



Six Sigma DMAIC Improvement Story

Green Belt Project Objective:
To Reduce the Time to Answer and Complete WASD Customer Service Calls

Last Updated: 4/13/13

Team: *Thirsty for Answers*

Barbara Galvez (Co-Team Leader)

Hugo Salazar

Vivian Guzman

Alina Hudak (Sponsor)

Harold Concepcion (Co-Team Leader)

Debbie Viera

Roberta Pasquier

Maria Carballeira



Identify Project Charter

The team developed a team Project Charter.

Project Charter	
Business Case	Project Name: Reduce Wait Time and Call handle Time for Customer Service Calls 2. <input checked="" type="checkbox"/>
	Problem/Impact: It is very important to address customer service requests both timely and effectively, thus improving the customers' impression of the department's service delivery. 1. <input checked="" type="checkbox"/>
	Expected Benefits: Improvement will result in reduced Call Wait Time, Handle time and improve customer satisfaction with call resolutions.
Objectives	Outcome Indicator(s) Q1- % of Calls Answered and Handled Timely
	Proposed Target(s) Target= Less than 7 minutes
	Time Frame: Nov 2012 through March 2013
	Strategic Alignment: Supports the County's Business Plan
Scope	In Scope: Calls from WASD Customer handled by WASD Customer Service Unit
	Out-of-Scope: Other Calls
	Authorized by: Alina Hudak
Team	Sponsor: Alina Hudak
	Team Leader: Harold Concepcion, Babara Galvez
	Team Members: Hugo Salazar, Debbie Viera, Maria Carballeira, Vivian Guzman, Roberta Pasquier
	Process Owner(s): Maria Carballeira
	Mgmt Review Team: Alina Hudak
Schedule	Completion Date: 31-Mar-13
	Review Dates: Monthly and Final Review in March 2013
	Key Milestone Dates: See Action Plan

