## OUTSOURCING OF INFORMATION TECHNOLOGY SERVICES BASED ON PROCESSES IN THE CHOSEN AUTOMOTIVE COMPANY

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**Abstract:** The main aim of the article is to define the issue of outsourcing and showing its advantages resulting from the services that are given to the external companies and the risk which comes from introducing of outsourcing. Nowadays the automotive industry is not thinking only about cost reduction but outsourcing, on account of contractors' high level of specializations, ensures quality, models and standards improvement which let to maintain the control in many companies. The dissertations in this essay concentrate on assessment and analysis of outsourcing information technology services which are used by the company and which are carried out by the SLA system (Service Level Agreement). More and more common is giving the contractors not only the collateral area but also more advanced processes as discussed information technology. This field needs constant processes improvement on the account of its fast development.

**Keywords:** outsourcing, subcontracting, external providers, external resources, IT processes

#### 1. Introduction

Nowadays the global economic changes are so intense so they demand to speed up organizations concentration development on the core activity within the drastic cost reduction. In present reality even companies which are achieving huge success are not able to lead in every area of their activity. This way some companies perceive benefits deriving from using outsourcing services. The premise is that outsourcing should relieve organization from commissioned tasks which are less important for the company, what lets them concentrate on its strategic areas and accomplishment of mission and concept of the company [1]. Outsourcing is now one of the fastest developing concepts of management taking into consideration not only a lot of processes but also full projects services. Depending on skills, capital or form of activity companies decide on the areas which should be outsourced and in what way this process should be imposed. The aim of this article is to define the assessment of the outsourcing services in IT areas in multi-ethnic company which produces technologically advanced sub-assemblies for the automotive industry. There will be also shown some good and bad points of outsourcing and the model of ultimate concept of outsourcing processes in current improvement. What is more, external services providers will be assessed.

### 2. Notion of outsourcing

Nowadays, most of companies are concentrated on the core activity; production costs are constantly increasing so managing of companies has to look for some new solutions for making an expected profit. The question arises: Is there any process in the company that

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cannot be more polished up? Are we able to find out someone who does it in a better way? The first recorded mention of external providers reached the production of a famous Ford T model where the owner of the factory, even did not realize, started the process that is currently called outsourcing [2].

Outsourcing is 'a possibility of using independent and external sources as suppliers of specific goods and services instead of necessity of developing those activity areas inside the company.' [3]. According to M. Trocki outsourcing is: 'the enterprise based on marking off the parent company from the organization structure, moreover, functions that are carried out by them and hand them over to accomplish by other business entity.' [4]. It is necessary to isolate differences that appear between outsourcing and subcontracting. Subcontracting appears when a company commissions a task accomplishment in case of no possibility of producing something on their own. Outsourcing instead means resignation of reaching the defined result as part of their own activity in favour of handing over the accomplishment to a different unit and taking results on the basis made in an agreement [5]. Fundamental difference between those concepts results from the fact that outsourcing causes numerous changes in organizational structures of the company. While in subcontracting such changes do not appear. Making a decision of implementation of outsourcing in the company one should focus on knowledge, resources and priorities which are set by the company.

The main aim of outsourcing is focused on company's core activity objectives for building the competitive edge and searching for some development opportunities. As a result of outsourcing implementation there is a reduction of operational problems while management can concentrate on strategic activities. Introduction of outsourcing involves many advantages for both company and employees. Outsourcing is usually used in some kind of costs optimization. This kind of specific optimization, can be used when company need cheapest service without changing quality level [6]. Table I. shows some advantages and drawbacks which can occur within implementation of outsourcing.

On the basis of information shown in Table I. it can be said that the cost reduction is the most important advantage of leading outsourcing, however, too high cost reduction pressure can lead the contractor close to the limit of profitability what can cause lowering the quality of project workmanship.

