



VM at The City of Calgary

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Calgary



Calgary, Alberta, Canada



- 4th Largest City
- 1.4 M
- 820 sq kms
- 3430 ft
- 18,000 – 20,000/ year
- 2.5% Economic Growth
- \$ 1.45 B - Capital Investment/
Year

Why VM is Critical Now?

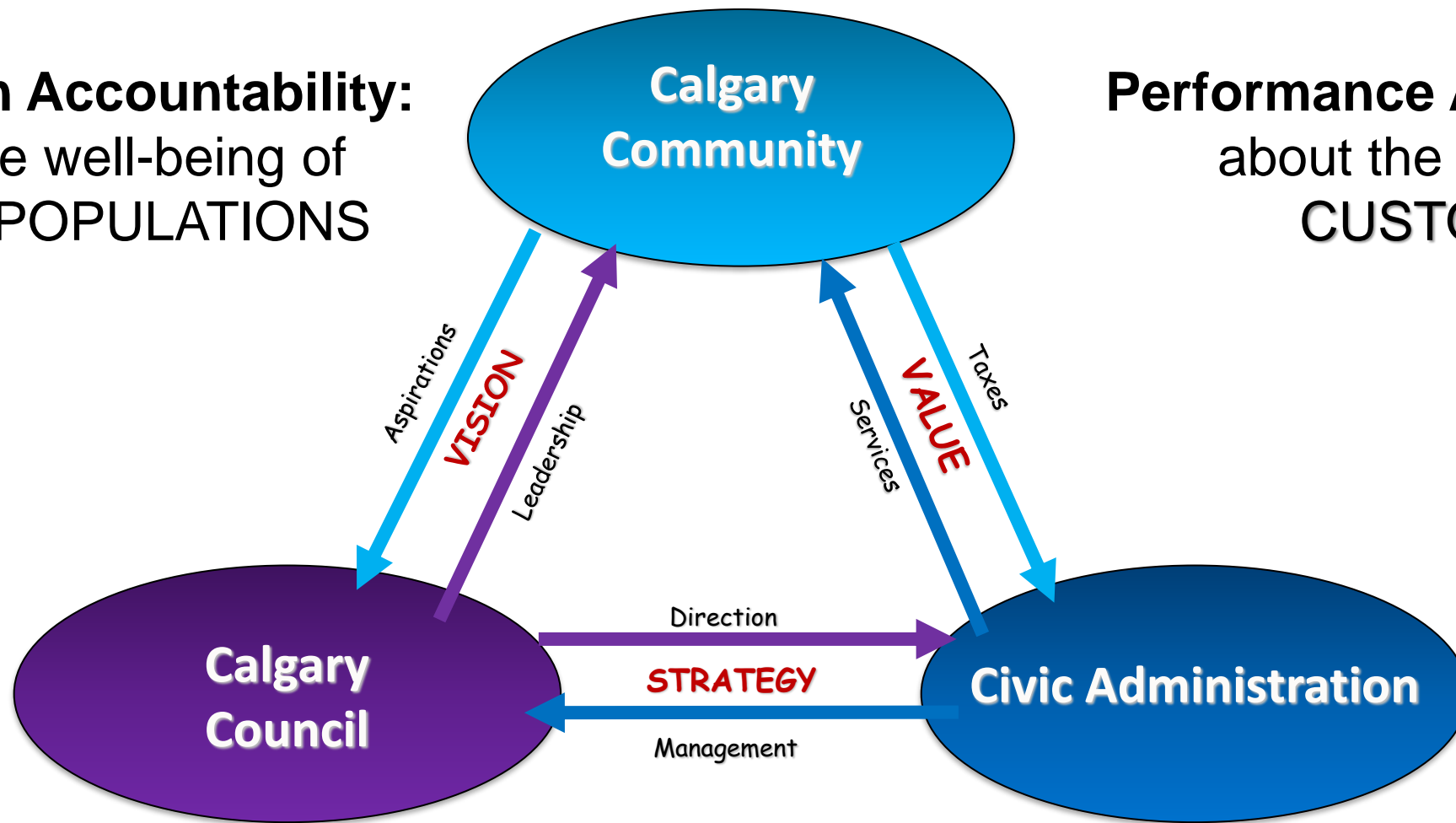


- **Uncertain Economic Times**
- **Shrinking Budgets**
- **Demanding Customers/ Citizens**

