

Attila Legoza

# Failure of Projects, Causes of Failure

## SUMMARY

The study examines the reasons for the project's failure, supplemented by the processing of the literature related to the topic, highlighting the project's success factors and the project's success criteria. Project implementation has become very popular in recent years. In addition to IT, organizational development and research and development (R&D) projects, the number of traditional investment projects also increased. Unfortunately, the number of failed projects has also increased along with the growing number of projects. There are various reasons for this.

**Keywords:** project, project management, success factor, success criteria, failure.

**Jel-code:** D2, M12

## INTRODUCTION

Defining the success of projects is a challenge, as the factors influencing the success of different types of projects can be different. At the same time, there are fundamental success factors such as deadline and planned cost that are crucial for any project. For example, if a project is not completed within the specified time frame, it is likely that its costs will also increase. Reasons for delayed deadlines can include incorrect project scoping or lack of resources, both of which can result in cost overruns. The present study examines the reasons for such failures, considering the above-mentioned factors.

## LITERATURE REVIEW

### *Project Concept*

According to Mihály Görög (2003: 26.): "A project is any activity that is a one-time and complex task for an organization, the duration of its completion (start and end) and the costs of its completion (resources) are determined, and (similar to strategic objectives) is aimed at achieving a defined goal (result)".

According to the Project Management Institute (PMI): A project is a series of rationally chosen activities involving the use of resources (time, money, people, materials, energy, space) in order to achieve predefined goals (PMI website: [www.pmi.hu](http://www.pmi.hu))

According to Lockyer and Gordon: "A unique process system that is a set of coordinated and controlled activities undertaken to achieve an objective that meets specific requirements, including time, cost and resource constraints, with start and end dates." (Lockyer, K.–Gordon, J.: *Project Management and Network Design Techniques*, 2000.)

### *Project Management*

Many people do not realize that project management has now developed into an independent profession. The number of projects is constantly increasing, and as a result, the recognition of the project management profession is also increasing. Projects have become part of our everyday life. People are increasingly forming small groups to solve problems or tasks that arise. The effectiveness of teamwork depends on the team leader, who is

able to direct and coordinate activities. In Hungary, the terms project and project management are increasingly popular both in the corporate and public administration fields. At the same time, according to experience, there are few people who exactly understand the content of these concepts.

### *Concept of Project Management*

Projects have some basic characteristics, namely that they are limited in terms of time, costs, and resources (human and technical). The project must therefore be completed within a given deadline and within a given budget. In fact, this is the essence of project management. Project management is the management, control, and organization of the project process itself, which, on the one hand, focuses resources and, on the other hand, methodological and technical tools on achieving the goal. (Görög 2001, p. 18)

There are many definitions of the concept of project management:

- Project management is the application of knowledge, skills, tools and techniques during activities carried out in order to fulfil project requirements. (PMI)
- Project management is the set of management tasks, organizations, techniques and tools necessary for project management. (DIN 69901-1)
- Project management is a specialized field dealing with the organization and management of resources, the aim of which is to ensure that the project's goals are met within a given time and budget, in accordance with quality parameters, as a result of the work performed by the resources. (Görög M. 2003, p. 51.)

### *10 Knowledge Areas of Project Management*

The ten areas of knowledge in the list below are still of outstanding importance in the implementation of a project. According to the wording of the PMBOK, the task division of each knowledge area is as follows:

- The task of integration management is to coordinate the various elements of the project. This includes the preparation of the founding document, the preliminary scope description and the management plan, as well as the control, management, follow-up and supervision of the implementation, the integrated change control and finally the closing of the project.
- The task of scope management is to ensure the realization of the set goals (and only those). In addition to keeping the original goal in mind, the important task of this area is to identify and incorporate new or changing goals that arise during the implementation into the project, as well as to carry out the necessary redesigns. This includes defining, planning, verifying and monitoring the project scope, as well as creating the task breakdown structure.
- The task of time management, i.e. schedule management, is to adhere to the original schedule, during which the pro-

