Performance Measurement and Analytics Guide

Approach and workplan to help measure the performance of a government function

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Contents

I Measuring Performance

A. Analytics objectives

This guide presents indicators and templates to help government organizations measure and analyze the performance of a specific function.

Why do performance measurement and analytics? Benefits are:

- Work toward a common vision and strategy vis-à-vis mandate and services
- Help to better understand and manage client expectations
- Assess the demand for specific services/product offerings
- Track performance of the function versus goals and targets and assess strengths and weaknesses
- Help to identify process improvements
- Help to make decisions about resource levels and capacity required
- Support external reporting requirements
- Link to accountability

Analytics goes beyond the traditional measurement of results and outcomes. Within the public sector, performance measurement has tended to focus on identifying and measuring "outcomes".   We propose a more "holistic" approach; that is, in addition to measuring outcomes, the analytics framework also encompasses other "dimensions" required for policy, planning and decision-making. We have defined analytics in the broadest sense to include metrics around all the key aspects of service delivery, such as:

- Timely and responsive services (as per service standards)
- Client demand
- Client satisfaction
- Conformity to rules and policies
- Effectiveness of management practices
- Workload/outputs by type of delivery method/product/service
- Efficiency
- People/ workplace health

B. Challenges

We identify below some of the potential issues and challenges that may arise in implementing more in-depth analytics of the function in a public sector context, although our experience is that the challenges tend to be specific to each organization:

- **Lack of quantitative data.** Most of the work done by government agencies is highly qualitative in nature. Policy development, creating increased awareness, influencing, training, are not easily quantified. Some results and impacts cannot be measured except in the long term. Further, some results are not easy to measure, and are not easily quantifiable.

- **High complexity.** Strategically, a government agency should not have more than a dozen or so overall indicators to measure its performance. In reality, most departments and agencies work in an environment where each high level indicator is influenced by hundreds of sub-indicators given the many nuances of government policy and program delivery.

- **Compiling the data.** For some indicators, particularly operational indicators, the organization may already have the data available required to implement the indicators. The problem may be in consolidating the data in a consistent manner across the organization and populating the indicator in a useful reporting format. To take an example, many organizations will have "response time" measures, such as the time taken to respond to information requests. While the data on elapsed time may exist, it may be difficult to assemble the required statistics on a weekly or monthly basis so that they are readily available to service delivery staff.

- **Linking analytics with the ongoing strategic and operational planning carried out by managers.** The organization needs to be specific about how analytics information and reporting will be integrated into planning and decision-making; for example, how the information will be used in support of the yearly business planning cycle.

- **Risk of using the wrong indicators.** Choosing the wrong indicators may emphasize the wrong tasks, or lead to misleading results. This may lead to changes to the behaviour of staff in a negative way. Conversely, activities that are not being measured may be perceived to have less value.

- **Self-assessment versus third-party review.** Given that a number of the indicators may be qualitative and subjective in nature, there are often concerns about the objectivity of the measurement process and the reliability of the performance assessment where data is difficult to collect. This argues for greater centralization of the data collection and reporting so as to ensure greater consistency in the reporting of results.

C. Guiding principles

Proposed guiding principles in developing analytics indicators for the function are:

- The analytics information should reinforce the organization's strategy, for example, shifting from a transaction to a more strategic advisory focus, improving supply management, transforming the processes. The performance indicators should closely aligned with the strategic objectives of the function and outcomes/results expected, and can therefore change over time as the priorities of the organization change.

- To the extent possible, analytics information should be drawn from information in existing data bases. This would not exclude the need for special surveys or evaluations to collect certain information periodically (e.g., client satisfaction surveys, employee satisfaction)

- A close alignment is required between the analytics framework and other organization-wide business processes and management systems, such as strategic and business planning, planning and performance reports, and any other external reporting done by the organization.

- The information must meet a number of attributes. For example, it must be easily understandable, relevant to managers, timely, and verifiable.

- Analytics indicators should include both qualitative and quantitative metrics.

- The number of data collection methods/sources should be kept at a manageable level

- The information should be transparent and readily available to staff at different levels of the organization.

