Certified Inspector General Inspector / Evaluator Course

INSPECTOR GENERAL INSTITUTE

TRAINING AND CERTIFICATION FOR INSPECTION AND OVERSIGHT PROFESSIONALS

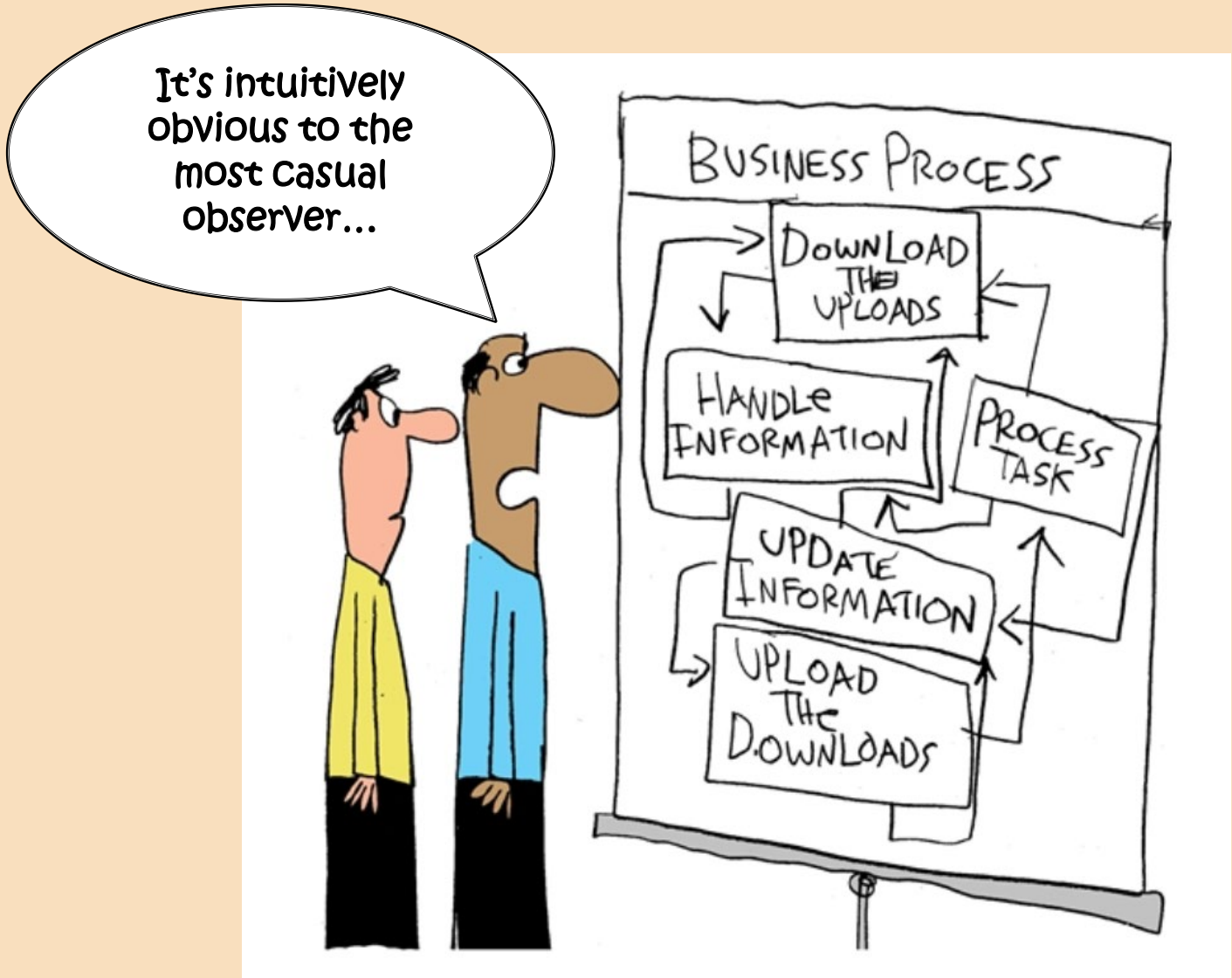
PROCESS MAPPING

Presented by:
Tony Montero
Palm Beach County OIG

Course Objectives

- 1 Describe how to flow and map a process.
- 2 Identify basic process mapping symbols.
- 3 Describe how process mapping helps identify problem areas and identify risk.
- 4 Describe how to use process mapping to find opportunities for improvement.

Process Mapping is Important to the Inspector



What is the mission/charter?

What is the definition of success?

What are the outcomes?

How do you measure success and the outcomes?

Who is responsible?

Where are the risks & controls?

Definition

Processes Mapping

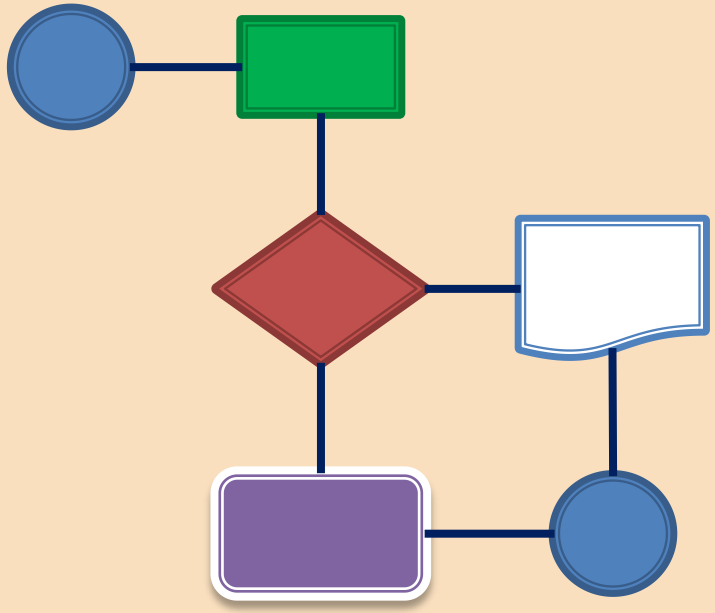
- Is a visual depiction of a process flow; a coordinated system of activities used by an organization.
- Represents a strategic, baseline analysis used to identify, create, and adjust process activities.
- Displays the entire process, input-to-output, in as much or as little detail as necessary for clarity.
- Crosses functional responsibility “silos” and focuses on input moving through the system.

