



Strategic Asset Management

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City of Wyoming

Strategic Leadership steering committee, organizational goals, policy

Tactical AM Teams, key performance indicators, asset management strategy,
asset management plans

Operational Departments, performance indicators, operating procedures.

Strategic Planning

- Mission and Vision
- Evaluate objectives and strategy
- Analyzing external environment and internal organization
- Set measurements for success



**Organizational
Policy**

**Strategic Asset
Management
Plan**

**Asset
Management
Program**

Asset Register

How to Implement AM Strategically?

- Connect activities to the organization's mission, vision and objectives
- Involve other departments: Engineering, Public Works, Information Technology, Finance
- Create a strategy map for implementation with measurements
- Assign a position or a champion to see the process through

Problems of implementing AM without strategic planning

- Many incompatible software solutions
- A complete asset registry but no plan for maintaining and updating
- Measuring and collecting the wrong data
- Difficulty implementing top-down and bottom-up

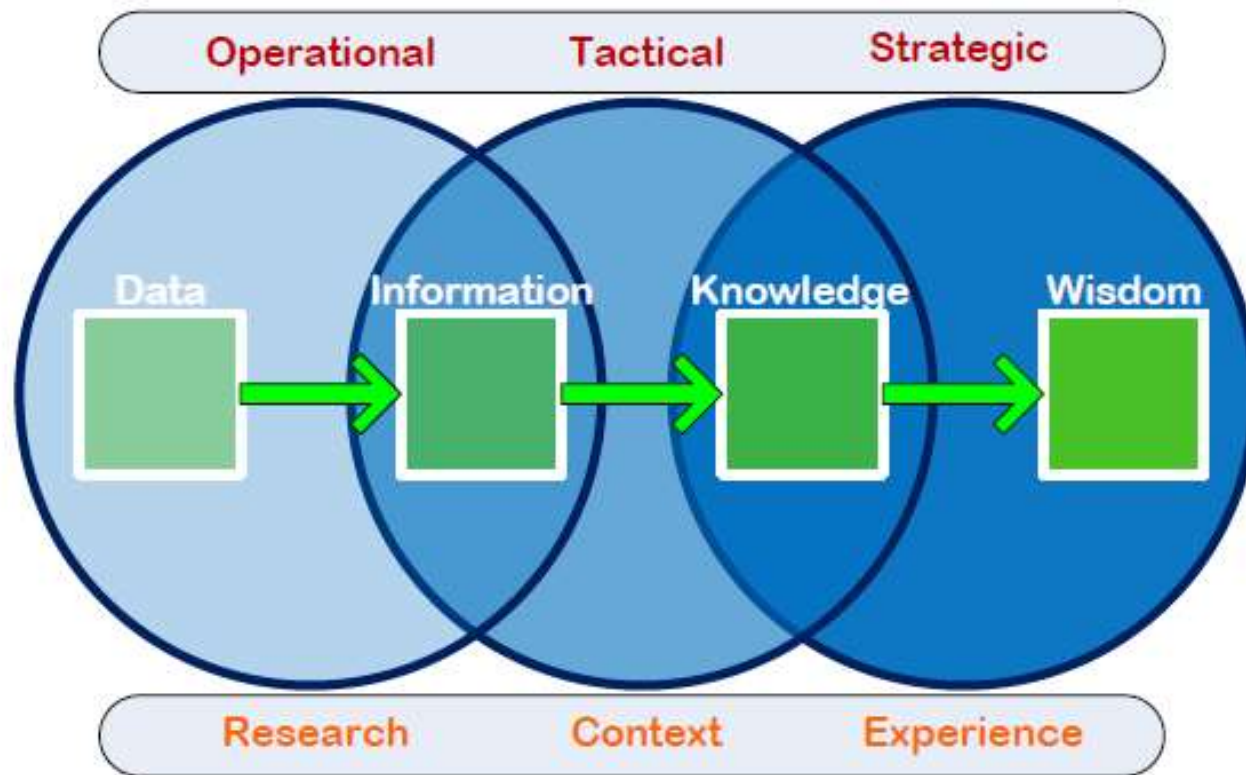
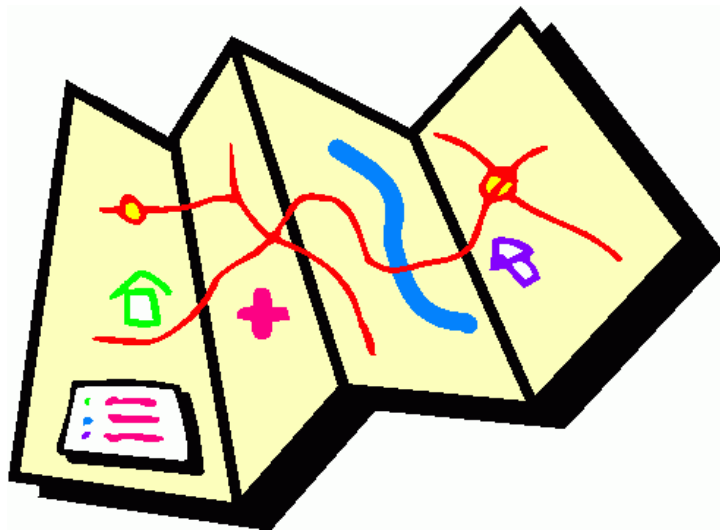


