

Goals Workshop State the Goals

Month Day, Year

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DM21-0588

Agenda

Workshop Objectives

Goal Driven Measurement Overview

Workshop Activities

- **Session 0: Introduction 30 min**
- Session 1 : Set Goals and SubGoals Workshop (2.5 hours)
- Session 2 : Success Criteria Workshop (1.5 hours)
- Session 3 : Goal Indicators Workshop (1.5 hours)

- Wrap Up, Debrief, and Next Steps

We request continuity and active participation from the workshop participants

Why GQ(I)M

“When you can measure what you are speaking about, and express it in numbers, you know something about it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely, in your thoughts advanced to the stage of science.”

-William Thompson, Lord Kelvin

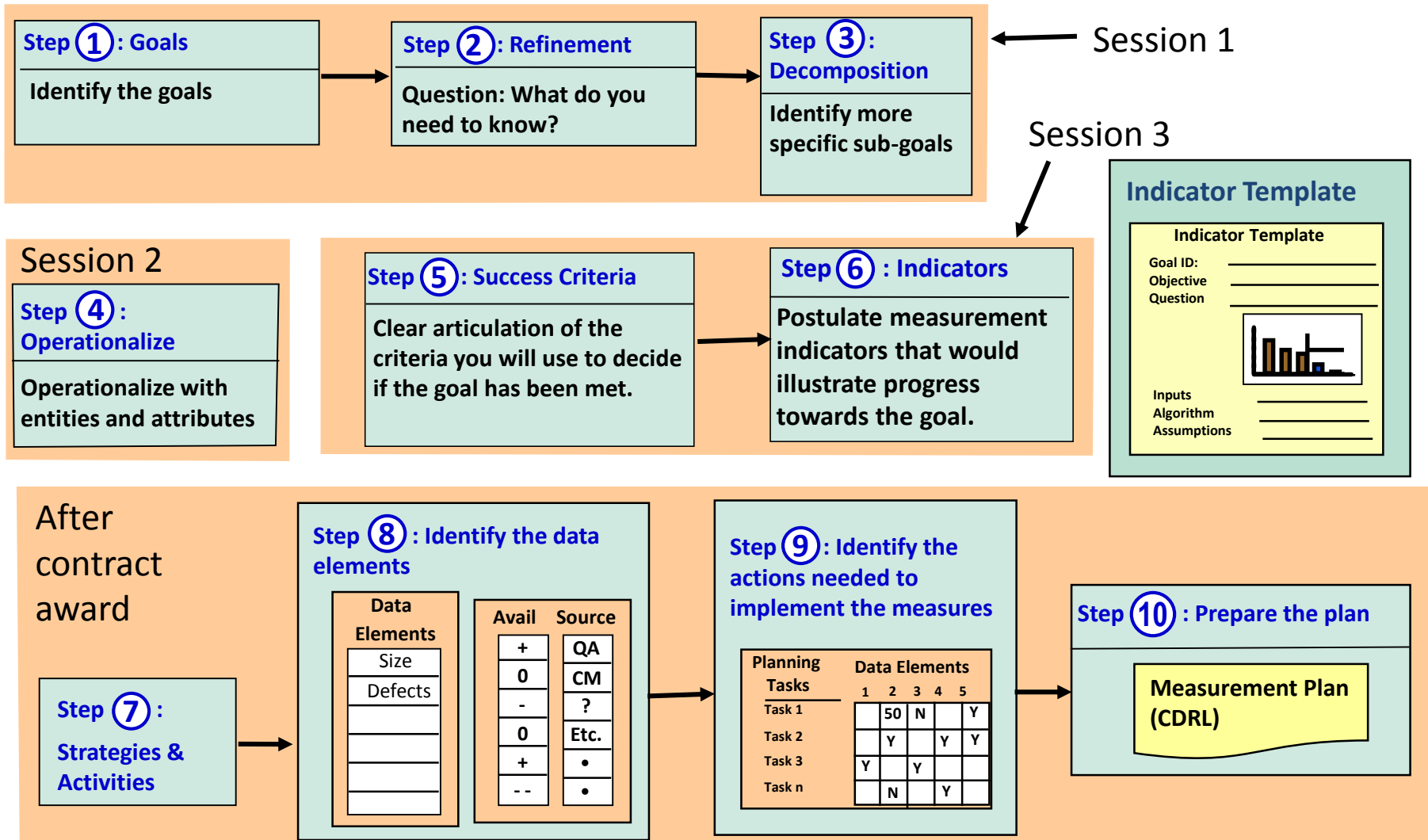
“The single biggest problem in communication is the illusion that it has taken place.” - *George Bernard Shaw*