Process Overview

INPUTS

Event
Supplier
Information
Customer
Activity
Document

PROCESS



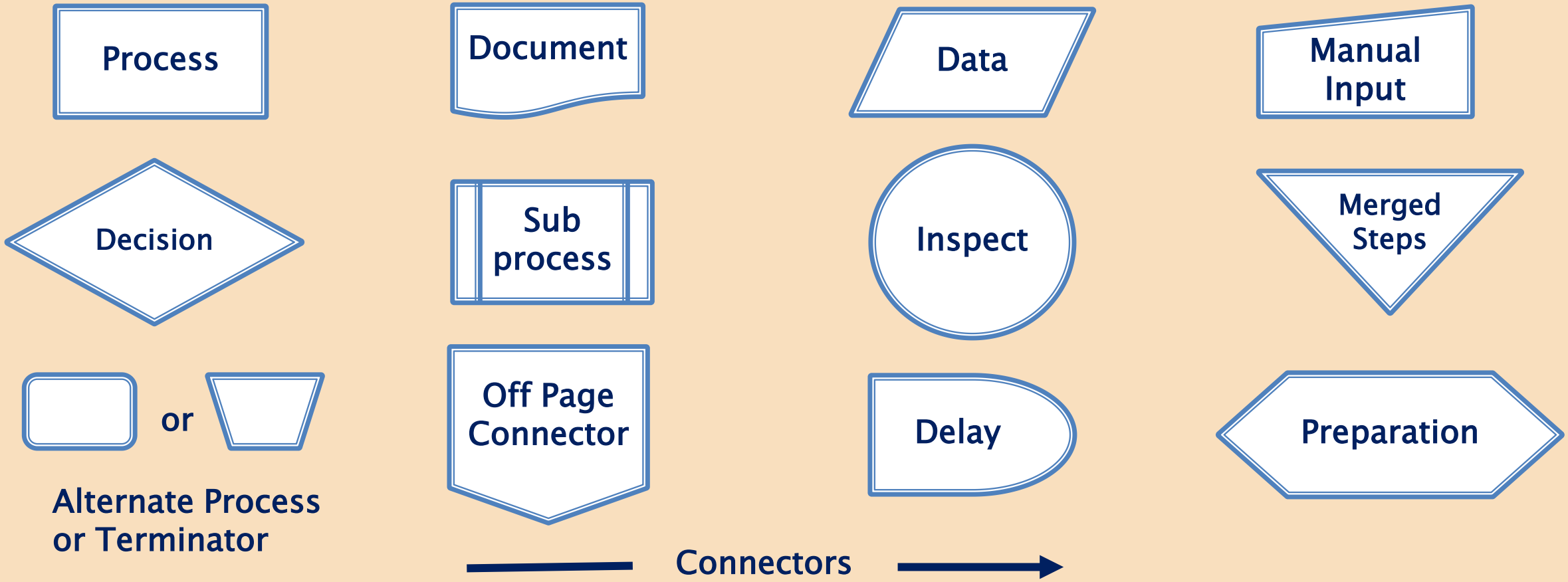
Value Added Activities

OUTPUTS

Event
Action
Product
Service
Activity
Report

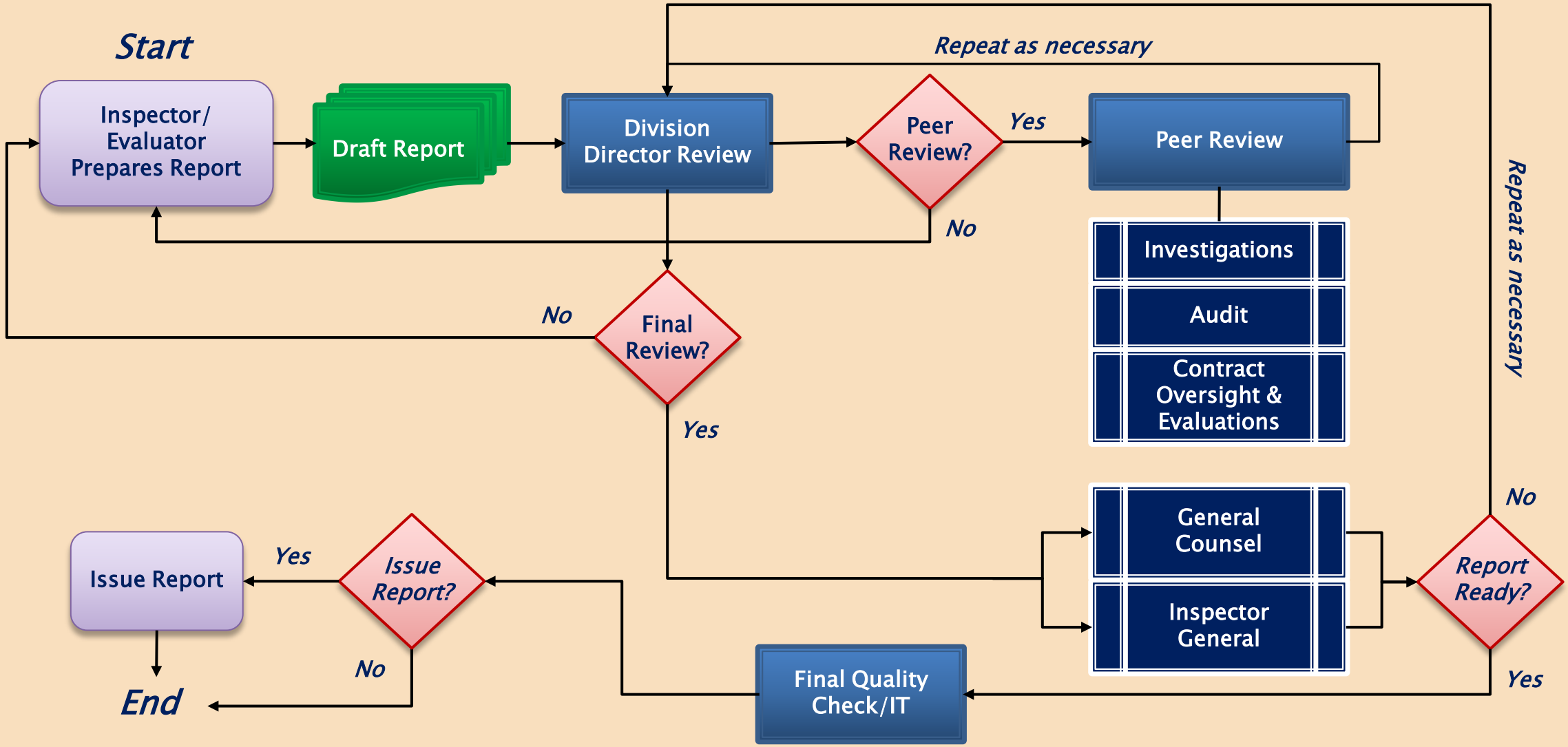
Process Mapping Symbols

The following flowchart symbols are typically used in defining business process maps:



Process Mapping Example

Issuing a Report



Principles & Tools

Process Mapping

Principles:

- Keep it simple.
- Stay focused on the purpose.
- A goal of process mapping is to enhance understanding.
- Use IT as an enabler of growth and change; not as a substitute for strategy.

DO:

- Map the process as it actually happens.
- Think about the process across the organization.
- Define the beginning and end/input, and outputs.
- Define key activities & metrics to measure the effectiveness of the process.

DO NOT:

- Map the process as you think it ought to happen.
- Restrict the map to only the processes you know.
- Map the process before determining the output.
- Add too many details or make it visually confusing.