Figure 4-1. Data Transformation Into Information, Knowledge, and Wisdom.

Gap Analysis



- Determines current position
- Clarifies future vision
- Develops a plan to fill the gap

City of Wyoming

- A City of Vision and Progress
- 72,000 Residents
- 2015 SAW Grant recipient
- 2016 NPDES permit requirement



City of Wyoming-Mission

- Wyoming Provides excellent and efficient municipal services necessary to support and protect the life and property of all residents and businesses-including public safety, public parks and facilities, public street, water and sewer systems.

City of Wyoming- Guiding Principles

Providing
Optimum
Customer
Service

High Quality
Infrastructure
Standards

Community
Aesthetics

Stewardship of
Resources

Financial
Stability

City of Wyoming Sustainability Statement

- The advancement and promotion, with equal priority, of environments quality, economic strength and social equity, so that stable and vibrant community can be assured for current and future generations.

Goals- Our Vision

- Decisions that are based on data, sound principles and an ethical framework
- Infrastructure that is up-to-date, reliable and suited for purpose
- Regulatory compliance
- A reputation for high quality and responsive customer service
- Active transparency where citizens and customers are informed and involved
- Highest regard for the health and welfare of our population
- Economic growth and vitality
- Rates that are stable and affordable

Gap Analysis

- Identified 4 main focuses:
 - Asset management program structure
 - Asset risk management
 - Operational improvements
 - Information management
- Tasks included
 - Increased documentation, assigning roles and responsibilities, establish risk framework, procure hardware and software systems, staff training

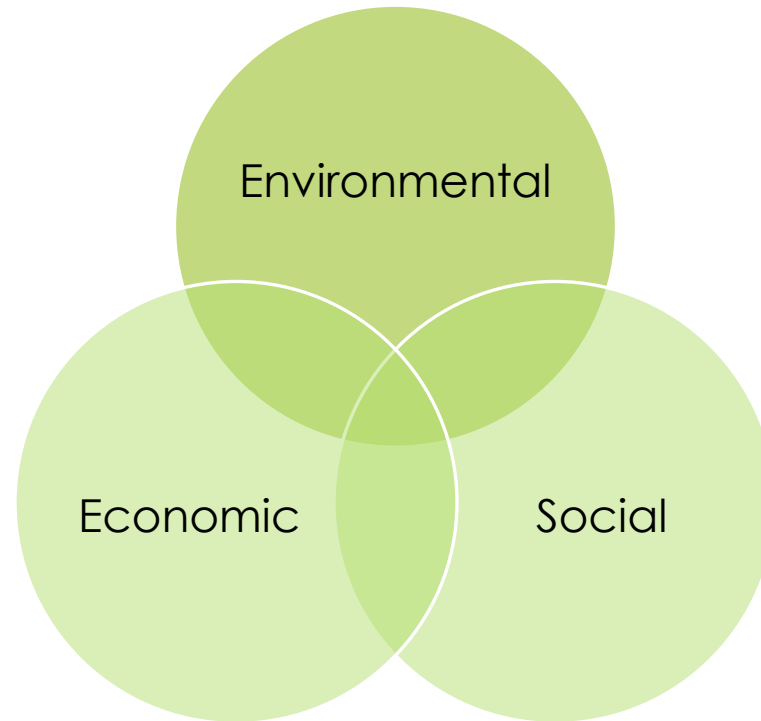
Steering Committee

- Steering committee includes Clean Water Plant, Drinking Water Plant, Public Works, Engineering, and Information Technology
 - Allows us to consider how these decisions affect other city functions
 - Keeps the software solutions compatible
 - Prepares us for implementation in other departments like Drinking Water
- Assigned a Asset Management Coordinator to lead the implementation

Policy Framework

- A logical structure that establishes how to organize a policy document into groupings and categories
- Contemplating 2 Frameworks
 - Sustainability-based
 - Modified Balanced Scorecard