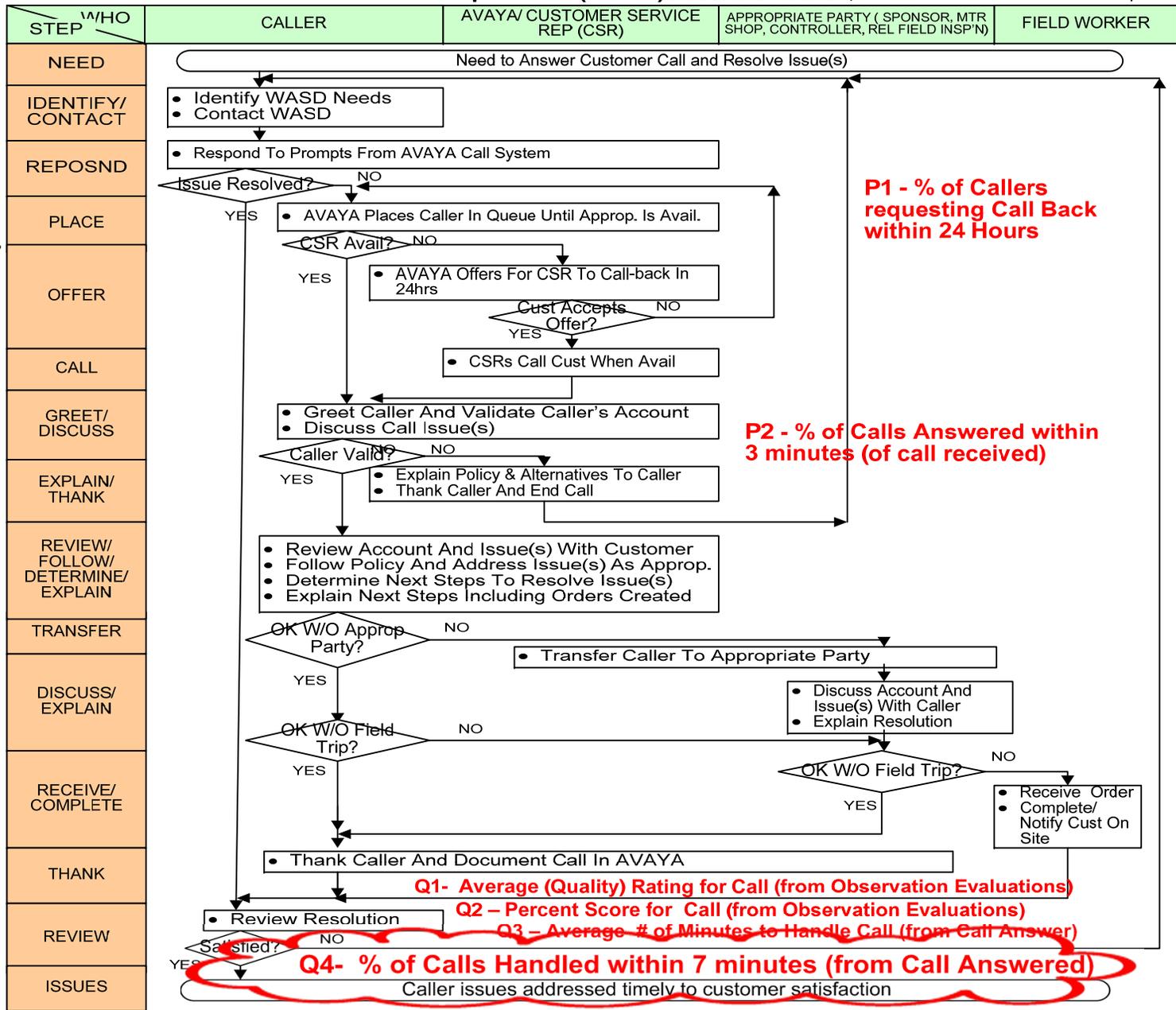


Review Process Flow Chart

The team constructed a Process flow chart describing the Process.

The team next looked closer how to capture indicator data.

Answer and Resolve Water and Sewer Department (WASD) Customer Calls (Process Owner: Harold Concepcion)



P1 - % of Callers requesting Call Back within 24 Hours

P2 - % of Calls Answered within 3 minutes (of call received)

Q1- Average (Quality) Rating for Call (from Observation Evaluations)

Q2 - Percent Score for Call (from Observation Evaluations)

Q3 - Average # of Minutes to Handle Call (from Call Answer)

Q4- % of Calls Handled within 7 minutes (from Call Answered)



Hidden Costs of Late Call Handling

The team identified the hidden costs of delayed service call handling.

Annual Cost

1. Additional Managing of Customer Call Backs

- a) Average of 95 callbacks conducted per day in the month of Nov.
(1,895 messages were left requesting callbacks in the month of Nov.)
 - b) Average of 10 minutes to research account in Customer Info System.
 - c) Average of 8 minutes to handle call back to customer.
 - d) Average of 3 callbacks per hour.
 - e) Average of hourly wage is \$22 for the (2) callback reps.
- (95 call backs per day) x (250 days per year) X (.30 staff hrs. per Call Back)X
(\$22 per staff hr. (CSR2)) =**\$156,750**

2. Complaint handling from customers (as a result of delays)

- a. We average 25 complaints per day that tend to be more complex than the call backs and are usually escalated to at least a lead worker and/or supervisor level → (25 complaints per day) X (.20 specifically delay related) = 5 X (250 days per year)= 1,250 x (.30 staff hrs. per complaint)= 375 x (\$30 per staff hr. (leadworker/supv.) **\$11,250**

Total..... \$ 168,000



Identify Data Collection Activities

The team tried 2 unsuccessful data collection attempts before succeeding on the 3rd attempt.

1st Attempt - The team requested data from the County's AVAYA call system data base. It was learned from AVAYA data experts that there was no current "detail" report that would provide needed detail information on calls from the AVAYA system. Furthermore, to secure the data, would take too long and require additional charges from AVAYA vendor.

2nd Attempt - The team next manually collected needed data from previously recorded call observations. Fifty (50) calls were sampled and data reviewed with the team and our Black Belt Consultant. This approach was manual and data available was less than desired.

3rd Attempt - The team decided to redesign the existing Call Observation Evaluations system. The team designed a 1 page survey and Spreadsheet . The survey could be converted to an electronic iPhone Survey Form in the future. The team will use this form (and spreadsheet) to address this problem AND for future on-going Call Observation Evaluations. *(note: changing to call observation data meant that the team would not be able to analyze call queue time in this project)*



Identify Data Collection Instrument

The team designed a one (1) page evaluation form for Call Observations

WASD Call Observation Evaluation *(Top of page)*

A. Employee : _____ Supervisor: _____ Evaluator: _____

B. Call Answer _____ Call Answer Time: _____ Call End Time: _____

C. Caller Type: Tenant Owner Other (specify): _____ Caller Gender: Male Female

D. Account Type: Commercial Residential Industrial Gov'tal Other (specify): _____

E. Call Type: CM EXT CONP UGL LIEN XFER DM HB Other (Specify): _____ Call Back? Yes No

F. Service Type: Water Sewer Other (Specify): _____ Account #: _____

Instructions: Please respond to the following based on your call observation.

