Process Mapping

Overview

- Goals and outcomes of function mapping
- Introduction to TalOp Process mapping for documenting processes (both strategic and process functions)
- How process mapping works
- Completing the workflow questionnaire
- How to write an SOP
- Building a SIPOC diagram
- Preparing a workflow diagram
- Approving and validating the final output

Function Mapping Outcomes

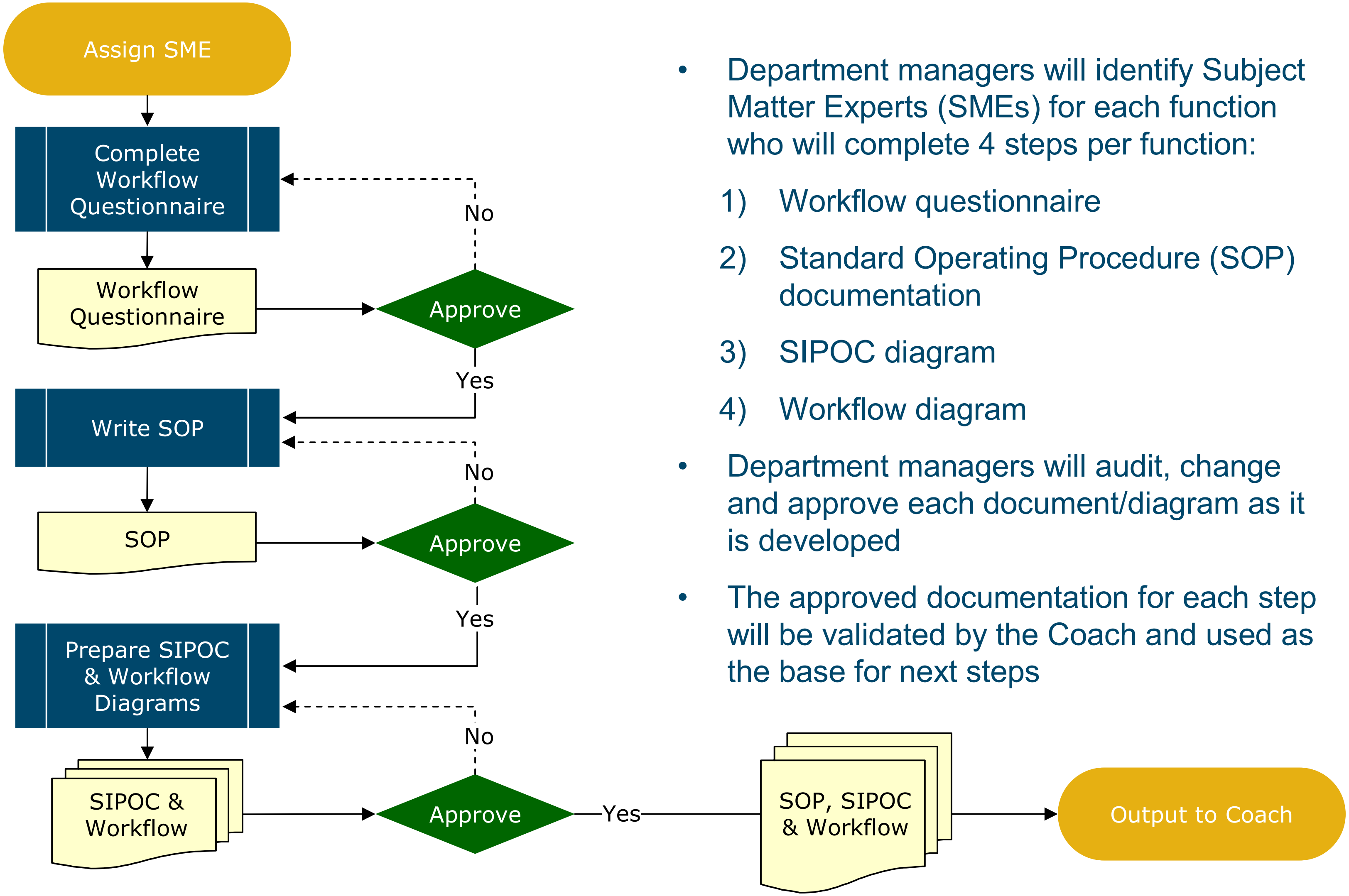
To improve the efficiency and effectiveness of functions by providing:

- Insight into how each function currently adds value
- Opportunities to streamline and automate
- A base for creating/verifying knowledge management tools
- A foundation for defining core competencies
- A process to validate existing operational

Process Mapping Results – Output in 6 Steps

- **Step 1: Finalize SOPs**
  - Once the workflow questionnaires are complete, draft SOPs will be produced for each function using an automated function.
  - The department manager in charge will take accountability for auditing the accuracy of each SOP, suggesting changes and approving the final SOP.
- **Step 2: Create SIPOC (supplier, input, process, output, customer) diagram**
  - The SOP provides information required to create the standard TQM SIPOC model used to assist in understanding a process function at a high level.
  - SIPOC identifies who will supply inputs to the process, what specifications are placed on the outputs and who the true customers and their requirements are.
- **Step 3: Draw Workflow Diagram**
  - SIPOC provides the base for analyzing the process and creating a detailed workflow diagram.
  - The workflow diagram provides a picture of the steps required to perform the function and shows the sequence of what happens from start to finish of a procedure.
- **Step 4: Establish Metrics**
  - All operational metrics measure and monitor performance of the function so that it can be benchmarked over a period of time. The focus of the metric will include all or parts of the 3 P's (People, Process Product/ service). Create/suggest additional metrics as observed. All metric will be rolled up to make the CFO Balanced Scorecard.
- **Step 5: Define Core Competencies**
  - Profiles for each position that will assist in skill development and determining skill gaps.
- **Step 6: Identify Continuous Improvement Opportunities**
  - The function map will define opportunities for improvement through Quality Control Audits, Action Learning with SME to look for improvements and will feed the Operational Efficiency Committee initiative, to name a few examples.

How Process Mapping Works



- Department managers will identify Subject Matter Experts (SMEs) for each function who will complete 4 steps per function:
  1) Workflow questionnaire
  2) Standard Operating Procedure (SOP) documentation
  3) SIPOC diagram
  4) Workflow diagram
- Department managers will audit, change and approve each document/diagram as it is developed
- The approved documentation for each step will be validated by the Coach and used as the base for next steps

Selecting the Right SME

"An individual who exhibits the highest level of expertise in performing a specialized job, task, or skill." Six Sigma

Ensure the SME meets all of the following requirements:

- Thorough expertise of the function including standard processes as well as exceptions and deviations
- Proven delivery expertise
- Excellent self-QC skills and ability to review and correct the work of colleagues
- Enthusiastic about quality and efficiency
- Understanding of how the function fits into the big picture
- Knows why the function is performed and for whom

Expectations of the SME

A SME is responsible for:

- Creating documentation that thoroughly describes the function and clearly shows all related tasks
- Following the SOP protocols when documenting tasks
- Developing SIPOC and workflow diagrams for all appropriate functions
- Completing documentation within the defined timeframe
- Asking questions for clarification of tasks
- Providing input into how a function can be performed more effectively and efficiently

A SME is not responsible for:

- Making decisions on policies affecting the function process

Completing the Workflow Questionnaire

For each individual function, the first step in the process is filling out the workflow questionnaire - a data collection tool that will help you organize the data needed to complete the rest of the documentation.

As the SME you will already know most of what is required to complete the form, but to get started you will also want to:

- **Define the work type to choose the right questionnaire.**
  - Process Function Workflow Questionnaire is defined as repetitive work that follows a pre-defined workflow processes and procedures and has a product as an output
  - Strategic Function Workflow Questionnaire impacts how things are done and involves ongoing decision making and critical thinking. Typical outputs would be analysis, strategy, analytics, etc.
- **Collect all related documentation.** Review any related forms, reports, training guides, SOPs, feedback forms, etc.
- **Have handy any data related to the function.** The questionnaire will ask you to identify how many people perform the function and how it is measured along with other data-related questions.

Defining Work Type

- The first step is defining work type and selecting the appropriate workflow questionnaire: Either **process** or **strategic**.
- Note that a function is a predictable regularly performed type of work, not to be confused with ad hoc work or a project which will be tracked later.

Please review the diagram below for more detail on the differences:

Workload

Planned Work

Process Functions

•Repetitive work that follows a pre-defined workflow processes and procedures.
•The goal of a process function is to output a product of the department, like a budget or financial statement.
•It is also important to note that not every function will have a unique workflow diagram associated with it. Some functions are part of a larger workflow made up of multiple functions.