Long-term execution of a given project is not profitable for changing the contractor, unless the one does not fulfil determined requirements. Using the outsourcing services gives an opportunity for focusing on the most important lines of action and making the process of making decisions more efficient. The biggest disadvantages of outsourcing are lack of control, high outsourcing services cost and loss of company's identity. Appropriate decision making concerned the cooperation of outsourcing will make profit and consolidation of company's position. In automotive sector the most important thing is to keeping coordination between market and production. Realization of production planning is based on subjective access of operators [7]. However, wrong decisions that are taken can lead the company to decrease of their value and what is more the growth of costs. Concerning that one should define core goals of outsourcing which are depicted on Figure 1.

Table I.

On the basis of Figure 1. it can be perceived that outsourcing consists of five basic objectives:

- 1. strategic objectives
- 2. market objectives
- 3. economic objectives
- 4. organizational objectives

creating new job places

5. motivational objectives

Realization of objectives on the expected quality level will bring fulfillment of the company in terms of mission and vision because those objectives are identical to goals of the company. Therefore, it can be said that external suppliers should take superior goals of their contractors to present expected quality level. If goals of the company - contractor are accurately prepared (for instance on the basis of SMART method) taking over and accomplishment by outsourcing companies should increase the competitive edge and general development of the company.

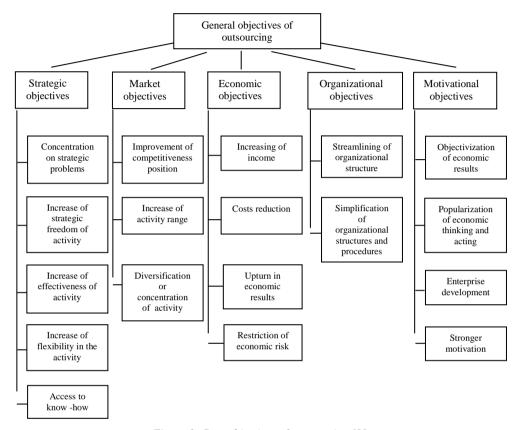


Figure 1. Core objectives of outsourcing [9]

### 3. Outsourcing of information technology services

Contemporary economy extorts some investments in information technology and its current operation skills. Outsourcing in this area of services refers to all outsourcing, outsourcing of computer systems and outsourcing of information technology. It is defined as providing complex e-business solutions by external experts [10]. Using of information technology has an impact on company's functioning, mainly on their innovations and continuous development. In the age of very fast development of the automotive industry companies which belong to this sector have to introduce some technological innovations, what is more, they cannot allow their internal computer systems be even a bit slower than those in the competitive companies. Implementation of outsourcing companies which are experts in their fields should guarantee the stable remain of the high standard of implementation of IT solutions in the company. On Figure 2. below there is a percentage part of outsourcing IT services in the separate branch of economy.

The market of IT outsourcing services is more and more frequently used by enterprises. The majority of IT outsourcing services come from the automotive industry, telecommunications and consumer industries. The enterprises connected with IT outsource only 10% of services because they do not transfer tasks in which they are specialized to their clients. The mentioned 10% consist of specialized processes which advisedly are better to be outsourced rather than to be learned on one's own by trial and error. However, public and government organizations are not interested in such kind of services. It is a challenge for IT outsourcing companies to convince public benefit organizations to at least encourage the organizations to test solutions offered by the companies. Nowadays, IT outsourcing can be compared to leasing launched in the early 90s in Poland. At that time, external financing was not popular and it was hard to come around this. As time passed by, it was proved that launching them is very useful and is connected with financial relieve. Due to outsourcing a company may benefit more rather than lose [11].

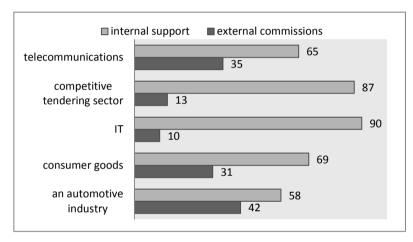


Figure 2. Outsourcing of IT services in separate trades (%) [12]

IT services in an enterprise are various and they are adjusted to needs, beginning with: technical service, launching IT systems, ending with administrative functions. Specialized IT companies not only provide a full range of services, but also give the opportunity of getting to know the new thing in the mentioned before area without the need to engage a remarkable capital. In the USA plenty of enterprises save from 10 up to 50% total costs connected with data processing. In this country, the market of outsourcing services related to information systems and technology is the largest and it is developing the fastest, taking into account all the outsourcing services market [13]. Due to increasing interest in these services, the number of enterprises also increases, what leads to competition between them and causes creating more profitable conditions for their customers. Furthermore, they have larger and larger opportunities to gain new customers thanks to saving time and the change of management of human resources from serving ones into outsourced ones.

