
Determinants of the Success of an Outsourcing Project in the Field of IT Separations – The Experience of Companies in the Silesian Voivodeship

Submitted 07/11/21, 1st revision 29/11/21, 2nd revision 17/12/21, accepted 15/01/22

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Abstract:

Purpose: The aim of the article is to present the experience of Silesian companies from the SME sector in the aspect of the conditions for the success of the outsourcing project in the field of IT separation.

Design/Methodology/Approach: The article presents the results of research on a group of one hundred companies from the Silesian Voivodeship. The research was conducted over the course of March and April 2020. During this period, a questionnaire was sent to respondents, in accordance with the CAWI technique standards. In order to verify the hypothesis, the independence test χ^2 was used.

Findings: It has been shown that the scope of satisfaction from cooperation with an external company and the benefits of IT outsourcing depend on the diligence of project preparation and the quality of outsourcing relationship management.

Practical Implications: Companies that will be satisfied with cooperation with an outsourcing partner will also properly plan the project implementation process. This, in turn, will translate into an efficient flow of information between project participants. The research results reflected here can benefit both incubator business workers, researchers and entrepreneurial teachers and become an inspiration for further analysis and extended research on this problem.

Originality/Value: The originality of the conducted research lies in the presentation of the relationship between the two parameters using the independence test χ^2 . These dependencies are based on relationships between several variables, among them, scope of satisfaction, outsourcing cooperation, profitability, degree of satisfaction.

Keywords: IT outsourcing, internet, enterprise, partnership, competitiveness.

JEL codes: M15.

Paper type: Research article.

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1. Introduction

The dynamic development of the Internet and systems based on specialized technologies means that new areas of outsourcing services are emerging. Among them is IT outsourcing. New technologies and solutions in the area of IT outsourcing services appear very quickly, and their value lies in the fact that they are applied faster and better than the competition. In turbulent market conditions, IT outsourcing becomes an innovative method of using the company's potential, and at the same time a method of improving business processes. It can be treated as a valuable business strategy and at the same time a beneficial way to perform auxiliary functions. However, it should be noted that small and medium-sized enterprises (SMEs) not only use outsourcing of IT services, but are also its vendors.

However, the use of outsourcing of IT services does not automatically mean success. A large part of the companies deciding on this project does not achieve the expected results. In addition, relations with external IT service providers can become a source of numerous problems.

The aim of the article is to present the experience of Silesian companies from the SME sector in terms of the conditions for the success of the outsourcing project in the field of IT separations. It was hypothesized that the scope of satisfaction from cooperation with an external company and the benefits of outsourcing depend on the diligence of project preparation and the quality of outsourcing relationship management.

2. Literature Review

2.1 New Information Technologies as Determinants of Market Virtualisation

The emergence of new information technologies and their dissemination in the 80s and 90s of the last century (Greaver, 1999) and at the beginning of the XXI century caused an information revolution. The 80s of the twentieth century saw a dynamic development of personal computer applications. It caused a revolution in the information systems of enterprises and individuals. In business, administration, public services, households (work), in science, in entertainment and information of individual users, personal computers and their local networks began to be used on a widespread scale (Nishitateno, 2013). It soon turned out that a well-organized and effective computerized business management system allows to strengthen the market position, gain the trust of customers and beat the competition (Urry, 2015). At the beginning of the 90s of the twentieth century, a world network appeared, which began to integrate millions of computers and information banks, that is, the Internet.

In today's dynamic and turbulent economic reality, the role of the Internet is undoubtedly significant, and the existence on the Internet is becoming a necessity (Jense, 2011). The Internet is becoming not only an invaluable source of various

information, but also an effective means of communication (Sallnäs and Björklund, 2020). Hence, this tool is used with great success by modern organization (Veen, Dagevos, and Jansma, 2020). A global computer network allows you to get previously non-existent opportunities for development. In the context of the use of the Internet and information technologies, the term "new economy" has begun to be used (García-Granero, Piedra-Muñoz, and Galdeano-Gómez, 2020). In the new economic reality, completely new technologies are emerging, which remain in close relations with each other, mutually conditioning and penetrating each other. The new economic order is becoming digital (Pańkowska and Sroka, 2002).

