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Developing Enterprise-Wide Measures for Tracking Performance of Acquisition Organizations

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Purpose of Overall Effort

Develop a methodology to define enterprise-wide measures that reflect the “health” of a government organization that supports acquisition.

Apply methodology to ensure alignment between the enterprise-level goals of an organization and the measures used to characterize that organization's performance.

Use these measures as a guide to their overall performance and performance improvement effort.



Overview Outline

Methodology

Major components

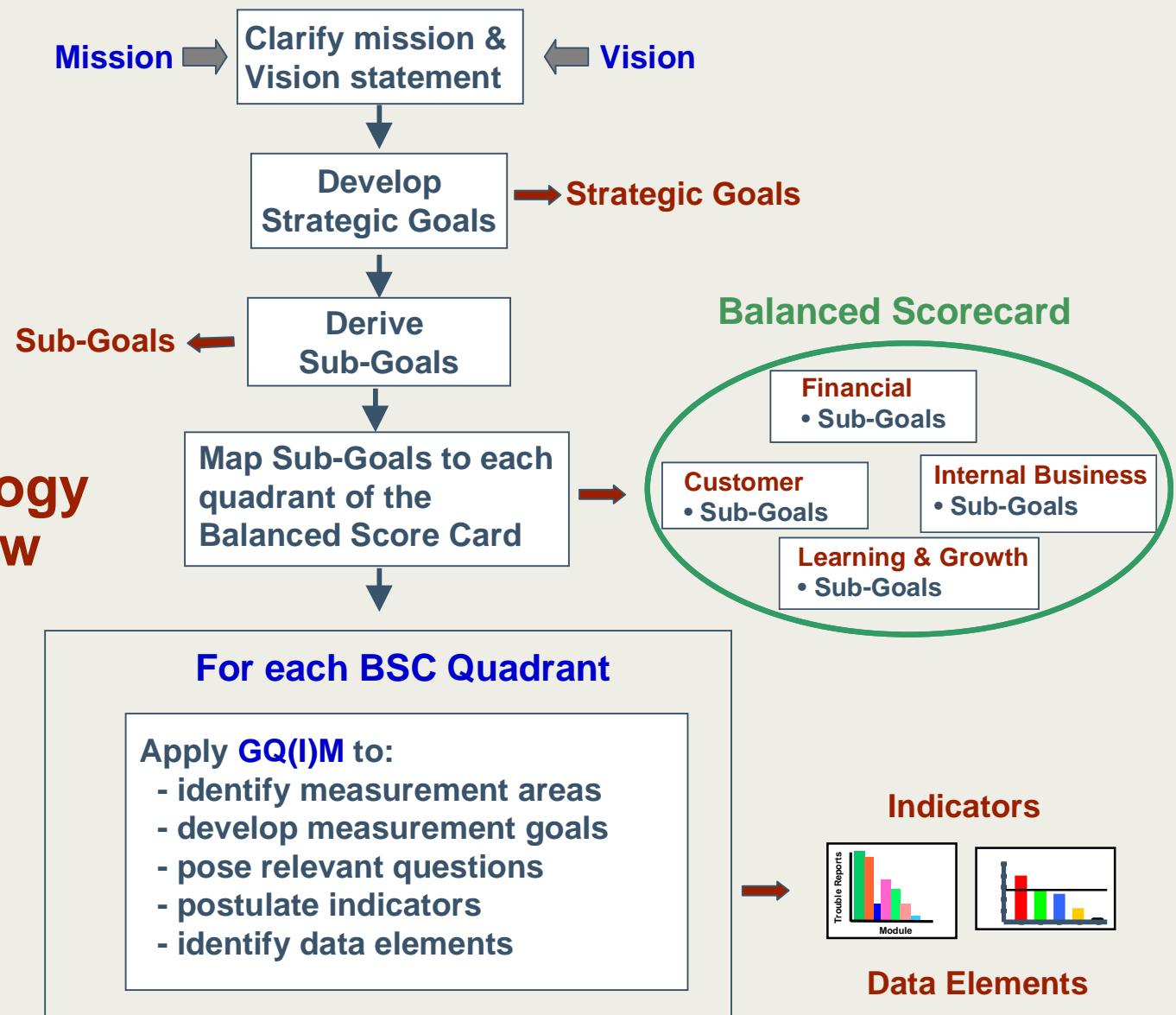
- BSC
- GQ(I)M

Example use

- Initial measurement areas
- Indicators

Summary

Methodology Overview





Major Components

GQ(I)M

- Align measures with goals; ensure measures selected will be used

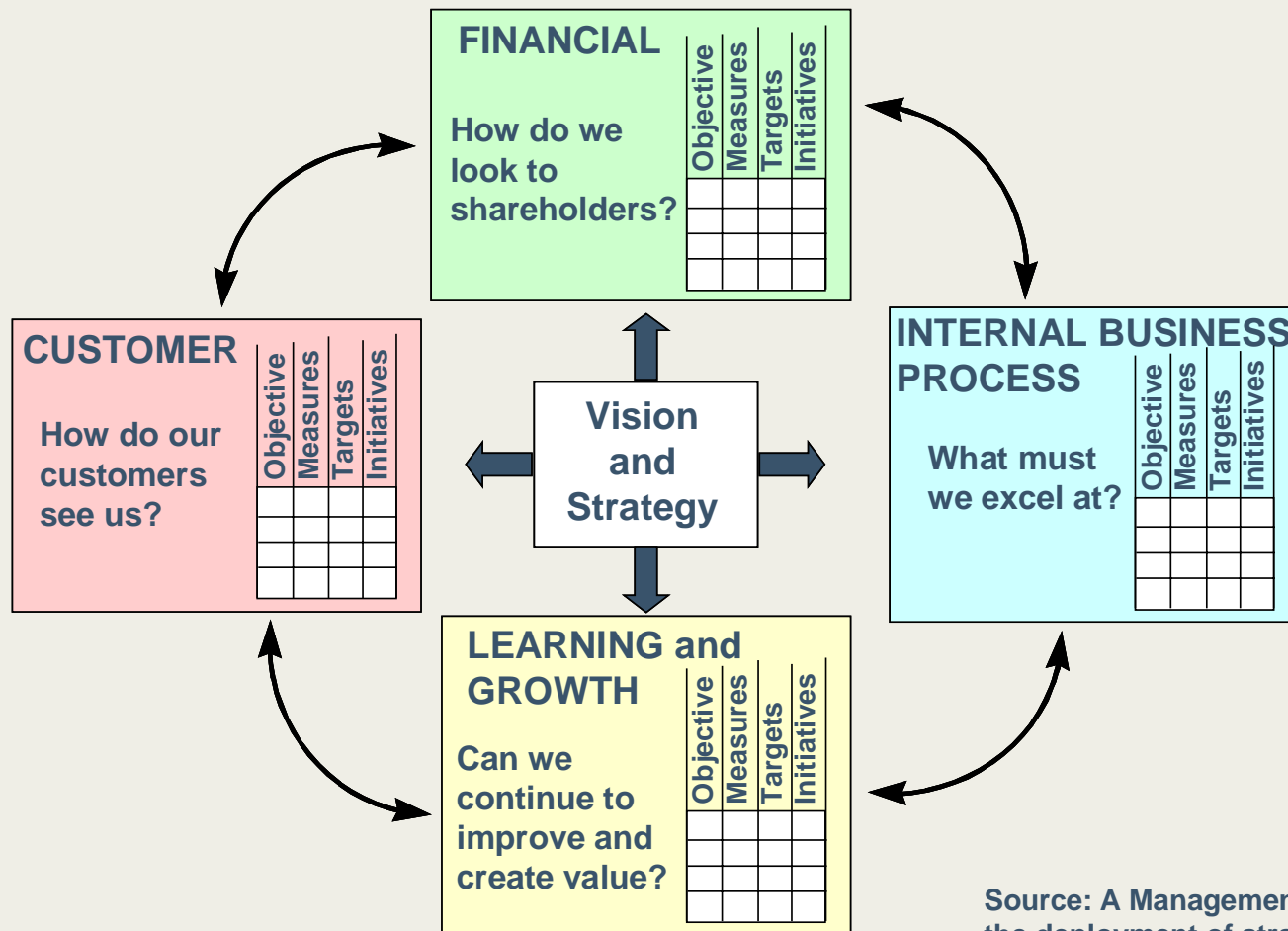
Balanced Scorecard

- Ensure set of measures provides coverage of all elements of performance; avoid hidden trade-offs

Process Model of Performance

- Select measures that are most meaningful with respect to selected areas of performance; prefer outcome then output measures over process and input measures

