




VHA Project through Quality Companion

Team 2 -

Shiyun Han, Abhishek Goswami, Yuchen Guo, Guowei Hou,
Navya Sree Peddu, Mahmoud Hamwi



Beginning A Project

The screenshot displays the Quality Companion software interface. The title bar reads "Untitled - Quality Companion - [Project Today]". The menu bar includes "File", "Edit", "View", "Tools", "Window", and "Help". The toolbar contains various icons for file operations and navigation. The "Project Manager" pane on the left shows a tree view with "12 Step Project" expanded to "Management", where "Project Today" and "Team Members" are highlighted with a red box. Below "Management" are "Tasks", "Financial Data", "Process Map Data", "Y Metrics", "Related Documents", and "Custom Categories". Under "Roadmap", a list of 12 steps is shown, including "1: Project Selection and Scoping" through "12: Implement Process Controls".

The main workspace displays the date "Sunday, April 3, 2016" and a "Customize Project Today" link. The "Welcome" section includes "Get Started" (Overview, Start a project, Add a tool, Getting Started (.pdf & files)), "Learn More" (About templates, About data, About data sharing, Import Visio files), and "View Webcasts" (View online Webcasts to see how to make the most of Quality Companion).

The "Status" section contains a table with the following data:

Project	Planned start date	Due date	% Complete	Status	Assigned to
12 Step Project	None	None	0	Not Started	None

Below the table, it states "No tools assigned to you - Add a Tool".

The "Financial Data" section shows a "Tracking Period" of "12 months" and a table with "Estimated" and "Final" values:

	Estimated	Final
Hard Savings	0	0
Soft Savings	0	0
Implementation Cost	0	0

The "Tasks" section states "No tasks assigned to you - Manage Tasks".

The "Variables" section shows "0 X variables" and "0 Y variables".

The "Ballots" section states "No ballots assigned to you - Add a Ballot".

Adding Team Members

The screenshot displays a software interface for project management. On the left, a tree view shows the project structure under '12 Step Project', including 'Management' and 'Roadmap' sections. The 'Team Members' option is highlighted. The main area shows a table with columns for Name, Job Title, Department, E-mail, and Business Phone. A 'Team Member Properties' dialog box is open, showing the details for 'Lucy Han', including her job title 'Engineer', department 'Team 2', and role 'Project Leader'. The dialog box has tabs for 'General', 'Contact', 'Custom Data', and 'Other', and buttons for 'Help', 'OK', and 'Cancel'.

Name	Job Title	Department	E-mail	Business Phone
Click here to add a t...				
Yuchen Gu				
Navya Ped				
Mahmoud				
Lucy Han	Engineer	Team 2		
Guowei Ho				
Abhishek C				

Team Member Properties

General | Contact | Custom Data | Other

Name: Lucy Han

Job title: Engineer

Department: Team 2

Role: Project Leader

Buttons: Help, OK, Cancel

Creating Financial Data

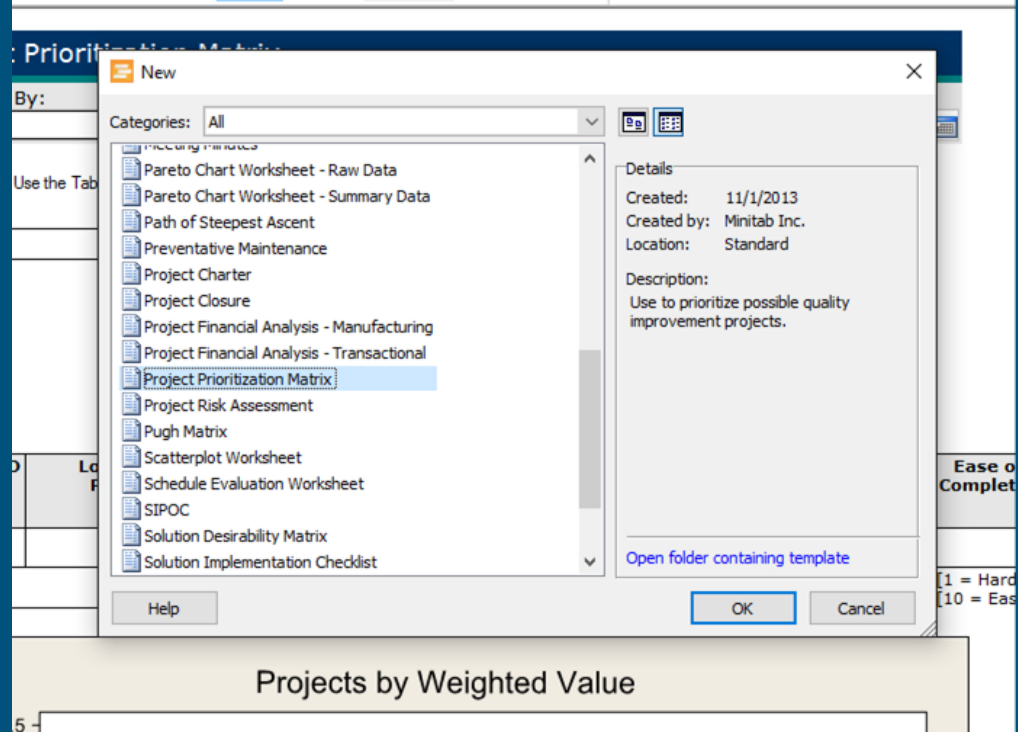
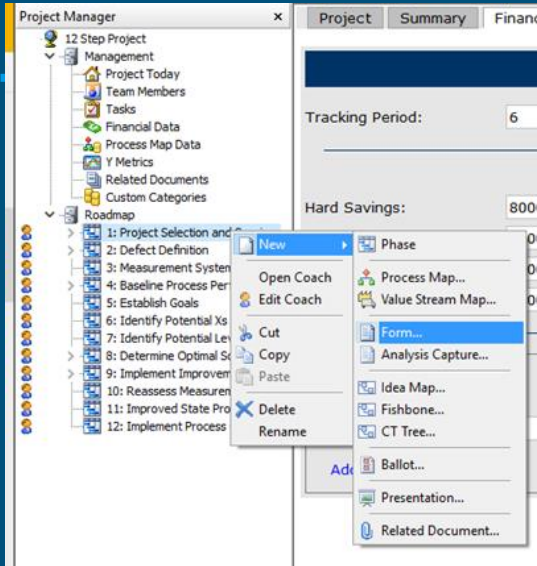
The screenshot displays the 'Project Manager' application window. On the left is a tree view of a '12 Step Project' with categories like Management, Roadmap, and Custom Categories. The 'Financial Data' item is highlighted with a red box. The main window has tabs for 'Project', 'Summary', 'Financial Data', and 'Capability Metrics'. The 'Financial Data' tab is active, showing a 'Tracking Period' of 6 months. Below this is a table with columns 'Estimate' and 'Final' for various financial items. At the bottom, there is a section for 'Custom Financial Data' with a text input field and a red-bordered box containing the text 'Add additional Fields here' and 'Add...'.

