Challenges and considerations in implementing quality management institutional framework

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Abstract

Over the recent years, the Albanian Institute of Statistics has undertaken comprehensive initiatives to implement the European Code of Practice across various dimensions. A pronounced emphasis on quality has been instated, transcending the purview of the National Statistical Institute (NSI) to encompass the broader National Statistical System (NSS). Particular attention has been directed towards advocating for and implementing a robust quality management framework. The institute is actively pursuing the strategic imperative of leveraging administrative data for statistical production as a means to enhance cost-effectiveness.

This paper endeavours to expound upon the challenges entailed in advancing quality management within the NSS and extending its reach to Other National Authorities (ONAs) engaged in the production of official statistics. It will systematically explore considerations pertaining to the requisite institutional framework for ensuring quality assurance and cultivating trust among users.

While the initiative may encounter impediments owing to divergent institutional frameworks, the involvement of many stakeholders, heightened workloads, or shifts in organizational culture, its implementation is envisaged to yield enduring benefits for both data producers and the use of data in official statistics.

Keywords: Quality, Institutional framework, ONAs

1. Introduction

In today's competitive and rapidly evolving organizational landscape, the pursuit of quality management has become not just a priority, but a necessity for institutions seeking sustainable success. Implementing a robust quality management institutional framework lays the foundation for systematic approaches to ensure consistency, efficiency, and excellence across all facets of operations (Liker, 2004). However, this endeavour is fraught with challenges and considerations that demand careful attention and strategic planning.

Within the broader context of institutional frameworks, the National Statistical System (NSS) of Albania is led by the National Statistics Institute (INSTAT) and composed of INSTAT itself, along with two other statistical agencies - the Bank of Albania (BoA) and the Ministry of Finance

and Economy (MoFE) - the NSS operates within a legislative framework defined by Law No.17/2018 on Official Statistics and the five-year Official Statistics Program (INSTAT, 2018). INSTAT, in collaboration with statistical agencies, operates with a clear mandate: to produce statistics in a transparent, impartial, and timely manner (INSTAT, 2018). This mission not only serves the domestic agenda but is also instrumental in facilitating Albania's integration into the European Union (EU). As articulated in Article 70 of the Stabilization and Association Agreement (SAA), the production of reliable statistics is crucial for evaluating the country's progress in aligning with EU standards and requirements, particularly under Chapter 18, "Statistics" (European Union, 2007).

While the NSS and its constituent agencies are tasked with producing official statistics, they must contend with numerous challenges and considerations. One such challenge stems from the diverse nature of data sources within the Albanian context. While ministries and other institutions generate data primarily through administrative systems, the primary scope of collection may not be statistical. Nonetheless, the importance of these data sources in the production of official statistics is indisputable (United Nations, 2015).

To address these challenges effectively, an assessment of the level of maturity among statistical agencies has been conducted to understand the current situation regarding various aspects, including adherence to international standards, quality issues, knowledge, staffing, and IT infrastructure (European Union, 2019). Similarly, evaluations have been undertaken for administrative data providers to evaluate the quality of data sources in relation to these aspects (United Nations, 2015).

Against this backdrop, the purpose of this paper is to offer a comprehensive exploration of the challenges and considerations inherent in implementing a quality management institutional framework within the context of the NSS in Albania. By drawing parallels between the challenges faced by the NSS and broader institutional frameworks, it is aimed to provide insights, strategies, and best practices that can inform and guide organizations embarking on their quality management journey.

2. Institutional frameworks for quality management

Starting from 2018, based on the new legal basis, while preparing the five-year Official Statistical Programme (OSP), as well as while preparing the Yearly Annual Plans, INSTAT has been assessing the situation on the quality management, taking into consideration strengths and weaknesses of each agency.

2.1 Integration of International Standards and Classifications

Within the National Statistical System (NSS) of Albania, a concerted effort is underway to align with international standards and classifications, particularly those set forth by the European Union (EU). Leading this initiative is the National Statistics Institute (INSTAT), which diligently works across all statistical domains to ensure adherence to EU regulations and classifications. INSTAT's approach prioritizes not only compliance but also responsiveness to national conditions and user needs, ensuring that statistical outputs are both internationally comparable and domestically relevant.