A Balanced Scorecard Perspective on Performance



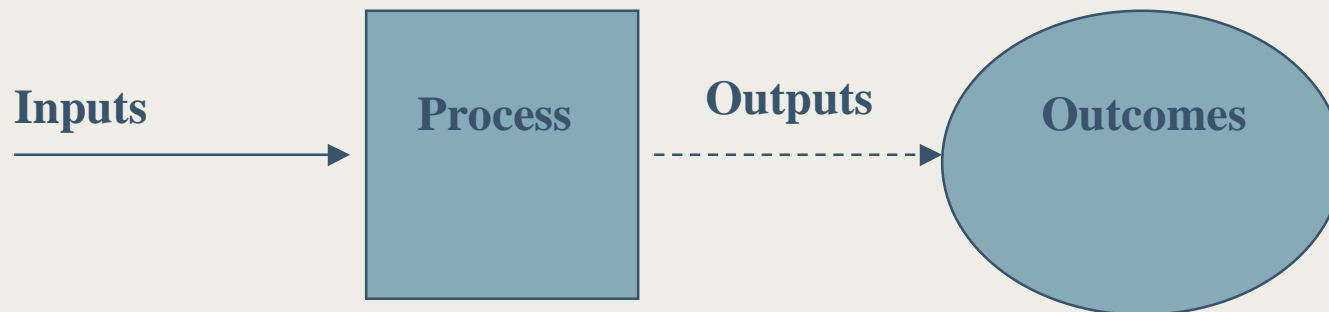
Source: A Management Guide for the deployment of strategic metrics, Ratheon

Success Vs Progress Indicators





Identifying Potential Measures: A Process Model of Performance

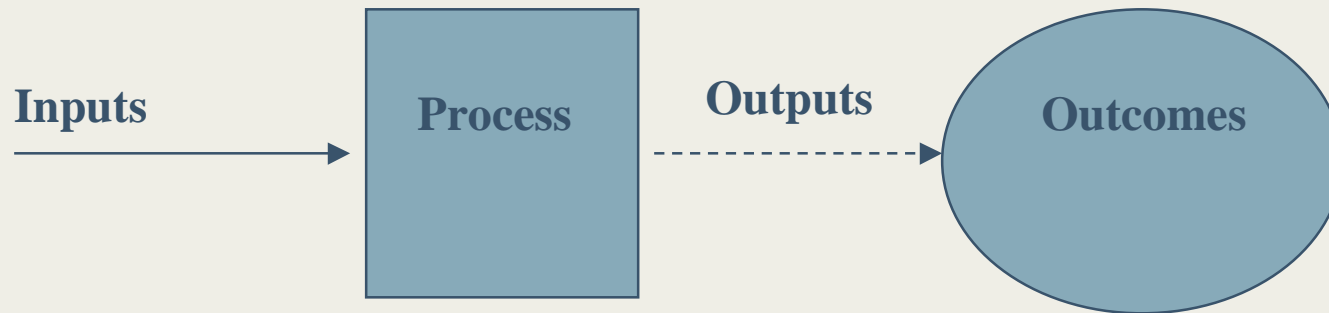


Potential Measures

Resources consumed	Throughput, tasks	Products and services	Impact on customer or user
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Identifying Potential Measures: A Process Model of Performance



Goal: Increase Customer Satisfaction

Inputs - dollars spent on customer service training, dollars spent on quality assurance