Strategic Functions

•Work that impacts how things are done
•Strategic functions require decision making and lateral thinking
•Strategic functions will not use a pre-defined workflow but rather depend on the individual's skills and knowledge
•Examples include, process development and objective setting.

Project Work

- Work that is focused on reaching a one time goal or solving a problem
- Projects are meant to have a start and finish and are not repetitive

Ad Hoc Work

- Work that is not considered within the job scope
- Ad Hoc work is normally a one time only request

Process Questionnaire – Definitions

The table on this page and next lists the question definitions to help you answer the Process Workflow Questionnaire.

Process Workflow Questionnaire – Field Definitions (part 1 of 2)	
Function Name	✓ The name of the function will be provided by the dept. manager (derived from the function map)
Function Owner	✓ The department accountable for performing the work
Regulatory Policy	✓ List all regulatory bodies and policies that require/monitor function
Input Suppliers	✓ All external departments, vendors, etc. who provide materials needed to perform the function (excluding hardware & facilities)
Input Material	✓ The information, paperwork, materials and research required to complete the function
Product/Service	✓ List of all products and services being provided to the customer by this function
Customer	✓ Person, department, external entity who will receive the output from the function
Output – Desirable	✓ List all desirable activity that should be created along with related output (e.g. calls and emails to customers, status updates to managers, etc)
Output – Undesirable	✓ List undesirable activity that could result from the function (e.g. customer complaints, payment errors, incorrect invoices)
Customer Feedback	✓ How feedback is taken from the customer on their satisfaction with the product/service
Metrics	✓ Method and data currently used to measure success of this function

Process Questionnaire – Definitions (cont.)

Process Workflow Questionnaire – Field Definitions (part 2 of 2)	
Frequency	✓ How often the function is performed (twice a day, once a month, etc.)
Time required	✓ The number of minutes, hours, days needed to complete the process
Full Time Equivalents (FTEs)	✓ The number of FTEs currently performing this function. (e.g. two people working 20 hrs each is one FTE)
Skills required	✓ What skills does a person need to successfully perform the function (proficient in MS Office, management skills, etc.)
Knowledge required	✓ The knowledge needed (e.g. BA in accounting, experience with customer service, understanding of DBOR structure, etc.)
Documentation Present	✓ List of documents that currently support the process and briefly what they cover
Documentation Needed	✓ Documentation that needs to be created
Resources & Tool	✓ Software, equipment, databases needed to perform the function
Detailed Steps	✓ List the actual detailed steps from start to finish to complete the function
Escalation Matrix	✓ Identify the hierarchy of people who will approve deviations from the process along the way or who will step in to solve ad hoc problems that occur while executing the process
Communication Protocol	✓ Which people need to be informed of the progress of the function and how they should be contacted (e.g. does the customer need a notification email when certain steps are completed)
Approval Process	✓ Identify if the function has a sign off process to approve the output along the way and/or when complete
Dependencies	✓ Note if this function is part of a larger process (and which process) or if it stands alone

B – M – E Workflow Questionnaire Strategic Function Data Collection Fields

For each strategic function performed a Subject Matter Expert (SME) will be identified and asked to complete a workflow questionnaire much like the process questionnaire. Rather than steps to complete, the SME will be asked for information on lateral thinking considerations. See sample table below:

Workflow questionnaire categories	
✓ Ownership of function	✓ Problem solving approach
✓ Decision tree (how to prioritized)	✓ Resources and tools used
✓ Target Client	✓ Documentation - what is in place/needs to be created
✓ Value proposition to the group	✓ Expected Frequency - how often performed
✓ Current metrics	✓ Intensity - level of effort and number of FTEs
✓ Regulatory Policy	✓ F & Q – top 5 questions person doing this function must be able to answer
✓ Feedback mechanism ✓ Function a stand alone function or supports a larger process	✓ Knowledge transfer information (political considerations, communication considerations, examples, research available)

How to Write an SOP

Once you have completed the appropriate Workflow Questionnaire write the SOP document that will define the process in one succinct document. Follow the steps below and on the following page.

•**Step 1: Document Information.** Prepare a cover page with information identifying the SOP (department, doc number, version, function name, etc.)

•**Step 2: Create Revision Control**. Following the cover page, include a revision control page that outlines all changes made to the document since it's creation.

•**Step 3: Describe Objective**. Create a brief introduction and objective at the start of the document that clearly identifies the desired output from the function and who will use the output. It is important to be specific, concise and to the point.

