

Strategic project controlling – a study of organizations functioning in Poland

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Abstract

The purpose of the chapter is to present the outcome of the research over controlling processes used in strategic project management of organizations functioning in Poland. The analysis, in particular, concerned the scope of strategic project controlling, the roles played in the process and its evaluation.

The author also analysed:

- the background of implementing the project controlling procedures into the organizations,
- the extent of control applied in project management practice,
- the job positions responsible for the strategic project control and the main tasks performed by the project controlling individuals.

Additionally in the chapter the advantages and disadvantages of introducing the system of controlling multiple projects are identified.

Streszczenie

Celem rozdziału jest prezentacja wyników autorskich badań z zakresu kontrolingu projektów, wykonanych w 2013 roku. Obejmowały one analizę rodzajów kontrolingu stosowanego w zarządzaniu projektami w odniesieniu do cyklu życia projektów realizowanych w organizacjach działających w Polsce. Odnosiły się również do powodów wykorzystywania i sposobów wdrażania zasad i procedur strategicznego kontrolingu projektów. W badaniach zidentyfikowano także zakres wdrażanych procedur kontrolingowych i wsparcia informatycznego w tym zakresie oraz osoby pełniące istotną rolę w strategicznym kontrolingu projektów i ich główne obowiązki odnoszące się do kontrolingu. Autor przeanalizował stopień spełnienia oczekiwań respondentów w odniesieniu do stosowanych procedur kontrolingu strategicznego w badanych organizacjach, zidentyfikował wady i zalety istniejących rozwiązań oraz poddał analizie potrzeby respondentów w zakresie ulepszania procedur strategicznego kontrolingu projektów.

3.1. Introduction

Despite its significance, strategic project controlling is an issue poorly described in the literature, both Polish and foreign. For last ten years, only a few books were entirely focused on project management controlling issues². At the same time one tries to implement the

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² Łada M., Kozarkiewicz A.: Rachunkowość zarządcza i controlling projektów, C.H. Beck, Warszawa 2007; Niedbała B., Controlling w przedsiębiorstwie zarządzanym przez projekty, Wolters Kluwer, Warszawa 2008; Devaux S., Total Project Control: A Manager's Guide to Integrated Project

concepts of repeatable activities controlling into the project management area. It raises a number of ambiguities and misunderstandings, due to the fact that project management is not usually coincide with the process-driven company activities. Therefore, the author decided to investigate broadly the scope of project management controlling issues for projects under implementation in Poland.

The aim of the article is to deal with a number of significant aspects of controlling issues in strategic project management from organizations operating in Poland point of view. The author analyzed the reasons for implementing the project controlling procedures into the organizations, the extent of level control applied in project management practice, identified the positions responsible for the strategic control of the projects and the main tasks performed by the project controlling staff. In that article also the advantages and disadvantages of introducing a system of multiple projects controlling for the organization are identified. The article is based on the results of the statutory research "The scale, scope and form of project controlling processes – empirical studies", conducted by the author at the Warsaw School of Economics.

3.2. Controlling of projects

Controlling of projects is defined as a set of methods and techniques to support the processes by providing information needed at different levels of project management to make rational decisions. Its main task is the integration of unrelated control activities into a coherent whole, which distinguishes them from the control processes, often carried out by autonomous individuals on a limited area of its operation. Project controlling is an example of adaptation of organizational systems to the projects unique character. Taking the planning horizon or activities detail level into consideration there are two types of project controlling to be mentioned: strategic and operational (also known as operable)³.

Strategic project controlling is primarily used to coordinate the information for the control and analysis of multiple projects (portfolios and programs) in order to make more rational decisions about their management proces, as well as to assess the strengths and weaknesses of projects in relation to the current development strategy of the organization. Strategic project controlling involves feasibility study, assessment of their cost-effectiveness and efficiency from adopted guidelines point of view, forming ranking lists of projects and analyzing the convergence of their goals with the strategic objectives of the organization.