Interviews

Interviews are an effective method to understand how a process is currently completed. It's important to interview the stakeholders, participants, and contributors to understand the roles they play in the process while looking at every duty and decision point, such as:

- Responsibilities
- Objectives
- Activities
- Inputs
- Customers
- Risks and controls
- Key performance indicators

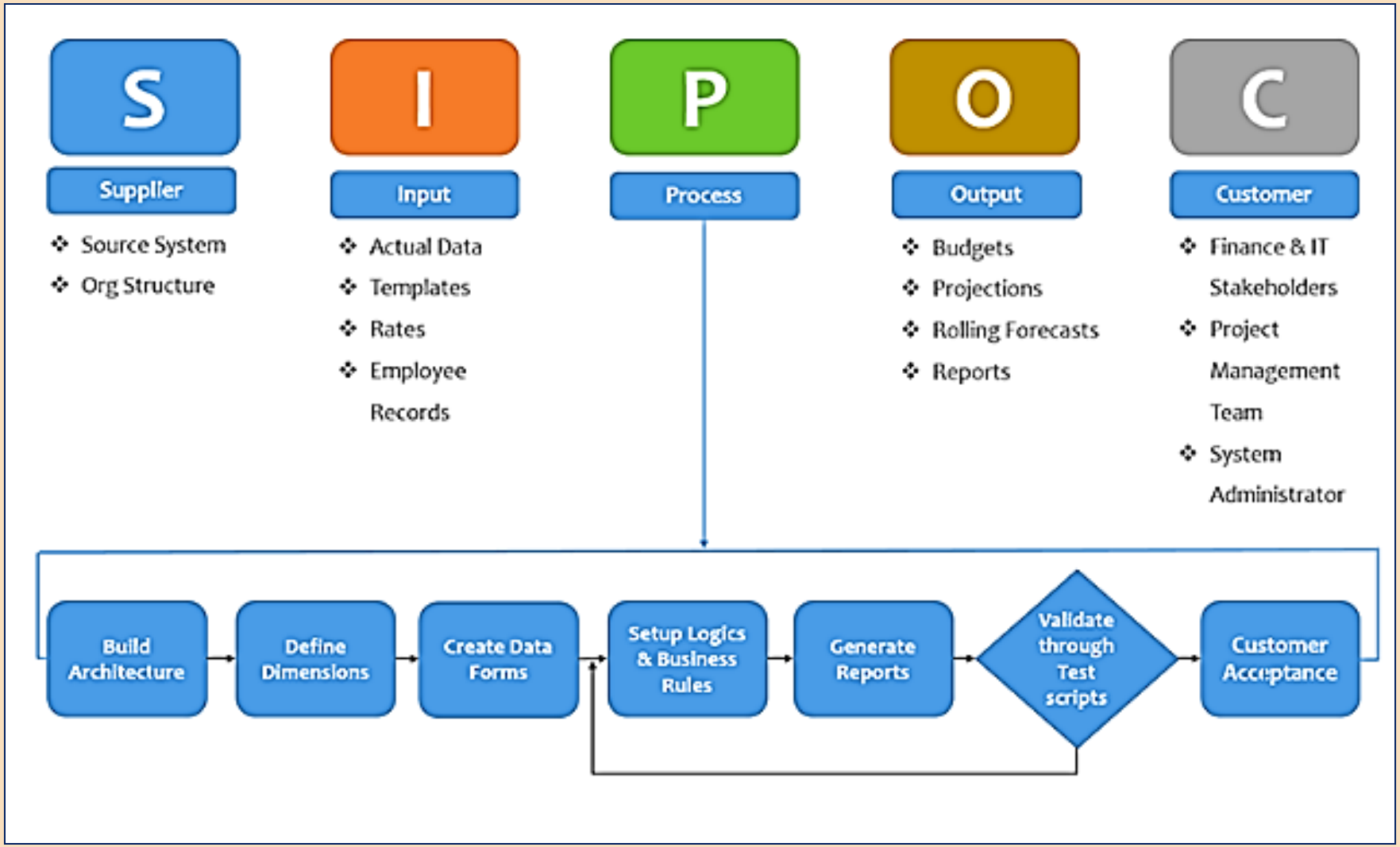
Interviews

- Begin the interviews with stakeholders who are believed to have the most complete understanding of the process, such as subject matter experts (SME's).
- Start an interview with the goal of understanding the beginning and the end goals of the process.
- Create a high-level outline of the process to serve as the basis for discussions later on.
- Use “if-then-else” logic when interviewing to help identify portions of the process which may otherwise be overlooked.
- The most frequent processes will be easily elicited, but prompting may be required to draw out the “alternate” processes, experiences, areas of disagreement, and opinions.

Types of Process Maps

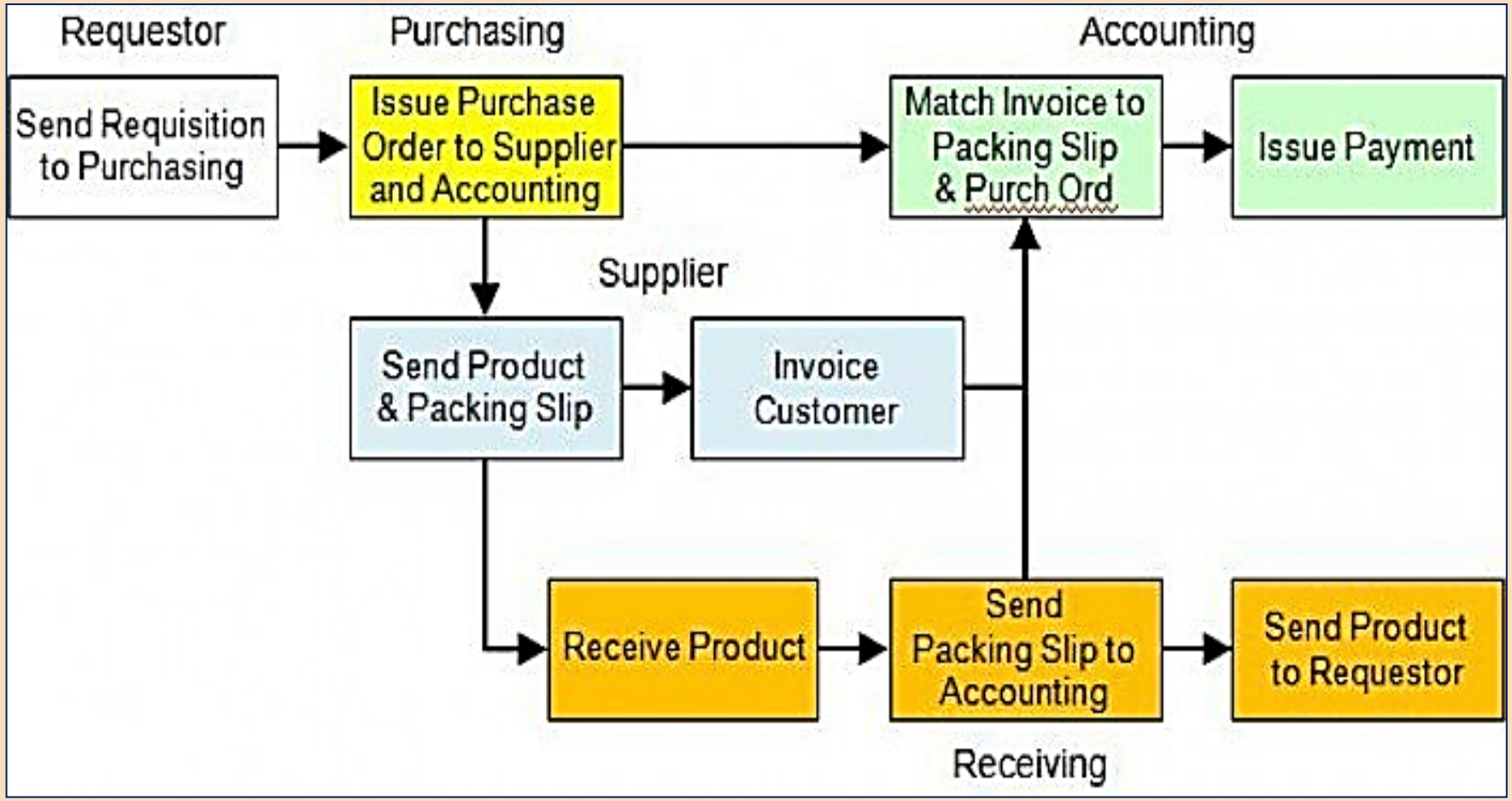
S.I.P.O.C. Map

A SIPOC map is a 10,000 ft view of the overall process showing suppliers, inputs, process, outputs, and customers.