**Table 1: project success**

<b>TRADITIONAL RESOLUTION FOR ALL PROJECTS</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>SUCCESSFUL</b>	39%	37%	41%	36%	36%
<b>CHALLENGED</b>	39%	46%	40%	47%	45%
<b>FAILED</b>	22%	17%	19%	17%	19%

*The Traditional resolution of all software projects from FY2011–2015 within the new CHAOS database.*

*Source: The Standish Group (2015)*

ject schedule (project plan) is used as a communication tool. This includes activity definition, activity dependency arrangement, activity resource estimation, activity lead time estimation, schedule creation and schedule monitoring.

- The task of cost management is to ensure implementation within the framework of the budget, to recognize cost overruns and to implement any necessary corrective actions. This includes cost estimation, cost planning, and cost monitoring.
- The task of quality management is to ensure results with expected and specified parameters (quality). This includes quality planning, quality assurance and quality control.
- The task of human resource management is the optimal use of human resources considering the ability and availability, including the training and development of resources. This includes human resource planning, project team recruitment and development, and project team management.
- The task of communication management is to inform all interested persons and organizations participating in the project in the appropriate quantity, quality and regularity. This includes communication planning, information distribution, performance reporting, and stakeholder management, which includes managing communications to meet stakeholder needs and resolve stakeholder issues.
- The task of risk management is qualitative and quantitative risk analysis, as well as the development of avoidance reserve plans. This includes risk management planning, risk identification, analysis, monitoring and supervision, as well as management.
- The task of procurement management is to regulate cooperation and integration with suppliers and partners. This includes procurement planning, contracting planning, soliciting supplier responses, supplier selection, contract execution and contract closing.
- New areas of knowledge Stakeholder management, which was recently included (in the 5th edition of the PMBOK), is a new area of knowledge. Edward Freeman (1984) formulated in the eighties that the key to business success is knowing the stakeholders living in the company's environment, taking their needs and wants into account in project work. (Frederick et al., 1992).

### **Project Success**

As Carden and Egan (2008) pointed out, there is no consensus in the literature regarding a unified concept of project success. Several organizations deal with the success of the project, I would like to highlight the Standish Group, an independent international consulting company founded in 1985. Every year, this organization publishes a publication entitled "Chaos Report", which is based on the IT project database and contains the overall success rate of the projects examined in a given year. The publication illustrates the percentage of projects that were successfully completed, failed or met with challenges. Their database of over 50,000 projects is one of the largest of its kind in the world. It is clear from their analysis that the examined projects are approx. 70% cannot be considered successful, see table 1.

The 2020 edition of the Standish group Chaos report also shows the same result. No significant changes have taken place, in fact the percentage of successfully implemented projects shows a decrease.

The analysis of the period between 1996 and 2022 in the latest report did not change either. The graph clearly shows that between 2009 and 2013 there was an increase in the percentage of successful projects, but from 2014, a decrease can be seen again.

The definition of project success in the literature is still unclear. Mihály Görög (2013) formulated the following definition of project success: "a project can be considered a success if the project result contributes to the achievement of the underlying strategic goal in the organization that initiated the project, and both the project execution process and the resulting project result are accepted by the stakeholders for interest groups" (Mihály Görög 2013, page 35)

Formulating the success of projects is not an easy task, since the success factors of projects with different goals are also different. However, there are success factors that are considered essential regardless of project type. It is important to properly define two related concepts and their differences, success factor and success criterion. Belassi and Tukel (1996) first drew attention to the conceptual differences between the success criterion and the success factor. We definitely need to understand the difference between the terms to define project success.

