

Key Performance Indicators as an evaluation tool for Tollway Operations

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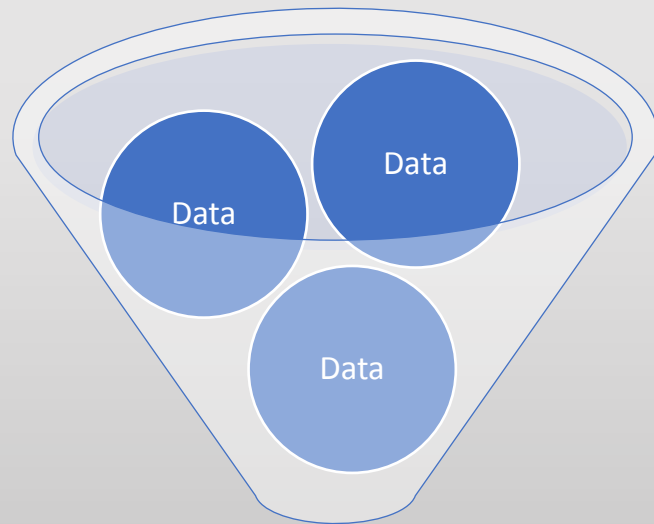
Measuring and Monitoring: a key factor for Business Excellence



**BUT...What to measure and how to
use these measurements?**

Integrate measurements to “KPIs”

KPI's, a way of measuring how well a company, or a business unit or an individual is performing compared to:

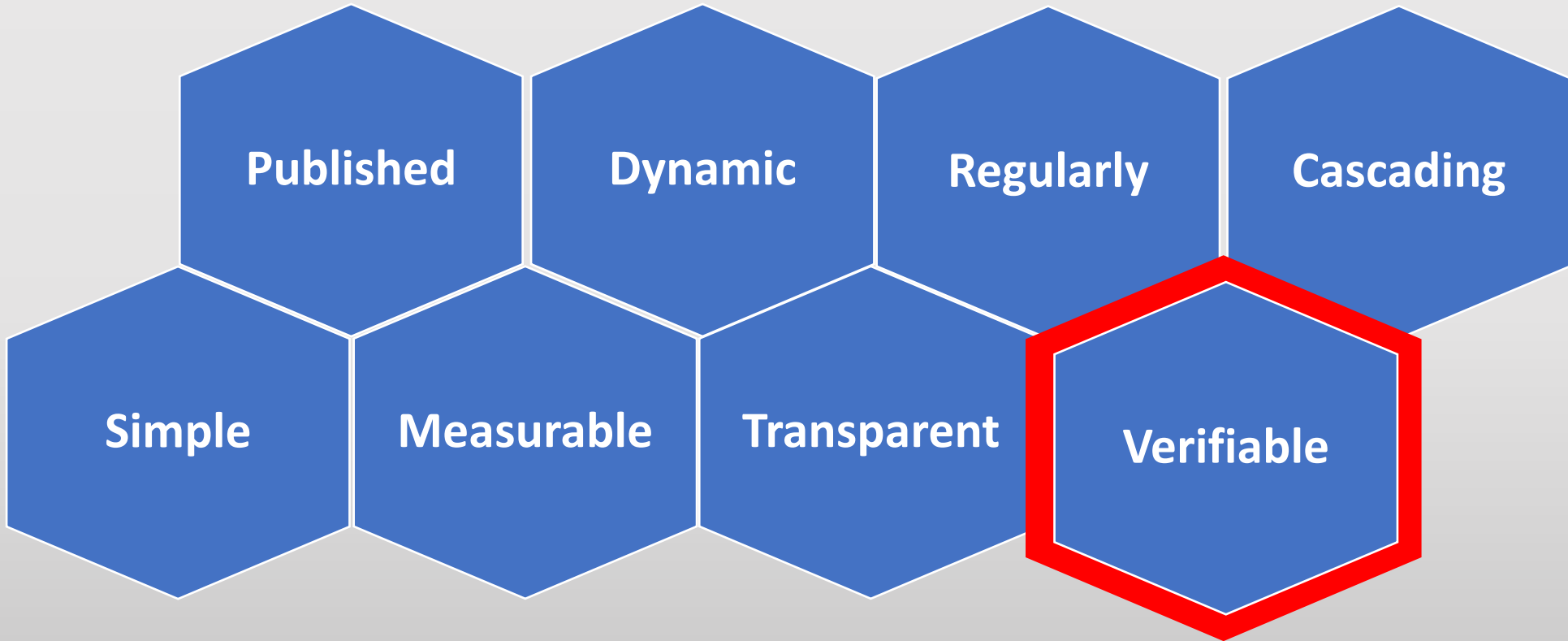


**Key Performance
Indicators**

....the industry and to strategic goals and objectives !



Key Performance Indicators characteristics



Monitoring and Measuring Performance....