Desired Call Outcomes	Rating Scale						Evidence Supporting Rating and Suggestions for Improvement (Explain ratings of 3 or less)
	Strongly Agree 5	Agree 4	Neither Agree Nor Disagree 3	Disagree 2	Strongly Disagree 1	Not Applicable NA	
Call Opening included;							
1. a. standard greeting and clear CSR identification.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. acknowledging caller's initial response & offering assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Account Validation included;							
2. a. request for caller name and relationship to account holder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. request for Phone #, email, SSN/FTN and/or mailing address.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. update of appropriate info.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Identify Data Collection Needs

WASD Call Observation Evaluation

(Bottom of page)

Instructions: Please respond to the following based on your call observation.

Desired Call Outcomes	Rating Scale						Evidence Supporting Rating and Suggestions for Improvement (Explain ratings of 3 or less)
	Strongly Agree 5	Agree 4	Neither Agree Nor Disagree 3	Disagree 2	Strongly Disagree 1	Not Applicable NA	
Problem Assessment/Resolution: CSR;							
3. a. actively listened & asked approp. questions to assess situation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. explained resolution clearly & tested for caller understanding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. followed CIS procedures in documenting resolution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Call Closing included;							
4. a. clearly summarized resolution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. an offer for additional assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. an appropriate reference number provided.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. a thank you to caller for their call.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Customer Experience: CSR;							
5. a. presented a professional, polite and helpful demeanor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. established rapport with caller.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. spoke clearly and easy for caller to understand.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Estimated # of minutes CSR could have saved, if any, on the call →			Explain if >0:				
Additional Comments or Suggestions to Improve							

Identify Data Collection Needs

The team designed a data collection spreadsheet to accept Call Observation Evaluations.

WASD Call Observation Evaluation Summary

BCB	DEMOGRAPHICS									MILESTONES				DURATION		
	WASD Staff Information			Caller Information						M	N	O	P	Q= P-M	R	
	B	C	D	E	F	G	H	J	K							
	Line #	Empl	Supv	Eval- uator	Caller Type	Caller Gender	Cust Class	Call Type	Service Type	Acct# / Address	2- Call Answered by CSR Date/Time		3- Call Handled and Ended Date/Time		Call Answrd TO Call Ended	Est'md # of Minutes that could have been Saved
				%Ownr	%F	%Res	%HB	%Water			Hr Avg	Day %Mo			Average	
				33.3	33.3	33.3	33.3	66.7			8	0.0			16.0	2.0
Q3																
1	DDF	CCF	NNG	Owner	M	Res- S	CM	Sewer	101 sw 20	6/5/12 12:01 PM	12	Tu	6/5/12 12:38 PM	37	3	
2	SCD	FFG	JJG	Tenant	F	Res-Mu	DM	Water &	231465	6/29/12 2:50 AM	2	Fr	6/29/12 2:58 AM	8	2	
3	RDS	BBR	NNY	Other	M	Comme	HB	Water	125432	6/27/12 11:50 AM	11	We	6/27/12 11:53 AM	3	1	