	Estimate	Final
Hard Savings:	8000000	0
Soft Savings:	1000000	0
Implementation Costs:	5000000	0
Cash Flow:	10000000	0

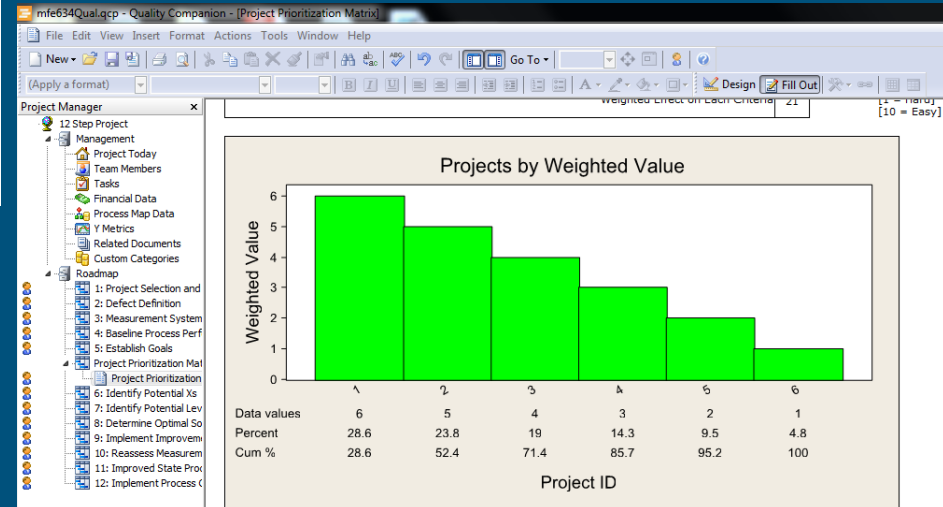
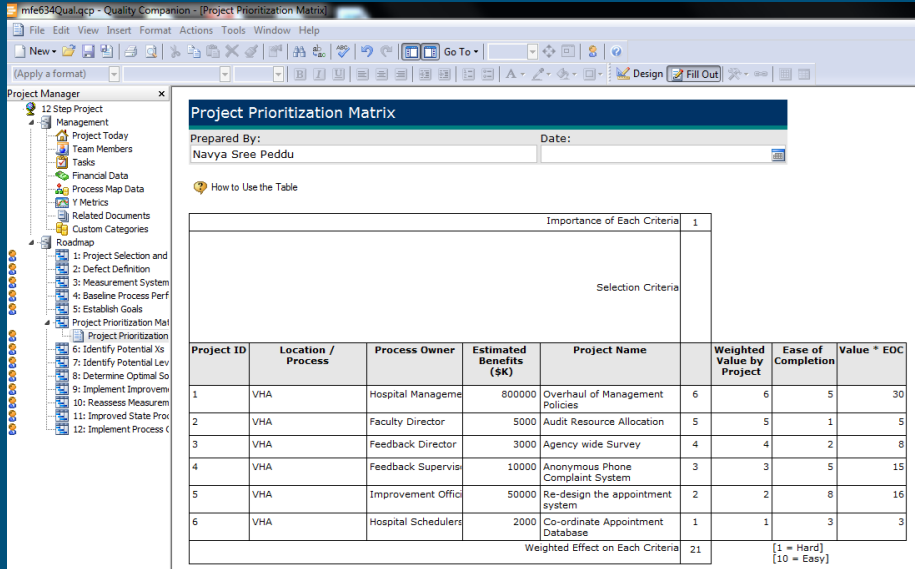
Custom Financial Data

Add additional Fields here
Add...