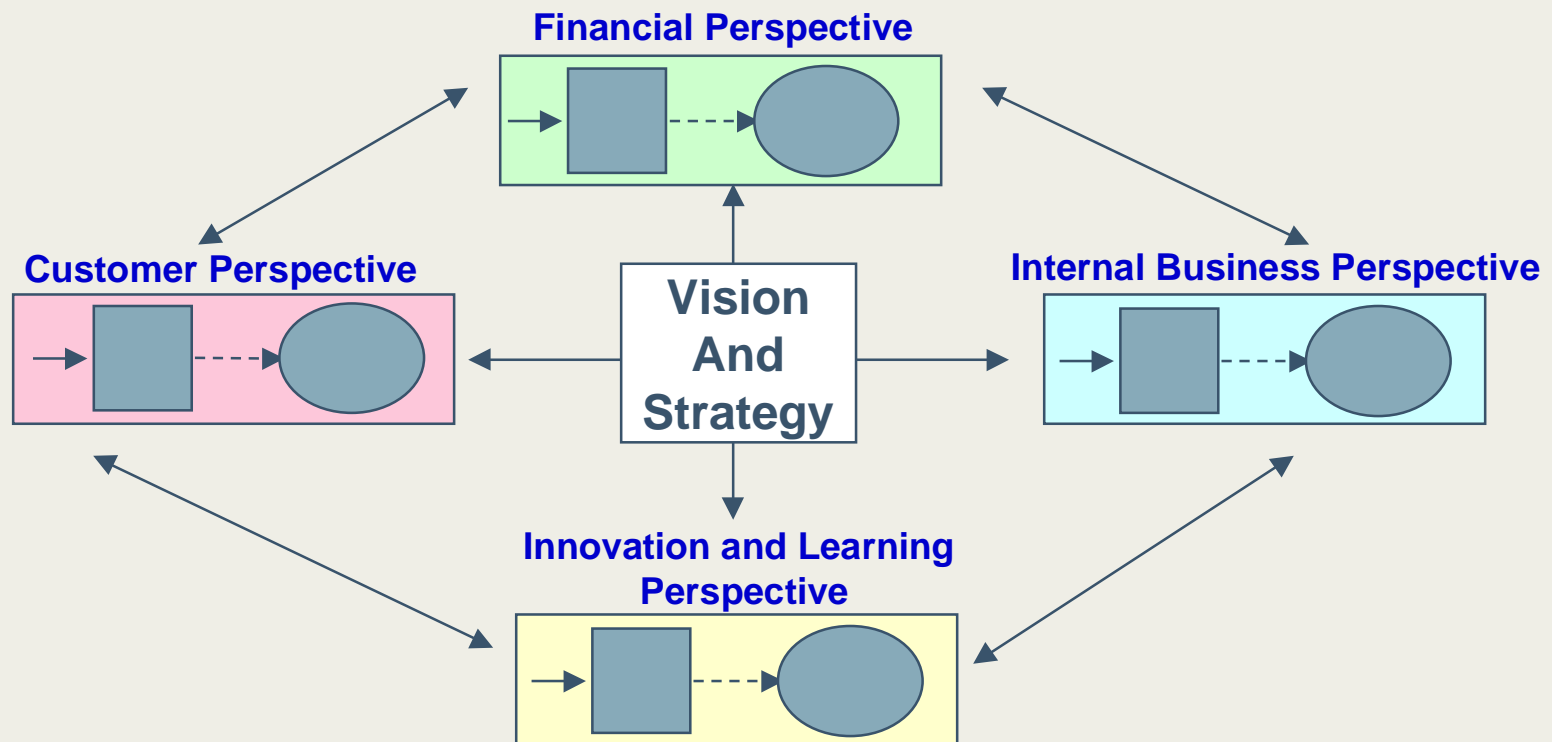
Process - number of work product inspections performed, number of tests performed

Outputs – number of new features released, resolution time for customer service calls

Outcomes: trends in customer satisfaction survey data, number of defects reported after release



Balanced Scorecard Perspective: A Multi-dimensional view



Source: Kaplan and Norton, "Putting the Balanced Scorecard to Work" Harvard Business Review, Sept-Oct 1993