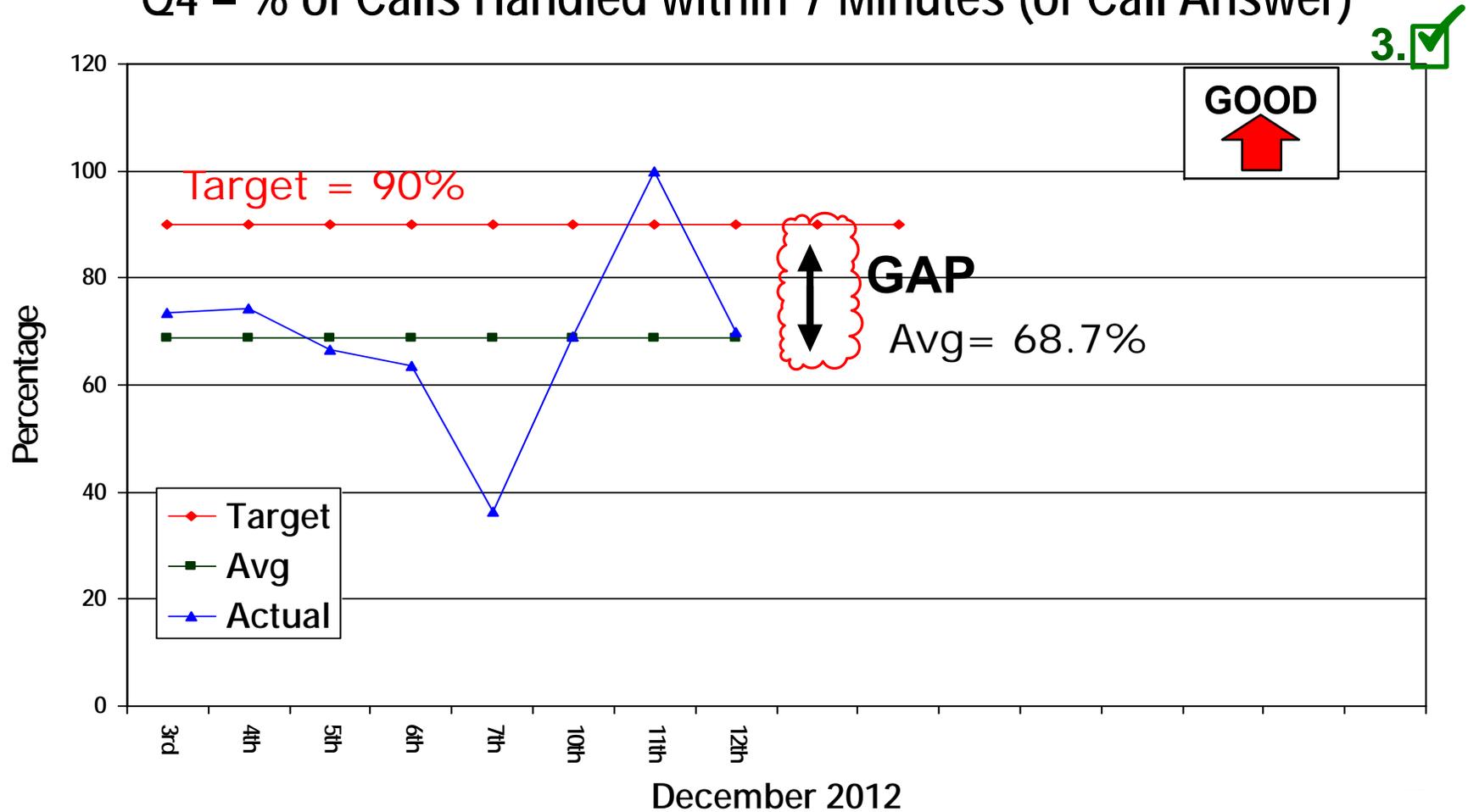
O U T C O M E S																	AI	AJ	COMMENTS
Timeliness	Disagree)															AVG Rating			
S	1. CALL OPENING		2. ACCOUNT VALIDATION			PROBLEM ASMT / RESOLUTION			4. CALL CLOSING				5. CUSTOMER EXPERIENCE						
Call Handled within 7 Min?	GREETING AND CSR ID	ACKNOWLEDGE AND OFFER ASSISTANCE	RGST CALLER NAME AND RELATIONSHIP	RGST PHONE,EMAIL, SSN/FTN, ADDRESS	UPDATE INFO	ACTIVELY LISTEN AND QUESTION	EXPLAIN CLEARLY & TEST UNDERSTND'G	FLW PROCEDURES & DOC RESOLUTION	CLRLY SUMMARIZE RESOLUTION	OFFERED ADD'L ASSISTANCE	PROVIDE APPROP REFERENCE #	THANKED CALLER	PROFESSION, POLITE & HELPFUL	ESTABLISHED RAPPORT	SPOKE CLEARLY & EASY TO UNDRSTND				
%Y	AVERAGE (BELOW ROW) ; % 4 OR 5 (2ND BELOW ROW)															Avg	%Y		
33.3	3.7	4.0	4.0	3.7	3.3	3.3	3.3	3.3	4.5	4.0	4.0	3.7	4.0	4.3	5.0	3.9	65.3		
	33.3	66.7	66.7	66.7	66.7	33.3	33.3	33.3	100.0	66.7	66.7	66.7	100.0	100.0	100.0		33%	<= % of '100' Scores	
Q4	P1a	P1b	P2a	P2b	P2c	P3a	P3b	P3c	P4a	P4b	P4c	P4d	P5a	P5b	P5c	Q1	Q2		
N	3	5	4	4	4	3	3	2	NA	4	4	4	NA	4	5	3.77	69		
N	3	2	3	2	1	2	2	3	4	3	3	2	4	4	5	2.87	27		
Y	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	4.93	100		