In the project structures this level of controlling is represented mostly by the Steering Committee responsible for programme or portfolio management as well as supervising single projects of high strategic importance. In the process of strategic control there are several tools to be used, among others:

- strategic evaluation (multi-faceted assessment of the project effectiveness, taking into account the external and internal circumstances);

Planning, Measuring, and Tracking, Wiley, 1999; Drigani F., Computerized Project Control, Wyd. CRC, 1988; Pinto J., Trailer J., Essentials of Project Control, PMI 1999; Mubarak S., Construction Project Scheduling and Control, Wiley 2010; DelPico W., Project Control: Integrating Cost and Schedule in Construction, Wiley 2013.

³ In the literature, these terms are often used interchangeably. About operational controlling write among others: Vollmuth H., Controlling, Placet, Warszawa 1997; Preißner A., Projekte budgetieren und planen, Carl Hanser Verlag 2003. About operable controlling write among others: Łada M., Kozarkiewicz A., Rachunkowość zarządcza i controlling projektów, op. cit.; Łada M., Budżetowanie projektów, [in:] Finanse. Przegląd Organizacji, 2007, 3.

- analysis of the portfolios (value analysis taking into account the cost of projects as part of the entire portfolio of related projects);
- analysis of programme or portfolio risk as well as individual projects of high strategic impact;
- measuring progress in the projects, for example through the balanced scorecard (evaluation during implementation, whether the project brings the expected benefits);
- analysis of the project value for the client (used to determine the final price using the “market approach”);
- the target cost of the project (to determine the scope, quality and timing on the basis of the overall cost and its target price);
- project life-cycle costing strategy (taking into account the phase of using the project final products);
- cost analysis of value chain (i.e. the value and costs at all stages of the project, carried out both inside and outside the organization)⁴.

Controlling tools concerning multiproject management allow, for better strategic development of a project portfolio, to help the client to identify their expectations having regard to the scope, quality and cost of the most important projects, determining the impact of stakeholders, risk analysis, etc. From the tools and techniques used in strategic project controlling one expects to increase capabilities and opportunities to ensure a stable implementation of projects implemented within the programmes or portfolios as well as making strategic decision in this regard.

The operational project controlling is oriented to adjust the implementation of projects in short time horizon (usually up to one year). It focuses on the planning, execution and control of the projects allotted for implementation at the defining phase stage. In the project management process operational p.c. is represented mostly at the level of project manager. Information collected in this type of controlling is primarily used to improve decision-making within the current management phases of the project. Taking into account the specificity of the article's subject the author focused in its later parts on strategic controlling issues and decided to present selected results of the results of the statutory research mentioned above.

3.3. Controlling projects in organizations functioning in Poland – the results of empirical research

The research sampling strategy

The research was performed in year 2013 and consisted of conducting standardized surveys⁵. The target group consisted of students and graduates of the Postgraduate Studies in Project Management at Warsaw School of Economics who participated of projects carried on in organizations functioning in Poland. They were project managers and members of the Steering Committees of at least 2 years of experience in project management, implementing and supervising the implementation of projects in sectors such as IT, telecommuni-

⁴ On the basis of: Łada M., Kozarkiewicz A., op.cit., p. 32–33.

⁵ Full version of conducted survey form can be found at: www.buklaha.pl/controlling2013.doc (access: 1.05.2014).

cations, construction, architecture, medicine, consulting. The survey was sent to 1 518 people, the return of the questionnaires (study sample) was at the level of 57 complete responses (3.75% of total answers of the research population). In opinion of the author it should be stressed that although interesting results were obtained, it should only be treated as an introduction to the further research, because answer sample of that level should not give right to extent the outcomes of the findings to the entire research population.

Research methods and scope of research

The author, being aware of the extent of the research topics, focused on presenting selected issues of strategic project controlling. The basis data for the development of the aggregated research results consisted primarily of forms and types of controlling applied in practice of project management, in relation to the projects implemented in the organizations functioning within the country. They also related to the reasons and methods of implementing strategic controlling procedures as well as their advantages and drawbacks. The study also allowed to identify the job position of individuals performing an important role in strategic project controlling and their main responsibilities in this regard. Nevertheless, the scope of research does not address issues of project portfolio assessment or analysis of the projects value for the customers.

The outcomes of empirical research

Question 1. *Do the surveyed organizations applying procedures of strategic controlling in the project management process?*

Taking all the answers into consideration 62% of respondents answered affirmatively to this question. This means that in six out of ten cases tools and procedures of the strategic control level were used for proper supervision of the projects carried out by the Steering Committee or its equivalent in relation to the manager of projects implemented in the surveyed organizations.

