



THE ROLE OF THE STATISTICAL INFORMATION SYSTEM IN ASSESSING ENTERPRISE PERFORMANCE

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Abstract

This article explores the significance of the statistical information system in assessing enterprise performance. It discusses how reliable and timely data support economic reforms, effective resource management, and strategic decision-making. The study analyzes the structure and functions of the system, its practical applications, and current challenges such as delays, incomplete reporting, and insufficient digital integration. Scientific and practical recommendations are proposed to improve the system in line with international standards.

Keywords: Statistical information system, enterprise performance, economic analysis, decision-making, data reliability, efficiency.

Introduction

Ensuring the stable and efficient development of the national economy requires an accurate assessment of the activities of economic entities – enterprises. Under market economy conditions, enterprise activity is multifaceted and complex; therefore, a systematic approach and reliable statistical information are essential for a comprehensive and trustworthy evaluation. In particular, the accuracy, completeness, and timeliness of statistical information are decisive factors in implementing socio-economic reforms and in making strategic decisions across regions and sectors.

The statistical information system is a set of tools that enables continuous monitoring, studying, evaluating, and analyzing the activities of economic entities. It plays a crucial role in solving such issues as the effective use of economic resources, identifying production potential, enhancing



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competitiveness, expanding the tax base, and increasing budget revenues. Based on the data collected through this system, government agencies, entrepreneurs, and investors make well-grounded economic decisions.

In today's digital transformation process, the statistical information system is becoming more automated, with expanded opportunities for rapid data collection, processing, and analysis through the use of information technologies and artificial intelligence. Nevertheless, the quality, completeness, and ability of statistical data to reflect real conditions remain urgent issues. In particular, in some cases, statistical data are submitted with delays or are incomplete, which can lead to ineffective economic analysis and management decisions.

In this regard, this article analyzes the significance of the statistical information system in assessing enterprise performance, its capabilities, and existing challenges. In addition, scientific and practical proposals for improving the system are developed, and mechanisms for evaluating enterprise performance based on modern statistical approaches are reviewed.

The main objective of this study is to identify the importance of the statistical information system in assessing enterprise performance, determine existing problems in the system, and develop ways to improve it. From this perspective, several scientific-methodological approaches and statistical analysis methods were applied in the research process.

In the study, systematic approach, structural-functional analysis, comparative analysis, and empirical observation methods were used. Through the systematic approach, the statistical information system was considered as an integral part of the entire economic information field. Structural-functional analysis was applied to examine the internal components of the statistical system and their interconnections.

Literature Review

The role of the statistical information system in assessing enterprise performance has been studied by many local and foreign researchers, and the scientific literature in this field highlights various aspects such as the importance of the system, its structure and functional capabilities, as well as its practical applications.



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In foreign literature, particularly in the economic theories developed by Paul A. Samuelson and William D. Nordhaus, the role of statistical data in economic decision-making has been thoroughly analyzed. According to them, statistical information serves as an “economic signal” that ensures economic stability and efficiency. In addition, OECD publications (Economic Outlook, Statistical Sources and Methods) also provide in-depth coverage of methods for monitoring and forecasting economic indicators through statistical systems.[1]

The concepts developed by the statistical divisions of the European Union and the United Nations, such as the System of National Accounts (SNA) and the European Statistical System (ESS), serve to systematize, standardize, and expand the possibilities for international comparison of statistical information. These approaches focus on the issue of integrating microeconomic data at the enterprise level into macroeconomic analyses.

Uzbek researchers have also widely analyzed the importance of the statistical information system in national economic development. In particular, the scientific works of A. Boboev, B. Usmonov, Sh. Teshaboyev, and other scholars provide a detailed discussion of statistical observations, enterprise performance indicators, and their evaluation metrics. Pardaev M., in his research, emphasizes that the accuracy and timeliness of statistical information are crucial in decision-making.[2]

Furthermore, the annual statistical collections published by the State Committee of Statistics, as well as the open data portal on economic indicators, serve as primary sources of the national statistical information base. These data make it possible to compare the financial and economic conditions of different enterprises and organizations and to evaluate their development dynamics.[3]

The analysis shows that there are various conceptual approaches in the scientific literature regarding the improvement of the statistical information system. Their general conclusion is that for the effective management of the modern economy, the speed, reliability, and transparency of information must be ensured. From this perspective, the statistical information system serves as the most important analytical tool in assessing enterprise performance.



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1. The Content of the Statistical Information System and Its Role in Assessing Enterprise Performance

The statistical information system is a complex process of collecting data from various sources, processing, analyzing, and delivering them to users. It serves as an important tool in substantiating economic analysis and management decisions. Enterprise activity is a complex system that encompasses many functions such as production, finance, investment, and marketing, and reliable statistical data are essential for its evaluation.[4]

Through statistical information, assessment is carried out in the following areas:

- **Financial indicators** (income, profit, assets, liabilities, profitability, liquidity, etc.);
- **Production volume and efficiency of resource use;**
- **Labor resources:** employment level, wage fund, labor productivity;
- **Tax and budget revenues;**
- **Volume of investments, their composition, and results;**
- **Foreign economic activity:** export-import indicators.

These indicators make it possible to comprehensively assess the state of enterprise activity. The state statistical system acts as the main institution for collecting and analyzing this information. Surveys, special statistical observations, and annual reports serve as the primary sources.

2. Practical Case: Practical Application of the Statistical Information System

In practice, the statistical information system is used to prepare analytical reports for each area of enterprise activity. For example, indicators published by the State Committee of Statistics of the Republic of Uzbekistan, such as "Gross Domestic Product," "Number of Enterprises and Organizations," "Volume of Industrial Output," and "Foreign Trade Turnover," are used to assess the overall economic potential of enterprises in the country.

At the regional level, for instance, statistical analysis of industrial enterprises in Kashkadarya region is conducted in terms of their number, annual production volume, labor potential, profits, and losses. Based on these analyses, local



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development strategies are developed by local authorities and economic policy-making institutions.[5]

However, the existing statistical system also has some shortcomings, such as:

- Submission of information with delays;
- Inaccuracy or subjectivity of data;
- Insufficient integration of digital technologies;
- Incomplete submission of statistical reports by enterprises.

Therefore, for the stable functioning of the statistical information system, the following proposals are considered relevant:

- Deeper integration of information technologies;
- Wider implementation of electronic reporting systems at the enterprise level;
- Simplification of information exchange between state statistical services and enterprises;
- Improvement of statistical analysis methodology based on international standards.

Conclusion

Accurately and comprehensively assessing enterprise performance is one of the important tasks in the modern economy. In this evaluation process, the statistical information system occupies a central place. The analyses show that through the statistical information system, the financial condition of enterprises, production capacity, the level of labor utilization, investment activity, and other indicators are identified and assessed. This system becomes the main source of information for government agencies, research institutions, and entrepreneurs in making decisions.

However, the current statistical system has a number of problems: delays in providing information, low quality of data, insufficient automation, and incomplete submission of reports by enterprises—all of which reduce the system's efficiency.



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Thus, the perfection of the statistical information system directly determines the accuracy of enterprise performance assessment, the reliability of economic analysis, and the credibility of management decisions.

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