Internal communication technologies in organizations have also developed rapidly. It is also referred to as an internal information network, or Intranet. Internet and Intranet networks are based on telecommunications links. They are constantly evolving due to new applications (Kim and Lui, 2015). An extremely important component of new information technologies have become, next to computers and data banks, devices for communication with the network, peripheral devices, data transmission network and mobile telephony. New information technologies also mark their presence in the so-called media sectors, i.e., television, phonography, radio, cinema, video and are the foundations for their integration. Modern ICT technologies create new, unlimited possibilities of organization management, both in terms of operational management and strategic management. They cause significant changes in management structures and methods (Partanen, 2014).

IT systems currently support the management of small companies and large organizations. However, there has been a tendency to move away from internal supervision of the IT system (Hahnel *et al.*, 2020). However, we can observe the phenomenon of increasingly frequent outsourcing of services to specialist service companies. This service has become the subject of outsourcing (Bielewicz, 2009). IT services have become an important area of activity of enterprises, in which outsourcing has found its application. There is a phenomenon of transferring entire IT departments to third parties. The reason for this is not only the reduction of costs, but also the desire to keep up with the dynamically developing technology (Danneels and Kleinschmidt, 2016).

2.2 The Essence of IT Outsourcing

The term "outsourcing" is an abbreviation of the expression "outside-resource-using" (Radło, 2013), i.e., the use of external resources (Gupta, Puranam, and Srikanth, 2006). In the literature on the subject you can find many definitions of outsourcing. Outsourcing is defined as a long-term outsourcing of auxiliary departments to an external service provider. It serves to increase the value that the company presents to its shareholders (Trosky, 2001).

Outsourcing can be called a long-term contract entrusting an external supplier with responsibility for the management and development of all or part of the business

processes and infrastructure. It is a conscious business decision to transfer the internal business to an external supplier (Elliot and Torkko, 1996). Another definition equates outsourcing with the possibility of using independent, external entities as providers of specific goods and services, instead of having to develop these areas of activity within the company" (Chakrabarty, 2006).

Definitions of external support for IT services appeared in the 80s of the twentieth century in the USA. Lacity and Hirschheim (1993), attempting to define outsourcing, began to analyze the outsourcing decisions of American companies. They defined IT outsourcing as the use of external entities to carry out one or more organizational activities (Lacity and Hirschheim, 1993). Outsourcing in the area of IT services (IT outsourcing, outsourcing of information systems, information technology, information technology) is defined as the provision of comprehensive e-business solutions by external specialists (Hindle, 1998).

IT outsourcing is the practice of using a third-party provider to provide some or all of the IT functions required by a company, including infrastructure management, leadership strategies, and service management (Pandita and Singhal, 2017). IT outsourcing providers can take full responsibility for all IT maintenance and support, this is called a fully managed service, or they can provide additional support to an internal IT team, sometimes called shared IT support and is usually an approach taken by larger organizations (Chakrabarty, 2006). A company can use a single vendor for all its IT requirements or multiple service providers to deliver different items.

IT outsourcing is also defined as the acquisition by an external company of the company's areas of activity in the field of IT. This applies to all or only selected areas. Current IT infrastructure expenses and investments in information technology account for a significant portion of the company's budget (Chakrabarty, 2006). The applied information technologies affect the level and the quality of economic processes. The company should choose its information technologies according to clearly defined priorities, intentionally and on the basis of thorough cost-effectiveness analyses. An effectively developed IT strategy ensures the proper functioning of the IT outsourcing model. Outsourcing of IT services becomes an element of the company's strategic plan, takes on a long-term character, with a service provider becoming a partner rather than a supplier (Danneels and Kleinschmidt, 2016).

Outsourcing of IT services is also understood as a process undertaken by the organization and aimed at signing an outsourcing agreement. This project also assumes the modernization of IT assets using cooperation with other recipients (Kern, 2002). As part, of IT services, these are works related to the ongoing administration of hardware and software IT resources in order to increase the efficiency of the business (Kłos, 2009).

IT outsourcing is the fact that the company outsources to the supplier to perform only certain services (partial outsourcing) or all functions (total outsourcing), while leaving its own employees the function of monitoring and controlling the entire project. Outsourcing of IT services usually takes the form of contractual outsourcing, in which the company resigns from the implementation of its systems functions and then transfers their performance to an independent business entity on the basis of a contract. IT outsourcing means transferring to an external company the responsibility for maintaining the IT system of a given company (or part of it) in exchange for periodic fees (Sobińska and Jakubowska, 2013).