•**Step 4: Outline Scope, Roles & Responsibilities**. Define what the process governs and:

- Who will perform the work described in each step?
- Who is accountable for approving/reviewing the functions output?
- What kind of operational metrics are there and who are the results given to?

How to Write an SOP (cont.)

Step 5: Identify Required Skills and Knowledge. Identify the training and/or certification required before a person can perform this function

Step 6: Diagram the Workflow. Create a graphical diagram of the steps from start to end supplemented with descriptive bullet points if required

Step 7: Describe Tools & Materials. List the entire range of tools, equipment, templates and reference materials needed to perform the actions in the SOP

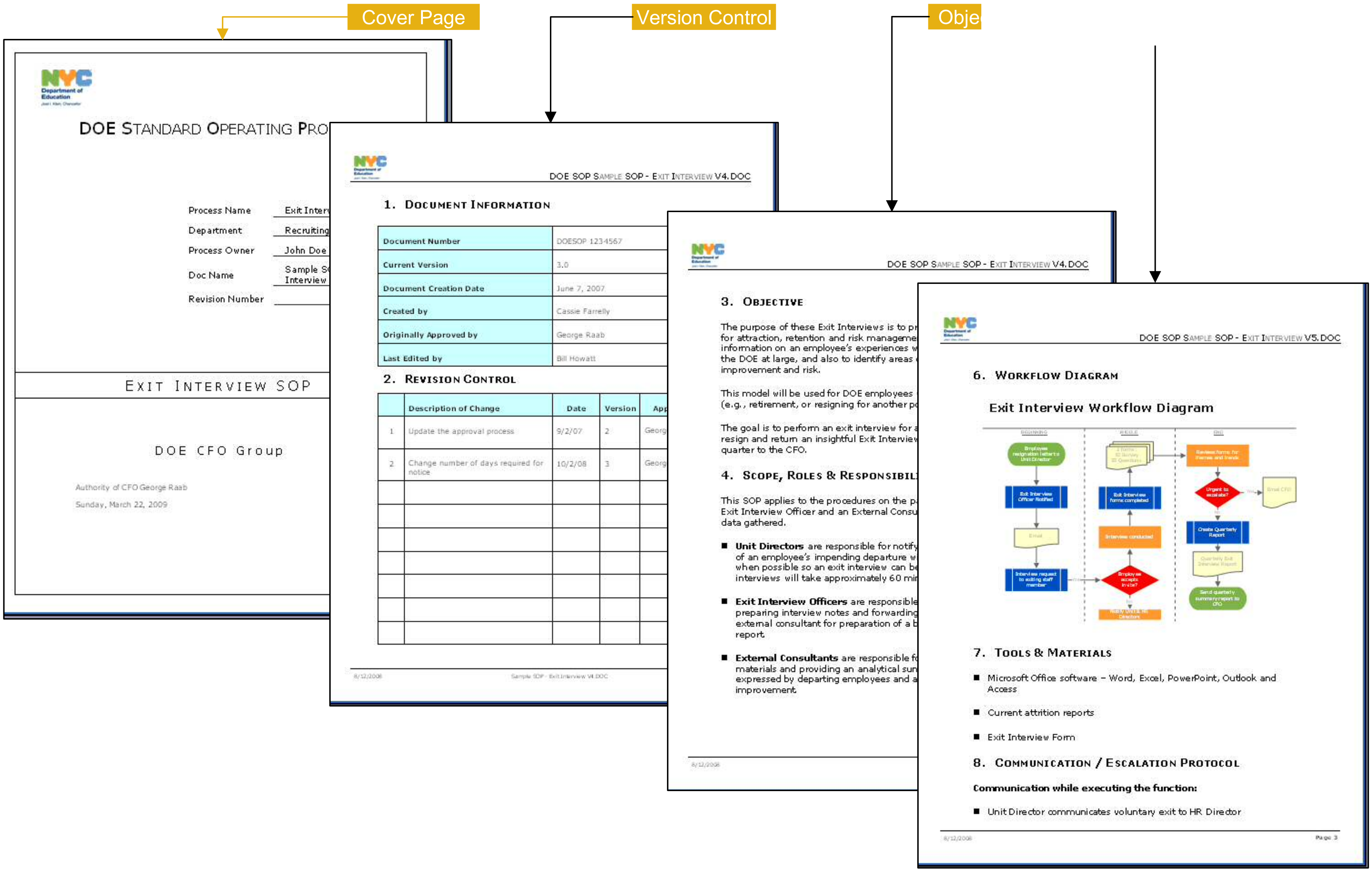
Step 9: Define Communication/Escalation Protocol. Include a communication plan with an escalation matrix (the order of who is communicated to first in this event)

Step 8: Specify Success Metrics. Specify how and what metrics are/should be collected and reported

Optional: Add an Appendix. A reference section may be added at the end to refer to additional information such as confidentiality statement, glossary of terms, forms, related reports and diagrams, etc.

