

## Improvement of Financial Standing of Enterprise by Means of Sourcing Maneuver Model Application

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### Abstract

The most important characteristic of the economic activity of an industrial enterprise is the level of its financial standing. The higher this level, the more attractive is the company for shareholders, banks, service, raw materials and components buyers and suppliers, the more competitive its products are. In recent years, we have seen an unfavorable business climate both in Russia and around the world, which, on the one hand, forces some companies to cut costs or completely withdraw from the market, and on the other, it fosters companies' attention to creative function, and not only in relation to the products being created, but also to the enterprise management model, the distribution and use of resources. In this connection, the possibility of using sourcing's technologies in the issue of improving the financial stability of an industrial enterprise through the restructuring of its distribution model and the use of resources is of interest. To achieve this goal, we have used the sourcing's maneuver model "higher utilization of production areas by providing outsourcing services". The development of proposals for improving the financial standing of the enterprise was carried out through the application of the "direct-hosting" system. In the present work, the authors developed proposals for improving the financial standing of an industrial enterprise through the application of the sourcing's maneuver model. The results of this work can be useful for further scientific research in the field of economy of sourcing and development of the "direct-hosting" system. They can also be useful for managers of financial and economic units of large industrial enterprises. The developed proposals for improving the financial standing of an industrial enterprise through sourcing maneuver suggest the prospect of further scientific work in the field of forming methodological approaches for making managerial decisions.

**Keywords:** Financial standing of an enterprise; Estimation of the economic effect; Feasibility assessment; Sourcing's maneuver model; Break-even point.



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### 1. Introduction

The most important characteristic of the economic activity of an industrial enterprise is the level of its financial standing. The higher this level, the more attractive is the company for shareholders and banks, the more competitive its products are, the less conflicts with the state, society and other economic entities. In recent years, we have seen an unfavorable business climate both in Russia and around the world, what, on the one hand, forces some companies to cut costs or completely withdraw from the market, and on the other, it fosters companies' attention to creative function, and not only in relation to the products being created, but also to the enterprise management model, the distribution and use of resources. In this connection, the possibility of using

sourcing's technologies in the matter of improving the financial stability of an industrial enterprise through the restructuring of the distribution model and the use of resources is of interest.

The purpose of this work is to develop proposals for improving financial standings of an enterprise through the application of the sourcing's maneuver model.

### 2. Materials and Methods

For today, among professional economists there is no uniform understanding of the cept "financial standing of an enterprise" (Zhoulega, 2006). There are various definitions of this concept in the scientific and practica literature, for example, in some sources, the financial standing of an enterprise is understood to mean a multidimensional economic value that reflects the availability and use of the company's financial resources, and in others the real and potential financial opportunities of a firm as a business partner, investment medium, and taxpayer (Terekhin *et al.*, 1998) Nevertheless, despite the diversity of approaches to the definition of the concept "financial standing of an enterprise", they are all characterized by such words and phrases as solvency, competitiveness, mobility of funds, the potential of the enterprise and others.

