe 2011; Nielson *et al.* 2005; Haimes 2012). In order to ensure effectiveness, it is necessary to ensure that the staff is involved into daily risk management that has to be a part of a company's strategy, mission and vision, so that each employee is familiar with the concept of risk management and clearly sees its connection with daily business operations. Risk management must be a part of corporate identity, organizational culture. Risk factors, risk management and specific risk management relations with translation project success and the ultimate realization of organizational objectives must be clearly communicated throughout the company. Free, explicit and transparent communication has to enable and encourage risk management.
- Project result (added by the authors, based on Neverauskas *et al.* 2013; Lech 2013; Zwikaël, Ahn 2011). As a measure of effectiveness of project risk management practices, using project result as a criterion is proposed in this article. This criterion is based on the idea of project success, which was discussed as a hard-to-define and

multi-dimensional concept. In this article, project result is defined by three objective criteria – time, budget and quality (Neverauskas *et al.* 2013). In order to take account of the satisfaction of the needs of stakeholders, and most importantly – the (end) consumer, a fourth subjective criterion is added – the satisfaction of the stakeholder needs and expectations, focusing on the client satisfaction (Neverauskas *et al.* 2013; Zwikael, Ahn 2011; Lech 2013).

To systematize the above aspects, one may create a conceptual model of the assessment criteria of project risk management and project results in language translation companies (see Figure 1) with the overall purpose of assessing the effectiveness of risk management practices from the perspective of project results. The components of the assessment criteria of translation project risk management are identified based on the ideas presented in the scientific literature that have been discussed above; furthermore, we propose a specific contribution in the form of two extra criteria, namely “unique/typical risks” and “stakeholder impact” (marked in *Italic* in Figure 1), which were added to fit the specificities of risk management in language translation service companies.

To assess the project risk management in translation companies, one may formalize it as follows: $y = ax_1 + bx_2 + cx_3 + dx_4 + ex_5$, where x_1 is the criterion of risk management process definiteness, x_2 – risk management process versatility, x_3 – risk management

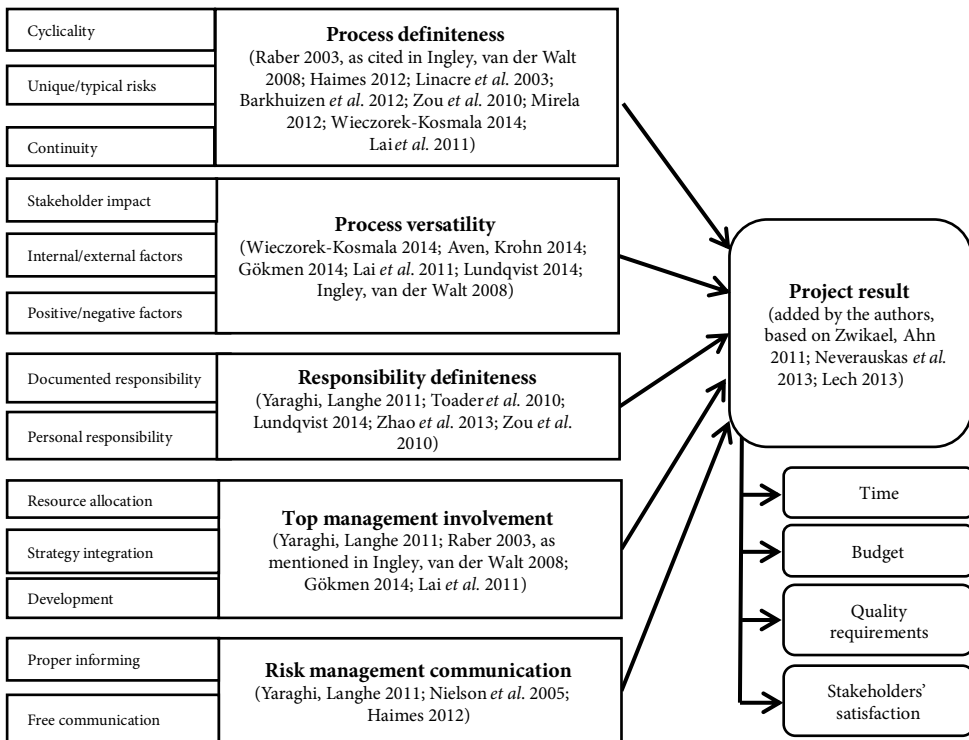


Figure 1. A conceptual model articulating the criteria of language translation project risk management and project result

responsibility definiteness, x_4 – top management involvement, x_5 – risk management communication, y – the project result. This is a general notation, indicating that all five project risk management criteria are statistically significant in determining the project result, as well as that their impact on the project result is additive.

To determine the criteria that are valid for project risk management assessment, the relationships and cause-effect relations between the independent project risk management criteria variables and dependent project results variable are to be analyzed. Correlation analysis is to be performed to check if statistically significant relations exist between all project risk management factors, criteria and the project result. The effect of the relations between the five criteria could be either additive or subtractive depending on whether the correlation analysis shows positive or negative statistically significant relationships between any of the determinants and the project result. To evaluate the significance of project risk management criteria's impact on the project result and its severity, a regression analysis is to be performed. The best data-fitting model is to be chosen and a corresponding regression analysis carried out. The most common option is linear regression. To eliminate statistically insignificant project risk management criteria, backwards linear regression analysis is to be performed. This would distinguish statistically significant criteria ($p < 0.05$) and yield standardized beta values reflecting their relative severities (the values of the coefficients a , b , c , d , e). Different data levels, i.e., data comprising separate project risk management factors, factors' groups (encompassing one criterion) and the five criteria, could be subjected to the same analysis to provide a comprehensive review of project risk management factors having influence on project result.

Conclusions

The conceptual model of the assessment criteria of language translation project risk management could serve as a basis for the company's top management to evaluate their risk management practices applied to projects. By ensuring the proper implementation of the given set of criteria, translation companies could expect delivering their projects in terms of planned timeframe, budget and quality requirements. By proving and explaining the direct linkage between project risk management and translation project result one should convince project managers and the top management to switch from passive or non-existent risk management approaches to proactive and integrative ones.

Nevertheless, the proposed conceptual framework has certain limitations. Since the criteria in question were selected based on the extensive scientific literature review, their usefulness in real life companies' operations may be of somewhat lesser extent. Therefore, this theoretical framework should be further developed from the empirical perspective in order to test the validity of the given set of risk management criteria. This work needs to be further extended to include empirical proof of the applicability of the given criteria in an effort to ensure language translation project result. Thus, to achieve this, future research could include a regression analysis in order to test the actual relationships among, and the direct impact of, language translation project risk management criteria and project results. The implementation of the procedure (by means of statistical relationship testing) calls for

constructing a solid and reliable empirical research methodology fundament with a special focus on designing a proper-content-questionnaire in order to embed the adequacy of the questions to the identified assessment criteria that incorporate and reflect the five-dimension body and their dimensional constituents of risk management in language translation service companies. The proposed model and its respective to-be-developed questionnaire can be applied and operationalized to assess, measure and compare risk management criteria of language translation services of different regions, companies' size, and source-target languages projects, etc. All this will potentially lead to practical results and implications, i.e. optimization of companies' operations and processes, saving resources, translation project quality improvements, value for the customers and, thus, creating a business competitive advantage in the translation service industry both locally, nationally, and globally.

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