Note: To see a completed example refer to the SOP on Exit Interviewing document

SOP Sample



Cover Page
Version Control
Obje
DOE STANDARD OPERATING PRO
Process Name
Exit Interv
Department
Recruiting
Process Owner
John Doe
Doc Name
Sample S
Interview
Revision Number
EXIT INTERVIEW SOP
DOE CFO Group
Authority of CFO George Raab
Sunday, March 22, 2009
DOE SOP SAMPLE SOP - EXIT INTERVIEW V4.DOC
1. DOCUMENT INFORMATION
Document Number
DOESOP 1234567
Current Version
3.0
Document Creation Date
June 7, 2007
Created by
Cassie Farrelly
Originally Approved by
George Raab
Last Edited by
Bill Howatt
2. REVISION CONTROL
Description of Change
Date
Version
App
1
Update the approval process
9/2/07
2
Georg
2
Change number of days required for notice
10/2/08
3
Georg
DOE SOP SAMPLE SOP - EXIT INTERVIEW V4.DOC
3. OBJECTIVE
The purpose of these Exit Interviews is to pr
for attraction, retention and risk manageme
information on an employee's experiences w
the DOE at large, and also to identify areas
improvement and risk.
This model will be used for DOE employees
(e.g., retirement, or resigning for another p
The goal is to perform an exit interview for a
resign and return an insightful Exit Intervie
quarter to the CFO.
4. SCOPE, ROLES & RESPONSIBILI
This SOP applies to the procedures on the p
Exit Interview Officer and an External Consu
data gathered.
Unit Directors are responsible for notify
of an employee's impending departure w
when possible so an exit interview can be
interviews will take approximately 60 mi
Exit Interview Officers are responsible
preparing interview notes and forwarding
external consultant for preparation of a b
report.
External Consultants are responsible f
materials and providing an analytical sur
expressed by departing employees and a
improvement.
DOE SOP SAMPLE SOP - EXIT INTERVIEW V5.DOC
6. WORKFLOW DIAGRAM
Exit Interview Workflow Diagram
7. TOOLS & MATERIALS
Microsoft Office software – Word, Excel, PowerPoint, Outlook and Access
Current attrition reports
Exit Interview Form
8. COMMUNICATION / ESCALATION PROTOCOL
Communication while executing the function:
Unit Director communicates voluntary exit to HR Director
Page 3

How to Build a SIPOC Diagram

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Using a PowerPoint slide in the format on the next page, list the values for each of the five areas. Next to each category is a description of what should be included in that value.	
Supplier	List all of the parties who are supplying data to the core process. These are the people, processes, departments and/or companies that provides the source of what is worked on.
Input	Input is the material or information provided to the process from the suppliers. List all inputs supplied by each supplier.
Process	These are the 4 to 5 high level internal steps required to get the job done. Ask yourself what the prime activities that take place from start to finish and list them here.
Output	This is the products, services, and/or information being provided to the customer by the process. List and classify all output from the process (including outputs that are not desirable). See the sample for potential "undesirable output."
Customer	Person, process and/or department receiving outputs from the process. Identify direct and indirect customers who are using or being affected by the output of the process

The SIPOC Diagram will be the base of a brainstorming session by the project team who will prioritize the most critical one to three customers and identify, prioritize and align the outputs most significant to those customers. The team can identify what input or information is needed to perform that process (I) and who provides that input (S). The output will be a finalized SIPOC.