2.3 Effects of IT Outsourcing in the Enterprise

Outsourcing of IT services is a valuable business strategy for the company, and at the same time a beneficial way of performing auxiliary functions. It allows (Hilami *et al.*, 2010):

- to reduce general and administrative costs, which leads to significant savings,
- focus on the basic objectives and tasks of the enterprise and the main activity,
- improve the quality of services,
- use the services of experienced IT specialists,
- increase work efficiency,
- relieve the employees of the enterprise from administrative work and make more effective use of their working time,
- use modern technology,
- use innovative tools and methods in the field of management and organization.

Companies also benefit from IT outsourcing due to the possibility of obtaining long-term effects in the form of a permanent improvement in competitive advantage and market success by changing relations with suppliers to partner ones and combining resources (Danneels and Kleinschmidt, 2016).

The outsourcing procedure in the field of IT services is also burdened with certain weaknesses, which include:

- imprecise definition of the objectives of the allocation in quantitative terms,
- lack of economic and financial analysis of the outsourcing project, allowing to compare costs and benefits,
- lack of strategic analysis of the project (the IT outsourcing process should be preceded by a preliminary analysis, in which IT outsourcing planning and examination and verification of strategic determinants of separation cannot be missing (Aalders, 2001).

The implementation of outsourcing of IT services also brings problems caused by not achieving the estimated benefits. Among the main problems are (Gay and Essinger, 2002):

- failure to achieve the expected cost reduction,
- a decrease in the quality of performance of the function previously performed independently,
- lack of success in developing a cooperation relationship with the service provider,
- conflicts between the client and the IT service provider, concerning the quality of, for example, services or the amount of remuneration,
- not taking advantage of opportunities in terms of achieving a better focus on customer needs.

It should also be mentioned that despite the numerous advantages that the implementation of IT outsourcing brings, you also have to take into account some risk that may become the cause of losses. We can mention here above all (Aarikka-Stenroos, 2014):

1. An increase in operating costs instead of the expected savings, the reasons for which should be seen in the defective recording and settlement of costs, which causes their overstatement, incorrect calculation of fixed costs and transaction costs, which are related to the preparation, shaping and control of contracts, especially when providing comprehensive services.
2. Opportunistic attitude of the contractor of IT outsourcing orders, which manifests itself in unsatisfactory activity and commitment. This leads to poor quality of products and services, neglect in staff training, under-investment, insufficient efforts to reduce costs and other non-partner behaviour.
3. Confusion and demotivation of one's own staff, which is the quintessence of fears of redundancies.
4. Uncontrolled outflow of information from the company and loss of know-how, proceeding with dismissed employees and functions transferred to external entities.
5. Failure to identify one's own key competences and erroneous transfer of them to external service providers.
6. Dependence on the client, there is a real threat of dependence (especially when complex tasks are outsourced to an external company that has adopted a position similar to a monopolistic one).
7. Loss of quality level as a result of the tendency among outsourcing service providers in the IT area to standardize services.

IT outsourcing can bring many benefits to companies of all sizes with very different goals. With the benefits of immediate team utilization, lower overhead costs, and more flexible work relationships, IT in particular generates most of the outsourcing market. While this has its drawbacks, properly executed IT outsourcing can help businesses of all sizes get things done faster and easier.

Certainly, therefore, IT outsourcing as a management concept, due to its strategic nature, has far-reaching effects on the enterprise, as well as more and more often on

the entire service chain. Taking into account both the great benefits that the use of outsourcing of IT services can bring, as well as the risks associated with it, the decision to cooperate with outsourcing contractors should be preceded by a prior strategic analysis, as well as an analysis of the profitability of this venture.

IT outsourcing requires proper preparation and management of outsourcing relationships. Therefore, it is necessary to carefully analyze the possibilities of outsourcing in the area of IT services and specify what to expect after its implementation.

3. Materials and Methods

The research was conducted over the course of March and April 2020. The study covered 100 companies from the Silesian Voivodeship. During this period, a questionnaire was sent to respondents, in accordance with the cawi technique standards. The results of the surveys were developed with the help of the SPSS Statistic program, for many years the most widely used program for the quantitative analysis of data in the social sciences. Thanks to it, an in-depth analysis of the data was carried out, which allowed to learn about statistically significant relationships between individual groups of respondents, as well as to verify the hypotheses put forward earlier.