Review Selected Indicator

The team collected Q4 indicator data and reviewed performance trends:

Q4 – % of Calls Handled within 7 Minutes (of Call Answer)

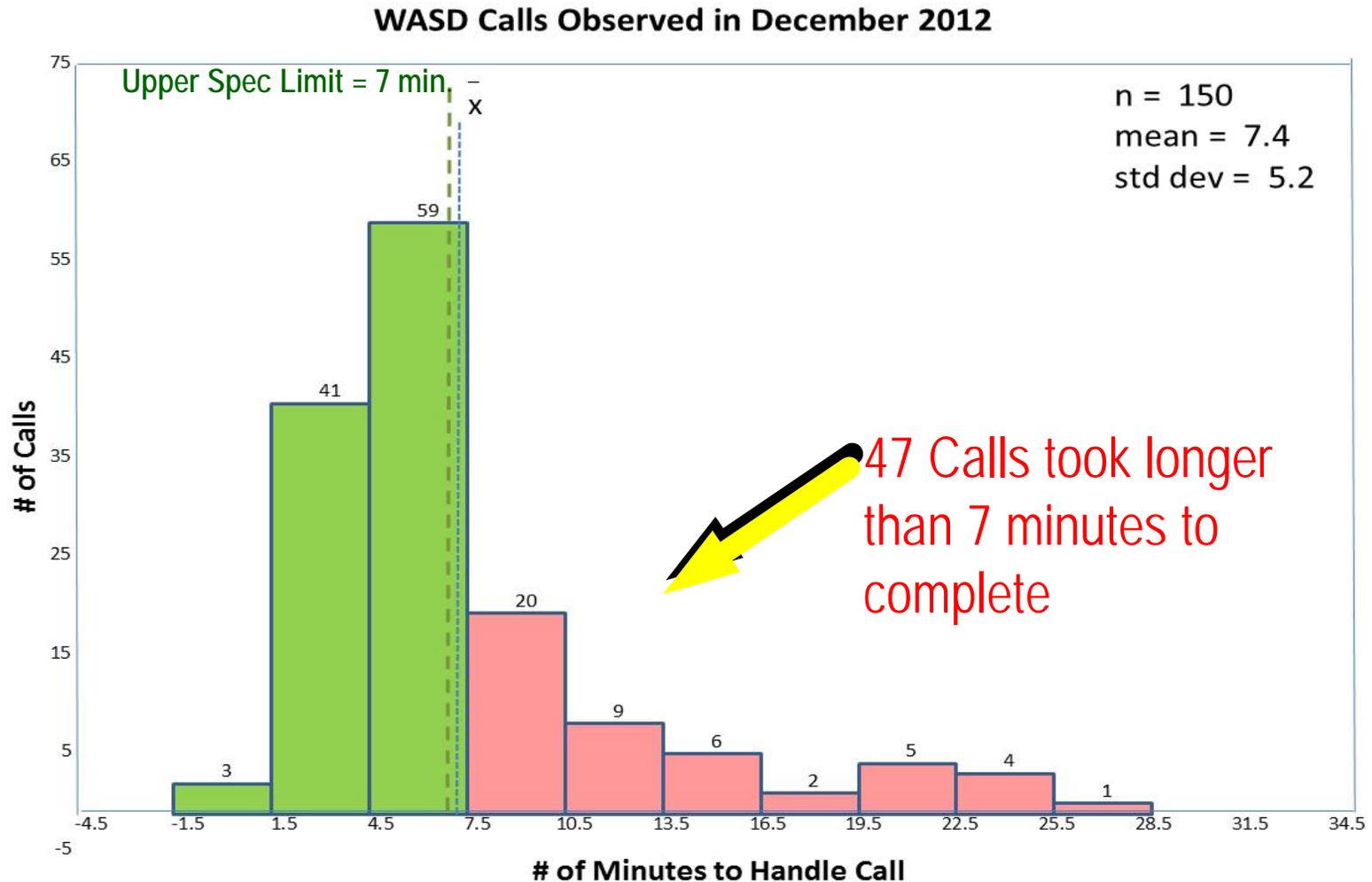


The team next looked closer at the Gap.