# 4. Methods of effectiveness assessment of IT outsourcing providers in an automotive company

In the whole EU directly in an automotive industry there are over 2 million employees. Additionally, about 10 million of people are employed in automotive-connected industries. The selected automotive concern is a leading provider of modern electronic solutions and system technologies as well as specialized sub-sets used in an automotive industry.

The company is on the list of top 10 largest automotive concerns as far as the market value is concerned (in billions of dollars). The company has four factories and two modern Technical Centres in Poland. The organization in factories is divided into following divisions:

- 1. The factory of electric beams and optical fibre wires,
- 2. The factory of engine supply systems, fuel feed system and absorbents,
- 3. The factory of heat exchangers,
- 4. The factory of switches.

A survey within an analysis of launching the outsourcing processes has been performed. The described company surveyed their employees who directly co-worked with outsourcing companies. The survey consisted of series of questions, thanks to which it was possible to state what impressions on the co-operation the employees have and whether outsourcing is really profitable. Also, the interviews with the management staff have been performed in order to check the opinion of people responsible for implementing new processes.

Table II. shows grouped information concerning outsourced areas and main reasons why they have been launched. The chart was created after an internal analysis, to make it easier to show relations between the areas which can be transferred to external suppliers and also to show benefits connected with this transfer. The main source of information was knowledge and opinions about researched subject delivered by management staff.

The areas of outsourcing in an automotive enterprise

Table II.

The areas of outsourcing in an enterprise		The main reasons of using outsourcing
•	Building services(physical security, clearing, gastronomic services)	Costs reduction
•	Finances and administration( payroll and staff managing.)	Costs reduction
•	IT services( technical service, data processing, applications improvements, maintaining IT processes)	<ul> <li>Access to specialized knowledge</li> <li>Quality improvement</li> <li>Costs reduction</li> </ul>
•	Management of real estate( maintaining the premises)	Costs reduction
•	Human resources management (recruitment, employment, training courses)	<ul> <li>Access to specialized knowledge</li> <li>Quality improvement</li> <li>Distribution of risk</li> <li>Costs reduction</li> </ul>

As the table shows, in each five areas of outsourcing in an enterprise reduction of costs plays the greatest role. Other reasons are: access to specialized knowledge, quality improvement or distribution of risk. Thus, outsourcing is treated as a method of being more effective, with maintaining less concentration on key tasks. Especially, the access to specialized knowledge is a determinant of outsourcing, particularly in IT areas.

For over a century automotive concern emphasizes innovations and development, which is why it is at the top of ranking of launching outsourcing. The measure of effectiveness of outsourcing services is based on monitoring provided services. Its aim is to precise demands which are set by an enterprise to an outsourcing company, i.a. improvement of the following issues: quality of service, relation of the average time of repair, effectiveness of systems. The analyzed enterprise in case of each contract concludes SLA - Service Level Agreement with outsourcing company. SLA is concluded between two subjects, an ordering party and a commissioned party and it concerns the area of provided services. Such a kind of cooperation requires precise and exact indicators on the basis of which the level of services and possible sanctions will be measured [14]. The effectiveness of provided IT outsourcing services in an enterprise is checked periodically in a form of SLA review. However, reports in a company are not prepared by stakeholders, but merely by suppliers of IT outsourcing services. This leads to "self-assessment" of the suppliers what, in fact, results in lack of reliable assessment. Possible defects in the analyzed case are controlled stochastically on the basis of a large number of reported problems. The disadvantages of cooperation based on SLA in a particular department of an automotive company are obvious and concern i. a. costly IT solutions, long-term contract with outsourcing company and lack of realistic effectiveness indicators.