The survey included closed questions, with some questions, in addition to the proposed answers, there were more detailed issues requiring the respondent to enter a specific answer. The survey was divided into two parts: the imprint and the research part. Due to the fact that the research was conducted among people from different professional backgrounds, with different genders and ages, the research sample can be considered as a representative of a larger population. The survey was addressed to managers of small and medium-sized enterprises in the Silesian Voivodeship. The imprint focuses on obtaining data on the age of enterprises, the nature of the activity and its range. As for the period of operation of the enterprises, the structure of the responses was as follows:

- less than 1 year - 15%;
- from 1 to 3 years - 34%;
- from 4 to 7 years - 51%.

The next step is to determine the type of activity of the analyzed companies. The obtained results showed that the most numerous category are enterprises with a commercial profile (65%), while the remaining 35% are entities of a production nature. The division of the surveyed enterprises according to their range of activity was as follows: 53% - local coverage, 47% - regional. None of the respondents described that this is a European and global reach.

It was also important to analyze the organizational and legal forms of the surveyed companies. The following forms dominated among the respondents: limited liability company (49%) and general partnerships (48%). Among the surveyed enterprises there were no entities run by natural persons or civil law partnerships or joint-stock companies. It has also become necessary to distinguish the size of the surveyed enterprises, in 48% of entities 10-49 employees are employed, in 32% - this size is in the range of 50-249. The surveyed group did not include companies with fewer than 9 employees, as well as large enterprises with more than 249 employees. In the latter case, it was intentional due to a specific research group.

The majority of companies surveyed describe their financial situation as bad (43%). It was described as good by 30% of the respondents. 27% could not answer this question. The statistical division of respondents answering by gender was as follows, men 81%, and women 19%.

In turn, the age range of respondents was in the age range of 26-35 years there were 58% of respondents, and people aged 36-45 accounted to 40%. In the group over 45 years of age there were 2% of the respondents. None of the respondents were under the age of 25. Responders most often defined their seniority as a period of up to 5 years, 67% of indications, 21% of respondents had an internship in the 6-10 year category, 9% of respondents worked for 11-15 years. The longest length of service – over 16 years – had 3% of the respondents.

The respondents were also classified according to their position in the company's structure. Among the respondents, middle and lower level managers definitely dominated 80% of indications. Middle management accounted for 17% of the respondents. Only 3% were top executives.

4. Results and Discussion

The success of the outsourcing project in the field of separation of IT services is the result of two forces - the quality of services and the company's expectations. Getting to know the needs of the contracting company is one of the essential elements of satisfactory outsourcing cooperation. Empirical research indicates that the contracting companies covered by the study remain satisfied with the implementation of outsourcing projects in their company. 51% of respondents rated the degree of satisfaction with their implementation as good. Only 2% of respondents consider it sufficient. These data are presented in Table 1.

In the course of conducting the research, attempts were also made to determine the premises determining the positive result of cooperation with an external partner. Respondents could select more than one answer. The distribution of responses is shown in Table 2. Thanks to the implementation of outsourcing in the area of IT services in the companies covered by the study, their effectiveness increases. Research has shown that as a result of cooperation with an external

company, there was a reduction in costs above 20% (this was confirmed by 3/4 of the respondents). A further 10% of companies reported that costs had decreased only slightly. These data are presented in Table 3.

Table 1. Degree of satisfaction with the implementation of the outsourcing project(s) in the IT area

The degree of satisfaction with the implementation of the project / outsourcing projects in the IT area	Percentage
Very good	21%
Good	51%
Satisfactory	26%
Sufficient	2%

Source: Own study.

Table 2. Level of satisfaction with the implementation of the project / outsourcing projects in the IT area

Prerequisites for a positive result of the cooperation with an external partner	Percentage
efficient flow of information between project participants	94%
proper planning of the project implementation process	69%
monitoring and control of the implemented project	32%

Source: Own study.

Table 3. Cost reduction as a result of cooperation with an external company

Cost reduction as a result of cooperation with an external company	Percentage
Cost reduction of more than 20%	75%
Slight decrease in costs	10%
No cost drop	9%
Lack of information	6%

Source: Own study.

