

How to use business research in project risk management?

Dr. Éva Nádor Ph.D
Budapest Business School
Diosy Lajos u. 22-24
Budapest
1165 Hungary
nador.eva@kkfk.bgf.hu

The author is going to present a working paper about the research launched in 2010 focusing on competence-based perceived risk of the projects' actors. The research objective is to reveal the nature of the competence-based perceived risk and to answer how the risk perceived in a service transaction can be handled. The ultimate objective of the research is to help the suppliers develop an effective risk management process. The 3 years research consists of 3 phases: exploring qualitative research based on in-depth interviews, quantitative survey based on conjoint analysis and post quantitative qualitative research. The paper will briefly summarize the key findings of the quantitative phase and present how the qualitative research validated those results.

Keywords: project, bilateral risk, risk management, competences, interactive communication

Business & Economics and Management

1. Introduction

One of the key challenges of the 21st century derives from the extremely rapid changes of the global economy followed by constant need for innovation. The higher degree of innovation is increasing the uncertainty of the sellers and the buyers as well. The constantly new business problems increase the perceived risk of both sides. The management of the bilateral risk is of high importance because it has a great impact on buyers' satisfaction. This issue is even more relevant in the case of projects due to the competence asymmetry between the buyer and the seller moreover the high interactivity and the significant level of interdependence. Therefore the understanding of the nature of risk in the service process is an outstanding research task.

2. Literature Review

Projects can be defined as series of actions to achieve specific goals, within a certain time frame, with dedicated resources, under a strictly defined budget.

The following literature review reveals the research that has been undertaken in the area of project marketing. The marketing authors are focusing on the following issues: the uniqueness of individual projects, the risk perception of the actors, and the risk management.

Cova and Ghauri started the European Network for Project Marketing in 2000. The members have been involved in several company researches aiming to develop concepts and methods of efficient use in the marketing of projects. Researches revealed that projects are discontinuous, time-specific and in certain industries can last for years (Cova, Ghauri, 2002.) By the Cova-Ghauri-Salle process model the supplier is constantly developing its competences and relationship network.

In terms of interactivity and interdependence between the actors Cova and Salle (2007) point out the possible synergies between the marketing of solutions and project marketing. Some of the authors revealed that the level of interdependence is highly influenced by project type (Bankvall, Bygballe, Dubois and Jahre, 2010). Professional

service providers also face a challenge of highly interactive relationships what is even more demanding due to the interdependence of the buyer and the supplier (Lowendahl, 2000).

Management of risk and uncertainty is a central issue of project marketing. Jacoby and Kaplan (1972) discuss the determinants of perceived risk. There are a variety of risk types that have been suggested, including financial, performance, physical, social, convenience, and psychological risk. This research focuses on the performance risk in relation to the project suppliers' expected performance.

In general, studies have found that buyers' perceived performance risk is linked to presumed weaknesses of the supplier (Veres, 2009). Since services have a strong process element the success of a project transaction is uncertain until it is completed. The perceived risk is generally fluctuating during the project process. This changing character can be illustrated by the risk perception funnel (Veres, 2009).

Golfetto and Gibbert discuss the notion of marketing competencies in buyer-supplier relationships, and the role these competencies play in creating value for the customer. The authors have found that the risk could be reduced by targeted risk communication what could lead to higher buyers' satisfaction. (Gibbert, Golfetto & Zerbini, 2006). Morgan and Hunt (1994) discuss another aspect of perceived risk identifying commitment and trust as key influencing factors in buyer-seller relationships. Trust is inevitable for building relationships and in client retention. (Kotler-Hayes- Bloom, 2002).

3. The Methodology

A complex research project was launched in 2010. The main research objective is to reveal the nature of the competence-based perceived risk and to answer how the risk perceived in a service transaction can be handled.

The 3 years research consists of the following phases:

- exploring qualitative research based on in-depth interviews,
- quantitative survey based on conjoint analysis,
- post quantitative qualitative research including international comparative research.

The quantitative research phase was finished in 2011. The key objective of the quantitative phase was to determine the partners' capabilities contributing to the success of the projects.

The third research phase what is the fine tuning of the quantitative results was finished in 2012. To verify the quantitative results 124 expert interviews were carried out both on supplier and buyer side. The industry profile of the respondents included both hard projects, like engineering, construction industry and soft projects such as ad hoc market research, event marketing, IT systems, business consulting, marketing communication projects, web design and business trainings.

