## **UNECE Expert Meeting on Statistical Data Collection and Sources**

## 22-24 May 2024, Geneva, Switzerland

# Performance indicators – SORS Case

Marija Hinda and Nebojša Tolić (Statistical Office of the Republic of Serbia [SORS]) marija.hinda@stat.gov.rs and nebojsa.tolic@stat.gov.rs

#### **Abstract**

The Statistical Office of the Republic of Serbia (SORS) has recognized the power of data collection processes and their integration with performance indicators to enhance the quality, accuracy, and efficiency of statistical analyses. Special attention has been devoted to analysing the performance of enumerators in Population and Agricultural censuses. By utilizing applications developed on the Power BI and PowerApps platforms, SORS has developed a specific method for tracking performance and outcomes.

More than 15,000 enumerators have been monitored to track the dynamics of their activities, ensure efficiency, and adjust plans as needed. This tool has enabled real-time monitoring of enumerator activities, providing detailed analysis and data visualization. Dashboards provide high-level views of data and KPIs, and apps are a way to share content with specific groups of users to make informed decisions. Additionally, an application speeds up and automates the issuance of travel orders, and advance payments for enumerators, reducing the potential for errors.

SORS' active implementation of performance management, real-time analytics, and other applications demonstrates a commitment to not only improving the quality and accuracy of analysis but also the provision of easier accessibility, which simplifies the process of decision-making.

# **Performance indicators – SORS Case**

#### Paper:

## Importance of performance indicators measurement

The performance measurement represents a crucial factor enabling more efficient and accurate analyses. This evolution is grounded in the recognition of the crucial role these technologies play in enhancing the efficiency and accuracy of data analysis. By harnessing the capabilities of performance indicators, the Statistical Office of the Republic of Serbia (SORS) have made significant strides in improving the quality and effectiveness of their statistical analyses.

Through the adoption of automated processes and performance indicators, SORS has achieved notable advancements in the quality and efficiency of data collection and statistical analysis. These innovations are not merely technological upgrades but herald a broader transformation of statistical methodologies, reshaping the way data is collected, analyzed, and utilized.

Performance measurement empowers SORS to navigate complex data environments with agility, unlocking new insights and opportunities that were previously inaccessible. Simultaneously, performance indicators serve as invaluable compasses, guiding decision-makers toward data-driven strategies and informed decision-making, thereby amplifying the impact of statistical insights.

#### CASE STUDY

#### **Population and Agricultural Census**

The Statistical Office of the Republic of Serbia (SORS) has recognized the power of data collection processes and their integration with performance indicators to enhance the quality, accuracy, and efficiency of statistical analyses.

Special attention has been devoted to analysing the performance of enumerators in the Population Census conducted in 2022 and the Agricultural Census conducted the previous year. By utilizing applications developed on the Power BI and PowerApps platforms, SORS has developed a specific method for tracking performance and outcomes.

More than 15,000 enumerators have been monitored to track the dynamics of their activities, ensure efficiency, and adjust plans as needed. Modern application enables data visualization of monitoring and control of the work of enumerators in the field, using Microsoft Power BI technology for business analytics, to create interactive dashboards and reports. This tool has enabled real-time monitoring of enumerator activities, providing detailed analysis and data visualization. Dashboards provide high-level views of data and KPIs, and apps are a way to share content with specific groups of users to make informed decisions.

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Additionally, an application for enumerator travel orders has been developed through the PowerApps platform, significantly speeding up and automating the process of issuing travel orders and advance payment for enumerators. This application provides detailed information on the costs of each enumerator, distance covered by each enumerator daily and also allows tracking and prompt payment of enumerator travel expenses and advances based on real-time requests, simultaneously reducing potential errors.

## Benefit of performance measurement

Performance measurement in conducting statistical surveys brings a multitude of benefits and advantages.

Firstly, it enables organizations to monitor progress and productivity more effectively throughout the data collection process. Precise performance tracking allows for the identification of efficient practices and areas in need of improvement, thereby optimizing the overall survey process.

Performance measurement allows for better managerial control over resources. By identifying effective work methods and pinpointing potential issues or obstacles, organizations can more efficiently allocate their resources to achieve optimal results in survey implementation.

Another key benefit of measurement is the improvement of data quality. Precise tracking and evaluation of performance enable the identification and resolution of potential issues or deficiencies in the data collection process, resulting in increased accuracy and reliability of the data.

Furthermore, performance measurement provides a basis for continuous improvement of work processes. Performance analysis enables organizations to identify areas in need of improvement and take appropriate steps to optimize their work processes and achieve better results during survey implementation.

# Challenges with performance measurement

Implementing performance measurement in conducting statistical survey can come with its own set of challenges that organizations must address.

Ensuring the accuracy and reliability of performance metrics can be challenging, especially when dealing with large volumes of data or complex data collection processes. Determining appropriate performance indicators and metrics may involve subjective assessments, which can lead to potential biases or inconsistencies in measurement.

Protecting sensitive data used in performance measurement processes poses challenges related to privacy protection and compliance with data security regulations. Effectively interpreting performance data and translating insights into actionable improvement strategies can be challenging, particularly when dealing with complex or ambiguous results.

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Addressing these challenges requires proactive management, engaging stakeholders, investing in appropriate technologies, and continuously evaluating and refining performance measurement processes.

#### CONCLUSION

The exploration of performance indicators in data collection processes represents an important step to improve statistical practices, especially in the context of the Statistical Office of the Republic of Serbia (SORS).

The analysis of performance in Population and Agricultural censuses has shown significant improvements in data collection efficiency and effectiveness. SORS' active implementation of performance management, real-time analytics, and other applications on the Power BI and PowerApps platforms demonstrates a commitment to not only improving the quality and accuracy of analysis but also the provision of easier accessibility. In the future, SORS plans to utilize and apply the acquired knowledge and tools in monitoring field enumerators in regular field surveys, such as ARS and SILC.

The benefits of performance measurement in statistical surveys are diverse, including improved monitoring of progress, better resource management, enhanced data quality, and opportunities for continuous process improvement. However, challenges such as ensuring data accuracy, protecting sensitive information, and effectively interpreting performance data require proactive management and ongoing refinement.

Overall, the adoption of performance measurement methodologies represents a pivotal advancement in statistical survey practices, enabling organizations to optimize their processes, enhance decision-making, and ultimately achieve greater impact and success in their surveys.