SIPOC Sample for Efficiency Opportunity Process

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S

SUPLIER

- Unit director
- Employees

I

INPUT

- Notification of resignation/ retirement
- Employee comments

P

O

OUTPUT

Desirable

- EI Survey
- EI Questions
- Monthly Exit Interview Report
- Quarterly Exit Interview Report

Undesirable

- Notice of denied exit interview

C

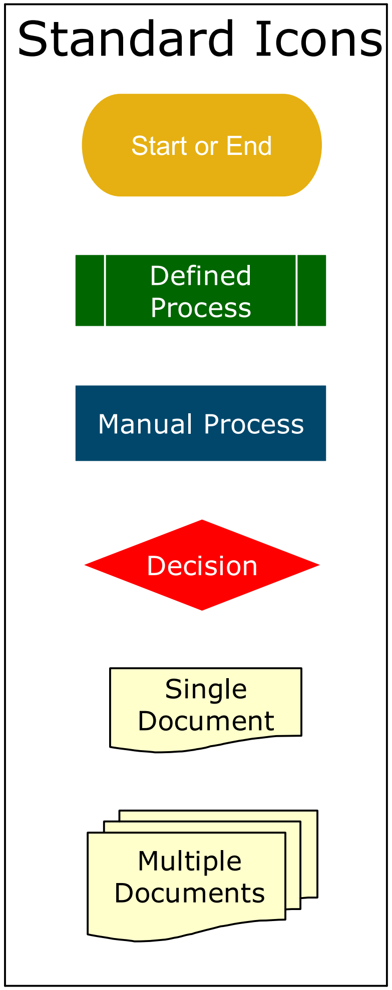
CUSTOMERS

- CFO
- HR director
- Unit directors

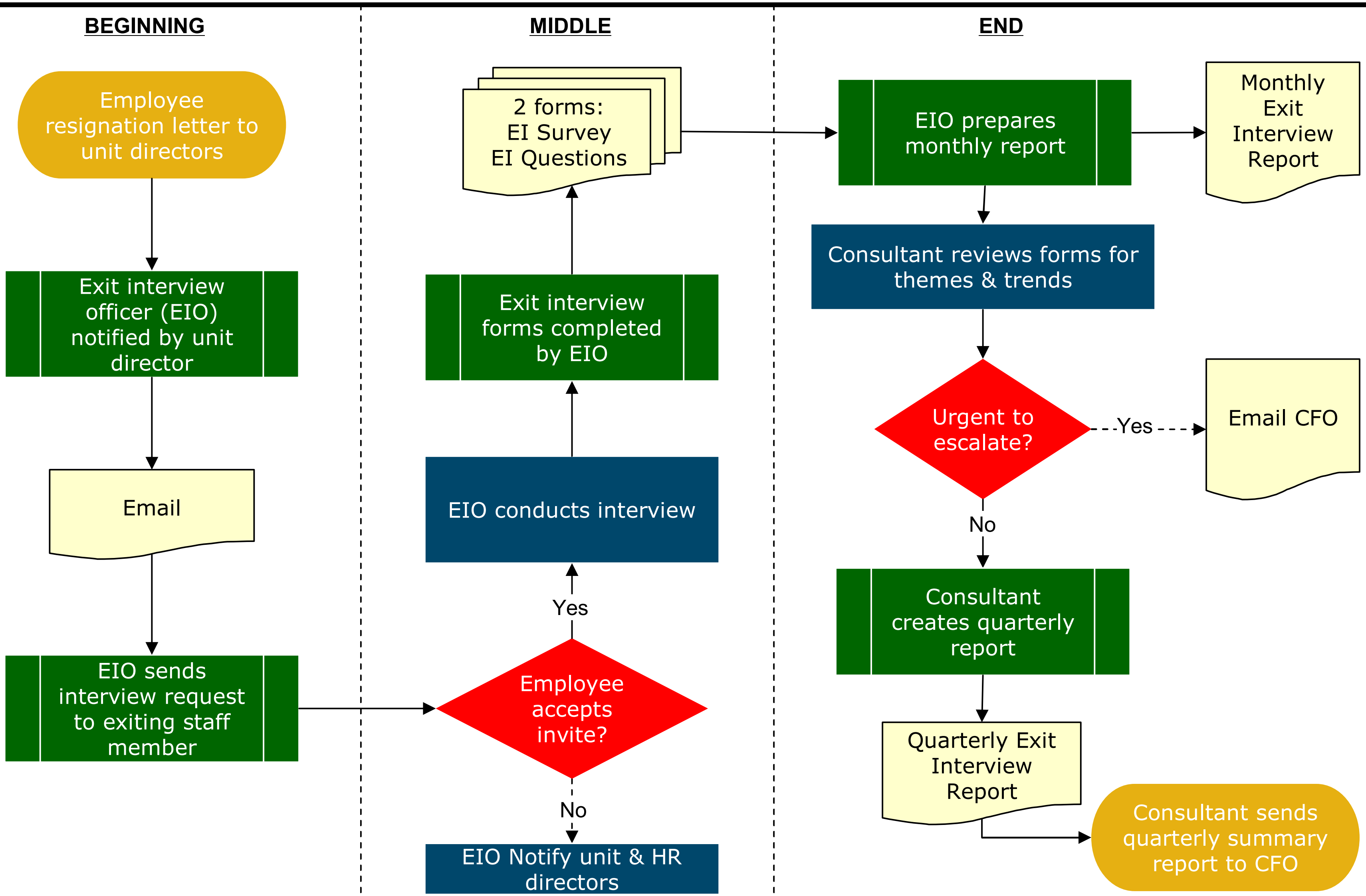
Schedule exit interview → Interview employee → Complete & distribute 2 exit interview forms → Prepare & distribute monthly report → Prepare & distribute quarterly analysis of exit themes & trends