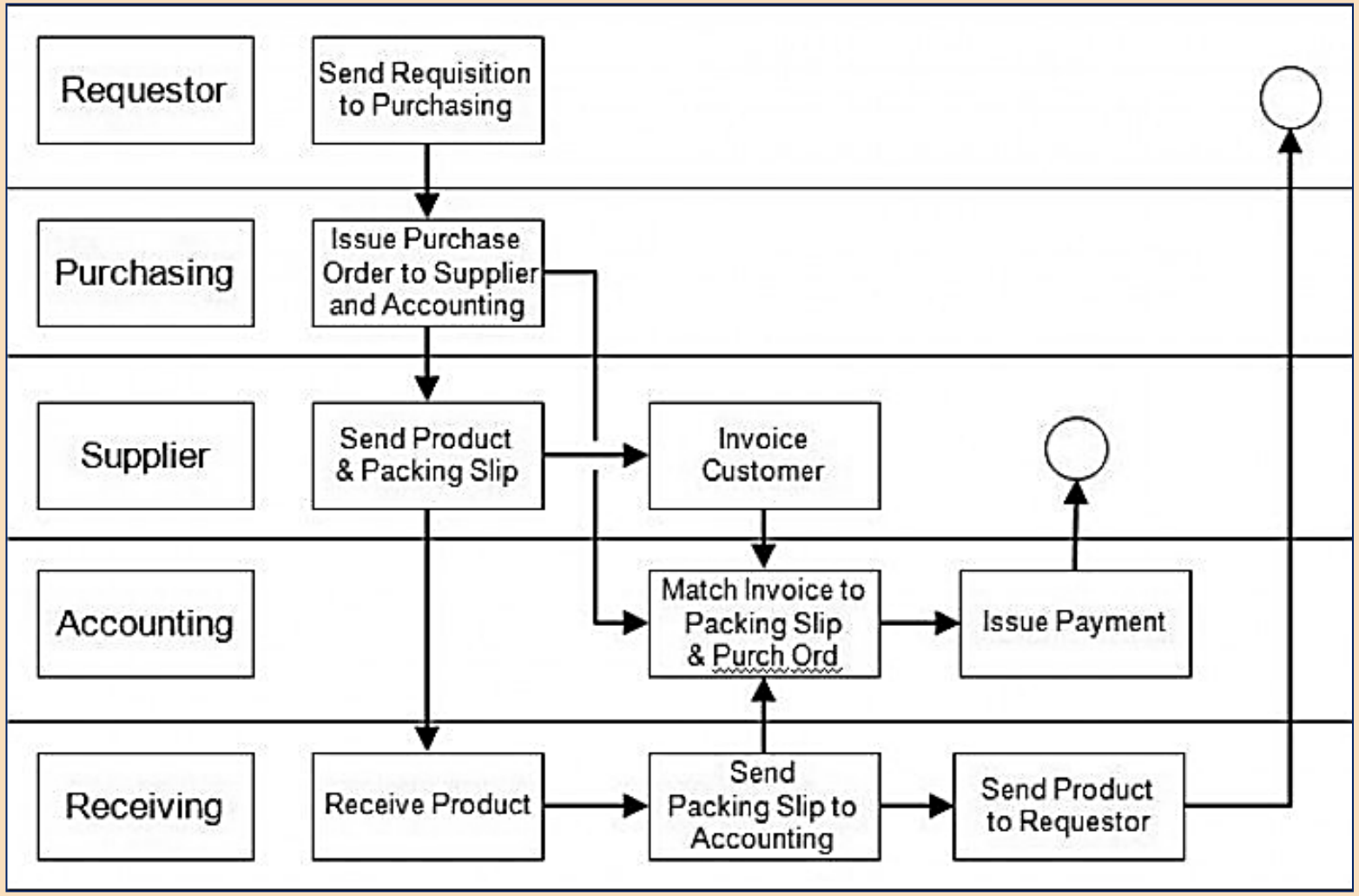
High Level or Deployment Map

A High Level or Deployment map is intended for stakeholders to show the major steps and relationships within the process.



