# **ARTICLE**

# SUBSTANTIATION OF ECONOMIC EFFECT FROM THE RESTRUCTURING OF ENTERPRISE THROUGH USE OF OUTSOURCING

# Il'nur I. Farkhoutdinov\*, Aleksei G. Isavnin

Naberezhnye Chelny Institute, Kazan Federal University, 68/19 Mira Ave., Naberezhnye Chelny, RUSSIA

# **ABSTRACT**

From the moment of emergence in scientific and practical literature of the concept "outsourcing" process of formation of the new direction characterized by development of new models, forms and types of sourcing and on its basis of programs of strategic development began. Each of the models of sourcing existing today has the advantages, shortcomings and a scope. Also today in scientific and practical literature various methods and techniques of an assessment of expediency and efficiency of application of this or that model of sourcing, its this or that look are presented. Despite a demand and popularity of outsourcing, illiterate use of this model of management in the Russian conditions of production and underdeveloped small and medium business in the country can seriously worsen a financial solvency of the enterprise. Therefore, the major factor in making decision on application of production outsourcing is competently carried out economic assessment taking into account features of production and nature of introduction of this tool at the enterprise. According to researches of the Accenture company, the majority of the organizations has even no elementary techniques and indicators for an assessment of economic efficiency of application of outsourcing. As a rule, the management of the enterprises more is necessary on "whims" of the market and opinion of more competitive partner outsourcers. The purpose of the real work is development of a technique of an assessment of economic effect of application of restructuring outsourcing at the large industrial enterprise.

### INTRODUCTION

#### **KEY WORDS**

Out sourcing, insourcing, economic effect, restructuring, industrial enterprise.

Received: 9 Aug 2019 Accepted: 23 Sept 2019 Published: 27 Sept 2019 From the moment of emergence in scientific and practical literature of the concept "outsourcing" process of formation of the new direction characterized by development of new models, forms and types of sourcing and on its basis of programs of strategic development began. Each of the models of sourcing existing today has the advantages, shortcomings and a scope. Also today in scientific and practical literature various methods and techniques of an assessment of expediency and efficiency of application of various model of sourcing are used.

Despite a demand and popularity of outsourcing, illiterate use of this model of management in the Russian conditions of production and underdeveloped small and medium business in the country can seriously worsen a financial solvency of the enterprise. Therefore the major factor in making decision on application of production outsourcing is competently carried out economic assessment taking into account features of production and nature of introduction of this tool at the enterprise. According to researches of the Accenture company, the majority of the organizations has even no elementary techniques and indicators for an assessment of economic efficiency of application of outsourcing. As a rule, the management of the enterprises more is necessary on "whims" of the market and opinion of more competitive partner outsourcers [1].

However, on the other hand, the scientific literature existing today offers enough methods of an assessment of economic effect of outsourcing introduction. Production outsourcing considers main classical way where a difference between costs of own production and costs of acquisition of production of the supplier is used [2].

The assessment of structure of its components has a great influence on calculation of economic effect. As a rule, economic effect of application of outsourcing consists of two indicators: direct and indirect economic effects [2]. Also allocate the following types of effects [3]:

- economic effects (for example, reduction of expenses, growth of revenue and others);
- social effects (for example, improvement of system of motivation of the personnel);
- marketing effects (for example, increase in a share of the market, increase of speed of passing of the order and others);
- resource effects (for example, reduction of time of adoption of administrative decisions, possibility of the best resource ensuring key processes and others);
- structural effects (for example, improvement of interaction between divisions).

One of the main reasons for application of production outsourcing in the Russian industry is increase competitiveness of production by use of components from the leading global manufacturers. Transition of the enterprises to this type of production outsourcing means rise in price of products therefore it is obvious that carrying out an assessment of economic effect with use of the method given above isn't possible. It is possible to bring the "GAZ Group" company which increased competitiveness of the cars by application of auto components from the leading global manufacturers [4] into qualities of an example.

\*Corresponding Author Email: ilnour 1986@inbox.ru Tel.: 8 960 070 11 68

97



In this regard in this work the technique based on experience of restructuring of the "KAMAZ" company automobile building enterprise [5] that is on the analysis of change of profitability of a product is offered.

