CASE STUDY

DESIGN A QUALITY ASSURANCE SYSTEM FOR MUNICIPAL CITY CLEANING SERVICES TO INCREASE EFFICIENCY, PRODUCTIVITY & CITIZENS' SATISFACTION

وزارة الشـــؤون البلدية و القروية
Ministry of Municipal & Rural Affairs

WEBSITE
WWW.MOMRA.GOV.SA

INDUSTRY
GOVERNMENT AND PUBLIC SECTOR

LOCATION
RIYADH, KINGDOM OF SAUDI ARABIA

KEY CHALLENGES
- Lack of standardized QA processes
- Quantity-driven contracts
- Poor IT infrastructure & tools
- Conflicting interests & lack of transparency

SOLUTION
Enhanced closed-loop QA system that ensures effective monitoring of service quality, citizens' satisfaction & service adequacy

BUSINESS BENEFITS
- Effective, high quality, standardised QA services leading to outcome-based service delivery
- Self-monitoring system to assess continuous improvement in municipal service delivery

The Ministry of Municipal and Rural Affairs (MoMRA) is the principal policy making authority for the municipal system in the Kingdom of Saudi Arabia (KSA). MoMRA oversees 269 municipalities of different sizes across the Kingdom and 16 AMANAs operating as a "middle layer" between MoMRA and the municipalities. AMANAs provide both oversight and control over municipalities while delivering a wide range of services to citizens and businesses.

Municipal city cleaning and waste management services (including litter picking, street sweeping, refuse collection & transport, etc.) are one of the main services provided by AMANAs and Municipalities. Such services are generally provided by Contractors with approximately 4% only of AMANAs/Municipalities relying on self-operation. Very often, consulting firms are being contracted to monitor and control city cleaning contractors as well as provide technical support to AMANAs.

The Challenge

Assessing the current status of city cleaning projects across key AMANAs from contractual, organizational, operational, financial and supervisory aspects reveals significant gaps in the existing quality control and quality assurance systems; thus, leading to ineffective and economically inefficient systems. The main challenges facing the existing models could be summarized as follows:

- The existing contractual framework for municipal city cleaning contracts is quantity-driven rather than quality-driven. City cleaning contracts currently focus on providing specified numbers and quantities of labour and machinery to perform the required services for specified frequencies. There is a lack in terms of standardized QA/QC processes and standards across AMANAs leading to a less emphasis on the quality of the desired outcomes of service delivery.
- The existing operational environment leads to increased costs of monitoring and control systems without achieving a proportional increase in the quality of the delivered services. City cleaning contracts rely heavily on large numbers of unskilled labour to provide the required services. In absence of efficient, transparent and standardized quality assurance processes, monitoring and controlling such projects become a complex and low-efficient process. Large numbers of inspectors and supervisors would be required to monitor and control the large numbers of unskilled labour.
- The use of adequate IT solutions is still relatively weak. This leads to poor efficiency and productivity, loss of historical data and inability to learn from past experiences. Moreover, the absence of adequate IT tools limits the interaction between AMANAs and citizens in terms of measuring citizens' satisfaction levels and addressing their complaints.

The Approach

A key goal of implementing an objective, unbiased quality assurance system is to improve the delivery of city cleaning and waste management services and ensure these services are effective, efficient and economical. DAIS Global utilized a five-step "Best Value" approach to maximize the value from cleaning contracts and achieve this goal:

1. Design of target QA model according to best practices taking into account existing challenges in KSA;
2. Engaging citizens to measure and increase their satisfaction levels;
3. Development of QA processes, procedures and tools (e.g. checklists, visual standards, technical specifications, KPIs, etc.) to support the implementation of the target QA model;
4. Process automation to increase objectivity, productivity and efficiency;
5. Piloting the target QA model in a key AMAMA in the Kingdom.

The Solution

DAIS Global designed an enhanced closed-loop QA system that ensures effective monitoring of service quality, citizens' satisfaction & service adequacy. The QA system could be rolled-out across the Kingdom to ensure consistency across AMANAs & allow for comparisons, benchmarking & trend analysis.