The Goal Question, Indicator, Metric approach helps close the communication gaps.

Step 1

Identify the Goals

Workshop Steps



Step 1 State Your Goals

A goal is an end toward which you direct specific effort.

A goal is a **specific and measurable accomplishment** to be achieved within a **specified time** and under **specific cost constraints**.

Goals reflect what you hope to achieve. They are broad, measurable statements that describe the long-term impacts of what you hope to accomplish. Goals address some value to the organization.

Mission Goals typically represent

- an end state similar to a vision statement
- an ongoing state that is visible to the organization, users, and customers

Mission Goals vs Project Objectives

Organizations and projects **establish quantitative quality and process performance objectives** based on the organization's business objectives and the needs of project customers and end users.

Organizations and projects **select subprocesses aligned** with the quality and process performance objectives and identify associated measures that support subprocess performance analysis.

Process performance baselines and models are created and used to quantitatively manage the selected subprocesses.

Projects are managed using statistical and other quantitative techniques (including process performance baselines and models) to achieve quality and process performance objectives.

Organizational Mission Goals

organization mission goal

Senior management develops objectives designed to ensure an organization's **success**. These goals align with the organizations mission and focus on outcomes for the organization, customers, and users.

quantitative objective

Desired **target value** expressed using quantitative measures.



Project Objectives

Quality, security, and **process-performance objectives**

Quantitative objectives and requirements for product quality, service quality, process performance, and security.

process improvement objectives

A set of target characteristics established to guide the effort to improve an existing process in a **specific, measurable** way either in terms of resultant product or service characteristics (e.g., quality, product performance, conformance to standards) or in the way in which the process is executed (e.g., elimination of redundant process steps, combination of process steps, improvement of cycle time). (See also “organization’s business objectives” and “quantitative objective.”)

Role of Senior Organizational and Project Leaders

Senior leaders within the organization have unique perspective on business goals and stakeholder needs

This perspective is vital to establishing the [hierarchy of goals](#) and objectives the organization should pursue

Many organizations have fallen in the trap of delegating the measurement of business goals and project objectives to lower level individuals who do not have the necessary organizational perspective

Without key senior leaders' involvement, objectives will be misaligned, locally optimized, and focused on the wrong activities

Senior leaders must lead by example in terms of their behavior as well as reward and recognize performance of others

Measurement is driven by the [goal hierarchy](#) and [information needs at key decision points](#).

Example Vision Statement Templates

By < some date > , our organization will have achieved < a value > of < some attribute > *with* < a percentage > *of confidence.*

By < some date > , < a percentage > of < something > in our organization will have achieved < some status > *with* < a percentage > *of confidence.*

Percentage of confidence is optional information but should be included if the quantitative information is estimated.

Exercise Vision Statements

As a group, use brainstorm to describe organizational vision

By <date>	Will achieve <attribute>	With <percentage> of confidence

Barriers to the Vision Statements

What are the barriers to each of the vision statements?

How might your organization stumble in pursuing the vision statements?

What are the key internal and external threats to achieving the vision statements?

What are the key **environmental**, **people**, **process**, **technology**, or **tool** issues that could impede progress towards the vision statements?



Exercise

List Barriers to the vision

Vision	barrier

Mission Goals

What are the key ways that the barriers could be defeated?

What are the key ways that opportunities may be capitalized?

How can the organizational strengths be applied to reduce the barriers?

How can the organizational weaknesses be minimized towards reducing or eliminating barriers?

