

# A Data Collection Framework for IT Governance

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# Agenda

1. Presentation Objectives
2. Context
3. A Measurement Framework
  - 3.1 Scope of the Canadian Initiative
  - 3.2 Translating Vision into Governance Objectives
  - 3.3 Mitigating Implementation Risk
4. Conclusion and Further Work

# 1.0 Presentation Objectives

- *Present an ongoing Canadian Government initiative to develop a non-proprietary and open data collection framework for software development and maintenance governance*
- *Obtain your comments, questions and insights on this ongoing initiative*

## 2.0 Context

- Very large portfolio of software development projects
  - important cost overruns,
  - some were canceled without delivering any business benefits
  - some where scope had been reduced dramatically
  - others showed strong signs of trouble by being re-estimated well beyond initial schedules or well over initial budget.

# Causes Identified by the Auditor General of Canada

- inadequate analysis of underlying business issues
- inconsistent support from management and weak project sponsorship
- inconsistent user involvement and acceptance
- lack of ongoing monitoring of systems under development
- lack of experience of project teams

# Standish Group Report on US IT Projects

- 31% of projects are canceled before completion
- 52% have overrun their initial estimate by an average of 189%
- A typical US IT projects delivers 42% of the features and functions originally proposed
- Only 16% of projects deliver one time and on budget

# Causes identified by a focus group of executives

- incomplete requirements
- lack of user involvement
- unrealistic expectations
- lack of planning and changing requirements and specifications.

# Underlying Reasons?

- None of the identified causes refer directly to the technical know-how necessary to build IT systems.
- They refer rather to:
  - the set of activities and tasks that is positioned before any technical work usually starts
  - tasks that are performed concurrently with the technical work.



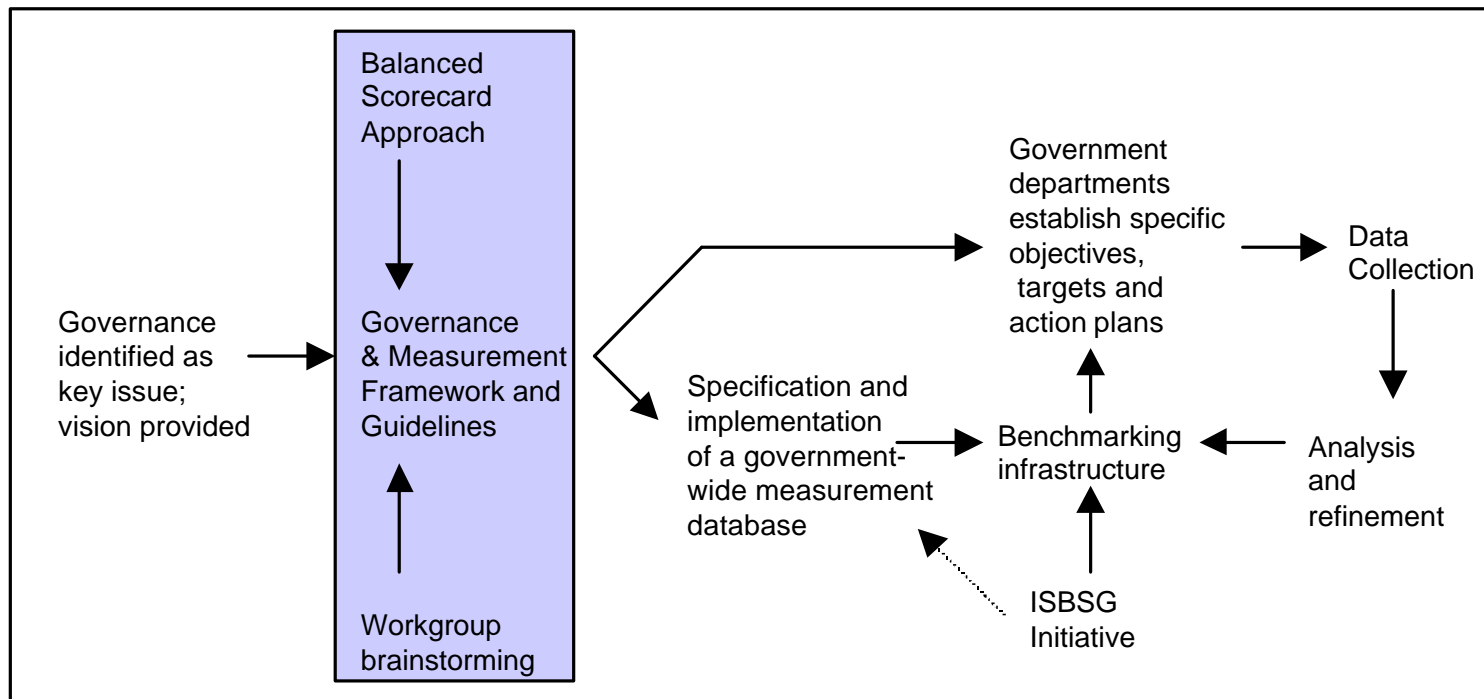
# *Hierarchy of Business Principles Identified by 1996 Treasury Board Workgroup*