Public Accountability Framework

Population Accountability:
about the well-being of
WHOLE POPULATIONS

Performance Accountability:
about the benefits for
CUSTOMERS



VM – NOT NEW to The City



EXPERIENCE

KNOWLEDGE



Prior to 2009: 7 Studies

- **Transportation Infra. (6)**
- **Water Resources (1)**

Renewed Interest in VM



2009-2011: 4 more successful studies

RFP 11-1546 'Professional Services for Value Analysis'

Secured 6 CVS' for rotational service

VM Training for Sponsors and PMs

Collaboration with VAC (Conference, Trainings)

Discipline Champion (at Management Level)

Renewed Effort with VM



2009-2014: 16 successful studies

- **Water Resources (6)**
- **Waste & Recycling (4)**
- **Transportation Infra. (1)**
- **Recreation (5)**

Multiple Benefits with VM



Assurance for Senior Management/ or Council

Greater alignment - stakeholders, disciplines, operations

Clear scoping and informed decision making

Improved functional performance

Reduced schedule/ timelines

Amended/ modified initial capital and O&M cost assumptions

Remedied design deficiencies and omissions

2009 – 2014 VM Results



Avg. VM study cost vs. program/ project estimate:

0.23%

Avg. ROI 130:1

Avg. % cost avoidance/ deferral: 12.6%

Avg. VM study cost: C\$90K

Range of programs and projects reviewed:

C\$6.0M to C\$523.0M (C\$60.0M median)



2011 City Auditor's Report

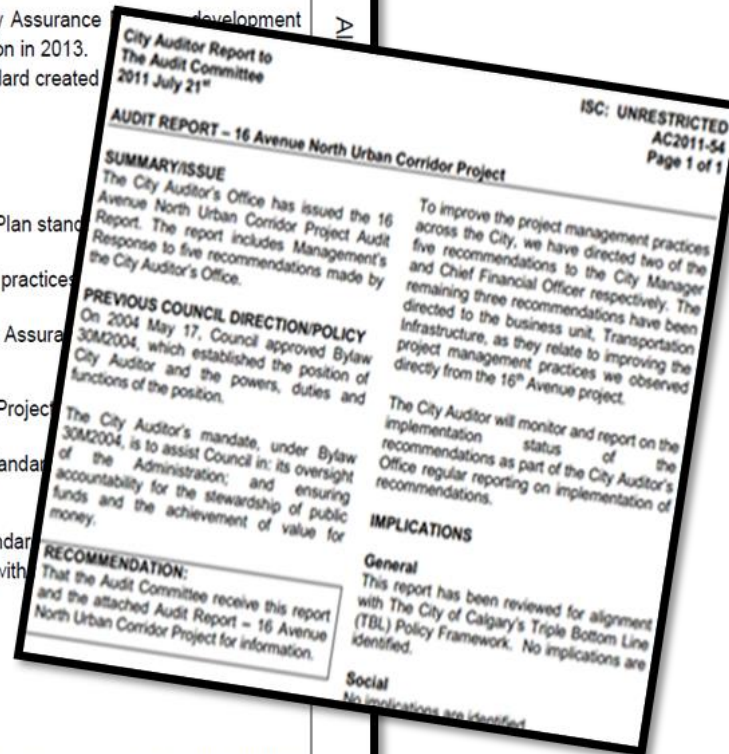
2013-0026 Corporate Project Management Framework - Progress Report - Alt4.pdf Unrestricted

16 Avenue North Urban Corridor Project Audit Report Corporate Project Management Framework Action Recommendation (2011 June 27)

The City Manager develop and implement a mandatory project management methodology for capital construction projects. The methodology should include (but not be limited to):

- A requirement for a business case setting out why (in quantifiable terms) the project is required, and showing why the option pursued is the best option for The City to resolve the issue. The business case should include measurable project objectives that can be measured at project close to determine the success of the project.
- A comprehensive planning process, including a requirement to detail timelines and budget at an appropriate scale for the project, identify dependencies, critical path items and contingencies, develop and communicate roles and responsibilities, and to set a series of formal project checkpoints with required deliverables. Any inspection processes required to complete projects must be included in the plan, as well as quality activities required to ensure that the completed project is fit for purpose.
- A proactive risk management process covering the whole project lifecycle, including the creation of a formal risk register which is updated throughout the project lifespan, and documentation of mitigating actions, monitoring of actions and the results/decisions.
- A system of regular reporting to management on progress against the original approved timelines/budget/scope/quality and checkpoints, reasons for any variances, a review of risks and mitigating actions, and summary of issues (affecting time, budget and quality/scope) that arose. Meetings to discuss the reports, including actions arising, should be documented to ensure that issue resolution can be tracked.
- Appropriate tools and techniques should be developed to support the methodology, including an evaluation of financial systems available to support the project manager to record project commitments, track expenditure and variances etc.