# Project Success Quick Reference Card

Based on CHAOS 2020: Beyond Infinity Overview, January 2021, QRC by Henry Portman

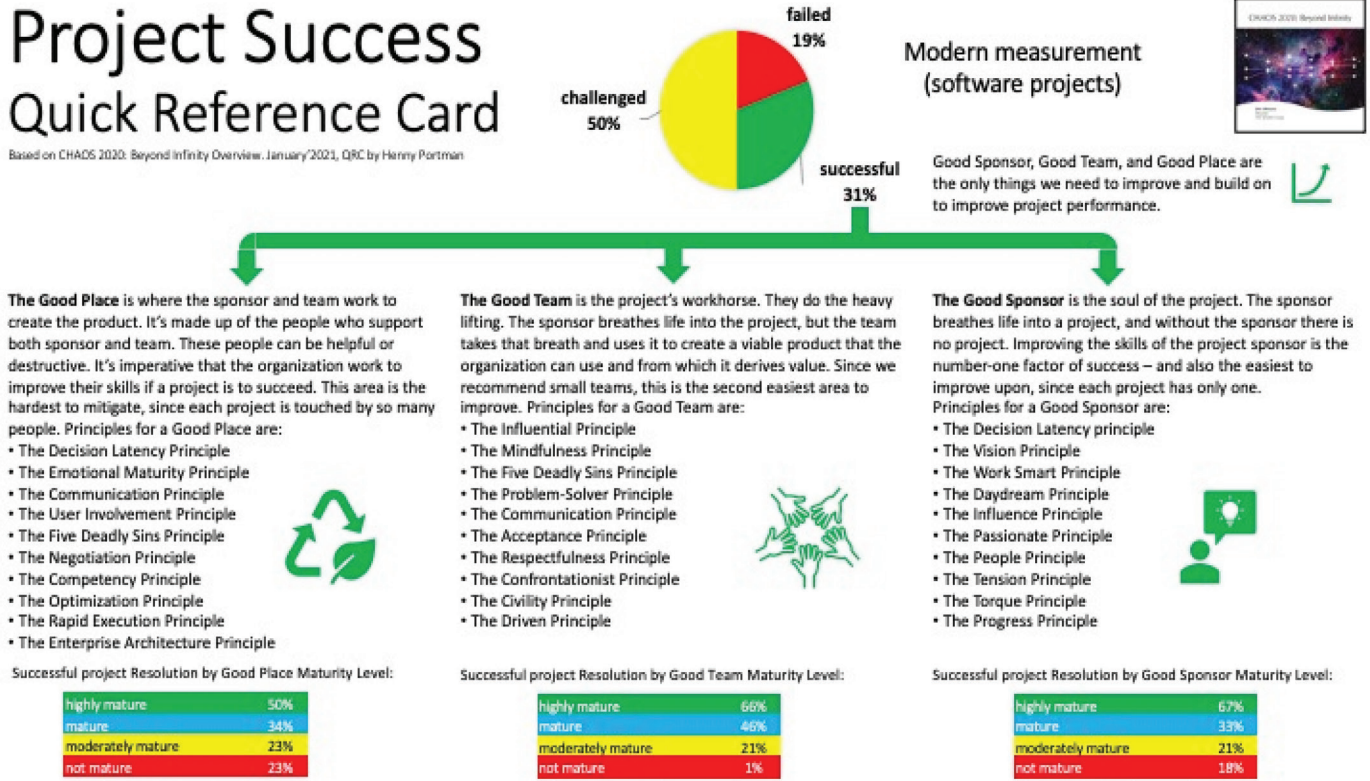


Figure 1: project success,

Source: The Standish Group (2020)

–Benchmarks that make it possible to measure project success are called success criteria. These are goals that can be evaluated after the completion of the project (Cooke-Davies 2002), dependent variables on the basis of which project success can be measured (Müller and Turner 2007).

– Success factors are influencing conditions that directly or indirectly facilitate the successful completion of projects, so these are independent variables of success (Bredillet 2008). Among these, we call critical success factors those that make an outstanding contribution to one of the project success criteria. (Fortune and White, 2006).