How do we modify the traditional goal statement to include a notion that we do not want to sub-optimize by sacrificing other measures?

Do these business goals cover the stakeholder space of your organization?

Define SMART Goals

Well-defined goals have five common characteristics.
They are:

Specific Clear and concise statement of what will be accomplished

Measurable Concrete, observable statement of what will be different once the goal is achieved

Attainable Feasible in terms of time, cost, and the degree of “stretch” the goal presents

Relevant Tied to a specific element of an organization’s goals
(why does it matter?)

Time-bound Include a specific date for achievement

Exercise Mission Goals

As a group, use brainstorm to describe 4 or 5 key vision statements. Categories include security, cost/schedule responsiveness, quality, security, safety, reliability

Category	Goal

Common Metric Program Goals

Goal	Motivation for Choosing the Goal
1) Improve the development process	<ul style="list-style-type: none">•Establish conformance to standards•Improve responsiveness•Increase staff efficiency
2) Improve software estimation	<ul style="list-style-type: none">•Establish reasonable expectations•Avoid cost overruns•Minimize unnecessary churn•Minimize risks
3) Improve project tracking	<ul style="list-style-type: none">•Predict need for corrective action•Ensure conformance to standards
4) Minimize schedule	<ul style="list-style-type: none">•Deliver products on a predictable schedule•Increase throughput of new products or features
5) Minimize development cost	<ul style="list-style-type: none">•Deliver within budget constraints•Maximize profit
6) Improve software quality	<ul style="list-style-type: none">•Meet product requirements•Reduce delivered vulnerabilities•Reduce time spent on rework
7) Improve software performance	<ul style="list-style-type: none">•Meet performance goals•Minimize hardware performance requirements
8) Improve productivity	Reduce or stabilize staffing levels

Step 2

What do you want to learn? Ask Clarifying Questions

Example – Clarification Questions

Goal: Improve the quality of delivered products.

Some of the possible questions to better understand the goal:

- What is the definition of quality?
- What problems result from quality?
- What are customer complaints? (performance, features, defects)
- How do the developers/PMO/and customer perceive quality?
- What quality of the process need improvement?
- What changes would make a difference?
- How would we recognize improvement?
- What is the time frame for improvement?

Example Answers

What is the PMO's definition of quality software?

- does what it is supposed to do
- doesn't do what it shouldn't
- people who use it, like it

How does the customer define quality?

- defect-free products (software, documentation, etc.)
- all requirements implemented

What are the problems with the current completed projects?

- software => very low quality, too many defects

What are our customers' complaints?

- buggy software; too many defects
- key enhancements not delivered

What quality aspects of the software need improving?

- reliability, correctness => fewer defects

Time frame?

- within one year

Exercise

Start with one of the mission-level goals identified in Step 1.

For each of the high level goals, at a minimum,

- **Identify** the persons or groups whose concerns will be addressed. (for example, manager, developer, customer, etc.) This defines the **perspective** and the roles that you assume in Tasks 3 through 6.
- **Understand** the **purpose** of the goal.

In addition record 3-5 questions that help further clarify the goal.

Record the results.