- Corporate Project Management Framework initiated and underway.
- Project Management Quality Assurance development underway with implementation in 2013.
- Project Business Case standard created
- Project Charter and Project Plan standard implemented.
- Inclusion of key policies and practices (procurement).
- Project Management Quality Assurance implementation in 2013.
- Included in Project Charter, Project Reporting standards.
- Project Risk Management standard
- Project Progress Report standard
- Project Dashboard initiated with
- Assessment underway.
- Alignment with Peoplesoft Project Costing implementation underway.



ATTN: PF



2012 Corporate PM Framework

Calgary

ADMINISTRATION POLICY:
Project Management Policy for Capital Projects

Policy Number: **GN-036 (C)**
ALT Report: **ALT2016-0010**
Approved By: **The Administrative Leadership Team**
Effective Date: **2016/06/21**
Next Revision Due: **2021/06/21**
Department / BU: **Deputy City Manager Office/Corporate Affairs**

BACKGROUND
The Corporation of The City of Calgary ("The City") is an intensive organization. As such, The City is committed to effective project management of Capital Projects.

PURPOSE
The purpose of this policy is to provide a consistent management of Capital Projects.

DEFINITIONS
1. **Capital Project** – A Capital Project meets the following requirements:
a. It is the creation of new assets, or the expansion, renovation or replacement of infrastructure.

Calgary

Project Management Practices Guide

The City of Calgary Project Management Framework

Corporate Project Management Framework
Business Case Standard

Purpose
The Business Case project team has documented the following project mission within their project Charter:
To define the baseline standards of the business case to inform the prioritization and selection process of all capital projects.
This document describes a Business Case Standard which will support corporate accountability and transparency in The City's capital projects/programs. It also ensures compliance with The City's policies and procedures, and will assist with audit compliance.

Scope
This standard represents the minimum information that must be included in a business case for all capital projects that meet the criteria outlined in the Application of Standard section below.

Standard

- All capital projects shall have a business case developed that provides the information necessary to make an informed investment decision.
- The business cases for all Council-approved projects shall be available for access/review in accordance with The City's records management policies.

Onward! Building a great city by supporting excellence in project management.