In pursuit of transparency and accessibility, INSTAT maintains a dedicated section on its website where all utilized classifications are publicly available. Furthermore, INSTAT has a leadership role in the National Commission of Classification, actively updating and proposing statistical classifications to the Albanian government. Through these efforts, INSTAT demonstrates its commitment to staying current with evolving international standards while tailoring them to the Albanian context.

Similarly, the Bank of Albania (BoA) makes continuous progress in aligning its statistical practices with European and global standards. BoA prioritizes transparency by providing methodological information publicly, thereby addressing any deviations based on specific Albanian circumstances. This transparent approach fosters clarity and understanding among users regarding BoA's statistical methodologies.

Additionally, the Ministry of Finance and Economy (MoFE) is actively engaged in adopting international standards advocated by the International Monetary Fund (IMF), particularly those aligned with the Regional Accounts 2010 (ESA 2010). Furthermore, MoFE is in the process of planning the implementation of the International Public Sector Accounting Standards (IPSAS), indicating a commitment to harmonizing financial reporting practices with global norms.

In essence, the NSS, comprising INSTAT, BoA, and MoFE, makes collective efforts to integrate international standards and classifications into Albania's statistical landscape. Through transparent practices, active participation in standard-setting bodies, and ongoing alignment efforts, these agencies contribute to enhancing the quality, comparability, and relevance of statistical outputs, serving both domestic and international stakeholders.

2.2 Ensuring Quality

Quality assurance has emerged as a focal point in recent years within Albania's statistical landscape. The framework employed aligns with international best practices, reflecting a

commitment to maintaining high standards. Since 2018, the issuance of quality reports has become standard practice, emphasizing transparency and accountability.

Several legal instruments underpin the commitment to quality in official statistics. These include the Law on Statistics 2018, the Commitment on Confidence in Statistics of the Albanian Government (2017), and the Commitment to Quality Statement. Moreover, INSTAT has articulated its Quality Policy, further solidifying its dedication to ensuring statistical accuracy and reliability.

At the core of quality management practices lies the adoption of Total Quality Management (TQM) principles by INSTAT. This involves the establishment of a management model aligned with TQM principles, alongside the development of a comprehensive Total Quality Management Strategy. INSTAT has also devised quality assessment guidelines based on the Generic Statistical Business Process Model (GSBPM), facilitating a systematic approach to quality assurance.

Documentation plays a pivotal role in guaranteeing quality, and INSTAT has made significant strides in this regard. Since 2018, efforts have been underway to document statistical processes based on the GSBPM framework. Notably, INSTAT has documented all statistical activities, underscoring a commitment to transparency and process standardization. Moreover, the implementation of statistical audits from 2019 further reinforces the institution's dedication to quality assurance, with quality audits conducted and self-assessment questionnaires completed.

Similarly, the Bank of Albania (BoA) adheres to rigorous quality standards, drawing upon the IMF's Special Data Dissemination Standard and Data Quality Assessment Framework. These frameworks, aligned with the United Nations Fundamental Principles of Official Statistics, serve as guiding principles for BoA's statistical practices. BoA has also published its commitment to quality statistics in 2017 and established the Policy and Calendar of the Bank of Albania Review of Statistics, signifying a commitment to transparency and accountability.

To foster a culture of quality across statistical agencies, INSTAT has organized workshops aimed at implementing quality frameworks in statistical products. Additionally, the institution has developed training curricula on "Quality in Statistics," delivered through the Albanian School of Public Administration, reflecting a proactive approach to capacity building and knowledge dissemination.

In essence, the emphasis on quality within Albania's statistical ecosystem, led by INSTAT and supported by the other agencies, underscores commitment to continuous improvement, transparency, and reliability in statistical outputs.

2.3 Metadata Management

Metadata, serving as crucial descriptors of statistical data, plays a pivotal role within the National Statistical System (NSS) of Albania. It is made publicly available for all published statistics, ensuring transparency and facilitating data interpretation.

Aligned with European standards, the National Statistics Institute (INSTAT) diligently prepares Structural and Referential Metadata. Referential Metadata, which provides contextual information, is integrated into publicly available quality reports, offering insights into the methodological underpinnings of statistical production. Methodological notes, further clarifying the statistical production process, are also accessible to users, enhancing understanding and trust in the data.

Moreover, structural metadata, delineating variables and classifications, is readily accessible on the INSTAT website for most statistical activities. This transparency fosters confidence in the reliability and comprehensiveness of statistical outputs.