### 5. The assessment of outsourcing services in an automotive enterprise

IT services outsourcing in an enterprise is a business strategy and it means the execution of widely understood IT projects. The area of IT is sometimes underestimated by managers because of being not understood or sometimes overestimated. As a result, the majority of investments in IT do not bring foreseen effects. However, modern enterprise cannot afford to manage such an important area improperly, thanks to which the company may develop. In accordance to this, the assessment of outsourcing effectiveness was carried out in an automotive enterprise by its employees. The results are shown in Table III.

Table III.
The results of effectiveness analysis in an automotive enterprise

Suggested changes	Employees' assessment in %
Change of outsourcing company	90%
Improvements	3%
Maintaining the current outsourcing company	6%
Other factors	1%

Table III. shows the assessment of the effectiveness of outsourcing services made by the employees of the automotive company. The majority of respondents constituting 90% would like to change the current outsourcing company in order to improve achieved results. However, 6% of the employees would not decide to change the current outsourcing company, and only 3% of the employees are for making improvements. A well-qualified managing staff in one out of 4 factories in Poland indicates that the basis reason of the change of the outsourcing company is the high costliness which in the perspective of recent years have been still increasing, unfortunately not contributing to improvement of the quality of offered services. On the basis of an analysis made in an automotive enterprise, they have presented the elements which should be improved in order to make outsourcing services more effective. Management team usually have different point of view from the staff. Only qualified and experienced board members, as in the presented company are able to understand the real needs of theirs employees [15]. The conclusions coming from the suggested changes in the context of researched areas have been described in detail in the summary. Figure 3. below shows an area of efficient IT system which as a result is to function in an enterprise after improvement the current processes.

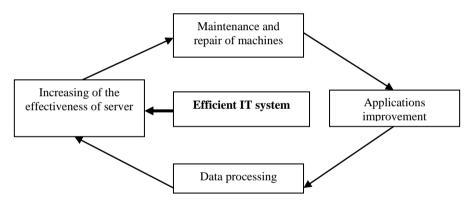


Figure 3. The areas of IT improvements

In the Figure 3. there are shown the elements of outsourcing which should be changed in an automotive enterprise to make IT services more effective and more competitive for internal recipients. One of the most important elements affecting the improvement of services is increasing of the effectiveness of server, then maintenance and repair of machines in stated terms, as well as improvement of applications and data processing. The improvement of outsourcing services in mentioned above areas will cause better matching IT services than competition offers. Constant improving processes, shown in Picture 3 will result in perfect quality of services provided by external suppliers.

Such a solution will cause no need of constant changes of suppliers, their implementing and "learning" the organization.

## 6. Summary

Outsourcing is one of modern tools which serves to decrease costs in the areas where their profitability also decreases. It is a solution which enables the realization of strategy to value increase of an enterprise, with proper stating the terms and conditions of a contract with a client. The success of outsourcing depends on stating its range and level, the quality of provided services and the choice of new or improving already existing Integrated Information System. Apart from the advantages frequently mentioned, the disadvantages of outsourcing should be considered, which in practice have been shown in research.

In recent years the attitude towards IT outsourcing has changed remarkably. Nowadays, managing staff see external IT services as long-term investments which will constitute measureable added value for the company in the future. The basis of success is mutual cooperation, partnership and trust. Unfortunately outsourcing services are difficult to control, the result of which is occurring various kinds of problems and increasing the costs which originally were to be reduced. In Poland the idea of outsourcing service assessment is still in a development phase, the effect of which are not exact effectiveness indicators. The result of this is often so called "lack of control" which may be observed in an analyzed enterprise. The factors restricting the effectiveness of outsourcing are connected with improperly performed outsourcing profitability analysis as well as the choice of external partner [16]. The companies pay attention mainly to costs of services offered by external companies, however they do not focus on other elements restricting the effectiveness in analyzed outsourcing process. Polish departments of western Europe concerns are constantly working on improvement of outsourcing services measurability in order to level the differences deriving from the state and range of using this idea. Western corporations promote implementation of outsourcing as a strategic tool assisting management. The aim of an automotive enterprise is achieving possibly larger effectiveness of IT with simultaneous costs minimization connected with services functioning and with transferring IT processes to a qualified outsourcing company.

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