Sustainability-Based



Sustainability-Based

Perspective	Objective	KPI
Social	Meet customer expectations	Customer satisfaction index
	Ensure public health and safety	# of illnesses related to wastewater
Environmental	Maintain regulatory compliance	# of NPDES violations
Economic	Rates that are affordable	Rate increases do not exceed cost of living index
	Assess real costs	Real cost compared to predicted costs

Modified Balanced Scorecard

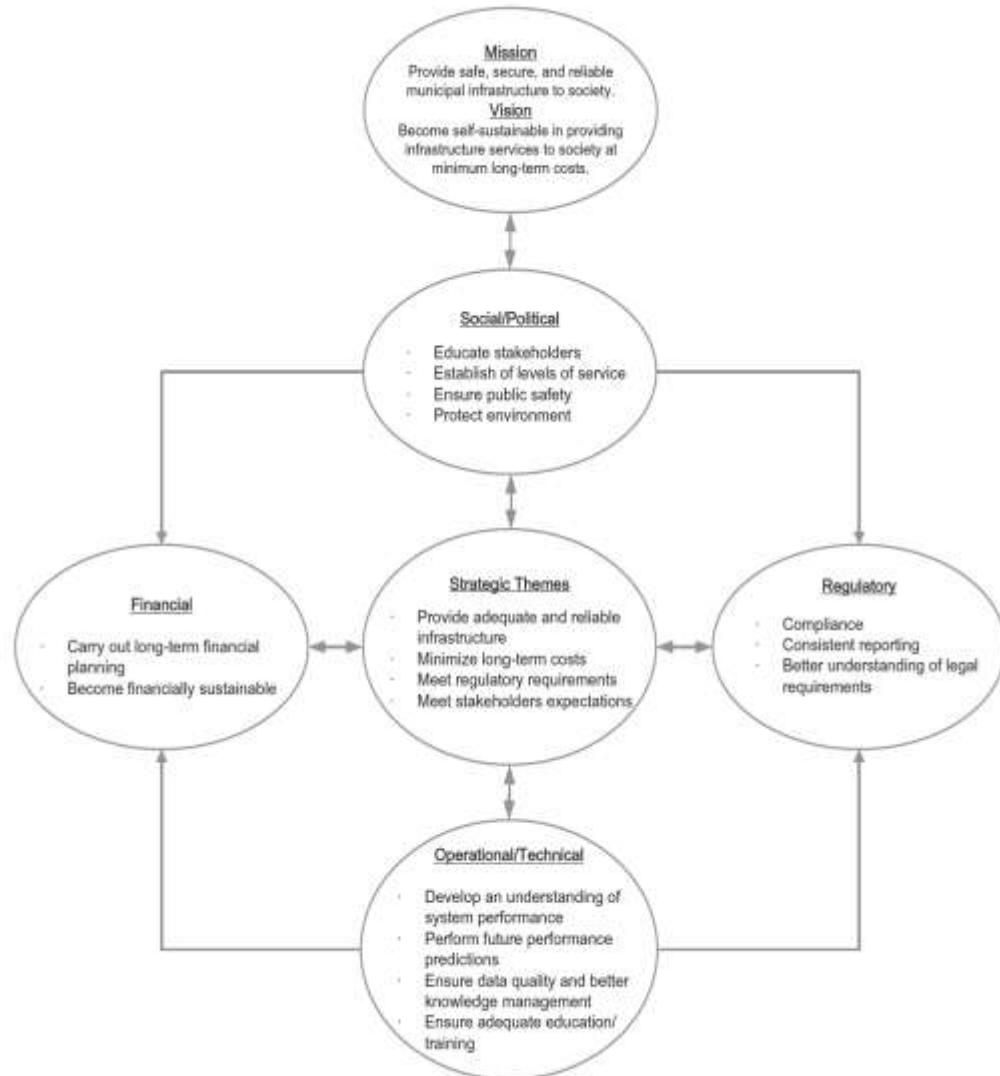


Fig. 3. Modified balanced scorecard model.

Modified Balanced Scorecard

Perspective	Objective	KPI
Operational	Complete system inventory	% of total system catalogued
	Assess current condition of assets	% of pipeline inspected
		% of equipment inspected
	Reduce risk in system	% of assets with risk value over 3

References

- Gay, L.F. & Sinha, S. K. (2014). Water Infrastructure Asset Management Primer. WERF
- International Standard Organization. (2014). ISO 55000-55002 Asset Management.
- Younis, R. & Knight, M. (2014). Development and implementation of an asset management framework for wastewater collection networks. *Tunnelling and Underground Space Technology*. 130-143



Questions?