

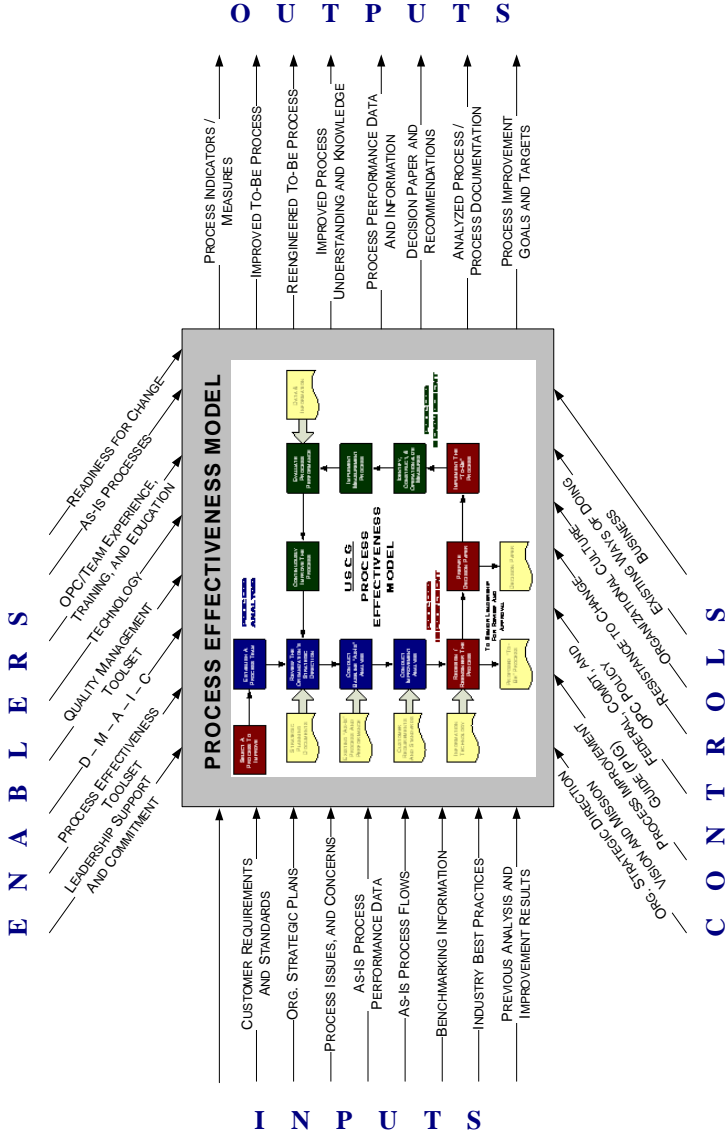
DEPARTMENT OF HOMELAND SECURITY  
UNITED STATES COAST GUARD

**S**emper **P**aratus



**Process  
Analysis**

# PROCESS EFFECTIVENESS CONTEXT DIAGRAM



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# PROCESS ANALYSIS

## CHECKLIST

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### 1.0 ESTABLISH A PROCESS ANALYSIS TEAM

- Identify the Process Owner
- Identify/Select Process Team Members
- Develop a Team Charter
- Administer the Team

### 2.0 REVIEW ORGANIZATION STRATEGIC DIRECTION

- Review Vision and Mission
- Review Goals and Objectives
- Review Critical Success Factors
- Review Strengths and Weaknesses
- Review Other Improvement Initiatives
- Review Planning Assumptions
- Review Measures and Performance

### 3.0 CONDUCT AS-IS ANALYSIS

- Set Process Boundaries
- Conduct SIPOC Analysis
- Identify Functional Requirements
- Flowchart the As-Is Process
- Identify and Label Indicators
- Collect Data and Evaluate Performance

### 4.0 CONDUCT IMPROVEMENT ANALYSIS

- Identify Key Stakeholders and Customers
- Identify Key Requirements
- Identify Standards and Performance Gaps
- Analyze Feasibility, Value, and Barriers
- Consider Change Issues/Recommendations
- Document Analysis/Present to Leadership

## PROCESS ANALYSIS

**DESCRIPTION:** The process by which organizations improve, document, investigate, and learn about their processes.

**USE THIS TOOL:** As needed, to document and gain greater understanding of processes, or as a prelude to process improvement and/or measurement.

**DEGREE OF DIFFICULTY:** *Beginner to Practitioner Level*

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## INTRODUCTION

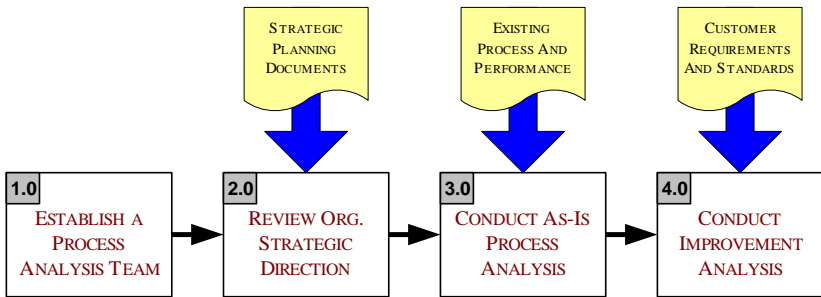
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This booklet provides guidance on process analysis. Often organizations just want to document and analyze their processes, and this undoubtedly adds value in and of itself. Understanding what you are doing, and how you are doing it, can provide a significant benefit to managers and workers alike. A documented process can be a valuable tool for either training new employees or showing existing employees how they contribute to the organization's performance. Below is a list of the primary steps for analyzing processes.

- Step 1.0** Establish a Process Analysis Team. Covers establishing a process analysis team – identifying the process owner, selecting team members, developing a charter, and administering the team.
- Step 2.0** Review Organization Strategic Direction. Creates clarity and a single-mindedness around the organization's purpose, vision, mission, and improvement priorities.
- Step 3.0** Conduct As-Is Process Analysis. The heart of this booklet, provides guidance on analyzing the current As-Is process. Covers setting process boundaries, analyzing inputs and outputs, and flowcharting.
- Step 4.0** Conduct Improvement Analysis. Helps the team to identify improvement opportunities, document their analysis, and make preliminary recommendations to senior leaders.

