

Improving Organizational and Economic Potential of the Construction Materials Industry Enterprises

B. B. Hrustalev

440028 Penza, street Titov, 28, Russia

T. V. Uchaeva

440028 Penza, street Titov, 28, Russia

Copyright © 2014 B. B. Hrustalev and T. V. Uchaeva. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

On the basis of the developed evaluation model of organizational and economic potential, assessed some construction materials industry enterprises of the Penza region. Based on these results, predict the development potential in the future and recommendations for enhancing the capacity to achieve the forecast data.

Keywords: potential of the enterprise, the evaluation of organizational and economic potential, changes in capacity, capacity building options, recommendations for improving

Introduction

We have previously developed and proposed evaluation model of organizational and economic potential construction materials industry enterprises [1]. The model takes into account the employment potential, financial capacity, infrastructure, work environment, information environment, the marketing potential, the state of the production process, management capacity. To quantify the above factors influencing the organizational and economic potential of the private system was developed, integrated and integral indicators [2].

The results of studies

On the basis of this system of indicators assessed the organizational and economic potential of some of the construction materials industry enterprises of the Penza region. Table 1 shows a generalized assessment of organizational and economic potential of the enterprises surveyed the Penza region.

Table 1
Evaluation of the organizational and economic potential construction materials industry enterprises of the Penza region

№	Name indicators that determine the potential of the company	Points / Generalized evaluation capacity			
		Open Joint Stock Company "RCS -1"	Society to the limitations liability "Building materials"	Open Joint Stock Company "Domostroite I"	Open Joint Stock Company "Kar'erou pravlenie"
1	skill-capacity	4/0,508	3/0,381	3/0,381	2/0,254
2	Financial capacity	4/0,68	3/0,51	3/0,51	3/0,51
3	Condition production Process	4/0,664	3/0,498	4/0,0,66 4	2/0,332
4	Status Information Environment	3/0,201	2/0,134	2/0,134	2/0,134
5	Infrastructure	5/0,415	2/0,166	3/0,249	2/0,166
6	Status Production medium	5/0,345	2/0,138	3/0,207	2/0,138
7	Smart potential	3/0,525	3/0,525	3/0,525	3/0,525
8	Marketing potential	4/0,612	4/0,612	3/0,459	3/0,459
	of generalized potential	3,95	2,352	3,129	2,059
	Use capacity	0,78	0,4657	0,619	0,4077

The calculation results are shown in Table 1, indicate that the company is currently building materials industry are low use efficiency potential. So if the Open Joint Stock Company "RCS -1" uses the potential to only 78%, Society to the limitations liability "Building materials" - only 46.57%, Open Joint Stock Company «Kar'eroupravlenie» - at 40.77%.

Figure 1 shows the dynamics of organizational change and economic potential of the surveyed enterprises for the period 2010-2012.

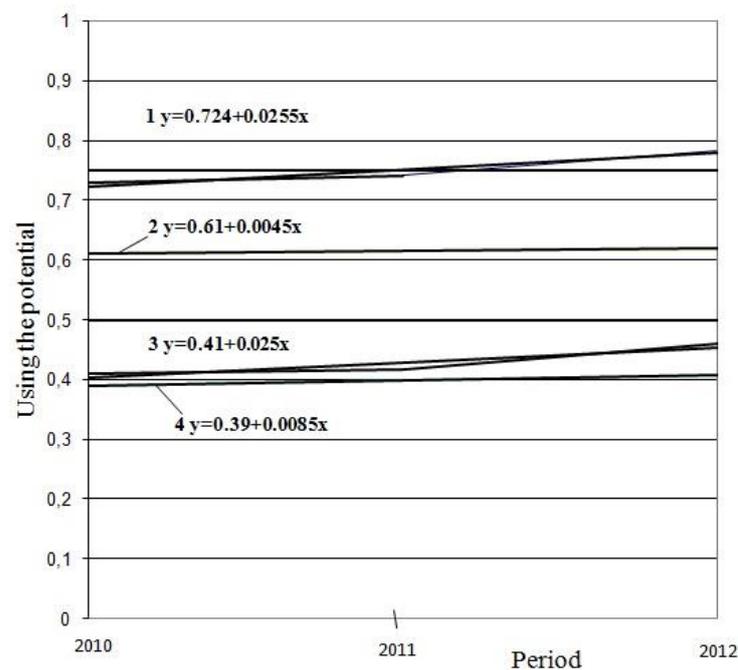


Figure 1. Dynamics of organizational and economic potential of some of the construction materials industry enterprises of the Penza region

1 - Open Joint Stock Company "RCS -1"; 2 - Society to the limitations liability "Building materials"; 3 - Open Joint Stock Company "Domostroitel"; 4 - Open Joint Stock Company "Kar'eroupravlenie"

Given the dynamics of organizational change and economic potential of these enterprises has been predicted for the future development potential. The data presented in Table 2.

