

# CREATING EFFICIENT ACCOUNTING FOR CONSTRUCTION ORGANIZATIONS UTILIZING KEY PERFORMANCE INDICATORS

## CREAR UNA CONTABILIDAD EFICIENTE PARA LAS ORGANIZACIONES DE LA CONSTRUCCIÓN UTILIZANDO INDICADORES CLAVE DE RENDIMIENTO

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### ABSTRACT

In the prevailing era, the pace and effectiveness of management decisions hugely depend on the pace of processing, collection, transmission, and analysis of data regarding financial outcomes shaped by the analytical and accounting system of organizations. It seems incredibly challenging to evaluate the duty and performance of the accounting unit. However, a means of properly-built key performance indicators (KPI) comes to the aid. The duty of KPI is to make life simpler for the managers of the organization, the business owners, and regular workers. This study aims to analyze the forming of efficient accounting for construction organizations utilizing key performance indicators (KPI). To that end, theoretical, empirical, monographic, statistical and economic, logical, and abstract approaches are utilized. Based on the results, KPI is regarded as the mathematical relation of the outcomes of the approaches and techniques of its implementation and also the quantity and quality of resources utilized. Considering calculating the dependence, one can perceive how close we are to attaining a specific aim and if we are heading toward the right trajectory.

**Keywords:** accounting; performance indicators; quality control; effective work.

Revista de Investigaciones Universidad del Quindío,  
34(S2), 322-329; 2022.

ISSN: 1794-631X e-ISSN: 2500-5782

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## RESUMEN

En la era actual, el ritmo y la eficacia de las decisiones de gestión dependen en gran medida del ritmo de procesamiento, recopilación, transmisión y análisis de datos sobre resultados financieros determinados por el sistema analítico y contable de las organizaciones. Parece increíblemente desafiante evaluar el deber y el desempeño de la unidad de contabilidad. Sin embargo, un medio de indicadores clave de rendimiento (KPI) construidos correctamente viene en ayuda. El deber de KPI es simplificar la vida de los gerentes de la organización, los dueños de negocios y los trabajadores regulares. Este estudio tiene como objetivo analizar la formación de una contabilidad eficiente para las organizaciones de construcción utilizando indicadores clave de rendimiento (KPI). Para ello se utilizan enfoques teóricos, empíricos, monográficos, estadísticos y económicos, lógicos y abstractos. Con base en los resultados, KPI se considera como la relación matemática de los resultados de los enfoques y técnicas de su implementación y también la cantidad y calidad de los recursos utilizados. Al calcular la dependencia, se puede percibir qué tan cerca estamos de lograr un objetivo específico y si nos dirigimos hacia la trayectoria correcta.

**Palabras clave:** contabilidad; indicadores de desempeño; control de calidad; trabajo efectivo.

## INTRODUCTION

KPIs are deemed as an indicators system helping assess the performance of the whole organization and individual specialists (Saura, J2021). Creating efficient accounting starts with the inquiry, what efficient accounting tools as a whole, what the nature of effectiveness is. First, that is the lack of statements from the regulatory authorities (statistics, tax, and so son) Kroshilin, 2018; Alfartoosi & Jusoh, 2021). Second, it is a well-created basis for management accounting (given the fact that real data is utilized based on accounting information). Eventually, it is a system of economic control. activities of the enterprise, on the fourth hand, prompt and timely transient of budgets to counterparties, customers, banking organizations and other members in the external financial actions of the organization (Adamenko, 2018; Govdya & Khromova, 2018).

The functional actions of accounting systems on a daily basis incorporates lots of routine tasks, as opposed to the background of which priorities in the significance of particular duties encountering the accounting department are lost (Tiwari & Khan, 2020). At the stage, the building of efficient accounting for a construction company utilizing KPI arrives at the aid (Bisultanova et al., 2018). KPI assists in building a monitoring tool for the job cared out by the accounting services (Kokina & Blanchette, 2019).

The primary duty of the efficient building of accounting for construction organizations is favorably chosen KPI to curb and supervise the precision of accounting information and timely handled business tasks by the accounting services (Koneva, 2020; Prodanova et al., 2019).

Let's regard the key indicators of curb over the efficient accounting maintenance in the construction organization of the developer on the example of Garantia Construction Company LLC.

## METHODS AND RESULTS

The methodological and theoretical foundation of the current research is supplied by:

- scientific research of foreign and domestic scientists-economists on management accounting, accounting, management, and controlling;
- balanced scorecard construction system;
- GOST R ISO 9001-2001 Quality management systems;
- control system for efficient management of the accounting service of Garantia Construction Company LLC.

In order to accomplish the aim and resolve the issues raised in the procedure of performing the study, the methods below have been employed:

- monographic;
- empirical;
- statistical and economic;
- theoretical;
- logical and abstract methods.