**Note:** This booklet is the first part of a series on process effectiveness. The three booklets are designed to be used as standalone interventions, or in sequence to improve overall performance. It is important to note, however, that the three booklets do overlap to some degree and that certain cross-booklet steps must be performed no matter which activity is undertaken.

# PROCESS STEPS

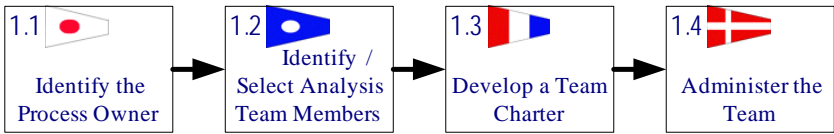


## Process Analysis Model

### **1.0 ESTABLISH A PROCESS ANALYSIS TEAM**

This step provides guidance to identify the process owner, select team members, and develop a team charter. Few individuals, working in isolation, can effectively improve a process. Processes by their very nature imply a coordination of effort among different groups – individuals, functions, or organizations. Teams, made up of a process owner, users of the process, and other key stakeholders must be intimately involved at every step of the process, from planning to post-implementation measurement, to achieve complete success. This coordinated approach makes sense since these are the people most familiar with the problems being examined. A team approach not only ensures higher quality improvement or redesign but increases the likelihood that senior leaders, as well as process managers and users, will accept the new or improved process and support its implementation. A detailed task checklist for this step and associated tools are provided below.

<b>D E T A I L E D   C H E C K L I S T</b>		<b>T O O L S</b>
1.1	Identify the Process Owner	Interrelationship Diagram
1.2	Identify/Select Analysis Team Members <ul style="list-style-type: none"> <li>• Consider Team Requirements</li> </ul>	Functional Matrix Diagram
1.3	Develop a Team Charter <ul style="list-style-type: none"> <li>• Establish Team Goals and Objectives</li> </ul>	Team Chartering
1.4	Administer the Team	Facilitation Skills



## Establish a Process Analysis Team



1.1

### IDENTIFY THE PROCESS OWNER

Every process must have a designated owner if it is to be managed properly. Someone must take responsibility for ensuring that it is analyzed, improved, and measured. Without owners, processes tend to flounder and stagnate. No one is communicating with stakeholders, determining expectations, and comparing those to the “voice of the process.” Consequently, no one really knows how the process is performing, only that it is performing in some way. The process owner should be:

- The one individual who is ultimately **responsible** and **accountable** for the proper working of the process;
- The immediate supervisor or manager who **has control over** the process from beginning to end.



1.2

### IDENTIFY/SELECT ANALYSIS TEAM MEMBERS

Leaders must pay close attention to team composition. The mix of multiple and complementary skills does not happen by chance. It requires a concerted effort to ensure team members possess the skills, background, and experience to be an part of the team.

Not every team member will possess all these necessary attributes, or to the same degree. Teams should balance technical and interpersonal skills, as follows.

- **Softer** skills allow teams to focus on the bigger picture and have the discipline and motivation to succeed.
- **Harder** skills provide what’s necessary to ensure the right processes are identified, developed, and implemented.

*“The secret of winning football games is working more as a team, less as individuals.*

***I play not my 11 best, but my best 11.”***


*– Knute Rockne,  
Football Coach*

For the organization, the issue of team composition goes beyond simply forming cross-functional teams. It requires selecting the *best* individuals from the *right* functions. Team membership should also include external stakeholders, where appropriate. Most specifically, teams should ensure representatives:

- Are **empowered** to act and make decisions for their functional managers;
- Have **ready access** to those managers;
- **Understand** the needs of, and are able to **enlist**, their functional counterparts;
- Are **committed and able** to remain with the team for the duration.

Selection criteria to consider include:


- Effective interpersonal/people skills;
- An open mind and a willingness to listen and learn;
- The ability to put functional priorities aside;
- Ability to think strategically – long-term and short;
- Working knowledge of the process;
- A willingness to collaborate and compromise;
- Experience working as a process manager or user;
- Ability to think sequentially, in an organized fashion;
- Creative as well as logical thinking.

 Refer to the Process Effectiveness Toolset (CD): ***Functional Matrix Diagram and Template***

– Assess the skill sets of each potential team member; select a team with the best mix.

## 1.3

### DEVELOP A TEAM CHARTER

 Refer to the Stakeholder Effectiveness toolset (CD): ***Team Charter Example, Questionnaire, and Template***

Process analysis team mission and goals are different from the organization's mission and goals. Senior leader direction can help the team get started by framing what the organization expects of it.

The teams, however, must invest a tremendous amount of energy in shaping and agreeing on a purpose that meets their needs and is clearly understood by all. This purpose must be measurable and attainable. The document that fulfills this requirement is the *team charter*. With relation to the team, the team charter:

### DESCRIBES

*“Teams do not become teams just because we call them teams or send them to team-building workshops.”*

– Katzenbach and Smith

- Purpose, mission, scope, and authority
- Goals and objectives
- Leadership and membership
- External relationships with other teams and stakeholders
- Training, technology, and other resource requirements
- Administrative procedures (e.g., minutes)
- Rules of conduct
- Reporting responsibilities

### IDENTIFIES

- The targeted process if one has been identified
- The process owner
- Suspected process problems
- Improvement constraints
- Other potential impacts for the team

The charter provides structural authority that helps ensure process improvement and accomplishment of team objectives, as well as a vehicle to communicate and develop a common understanding and support for its objectives. It also serves as a notice to the rest of the organization that appropriate assistance to the team is expected.

## **Process Teams Provide**

Teams are catalysts for the organization’s process analysis, improvement, and measurement efforts. They exercise this crucial function by providing:

- 🕒 The advocacy, experience, dedicated time, and focus needed to identify, develop, and improve processes;
- 🕒 A conduit to senior leaders on the status of process improvement and its implications;
- 🕒 A mechanism for transferring process improvement products and learning to the organization;
- 🕒 A means of monitoring improvement progress and alerting the organization to conditions impacting its success;
- 🕒 The working-level focus needed to identify and evaluate shortfalls and new opportunities for process improvement.