# MATERIALS AND METHODS

The following indicators are applied to creation of a technique:

1. Marginal profit of a product before outsourcing application.

Application of outsourcing involves decrease in a value added of the enterprise in product cost, therefore loss of marginal profit – the obvious phenomenon. Decrease in marginal profit of KAMAZ trucks at application of outsourcing is presented in the [Table 1] [6].

**Table 1:** Increase in the cost price and the price of KAMAZ trucks when using outsourcing (as of 2011), %

	Family		
Indicator	The transport	The heavy	The all-wheel drive
	(KAMAZ-65115)	(KAMAZ-6520)	(KAMAZ-43118)
Increase in variable expenses	22	23	20
Increase in the price of shipment from the conveyor, without the VAT	5	8	5
Loss of marginal profit	- 25	- 21	- 20

# 2. A share of profit of the customer at joint ventures.

Today the main problems of the Russian industry are excessive floor spaces with strongly worn-out equipment and the limited budget of the enterprises. One of effective methods of the solution of these problems is the organization on own squares of coproduction with foreign partners which will allow to optimize business processes, to update the existing equipment due to association of the capitals [7] and it is essential to reduce quantities of "narrow places". Therefore, at an assessment of economic effect of application of outsourcing it is necessary to consider a share of profit of the customer at joint ventures.

Within modernization of a model range of KAMAZ trucks the following joint ventures presented in the [Table 2] were organized [5].

 Table 2: Participation of "KAMAZ" company in the capital of joint ventures

Joint venture	The car component transferred to outsourcing	Share of "KAMAZ"in authorized capital, %
CUMMINS KAMA	Small diesel engines	50
Federal Mogul Naberezhnye Chelny	Details of cylinder-piston group	50
ZF KAMA	Transmissions	49
KNORR-BREMSE KAMA	Brake mechanisms	50

The main components of the car were transferred to joint ventures to outsourcing. The profit on activity of data of the enterprises at a rate of a share of authorized capital belongs to "KAMAZ" company.

3. Profit of the customer on localization of details of production of joint ventures.

Creation of joint ventures is also directed on reduction of price of purchased components of a product. This effect is reached by depreciation of delivery and the customs duties (due to delivery of SKD and CKD components), and also application of strategy of sourcing's maneuver – localization and performance of part of operations at plants of the customer. Therefore, at an assessment of economic effect of application



of outsourcing it is necessary to consider profit of the customer on localization of details of production of joint ventures.

Application of elements of sourcing's maneuver allows to compensate partially loss of marginal profit at application of production outsourcing.

4. Potential reduction of prices of purchased components of a product.

At an assessment of economic effect of application of outsourcing it is necessary to consider potential reduction of prices of purchased components of a product. This decrease can be caused by the following reasons:

- Increase in production of products leads to increase in volumes of the order for purchased components. It is a guarantee of the serious and long-term relations for the supplier who has to reduce or clean a risk extra charge the price of the production over time. Also the supplier can apply various systems of discounts depending on volumes of the order [8].
- Development of activity of joint ventures consists in increase in a share of localization which has to lead to reduction of prices of production released by them over time [9].

Therefore, for calculation of economic effect it is necessary to consider target indicators which need to be reached.

For an assessment of economic effect of application of restructuring outsourcing the concept "full marginal profit of a product after outsourcing application" which will consider all indicators given above is entered:

(1)

TMP=MP+MPJV+MPL+PT,

where TMP – full marginal profit of a product after outsourcing application; MP – marginal profit of a product after outsourcing application; MPJV – total profit on the joint venture on products unit; MPL – total profit of the enterprise on localization of details for production of the joint venture on products unit; PT – total potential reduction of prices of purchased components of one product.

# RESULTS AND DISCUSSION

The assessment of economic effect consists in a difference between "full marginal profit of a product after outsourcing application" and marginal profit of a product before outsourcing application:

E=TMP-TMPI, (2)

where E – economic effect of application of restructuring outsourcing; TMPI – marginal profit of a product before outsourcing application.

If from (2) follows that  $E \ge 0$ , application of restructuring outsourcing is effective as even at E = 0 there is a preservation of marginal profit at reduction of a value added of the enterprise in product cost.

If E < 0, it is necessary to analyze change of net profit which can increase even at decrease marginal as application of restructuring outsourcing can significantly cut down overhead costs of the enterprise. If there was a decrease in net profit of a product, negative economic effect is obvious.