# A Need for Decisive Governance

- Ensure executive management support
- Oversee user involvement
- Ensure that requirements are clear and complete
- Maintain business alignment
- Enforce accountabilities
- Exert corporate discipline

# *Outline of this Ongoing Initiative*



## 3.0 A Measurement Framework

- Governance requires guidelines and measurements that cover both sides of the picture: client organization and IT organization
- Measurements must be linked to governance goals
- Most measurement frameworks proposed so far concentrate on one or two governance process areas

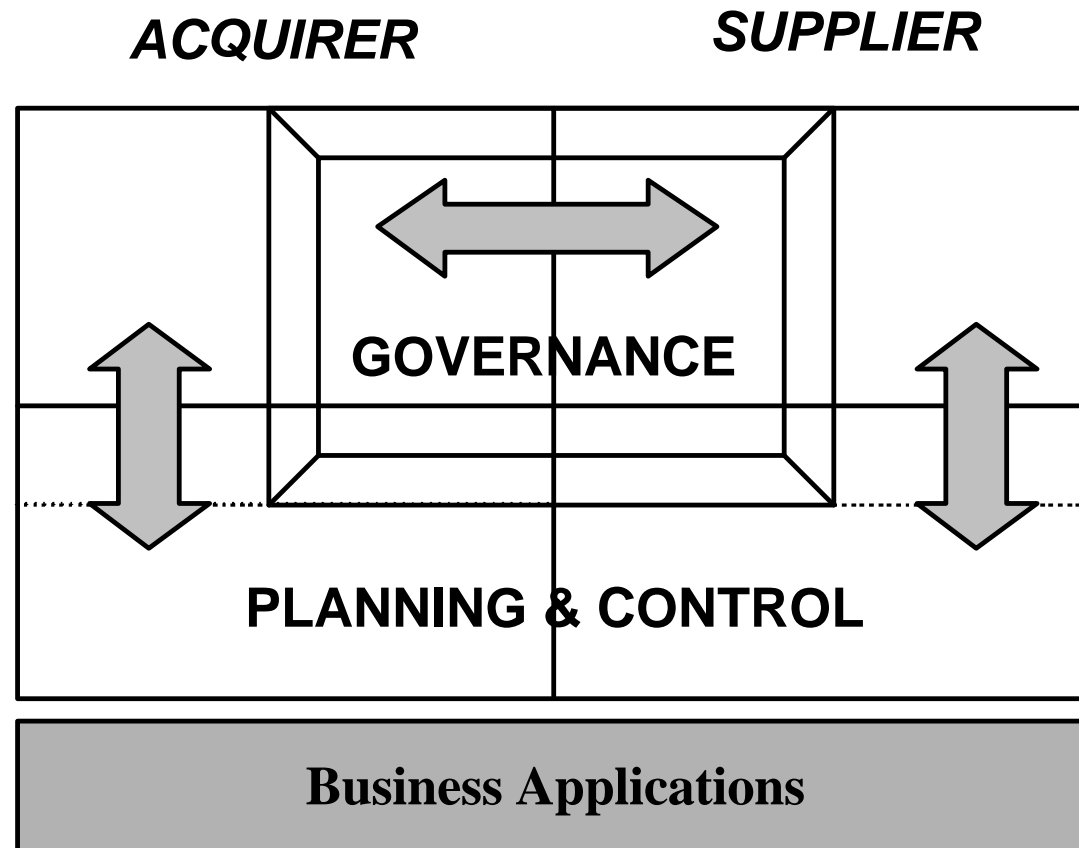
# Balanced Scorecard Approach

- Proposed by Norton and Kaplan of the Harvard Business School
- Has been used in recent IT measurement initiatives:
  - GAO
  - ESI
  - Other private industry initiatives

# Balanced Scorecard Approach

- Excellent tool to support the development and implementation of performance measurement in organizations
  - Links measurement to overall organizational strategy
  - Concentrate on organizational priorities
- Selected as the main thrust for this initiative by the Treasury Board Secretariat

# 3.1 Scope of the Canadian Initiative



# What is the acquirer?

- The **acquirer** is the organization which is responsible for defining needs and managing the acquisition process. Within the context of this Canadian effort, the acquirer is also identified as the organizational entity responsible for investing in IT to satisfy a business requirement, a role devoted to the owner in ISO 12207;



# What is the supplier?

- The **supplier** is the organization which is responsible for providing the IT services and/or products requested by the acquirer. Supplier's processes are defined in the ISO 12207 standard for the development and maintenance of software.