THE CITY OF CALGARY

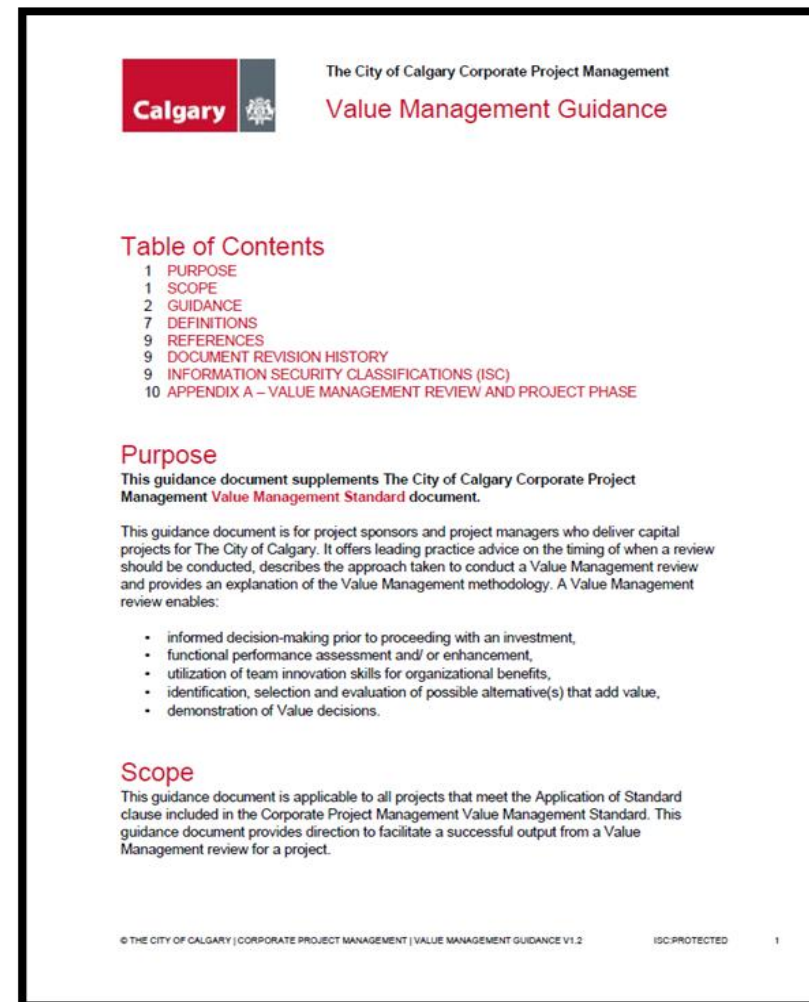
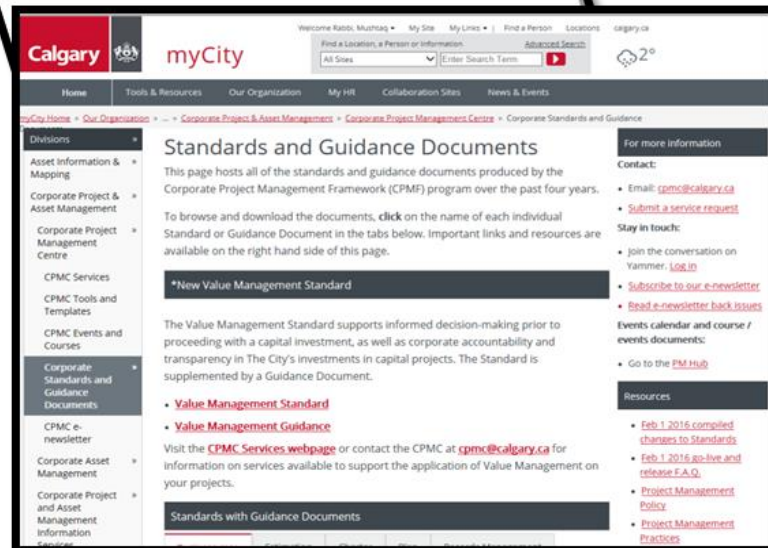
2015 Council's Notice of Motion



...further enhance project management capabilities

- *The application of innovative quality and project management approaches, including value management and stage gating,*
- *The identification of ways to better capture capital construction project savings and increase project efficiency,*
- *Analysis on how The City could better demonstrate economic benefit and the multipliers of all construction projects,*
- *Options to reduce capital construction project delivery timelines.*