### Project Success Factors

The success factors of the project must be distinguished from the critical success factors of the project, which in the interpretation of Rockart (2002) are special factors that contribute to the successful completion of the project.

Pinto and Slevin (1988) conducted outstanding research on the topic, who, based on a 418-item questionnaire survey, identified ten internal (project mission, project schedule/plan, project support technology, group, senior management support, customer acceptance, monitoring feedback, communication channels and problem management expertise), and four external (project team leader characteristics, power relations and politics, environmental events and urgency) critical success factors were identified.

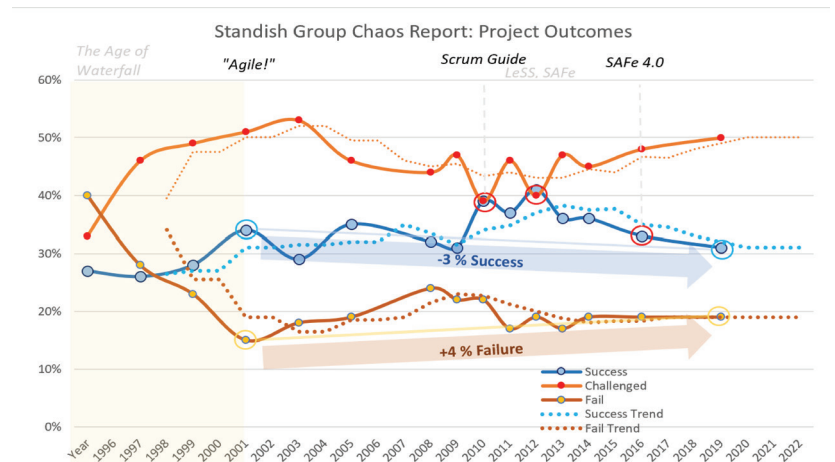


Figure 2: project success

Source: The Standish Group (2022)

### Project Success Criteria

According to Müller and Turner (2007), projects differ both in their size and uniqueness, as well as in their complexity. Accordingly, different criteria systems must be used to evaluate success. Different projects require different types of management and management processes (Crawford et al. 2005), and the same applies to the criteria for evaluating the success of the project.

The 6th edition of the Project Management Body of Knowledge defines the following success criteria: (Project Management Institute, 2017b)



**Figure 3. Project success criteria**

Source: own editing, based on the Project Management Institute

## RESULTS AND THEIR EVALUATION

### *Reasons for Failure of Project Implementation*

Determining the reasons for the failure of project implementation is not an easy task. Simply put, if the success factors and criteria of the project are not evaluated positively, because they were not realized in part or in whole during the implementation, then we can already talk about failure. The main elements of the former golden triangle, nowadays more of a project triangle, such as scope (previously quality), cost and deadline, are the most important criteria. Considering the critical success factors, if a project is not completed within the specified time frame, it is likely that its costs will also increase. Delays in deadlines can be caused by factors such as inadequate definition of the scope of the project or lack of resources, both of which can result in increased costs.

I work for a project implementation company, I have participated in the implementation of several international and domestic projects with different budgets and different organizational structures. Accordingly, I have identified some of the main reasons for the delay, such as inadequate:

- a) planning, definition of project content
- b) cost planning
- c) use of resources
- d) setting up a project organization
- e) project management, lack of project management competence
- f) undertaking below the market price due to the competitive situation

I will explain the above factors in a few sentences:

- a) Planning, definition of project content: the investors' ideas are put on paper by the designers. During the planning process, the designers first prepare the concept plans, followed by the preparation of the execution plans. In many cases, the competition for the implementation is already started based on the concept plans. Unfortunately, this is a wrong decision

in many cases, as there is usually a big difference between the concept plans and the execution plans,