## 1.4

### ADMINISTER THE TEAM



Refer to the  
CG PIG:

#### **Facilitation Skills**







Effectively administering the team assists in bringing to process development the required practicality, organization, discipline, and motivation necessary for success. Individuals should be engaged to manage team roles, such as, recorders and facilitators of team activities. Attention to meeting management basics also should not be overlooked.

### **Team Leader and Facilitator Responsibilities**

Team leaders and facilitators play key roles in process analysis, improvement, and measurement. Although each has a distinct role, they work together to achieve meeting and team objectives, make the best use of the team's time, ensure continuity of purpose and method, and maximize team effectiveness and efficiency. Their relationship evolves over time. As work progresses and the team matures, the team leader's meeting management involvement increases, while the facilitator's decreases. Teams function best when each member understands both the performance improvement process and the interdependent roles each team member performs.

### **Senior Leader Responsibilities**

Leaders must keep teams apprised of changes affecting policy, resources, scheduling, membership, and other environmental issues likely to impact their activities. Teams derive energy and meaning from their leaders. Leaders must *lead by example* and remain both positive and realistic. What they say and do sends signals that convey priority and care. Examples include, participating in team meetings, responding promptly to requests, avoiding "micro-management," and devoting time to listen and review. Leaders should ensure process development teams:

-  Support the organization's strategic direction;
-  Maintain a customer focus;
-  Have the resources, information, and skills needed to succeed;
-  Are provided expectations, objectives, and milestones;
-  Coordinate their activities with related teams;
-  Effectively communicate problems beyond their control.

*“The intelligence of the team exceeds the intelligence of the individuals on the team.”*

– Peter Senge

Good team meeting norms should ensure:

- Members have the opportunity to influence agendas;
- Read-ahead packages are complete and timely;
- Important topics are discussed and resolved first;
- Minutes are promptly distributed;
- Leaders are apprised of issues and accomplishments;
- Members understand next steps.

## **2.0 REVIEW ORGANIZATION STRATEGIC DIRECTION**

The purpose of this step is to create clarity and a single-mindedness around the organization’s purpose, and help the team understand its role and connection to the organization’s vision, mission, and improvement priorities. The organization’s strategic plan lends meaning to the process analysis effort. During this step the team reviews the organization’s strategic direction, goals, and objectives; guiding principles; strengths and weaknesses; assumptions; values; performance measures; and overall performance. This step prepares the team to analyze and improve the targeted process. A detailed task checklist and associated tools are provided below.

**Note:** these steps are not covered in detail in this booklet; refer to the Strategic Planning Booklet.

<b>D E T A I L E D C H E C K L I S T</b>		<b>T O O L S</b>
2.1	Review Vision and Mission	Facilitation skills
2.2	Review Goals and Objectives	Facilitation skills
2.3	Review Critical Success Factors	Facilitation skills
2.4	Review Strengths and Weaknesses	Facilitation skills
2.5	Review Other Improvement Initiatives	Facilitation skills
2.6	Review Planning Assumptions	Facilitation skills
2.7	Review Measures and Performance	Facilitation skills



## Review Organization Strategic Direction

### WHY IT'S IMPORTANT

The first step in process analysis is to review the organization's strategic direction – its vision and mission, goals and objectives, critical success factors, strengths and weaknesses, and other high-level documents, plans, and statements that indicate where the organization is headed and why. This helps the team understand where the organization is headed in order to steer the process in the appropriate direction. Reviewing the organization strategic direction:

- Ensures a **continuity of purpose** throughout the analysis process – everyone on the team knows where it is heading and why;
- Enables the team to **prioritize process improvement options** based on organizational priorities;
- Helps team members to **put aside personal and functional imperatives** in lieu of process imperatives;
- Creates a **big picture focus** as team members understand how their efforts fit in with everything else the organization is doing;
- Provides an ice-breaker and gets the team **thinking strategically or long-term**, rather than tactically or short-term;
- Makes it easier for the team to identify **meaningful and effective improvements** that truly align with what leaders think is important.

## WHEN A STRATEGIC PLAN DOESN'T EXIST

If the organization does not have a strategic or forward-looking plan, then work with the leaders to develop a “sense of direction” for the organization, before the team gets to work. This may require extra time on your part, but your role is to assist leaders in setting the team up for success. If the organization is willing to work with you to define direction and expectations, then by all means push ahead. Be prepared to reduce the opportunity for setbacks by increasing the frequency of status/progress checks with the leaders.

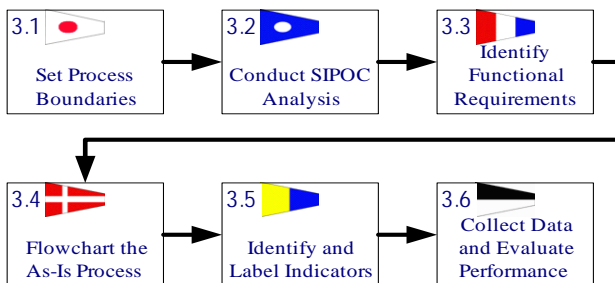
### **3.0 CONDUCT AS-IS PROCESS ANALYSIS**

The purpose of an As-Is process analysis is to:

- Describe the **physical characteristics** (relationships and parts or activities) of the existing (As-Is) process – or how work is actually being done;
- And then, determine **how it is performing** by developing indicators, collecting and logging data, and conducting an evaluation.

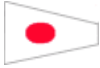
A detailed task checklist and associated tools are provided below.

DETAILED CHECKLIST		TOOLS
3.1	Set Process Boundaries	Brainstorming
3.2	Conduct SIPOC Analysis	SIPOC Chart
3.3	Identify Functional Requirements	Swimlane Flowchart Interrelationship Diagram
3.4	Flowchart the As-Is Process	Flowchart
3.5	Identify and Label Indicators/Measurement Points	Flowchart
3.6	Collect Data and Evaluate Performance	Process Measurement



### **Conduct As-Is Process Analysis**

### 3.1



## SET PROCESS BOUNDARIES



Refer to the CG PIG:

***Brainstorming***

The first task to complete this step is to set the process boundaries – precisely, where does the target process start (trigger point) and end (where work is passed to another unit or internal/external customer). Although this may seem simple, it can often prove problematic. Be prepared to facilitate a discussion to arrive at an agreement that everyone can live with.