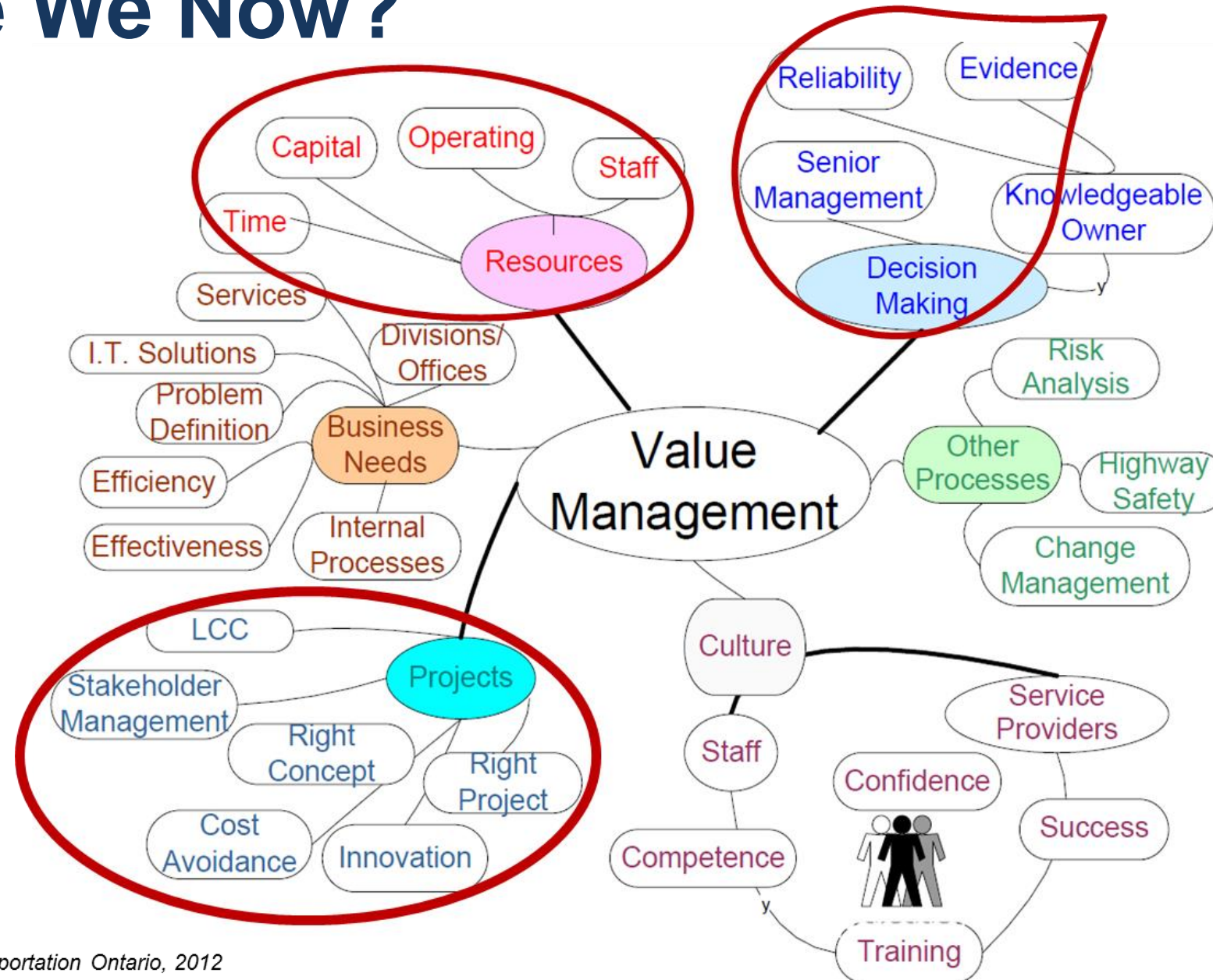
2016 City's VM Standard and Guidance



Recent VM Studies in Various Asset Classes

Year	Water/ Wastewater	Transportation	Vertical Built	Information Tech./ Systems
2016	1. Inglewood Sanitary Trunk		1. Downtown Fire Infrastructure Deployment	1. WWTP Electrical and Power Systems Upgrade
2017	1. WW Community Drainage Improvement Program 2. Rangeview Sanitary Trunk 3. North Calgary Water Supply System	1. Green Line LRT 2. 9 Av Bridge Replacement		
2018	1. Water Long Range Plan Risk and VM 2. TransCanada Sanitary Trunk 3. Upper Plateau Separation Storm Trunk 4. Manchester Area Storm Water Management	1. 16 Av NW Widening + Local Access Improvements		1. Calgary 911 PSAP Optimization 2. OWAM GIS Integration