Defining Indicators & Measures Based Upon Goals





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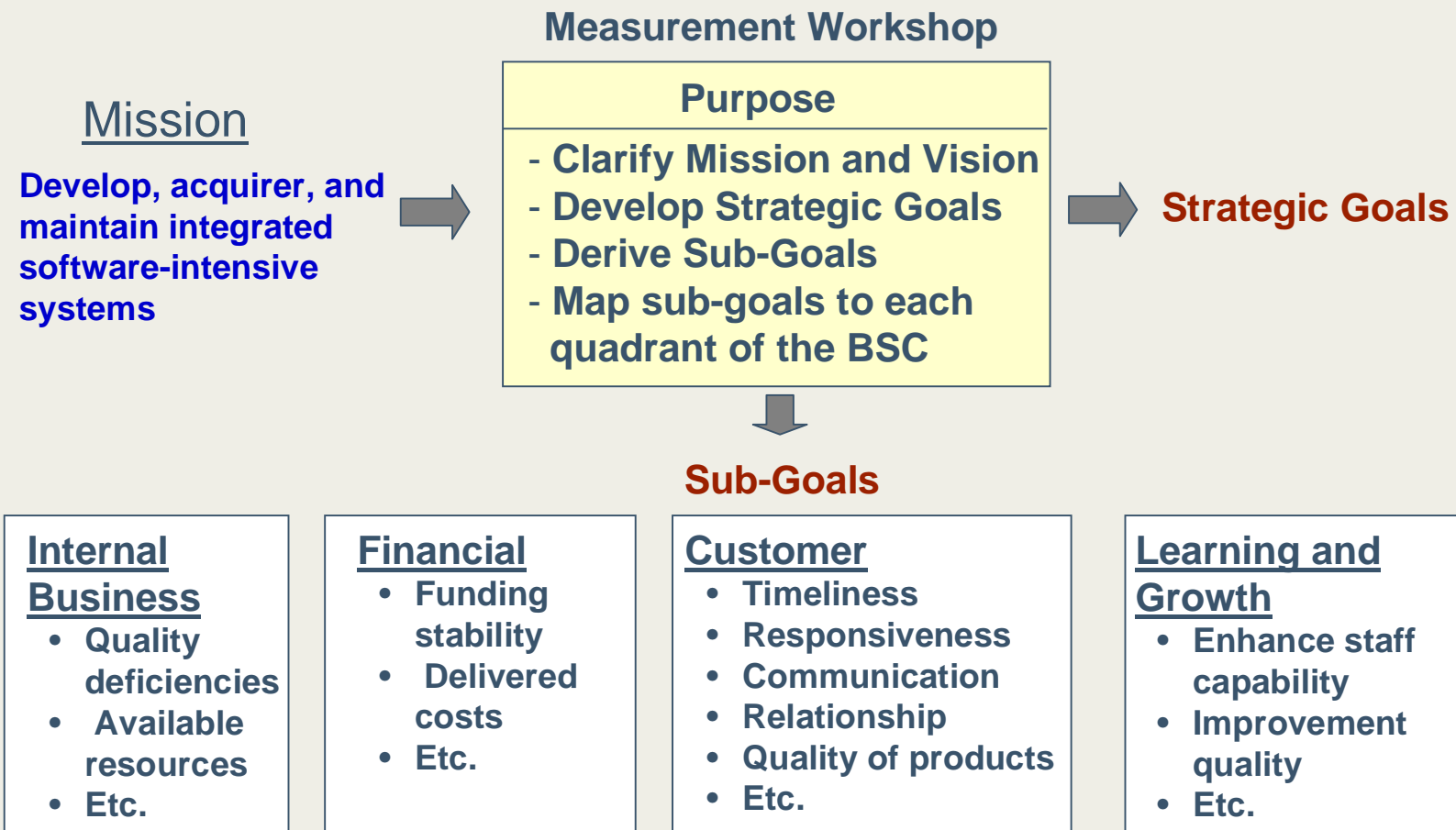
Organization

Example based on aggregate of several organizations with similar characteristics

- Government agency consisting of 300 management, administrative, and technical personnel
- Development, maintenance and enhancement of system components of fielded systems, and acquisition



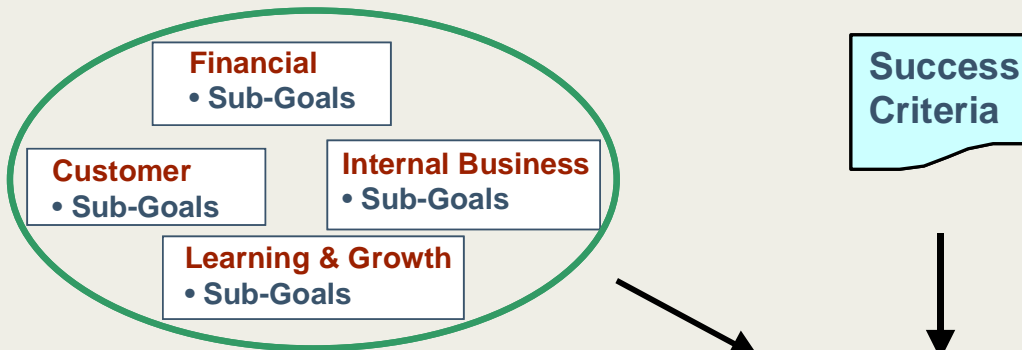
Use of Methodology - Example





Success Criteria

Balanced Scorecard



BSC Quadrant

	Strategic Sub-Goals	Success Criteria
Financial		
Internal Business Process		
Learning and Growth		
Customer		



Typical Questions Related to Sub-Goals

Customers' Viewpoint

- What is important to our customer? What are the customers' "hot buttons"?
- How do our customers evaluate timeliness?
- What does the customer consider a quality product? Are there any standards or goals currently set by the customer?
- How and what do our customers currently evaluate our organization?
- Etc.