- b) Cost planning: perhaps I should not use the inappropriate word, but rather the term insufficiently prudent cost planning. The investment and implementation cost of the project is usually determined at the same time as the concept plans (basic design) are prepared. Similar to the definition of the project content, it is finalized in several phases, but in many cases the competition is already based on concept plans, and thus contractual costs are already determined based on the received offers, the consequence of which is planning below cost.
- c) Use of resources: one of the most important factors in project management is the provision of adequate human resources. However, the labor market faces challenges, there are few professionals with project experience, so the project often has to be started with newbies or staff with no project experience. Accordingly, the strategy and the organization must be set up. In addition to setting up the project organization, it is extremely important to properly assemble the subcontractors.
- d) Setting up the project organization: setting up the right project organization is half the success of running the project. On the other hand, the formation of an inadequate project organization can be just the opposite, it can lead to the unsuccessful implementation of the project. An accurate, detailed definition of the tasks of the project organization covering the entire content of the project is essential, this should be the first step.
- e) Project management, lack of project manager competence: after setting up the project organization, the first step is to find and hire a suitable project manager. This is one of the most difficult tasks. There are many types of projects and almost all of them are unique, so the project manager must be flexible and have adequate project management skills. You

can be technical, economic or even a lawyer based on your qualifications, but it is important that you know and apply project management tools. Of course, for example, in the construction of a plant, it is preferable if the project manager has a technical degree, but if the members of the organization under him perform the professional tasks, then the project manager should have management skills.

f) Undertakings below the market price due to the competitive situation: after the regime change, many businesses were established and the spirit of entrepreneurship has not decreased to this day. There are smaller forced enterprises that were founded due to the loss of a job, termination of employment or other reasons. However, most businesses are based on the opportunities provided by the market niche. There is a great demand for investment companies to this day, private investors, multinationals from abroad and public investments are all waiting to be implemented. Since European Union funds must also be used, public procurements provide businesses with the opportunity to participate in open tenders. This has advantages and disadvantages. Any company that meets the conditions in the call for tenders can submit its offer. The open public procurement procedure does not include a budget amount, only an unpriced budget. This is what businesses need to fill out. There are programs that help with pricing, such as the TELC budgeting program, but their use is not mandatory. In each case, the calculation of the offer price is a unique decision of the company. However, there are companies that calculate well below the market.

In addition to the above, there are other factors that can hinder the successful implementation of the project, but from the point of view of my research, the ones mentioned above have more weight. I will mention a few more factors, but I did not use them in my questionnaire and interview questions:

g) Financing problems, h. Environmental factors, i. Human factors, j. Regulatory changes.

### Questionnaire

I only sent my questionnaire to people who are somehow involved in project implementation, either as investors or contractors. 154 people filled out the questionnaire. In my questionnaire, I asked the respondents to weight the reasons for the project's failure and I received the following result.

*There are tangible reasons for unsuccessful project implementation. Choose the factor you think has the most weight from the following, from 1 to 6 points, where 1 point has the least weight and 6 points has the most weight.*

I received the following result during the evaluation.

#### a) factor: Inadequate planning, definition of project content.

Based on the results, the respondents evaluated the following as the most important factors of unsuccessful project implementation:

1 point: 5 respondents (3.25%), 2 points: 10 respondents (6.5%), 3 points: 11 respondents (7.15%), 4 points: 12 respondents (7.8%), 5 points: 42 respondents (27.3%), 6 points: 74 respondents (48.1%).

The results show that most of the respondents (48.1%) gave the highest 6 points to the "Inadequate planning, project content definition" factor, which means that for the respondents

this is the weightiest reason for unsuccessful project implementation. Based on the results, it seems important to emphasize and improve the planning process, as well as to ensure the proper definition of the project content, in order to increase the success of the project.

#### b) factor: Inadequate cost planning.

Based on the results, the respondents evaluated the following as the most important factors of unsuccessful project implementation:

1 point: 1 respondent (0.65%), 2 points: 10 respondents (6.5%), 3 points: 14 respondents (9.1%), 4 points: 36 respondents (23.4%), 5 points: 50 respondents (32.5%), 6 points: 43 respondents (27.95%).