Therefore, research has shown that the efficiency in the surveyed enterprises as a result of the implementation of outsourcing of IT services remains greater, which confirms the increase in sales above 20% in these companies. 12% of the surveyed companies recorded a slight increase in these sales. 8% of respondents were unable to answer due to the fact that no proper analysis was carried out there.

In this study, an attempt was made to determine the most important conditions that an effective outsourcing company should meet. It turned out that the most important advantage of an external company providing IT services should be guaranteed high quality at a relatively low cost of the service offered. This was confirmed by 33% of indications. A certain noticeable trend has become the treatment of high quality and low costs as a necessary condition influencing decisions on outsourcing IT services. 23% of indications show that the reliability factor of the service provided can be

perceived in a similar way. This is because customers want to feel safe from planning their own ventures.

Turbulent market conditions stimulate the need to increase the flexibility of economic organizations and, as a result, external partners. These units should be characterized by a high degree of adaptability to dynamically changing customer expectations. Certainly, the interest in professional service by an external partner will grow. The exact statistics are shown in Table 4.

Table 4. *Conditions to be met by an effective outsourcing company*

Conditions that an effective outsourcing company should meet	Percentage
High quality at a relatively low cost of the service offered	33%
Reliability of the service provided	23%
State-of-the-art equipment	20%
Punctuality	10%
Experience	7%
Established market position	7%
Another	3%

Source: Own study.

4.1 Statistical Dependencies

In order to verify the hypothesis of the relationship between two parameters describing functions, the independence test of χ^2 was used. The independence of parameters was assumed as the null hypothesis, while the dependence was defined as an alternative hypothesis. In each case, a significance level of $p=0.05$ was assumed. To determine the value of the test, the formula was used:

$$\chi^2 = \sum_{i=1}^k \sum_{j=1}^l \frac{(n_{ij} - \widehat{n}_{ij})^2}{\widehat{n}_{ij}}$$

Where:

- k- number of columns, i- corresponding column;
- l-number row, j- corresponding row;
- freedom degree= (k-1)*(l-1).

The χ^2 test is the most important non-parametric test. With the help of the χ^2 independence test, it is possible to verify the hypothesis of the absence of a relationship between the two specified qualitative or quantitative variables. The correlation analysis was abandoned due to the fact that the data provided were not numerical data, but only an indication of elements having the same, non-measurable features. The independence test made it possible to check whether there was a

relationship between elements of the same feature, i.e. whether there was an impact on the number of tested features.

The hypothesis put forward in the introduction of the article concerned the conditions for obtaining satisfaction from cooperation with an external unit. The following statistical relationships should make it possible to verify this hypothesis:

H1: Relationship between the scope of satisfaction with outsourcing cooperation and including outsourcing in the strategy of the contracting company (Tables 5 and 6).

Data: Sample – 100 companies

Degree of satisfaction: Very good – 21 companies, Good – 51 companies, Satisfactory – 26 companies, Sufficient – 2 companies, Insufficient – 0 enterprises

Presence of strategies: Yes, a special program has been developed - 10 enterprises, Yes, selected areas – 6 companies, No strategy – 86 companies, I don't know – 4 companies.

Table 5. *The presence of the strategy and the degree of satisfaction with cooperation*

The degree of satisfaction	The presence of a strategy			
	Yes, a special program has been developed	Yes, selected areas	No strategy	I don't know
Very good	10	2	0	0
Good	0	4	0	4
Satisfactory	0	0	1	0
Sufficient	0	0	20	0
Insufficient	0	0	59	0

Source: Own study.

Table 6. *The presence of a strategy and the degree of satisfaction with the cooperation - table with theoretical values*

The degree of satisfaction	The presence of a strategy			
	Yes, a special program has been developed	Yes, selected areas	No strategy	I don't know
Very good	1,200	0,720	9,600	0,480
Good	0,800	0,480	6,400	0,320
Satisfactory	0,100	0,060	0,800	0,040
Sufficient	2,000	1,200	16,000	0,800
Insufficient	5,900	3,540	47,200	2,360

Source: Own study.

Test value: $X^2 = 172.222$

So, at the level of significance $p < 0.05$, it can be said that there is a relationship between the presence of the strategy in the ordering company and the degree of satisfaction with outsourcing cooperation.