- **Start Point** (Trigger) – The point where the raw materials (inputs) enter the process or are received from a supplier. Triggers initiate the process or cause work to begin.
- **End Point** – Where the product or service (process output) is passed to another unit or internal/external customer.

### 3.2



## CONDUCT SIPOC ANALYSIS



Refer to the Stakeholder Effectiveness toolset (CD):

***SIPOC Chart-Analysis***

***Instruction and Template***

The next task is to identify process component parts: **Suppliers, Intputs, Processes (or sub-processes), Outputs, Customers, and the relationships between them. Who provides what inputs and, after performing work, what outputs go to what customers? This is called a **SIPOC Analysis**, and it is facilitated through the development of a **SIPOC Chart** (see the below example – note: enablers and controls are specific types of inputs).**

A SIPOC Chart can be used to identify key processes or lesser activities within a process and to focus on the appropriate unit of analysis. Teams should conduct a SIPOC Analysis when:

- The system or process they are analyzing is complex;
- They need to break a process into component parts;
- Understanding key relationships is important;
- Extreme detail or perfection is not needed.

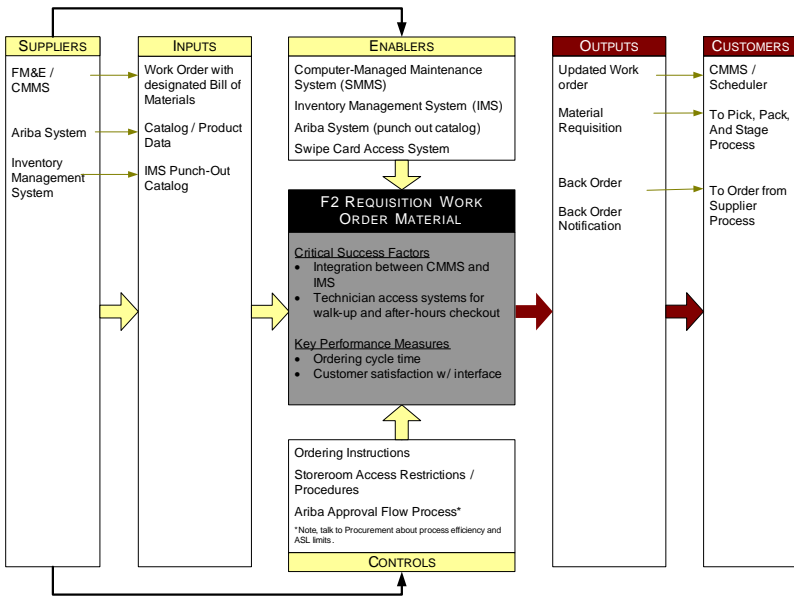


Refer to the CG PIG, *Work as a Process*:

***SIPOC Model***

A useful and insightful add-on to a SIPOC Analysis is to go one step further and identify process outcomes. Outcomes are the result of a customer receiving an output.

**Note:** if the process is already flowcharted and the team is simply working to improve what has already been analyzed, much of this work will already be done. In that case the team's role becomes primarily one of verifying and refining.



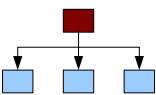
**SIPOC Chart for a Sample Logistics Process**


### 3.3

#### IDENTIFY FUNCTIONAL REQUIREMENTS

By definition, *key business processes are cross-functional*. They constitute horizontal slices of the organization, whereas *functions constitute a vertical slice*. This is what makes managing a process so much more challenging than leading a function. Since people relate to the organization and its priorities and alliances functionally, it can be a challenge to get people to think cross-functionally and to suboptimize functional performance in favor of improved overall performance.

ORG. CHART



 Refer to the Process Effectiveness toolset (CD): **Flowchart Instruction and Template**

Given this, the third step in conducting an As-Is process analysis is to identify and consider functional requirements. In this regard, it is often useful to create a workflow representation that separates process activities and depicts them as occurring in various functional swimlanes.

## 3.4

### FLOWCHART THE AS-IS PROCESS

 Refer to the CG PIG: **Flowcharts**

A flowchart represents how work is and should be done. Flowcharts help show the relationships among all tasks or steps of a process used to produce a product or service. A typical flowchart details in sequence all process elements: activities, documents, decisions, and connectors.

## SIPOC CHART

### CONSTRUCTION STEPS

The two primary steps to construct a SIPOC Chart are listed below. Note that creating the chart and analysis are one in the same activity. It is not possible to do one without the other.



#### ANALYZE UPSTREAM SYSTEMS

- Identify suppliers and inputs
- Audit inputs against suppliers and vice versa
- Group inputs by supplier
- Analyze supplier relationships and quality of inputs