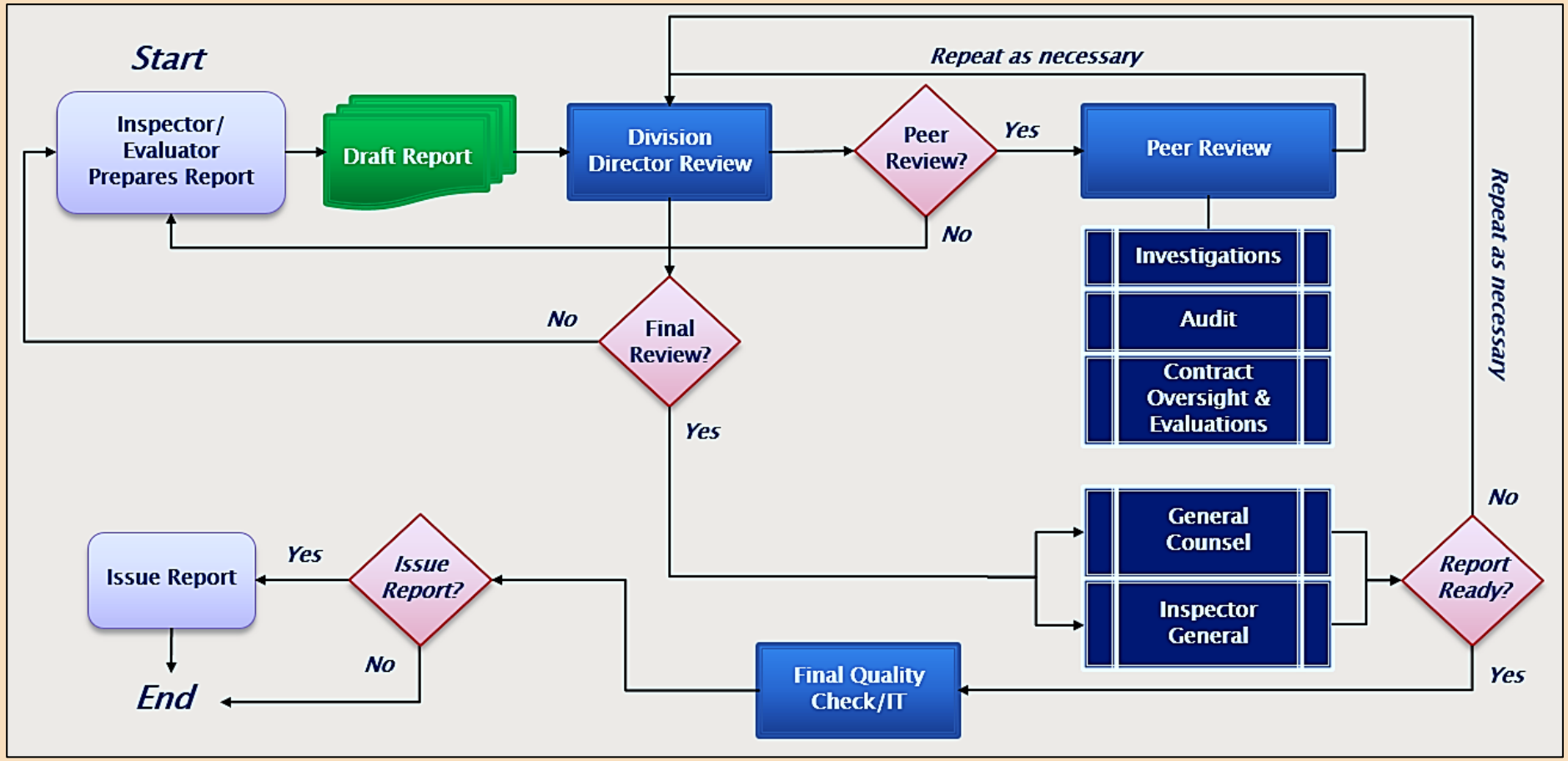
Swim Lane Map

A Swim Lane map is a detailed map of the process channeled into “swim lanes” based on the process owner or responsible organization.



Detail Process Map

A Detailed Process map is a close review of a specific process usually to establish metrics, trouble shoot issues, or streamline functions.

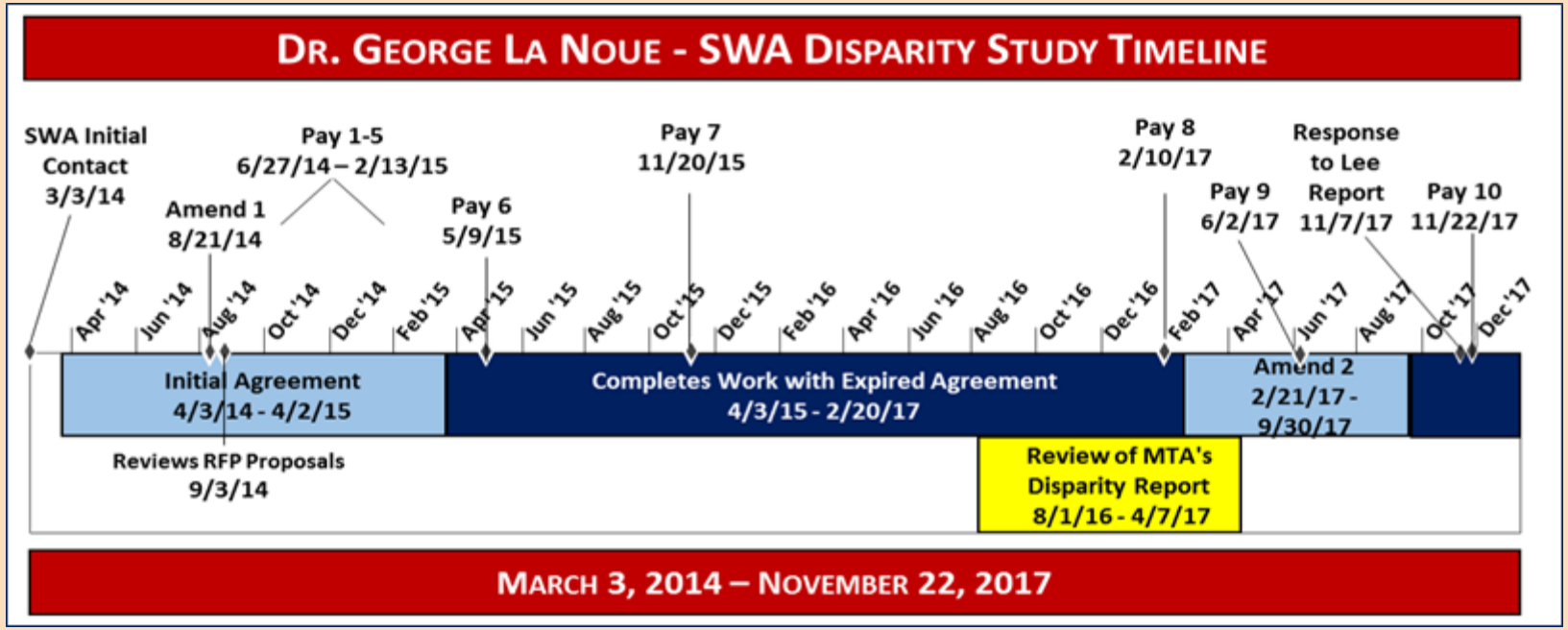


Timelines

Q: Can a ***timeline*** be considered a process map?

A: Yes. Timeline mapping is the process of arranging important events, activities, grants, actions, achievements, and other milestone markers in chronological order, enabling insight into their relationships to one another and to key contextual factors.

PBC OIG Contract Oversight Report CA-2018-0023 SWA Disparity Study



What does Process Mapping tell us?

Process Improvements

The process map can assist in:

- Eliminating duplicate tasks.
- Reducing the re-handling of materials & information.
- Identifying idle time & resources.
- Removing unneeded tasks.
- Realigning personnel & resources.
- Removing non value added activities.
- Establishing baseline metrics.
- Communicating important details.
- Discovering opportunities.
- Identifying wasted time, money, & effort.
- Implementing change management & promoting understanding.
- Determining key points to evaluate risk, controls, and responsibilities.

Things to Avoid

The following issues should be avoided in a process mapping:

<u>Unnecessary and excessive repeating loops</u>

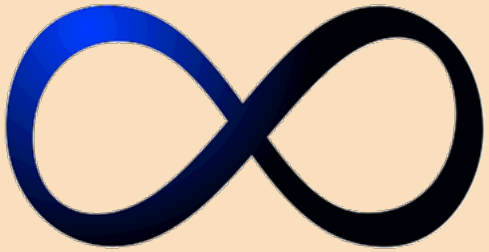
Repetition usually indicates a flawed and inefficient process. This can be caused by improper allocation of resources, or improper delegation of responsibilities.