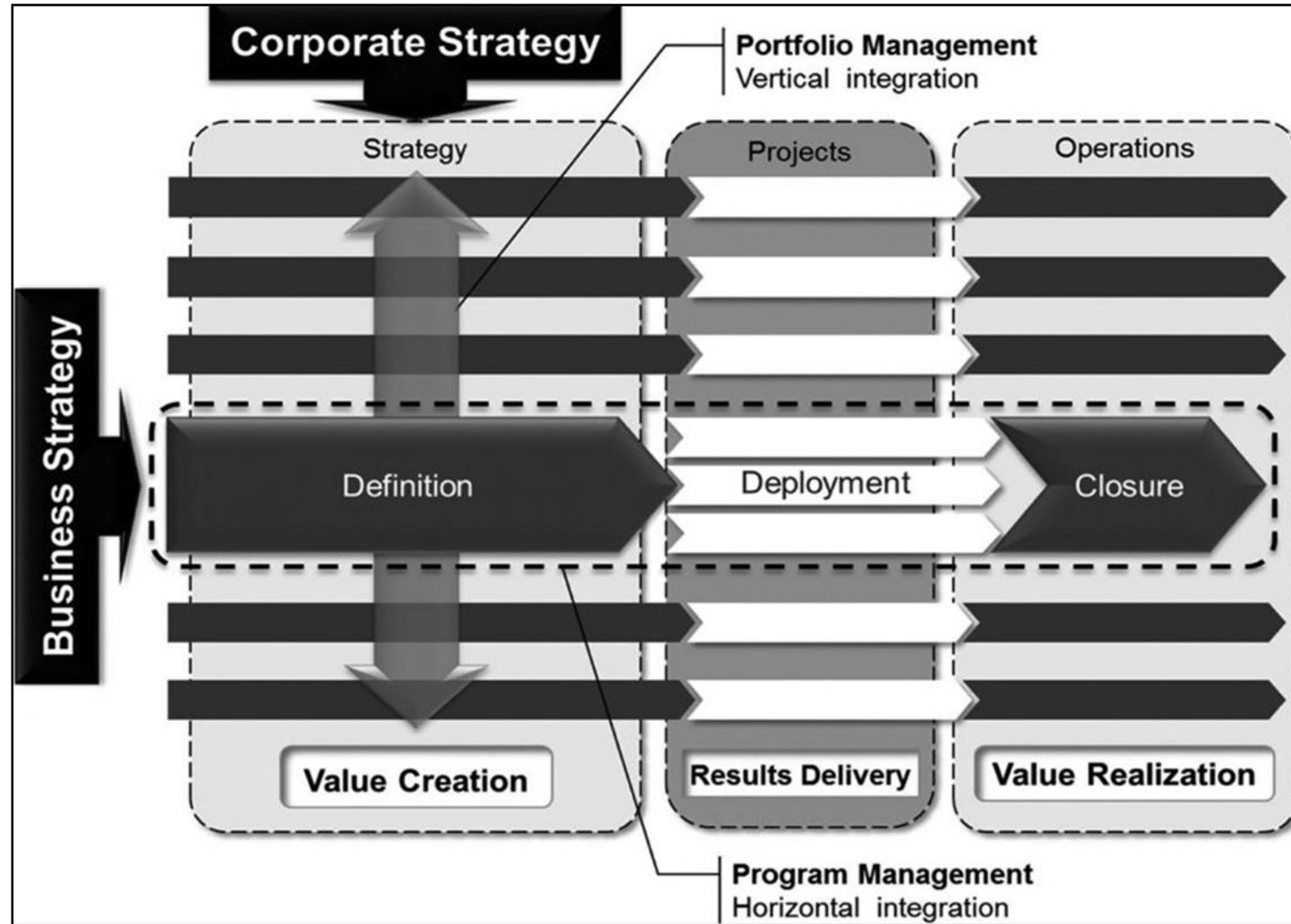
Where Are We Now?