H2: Relationship between conducting a cost-effectiveness analysis in the contracting company and the degree of satisfaction of this company with outsourcing cooperation (Tables 7 and 8).

Data: Sample of -100 companies

Conducting a profitability analysis in the contracting company: Analysis – 38 companies, Lack of analysis (including lack of knowledge of such an analysis) – 62 companies

Degree of satisfaction with outsourcing cooperation:Very good – 21 companies, Good – 51 companies, Satisfactory – 26 companies, Sufficient - 2 enterprises.

Table 7. The degree of satisfaction with outsourcing cooperation and conducting a profitability analysis

	The degree of satisfaction with the outsourcing cooperation			
	Very good	Good	Satisfactory	Sufficient
Conducting a profitability analysis				
Conducting the analysis	20	10	6	2
No analysis	1	41	20	0

Source: Own study.

Table 8. The degree of satisfaction with outsourcing cooperation and conducting a profitability analysis - table with theoretical values

	The degree of satisfaction with the outsourcing cooperation			
	Very good	Good	Satisfactory	Sufficient
Conducting a profitability analysis				
Conducting the analysis	7,98	19,38	9,88	0,76
No analysis	13,02	31,62	16,12	1,24

Source: Own study.

Test value: $X^2 = 42.24$

So, at the level of significance $p < 0.05$, it can be said that there is a relationship between conducting a profitability analysis and the degree of satisfaction with outsourcing cooperation.

H3: Relationship between the presence of a criterion system and evaluative measures effectiveness of the implemented outsourcing process and the degree satisfaction of this company with outsourcing cooperation (Tables 9 and 10).

Data: Sample of -100 companies

The presence of a system of criteria and measures: Yes – 50 companies, No (including lack of knowledge about the existence of such a system) - 50 enterprises

Degree of satisfaction with outsourcing cooperation: Very good – 21 companies, Good – 51 companies, Satisfactory – 26 companies, Sufficient - 2 enterprises.

Table 9. *The degree of satisfaction with outsourcing cooperation and the presence of a criterion and measure system*

	The degree of satisfaction with the outsourcing cooperation			
	Very good	Good	Satisfactory	Sufficient
The presence of a system of criteria and measures				
Yes	9	21	20	0
No	11	30	6	3

Source: Own study.

Table 10. *The degree of satisfaction with outsourcing cooperation versus the presence of a system of criteria and measures - table with theoretical values*

	The degree of satisfaction with the outsourcing cooperation			
	Very good	Good	Satisfactory	Sufficient
The presence of a system of criteria and measures				
Yes	10	25,5	13	1,5
No	10	25,5	13	1,5

Source: Own study.

Test value: $X^2 = 12.32$

So at the level of significance $p < 0.05$, it can be said that there is a relationship between the presence of the criterion and measure system and the degree of satisfaction with outsourcing cooperation.

H4: Relationship between the level of benefits achieved as a result of cooperation outsourcing for the ordering company and analysis the profitability of such an undertaking in the surveyed companies (Tables 11 and 12).

Data: Sample of -100 companies

The level of benefits achieved as a result of outsourcing cooperation for the ordering company (measured by cost reduction above 20% and sales increase above 20%)³: Number of enterprises achieving benefits – 80, Number of non-profitable enterprises - 20

³ Omitted those companies that could not determine whether the company had achieved such benefits and those companies that achieved negligible benefits, i.e. cost reduction below 20% and sales increase below 20%.

Conducting a profitability analysis in the contracting company: Analysis – 38 companies; Lack of analysis (including lack of knowledge of such an analysis) – 62 companies

Table 11. Conducting a profitability analysis in the contracting company and the level of benefits achieved as a result of outsourcing cooperation for the ordering company

	Conducting a profitability analysis in the commissioning company	
Benefits	Conducting the analysis	No analysis
Occurred	21	59
Did not occur	17	3

Source: Own study.

Table 12. Conducting a profitability analysis in the commissioning company and the level of benefits achieved as a result of outsourcing cooperation for the commissioning company - table with theoretical values

	Conducting a profitability analysis in the commissioning company	
Benefits	Conducting the analysis	No analysis
Occurred	30,4	49,6
Did not occur	7,6	12,4

Source: Own study.