Every fifth respondent (ca. 21% of answers) stated that their organization does not apply the procedures of strategic controlling in managed projects, while 17% of respondents had no opinion in this area.

Question 2. *At what stages of project management lifecycle strategic controlling tools and techniques are applied in the surveyed organizations?*

Regarding the frequency of use of strategic controlling appropriate procedures in the stages of the project life cycle, most responses pointed the stage of project completion, which focuses on postaudit outcomes of the whole project (26%), followed by phases of implementation and planning (21% and 18% indications) (Table 3.1).

Table 3.1

Strategic controlling elements in project lifecycle phases (possible multiple indications)

Initiation	Definition	Planning	Implementation	Closing	Hard to say
12 (15%)	12 (15%)	14 (18%)	17 (21%)	21 (26%)	4 (5%)

Source: own work

It should be noted that due to the outcomes of the research most often chosen areas of using elements of project strategic controlling concerning the planning, execution and completion lifecycle phase, is in line with the recommendations of the leading universal project management methodologies such as PMBoK or PRINCE2.

Question 3. *What were the main reasons for introducing strategic project controlling procedures in the surveyed organizations?*

In the conducted research respondents indicated the following basic reasons: the need to obtain additional information about the project implementation cost, to reduce costs and improve the cash-flow level of the organization (19 responses each). It should also be noted that the number of indications of all the remaining reasons was even and ranged from 9–14% of all responses in this research area (Table 3.2).

Table 3.2

The main reasons for introducing strategic project controlling procedures in the surveyed organizations (possible multiple indications)

The main reasons for introducing strategic project controlling	Number of indications	%
To obtain additional information about the project implementation cost	19	17
To reduce costs and / or improve the cash-flow level of the organization	19	17
To obtain additional information about the scope of work	15	14
To obtain additional information about the quality of project outcomes	14	13
To obtain additional information about the time of project implementation	13	12
To ensure better information flow	10	9
To increase the involvement of project employees	9	8
To obtain additional information about the available resources	8	7
Other reason	1	1
Hard to say	2	2

Source: own work

Taken above into consideration, it should be noted that – besides main reasons related to financial control – the extent, duration, timing, quality and personal issues played an important role in the formation of strategic controlling procedures. This contradicts the perception of controlling projects solely through the perspective of the work costs, which was characteristic of the extensive, accounting approach to the project control.

Question 4. *How were procedures for strategic project controlling implemented in the surveyed organizations?*

The respondents indicated that the introduction of controlling procedures was raised primarily through self-implementing them in projects, without the participation of external consultants. Often controlling procedures have been implemented by the parent organization, for example the parent company in the capital group (Table 3.3).

Table 3.3

The methods of implementing procedures for strategic project controlling in the surveyed organizations

Controlling was implemented independently without the participation of external consultants	Controlling was implemented by the parent organization, e.g. the parent company	Controlling was introduced with the participation of external consultants	Controlling was implemented in a different way	Hard to say
31%	28%	15%	5%	21%

Source: own work

It is worth mentioning that due to the nature of controlling strategic management refers to programs or portfolios of projects, the assistance of external consultants was here reported often than in the case of the current controlling of projects.

Question 5. *How often is the strategic project supervision carried out in the surveyed organizations?*

The respondents underlined the fact that the strategic supervision during the implementation phase of the projects was carried out usually once or several times a month and ad hoc, depending on the circumstances. This is consistent with the specificity of the stage control, most commonly associated with the completion of each and every milestones in the project (Chart 3.1).