Step 2 – More probing questions

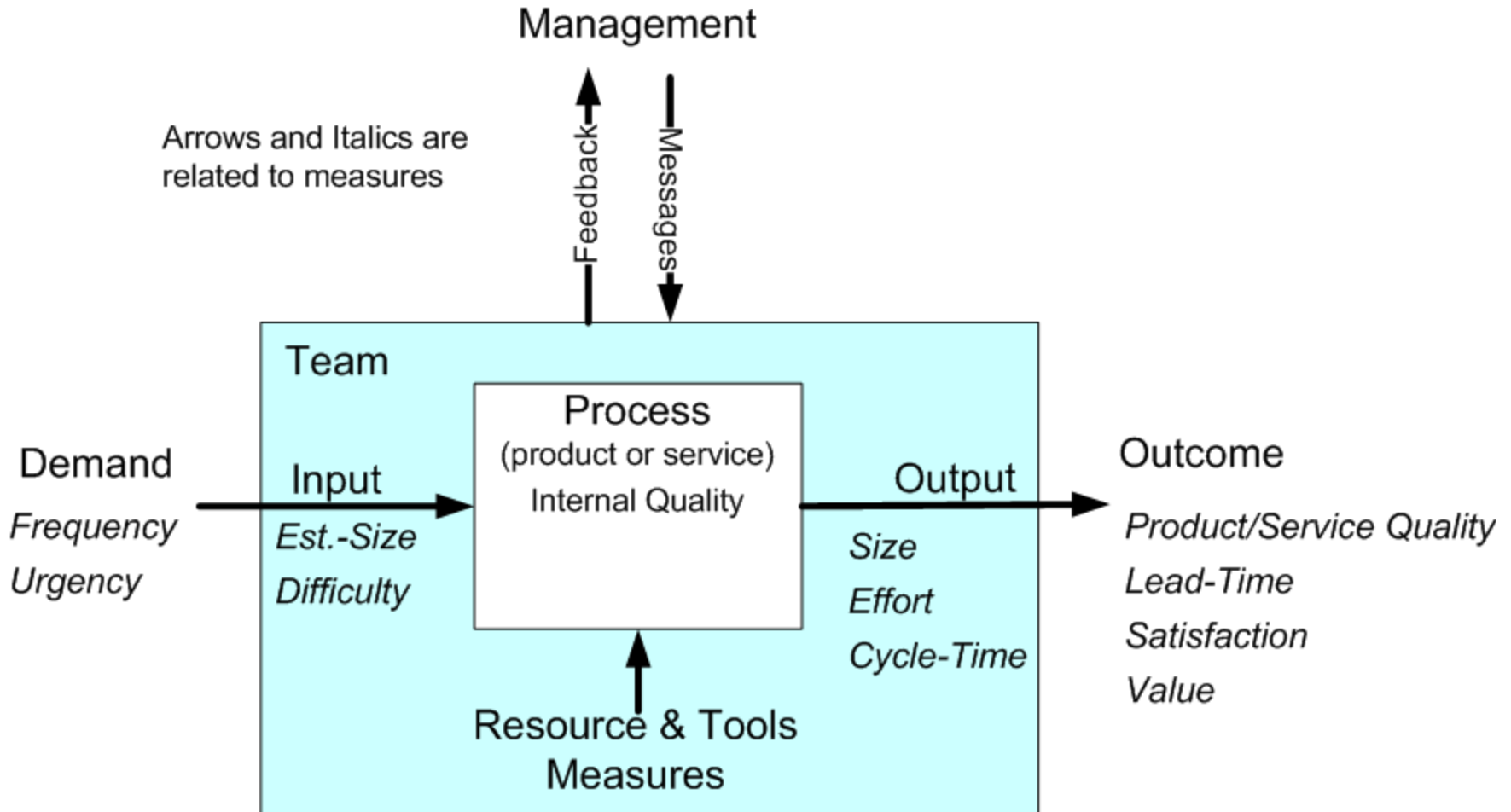
Describe of the relevant processes that you, in your role, manage or affect. Consider what you want to achieve and the issues you will have to address to achieve it.

Record the inputs, outputs, process steps, interim artifacts, and responsible roles.

Use the process to identify key entities and attributes to achieve the goals.

Use this information to ask additional clarifying questions.

Instrument a Process



Identify Entities (what could we measure?)

List the important things (entities) in your processes that you, in your role, can manage or influence. Make sure that you address the four kinds of process entities below:

1. Inputs and resources
2. Products and by-products
3. Internal artifacts
4. Activities and flow paths

You may also want to list some of the environmental entities outside your processes that affect your work.

Ask questions about the Entities

For each entity, list questions that, if answered, would help you, in your role, plan and manage progress toward your goals.

For example:

- How big is it?
- How much is there?
- How many components?
- How fast is it?
- How long does it take?
- How much does it cost?

Worksheet, Entities of Interest

Entity		Questions
inputs		
activities		
Internal parts		
products		

Ask additional Clarification Questions

Look at your process as a whole to see if anything is missed.

Ask questions such as:

Is the process stable?