Initial Measurement Areas

Customer

Customer satisfaction with delivered product
Compliance with customer requirements
On time delivery

Financial

Funding stability
Trend in Expenses

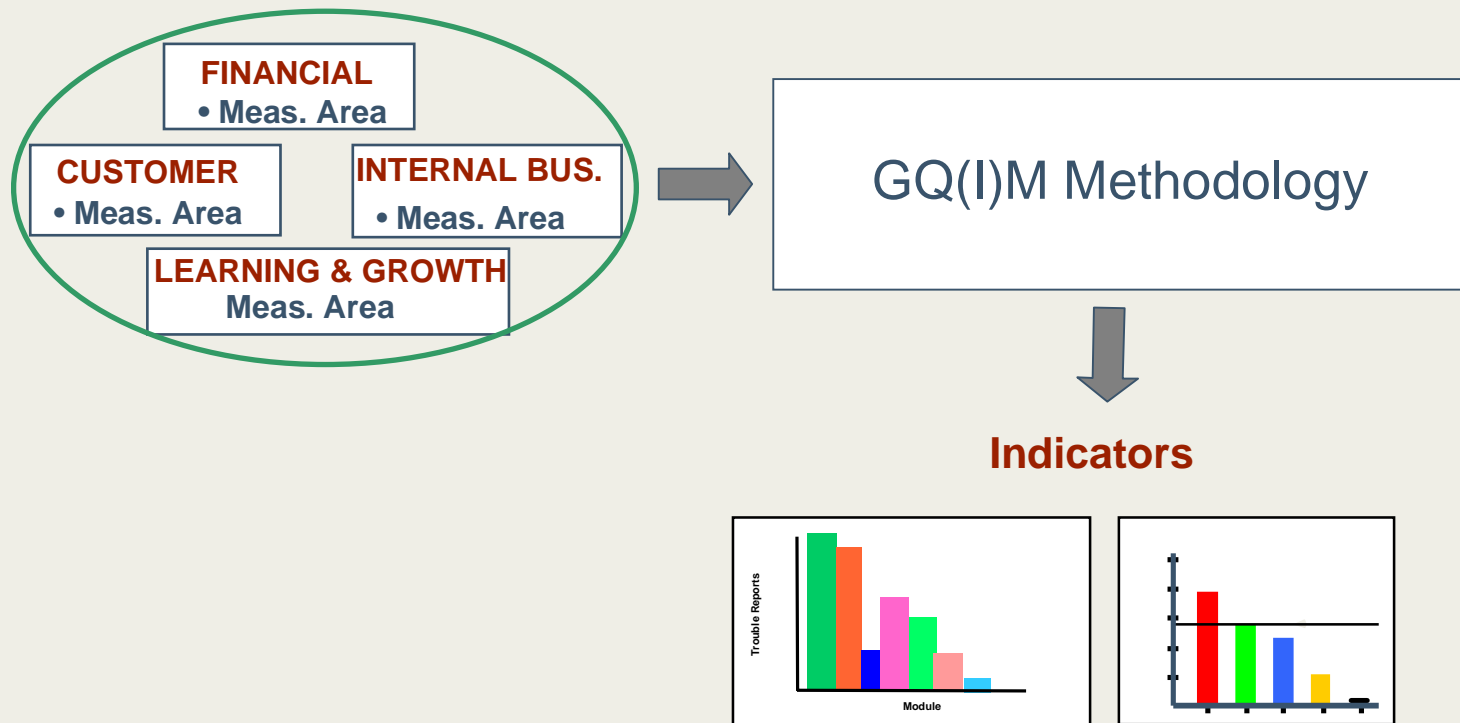
Internal Business

Availability and capability of
resources (staff)
Status of open deficiencies in
delivered projects
Timeliness of projects completion

Innovation & Learning

CMM level
Trend in employee satisfaction
Meeting functional requirements

Measurement Areas to Indicators





Internal Business

Status of Open Deficiencies in Delivered Projects

Severity Levels	Number of Deficiencies That Have Been Open x Days				Totals
	$x < 30$	$30 < x \leq 60$	$60 < x \leq 90$	$x > 90$	
Severity 1	2	1			3
Severity 2	3	1	1		5
Severity 3	3	2	1	1	7
Severity 4	4	3	3	2	12
Severity 5	8	6	3	3	20
Totals	20	13	8	6	47



Internal Business

Availability and Capability of Resources (Staff)