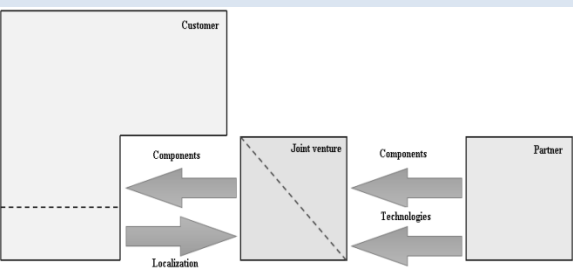
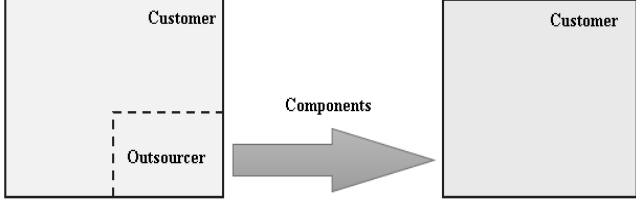
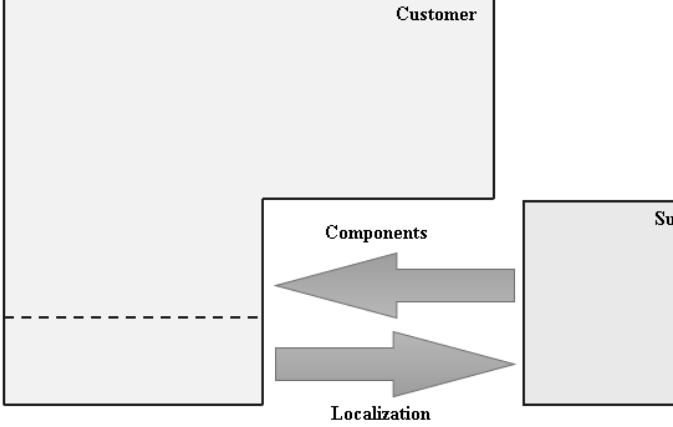
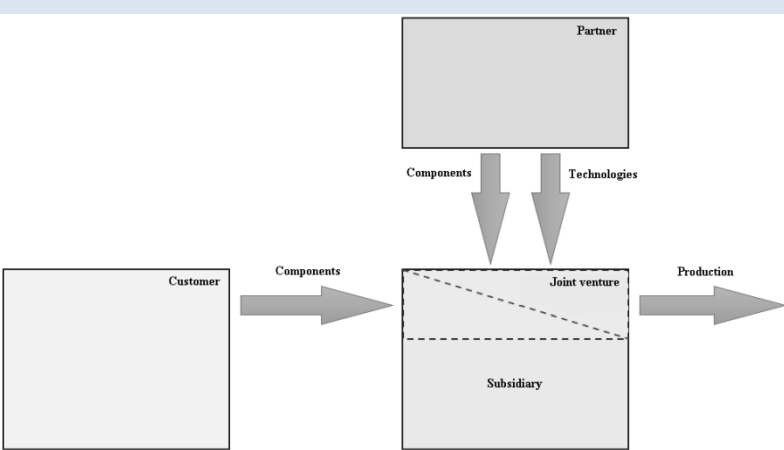
Without going into the essence of existing approaches to the definition and analysis of the financial standing term, in this paper we will proceed from the understanding that a business unit strives to effectively dispose of the available resources, for example, to fully load production capacities. These aspirations of the enterprise lead to an increase in the profitability of production and a decrease in the break-even level, which positively affects its financial standing.

Taking into account the aforesaid, as well as the development in the economic science of a new direction referred to as the "economy of sourcing", we will consider the possibilities of sourcing in the matter of improving the financial standing of an industrial enterprise. In this paper, we turn to the models of sourcing maneuver.

Sorcery maneuver

To date, a sufficient number of sourcing's maneuver models are presented in the scientific and practical literature, among which one can distinguish such models as "localization of the components of joint venture's products" (Isavnin, 2013) "creation of a joint venture on the basis of a subsidiary" (Isavnin, 2013), "localization of components of third-party products" (Isavnin, 2013) and others. Table 1 presents with the schemes, descriptions and advantages of some models of sourcing's maneuver.

Table-1. Schemes, descriptions and advantages of some sourcing's maneuver models

No.	Model scheme and name	Model Description	Some advantages of the model
1.	 <p><b>Fig. 1.</b> Localization of components of joint venture production</p>	<p>The customer allocates a part of its divisions for the creation of a joint venture (JV) with the partner, then transfers the production of the component to this joint venture retaining a part of the production process</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Decrease in costs of the enterprise connected with the maintenance of production areas;</li> <li><input type="checkbox"/> Partial reimbursement of losses of marginal product profit associated with the transfer of component production to outsourcing;</li> <li><input type="checkbox"/> Achievement of an optimal price for JV products.</li> </ul>
2.	 <p><b>Fig. 2.</b> Additional charge of floor spaces by providing outsourcing services</p>	<p>The customer acts in the role of an outsourcer with additional loading its own areas by manufacturing components for other customers</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Obtaining additional profit;</li> <li><input type="checkbox"/> The reduction of the costs of the enterprise related to the maintenance of unused production facilities.</li> </ul>
3.	 <p><b>Fig. 3.</b> Localization of components of subsidiary production</p>	<p>The customer outputs one of the units to the subsidiary company, then interacts with it within the framework of internal outsourcing, but retains a part of the production process</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Decrease in costs of the enterprise connected with the maintenance of production areas;</li> <li><input type="checkbox"/> Obtaining additional profit from the activities of its subsidiary;</li> <li><input type="checkbox"/> Reaching an optimal price for the products of a subsidiary.</li> </ul>
4.	 <p><b>Fig. 4.</b> Creation of a joint venture on the basis of a subsidiary</p>	<p>The customer creates a joint venture with the partner company on the basis of its own subsidiary company and transfers the assembly production of the final product to this joint venture. The components of the product are delivered to the JV from the customer and partner</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Reaching a competitive market price for the products of the joint venture;</li> <li><input type="checkbox"/> Obtaining additional profit from the activities of the joint venture in the amount of a share in the authorized capital;</li> <li><input type="checkbox"/> Loading of production capacities of the enterprise and subsidiary.</li> </ul>

In this paper, we will consider the model of "additional loading of production areas through the provision of outsourcing services" as a tool to improve the financial standing of the enterprise.