- Senior management and leadership are critical to ensure the information is used as evidence in support of decision-making and meaningful change.

D. Approach to analytics

The key steps are:

- Decide on the overall approach, objectives and scope of analytics to be done.
- Develop the analytics framework including the overall strategy and strategic objectives, results/outcomes, key dimensions, indicators, targets, data sources, and improvement actions. The analytics framework defines what will be measured and how.
- Develop a data collection plan including data sources and data collection methods
- Report results, starting with trial pilots and pro-forma reports
- Assess results of the analytics information and identify opportunities for improvement (including system improvements).

Overall approach

Scope and approach
- Confirm scope of analytics
- Introductory awareness/training session
- Obtain documentation (e.g., operational reports, audits, evaluations)
- Decide on overall analytics approach

Reporting
- Collect performance data
- Prepare pro-forma reports
- Validate performance targets
- Confirm reporting cycle
- Link with overall planning and reporting

Data collection plan
- Review sources of information and gaps
- Develop report templates
- Develop overall data collection methods
- Assign accountabilities

Analytics Framework
- Confirm strategic objectives, outcomes and expected results
- Identify indicators/ targets
- Research external benchmarks
- Validate with senior management and staff

Implementation planning
- Identify opportunities for improvement
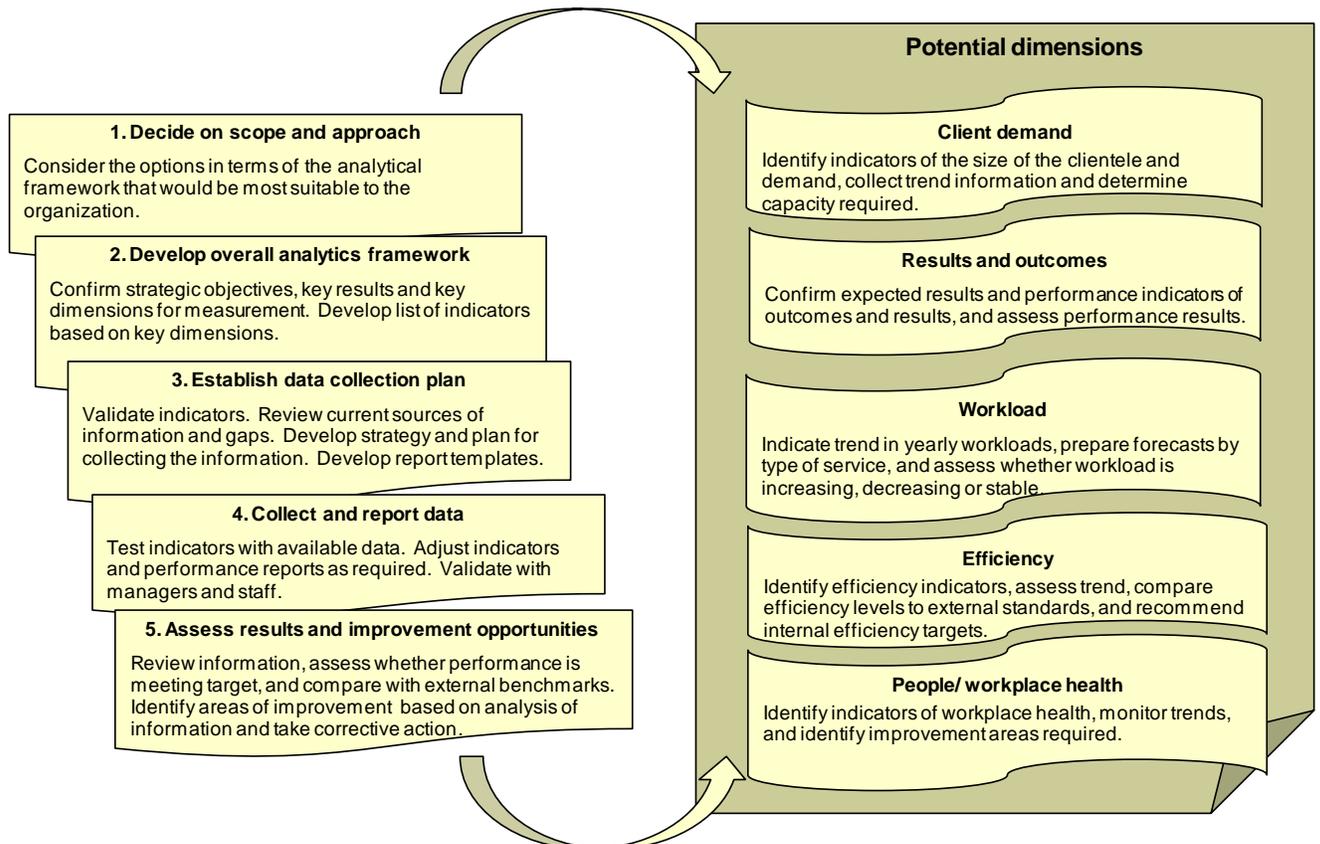- System improvements
- Implementation