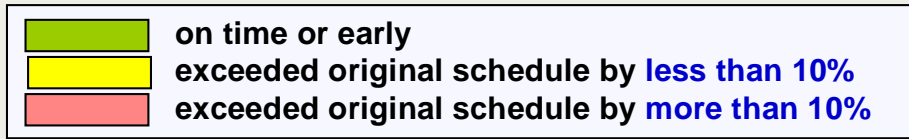
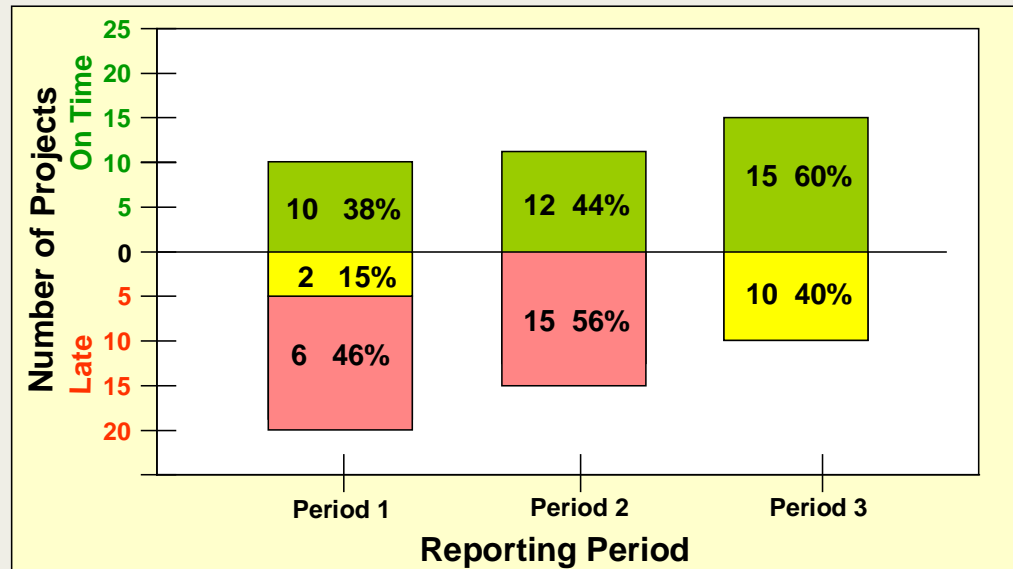
			FY 99		FY 00		FY 01	
			#	%	#	%	#	%
E&S	GOAL	Entry Level						
	40%	Journeyman						
		High Grade						
Tech	GOAL	Entry Level						
	45%	Journeyman						
		High Grade						
Other	GOAL	Entry Level						
	15%	Journeyman						
		High Grade						



Internal Business

Timeliness of Project Completion

Completed Projects in Reporting Period

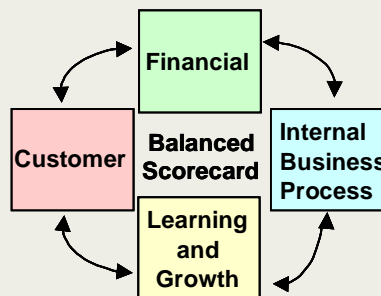


Summary of Initial Results

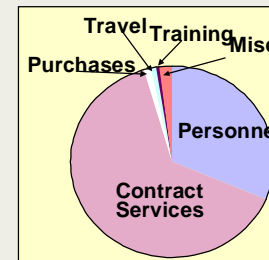
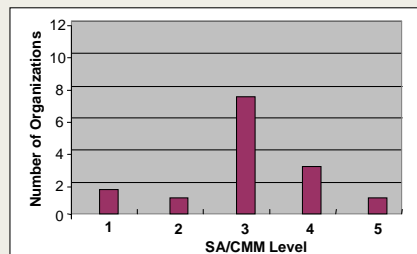
- Satisfied with delivered Product
- Compliant with requirements
- On-time delivery

Compliance with customer requirements				
Total Systems	Full Compliance		Partial Compliance	
	#	%	#	%

- Funding stability
- Trend in Expenses



- Trend in employee satisfaction
- Meeting functional requirements
- CMM Level



- Avail. & capability of staff
- Status of open deficiencies
- Timeliness of project completion

Severity Levels	Number of Deficiencies That Have Been Open x Days				Totals
	x < 30	30 < x <= 60	60 < x <= 90	x > 90	
Severity 1	2	1			3
Severity 2	3	1	1		5
Severity 3	3	2	1	1	7
Severity 4	4	3	3	2	12
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Totals	20	13	8	6	47



Indicator Documentation

Documents the why,
what, who, when,
where, and how

INDICATOR TEMPLATE

Measurement Goal # _____:

Objective _____

Questions _____

Visual Display

Bar Color	Approximate Value
Green	80
Green	60
Green	50
Red	30
Black	10

Input(s)

Data Elements _____

Responsibility _____

for Reporting _____

Form(s) _____

Algorithm _____

Assumptions _____

Interpretation _____

X-reference _____

Probing Questions _____

Evolution _____



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Summary

The approach, using the BSC and GQ(I)M, provides a systematic way to obtain indicators and measures that reflect the health and performance of the organization.

The approach uses an organization's vision and mission statements to identify and clarify strategic goals and sub-goals.