Based on the results, most respondents (32.5%) gave the factor "Inadequate cost planning" the highest score of 5 points, while another 43 respondents gave it 6 points, which represents the most weighty answer. The results show that for the respondents, deficiencies in cost planning have a significant impact on the failure of project implementation. Therefore, it would be important to invest more time and energy in the proper cost planning process and to pay attention to cost control during projects in order to minimize risks and increase the chance of success.

#### c) factor: Use of inadequate resources.

The evaluation of the answers to the question can be seen below:

1 point: 2 respondents (1.3%), 2 points: 10 respondents (6.5%), 3 points: 14 respondents (9.1%), 4 points: 31 respondents (20.1%), 5 points: 50 respondents (32.5%), 6 points: 47 respondents (30.5%).

The majority of respondents (32.5%) indicated 5 points as the factor with the greatest weight in the case of unsuccessful project implementation. This is followed by 6 points (30.5%), then 4 points (20.1%). The proportion of respondents marking 1-3 points is relatively low.

These results show that for the respondents, the appropriate use of resources is the most important factor in terms of successful project implementation. The proper planning, distribution and use of resources plays an important role in ensuring the success of projects.

#### d) factor: Setting up an inappropriate project organization.

The evaluation of the answers to the question can be seen below:

1 point: 3 respondents (1.9%), 2 points: 6 respondents (3.9%), 3 points: 22 respondents (14.3%), 4 points: 41 respondents (26.6%), 5 points: 51 respondents (33.1%), 6 points: 31 respondents (20.1%).

The majority of respondents (33.1%) indicated 5 points as the factor with the greatest weight in the case of unsuccessful project implementation. It is followed by 4 points (26.6%) and 6 points (20.1%). The proportion of respondents marking 1-3 points is relatively low.

These results show that for the respondents, the establishment and operation of the project organization is an important factor in terms of successful project implementation. Ensuring proper project organization, which includes proper division of tasks, responsibilities, and communication, is key to project success.

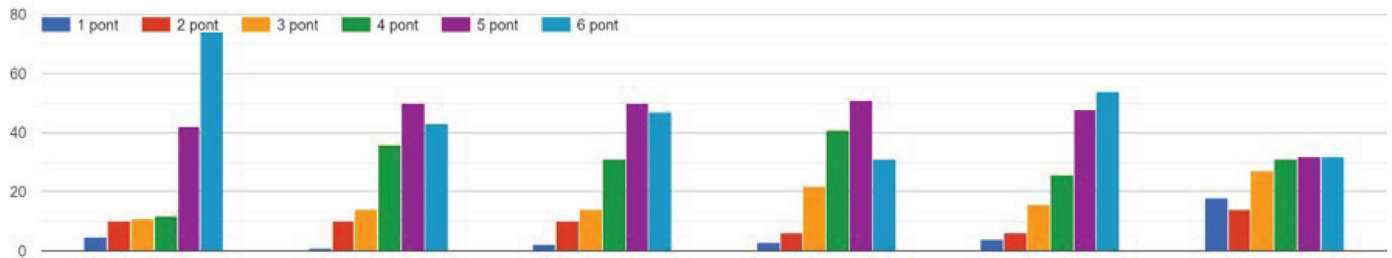


Figure 4: reasons for project failure

Source: own questionnaire report

**e) factor: Inadequate project management, project management competence.**

The evaluation of the answers to the question can be seen below:

1 point: 4 respondents (2.6%), 2 points: 6 respondents (3.9%), 3 points: 16 respondents (10.4%), 4 points: 26 respondents (16.9%), 5 points: 48 respondents (31.2%), 6 points: 54 respondents (35.1%).