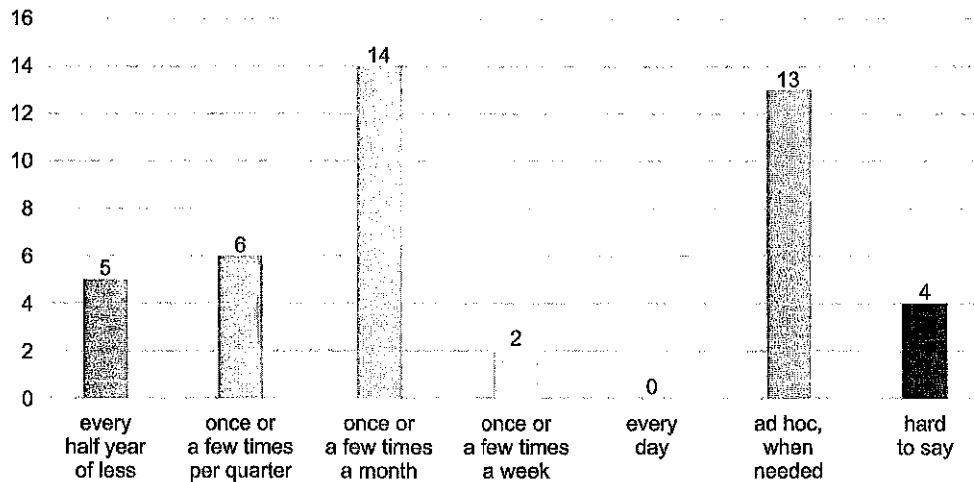


Chart 3.1. The frequency of strategic projects control in the surveyed organizations (number of responses given = 44)

Source: own work

Fewer respondents pointed to conduct of strategic control in projects once or several times a week, a quarter and half year. None respondent had observed undergoing strategic control on a daily basis in their projects (that could be carried on e.g. during critical stages for project outcomes or for solving crucial problems).

Question 6. *What does most often fall under the strategic control of projects in the surveyed organizations?*

Regard strategic project controlling cost aspects clearly dominates the other (every fourth indication in the table below). Less, although numerically close to each other responses were: time and schedule control, level of project risk and the scope of project work (Table 3.4).

Table 3.4

The scope of strategic project controlling in the surveyed organizations
(possible multiple indications)

Costs	Time and schedule	Level of risk	Scope	Quality and technology used	Other reasons	Hard to say
27 (38%)	14 (20%)	12 (17%)	10 (14%)	5 (7%)	2 (3%)	1 (1%)

Source: own work

In this type of controlling it can be seen that the actual scope of the strategic project control in the vast majority (except for issues of risk management) coincides with the reasons for the introduction of procedures for controlling, described above. This may prove the effectiveness and consistency in the creation of strategic controlling procedures and applying them into practice.

Question 7. *Do the surveyed organizations use IT software tools to support procedures of strategic project controlling?*

With regard to strategic controlling the most common IT tool used in project management proved to be a spreadsheet (36% of responses). The second most frequent choice was specialized project management software (PMS) (Table 3.5).

Table 3.5

IT support procedures for strategic project controlling in the surveyed organizations
(possible multiple indications)

IT support procedures for strategic project controlling	Number of indications	%
Spreadsheet	19	36
Specialized project management software (PMS)	11	21
Part of information system of the organization	7	13
Own IT solution	6	11
Does not use any IT software	6	11
Hard to say	4	8

Source: own work

The research respondents occasionally pointed the use of controlling modules within the organization's information processing systems. For management of project strategic controlling procedures every tenth respondent used corporate software or does not use the IT software at all.

Question 8. *Who, in surveyed organizations, usually does act as the strategic controller of implemented projects?*

As far as the procedures of strategic project controlling are concerned the role of mail controller is mostly played by the member of the Steering Committee or a controlling specialist (respectively 38 and 28% of responses). It should be noted that such solution corresponds to the specificity of strategic project controlling which – in most cases – the Steering Committee or its equivalent is responsible for.

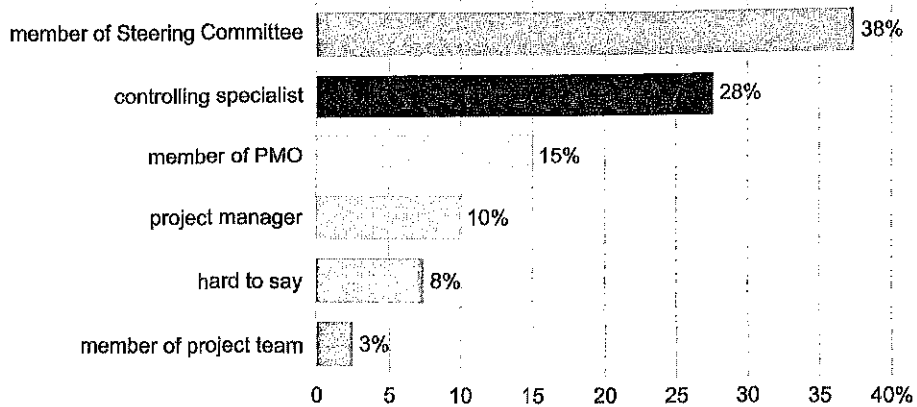


Chart 3.2. Who does act as a strategic controller of projects in surveyed organizations (number of responses given = 40)