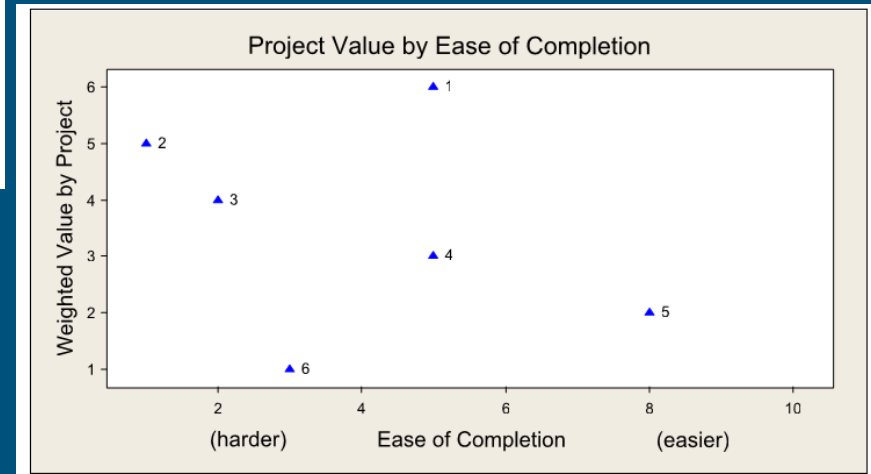
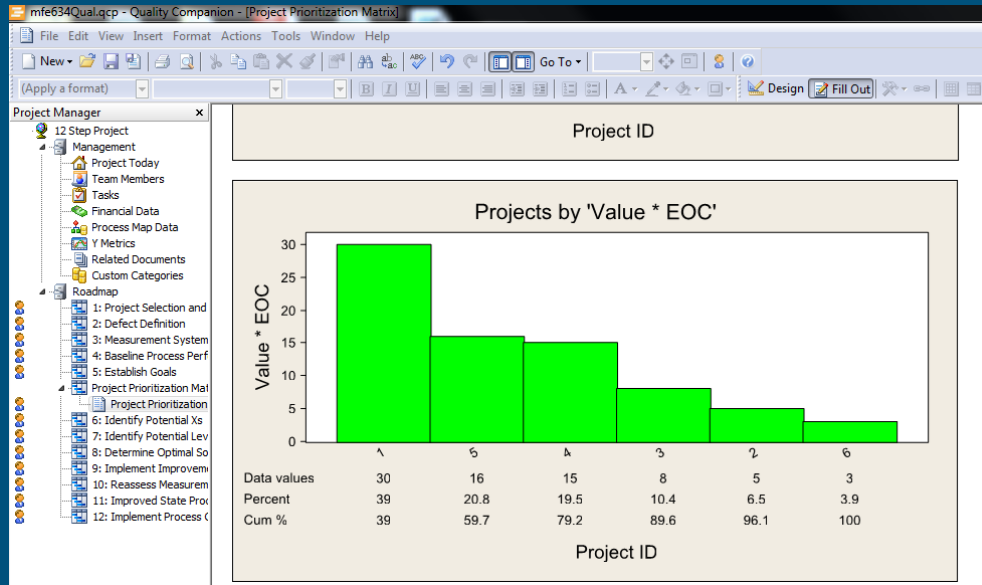
Selecting tools from the Roadmap



Project Prioritization Matrix



Project Prioritization cont.



Creating Project Charter After Project Selection

Project Manager

- Veterans Administration Healthcare System
 - Management
 - Project Today
 - Team Members
 - Tasks
 - Financial Data
 - Process Map Data
 - Y Metrics
 - Related Documents
 - Custom Categories
 - Roadmap
 - 1: Project Selection and Scoping
 - Overview
 - Project Charter**
 - 2: Defect Definition
 - Audit Plan
 - Fishbone
 - 3: Measurement System Evaluation
 - 4: Baseline Process Performance
 - 5: Establish Goals
 - 6: Identify Potential Xs
 - 7: Identify Potential Leverage Variables
 - 8: Determine Optimal Solution
 - 9: Implement Improvements
 - 10: Reassess Measurement System Evaluation
 - 11: Improved State Process Performance
 - 12: Implement Process Controls

Project Charter

Project Authorization

Organization: Veterans Health Care Administration	Champion: Professor J. Romeu	Process Owner: Team 2
Project: Veterans Administration Healthcare System		Project #:
Problem Statement: Since 2014, 43% of appointments scheduled by the VHA has exceeded the 14 day wait time goal.		
Project Objective: Reduce the number of appointments with wait times exceeding the 14 day goal from 43% to less than 10%.		
Estimated Defect Level: Major	Initial Goal: New oversight and accountability policies	Estimated Benefits: \$9,000,000
Approval Date: 4/6/2016	Champion Signature: Prof. Romeu	Process Owner Signature: Shiyun
Estimated Completion Date: 5/5/2016	Project Leader: Shiyun Han	Financial Analyst: Abhishek Goswami