What limits our capability?

What determines success?

What do our customers want?

What might signal early warnings?

Where is backlog occurring?

What could go wrong?

How is it performing now?

What determines quality?

What things can we control?

What limits our performance?

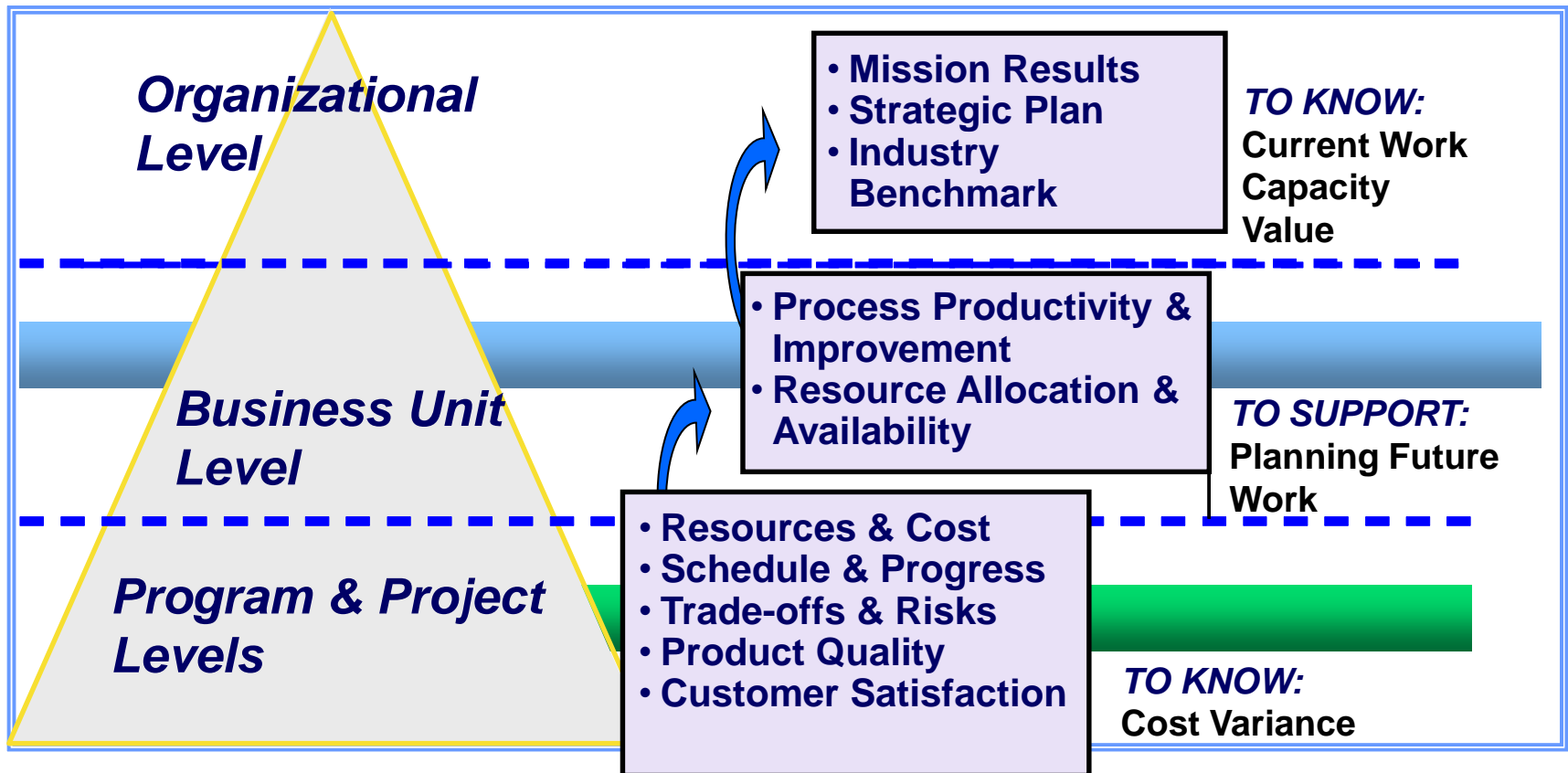
How big is our backlog?