At negative economic effect the following directions of works for increase in profitability of a product are possible [5]:

- artificial advance in price of a product;
- actions for increase of indicators of MPJV, MPL, PT;
- decrease in overhead costs.

It should be noted that the indicator of PT is used only for an assessment of target economic effect therefore for calculation of actually reached economic effect of application of production outsourcing it is necessary to use the truncated version of a formula (3) without PT indicator:

TMP=MP+MPJV+MPL, (3

The developed technique is one of ways of an assessment of economic effect of application of restructuring outsourcing at the enterprise which allows to estimate more fully influence of various factors and actions on profitability of production.



The technique showed that economic effect of application of production outsourcing on "KAMAZ" company averaged 3,7 thousand rubles on each truck of transport family (as of 01.01.2011) [6].

Also it is necessary to add that formulas (1) and (2) can be supplemented with other indicators, for example, additional profit on products unit at application of model of sourcing's maneuver "additional charge of floor spaces by providing outsourcing services". Thus, the presented technique allows to estimate economic effect of application of some models of sourcing's maneuver [10].

In particular, the assessment of economic effect of application of model of sourcing's maneuver "localization of components of production of subsidiary" with the help above the presented technique which is based on the analysis of change of profitability of a product when carrying out restructuring of the enterprise is carried out by means of replacement in a formula (1) some indicators:

where TMP – full marginal profit of a product after application of model of sourcing's maneuver; MP – marginal profit of a product after application of model of sourcing's maneuver; MPSC – total profit in subsidiary on products unit; MPL – total profit of the enterprise on localization of details for production of subsidiary on products unit.

Similar approach can be applied to an assessment of economic effect of application of such models of sourcing's maneuver "localization of components of production of the sold division", "localization of components of production of the third-party supplier" and others.

# **CONCLUSIONS**

The offered technique of an assessment of economic effect of application of restructuring outsourcing, without doubts, is interesting from the point of view of further scientific researches in the field, and also practical application at the real enterprises. However, this technique isn't only possible and universal for an assessment of all existing kinds of production outsourcing.

#### **CONFLICT OF INTEREST**

There is no conflict of interest.

#### **ACKNOWLEDGEMENTS**

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

#### FINANCIAL DISCLOSURE

None.

# **REFERENCES**

- [1] Mikhailov DM. [2009] Outsourcing. The new system of business organization: training manual. M.: KNORUS. 256.
- [2] Emelina NB. [2010] Justification of economic efficiency of industrial enterprise management on basis of outsourcing proceedings of the Samara scientific center of the Russian Academy of Sciences. 4 (2):521-525.
- [3] Prikhodko VI, Valiulova AR. [2007] Efficiency of organization management tools. problems of management theory and practice. 12:103-109.
- [4] GAZelle Business with engine Cummins ISF2.8. URL: http://www.tempavto.ru/diesel-cummins.html
- [5] Isavnin AG, Farkhoutdinov II. [2012] Method of economic efficiency evaluation of industrial outsourcing application at Russian automotive enterprise. Journal "Regional Economics: theory and practice. 13(224):16-21.
- [6] Isavnin AG, Farkhoutdinov II. [2013] Features of application of industrial out sourcing at the Russian automobile building enterprise. LAP LAMBERT Academic Publishing, AV

- Akademikerverlag GmbH & Co KG, Saarbrücken, Germany, ISBN 978-3-659-42197-6. doi:10.24891/fa.10.8.925
- Moiseeva NK, Malyutina ON, Moskvina IA. [2010] Outsourcing in development of business partnership. M.: Finance and statistics; INFRA-M. 240.
- [8] Isavnin AG, Farkhoutdinov II. [2012] Analysis of the main risks of industrial outsourcing in the Russian automotive industry. Proceedings of the VIII international scientific and practical conference news of advanced science. Sofia, Bulgaria. 6:16-20.
- [9] Isavnin AG, Farkhoutdinov II. [2013] Application of the target-costing method in the formation of the cost of a car with a high share of purchased components Journal Economics and entrepreneurship. 8 (37):274-278.
- [10] Isavnin AG, Farkhoutdinov II. [2014] Evaluation of economic effect of using the model of sourcing maneuver at an industrial enterprise. Regional economy: theory and practice. 43(370):45-50