The majority of respondents (35.1%) indicated 6 points as the factor with the greatest weight in the case of unsuccessful project implementation. Then comes 5 points (31.2%) and 4 points (16.9%). The proportion of respondents marking 1-3 points is relatively low.

These results show that, according to the respondents, project management and the competence of the project manager greatly influence the successful implementation of projects. The selection of the right project manager and the availability of the right competencies are key to the success of the project.

Based on the results, the majority of respondents (35.1%) gave the highest score, i.e. 6 points, to the factor “Inadequate project management, project manager competence” as the most important reason for unsuccessful project implementation. This indicates that respondents attach great importance to the quality of project management and the competence of the project manager. In this case, the right management skills, experience and abilities are considered essential for successful projects.

The next highest proportion of scores chosen was 5 points (31.2%), which further emphasizes the importance of project management and the weight of the project manager’s role in the success of projects. This indicates that, according to the respondents, effective and results-oriented implementation of project management is key to successful project implementation.

The proportion of respondents giving 4 points is 16.9%, which means that, according to a considerable number of respondents, inadequate project management and project manager competence are a significant factor in the failure, although it has a lower weight among the listed factors.

The proportion of respondents giving 1-3 points is relatively low, which shows that a small part of the respondents believe that the quality of project management and the competence of the project manager have little or no influence on the successful implementation of projects.

Overall, based on the results, it can be concluded that the great majority of respondents attach great importance to project management and the competence of the project manager in the implementation of successful projects. This result sug-

gests that the right management skills, experience and expertise are essential for the successful completion of the project and the achievement of the objectives.

**f) factor: Commitment below the market price due to the competitive situation**

Based on the given results, the “Commitment below the market price due to competitive situation” factor is a major reason for unsuccessful project implementation. We can evaluate the results in detail below:

Number of respondents giving 1 point: 18 people, number of respondents giving 2 points: 14 people, number of respondents giving 3 points: 27 people, number of respondents giving 4 points: 31 people, number of respondents giving 5 points: 32 people, number of respondents giving 6 points: 32 people.

Based on the results, most of the respondents (32 people) gave 5 or 6 points to the factor “Commitment below the market price due to the competitive situation”, which means that this factor has the greatest weight in unsuccessful project implementation. In addition, the number of respondents giving 4 points is also high (31 people), which further strengthens the importance of this factor.

Based on the results, we can conclude that most of the respondents believe that the competitive situation and the commitment below the market price have a significant impact on unsuccessful projects. This shows that competitive offers and appropriate pricing during projects are extremely important for successful project implementation. Graphic display of responses to the questionnaire.

**CONCLUSIONS AND RECOMMENDATIONS**

Overall, respondents emphasize that improving project management and planning processes, proper management of resources and realistic cost planning are key to successful project implementation. In addition, the low prices caused by the competitive situation are a challenge, and it is necessary to monitor the pricing strategies for optimal project implementation. Regarding resources, I would like to point out that it is developing into one of the most serious factors among the reasons for failure, since ensuring the available resources is one of the most challenging areas in Hungary. Not only the lack of professional training, but also the provision of adequate staff is on a critical path. Nowadays, the number of investments has increased and Hungarian resources are no longer sufficient for the core implementation of the projects. Foreign construction companies have appeared on the market and Hungarian enterprises also employ foreign workers. There are several reasons for the lack of resources. One of the reasons is that there

are not enough professionals, as our education system has been transformed and we have practically abolished vocational training, most of the old professionals have reached retirement age, and those who are not yet good at their profession are taking jobs abroad in the hope of better pay. And there are not enough professionals left at home, so companies try to make up for the shortage with trained or auxiliary workers. In practice, this looks like, for example in the field of electricity, that 2-3 out of 10 workers are professionals with appropriate qualifications, 4-5 trained workers, the rest are assistants. The consequence of this, however, is that the implementation takes place at a slower pace, causing delays to the project. The same is true for the other fields of expertise.