Project Team

Name	Role	Comments	Phone
Shiyun Han	Project Leader		
Abhishek Goswami	Financial Analyst		
Guowei Hou	Black Belt		
Mahmoud Hamwi	Black Belt		
Navya Sree Peddu	Health and Safety Rep		
Yuchen Guo	Green Belt		

Project Definition and Scoping

Metrics (unit of measure):
% reduction of long wait time appointments

Critical to Satisfaction (linkage to customer):
Yes

Defect Definition - Audit Plan

Project Manager

- Veterans Administration Healthcare System
 - Management
 - Project Today
 - Team Members
 - Tasks
 - Financial Data
 - Process Map Data
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 - 1: Project Selection and Scoping
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 - 12: Implement Process Controls

Audit Plan

Project:	Veterans Administration Healthcare System	Document #:	25 A.S.
Location:	Syracuse, NY	Revision:	0
Process Owner:	Team 2	Revision Date:	
Prepared By:	Abhishek Gowami	Approved By:	Lucy Han
		Date:	4/5/2016

The Audits Table

When establishing a plan for a single audit, which may check multiple items/criteria, complete a row for each audit item/criteria using the same audit number. The audit number is typically obtained from the auditing function.

Frequency: How often the audit should be performed. For example, Perform an audit every 4 weeks, Perform an audit every 2000 cycles, Randomly once every three months.

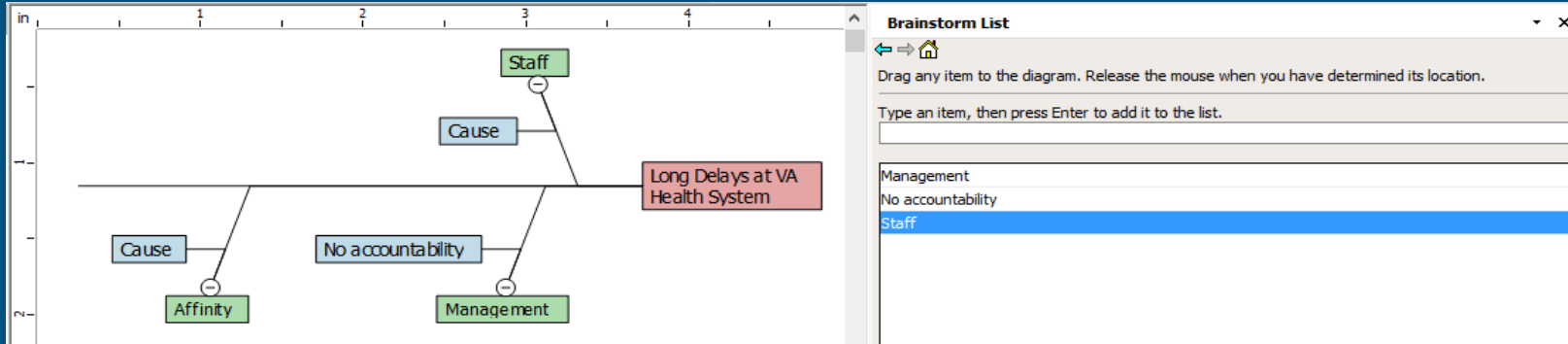
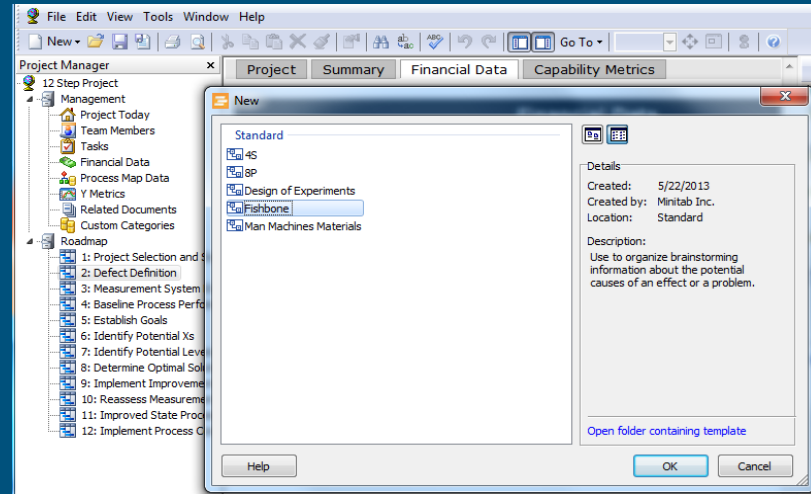
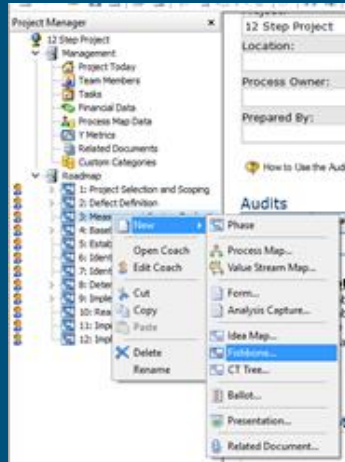
Description/Scope: The item(s) you are auditing. For example, Operator training or SOP manuals.