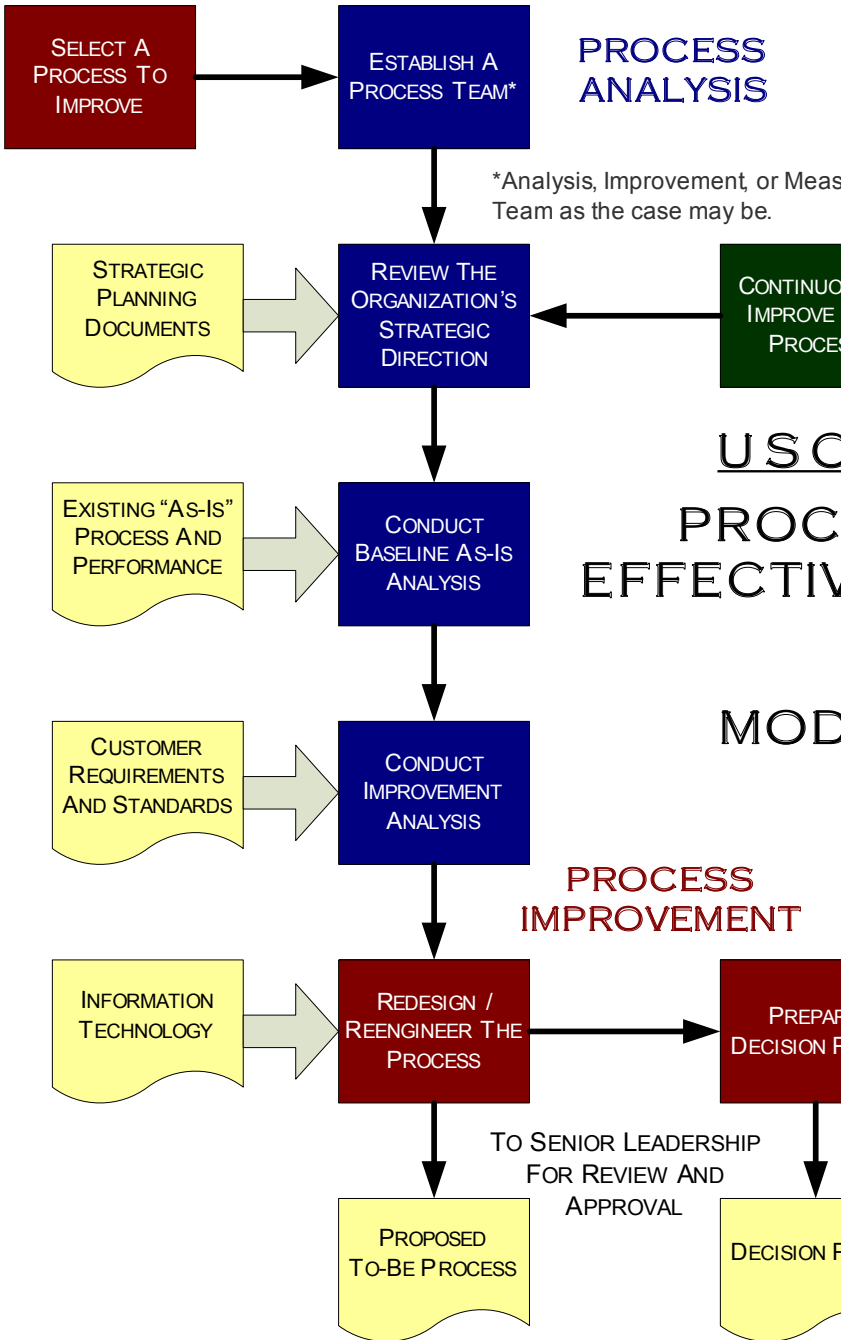


#### ANALYZE DOWNSTREAM SYSTEMS

- Identify outputs and customers
- Audit outputs against customers and vice versa
- Group outputs by customer
- Analyze customer relationships and quality of outputs

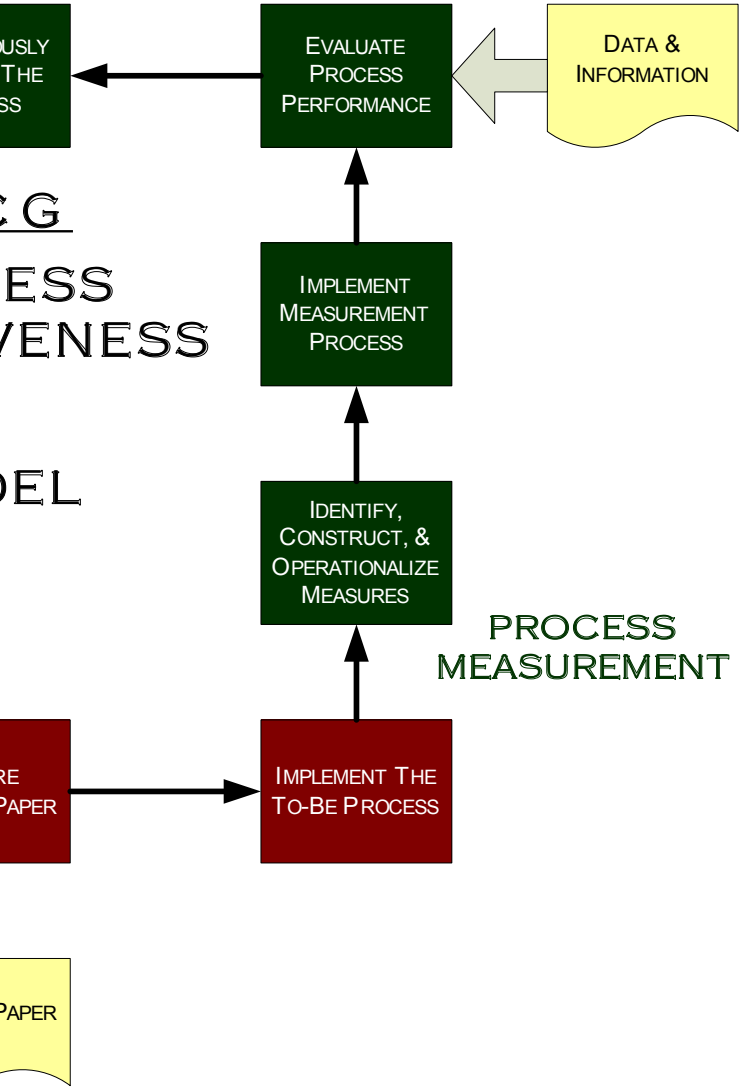
### CONSTRUCTION TIPS

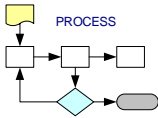
- Participative brainstorming works best
- Suppliers include: resource providers and higher authorities
- Inputs include: data, requests, policies, resources, raw materials, etc.
- Customers can be and often are also suppliers
- There are often fewer outputs than inputs
- Distribute a blank chart to participants prior to analysis
- It is not meant for perfection – don't get too detailed



# OPC PROCESS EFFECTIVENESS MODEL

Measurement





More specifically, flowcharts help the process team to:

- Understand organizational element relationships;
- Develop indicators of process performance;
- Evaluate workflow for improvement opportunities;
- Put the process into an organizational context;
- Define procedures for the process.