### 3. Results and Discussion

As follows from the very name of the model and some of its advantages noted in Table 1, the model "additional loading of production areas through the provision of outsourcing services" is aimed at more efficient use of production capacities, therefore, the competent application of this decision significantly enhances the financial stability of an enterprise. It is important to specify those indicators which, on the one hand, characterize the financial soundness of the company, and on the other hand, clearly demonstrate the effects and advantages that the sourcing's maneuver model brings to the enterprise. We will distinguish three main indicators and we will describe them in more detail.

Indicators that assess the sourcing model

1. Reducing the share of useless ("out-of-work") costs in constant costs.

The concepts of "useless (out-of-work) costs" and "useful costs" were introduced by economists O. Brut (Bredt, 1939) and E. Gutenberg, respectively (Shelukhin, 2003). They perfectly characterize the modern Russian industry which in addition to high overhead costs at its enterprises has unclaimed production capacities. The share of useless costs in constant costs of Russian industrial enterprises remains high what reduces the financial stability and competitiveness of companies. So, for example, the capacity of the Volgograd Tractor Plant to produce hardware before they were outsourced was loaded only to 10% (Sirotkin, 2009).

The application of the sourcing's maneuver model carried out by mastering the productions of diversification products or the company's entry into the market of spare parts, allows loading of unused production capacities and, consequently, to reduce the share of useless costs in constant costs of the enterprise. This allows, on the one hand, to improve the financial viability of the company, and on the other hand, during periods of economic downturn, maintain friendly and long-term relations with outsourcers, since there is either no need to return production to insourcing or is lower than in the case if the capacities remained unloaded. For example, the Russian company JSC "RIAT" had encountered with a similar situation, when during the economic downturn of 2008-2009 it was forced to return part of the production to its own production capacities (Lobada, 2012).

2. Increase in net profit of an enterprise.

An additional loading of production capacities of an enterprise due to the application of the sourcing's maneuver model, in addition to increasing the utility of fixed costs, will result in an additional net profit. In this case it is appropriate to turn to the experience of restructuring the production areas of PJSC "KAMAZ" through the use of another sourcing's maneuver model, "localization of the components of the joint venture's products". Then, to assess the economic effect of the application of this model, the indicator "total marginal profit of the product after applying the sourcing's maneuver model" was introduced (Isavnin, 2013). In the paper, we develop this idea by entering the indicator "total net profit of the product after applying the sourcing's maneuver model". This indicator implies the distribution of the net profit of the product newly produced under the model "additional loading of production areas by providing outsourcing services" to the core product of the enterprise, that is, the indicator is calculated using the following formula:

$$S_{TNP} = S_{NT} + S_{NTS}, (1)$$

Where  $S_{TNP}$  - the total net profit of the product after the application of the sourcing's maneuver model;

$S_{NT}$  - net profit of the core product;  $S_{NTS}$  - the net profit of the newly produced product within the sourcing's maneuver model divided by the unit of the core product.

3. Reducing the breakeven level of an enterprise.

More efficient use of production capacities due to the application of the sourcing's maneuver model and, as a result, the receipt of additional net profit reduce the breakeven level of an enterprise.

The following assumptions are accepted in the paper:

1. The scenario is considered when applying the sourcing's maneuver model, there would not be increased the fixed costs of the enterprise.
2. The enterprise produces two types of products: one type of core product and one type of non-core product.
3. Given that the production of a non-core product does not increase the company's fixed costs, that is, the constant costs of a non-core product are an integral part of the fixed costs of the core product, the price of the newly produced product in the sourcing model consists of two components: net profit and variable costs. In this situation, the break-even point of the non-core product is zero, so when forming the indicator "reducing the breakeven level of the enterprise", the cost of only the core product with the net profit of the non-core product distributed to it was taken into account.