# Four Governance Process Areas

- Policy and Standard Formulation
- Strategic Leadership
- Decision-Making
- Oversight


# Additional Precisions on Scope

- Only IT services related to business applications
- Technological type of investments are not addressed at this time
- Includes software development and software maintenance

# 3.2 Translating Vision into Governance Objectives

Perspectives	BUSINESS OBJECTIVES			
	ACQUIRER		SUPPLIER	
	Dev't	Maint.	Dev't	Maint.
	FINANCIAL	1	2	3
CUSTOMER	5	6	7	8
INT. BUS. PROC.	9	10	11	12
LEARN. & GROWTH	13	14	15	16

# *“Horizontal logic” of the scorecard*

	Business Objectives				Targets	Measurement	Action Plan
	Acquirer		Supplier				
	Dev.	Maint	Dev.	Maint			
Financial	Ⓐ				Ⓑ	Ⓒ	Ⓓ
Customer							
Internal Business Process							
Learning & Growth							

## 3.3 Mitigating implementation risk

<i>Category</i>	<i>Risk</i>
<i>Context</i>	Authority level of measurement program management too low
	Poorly defined scope of measurement program
	Lack of support from senior management
	Lack of coherence of measurement program with business directions
	Poor credibility of expected benefits
	Poor alignment with middle management requirements
	Lack of involvement of senior management
	Lack of clarity of objectives and goals

## 3.3 Mitigating implementation risk

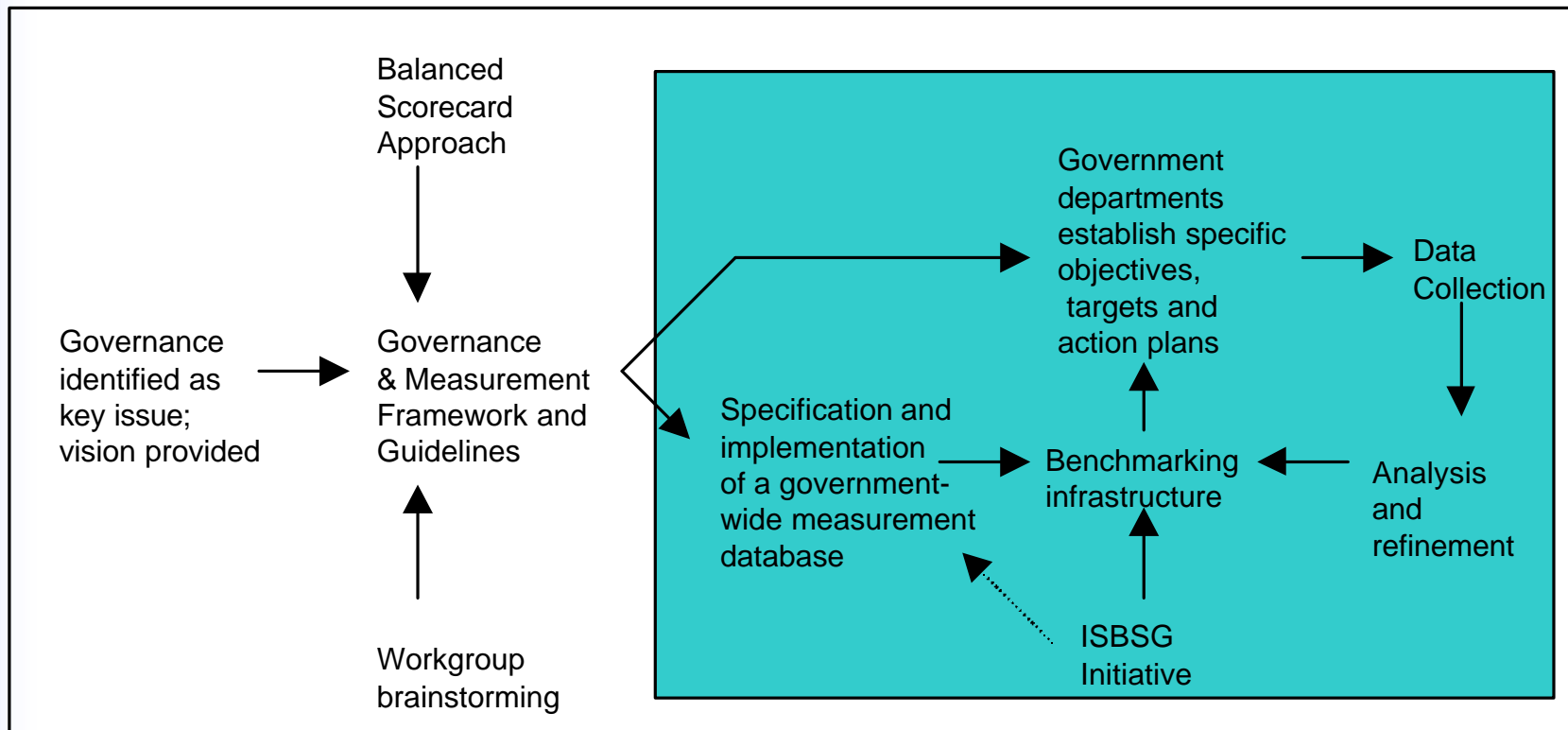
<i>Category</i>	<i>Risk</i>
<i>Component</i>	Poor understanding of the “why” and “how” by the organization
	Selection of measures not based on objectives
<i>Results</i>	Lack of clarity of benefits to targeted level of management
	Poor conformance of result usages with initial objectives

## 4.0 Conclusion and Further Work

- *Complete vision*
- *Balanced scorecard perspectives*
- *Hypothesized causal relationships*



# Further Work



# Acknowledgments

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