How to Create a Workflow Diagram

- Start by reviewing the SIPOC Diagram and using the information from “Process” to create the PPT
- The “start” and “end” icons will be similar to the first and last Process steps from the SIPOC
- The Process segment of the SIPOC will provide the individual actions that move the process forward. Identify all of the steps in between “start” and “end” using the appropriate icon selecting from right
- Make your diagram as simple as possible while still showing all standard steps and if possible, identify the beginning, middle and end stage of the process (see next page diagrams for reference)
- Connect steps with a solid arrow/line to indicate a straight forward progression or a dashed line to indicate an alternate progression
- Clearly diagram where documents (files and instructions) follow the process steps and where decisions need to be made (but do not get sidetracked by non-standard deviations)
- Clearly indicate where the process ends with the output aligned to the SIPOC Diagram
- Finally, identify all tools and abbreviations used in the process such as software, supplies, etc. and include them as a table on the PPT slide



Sample Workflow Diagram for Exit Interview



Work Flow Mapping Tool Kit

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- SMEs will be given a set of training materials and templates to use when creating the documents required by this process.

- This page outlines the training materials and how you will receive the time timeline. The documents are outlined on the next page.

- Defined Timeline.
  - Along with the documents in this package you will be given the deliverable date for when SMEs are to have all completed materials back.
  - The normal timeframe will be a maximum of two weeks.

Work Flow Mapping Tool Kit (cont.)

The following documents are templates you will use to create the output from this project. Please pay close attention to the naming conventions outlined here as this will help us manage the documents as the process moves forward.

- Two Excel questionnaire templates in Excel to complete based on type of function:
  1. **Workflow Process Questionnaire.XLS** – when completed save as the function name, “Questionnaire” followed by your initials (e.g. “Exit Interview Questionnaire bh.xls”)
  2. **Workflow Strategic Questionnaire.XLS** – save as above

- Three template, two PowerPoint and one Word, to be used for creating the SOP document and the SIPOC and Workflow diagrams
  1. **SIPOC Template.PPT** – when complete save this as the function name, “SIPOC” followed by your initials (e.g., “Exit Interview SIPOC bh.ppt”)
  2. **Workflow Template.PPT** – build the workflow diagram this version and paste the completed diagram as a picture into the appropriate place in the SOP Word document.
     - When complete save this as the function name, “Workflow” followed by your initials (e.g., “Exit Interview Workflow bh.ppt”)
     - Ensure you send this PPT in with the SOP to allow for any minor changes that might be required during the QC
  3. **SOP Template.DOC** – use this template to write the SOP. When complete save this as the function name, “SOP” followed by your initials (e.g., “Exit Interview SOP bh.doc”)

Approving and Validating Output

- As you develop each document or diagram in this process you must validate it before moving on to the next step in the process per the workflow diagram. Have each piece approved by SME direct manager who is responsible to ensure they have all SOPs signed off by their department manager or if necessary the CFO.

- If you have questions during this process check in with your team lead or the SOP Coach assigned to help you.

- The final output should be an approved and validated set of these four documents.
  1) Appropriate Workflow Questionnaire (Process or Strategic)
  2) SOP
  3) SIPOC Diagram
  4) Workflow Diagram

- Please seek the assistance of your coach and department manager as you have questions about the process to expedite completion of the process for each function.

In addition to Process Mapping, TalOp has many supports and products available.

For more information visit www.TalOp.com