Creating efficient accounting requires performing the tasks below:

- 1) Create key indicators for the efficient tasks of the accounting unit of a construction organization;
- 2) Organize and manage policies for the developed KPIs on the calculation procedure, stating frequency and utilized reports from software products for determining indicators;
- 3) manage the procedure process for monitoring and calculating KPIs with the aid of information and communication technologies (ICT);
- 4) designate accountable experts to curb and control the execution of KPIs of the accounting unit.
- 5) Create control approaches and means for the actions of the accounting services - the organized actions of accounting staff to test original accounting files, their submission timing for reporting, rectify classifications and reporting in the accounting accounts.

Table 1 demonstrates control actions of the Companies Group performed by experts of the structural units of the accounting deploying the techniques of control and self-control by the subordination's level.

**Table 1.** Methods of control of the accounting service

<b>Self-control</b> provided by:	<b>Subsidiarity control</b> performed by:
Accountant Deputy chief accountant Chief accountant	Deputy chief accountant Chief accountant
Self-control is performed especially in a persistent manner by the officials of the accounting unit through testing each of their tasks for compliance with the needs of regulatory legal actions governing legal relationships in accounting policies, accounting, and local actions of the Companies Group, and also by evaluating the causes that may impact the final aims of the actions of Companies Group.	Subsidiarity control is conducted by the boss of the structural department through approving the tasks performed by the subordinate officials, in a sustainable manner, or through performing an investigation in association with individual tasks in a selective manner.

The primary aim of attaining the planned accounting indicators is designated to the internal audits. On the example of Garantia CC LLC, the internal audit is performed as below:

1. The audit is conducted in a constant and/or selective manner by verification acts related to the internal audit and control measures' objects.

The auditors reports to the CFO and CEO of the Companies Group.

2. Internal audit is regarded as a procedure intended to acquire adequate confidence that the examined objects supply:

- the effectiveness and efficiency of its actions, such as the accomplishment of operational and financial indicators, the assets' safety;
- reliability of accounting for assets (fixed assets, inventories, accounts receivable, loans issued, etc.) and liabilities (accounts payable, loans received, other liabilities);
- reliability and correctness of management and accounting record;
- timeliness and reliability of the management and accounting statement;
- compliance with viable regulations of Russia;

3. Control actions and internal audit are handled so as to:

- identify or prevent deviations from the laid procedures and rules, affirm the reporting reliability, confirm the process for keeping management and accounting records with modern methods and schemes;
- get proposals ready to improve the financial situation and effectiveness of the usage of budgets to guarantee the accomplishment of the aims and purposes of the Companies Group through defining the compliance degree with the needs laid by regulatory files in the arena of management and accounting and the Accounting policy of the Companies Group;

4. The primary aims of internal audit and control actions include:

- curb and supervision over acknowledgment with the correctness and completeness of registrations of ,main accounting files, reporting and accounting registers;
- supervision over the precision of reflection of the realities of economic life in the framework of the existing economic and financial acts of the Companies Group with the readiness of main accounting files;
- recognition of trajectory for boosting the accounting performance in the economic and financial actions of the Companies Group;
- inspection of individual procedures for acknowledgment with the legislation of Russia, local policies of the Companies Group, its financial benefits and priorities, proposals development to enhance the effectiveness of procedures on the basis of the outcomes of the investigation;
- establishing the KPI indicators level for staff of accounting units regarding accounting actions by areas. Table 2 reveals the primary fields of accounting control within which more elaborate KPIs of accounting are created.

**Table 2.** Areas of monitoring the effective activities of accounting of construction companies using key performance indicators

No.	Fields of controlling the efficient actions of accounting of construction organizations utilizing KPIs
1	Curb of accounting of material assets and control of accounting and settlements with contractors and suppliers
2	Supervision of the management statements and accounting conformity
3	Supervision of the contract between the General and the Contractor Developer

No.	Fields of controlling the efficient actions of accounting of construction organizations utilizing KPIs
4	Ssupervision of the availability of main files in accounting
5	Supervision of the accounting correctness and precision
6	Checking of the reconciling and accrued taxes with the funds
7	supervision of services' timely delivery
8	Supervision of settlements with equity holders

## RESULTS AND DISCUSSION

KPIs of the service accountants act as the way that facilitates understanding what acts shall be performed to enhance the efficiency of the organization. KPI makes clear both the duty of each accountant and their efficiency, experts grasp what outcome they anticipate from them and what they require to accomplish for that. Those conclusions are on the basis of the viable application of KPIs at Fabrika Angazhement LLC, Garantia CC LLC, and also NGM-T LLC.

KPIs of the accounting unite are provided in Tables 3-6 are split into clasifications on the basis of the control points of the accounting system.