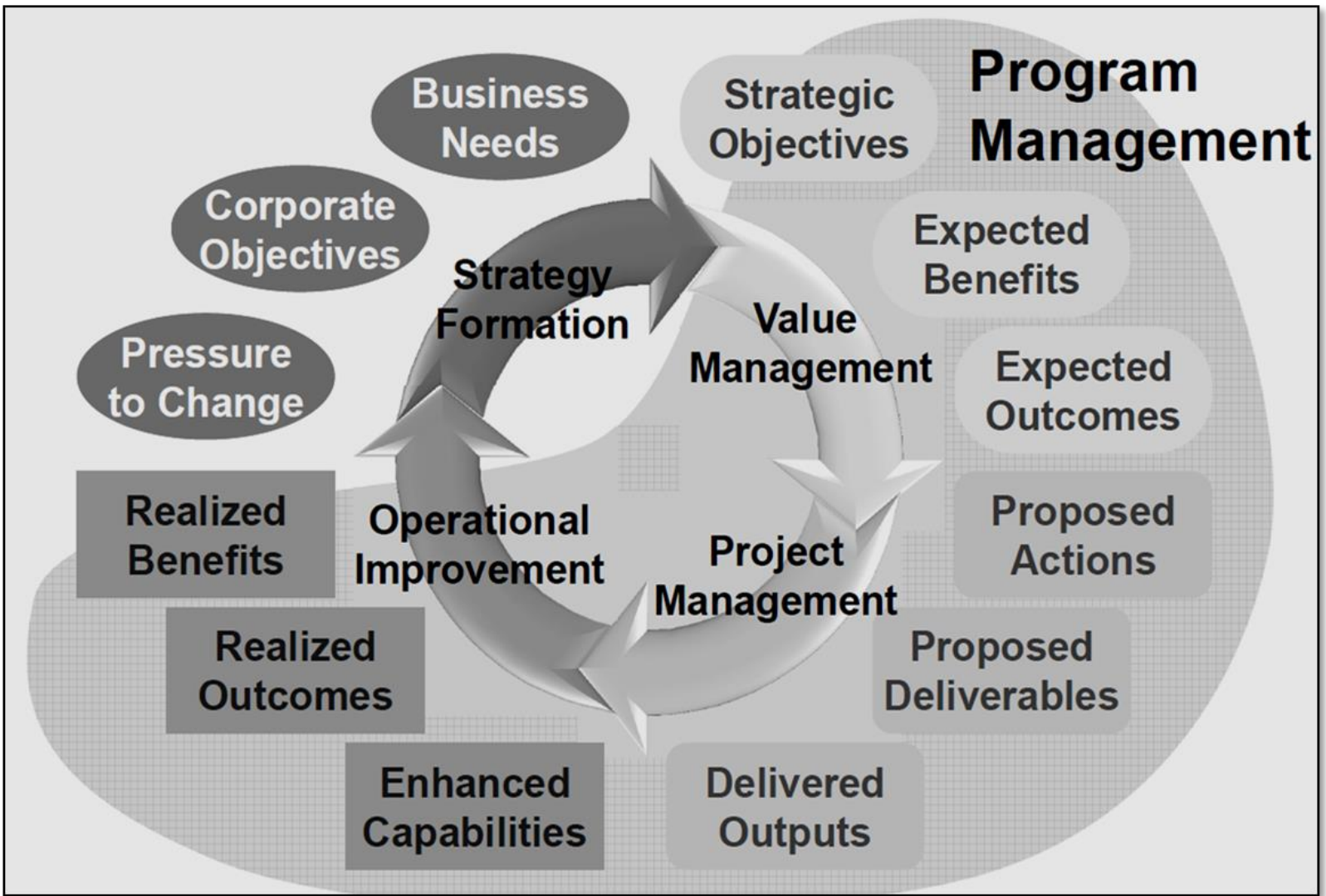
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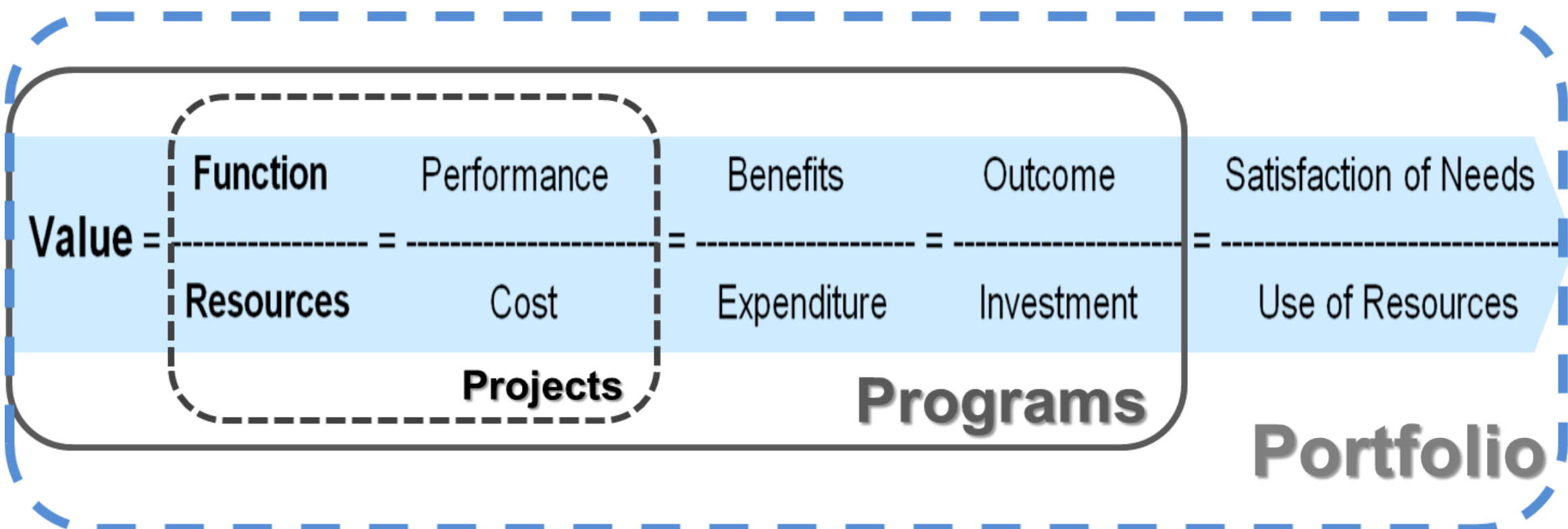
Where to next with VM?