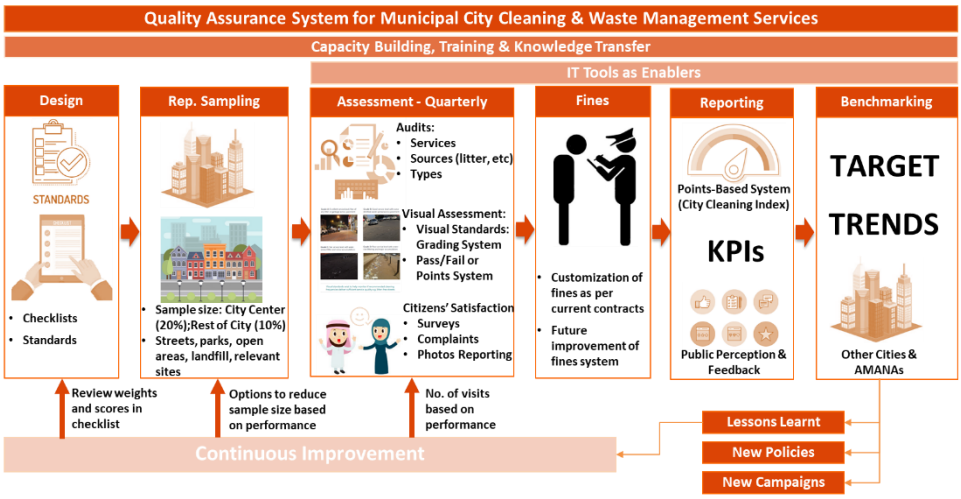

Figure 1: Quality Assurance System Model

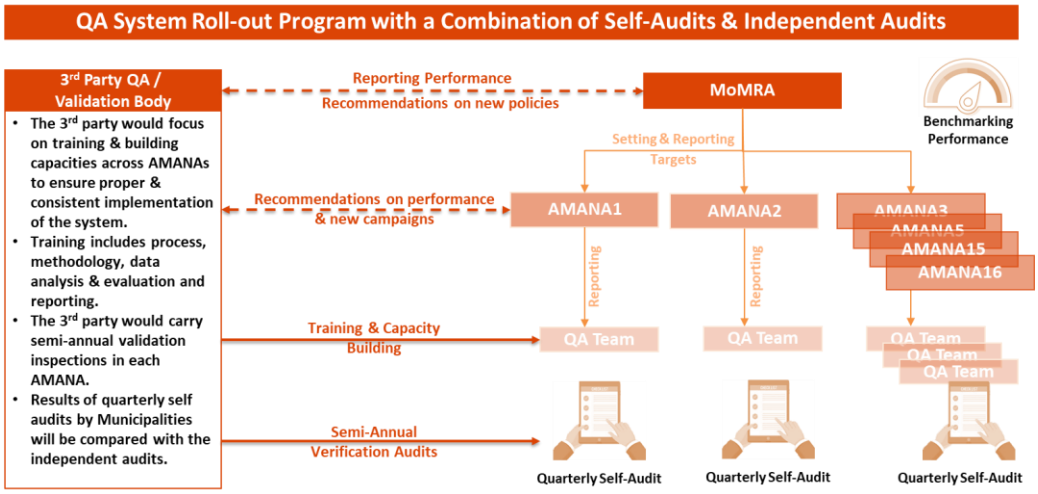

Figure 2: 3rd Party QA/Validation Body

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Business Results & Client Benefit

Developing the QA system supported MoMRA and municipalities in the process of maximizing their value from city cleaning contracts:

1. Defined governance structure to avoid conflicting interests and allow transparent and objective auditing and reporting mechanisms;
2. Effective, high quality, standardised QA services leading to outcome-based service delivery;
3. Capable and specialist Municipality resources, with optimal resources numbers and work distribution;
4. Effective performance management and feedback systems;
5. Optimal usage of technology in carrying out QA audits and for data management (benchmarking, trend analysis, etc.);
6. Establishing a self-monitoring system to assess continuous improvement in municipal service delivery.

About DAIS Global

DAIS Global
DATA I ANALYTICS I INSIGHTS I SOLUTIONS

DAIS Global is an engineering, strategy and innovation consultancy that utilizes analytical methods, integrated modelling approach and systems engineering in order to objectively inform strategic players in the energy, environment and waste management industries. We develop quantitative models to analyze innovation trends in the energy, environment and waste sectors. We complement our developed models with customized technology-based tools for data analytics and data driven decision making in various functions. Our specialist areas are: Energy, Environment & Scarce Resources and Waste Management.