The post quantitative research was dealing with the following project management issues:

- uniqueness of the projects and its impact on the project management,
- tangibility aspects, impact on project management,
- perceiving and managing risk during the project,
- issues related to project success and
- expected competences of the partner.

The research was focusing on the impact of project's tangibility (tangible, intangible) and the position of the actors (supplier, buyer). The management issues were analysed also in terms of timeliness, involvement and interaction. Timeliness means the risk perception across the project phases. Involvement was discussed by the level and kind of involvement (material, relationship, information). Interaction is interpreted as understanding of the project as a bilateral act, in fact it is the communication among the partners.

4. The Findings

Unique character of the projects and its impact on the project management

The conceptual background of our research is that projects are unique by providing a specific solution that requires systems thinking. The quantitative research findings affirmed this concept. The research also revealed that this challenge requires sophisticated service adaptation and it has a significant impact on the project management.

The post-quantitative qualitative survey further investigated this issue. The respondents unanimously expressed the unique character of the projects, indicating differences only in the extent of uniqueness.

Projects usually have a process side and a content side. The processes are always regulated, and show some kind of standardization, containing the same elements, such as pre- transaction, transaction and post- transaction phase. In overall the respondents say that the process is routine while the content is unique. Even the management process is less routine than before, because the technology is changing fast and the calculation of time is very difficult.

The uniqueness of the projects has a positive impact on the performance of the actors. All of the respondents said that uniqueness is an enormously motivating factor. Employees need variety in their work.

The unique character of the projects provides the possibility of differentiation for the actors. Especially in a competitive market it is important to stand out, to develop a unique proposal. This challenge requires sophisticated service adaptation.

Another important aspect raised by the respondents connected to the uniqueness is the clarification of project objectives. Most of the managers mentioned that clear project objectives are the base of a successful project. Very often this is a joint effort of the supplier and the buyer.

Most of the buyers mentioned that uniqueness goes together with closer personal relationships. They need more communication about the project's objectives and the project details. Suppliers expressed that bigger focus is needed on project organization. Communication is important in the transaction period as well when lots of questions and not expected problems to solve can arise. The development of trust between the actors is based on constant communication. The form of interaction differs; the most common is the personal relationship and the status report.

The unique character of the project has an influence on the expected competences. The post- quantitative qualitative research justified the quantitative results. The buyers expect expertise, up-to-date knowledge, problem solving capabilities, open communication. The supplier expects clear problem definition, project objectives, good information base and trust.

The interviews revealed that the uniqueness of the project is increasing the risk of both actors especially if the project is very complex and calls for absolutely new solutions. Both parties make efforts to decrease the project risk. Buyers' priority is to accomplish the project objectives while the suppliers' main objective is to satisfy the clients. The good relationship, the established trust is helping them to achieve their goals. Both project actors emphasized the importance of trust particularly in case of new business partners. Respondents outlined some risk decreasing methods, among others long lasting business relationships, interactive and intensive relationships.

The interviews revealed a significant difference in managing tangible and intangible projects.

In case of the so called hard projects with significant physical content the correct planning of the technological processes and the linked professional competences are the most important factors. Due to the fact that very often there are more actors in the project, organizing and coordination is fundamental. The good information exchange can ensure the project success, a great number of meetings, discussions are characteristic. Personal presence of the management is very important, very often quick decisions should be made on the spot. Harmonization of the physical and intellectual processes is essential.

The intangible projects engage mostly intellectual resources. Therefore the most important are the competences of the professionals. Since the business environment is changing rapidly, there is a high need for ongoing knowledge development. The competence level and the performance of the project members might significantly differ, if it is not considered by the project management it could increase the project risk. Both parties' competencies contribute to value creation in projects, however, the competence asymmetry should also be acknowledged. Intangible projects are

generally characterized by intensive relationship among the actors and by joint conceptualization and thinking with the partner. This is decreasing the risk of the project and increasing the buyers' trust.

Intangible projects with significant physical content often need subcontractors. Subcontractors' performance is highly influencing the satisfaction of the client. Likewise, good relationship with authorities and other business partners is also necessary.

Perceiving and managing risk during the project

Due to the discontinuous, unique and complex character of the business projects the bilateral risk of the projects is higher than in the services industry in general. The unique character of the projects is raising always new business problems for the service provider consequently resulting risk for the project actors. The management of the bilateral risk is of high importance because it has a great impact on buyers' satisfaction.