How will we know?

Step 3

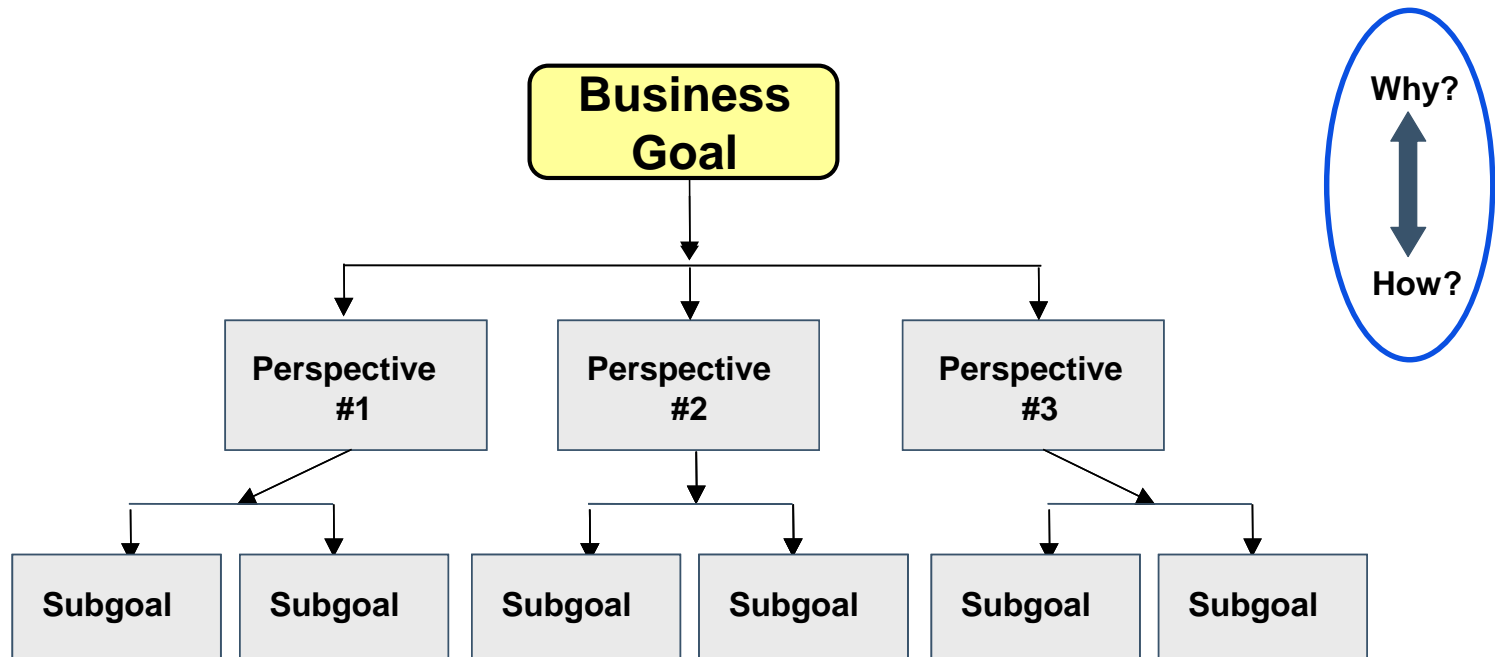
Identify Specific Sub-goals Perspective, Process, or Enabling