On the one hand, what is described above reflects my own experiences, and on the other hand, I formulated it on the basis of interviews conducted during my research, answers to questionnaires and a review of the literature. During the interviews, I specifically spoke with senior managers who deal with project implementation and investment projects, including company managers, investment directors and project managers. Out of a total of 5 in-depth interviews, 3 people represented the investor side, while 2 people represented the contractor side. I sent the questionnaire to more than 200 participants who deal with project implementation both on the client's and the contractor's side. Company managers, project managers, project engineers and purchasing managers were among those who completed the questionnaire. In terms of the size of the companies, they ranged from HUF 100 million to HUF 20 billion based on sales revenue, while I targeted companies with between 25 and 500 employees based on the number of employees. I gained extensive experience as the technical director of a project implementation company over the past 10 years.

It is easy to read from the review of the literature that the success of the project implementation can be achieved by fulfilling several factors and criteria. Detailed studies, technical books, and scientific descriptions are available to summarize the success of the project.

My research is mainly exploratory, but the analyses and results in the study also contain explanatory experiences. During the analysis based on quantitative data, I detect and evaluate the relationships between the presented factors.

## REFERENCES

- BELASSI, W. – TUKEL, O. I. (1996): A new framework for determining critical success/failure factors. *International Journal of Project Management*, 14(3), pp. 141-151. DOI: 10.1016/0263-7863(95)00064-X
- BREDILLET, C. N. (2008): From the Editor – Exploring Research in Project Management: Nine Schools of Project Management Research Part (4). *Project Management Journal*, 39 (1), 2-6. DOI:10.1002/pmj.20030
- CARDEN, L. – EGAN, T. (2008): Does Our Literature Support Sectors Newer to Project Management? The Search for Quality Publications Relevant to Non-traditional Industries. *Project Management Journal*, 39(3), 6-27. DOI:10.1002/pmj.20068
- COOKE-DAVIES, T. (2002): The "real" success factors on projects. *International Journal of Project Management*, 20(3), 185-190. DOI:10.1016/S0263-7863(01)00067-9
- CRAWFORD, L. (2005): Senior management perceptions of project management competence. *International Journal of Project Management*, 23(1), 7-16. DOI:10.1016/j.ijproman.2004.06.005
- FORTUNE, J. – WHITE, D. (2006): Framing of project critical success factors by a systems model. *International Journal of Project Management*, 24(1), 53-65. DOI:10.1016/j.ijproman.2005.07.004
- FREDERICK, W. C. – POST, J. E. – DAVIS, K. (1992): *Business and Society*. New York, St. Louis etc. McGraw-Hill, Inc. ISBN: 0070155615, 9780070155619
- MIHÁLY GÖRÖG (2001): *Introduction to project management*. Aula Publishing House, Budapest, ISBN: 9639345504
- MIHÁLY GÖRÖG (2003): *The craft of project management*. Aula publishing house, Budapest, ISBN: 9639478571
- MIHÁLY GÖRÖG: (2013). *Project management in organizations*. Panem Publishing House, Budapest, 35. ISBN: 9786155186172
- LOCKYER, K. – GORDON, J. (2000): *Project management and network planning techniques*, Kossuth Kiadó, Bp., ISBN: 9630941244
- MÜLLER, R. – TURNER, R. J. (2007a): The influence of project managers on project success criteria and project success by project type. *European Management Journal*, 25(4), 298-309. DOI:10.1016/j.emj.2007.06.003
- PINTO, J. K. – SLEVIN, D.P. (1988): Critical success factors during the project life cycle. *Project Management Journal*, 19(3), 67-75. ISSN: 1938-9507
- ROCKART, J. F. (2002): *Critical project factors: A 2002 Retrospective*. Available: <http://web.mit.edu/> Project Management Institute, PMI webpage: [www.pmi.hu](http://www.pmi.hu) Project Management Institute, Project manager competence development framework. Project Management Institute, Newton Square. ISBN-13. 978-1628250916