The quantitative interviews surveyed the risk perception of the actors. The qualitative phase verified the former statements. The key risk areas can be grouped into the followings: problem definition, project objectives, planning, communication and relationship of the actors.

Due to the lengthy process and the strong process-orientation of the projects both parties bear a bilateral risk of the project implementation. The post-quantitative qualitative research aimed to reveal the risk perception flow and the reaction of the project actors. The quantitative phase of the research has already pointed out that the risk perception is not independent from the transaction episodes of the project implementation. This risk perception flow can be depicted by the risk perception funnel. It means as the project progresses the parties reach the 'point of no return' and hence, are less likely to abandon the project. The post-quantitative qualitative research results verified the quantitative results and made the risk perception flow even more transparent.

First and foremost it should be noticed that none of the respondents involved in the research had ever abandoned a project. All of them declared that they always managed to solve the problems arising during the project. The general opinion of the respondents is that all the possible efforts should be made to avoid abandonment. Since the abandonment is expensive and inconvenient very careful decision is needed to decide about a project.

A great number of the respondents mentioned the importance of the contract. The contract should include all the financial and non financial consequences of a withdrawal regarding both parties. The waiver clause is an integral part of the project. In principle they think that termination of a project is more easy in an early phase however hindering factors arise only in later phases.

It is obvious that the withdrawal is disadvantageous not only because of the possible penalties but the lost income. All the respondents said that the primary consequence of abandonment is financial. Managers of tangible projects share the view that this financial loss could be high depending on the contract. Generally the penalty for non-performance is high. The managers of intangible projects feel less pressure in terms of financial loss however intangible projects with significant physical content face similar problems.

In the opinion of both suppliers and buyers abandonment has non financial consequences as well. Among other consequences loss of client was mentioned by the suppliers as one of the most important. Withdrawal can jeopardize client relationships.

Abandonment of the project could be initiated by the buyer as well. The most common reason is dissatisfaction with the supplier but other reasons as new management, financial problems can arise too.

Predictability of the success

The quantitative research surveyed the importance of predictability. By the research results both actors emphasized the importance of predictability. Due to the frequently occurring unexpected conditions it is very important to map the problematic issues and their impact on the project success.

The post-quantitative research verified the quantitative research results.

Table 1. Predictability of the project success

PROJECT PHASE	Number of mentions	%
Pre-transaction, transaction phase	164	41,8
End of the project	123	31,4
A long time after the end of the project	101	25,8
No answer	4	1,0
Total	392	100,0

Only approximately half of the actors are able to predict the ultimate success of a project already in the pre-transaction and transaction phase. Another significant number of actors say that the project success becomes apparent only a long time after the end of the project. The interviews show that there are significant differences by the type of the project both in tangible and intangible projects.

The project management of tangible projects can predict the project's success rather at the end of the project. The reason is that tangible projects:

- are more complex,
- there are more partners on the suppliers' side,
- generally they involve a great number of subcontractors and
- the accomplishment is strictly linked to the technical acceptance.

The success of the project is hardly predictable in intangible projects too, however the reasons are different. Large number of the suppliers connects the success to the concept approval. After the concept, the proposal is accepted by the buyer, the project output depend mostly on the supplier. In case of trust the supplier can calculate with a supportive, effective cooperation with the client what concludes in a successful project. It should be also noted that the subject of the intangible project is highly influencing the predictability of the success. Notwithstanding that software development, event marketing or web marketing are intangible, prediction of project success comes often only following the project. Project actors agree that good client relationships are guarantees for the success. Ongoing cooperation, interactive communication with the client predicts the success of the project already in an early phase of the project.

Observing the actors both of tangible and intangible projects, it is obvious that the suppliers can predict the output of the projects more precisely. This is because they are in aware of their own competences and former experiences. The buyers are more uncertain, they feel more defenseless because the project success in not in their hands.

Key success factors

The quantitative research made it clear that the human factor is the most important in the success of a project.

Table 2. Key project success factors

KEY SUCCESS FACTORS	Number of mentions	%
Used materials, information	101	25,8
Employees' competences	247	63,0
Applied technology	31	7,9
No answer	13	3,3
Total	392	100,0

The quantitative research results are verified by the post - quantitative interviews. The interviews reflect that the project success depends most on the human resources however there are significant differences between tangible and intangible projects.