Source: own work

In the other places of the set of answers above there were members of special organizational structures raised to support projects such as Project Management Office (PMO), while almost one in ten respondents pointed that such a role was played simply by project managers. About 3% of the respondents indicated the project team members as a source of creating the rules and procedures for strategic control level. It is very unusual as both project managers and project team members usually are only responsible for the operational type of control in projects.

Question 9. *What tasks is a strategic project controller responsible for in the surveyed organizations?*

According to the outcomes of the survey the main task which the strategic controller was responsible for was the budgeting and cost control in implemented projects (a third part of all respondents pointed to that). Further tasks of the strategic controller were: project progress and variance analysis, internal reporting, including executives and decision-makers as well as external reporting (about 17% of responses each).

Table 3.6

The responsibilities of strategic project controller in the surveyed organizations (possible multiple indications)

Strategic project controller main responsibilities	Number of indications	%
Budgeting and cost control	16	27
Project progress and variance analysis	11	18
Internal reporting, including executives and decision-makers	10	17
External reporting (e.g. To main customers or sponsors)	10	17
Coordinating of planning and progress controlling	5	8
Providing information from the project environment	1	2
Other than specified above	3	5
Hard to say	4	7

Source: own work

Almost one in ten respondents pointed to the following responsibilities as the main responsibilities of project controller of that level: coordinating of planning and progress controlling and providing information from the project environment.

Question 10. *From whom or what does the selection of range, techniques and procedures of the strategic project controlling depend in the surveyed organizations?*

The main source of strategic decisions taken in the field of the scope, techniques and procedures of strategic controlling were members of the Steering Committee as well as the project management procedures or methodologies used in the surveyed organizations.

Table 3.7

Decision-makers in the selection process of the scope, techniques and procedures for strategic project controlling in surveyed organizations (possible multiple indications)

Main decision-makers in strategic project controlling	Number of indications	%
Members of Steering Committee	15	33
Project management procedures or methodologies	9	20
Organizational culture	8	18
Superiors of project manager	5	11
Members of Project Management Office (PMO)	3	6
Project manager	1	2
Hard to say	4	9

Source: own work

The results of the research confirm the common practice of granting delegation to define procedures for strategic controlling of projects most frequently to the members of the Steering Committee.

Question 11. *To what extent do the current solutions in the field of strategic project controlling meet the expectations of the respondents in the surveyed organizations?*

In the case of up-to-date strategic controlling procedures 40% of respondents believe that they are too vague and do not provide the relevant information needed to make decisions with respect to currently implemented projects. A third part of respondents (10 respondents' answers to this question) indicated that these procedures are adequate and meet their needs in this area. Only one in ten claimed that the strategic controlling procedures are too meticulous and offer an excess of information, which makes it difficult to make decisions with respect to the monitored projects.

Given the above, it appears that the existing procedures in relation to the strategic project controlling are not exaggerated. If they cause some discomfort information, it only refers to the excessive vagueness of control information resulting from control reports and entailing difficulties in uniqueness of assessment of the project state rather than their becoming too upsize and overformalized.