**Table 3.** KPI of the accounting service. Control of accounting of material assets

KPI	KPI code	Calculation process	Reporting period / Norm
1	2	3	4
<b>Tangible assets, TA inventory</b>			
The reports of warehouse materials TA inventory	01	The actual's ratio to projected number of warehouses	One time a day / 95%-100%, if less then = 0
Contractor's take-and-give reports	02	The actual's ratio to projected number of reports	Two times a month / 95%-100%, if less then = 0
TA stock balance report	03	The amount ratio of unreasonable balances on inventory to the total amount of balances on inventory	One time a month / 95%-100%, if less then = 0
Vehicle spare parts report	04	The ratio of the amount of unjustified balances on vehicle spare parts to the total amount of balances on vehicle spare parts	One time a month / 95%-100%, if less then = 0

**Table 4.** KPI of the accounting unit. Supervision of the availability of main files in accounting

KPI	KPI code	Calculation procedure	Reporting period / Norm
1	2	3	4
<b>Documents of receipt</b>			
Registration of documents of receipt for the entire company	12	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0
Registration of receipt files regarding the accountable accountant	13	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0
<b>Sale Documents</b>			

Registration of files of sale for the entire company	14	The correct process ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0
Registration of files of sale regarding the accountable accountant	15	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0

**Table 5.** KPI of the accounting services. Supervision of the availability of main files in accounting

KPI	KPI code	Calculation procedure	Reporting period / Norm
1	2	3	4
<b>Documents of receipt</b>			
Registration of files of receipt for the entire company	12	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0
Registration of receipt files regarding accountable accountant	13	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0
<b>Sale documents</b>			
Registration of files of sale for the entire company	14	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0
Registration of files of sale in the framework of the accountable accountant	15	The correct quantity ratio to the quantity based on the register	One time a month / Finished 95 % - 100% = 100, if less then = 0

**Table 6.** KPI of the accounting services. Supervision of the accounting correctness

KPI	KPI code	Calculation procedure	Reporting period / Norm
1	2	3	4
<b>Proper reporting of business transactions and closing of all needed accounts</b>			
Trial balance (in total)	16	Evaluated if “Yes” - 100% or “No” - 0%	One time a month / 100%, if less then = 0
Trial balance for 25, 26.90,91,58,66,60,62 accounts	17	Evaluated if “Yes” - 100% or “No” - 0%	One time a month / 100%, if less then = 0
Sub-account analysis for 60.1; 60.2; 62.1; 62.2; 76 accounts	18	Evaluated if “Yes” - 100% or “No” - 0%	One time a month / 100%, if less then = 0
Investigation of seventy accounts with the salary statement’s attachment	19	Evaluated if “Yes” - 100% or “No” - 0%	One time a month / 100%, if less then = 0
<i>Prepaid costs:</i>			
Trial balance for the account. Justification of accounting and write-off	20	Evaluated if “Yes” - 100% or “No” - 0%	One time a month / 100%, if less then = 0
<i>Deferred income:</i>			
Trial balance for the account. Justification of accounting and write-off	21	Evaluated if “Yes” - 100% or “No” - 0%	One time a month / 100%, if less then = 0

In case the accounting unit conducts its tasks on a regular basis regarding the KPI set by the chief, this doesn’t imply that each staff of the service operates as efficiently as probable. To develop and

optimize an organization, the workload degree of each accountant should be defined. To that end, the task and duty of the service on the basis of individual KPI shall be conducted (Darko et al., 2019).

Constant supervision of the actions of the accounting unit and the adequate preparation of KPI permit, if needed, decreasing the employees' number, raising their effectiveness, and boosting the financial capacity of the organization.

The duty of KPI is to ease life for the enterprise's head, the business owner and regular employees (Bannykh, 2019; Saliy et al., 2021).

Executing and adapting the KPI system isn't sufficient per se. The key indicators' system isn't perpetual for the usage over the course of the whole activity of the organization. As the organization expands, the indicators' priorities could undergo changes, the major challenges the system of indicators resolve are to curb poor and inadequate points in the organization by the key indicators' system and attain the foreseen outcome in activities (Alfartoosi & Jusoh, 2021).

Evaluation of the functioning of the designated duty is a substantial factor of the duty of that motivational system. The regular accountants' indicators shall be vivid and clear in their evaluation, so an individual would be able to perceive through the accounting period if he meets them or not, instead of finding out regarding it after the period (Blasi et al., 2018; Pardo-Bosch et al., 2019).

An effectively created accounting control system for construction organizations on the basis of key indicators is the cornerstone of the companies' prosperity. The system for creating efficient accounting utilizes to all organizations, without considering departments; each staff should grasp the duties he was employed for and the outcome anticipated from them.

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