The managers of projects with significant physical content declared unanimously that all resources such as materials, information and professional knowledge are playing an important role in the project success. The used materials and the applied technology are very important in the tangible projects. In the age of rapid technological changes buyers require the most developed solutions from the suppliers. Projects became more complex and therefore they are not manageable without professional project management any more. Understanding and coordination of large projects calls for special competences.

Almost all respondents of intangible projects gave priority to the human resources versus the used materials, technology and information. In lack of professional competences, expertise and experience realization of project objectives is not possible. Since the output is mostly determined by the quality of the professionals, change in staff can cause big problems.

Valuation of the project management of intangible projects is very controversial. There are project managers who believe that management of totally intangible, intellectual projects is easier because the process is less complex, there is no need for on the spot management, online communication could be very effective, saving time and money. Others consider it even more complicated because of the high role of human resources. Intangible projects, like business consulting call for effective management of human resources, what starts with the selection of the professionals, followed by constant knowledge development. Very often the buyers expect knowledge transfer what makes the whole process even more complex and difficult.

Higher than average role was attached to the used materials in the intangible projects with relatively large physical content, like event marketing. Clients want always new, astonishing marketing events. Creativity is important not only in terms of creative idea but in terms of technical solution as well, such as 3D displays. Marketing communication tools changed a lot in the last couple of years. Web marketing is getting more and more popular and effective web marketing requires lots of technical resources.

Technology is playing a big role in the technology based intangible projects, like software development, web design or computer aided design.

The post quantitative qualitative research revealed some differences regarding the importance of the success factors by the actors' positions. Suppliers consider the proper project management as the most important success factor. Buyers find the human resources, the competences of the professionals involved in the projects as the most outstanding success factor. Besides that interactive relationship, close cooperation among the actors is also a must. Trust as a key success factor appeared in almost all buyer interviews.

5. Summary and Conclusions

The research helped to understand the profile of the project competences and its role in risk perception. Research findings revealed in what way competence, confidence and communication affect minimization of risk attached to project performance. Mutual communication and interactivity can decrease risk perception and thus represent enhanced problem solving capability. Proactivity of the supplier is increasing trust and is highly appreciated by the buyer.

In the last phase the post quantitative qualitative research will be completed by international comparative research results.

Biography

The author is professor of marketing at the Budapest Business School. She graduated with an M.A. in economics from the University of Economics Budapest, and obtained a Ph.D. in organisational sciences from the Miskolc University. She worked for 15 years in research, 10 years in marketing positions at multinationals before getting faculty position at the Budapest Business School. She is also acting as visiting lecturer at different universities in Europe. In addition to her work as a teacher and author, she has an extensive consulting experience with service businesses.

References

- Bankvall, L., Bygballe, L.E, Dubois, A., Jahre, M. (2010). Interdependence in supply chains and projects in construction. *Supply Chain Management: An International Journal*, 15(5), 385-393.
- Cova, B. & Salle, R. (2007). Introduction to the IMM special issue on 'Project marketing and the marketing of solutions'. A comprehensive approach to project marketing and the marketing solutions. *Industrial Marketing Management*, 36(2), 138-146.
- Gibbert, M., Golfetto, F., & Zerbini, F. (2006). What do we mean by marketing competences? A reply to Hooley et al. *Journal of Business Research*, 59(1), 148-151.
- Golfetto, F. , & Gibbert, M. (2006). Marketing competences and the sources of customer value in business markets. *Industrial Marketing Management*, 35(8), 904-912.
- Jacoby.J. & Kaplan, L. B. (1972). The components of perceived risk. Paper presented at the Conference of the Association for Consumer Research, Chicago.
- Kotler, Ph., Hayes, T., Bloom, P.N. (2002). *Marketing of professional services*. Prentice Hall Press
- Lowendahl, B.R. (2000). *Strategic Management of Professional Services Firm*. Handelshojskolens Forlag, Copenhagen.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20-38.
- Nador,E. (2012) Do Suppliers Still Have Hidden Reserves to Enhance Clients' Satisfaction? Factors Affecting Perceived Risk in the Project-type Services. *Journal of Business and Economic Research* Vol. 10, No7 July 2012.
- Veres, Z. (2009) Competence-based risk perception in the project business. *The Journal of Business and Industrial Marketing*, 24(3-4), 237-244.