Criteria: The standards which will be used to gauge whether the audit passes or fails. For example, "Has the operator been trained using the online training system and have the records of the training been posted to the training database?" or "Is the SOP manual up to date and placed at the workstation in clear view of the operator?"

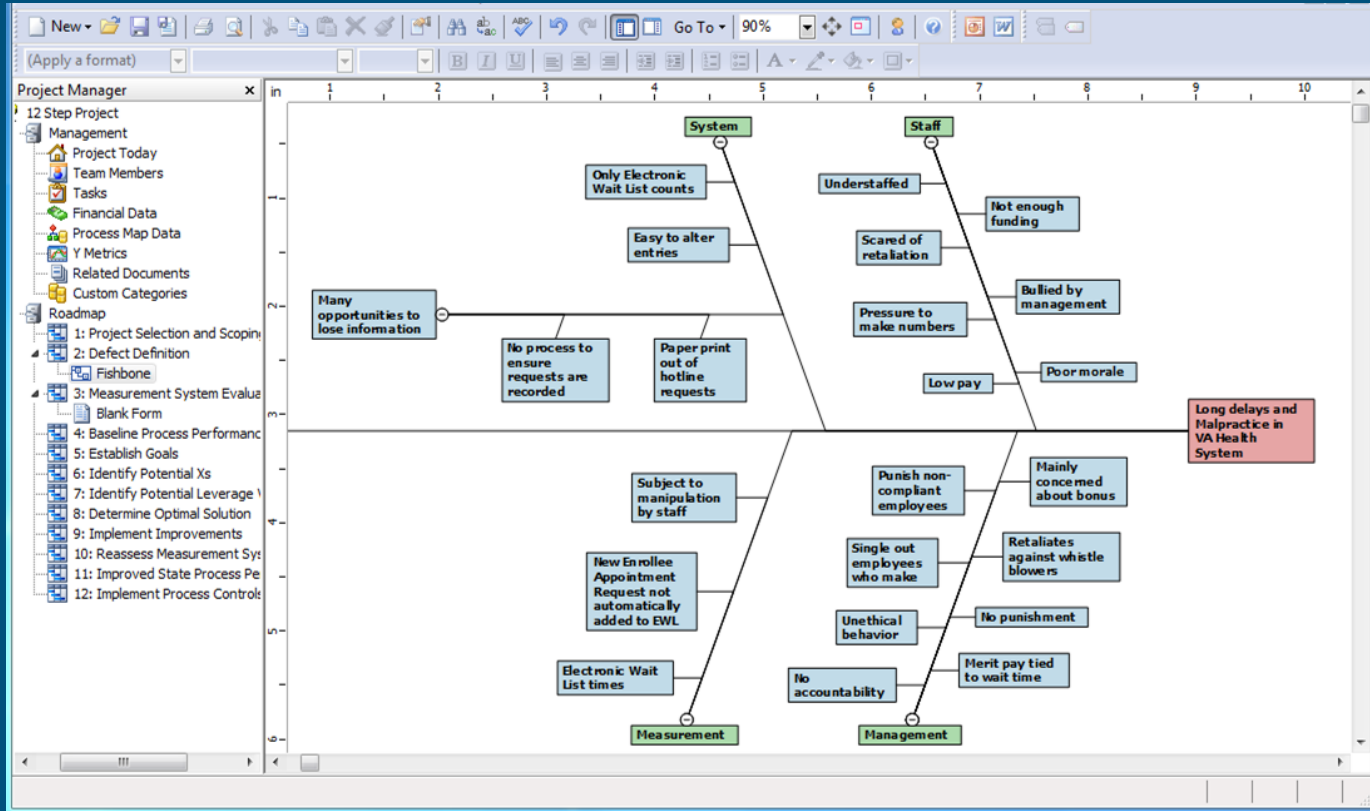
Location of Data: The location of supporting documents or data for the audit criteria. For example, H:\Server1\Training Database or L:\Procedures\Master SOP Files.

Reference: Any additional materials used for the audit item/criteria. For example, Online training materials or Master SOP files.