## **FLOWCHART**

### **CONSTRUCTION STEPS**

Constructing a flowchart is technically simple, although it does take some in-depth thinking and experimentation. Following are the steps necessary to do so:

- ✂ **IDENTIFY STARTING POINTS OR TRIGGERS**
  - Depict them on the chart as oblong circles
  - Note the previous process and step they came from in the circle
- ✂ **IDENTIFY END POINTS**
  - Show them as an output of a physical activity
  - Depict them on the chart as oblong circles
  - Note the next process in line or write “STOP” in the circle
- ✂ **DIVIDE THE WORKFLOW INTO MAJOR STEPS**
  - Brainstorm activities and sort them into related groups
  - Identify group headings (these are the major steps)
  - List steps in sequence, as they are accomplished
  - Depict them on the chart as rectangles
- ✂ **IDENTIFY KEY PROCESS DECISIONS MANAGERS MAKE**
  - Brainstorm decision points
  - Depict them as diamonds on the chart
  - Use arrows to show branching relationships, flow, and direction
  - Label arrows as appropriate
- ✂ **CHART MAJOR INPUTS AND OUTPUTS**
  - Brainstorm inputs and outputs (refer to SIPOC Analysis results)
  - Depict them on the chart as rectangles with wavy bottoms
  - Using arrows, flow them into or out of major steps
- ✂ **GET THE REACTIONS OF OTHERS AND REFINE AS NECESSARY**
  - Identify gaps, resolve conflicts, and improve the chart as appropriate

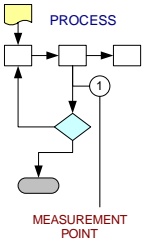
## 3.5



### IDENTIFY AND LABEL INDICATORS/MEASUREMENT POINTS



Refer to the **Process Measurement Booklet**



The final task to conduct a baseline analysis is to identify points in the process, called indicators, where critical data can be collected and logged. These indicators are used to evaluate effectiveness, quality, cost, and time characteristics of the process or activity. They are compared against stakeholder requirements (references or standards) to establish performance gaps (refer to Field Guide Booklet 11, Process Measurement).

As-Is performance data provide a baseline from which to measure improvement. Without it, gaps and improvement cannot be validated. Two rules of thumb apply: (1) keep it simple, and (2) measure only what's important.

## 3.6



### COLLECT DATA AND EVALUATE PERFORMANCE



Refer to the **Process Measurement Booklet**

The final step in baseline analysis is to actually collect data and evaluate As-Is performance. Clearly, this is not something that can be done in a day, week, or even a month. It is possible that some data will have already been collected and just need formal documenting, but other data needs will be new and have to be collected to the degree that statistically meaningful trends can be established. How much time will depend on how quickly performance is changing. For slower changing performance, such as customer satisfaction, this may take several months.

## FLOWCHART

### CONSTRUCTION TIPS

- Don't include resource decisions, like hiring people
- Non-branching decisions should be depicted as activities, with a rectangle
- Chart major activities first, before decisions
- Processes typically have no more than 15 major activities
- Balance precision with simplicity
- Flows typically go from the upper left to the lower right
- Clearly identify all indicators or measurement points

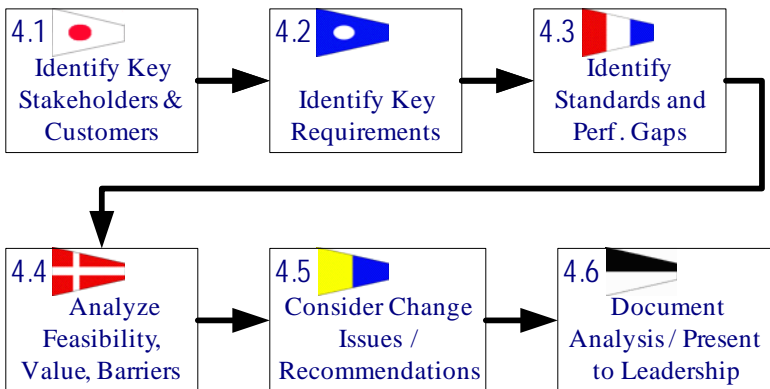
## 4.0 CONDUCT IMPROVEMENT ANALYSIS

This final step is concerned with understanding, quantifying, documenting the performance gaps, and separating current performance and customer requirements. During this step, the process team will:

- Identify stakeholder and customer requirements;
- Compare current performance to stakeholder requirements;
- Identify and consider improvement opportunities;
- Document analysis and make recommendations;
- Consider change implications and improvement barriers.

This analysis helps the team to understand the process and identify opportunities, not actually improve it. The next phase of the Process Effectiveness Model (refer to Field Guide Booklet 10, Process Improvement) is concerned with process redesign to close performance gaps. A detailed task checklist and associated tools are provided below.

DETAILED CHECKLIST		TOOLS
4.1	Identify Key Stakeholders & Customers	Stakeholder Analysis
4.2	Identify Key Requirements <ul style="list-style-type: none"> <li>• Establish Reference Points</li> </ul>	Process Measurement
4.3	Identify Standards and Performance Gaps <ul style="list-style-type: none"> <li>• Compare Reference Points and Standards to Indicators</li> </ul>	Process Measurement
4.4	Analyze Feasibility, Value, and Barriers	Process Measurement
4.5	Consider Change Issues/Recommendations	Tree Diagram
4.6	Document Analysis/Present to Leadership	




### Conduct Improvement Analysis

## 4.1



### IDENTIFY KEY STAKEHOLDERS & CUSTOMERS


 Refer to the Organizational Effectiveness toolset (CD): *Stakeholder Analysis*

The first task is to identify the key process stakeholders. Much of the work and the thought associated with this has probably been done if the process team developed a SIPOC Chart and considered functional requirements. The important thing here is to identify the key stakeholders – these are the ones the team will want to concentrate their efforts on satisfying.

## 4.2

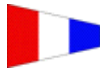


### IDENTIFY KEY REQUIREMENTS


 Refer to the *Process Measurement Booklet*

Next, the team collects data to learn customer requirements by conducting surveys, interviews and focus groups. These data will provide reference points that can be compared to current performance (i.e., indicator data collected during the previous step) to make information and identify performance gaps or improvement opportunities.

