



# Maximo's Key Performance Indicators (KPIs)

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# Agenda

- What is a KPI?
- Types of KPIs
- Common Maintenance & Materials KPIs
- Building and Using KPIs in Maximo



# Key Performance Indicators

Definition: Key Performance Indicators (KPIs) are quantifiable measurements, agreed to beforehand, that reflect critical business success factors (of the company, department, project, etc..)

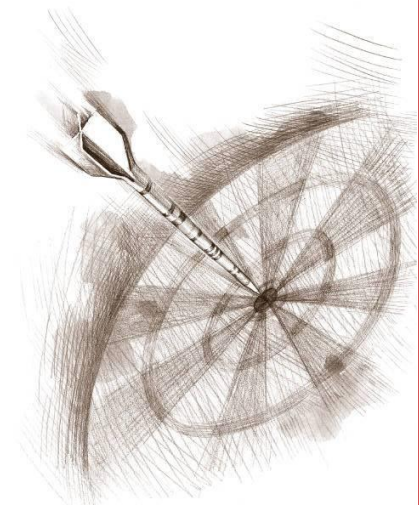
## KPIs can be:

Management dashboards

Reports run adhoc

Simple calculations or queries of data

Scheduled reports sent to specific individuals



# Types of KPI's

## Leading (how we're performing now)

For Example:

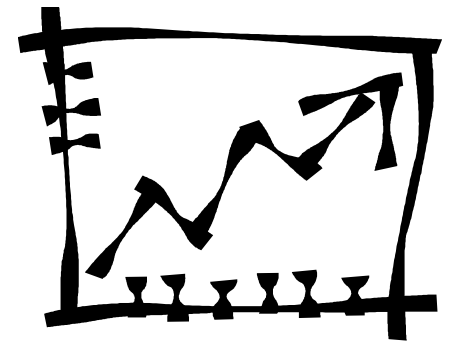
- Current Backlog Labour Hours
- # of Work Orders Completed Today
- Actual Costs vs. Budget Costs (current)



## Lagging (how we've performed in the past)

For Example:

- Work Order Backlog Trend
- Mean Time To Repair (MTTR)
- Mean Time Between Failures (MTBF)



# Sample Maintenance KPI's

## Leading

Measurement	Units	Frequency	Definition
New Work Orders	Number	Week to week running	The total number of new work orders/requests generated weekly
Past Due Work Order	Number	Week to week running	Total number of work orders that are past their scheduled start dates.
Current Backlog	Labour Hours	Weekly or Daily	Total labour hours required for all remaining work orders.
Percent of Planned Hours	Percent		Planned hours vs. total hours in schedule.
Job Plans Used	Percent		Percent of work orders that are using a job plan.

## Lagging

Measurement	Units	Frequency	Definition
Schedule Compliance	Percent	Daily / Weekly	Work orders planned to be started divided by the actual work orders started in a week (or defined period)
Estimating Accuracy	Curve		A distribution curve of actual vs. estimated time/cost by selected groupings.
Mean Time Between Failures	Number	Quarterly	Average time between failures on a particular asset or asset class.
Work Type Distribution	Pie Chart	Weekly	Distribution of Corrective, Breakdown, Capital Projects, Predictive and Preventive Work Orders.
Follow-up to PM ratio	Percent	Monthly	Measure the effectiveness of PM inspection programs.



# Sample Supply Chain/Materials KPI's

Leading

Measurement	Units	Frequency	Definition
Total Value of Inventory Stock	Dollar	Weekly / Monthly	The Total dollar value of maintenance materials in stock (excludes process chemicals & fuels). Used to demonstrate effective stock utilization.
Number of Inventory Reservation	Number	Daily / Weekly	Total number of inventory reservations made in a given day / week.
Items Above "Max" Level	Number		Number of items above their Maximum level in the system.

Lagging

Measurement	Units	Frequency	Definition
Inventory Turns	Number	Monthly	Value of Inventory issued divided by the average inventory for the period.
Stocks Outs (aka Backorder)	Percent	Monthly	The percentage of inventory request that could not be fulfilled with inventory items in stock.
Potentially Obsolete Parts	Number	Monthly	The number of inventory items that could be potentially obsolete.
Vendor Lead Time Compliance	Percent	Monthly	A vendor analysis metric that shows the actual lead time compliance compared to the promised lead time.



# Three Major Areas for KPIs in Maximo

1. Result Set – Pie/Bar Charts
2. KPI Manager
3. Reports

The focus of this Webcast is on #2



# Maximo's KPI Manager

- Introduced January 2004 for Maximo 5.2 and beyond
- Can be downloaded from IBM Support Online (with active support) for Maximo 5.2, included in 6.x and 7.x.
- Allows users to create KPIs on the fly using a query in an application or simple SQL
- Comes with 13 KPIs out-of-the-box (MAXDEMO database)
- Can be used as both Lists & Graphs on the Start Center





# Demonstration

1. Using KPI's on the Start Center
2. Creating KPI's using a query
3. Creating KPI's using SQL