Different Roles – Different Goals- Different Needs



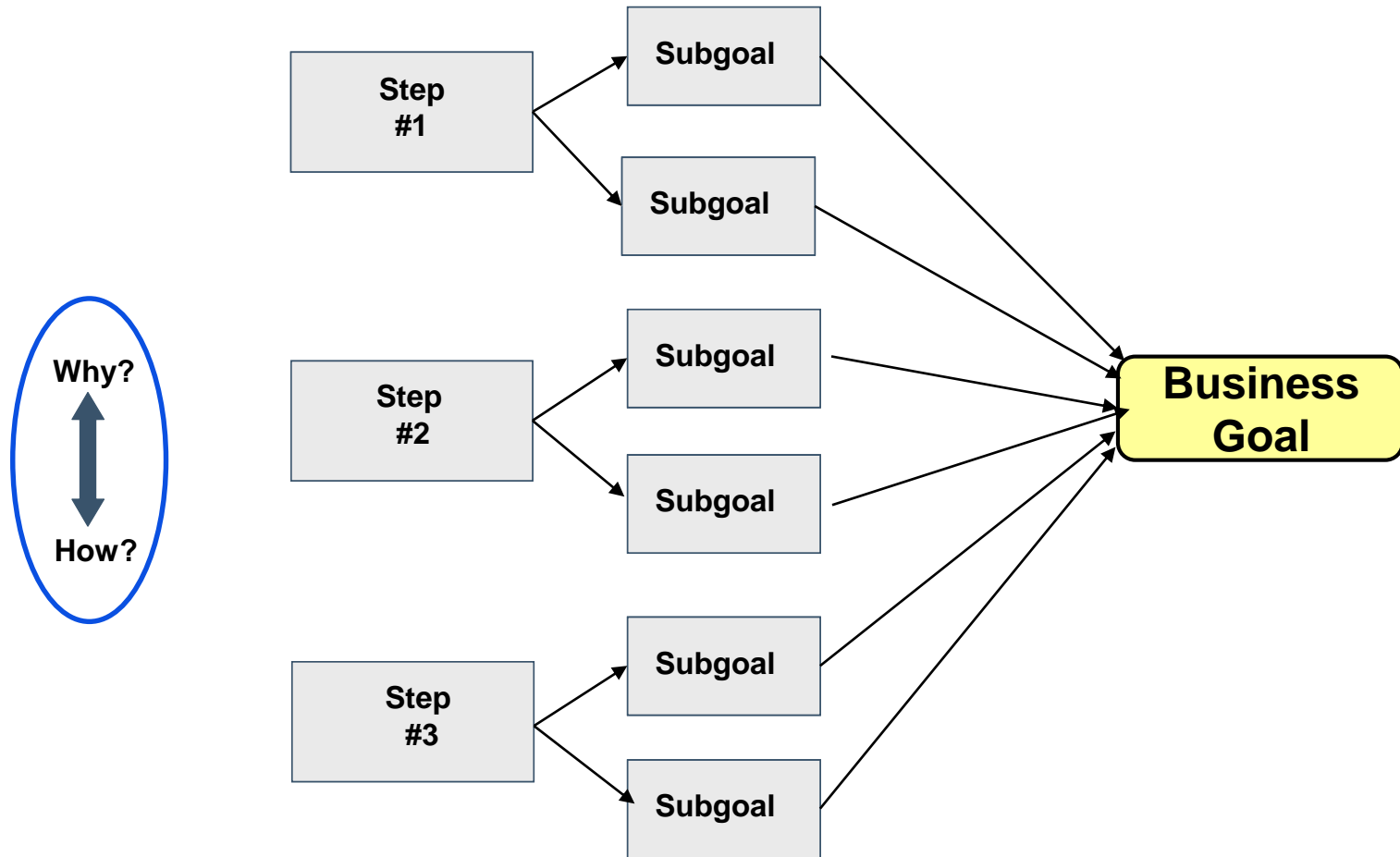
Subdividing the Goal by Perspective

Now that we have a business goal, what do we do with it?