Stratify the Problem

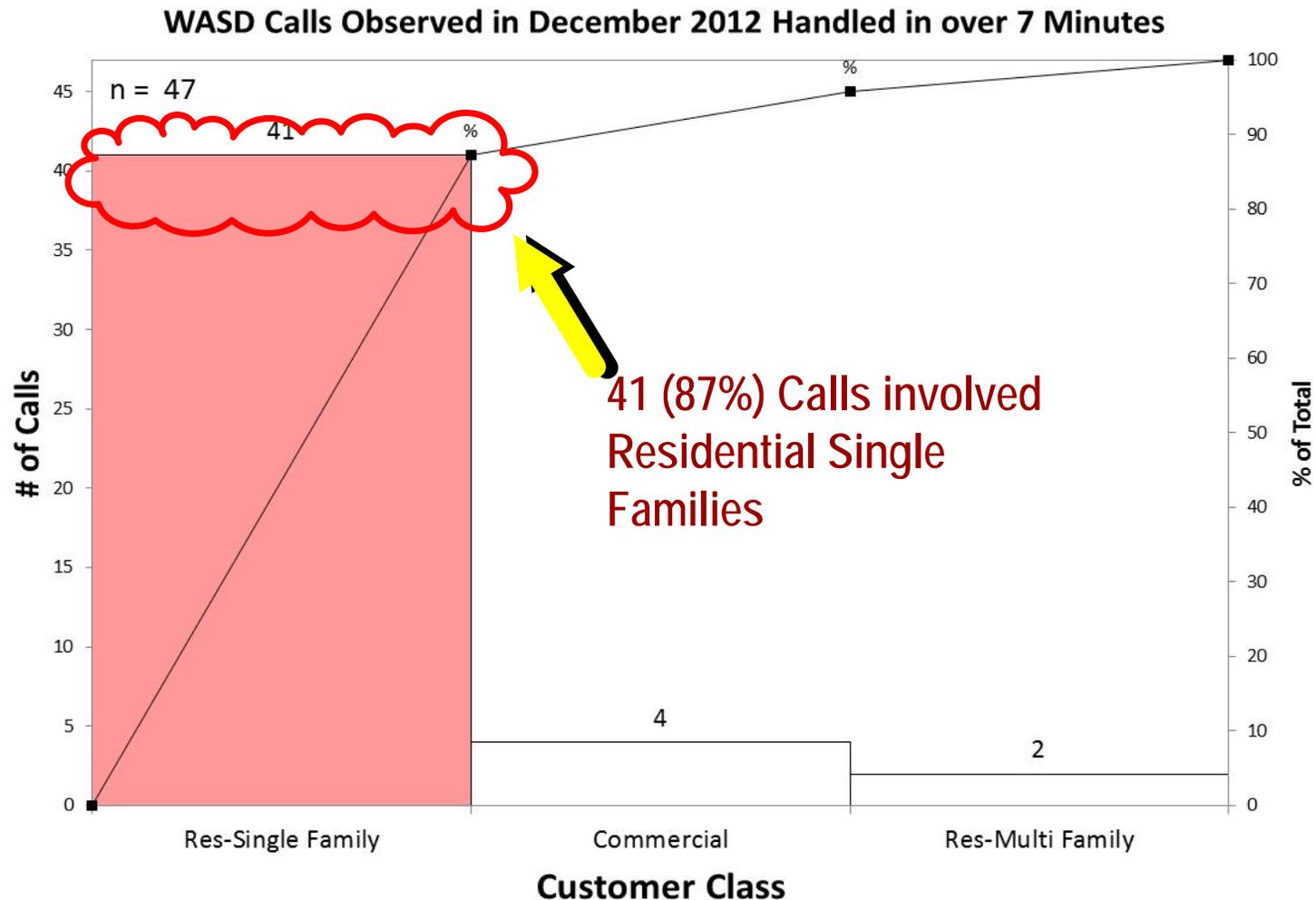
The team stratified the 150 observed calls using a histogram and found...