E. Key dimensions

Building on the overall suggested approach, we have identified the following key dimensions that could be used in developing an analytics framework:

❑ **Client demand.** The scope of the clientele, key workload drivers, and future changes in client demand for the services.

❑ **Results/outcome indicators.** For example, timely and responsive services, client satisfaction, conformity to rules and policies, and the effectiveness of management practices.

❑ **Workload.** To assess the current types of services and products that are offered, and to forecast future workload and capacity requirements based on historical trends and any new workload drivers.

❑ **Efficiency.** Unit costs of the activities and transactions.

❑ **People/workplace health.** Indicators of the overall health of the organization and workplace.

Key design steps and dimensions

Potential dimensions

1. Decide on scope and approach
Consider the options in terms of the analytical framework that would be most suitable to the organization.

2. Develop overall analytics framework
Confirm strategic objectives, key results and key dimensions for measurement. Develop list of indicators based on key dimensions.

3. Establish data collection plan
Validate indicators. Review current sources of information and gaps. Develop strategy and plan for collecting the information. Develop report templates.

4. Collect and report data
Test indicators with available data. Adjust indicators and performance reports as required. Validate with managers and staff.

5. Assess results and improvement opportunities
Review information, assess whether performance is meeting target, and compare with external benchmarks. Identify areas of improvement based on analysis of information and take corrective action.

Client demand
Identify indicators of the size of the clientele and demand, collect trend information and determine capacity required.

Results and outcomes
Confirm expected results and performance indicators of outcomes and results, and assess performance results.

Workload
Indicate trend in yearly workloads, prepare forecasts by type of service, and assess whether workload is increasing, decreasing or stable.

Efficiency
Identify efficiency indicators, assess trend, compare efficiency levels to external standards, and recommend internal efficiency targets.