Verifiable

.....TRUST BUT VERIFY.....

a famous political phrase
a valuable business approach



.....I used a Russian proverb. I'm not a linguist, but I did learn this and have used it several times in his presence. If I'm pronouncing it correctly, it is **“doveryai, no proveryai”**. It means, “trust but verify”. And I think that's the policy that has to be followed. I have cited DEMOSTHENES, who a thousand years or two back in the Athenian marketplace said: **“What sane man would let another man's words rather than his deeds tell him who is at peace and who is at war with him?”**



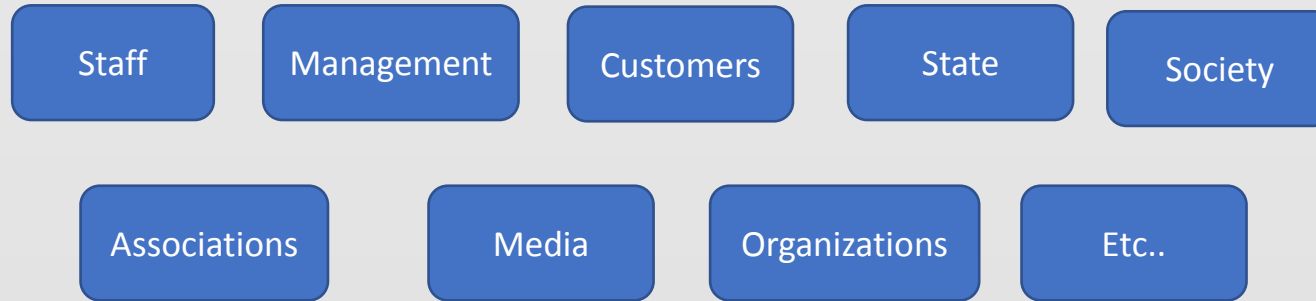
Demosthenes

(Interview With Alastair Burnet of ITN Television of the United Kingdom March 10, 1988 about Gorbachev–

Source: THE RONALD REAGAN PRESIDENTIAL LIBRARY)

KPI's as a communication tool...

Each KPI has its own "audience"



But all have the same objective....

To communicate how the operator is performing and what can be done to make operations more effective and valuable for each one of the stakeholders!

Let's talk about HELLASTRON

CREATING A NATIONAL NETWORK

Necessary condition:

Integrated network management aiming to provide high level of services, integration of procedures and road safety improvements.

Implementation:

Construction, operation & maintenance, financing through concession contracts and tolling.



Creating the Greek National Tollway Network



Attiki Odos



Rio – Antirio Bridge



Egnatia Odos



Nea Odos



Moreas



Aegean Motorway



Olympia Odos



Kentriki Odos

HELLASTRON – Indicative Measurements

Description
Total Network Length in Operation (km)
Total Staff O&M
Total Number of ETC Tags
Number of Toll Transactions (in millions) LV
Number of Toll Transactions (in millions) HV
Total Number of Toll Transactions
Number of ETC toll transactions
Number of ETC toll transactions LV
Number of ETC toll transactions HV

Description
Average Daily Traffic LV
Average Daily Traffic HV
Total Average Daily Traffic LV
Number of Accidents with injuries
Number of Fatal Accidents
Number of Injured persons
Number of Fatalities
Number of property damage only accidents
Number of service areas (equipped with petrol stations)

Description
Number of rest areas
Number of restaurants
Number of hotels
No. of tunnels (tubes) more than 500 m



Monitoring HELLASTRON's Objectives & Goals

Operators have to answer the following questions in order to make the right decisions:

1. Why have the numbers decreased or increased?
2. Can I do something to change these numbers?
3. What actions should be taken to change these numbers?
4. How I can evaluate the results of the actions taken?
5. How these numbers monitor our performance?



Monitoring HELLASTRON Objectives & Goals

Key Performance Indicators help significantly to answer all these questions.

HELLASTRON and its members design their own KPI's for measuring how well the network operators are performing.



Indicative Attica Tollway KPI's

Tolls

- Toll lane processing capacity
- Toll collection cash discrepancy
- Counterfeit or worn banknotes/coins
- Non Payment Forms (NPF)
- Manually issued receipts (Toll System Availability)
- ETC volume
- Money deposit of subscription account

Traffic & Maintenance

- Response time to incidents (own units)
- Cooperating agencies response time to incidents (third parties)
- Lane closure due to road maintenance (Lanes*km*time)
- Incident clearing time duration
- Accidents-over-incidents
- Congestion (Km*time)
- Perceived safety feeling (RSS)

HR

- Employee turnover
- Employee satisfaction
- Employee presence
- Employee training hours
- Overtime payed

HELLASTRON's monitoring program is moving to towards benchmarking..

Indicative Key Performance Indicators:

Safety	Operational	Customer Satisfaction
<ul style="list-style-type: none">• Fatal Accidents & Fatalities• Accidents with Injuries & Injuries• Property Damage only Accidents	<ul style="list-style-type: none">• Toll collection discrepancy• Interoperability penetration• ETC Penetration	<ul style="list-style-type: none">• Perceived quality of service• Response time to user complaints and requests• Perceived Road Safety

Let's talk about ASECAP

- 22 national association members
- Political paper on the socio-economic role of the industry with well measured parameters
- Permanent Statistics Committee (COPER IV)
- Indication of members' real situation
- Proof of the road sector importance to the EU world



ASECAP – Existing Measurements

Description
Total Network Length in Operation (km)
Total Staff O&M
Total Toll Revenue
Number of Toll Transactions (in millions) LV
Number of Toll Transactions (in millions) HV
Total Number of Toll Transactions
Number of ETC toll transactions
Number of ETC toll transactions LV
Number of ETC toll transactions HV

Description
Total Number of ETC Subscribers
Total Network Length in Operation (km)
Number of service areas (equipped with petrol stations)
Number of service areas
Number of restaurants
Number of hotels
Number of Fuel Stations

Description
Average Daily Traffic LV
Average Daily Traffic HV
Total Average Daily Traffic LV



ASECAP-moving into the future....

- Extending the existing measurements (Safety, Environment, Social Responsibility, Economic Growth, etc.)
- Harmonizing the measurement methods and smoothing of particularities
- Designing of a KPI system to monitor the performance of the European tolling industry



Monitoring and Measuring Global Tolling Industry Performance

The Global Tolling and Concession Industry should design KPI's for promoting tolling and concessions and measuring how well the network operators are performing.



Thank you for your attention!

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