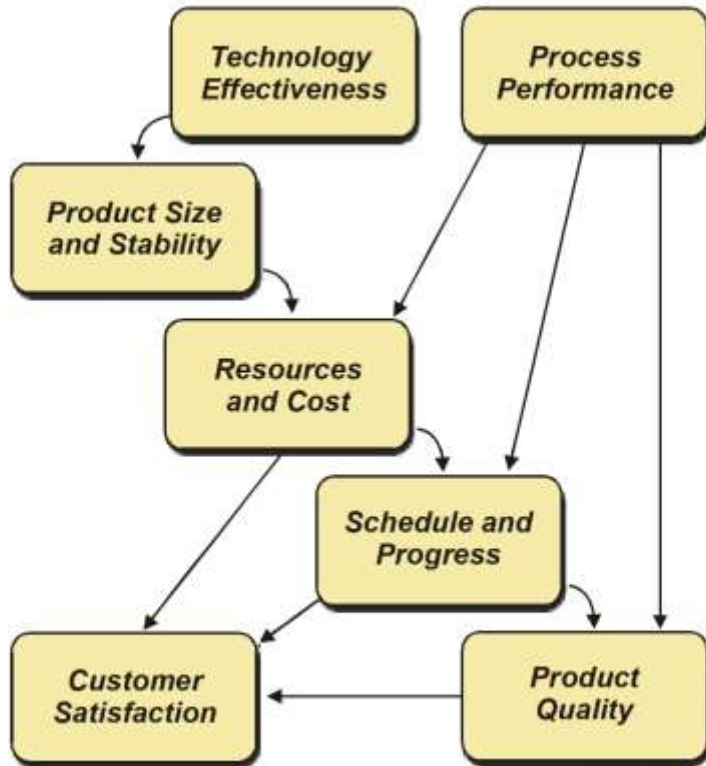
From each perspective, what can be done to support the business goal?

Subdividing the Goal by Process



For each process step, what can be done to support the business goal?

Goal and Subgoal Relationships



Supporting goal relationships can often be found in the process.

Worksheet for 2

Perspective:

as a _____

Goal:

I want to _____

Purpose:

in order to _____

Perspective Decomposition Worksheet

Goal: Use one of the goals and use your functional leader's perspective

Perspective: _____

Subgoal 1 _____

Subgoal 2 _____

Subgoal 3 _____

Subgoal 4 _____

Exercise Instructions

1. Break up into your teams.
2. From your perspective, select high value items from the process decomposition and complete the perspective worksheet.
3. Brainstorm additional subgoals (things you can do) to support the higher level goals.
4. Merge similar subgoals and sort them into a rough priority order
5. Prepare a summary chart to brief your results to the other teams
6. Use flip charts, markers, post-its, transparencies, etc. to generate, organize, and to present your results.

Goal Decomposition Matrix - 1

Process Step	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
	X			X			
		X					
			X				
			X				
							X
						X	
	X			X			
		X					

The ***first pass*** of this matrix is to identify the column headings, e.g. the Mission and Organizational

Goal Decomposition Matrix - 2

Process Step	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
						X	
							X
						X	
	X			X			
		X					

The ***second pass*** of this matrix is to identify the list of key processes, sub-processes or activities performed within the projects. Ideally, this list should not be longer than 20-40 items.

Goal Decomposition Matrix - 3

Process Step	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
	X						
		X					
			X				
			X				
	X						
		X					

The ***third pass*** of this matrix is to go column by column and ask yourself “What are the top 2-3 processes, sub-processes or activities that most contribute to meeting the Mission Goal”. These cells get marked with an “x”.

Process Decomposition Matrix - 4

Process Step	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
	1						
		X					
			3				
			X				
	X						
		2					

The ***fourth pass*** of this matrix is to identify the critical subset of the “x’s” important enough to warrant developing a project level objective statement.

These “x’s” then become numbers corresponding to a numbered list of project objective statements.

Goal Decomposition Matrix - 5

Process Step	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
	1*						
	X						
		2*					

The ***fifth pass*** of this matrix is to identify the subset of the numbered project objective statements that possess sufficient uncertainty or variation to warrant statistical management. These numbered cells receive an “*”. Methods applied can include process performance baselines or models.

Group Exercise : Goal Decomposition Matrix (35 minutes)

Continue within your group. The volunteer will lead the group through the first four passes of the Goal Decomposition Matrix.

The volunteer leading the discussion will need to identify the list of processes/subprocesses to use in the matrix.

Document the Decomposition Matrix on a flip pad or notebook, for collection at the end of the tutorial.

Identify key entities and ask additional clarifying questions.

Record the results in an Entities of Interest worksheet.

In later steps will use these to refine process specific goals.