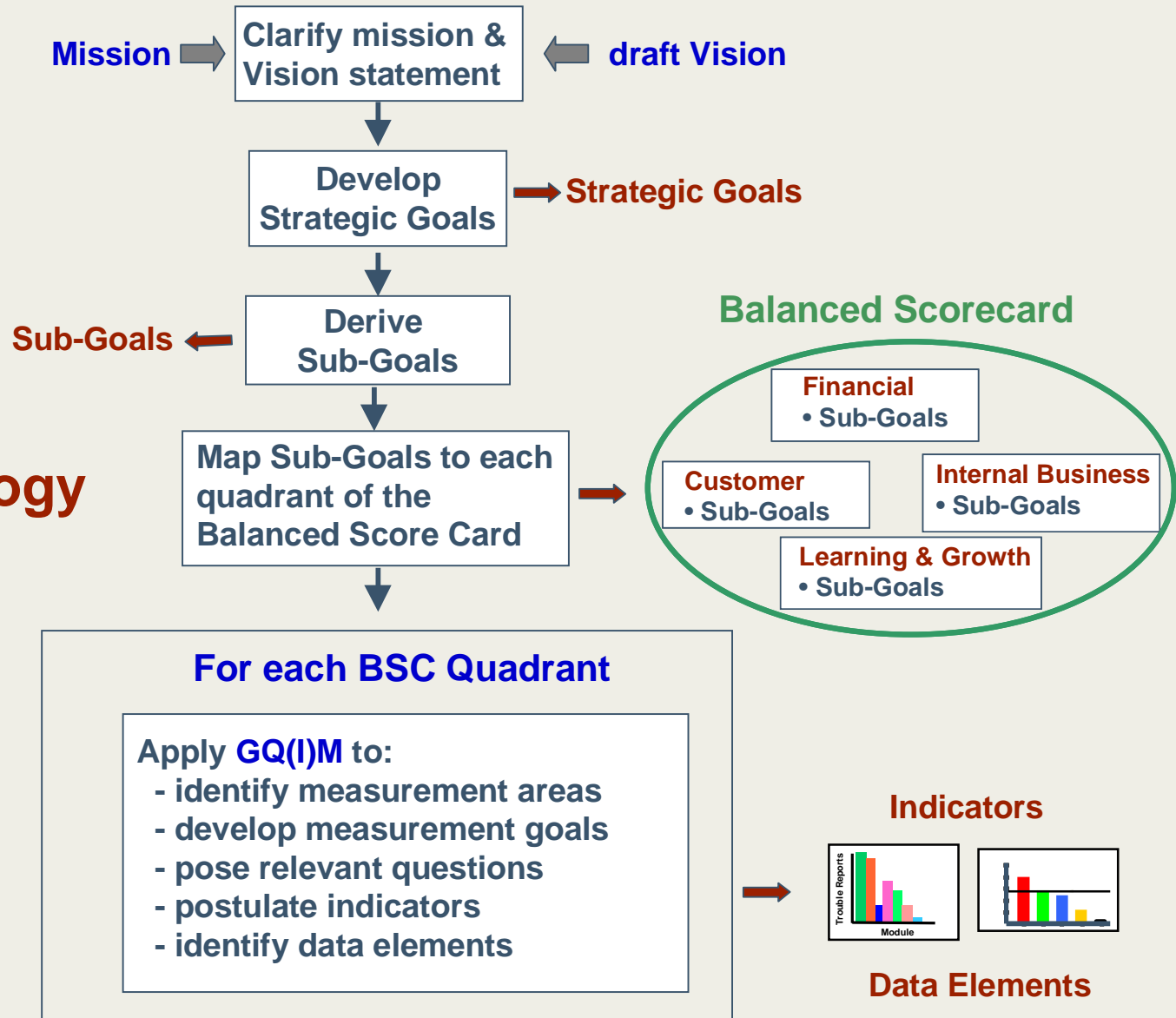
The sub-goals are mapped to the balanced scorecard.

The GQ(I)M methodology is then used to identify measures and indicators

Bottom Line

We tried it; It worked; Now maturing methodology

Methodology





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Back-up Material



Some Definitions

Performance Management

“The use of performance measurement information to help set agreed-upon performance goals, allocate and prioritize resources, inform managers to either confirm or change current policy or program directions to meet those goals, and report on the success in meeting those goals.”

Performance Measurement

“A process of assessing progress towards achieving predetermined goals, including information on [efficiency, quality, and] outcomes....”

Source: “Serving the American Public: Best practices in performance measurement,” June 1997.