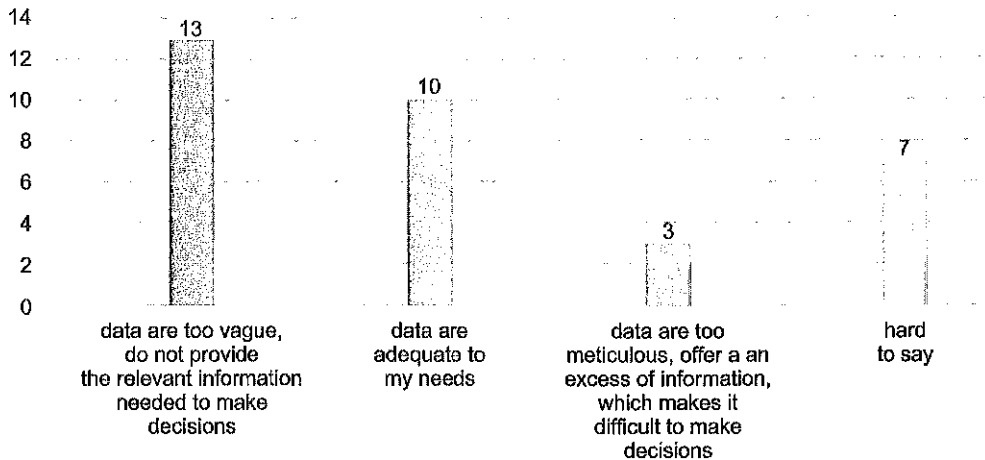


Chart 3.3. The extent of meeting the expectations of the respondents in relation to the current procedures of strategic project controlling in the surveyed organizations (number of responses given = 33)

Source: own work

Question 12. *What are the benefits of applying procedures for strategic project controlling noted in the surveyed organizations?*

Considering strategic project controlling the respondents focused mainly on the financial benefits (reducing the project costs – 22% of respondents), improving cash-flow and profitability of the organization, increasing operational efficiency and the speed of decision making. Further down the following benefits of strategic controlling procedures can be found: a better information flow and obtaining additional data for project decision-making process (12% of responses), as well as greater involvement and motivation of employees to perform project tasks (8%).

Table 3.8

The benefits of applying procedures for strategic project controlling in the surveyed organizations (possible multiple indications)

Main benefits of applying strategic project controlling procedures	Number of indications	%
Reduction of projects costs	20	22
Improvement cash-flow and profitability of the organization	14	15
Increased operational efficiency	13	14
Increased speed of decision-making process	12	13
Better information flow	11	12
Obtaining additional information for project decision-making process	11	12
Greater employees involvement and motivation to perform tasks for projects	7	8
Other benefits not stated above	3	3
I see no benefits of applying such procedures	1	1
Hard to say	1	1

Source: own work

It should also be noted that, while reducing the risk of the projects didn't appear even once as a separate benefit, it actually manifests in majority of the issues raised in the table above. In the author's assessment an increase in efficiency of operation, better information flow, faster speed of decision-making or obtaining additional information for decision-making are factors significantly lowering the risk of implemented projects.

Question 13. *What drawbacks concerning procedures for strategic project controlling could be observed in the surveyed organizations?*

According to the outcomes of the research the largest group of respondents was satisfied with the current system of strategic control (24% of responses). The biggest objections were focused on the increase of bureaucracy (18%), the involvement of too many people in controlling process (by every tenth respondent), the extension of working time in the project, the need to provide very detailed information and the fact that strategic controlling procedures generates additional costs (2 responses each).

Table 3.9

Drawbacks concerning procedures for strategic project controlling that could be observed in the surveyed organizations (possible multiple indications)

Drawbacks concerning procedures for strategic project controlling	Number of indications	%
No drawbacks	9	24%
Increase of bureaucracy	7	18%
Involvement of too many people in controlling process	4	11%
Extension of working time in the project	2	5%
Need to provide very detailed information about the project to those responsible for ongoing monitoring of the project	2	5%
Strategic controlling procedures generates additional cost to the project	2	5%
Other than stated above	4	11%
Hard to say	8	21%

Source: own work

Four respondents indicated on the other, undefined detail problems in the current system of strategic project controlling in their organizations.

Question 14. *Is the scope and frequency of strategic controlling processes sufficient in relation to effective project implementation in the surveyed organizations?*

With regard to procedures of strategic project controlling almost 41% of respondents indicated too low level of scope and frequency of control in relation to their requirements in this area. Only one in five respondents considered that the scope and frequency of control is appropriate. Such distribution of results may on one hand provide a strong demand for more accurate, frequent and detailed information over the strategic project control, and on the other, be an evidence of an inefficient system of access to such information at all.