People/ workplace health
Identify indicators of workplace health, monitor trends, and identify improvement areas required.
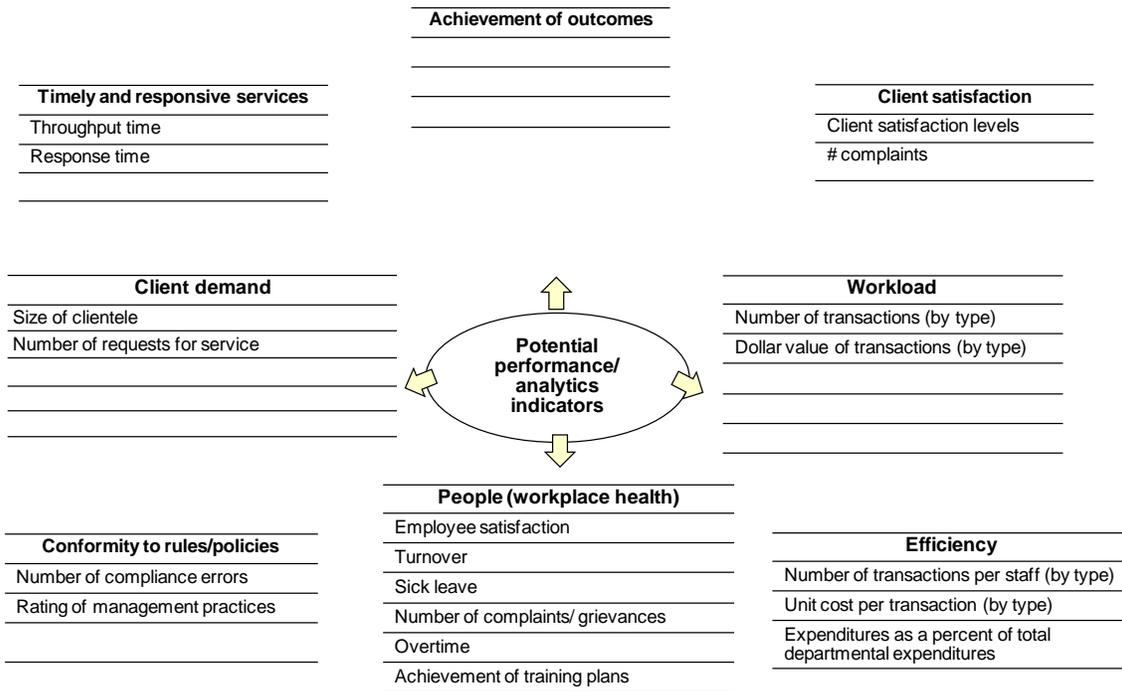
II   Types of Performance Indicators

Potential indicators are shown below under each dimension. This list represents a starting point and would need to be customized to the function being measured. Each dimension is discussed further below.

Potential indicators (by dimension)

Achievement of outcomes

Timely and responsive services
Throughput time
Response time

Client satisfaction
Client satisfaction levels
complaints

Client demand
Size of clientele
Number of requests for service

Potential performance/ analytics indicators

Workload
Number of transactions (by type)
Dollar value of transactions (by type)

People (workplace health)
Employee satisfaction
Turnover
Sick leave
Number of complaints/ grievances
Overtime
Achievement of training plans

Conformity to rules/policies
Number of compliance errors
Rating of management practices

Efficiency
Number of transactions per staff (by type)
Unit cost per transaction (by type)
Expenditures as a percent of total departmental expenditures

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A. Results and outcomes indicators

Service standards and performance indicators are used to measure the success of the function by monitoring performance against these indicators and targeted levels of performance. Key elements are:

- **Expected results**. Defined based on strategic objectives, logic models, strategy maps, performance measurement frameworks, external reports, planning documents (e.g., strategic plan, business plan), management and financial reports, program evaluations, etc.

- **Performance indicators, metrics and targets.** Established for each result and outcome.

- **Actual results.** Performance information for each indicator, ideally on a trend basis (3-5 years) for quantitative performance indicators; and compared with external benchmarks where information is available.

- **Performance analysis.** Assess whether performance results for each indicator are meeting target or not. Provide explanatory rationale for performance rating. Identify those indicators where the function is under performing, and changes/improvements are required. Review performance targets as needed.

B. Indicators of demand

Demand indicators are intended to identify the key client groups served by the function and the level of demand for services, the trend in the demand, and the key workload drivers that will influence the demand for service in the future. Key elements are:

- **Scope of the clientele** (managers, employees, supply partners). Anyone who orders goods and services within the organization is potentially a client.

- **Workload drivers.** For example, workload drivers that affect the demand for the service include the scope and type of service carried out by the organization, complexity, changes in the external environment, new technology developments.

- **Indicators of the size of the clientele and demand** for the services.

- **Historical trends and forecast.** Collect information and indicate trends over the last 5-10 years, and estimate demand in the way ahead.

- **Capacity** ("as is" and "to be") in full-time equivalent (FTE) required to meet demand.

C. Workload indicators

For transactional services, workload can be measured by the number of transactions by type of service. Key elements are:

- **Historical trends.** Yearly workloads for over a three to five year period for key indicators, in order to assess the trend in the number of transactions, whether workload is increasing, decreasing or stable, and the impact of any fluctuations or surges in workload.