The pointed out indicators are not sufficient, and they are not universal for evaluating other models of sourcing's maneuver, nevertheless, emphasis on them with the application of the model "additional loading of production areas through the provision of outsourcing services" and the achievement of positive changes in these indicators undoubtedly improve financial viability of the enterprise. With regard to approbation, an example of the sourcing's maneuver model application is the loading of the production facilities in the Foundry of the PJSC "KAMAZ" Metallurgical Complex by the orders of Russian Railways (Syuzeva and Pyshnaya, 2014).

In addition to the above indicators, you can add the following indicators:

1. Achieving a balance between the realization of risky and less risky products (Panzar and Willig, 1977). For example, when new or modernized core products are introduced to the market, the risk of technical and ethical barriers remains high.
2. Indicators from the categories "diversity effect" (Adizes, 2004; Panzar and Willig, 1981), "synergistic effect" (Clinton and Del Vecchio, 2002), etc.

However, in this paper we will concentrate on the indicators "reducing the share of useless costs at fixed costs", "increasing the company's net profit" and "reducing the breakeven level of the enterprise", and build the following methodological approaches on them.

The economic effect of the sourcing's maneuver model application is estimated using the following expression:

$$\begin{cases} E_1 = D_I - D_{ISM} \\ E_2 = \sum_{i=1}^n (S_{TNP_i} - S_{NT_i}) \\ E_3 = BEP - BEP_{SM} \end{cases}, (2)$$

Where  $E_1$  - the change value in the share of useless costs at constant costs when applying the sourcing's maneuver model;  $D_I$  - The share of useless costs in constant costs before the application of the sourcing's maneuver model;  $D_{ISM}$  - the share of useless costs in constant costs after the application of the sourcing's maneuver model;  $E_2$  - the value of change in net profit in the application of the sourcing's maneuver model;  $n$  - the number of produced core products;  $E_3$  - the value of change of break-even point when applying the sourcing's maneuver model;  $BEP$  - the value of the break-even point before an application of the sourcing's maneuver model;  $BEP_{SM}$  - the value of the break-even point after the application of the sourcing's maneuver model.

However, easy achievement of positive values for indicators  $E_1$ ,  $E_2$  and  $E_3$  is insufficient in order to assess the feasibility of using the sourcing's maneuver model. It is important to determine the target values of these positive changes and it is necessary, at least, to achieve the intended values in the process of developing this model in the enterprise. Therefore, a positive decision in favor of the application of the model "additional loading of production areas through the provision of outsourcing services" is adopted if the following condition is met:

$$\begin{cases} E_1 \geq a \\ E_2 \geq b \\ E_3 \geq c \end{cases}, (3)$$

Where  $a$  - the target value of the change for the proportion of useless costs in constant costs when applying the sourcing's maneuver model;  $b$  - target value of change in net profit when applying the sourcing's maneuver model;  $c$  - target value of change of break-even point when applying the sourcing's maneuver model.

Values of indicators  $a$ ,  $b$  and  $c$  are determined at each enterprise individually. However, as further research, the development of methods for assessing indicators  $a$ ,  $b$  and  $c$  is quite interesting and in demand.

#### 4. Conclusions

We add a few important remarks to the proposals developed in this work on improving the financial standing of an enterprise through the application of the sourcing's maneuver model:

1. When assessing the feasibility and economic effect of the sourcing's maneuver model application accompanied by an increase in the fixed costs of the enterprise, the expression (1) must be supplemented as follows:
- 2.

$$S_{TNP} = S_{NT} + S_{NTS} - S_{IFCS}, (4)$$

Where  $S_{IFCS}$  - Increase in fixed costs of the enterprise after application of the sourcing's maneuver model distributed per unit of the core product;

2. The considered model "additional loading of production areas through the provision of outsourcing services" and the proposed methodological approaches are also valid for the implementation of processes or functions related to the production of a component (or product) at the enterprise for its customer. For example, the customer is not able to perform a certain function due to the lack of the necessary production capacity, and the partner has these capacities. By combining their efforts, they can solve joint production problems for the component (Britannica, 2001).
3. The effect for the application of the sourcing's maneuver model "additional loading of production areas through the provision of outsourcing services" can be even more significant in the joint application of another hybrid sourcing model, cosourcing. In particular, the presence of "bottlenecks" in the production of non-core products will not allow completely to load unused production capacities. In this case, the appeal to cosourcing significantly expands the possibilities of the sourcing's maneuver model.

The developed proposals for improving the financial standing of an industrial enterprise through sourcing maneuver give evidence of the prospects of further scientific work in the field of forming methodological approaches for making managerial decisions.

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