Similarly, the Bank of Albania (BoA) adopts a rigorous approach to metadata publication, particularly for specific statistical products governed by the Enhanced General Data Dissemination System (e-GDDS) and IMF standards. Through the e-GDDS platform, detailed information on sources and methods used for statistical production is provided, empowering users to assess data quality and reliability.

The Ministry of Finance and Economy (MoFE) also publishes metadata and technical notes for produced statistics. MoFE's efforts contribute to enhancing transparency and understanding of statistical outputs. Despite this, standardization of metadata remains a challenge.

In a collaborative effort to enhance metadata management practices, INSTAT in yearly basis organize workshops with representatives from statistical agencies, focused on quality and structural and referential metadata, aiming to foster knowledge sharing and best practices adoption across the NSS.

The NSS of Albania is a committed to metadata transparency and accessibility, with INSTAT, BoA, and MoFE each playing a crucial role in ensuring that users have access to comprehensive and reliable metadata to support informed decision-making.

2.4 Capacity Building and Knowledge Enhancement

In the evolving landscape of official statistics production, continuous training is indispensable to support staff development and ensure currency with evolving methodologies and practices.

Recognizing the critical importance of knowledge development, the National Statistics Institute (INSTAT) initiated a Training Strategy in 2018, complemented by an annual Calendar of Trainings. This strategy aims not only to enhance the professional competence of INSTAT personnel but also to extend its benefits to staff from other statistical agencies, administrators of administrative data, and diverse users of official statistics. To facilitate this, INSTAT has established a Statistical Training Centre on its premises, operating in collaboration with the Albanian School of Public Administration. This partnership ensures alignment with relevant legal frameworks, such as Law No. 152/2013 "On the civil servant" and the Statistics Law 2018.

Within the National Statistical System (NSS), newly recruited employees undergo mandatory training on the objectives, tasks, compilation practices, methodologies, and statistical products. This foundational training equips staff with the requisite knowledge to execute their responsibilities effectively from the outset.

Moreover, mechanisms for ongoing knowledge enhancement are embedded within performance appraisal processes and employee satisfaction surveys. Dedicated sections within these assessments are devoted to identifying knowledge gaps and devising strategies to augment professional capacities. By incorporating feedback loops and performance evaluations, the NSS fosters a culture of continuous learning and improvement among its workforce.

The NSS of Albania prioritizes capacity building and knowledge development as cornerstones of organizational effectiveness and excellence. Through structured training initiatives, ongoing learning opportunities, and feedback mechanisms, the NSS endeavours to cultivate a skilled and adaptable workforce capable of meeting the evolving demands of official statistics production.

2.5 Information Technology Infrastructure

The National Statistical System (NSS) faces with the ongoing challenge of maintaining adequate and up-to-date IT infrastructure. With the evolution of the technology, even though IT strategic plans are in place within institutional development strategies, the need for further improvements is continuous.

INSTAT has been taking continuous initiatives towards modernization and improvement of communication with user groups, building innovative IT systems for data collection and production processes. The Information Technology Strategy and the Strategic Information Technology Plan outline ambitious objectives.

Similarly, the other statistical agencies work in improving aspects of data collection and processing. Major innovations are included in budget planning for statistical processes and usage of IT in all steps of the production and dissemination of statistics. Interfaces of communication between different systems and agencies are being developed to automatize processes and safeguard statistical information.

2.6 Administrative Data Providers

Administrative data providers for official statistics operate within the boundaries of national legal frameworks and institutional agreements, such as Memorandums of Understanding (MoUs) with INSTAT.

Challenge arise from the shortfall in internal guidelines for statistical procedures and methods to monitor, assess, and report data quality within institutions. Some entities implement practices aimed at maintaining data quality, while others lack institutional guidelines for statistical methodology, leading to inconsistencies in quality assurance practices.

Despite indications of practices contributing to quality maintenance, there is a need for structured evaluation processes, in order for the institutions to develop comprehensive frameworks for quality assessment.

Another critical aspect is the development of metadata related to administrative data across institutions. This underscores a gap in contextual information crucial for comprehensively understanding and effectively utilizing the data. Enhanced metadata practices are imperative to improve data transparency and usability, thereby facilitating informed decision-making processes.

In light of these challenges, administrative data providers need to make efforts towards the development and implementation of robust quality management frameworks. Such frameworks should encompass clear guidelines for statistical procedures, systematic approaches to monitoring and assessing data quality, and mechanisms for producing comprehensive quality reports. Additionally, investments in metadata development are essential to enhance the accessibility and usability of administrative data for official statistical purposes.