- **Volume by type services, products or instruments.** For example, by service type, delivery method, dollar value, client, region. This information can help the function to assess which products and services are generating the greatest effort or interest within the department/agency.

- **Baseline forecast.** Using the baseline forecast as a planning tool, estimate yearly baseline volumes by type of service to establish required capacity, and support the business case for reallocation of resources or for adjustments to resources when workload changes. Workload information is also used to estimate the unit effort or cost for key transactions and how this compares with industry benchmark standards.

D. Efficiency indicators

Establish efficiency/ productivity measures for transactional activities and compare the productivity of these activities with internal efficiency standards and external benchmarks. Key elements are:

- **Indicators.** Determine the appropriate efficiency or productivity indicators, either based on volume of production per FTE (by output), or other recognized industry indicators. Examples of efficiency indicators are shown in the chart below.

- **Trend in actual results.** Collect workload and resource data to determine efficiency results, and monitor trend on a historical basis to assess whether efficiency is increasing, decreasing or is stable.

- **Comparison with external benchmarks.** Collect information on external/industry benchmark standards and compare efficiency levels to external standards.

- **Productivity targets.** Recommend target productivity standards for the function based on actual results and external benchmarks, and seek management/staff validation and approval.

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E. People (workplace health) indicators

Performance indicators to measure employee satisfaction and workplace health within the organization. Key elements are:

- **Workplace health indicators.** For example, employee satisfaction, employee turnover rate, average sick leave, number of complaints/ grievances, amount of overtime, achievement of training plans.

- **Data sources and data collection methods.** For example, periodic employee satisfaction survey, internal HR systems, annual development of training plans.

- **Actual results.** Report and assess performance against agreed upon performance targets. Communicate results to staff.

- **Improvement plans.** Develop action plans to address improvement opportunity areas.

Performance Indicators	Target	Performance Assessment (major gap, below target, approaching target, meets target, above target)
Employee satisfaction (as per Employee Survey)	__%	
Employee turnover rate	Less than __%	
Average number of days of sick leave per employee per year	Average of the public service (__ days, including long term)	
Number of formal complaints/grievances	__	
Number of overtime hours as a percentage of total working hours	__	
Achievement of training plans	__%	

III Work Plan

A high level work plan is presented below and described in further detail in this section.

High level work plan

1. Decide on scope and approach

Consider the options in terms of the analytical framework that would be most suitable to the organization.

2. Develop overall analytics framework

Confirm strategic objectives, key results and key dimensions for measurement. Develop list of indicators based on key dimensions.

5. Assess results and improvement opportunities

Review information, assess whether performance is meeting target, and compare with external benchmarks. Identify areas of improvement based on analysis of information and take corrective action.

3. Establish data collection plan

Validate indicators. Review current sources of information and gaps. Develop strategy and plan for collecting the information. Develop report templates.

4. Collect and report data

Test indicators with available data. Adjust indicators and performance reports as required. Validate with managers and staff.

