



ATHENS S.A.

ATHENS, GREECE

Use of Key Performance Indicators (KPI) as a Management Tool

Background/context

The Public Transport Company of Athens, a subsidiary of Attiko Metro S.A., is a public service corporation supervised by the Minister of Transport and Communication. It operates according to the rules of the private economy.

The company focuses on the design, development, operation and exploitation of contemporary networks of urban tramway or any other network of fixed-track transportation, along with the necessary facilities and vehicles.

Case Description

The case illustrates the use of key performance indicators (KPIs) as a management tool in helping to stay focused on company goals and quantify results and thus better manage and operate systems and reduce costs.

There are two main types of indicators:

- those requiring qualitative data; and
- those requiring quantitative data.

Overall, the KPIs used by Tram SA can be classified in four main categories:

I. RELIABILITY

Passenger kilometres: Total annual number of passenger kilometres

Starting reliability: Percentage of planned departures of service journeys that are unreliable, i.e. early, delayed or abandoned at the origin of the service

Example: Percentage of service journey departures that are at least two minutes early

Timing point reliability: Percentage of planned service journeys that are early, delayed or abandoned at selected timing points (stops/stations)

Example: Percentage of service journeys departures that are at least two minutes early at timing points

Abandoned service journeys: Percentage of planned service journeys that are not carried out, categorised by the cause of abandonment

The service is classed as abandoned if the vehicle or a replacement vehicle does not reach the service destination or if a vehicle does not leave the point of origin.

Example: Percentage of service journeys abandoned because no staff available

Delayed service journeys: Percentage of planned service journeys that are delayed at the origin and/or destination of the service, categorised by the cause of delay.

The service is classed as delayed if (i) it departs more than five minutes late from its origin or (ii) it arrives more than five minutes late at its destination.

Example: Percentage of service journeys delayed because no staff available



2. TECHNICAL PERFORMANCE

Fleet reliability: Average number of breakdowns that make the vehicle unroadworthy and lead to a delay in the service per million vehicle kilometres

The delay could take place at the origin of the service or after leaving the origin.

Example: average number of breakdowns per million vehicle kilometres

3. SAFETY & SECURITY

Incidents: Number of incidents per million vehicle kilometres. This indicator is concerned with incidents that cause damage to vehicles.

4. COSTUMER SATISFACTION

Passenger feedback ratio: Number of recorded positive and negative comments by passengers per 1,000,000 vehicle kilometres.

Cost and Financing

There is no need for any major investment for setting up such a monitoring mechanism.

Results

The use of performance indicators has provided the opportunity for following, monitoring and improving the operations of the company and has also acted as a diagnostic tool in improving functions within the organisation.

Problems

Good quality data is important as it enables companies to derive the greatest benefit.

Good quality data means that it is fit for the purpose for which it is required. It should not contain an inherent bias in

the measurements. Whether using a complete record or a sample, it is very easy for bias to affect results. For example:

- Although some indicators are not affected by season, others will be affected by time of year in which the measurement is carried out.
- Misinterpreting the definition of an indicator may mean that results are not comparable. Sometimes this happens by accident, but at other times, it results from an intentional effort to embellish the record, e.g. the under-reporting of minor accidents.

Measurements should be taken with sufficient precision.

Transferability and success factors

The approach is to be used by operators of the most frequently used modes of land-based public transport. This includes bus, trolley bus, tram, metro/light rail and local heavy rail operators. The approach is suitable for different types of operators, e.g. small, medium-sized, large, urban, rural and inter-urban. It is transferable to other cities. Each city can set up its own key performance indicators based on its priorities, operating environment and other conditions.

Lessons learnt

By introducing KPIs the management of the company was able to better follow the operation of the company and to report it to the City Council with which it has a contractual arrangement.

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