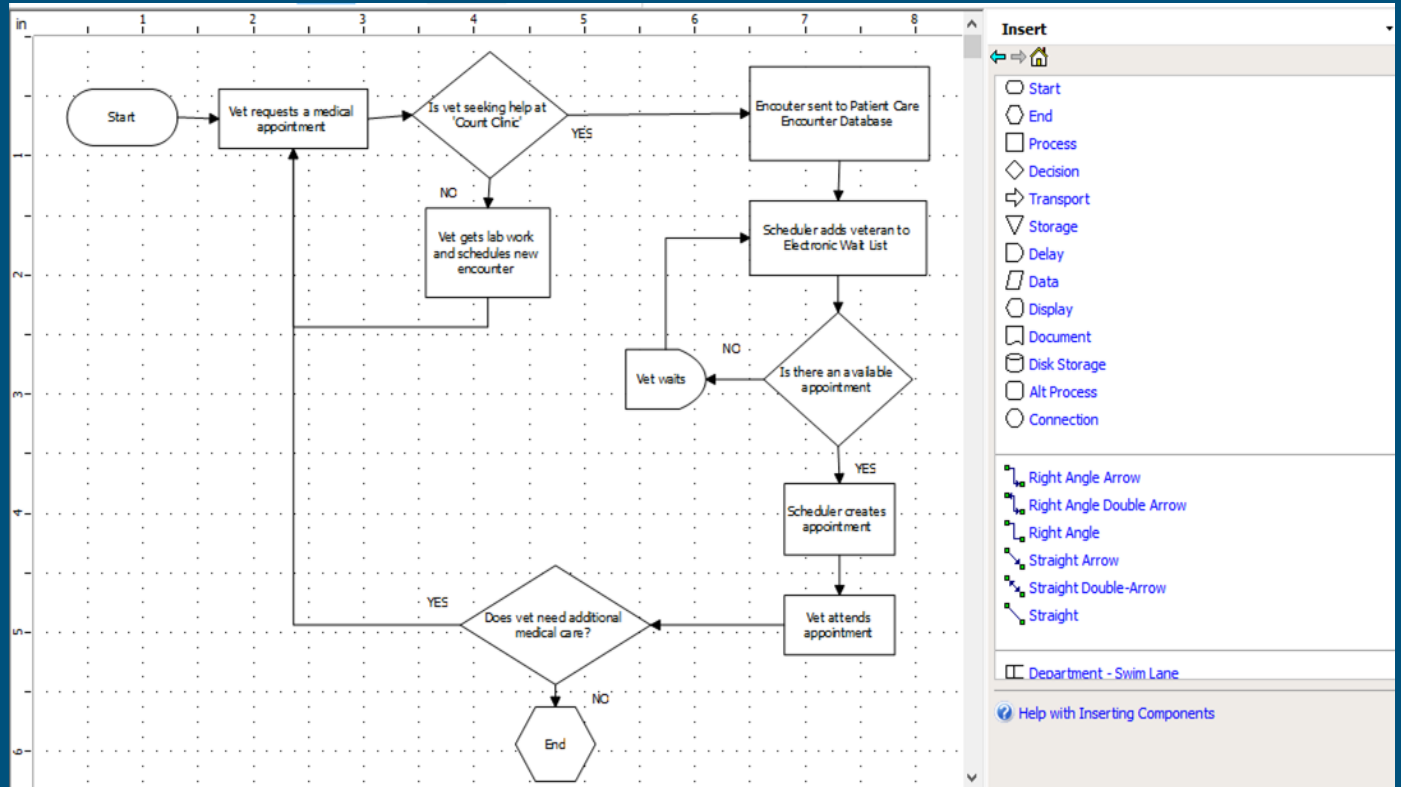
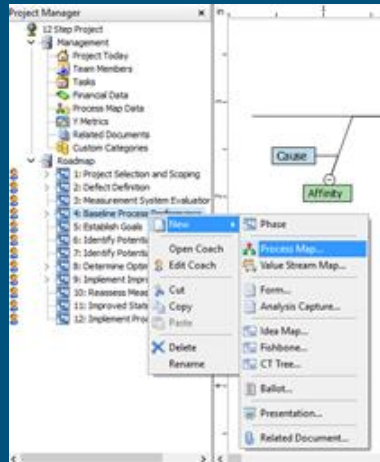
Creating the Fishbone Diagram



Fishbone Diagram cont.