1. Decide on scope of analytics and approach

This step includes the project planning, review of the current situation, confirmation of analytics objectives and desired scope, benchmarking with other similar organizations, discussion of options, and development of an overall concept design.
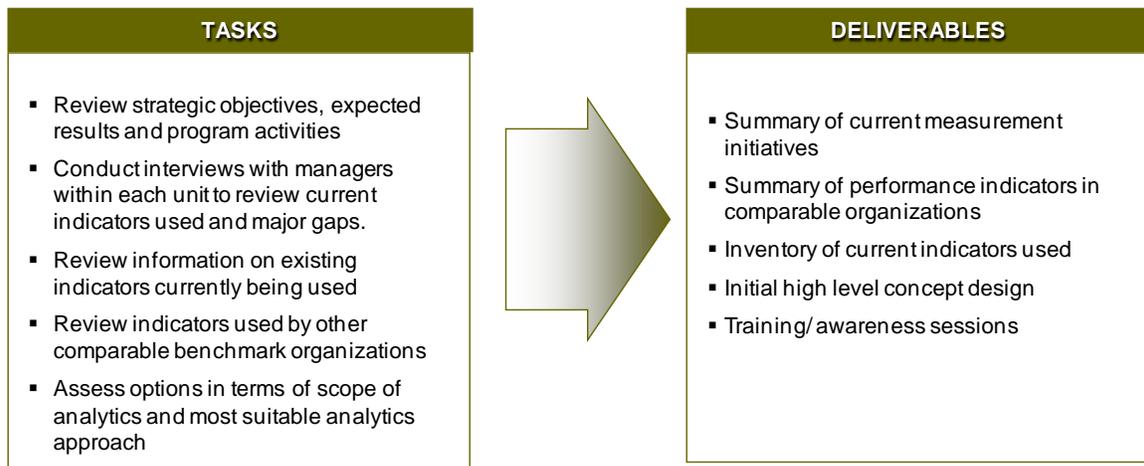
1.1 Review current measurement activities

This assessment of the current measurement activities is typically done through interviews with managers and review of existing documentation and reports.

1.2 Identify efficiency indicators used by other similar organizations and benchmark standards

Benchmarking with other similar organizations, often at the international level, provides valuable input into the development of the indicators and the analytical approach used by other similar organizations.

1.3 Assess options re scope of analytics

Options are typically discussed in a workshop setting with managers and staff.

TASKS	DELIVERABLES
▪ Review strategic objectives, expected results and program activities ▪ Conduct interviews with managers within each unit to review current indicators used and major gaps. ▪ Review information on existing indicators currently being used ▪ Review indicators used by other comparable benchmark organizations ▪ Assess options in terms of scope of analytics and most suitable analytics approach	▪ Summary of current measurement initiatives ▪ Summary of performance indicators in comparable organizations ▪ Inventory of current indicators used ▪ Initial high level concept design ▪ Training/awareness sessions

Challenges:

■ Obtaining management commitment and resources support to the project

■ Communicating/explaining what "analytics" implies

■ Building on existing performance indicators already in place

2. Develop analytics framework

During this step, confirm the overall strategic objectives and key results of each unit, and begin to identify the types of indicators that would be aligned with these strategic objectives. Strategies for collecting the information would also be discussed at a preliminary stage building on existing data sources.

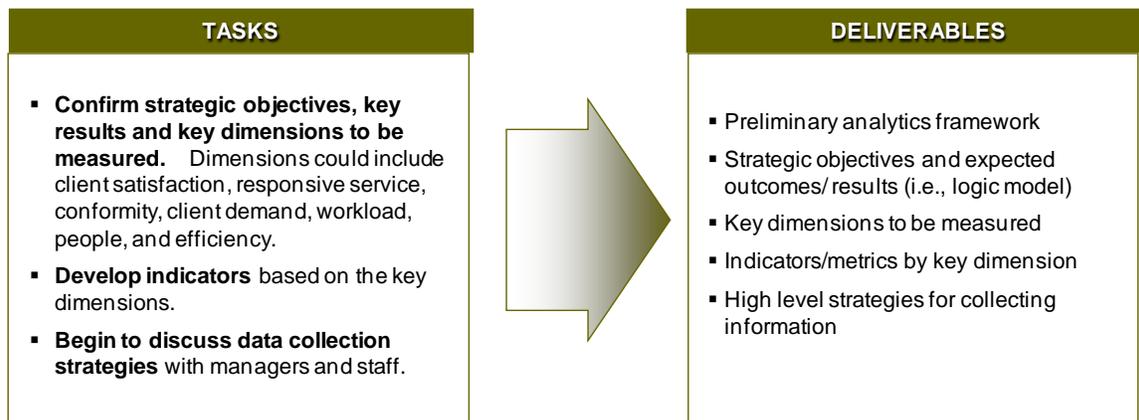### 2.1 Confirm strategic objectives, key results and dimensions

The objectives, expected results and key dimensions for analytics will vary by organization and should be aligned with the dimensions used by the organization overall.