## 4.3



### IDENTIFY STANDARDS AND PERFORMANCE GAPS

 Refer to the *Process Measurement Booklet*

Teams then use this information to negotiate with stakeholders to develop standards. Standards are reference points the team has agreed to meet (or has agreed should be met). The difference between current process performance (i.e., indicator data) and standards (customer requirements) then become initial improvement goals or targets (to be refined and finalized during the next step).

## Activity-Based Costing

Depending on the level of detail required and complexity of the process, the team may decide to identify lesser activities and develop what is called an activity model. A model or picture of how the products and people (activities) actually move in a process helps to highlight wasted motion, unnecessary delays, complexity, and other inefficiencies. Activity modeling is the first step in Activity-Based Costing, a method to determine costs by activity and evaluate total factor productivity.

Improvement gaps can occur in the following performance categories:

- Product or service quality (e.g., error rate);
- Fitness for purpose (usability or application);
- Process cycle-time (e.g., response to inquiries);
- Quantity (as defined by the customer);
- Cost or value.

## 4.4



### **ANALYZE FEASIBILITY, VALUE, AND BARRIERS**

Once the team identifies performance gaps, they must analyze whether closing the gaps is feasible and cost-effective. The team should ask the following questions.

- What would it take to close a gap, or gaps?
- What resources – time and money – would be required?
- What are the potential barriers to improvement?
- Would new technology be required?
- How would it impact people, processes, and culture?

It's possible the team may not be able to, or want to, close all performance gaps. Perhaps the stakeholder's expectation is unrealistic. In many cases a formal and detailed cost-benefit analysis should be conducted prior to making this decision.

### **CONDUCT BEST PRACTICE BENCHMARKING**

The team should also consider conducting a “best practice” benchmarking analysis to help determine what's possible and learn how others accomplish the same or similar tasks or processes. Benchmarking can be used to discover effective ways to perform a process or activity. The focus should be on process characteristics with respect to each of the gaps being considered, as well as the enablers that support the process.

## 4.5



### **CONSIDER CHANGE ISSUES/RECOMMENDATIONS**

Following this analysis, the team considers change issues and decides what they will recommend. This is an important step; in that the team must prepare the organization to operate the improved process. Not all of the improvements will be practical to implement or readily accepted. A Tree


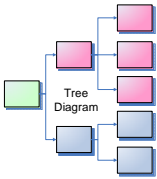
 Refer to  
the *Process  
Measurement  
Booklet*

Diagram may be used to break down the particular aspects of the change issues into their component parts. In developing solutions to these challenges, leaders will want to know which improvement elements:



- Offer the greatest potential to satisfy requirements;
- Are feasible, given previous assumptions;
- Can the organization afford;
- Are politically practical;
- Are most culturally acceptable.

The team must be careful not to be overly constrained by assumptions and paradigms. Often teams underestimate the value of good analysis and documentation. They may have more leeway and influence with senior management than they ever thought possible.

## 4.6

### **DOCUMENT ANALYSIS/PRESENT TO LEADERSHIP**

Finally, the team documents its analysis and presents improvement/change recommendations to senior leaders. There is no set format for the documentation, although it is often useful to place all related documentation into a single, appropriately tabbed binder. It is empowering for a process owner to have all of the information listed below in a nice, neat, complete package.


#### **DOCUMENTATION PACKAGE**







A typical documentation package, includes:

- A list of team members, incl. the leader and facilitator;
- Team objectives and goals;
- Key assumptions made by the team;
- Process flowcharts, SIPOCS, and other documentation;
- Process measures;
- Improvement recommendations;
- Analysis associated with each recommendation;
- An implementation timeline and resource requirements;
- Additional concerns, thoughts, and ideas.



## USEFUL TOOLS

The following tools: templates, forms, worksheets, calculators, slide decks, facilitator notes, etc., are included in the following references or on the accompanying compact disc .

Tool	Reference
Affinity Diagram Instruction	 Process Effectiveness Toolset (Also CG PIG Affinity Diagram)
Brainstorming	CG PIG
Facilitation Skills	CG PIG
Interrelationship Diagram	Memory Jogger Plus/II
Functional Matrix Instruction and Template	 Process Effectiveness Toolset (Also CG PIG Matrix Diagram)
SIPOC Chart-Analysis Instruction and Template	 Process Effectiveness Toolset
SIPOC Chart ( <i>Work as a Process</i> )	CG PIG
Stakeholder Analysis	 Organizational Effectiveness Toolset
Flowchart Instruction and Template	 Process Effectiveness Toolset (Also, the CG PIG Flowcharts)
Team Charter Example, Questionnaire, and Template	 Stakeholder Effectiveness Toolset
Tree Diagram	Memory Jogger Plus/II



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# REFERENCES

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# TERMS AND DEFINITIONS

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*Without teams –  
properly motivated  
and organized –  
process improvement  
is likely to fail!*

**Activity-Based Costing:** A method of accounting aimed at breaking down costs by activity and evaluating total factor productivity. Identifies the activities of a unit and sorts them by their product or service “drivers” (reasons for being) rather than their nature (e.g., travel expense). This provides more useful and diagnostic data for local management.

**As-Is Process:** The existing process as it currently exists, before the process team changes it in any way. The focus of your process improvement efforts.

**Customer:** An organization or person that receives a product or service. A down-line business entity.

**Evaluate:** To study data or information and derive meaning from it through comparison to other data or information, or a reference point or standard.

**Flowchart:** A logical, graphical representation of a process using rectangles to represent activities; arrows to represent relationships, flow, or direction; diamonds to represent branching decisions; rectangles with a wavy bottom to represent documents; and circles to represent connecting points.

**IDEF:** (Integrated Definition) is a group of modeling methods used to describe operations in an enterprise. IDEF was created by the United States Air Force for use in the manufacturing environment; IDEF methods have been adapted for wider use and for software development in general.

**Lexicon:** Glossary of process-related terms.

**Performance Gap:** The difference between the voice of the customer and the voice of the process, or between what customers want (i.e., identified requirements) and what the process or organization is providing (i.e. actual performance).

**Performance Indicator:** Performance indicators (like reference points) are data points. A data point is made up from fact and meaning. Comparing an indicator to a reference point (defined below) makes information. Performance indicators convey the “voice of the process.”