Real World Example:

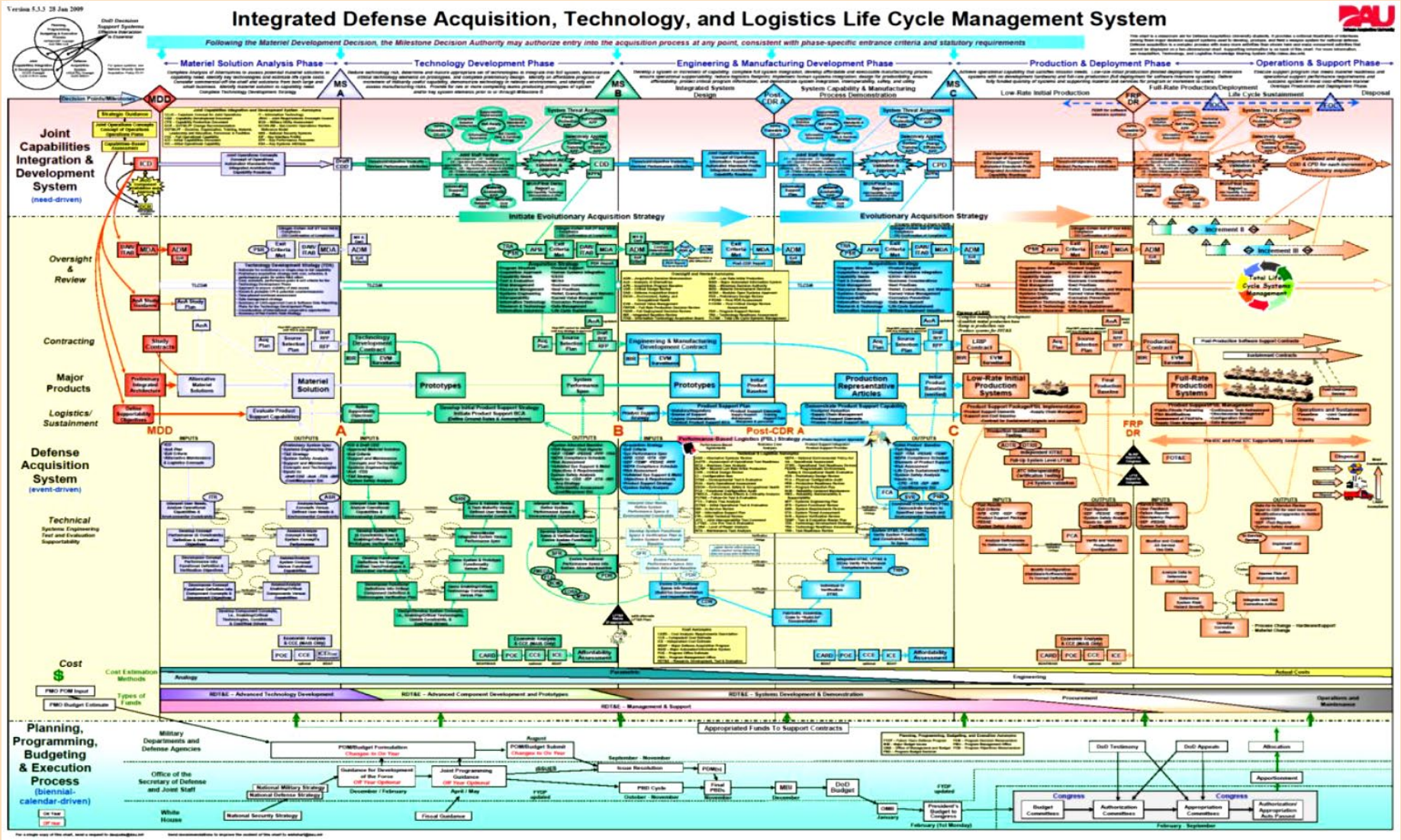
Defense Business Board – Report to the Secretary of Defense

Linking and Streamlining the Defense Requirements, Acquisition, and Budget Process

Report FY 12-02



Things to Avoid



Quote from FY 12-02 Report:

"The Defense Acquisition System in Reality...depicts the reality of today's stovepipe processes – this is a well-publicized depiction that has been around for years. The complexity of the three processes, when displayed on a single page, illustrates what unintentionally evolved over many years of well-intended policy and legislative changes."

Things to Avoid

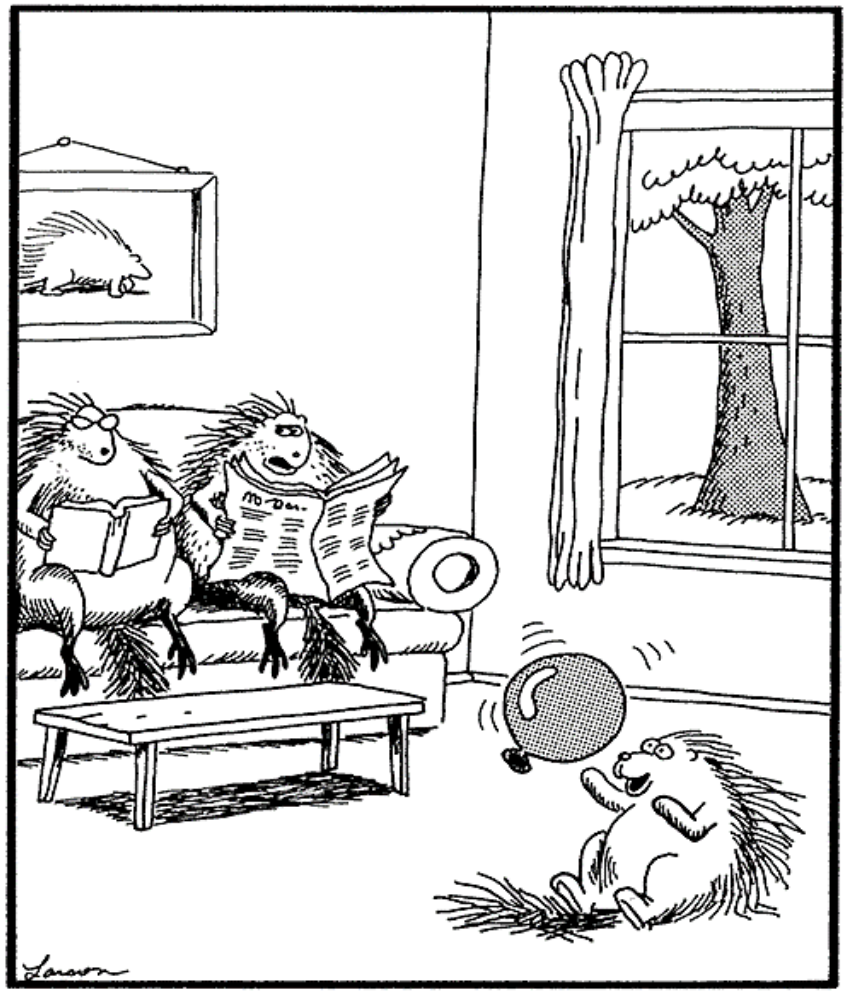
Map what happens, not what ought to happen!

Most organizations don't recognize a problem until they try to flow their business processes.

Real World Example:

Department of Veterans Affairs
Office of Inspector General
Report No. 14-03540-123

Veterans Crisis Line (VCL) Caller Response & Quality Assurance Concerns, Canandaigua, New York



"Well this shouldn't last too long."

Things to Avoid

Allegations: **Calls to the VCL were directed to voicemail and/or went unanswered.**

According to VCL's routing process map:

- The greeting is about 22 seconds long.
- If the caller presses 1, the call is routed to the VCL.
- It may ring up to 38 seconds before being answered by VCL staff.
- If VCL staff do not answer, it is forwarded to a Network backup center.