2.2 Develop indicators

This would include a "straw version" of the types of indicators that could be used in relation to each dimension, as well as the potential data sources. The indicators would normally be identified and validated through interviews and workshops.

2.3 Identify strategies for collecting and analyzing the information

Options are typically discussed in a workshop setting with managers and staff.

TASKS	DELIVERABLES
- **Confirm strategic objectives, key results and key dimensions to be measured.** Dimensions could include client satisfaction, responsive service, conformity, client demand, workload, people, and efficiency. - **Develop indicators** based on the key dimensions. - **Begin to discuss data collection strategies** with managers and staff.	- Preliminary analytics framework - Strategic objectives and expected outcomes/ results (i.e., logic model) - Key dimensions to be measured - Indicators/metrics by key dimension - High level strategies for collecting information

Challenges:

■ Ensuring the indicators are aligned with the strategic objectives

■ Keeping the number of indicators to a manageable level

■ Identifying the right dimensions for measuring the performance of the procurement function

3. Establish data collection plan

This step involves doing an inventory of existing sources of information in relation to the indicators, and developing strategies to collect the missing data. Tasks include validating the indicators, confirming existing sources of information and data collection methods, and identifying system capabilities and options to produce the data gaps.

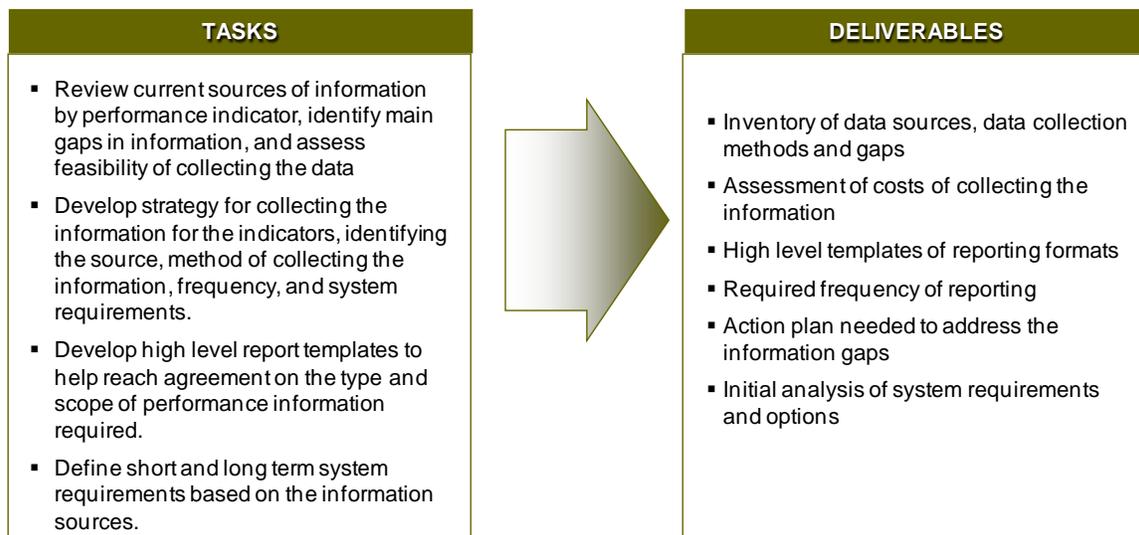### 3.1 Review current sources of information and gaps

The most effective way of confirming existing data available is to develop and complete the templates for each indicator.

3.2 Develop strategy and plan for collecting the information

Begin to assess the various system options that are available to help track performance information, building on existing systems currently in place.

3.3 Develop reporting tools

Confirm for each indicator the data collection method and source, frequency of reporting, and the responsibility for collecting and reporting the information.

TASKS	DELIVERABLES
▪ Review current sources of information by performance indicator, identify main gaps in information, and assess feasibility of collecting the data ▪ Develop strategy for collecting the information for the indicators, identifying the source, method of collecting the information, frequency, and system requirements. ▪ Develop high level report templates to help reach agreement on the type and scope of performance information required. ▪ Define short and long term system requirements based on the information sources.	▪ Inventory of data sources, data collection methods and gaps ▪ Assessment of costs of collecting the information ▪ High level templates of reporting formats ▪ Required frequency of reporting ▪ Action plan needed to address the information gaps ▪ Initial analysis of system requirements and options

Challenges:

■ Ensuring the validity of the indicators before investing extensively in analytics measurement systems and tools.