Deliver Value in Levels of Service



Infrastructure Calgary



Challenges/ Issues We Face

Tracking the Results (after the study)

Desire to shorten study hours

Perceived as an interruption

**Lack of knowledge of VM capability (PMs,
Sponsors, Management)**

Upfront cost of study



What Have We Learned?



VM Champion

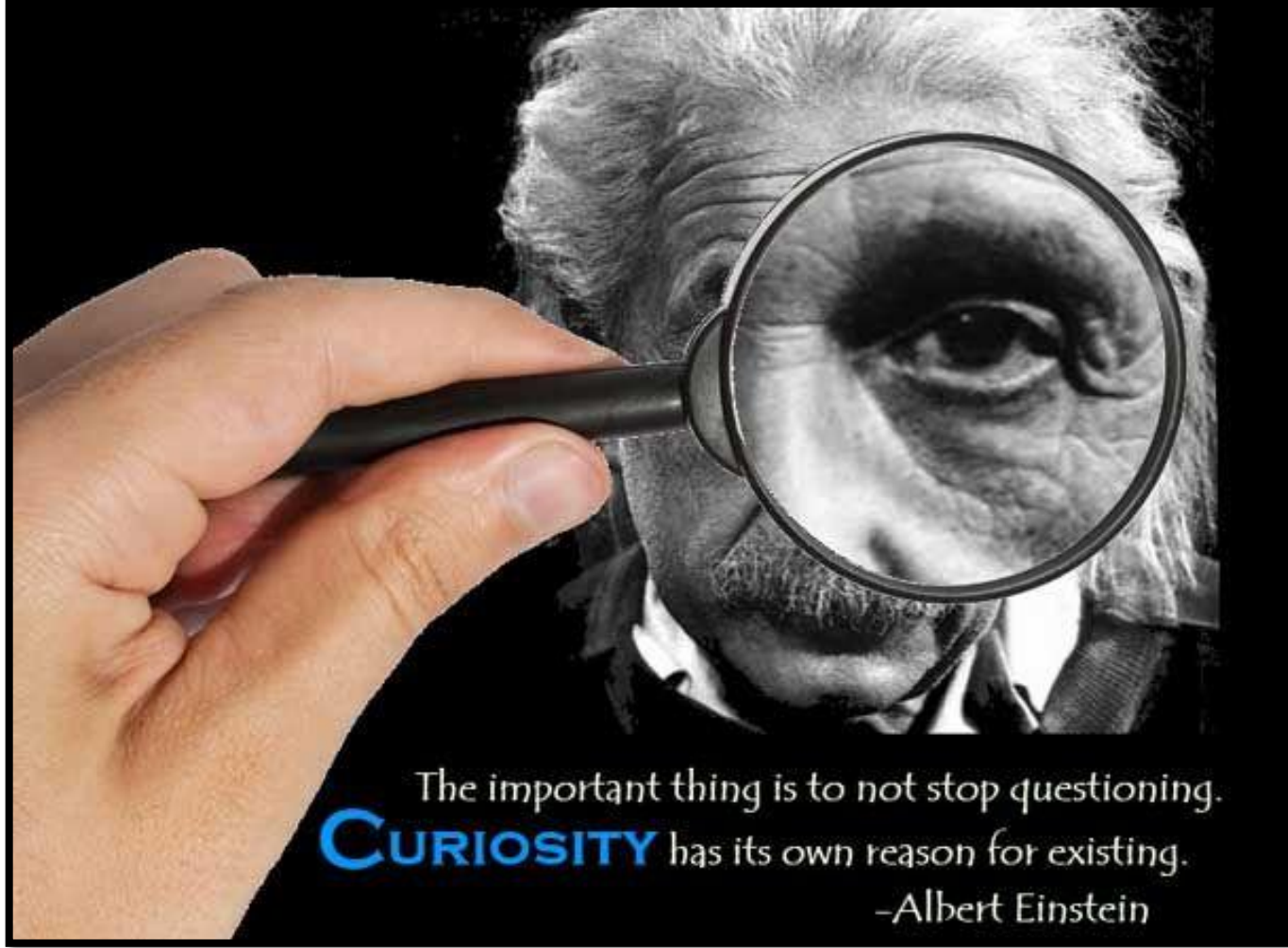
Easy of Procurement

Timing of VM

Share VM results

Create and Build Awareness

Consolidation of VM Service



The important thing is to not stop questioning.
CURIOSITY has its own reason for existing.
-Albert Einstein