



Business School

UNIVERSITY OF COLORADO DENVER

Information Systems Program

# Business Intelligence Concepts, Tools, and Applications

Week 4: Business Performance Management Systems  
Lesson 2: Performance Measurement System



# Performance Measurement System

- Learning Objectives
  - Define the purpose of a performance measurement system
  - Understand how to define common key performance indicators (KPIs) and summarize their distinguishing attributes



# Performance Measurement System

- A system that assists managers in tracking the implementations of business strategy by comparing actual results against strategic goals and objectives
- Purpose
  - identify and articulate the strategic mission, goals and objectives of an organization
  - assist managers in tracking the implementations of business strategy by comparing actual results against these strategic goals and objectives.

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# DMAIC Performance Measurement Model

- **DMAIC** (*define, measure, analyze, improve, and control*) is a closed loop performance improvement model for
  - *Defining* the goals, objectives, and boundaries of the improvement activity
  - *Measuring* the existing system to monitor its performance against the goals
  - *Analyzing* the system to identify ways to eliminate gaps
  - Improving the performance of existing system by reducing the gaps
  - Controlling by modifying the compensations, incentive systems, policies, and procedures, or other management systems
- For a new process the model that is used is called **DMADV** (*define, measure, analyze, design, and verify*) instead.

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# Effective Performance Measurement

- Measures should:
  - focus on key factors (indicators)
  - be a mix of past, present, and future
  - balance the needs of shareholders, employees, partners, suppliers, and other stakeholders
  - start at the top and flow down to the bottom
  - have targets that are based on research and reality rather than arbitrary.

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# Key Performance Indicators (KPIs)

- KPIs represents strategic objectives and metrics that measure performance against a goal
- They are Leading rather than lagging indicators and reflect future performance
- As such it is not easy to create effective KPIs

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# Common KPIs

- Customer performance
- Service performance
- Sales operations
- Sales plan/forecast

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# Key Performance Indicators

- Distinguishing features of KPIs
  - Strategy
  - Targets
  - Ranges
  - Encodings
  - Time frames
  - Benchmarks

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# How to define effective KPIs

- Need to gather business requirements
  - choosing the right KPIs relies upon a good understanding of what is important to the organization.
  - What is important' often depends on the department measuring the performance - e.g. the KPIs useful to finance will really differ from the KPIs assigned to sales.
- Identify the right number of metrics
- Select those that
  - are not in conflict with other KPIs
  - Incentivize employees to work at cross-purposes to support strategic objectives and foster proactive actions

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