■ Aligning the analytics information and the measurement application that could be used.

4. Collect and report data

During this step, we would report the data

4.1 Test indicators with available data and develop preliminary reports

Develop performance reports for each indicator, using historical trend information that is available; and review with managers and staff to ensure the validity and usefulness of the information for decision-making.

4.2 Assess actual results

Compare actual results to performance targets and external benchmarks, revise indicator and targets if necessary, and assess whether the function is below, approaching, at or above target on each of the indicators.

4.3 Identify steps for addressing data gaps

Where appropriate, review indicators and data collection options with interested stakeholders. Identify key tasks and timeline required to implement or improve data collection tools, identify training requirements and options, estimate resources required and seek approvals

TASKS	DELIVERABLES
▪ Prepare preliminary performance reports ▪ Review analytics reports with managers and staff ▪ Collect information on external benchmarks ▪ Confirm targets ▪ Confirm frequency of reporting ▪ Review strategy for collecting and maintaining the analytics information (may involve prototype software solutions)	▪ Report templates ▪ External benchmarks ▪ Targets ▪ Analytics reports ▪ Prototype software application

Challenges:

■ Finding comparable benchmarks

■ Aligning targets with client/stakeholder expectations and strategic objectives

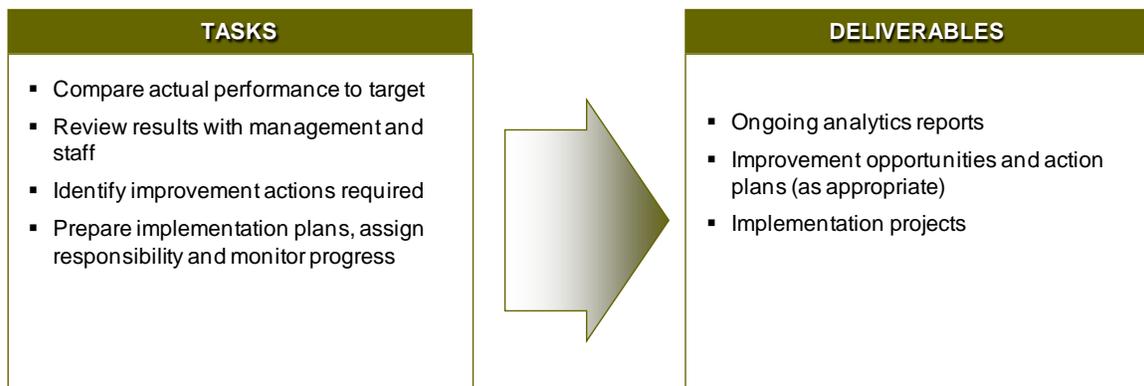## 5. Assess results and improvement opportunities

During this step, review the actual results and identify opportunities for improvement. This may be done over an extended period of time depending on the quality of the information available and the timeframe required to assess overall trends in results.

5.1 Assess actual results

Use the information in support of decision-making. This would typically involve a discussion of targets, actual performance in relation to the targets and external benchmarks, and the timeframe required to achieve desired performance levels. This would typically be done through meetings and workshops with staff.

5.2 Develop implementation plans

Develop implementation plans for specific opportunities identified.

TASKS	DELIVERABLES
▪ Compare actual performance to target ▪ Review results with management and staff ▪ Identify improvement actions required ▪ Prepare implementation plans, assign responsibility and monitor progress	▪ Ongoing analytics reports ▪ Improvement opportunities and action plans (as appropriate) ▪ Implementation projects

Challenges:

■ Ensuring usefulness of indicators and results for decision-making

■ Separating strategic indicators from detailed operational measures

■ Changing the indicators as organizational priorities change