Process Flow Chart



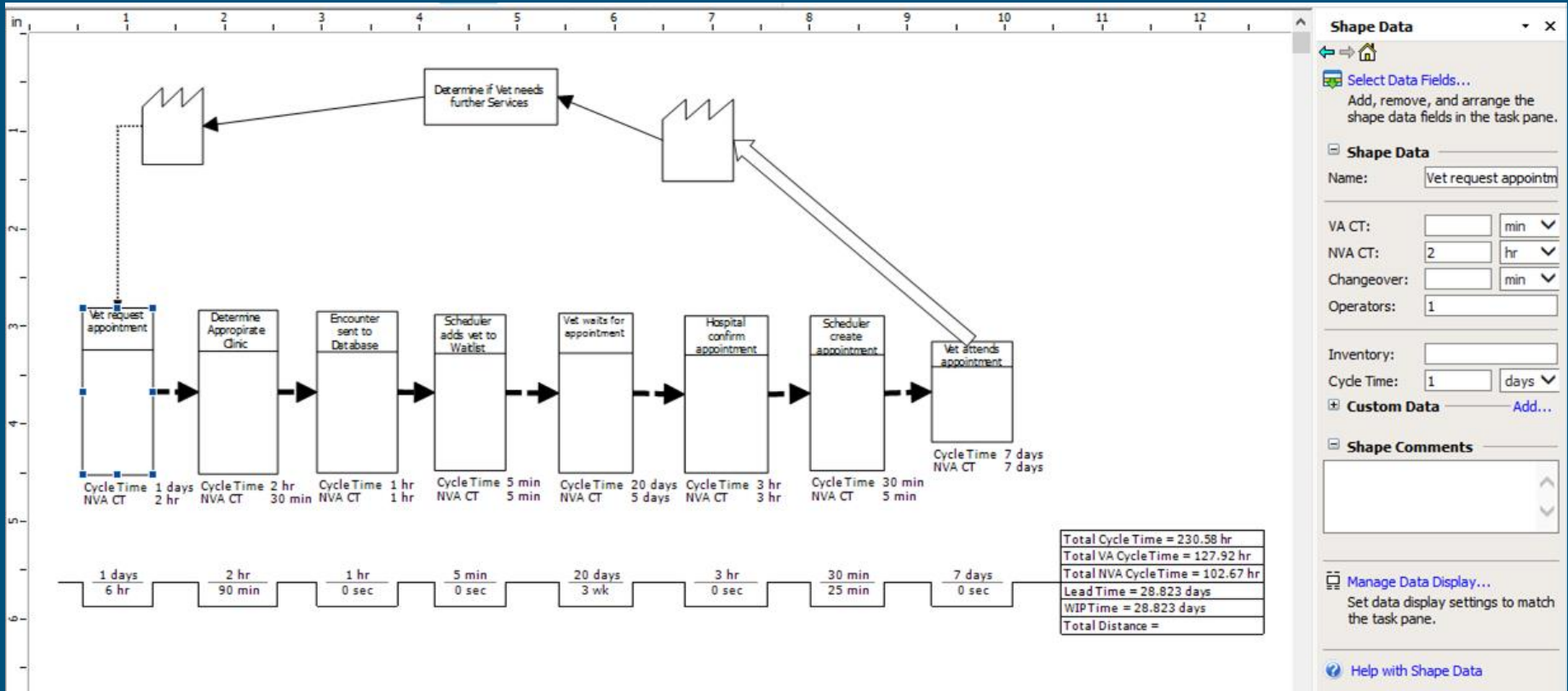
Creating Value Stream Map

The screenshot displays a Value Stream Mapping (VSM) software interface. On the left, a 'Project Manager' pane shows a hierarchical tree of project elements, including '1: Project Selection and Scoping', '2: Define Customer', '3: Measurement System Evaluator', '4: Baseline Process', '5: Standardize', '6: Identify Potential', '7: Identify Problems', '8: Determine Order', '9: Implement Improvement', '10: Standardize', '11: Improved Start', and '12: Implement Plan'. A context menu is open over the 'Process' element, listing options like 'Phase', 'Process Map...', 'Value Stream Map...', 'Form...', 'Analysis Capture...', 'Idea Map...', 'Fabbase...', 'CT Test...', 'Relist...', 'Presentation...', and 'Related Document...'. The main workspace shows a process map with a rectangular process box and a data box containing the following metrics:

Total Cycle Time =
Total VA Cycle Time =
Total NVA Cycle Time =
Lead Time =
WIP Time =
Total Distance =

On the right, the 'Insert Shapes & Connect...' palette is visible, containing two sections: 'Shapes' and 'Connectors'. The 'Shapes' section includes icons for Process, Inventory, Outside Sources, Shipment, Information Supermarket, Buffer Stock, Kaizen Burst, Kanban Post, Withdrawal, Load Leveling, Signal Kanban, Production Kanban, Withdrawal Kanban, Batches Kanban, FIFO Seq Flow, Sequenced-Pull Ball, Operator, Go See Scheduling, and Text Box. The 'Connectors' section includes icons for Manual Info. Flow, Electronic Info. Flow, Kanban Path, Push Arrow, and Finished Goods.

Value Stream Map cont.



Capability Analysis

Project Manager

- 12 Step Project
 - Management
 - Project Today
 - Team Members
 - Tasks
 - Financial Data
 - Process Map Data
 - Y Metrics
 - Related Documents
 - Custom Categories
 - Roadmap
 - 1: Project Selection and Scoping
 - 2: Defect Definition
 - 3: Measurement System Evaluation
 - 4: Baseline Process Performance
 - Process Map
 - Capability Analysis (Normal)
 - 5: Establish Goals
 - 6: Identify Potential Xs
 - 7: Identify Potential Leverage Vari
 - 8: Determine Optimal Solution
 - 9: Implement Improvements
 - 10: Reassess Measurement System
 - 11: Improved State Process Perfor
 - 12: Implement Process Controls

Capability Analysis (Normal)

Minitab: Stat > Quality Tools > Capability Analysis > Normal

Project:

12 Step Project

Project Leader:

Lucy Han

Date:

4/4/2016

Status of Process Evaluation:

Baseline

Input

Variable Description:

Wait time between appointment request and a scheduled appointment date

Subgroup Size: Unit of Measure: LSL: Target: USL:

Unit of Measure: Days LSL: 0 Target: 7 USL: 14

Checklist

Has the measurement system been validated?

Yes No

Are there any hard boundaries and have they been applied?

Yes No

Are the data reasonably normal?

Yes No

If 'No', has the data been transformed? (e.g. Box-Cox)

Yes No

Capability Analysis - Cont.