2.6.1 Resources

In terms of resources, the situation in institutions is different. In some institutions the staff in charge of statistics have proper education and training while in other the staff needs more training.

Staff from different institutions has received the training on "Basic Knowledge of Official Statistics" organized by INSTAT in collaboration with the Albanian School of Public Administration". While some staff have been trained from INSTAT on the standardization of data processing. Evaluation on training needs has been performed also with local government. Dedicated training on local government staff working with data and statistics has been organised and conducted by INSTAT.

Potential training topics include data collection, updating registers, compiling statistics, metadata preparation, workflows, improvement in reporting, and improving data preparation and dissemination.

The adequacy of physical and IT infrastructure is rather mixed and is different from central to local level institutions.

3. Results

The analysis of the challenges and considerations in implementing quality management institutional frameworks within the NSS of Albania yielded several significant findings:

One prominent challenge identified is the diverse nature of data sources within the Albanian context. While ministries and other institutions primarily generate data through administrative systems, the primary scope of collection may not always be statistical. This diversity poses challenges in ensuring the compatibility and consistency of data across different sources. Furthermore, aligning with international standards and classifications, particularly those set forth by the European Union (EU) and other relevant bodies, presents a significant consideration for the NSS. Achieving alignment while also catering to national conditions and user needs requires careful navigation and strategic planning.

The legal and regulatory frameworks governing statistical activities play a crucial role in shaping quality management practices within the NSS. Laws, regulations, and institutional policies define the mandates, responsibilities, and standards to which statistical agencies must adhere. These frameworks provide the foundation for quality assurance mechanisms, transparency requirements, and accountability structures. However, navigating the complexities of legal and regulatory compliance while also fostering innovation and flexibility presents a notable challenge for institutions within the NSS.

Capacity building and knowledge enhancement emerged as key priorities for advancing quality management within the NSS. Ensuring that staff possess the necessary skills, competencies, and expertise is essential for maintaining high-quality statistical outputs. Training initiatives, such as those conducted by INSTAT in collaboration with the Albanian School of Public

Administration, play a critical role in enhancing the professional competence of personnel across statistical agencies and other relevant institutions. However, addressing variations in staff education, training needs, and resource availability presents a significant challenge for capacity-building efforts.

Adequate and up-to-date information technology (IT) infrastructure is essential for supporting quality management initiatives within the NSS. While strategic plans and initiatives for IT modernization and improvement are in place, challenges persist in maintaining and upgrading infrastructure at both central and local levels. Innovations in data collection, processing, and dissemination require robust IT systems and interfaces to facilitate seamless communication and collaboration among different agencies and systems. Addressing gaps in IT infrastructure and ensuring interoperability remain critical considerations for advancing quality management efforts.

Administrative data providers represent a crucial component of the statistical ecosystem within the NSS. However, challenges arise from the lack of internal guidelines for statistical procedures, methods, and quality assurance practices among these providers. Inconsistencies in quality assurance practices and the absence of formal reports assessing data quality underscore the need for comprehensive frameworks and standardized approaches to quality management. Additionally, enhancing metadata practices and developing contextual information related to administrative data are imperative for improving data transparency, usability, and informed decision-making processes.

There is a complex interplay of challenges and considerations in implementing quality management institutional frameworks within the NSS and data providers. Addressing these challenges requires concerted efforts, strategic planning, and collaboration among stakeholders to ensure the reliability, transparency, and relevance of official statistics.

4. Conclusions

Based on the findings, it's clear that implementing quality management frameworks within Albania's National Statistical System (NSS) presents various challenges. These include diverse data sources, alignment with international standards, legal complexities, capacity building needs, IT infrastructure requirements, and issues with administrative data providers. The diversity of data sources requires careful integration and alignment to ensure consistency and reliability. Furthermore, achieving alignment with international standards while navigating legal complexities demands strategic planning and compliance efforts. Addressing capacity building needs and upgrading IT infrastructure are vital for maintaining high-quality statistical outputs. Additionally, establishing robust frameworks for administrative data providers is

essential for enhancing data quality and transparency. Overcoming these challenges demands concerted efforts, strategic planning, and stakeholder collaboration to ensure the reliability and relevance of official statistics for informed decision-making and policy formulation.

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