**Planning Assumptions:** Provide a grounding upon which future improvements are based. All decisions are based on assumptions, as rarely is all information known or all cause and effect relationships understood.

**Process:** A set of interrelated or interacting activities that transform inputs into outputs. Processes are the steps and decisions involved in completing a value-adding activity.

**Process Analysis:** The examination of a process to determine its inputs, outputs, requirements, capabilities, activities and decisions, and the interrelationship between those activities and decisions.

**Process Boundary:** The beginning points (triggers) and end points (where the product or service passes to another unit or process) of a process.

**Process Goals:** Improvement or performance goals for a specific process.

**Process Measures:** See Performance Indicator, above.

**Process Owner:** The individual who is ultimately responsible and accountable for the process working properly. The process owner is the manager or leader who has control over the entire process from beginning to end. A process owner may directly lead the actions of a process improvement team or may decide to delegate the team leadership role to another person who is knowledgeable about the process. Whatever the case, it is very important for the process owner to stay informed about the team's actions and decisions affecting the process.

**Process Reengineering:** The fundamental rethinking and radical redesign of a process or processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.

**Process Team:** A unit that naturally falls together to complete a whole piece of work – a process. It is a putting back together of a group of workers who have been artificially separated by organization.

**Reference Point:** Reference points are data points. A reference point is the basis for making information from a performance indicator (defined above). Reference points are based on customer and stakeholder needs. Reference points convey the “voice of the customer.”

**SIPOC Analysis:** A review and detailed understanding of the elements of a given process, including: Suppliers, Inputs, the Process, Outputs, and Customers. Analysis is enhanced through a SIPOC Chart or diagram.

**Stakeholder:** A person or group having an interest (as in, an interested party) or a stake in the performance or success of a process. Stakeholders include, for example, customers, employees, suppliers, vendors, partners, and society.

**Standard:** A required or specified performance level. Standards are reference points you are committed to meeting.

**Taxonomy:** A classification or grouping of related terms and their descriptions (e.g., a data field or location taxonomy). Presented in the form of a table.

**To-Be Process:** An improved process – the result of a process improvement team’s efforts. What the process improvement team believes the As-Is Process should become to maximize performance.

**Value Added:** The difference between the revenue from a sale of goods or services and the cost of their purchased components (raw materials, supplies, energy, consulting services). In a more popular sense, work that adds customer value.





## BALDRIGE FOCUS

How does your organization determine its key value creation and support processes?

What are your organization's key product, service, and business processes for creating or adding value?

What are your key processes for supporting your value creation processes?

How do these processes contribute to profitability and business success?

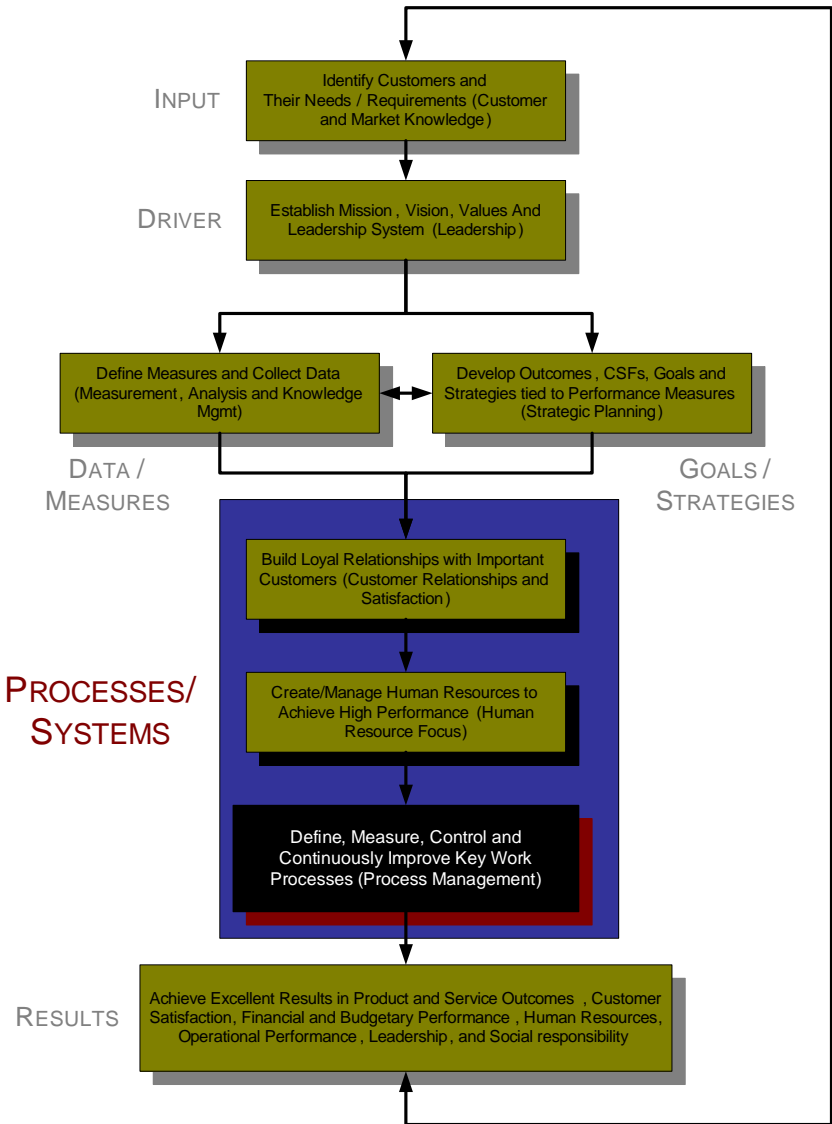
How do you determine key value creation and support process requirements, incorporating input from customers, suppliers, and partners, as appropriate?

What are the key requirements for these processes?

How does your organization ensure adequate financial resources are available to support your operations (i.e. key value creation and support processes)?

*The Process Management Category examines the key aspects of your organization's process management, including key product, service, and business processes for creating customer and organizational value and key support processes. This Category encompasses all key processes and all work units.*

# BALDRIGE LINK



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