Test value: $X^2 = 23.44$

That is, at the level of significance $p < 0.05$, it can be said that there is a relationship between the benefits and conducting a profitability analysis in the ordering company.

H5: The relationship between taking measures to ensure proper cooperation with an external company and the level of benefits achieved as a result of outsourcing cooperation for the contracting company (Tables 13 and 14).

Data: Sample of -100 companies

Taking actions to ensure proper cooperation with an external company⁴: Number of enterprises that have taken such measures – 90, Number of enterprises that have not taken such action - 10

The level of benefits achieved as a result of outsourcing cooperation for the ordering company (measured by cost reduction above 20% and sales increase above 20%): Number of enterprises achieving benefits – 80, Number of non-profitable enterprises – 20

⁴*Such activities should be understood as checking the recommendations of a potential outsourcing partner, analyzing many offers of different companies, conducting interviews with potential service providers, conducting negotiations, taking into account the opinions of other companies about potential service providers.*

Table 13. The level of benefits achieved as a result of outsourcing cooperation for the company commissioning the fact of taking action

	Benefits	
Actions	Occurred	Did not occur
Was taken	70	20
Not taken	10	0

Source: Own study.

Table 14. The level of benefits achieved as a result of outsourcing cooperation for the company commissioning the fact of taking action - table with theoretical values

	Benefits	
Actions	Occurred	Did not occur
Was taken	34,2	55,8
Not taken	3,8	6,2

Source: Own study.

Test value: $X^2 = 76.76$

That is, at the level of significance $p < 0.05$, it can be said that there is a relationship between benefits and actions.

5. Limitations of the Study and Further Research

Due to the fact that the research took place during the coronavirus pandemic, it was not possible to meet the respondents in person and conduct a more detailed interview, which can certainly be considered a significant limitation of this survey.

The research carried out so far has outlined the conditions for obtaining satisfaction from cooperation with an external unit. It also seems interesting to compare the results of the Author's research with other studies. The obtained research results on the external separation of IT services coincide with the results of the Pandit and Singhal research (Pandita and Singhal, 2017). These studies, like the authors' research, indicated that the scope of satisfaction from cooperation with an external company and the benefits of IT outsourcing depend strictly on the diligence of project preparation. Another study (Aarikka-Stenroos, 2014) found that high-quality partnerships facilitate the process of commercialization and diffusion of innovations.

Maintaining this idea, it also seems interesting to examine the impact of outsourcing IT services on creating innovations. This idea may be an interesting material for further research.

6. Conclusions

Using the χ^2 independence test, it was shown that:

- there is a relationship between the presence of the strategy in the commissioning company and the degree of satisfaction with outsourcing cooperation,
- there is a relationship between conducting a cost-effectiveness analysis and the degree of satisfaction with outsourcing cooperation,
- there is a relationship between the presence of a criterion system and measures assessing the effectiveness of the implemented outsourcing process and the degree of satisfaction with outsourcing cooperation,
- there is a relationship between the benefits achieved as a result of outsourcing cooperation and conducting a cost-effectiveness analysis in the contracting company,
- there is a relationship between the benefits achieved as a result of outsourcing cooperation and the activities that are to ensure proper cooperation with an external company.

The analysis and statistical verification confirmed the relationship between the diligence of preparing the outsourcing project and the quality of outsourcing relationship management and the degree of satisfaction with cooperation with an external company. This is probably due to the fact that quality plays a key role when choosing an outsourcing partner.

However, in order for the customer to become satisfied with the service, it is necessary to carefully prepare an outsourcing project (in this case, it was a separation project in the field of IT). This is evidenced by the fact that companies, positively assessing their cooperation with an outsourcing partner, also properly plan the project implementation process, as well as strive for an efficient flow of information between project participants. In addition, thanks to the proper and efficient implementation of IT outsourcing in enterprises, their efficiency increases. Research has also shown that the quality of service is a prerequisite for the decision to outsource IT.

There is also a statistically confirmed relationship between the scope of satisfaction with outsourcing cooperation and the inclusion of outsourcing in the strategy of the ordering company, the profitability of the entire project and the presence of a system of criteria and measures assessing the effectiveness of the implemented outsourcing process. The benefits achieved as a result of outsourcing cooperation remain closely related to the careful conduct of a cost-effectiveness analysis in the contracting company and taking appropriate actions to ensure proper cooperation with the external company.

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