Table 2
Using organizational and economic potential of the construction materials industry enterprises

Title Enterprise	Dynamics model potential	periods					
		2010	2011	2012	2013	2014*	2015*
Open Joint Stock Company "RCS -1"	$Y=0,724+0,0255x$	0,724	0,74	0,784	0,8	0,826	0,8525
Society to the limitations liability "Building materials"	$Y=0,61+0,0045x$	0,61	0,615	0,619	0,624	0,628	0,6325
Open Joint Stock Company "Domostroi tel"	$Y=0,41+0,025x$	0,41	0,416	0,46	0,485	0,51	0,535
Open Joint Stock Company "Kar'eroupravlenie"	$Y=0,39+0,0085x$	0,39	0,4	0,407	0,575	0,424	0,4325

The note: * - values of potential are resulted in view of the forecast.

To increase the capacity and improve the performance of construction materials industry enterprises of the Penza region developed recommendations, including various options for increasing capacity.

Options to improve the organizational and economic potential construction materials industry enterprises can be represented as a function of several parameters, which provides a definition of the relationship of such important indicators for the organization as cost, profit, etc. [3]:

- Option A - the characteristic of building production of the enterprises of the industry of building materials;
- Option B - characteristic of conditions of industrial enterprises of building materials;
- Option V - characteristic of the investment attractiveness of the building materials industry.

Efficiency of enterprises is based on the choice of the most efficient options for forming organizational and economic potential, problem boils down to the fact that the company is constantly reacting to changes in the external environment, is trying to stabilize its internal structure by gradually changing the basic parameters (A, B, V). In accordance with the constant changes of the external environment must change and the development of building materials industry enterprises.

I variant (C1). A parameter is changed at constant parameters B and $V = \text{const}$.

Conversion parameters are subjected to a process of production (in stability and repeatability), leading to marriage and reduce production costs. Great influence on the activities of the company have internal factors such as competence management, equipment costs, etc.

Variant II (C2). Parameter B changes at constants A and $V = \text{const}$.

By bringing the enterprise to raw materials reduces transportation costs. New products being developed, and there is access to new markets. Increasingly important to equip vehicles in enterprises, their degree of mobility, the development of information and communication paths.

Variant III (C3). Parameter V changes at constant parameters A and $B = \text{const}$.

Going revision of the principles of the internal organization of the enterprise, the best use of available resources. Develop strategies to existing products and markets. The objective of these strategies is the stabilization and expansion of the market.

IV variant (C4). Change the parameters of B together with the parameter A.

Great value such internal factors, as get an organizational effectiveness, a condition of production (stability and reproducibility), a level of use of potential. The innovative strategy connected to realization of newly developed products, connected or not connected with primary activity in the local markets are developed.

Conclusions

Change one of the main parameters can improve the construction materials industry enterprises. The best option is when all three parameters are changed. This will allow companies to choose the direction of development, relying only on their internal resources and capabilities. These recommendations can be used by enterprises of other industries specific to their activities.

References

[1] B. B. Hrustalev, T. V. Uchaeva «Model of an estimation of potential of the industrial enterprise» *Contemporary Engineering Sciences*, Vol. 7, 2014, no. 27, 1517-1522 <http://dx.doi.org/10.12988/ces.2014.491>

[2] Uchaeva T. V. Evaluation of the factors influencing the organizational and economic potential of the industry of building materials // Economics and management of innovative technologies. 10 (2014). [electronic resource]. URL: <http://ekonomika.snauka.ru/2014/10/6099>.

[3] Hrustalev B. B. Parameters estimation of activity of industrial enterprises of building materials according to marketing. / B. B. Hrustalev, V. I. Loganina, T. V. Uchaeva // Regional architecture and stroitelstvo.-2 (2013), 147-152.

Received: November 14, 2014; Published: December 22, 2014