Output

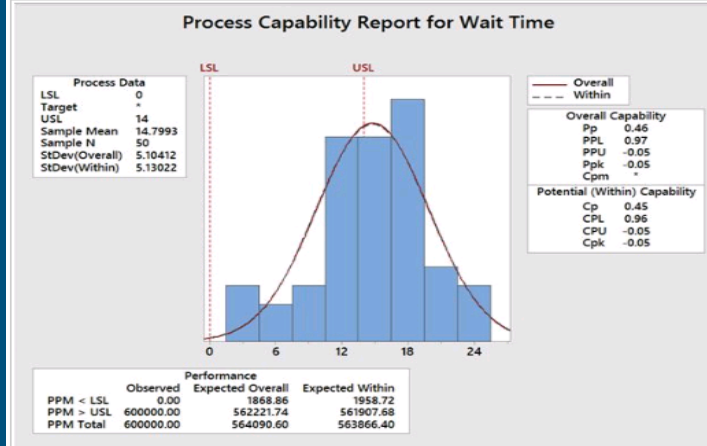
PPM LT (Expected): Ppk:

(Expected Overall DPMO)

PPM LT (Observed): Pp:

(Actual Overall DPMO)

Graphical (Process Capability):



Conclusion

Observations:

- The process capability analysis shows that the process is not capable.
- Other facilities in different states should be used for benchmarking.
- Management overhaul is required to improve the scheduling process and reduce waiting times.

Gauge RR

The screenshot displays the Minitab Project Manager interface. On the left, a tree view shows the project structure under 'VHA waiting time gauge R&R', with '3: Measurement System Evaluation' > 'Gage R&R Study (Crossed)' selected. The main panel shows the configuration for this study.

Gage R&R Study (Crossed)
Minitab: Stat > Quality Tools > Gage Study > Gage R&R Study (Crossed)

Project: VHA waiting time gauge R&R
Project Leader: Lucy Han Date: 4/4/2016

Input
Variable Description: Waiting time

Study Parameters
of Samples: 90 # of Appraisers: 3
of Trials: 3 Randomized? Yes No

Appraisers
Name or Identification:
All qualified? Yes No

Inspection Capability
Is there a desire to evaluate the Gage System to determine if it can be safely used to accept/reject output? Yes No
If 'Yes', enter the Process Tolerance [USL-LSL] into Minitab - Options.
Process Tolerance: 14-0

Quality of Sample
Does the variation of the selected samples fairly represent the variation of the process? Yes No
If 'Yes', explain rationale:
Random sample was generated through minitab.

If 'No', enter a historical or estimated Process Standard Deviation into Minitab - Options.
Historical Process SDev:

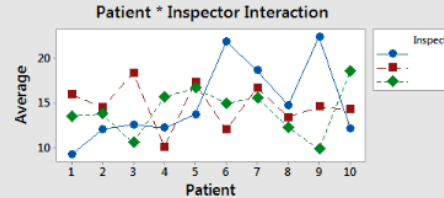
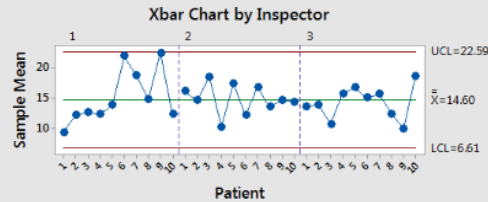
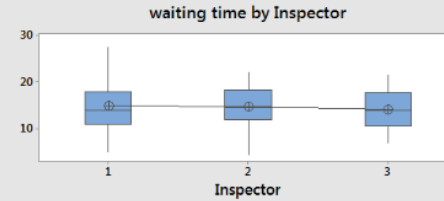
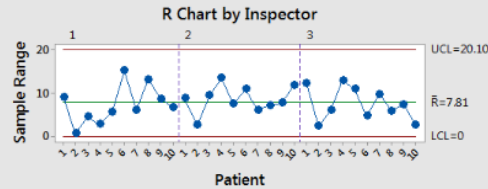
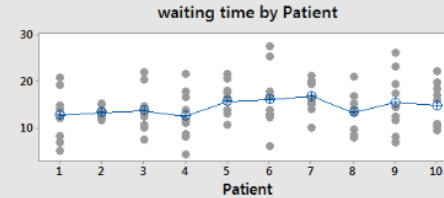
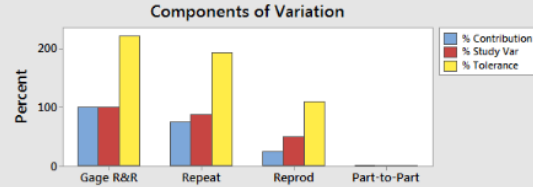
Gauge RR

Graphical (Gage R&R (ANOVA or Xbar-R)) (optional):

Gauge R&R for Waiting time measurement VA

Gage name: Data collection system
Date of study: 4/4/16

Reported by: Mahmoud Hamwi
Tolerance:
Misc:



Conclusion

Generally accepted guidelines for evaluating all the % R&R values in the "Total Gage R&R" row (%SV, SV/Toler, and SV/Proc):
<10% Ideal, 10 to 30% Marginal, >30% Not Acceptable

- Gauge variation is too high, the measurement system should be re-evaluated.

Thank You