If routed to a backup center:

- Calls are answered,
- Placed in a call queue for backup center staff, or
- If the backup center queue is full or staff are busy, the call is forwarded to another backup center.

Things to Avoid

Findings: **Substantiated.**

- A timeframe is not defined for the backup centers to answer a call.
- Some calls routed to crisis backup centers go into a voicemail system (which is allowable under the contract). But the backup center staff are not aware the voicemail system exists, and do not return these calls.
- Neither the VCL program managers nor the backup center managers monitor information on how long calls are in the backup center queues, or the number of backup centers a call is transferred to.
- VCL management is unable to confirm, or provide data as to whether callers were "on hold" for any extended time, or if the calls were dropped.

Things to Avoid

<u>Too much detail</u>

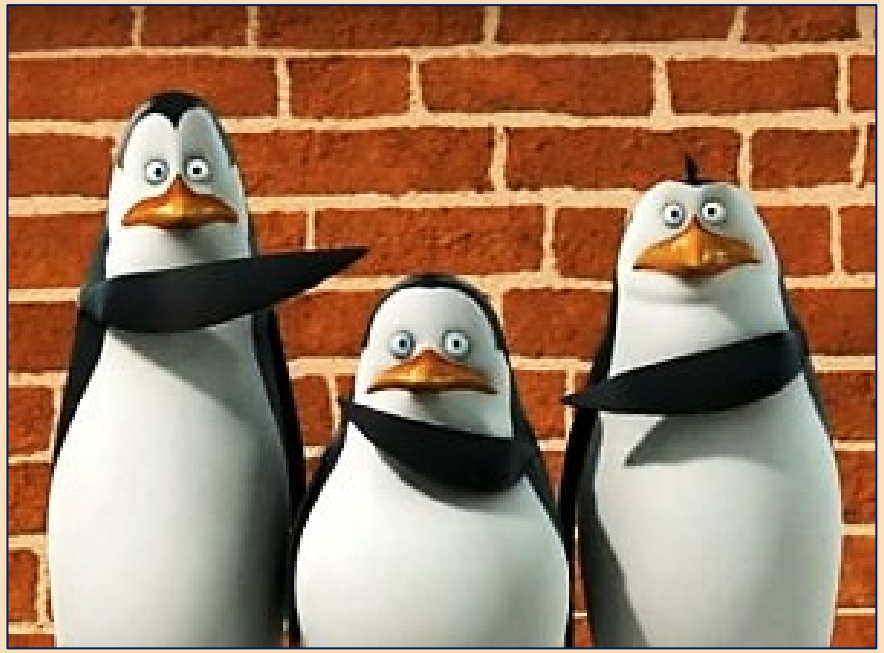
Multiple maps should be used in lieu of overloading one map with too much detail, such as an authority map, or a responsible organization map. Too much detail turns off listening and reduces visual comprehension.

Real World Example:

DoD Inspector General
Report No DODIG-2018-153

Armed Forces Retirement Home (AFRH)
Support Functions

September 24, 2018



Things to Avoid

Finding E – Human Resources Program

The AFRH Chief Human Capital Officer (CHCO) did not execute the AFRH Human Resources Program in accordance with Office of Personnel Management (OPM) guidance and AFRH policies. ***This occurred because the CHCO did not develop standard operating procedures or detailed process maps of administrative controls and timelines for the hiring process.*** As a result, vacant positions for critical AFRH healthcare and support personnel often remained unfilled for extended periods.

Recommendation E

AFRH CHCO ***develop human-resource process maps***, as well as applicable directives and standard operating procedure to fully support the operation and management of the human resources program.

Things to Avoid

When integrating IT, don't computerize a flawed process

When implementing new systems, personnel tend to computerize exactly the process they currently use because it is familiar. Use process mapping to improve the system.

Real World Example:

A public organization with more than 5,000 employees tried to improve its hiring process using new HR software. The current hiring process only required completion of a Personal Action Form by the department, followed by actions from HR, and Finance.

When completed the new process had 52 approval steps, hundreds of nested tasks, and bounced back and forth between the 3 departments more than 85 times.

HR proudly announced during an ill-fated Board demonstration that it took "some doing" to duplicate their current process!

Things to Avoid

Resistance

Personnel may resist attempts at process mapping exercises because they fear: change in the way things are done, loss of job, being blamed, added work, or reduced responsibility and authority.

People may resist process mapping exercises for fear of the changes that might result once the inefficiencies are revealed. Even the best worker can interpret the exercise as a personal challenge to their work ethic.

Change management is needed to involve, prepare, equip, train, and support individuals to successfully adopt the process and drive the organization to a successful outcome.

Process Mapping Workflows

Evaluation of IT Workflows

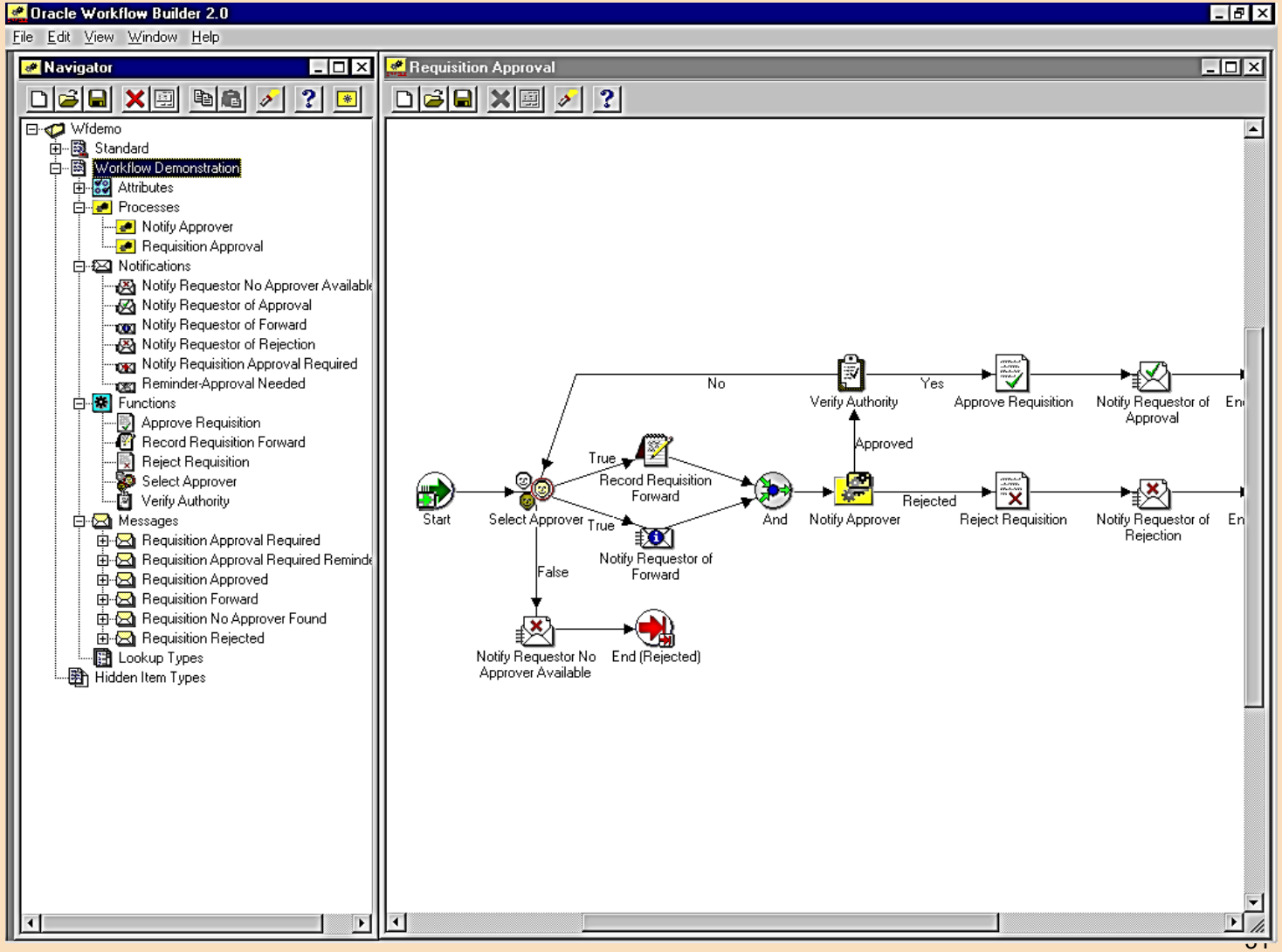
The **Workflow Process** refers to a series of electronic activities that take place in order to achieve an outcome. In most cases, the process is linear and proceeds in a sequence determined by actions or pre-defined business rules. Each workflow component or step may be described by three parameters: ***input***, ***transformation***, and ***output***. Workflows are common in large, enterprise type Financial, HR, and other business software systems. (SAS, Oracle, PeopleSoft)