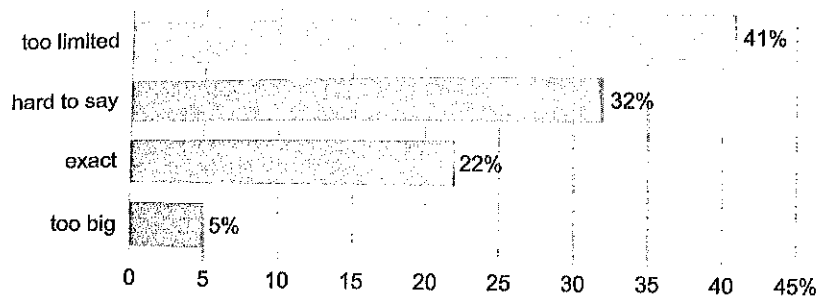


Chart 3.4. The scope and frequency of project control and its impact on the project implementation efficiency (number of responses given = 37)

Source: own work

According to answers of respondents, opinions about too massive scope and frequency of the information collected in the process of project strategic control in relation to ongoing projects were marginal, while one third of respondents had no opinion in this regard.

3.4. Conclusion

In the above research the author attempts to answer a number of research questions, that concerned the scope of strategic controlling of projects in organizations functioning in Poland, the roles played in the process of controlling and evaluation of that process. Research on the scope of project controlling indicates that that kind of control is commonly used in the surveyed organizations. First of all it can be seen in the phases of planning, implementation and completion of projects.

According to the research outcomes the reasons for the introduction of rules and procedures to strategic control was not only the need to obtain additional information about the project implementation cost but also about their range, schedule, time and quality, to ensure a better flow of information and increase the involvement of the employees.

The procedures of strategic controlling have been implemented primarily on internal staff of organization, without the involvement of external consultants. Their rules in the case of most organizations have been implemented by the parent company.

Strategic control of the projects was carried out mostly ad hoc, depending on the project needs and additionally once or several times a month.

In the surveyed organizations the scope of the strategic project control comprised mostly of task cost issues and to a lesser extent – the scope of work, time, schedule and quality of project activities.

In the surveyed organizations IT software tools were commonly used to support procedures of strategic project controlling. They were primarily: spreadsheets and dedicated project management software (PMS).

As far as the roles taken in the process of strategic controlling are concerned the role of the main strategic project controller was generally played the members of the Steering Committee. They were often supported by controlling specialists or members of projects management office (PMO).

The strategic controller of projects in a surveyed organizations was most often responsible for:

— work progress and variance analysing;

- budgeting and cost control;
- coordinating of planning and control;
- internal reporting, including to company executives;
- external reporting (e.g. principal, sponsor);
- information provisioning from external project environment.

Decisions on the selection of the scope, techniques and procedures for strategic project controlling depend mainly on the members of the Steering Committee, but also results from the organizational cultures.

Current procedures of strategic project controlling meet the expectations of majority of the respondents. The minority tend to claim that the information gained as a result of strategic controlling was unclear and usually not sufficient to make rational decisions about controlled projects.

The respondents underlined a number of benefits of implementing procedures of strategic controlling. The most important among them were:

- project cost reduction;
- improvement of project cash-flow and/or profitability of the organization;
- increased operational efficiency;
- better information flow;
- increased decision-making speed,
- obtaining additional information for decision-making;
- higher employees involvement / motivation.

The respondents also pointed to drawbacks of the current system of strategic project controlling. While most of them were generally satisfied with the current procedures in this area, there were also some inconvenience in this regard. It was related primarily to growth in bureaucracy, longer working hours, the involvement of too many people in that process and the necessity of providing too detailed information.

The research area also covered analysing if the scope and frequency of strategic controlling processes in relation to the ongoing projects is sufficient for their effective implementation. According to the respondents, most common answer pointed at too low level of scope and frequency of control in relation to their needs in this area. Only one in five respondents considered that the scope and frequency of control is appropriate.

The conducted research revealed some regularity, which – according to the issues of strategic project controlling – could be seen within the context of the analysed research sample. From the author's point of view project controlling is the subject of major importance, requiring new research and avail of lessons learned from past experience. Therefore it is highly recommended to continue and explore this area in future to successfully expand the state of knowledge.

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ZARZĄDZANIE PROCESAMI I PROJEKTAMI

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