- Workflows are usually created by a workflow module or program that uses processing mapping to create a flowchart of the process.
- Next, the individual elements and business rules are built or modified within each step to create the final workflow.
- When viewing reports and transactions from any computer system, it's important for inspectors to understand how the information was obtained. The workflow process could be flawed, biased, or the business rules driving the information are inadequate.

Process Mapping Workflows

Common Problems to look for:

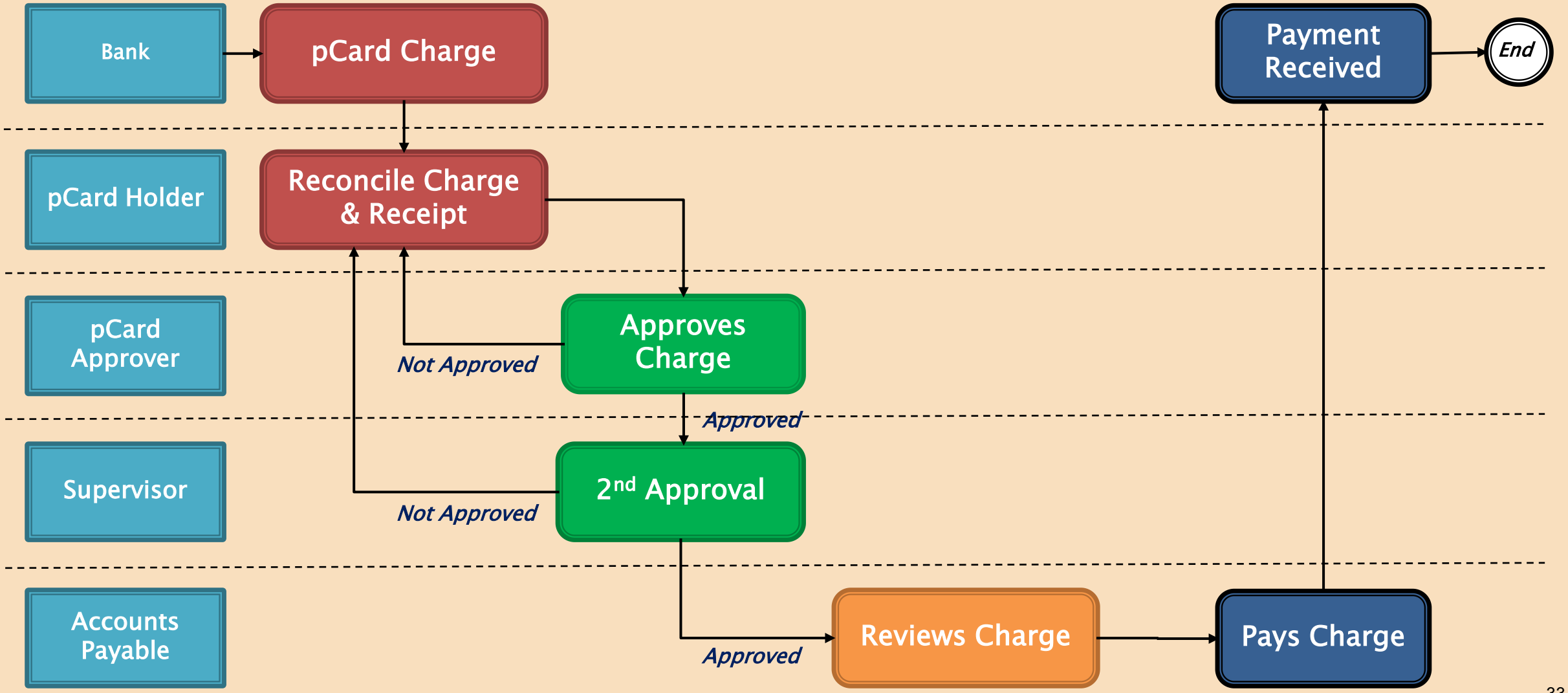
- ***Half-Implementation***: Not all the necessary processes were implemented creating gaps.
- ***Broken Processes***: There is such a thing as purgatory for non-standard data in workflows. These documents can go "missing" and are usually awaiting the "<u>Super User</u>" to find.
- ***Side-Stepping:*** Every manager tries to build a "work-around"…in case of "emergencies." Some revert to paper, others create special access privileges.
- ***Stale Processes*** are not fixed, but often deactivated and not replaced. This leaves gaps in data.



What does Process Mapping tell the IG?

– Process Mapping Exercise –

pCard Electronic Reconciliation Process



pCard Electronic Reconciliation Process

Items for Discussion:

- Are there any issues with the process flow? (Do's & Don'ts)
- Do you see any points of risk? How are errors/exceptions handled?
- Can you tell who is responsible at each point in the process?
- What sort of checks and balances can be used to prevent unauthorized actions?
- Are the authorities for approval accurate and appropriate?
- Is there data that can be tracked, measured, and evaluated?
- Can this process be improved? Can the map be improved?

pCard Electronic Reconciliation Process

Issues Found:

- Altered pCard receipts
  - Vendor's name or the items order changed on physical receipt.
  - Vendor's name changed in electronic system but was different from the bank file.
  - Lots of missing receipts…but there were lost receipt forms the pCard holder completed.
- No electronic or central storage; receipts maintained only by the approver.
- pCard holder may also be the Supervisor of the pCard approver.
- Accounts Payable is not an approval step; consolidation for payments only.
- No ability (authority) to move a payment through to meet the payment processing time limits.

Questions or Comments