The team looked closer at comparing the 47 calls taking over 7 minutes to handle.

Stratify the Problem

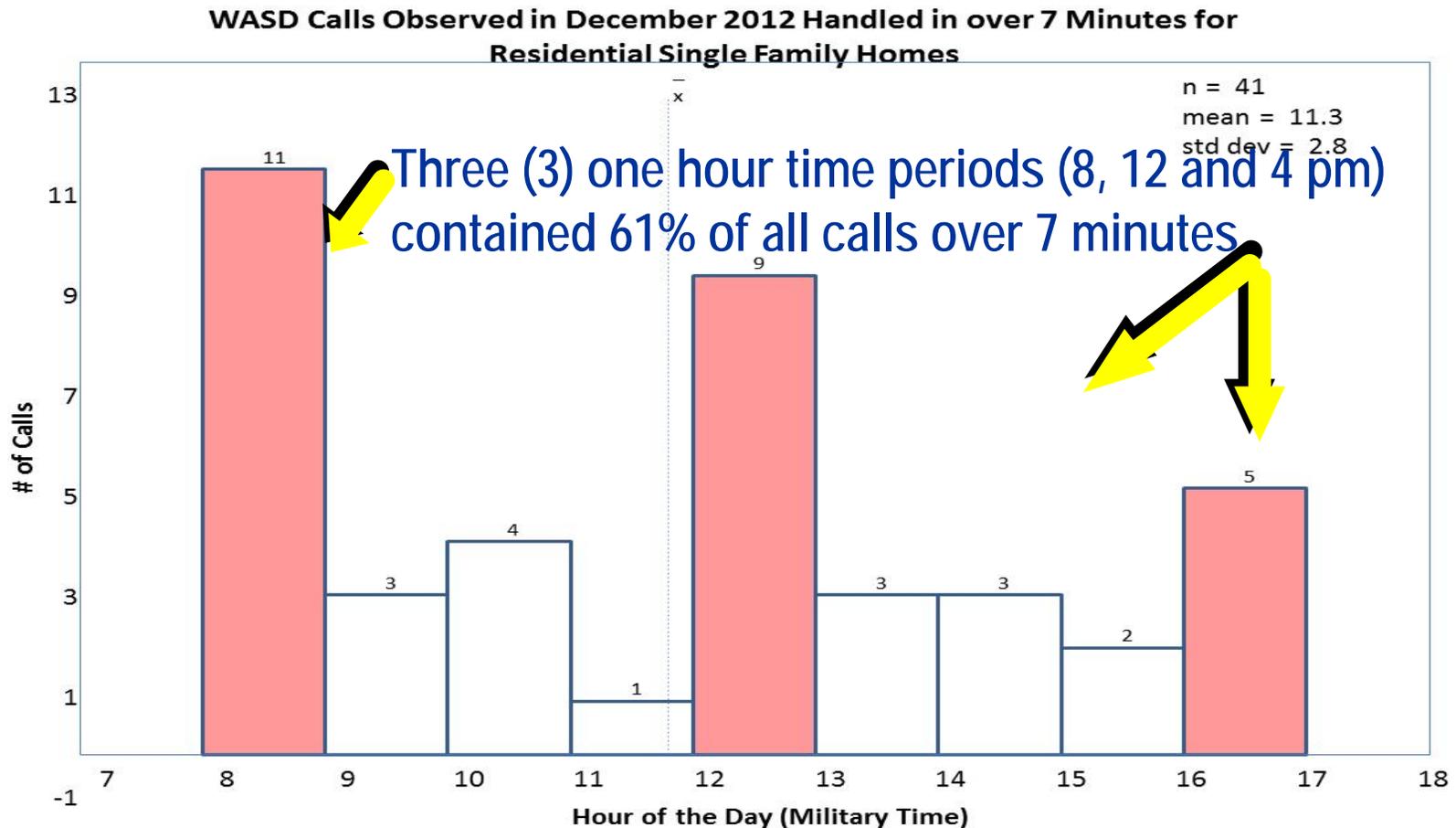
The team stratified the 47 calls many ways and found...



The team looked more closely at the 41 Res-Single Family calls.

Stratify the Problem

The team stratified the 41 calls many ways and found...



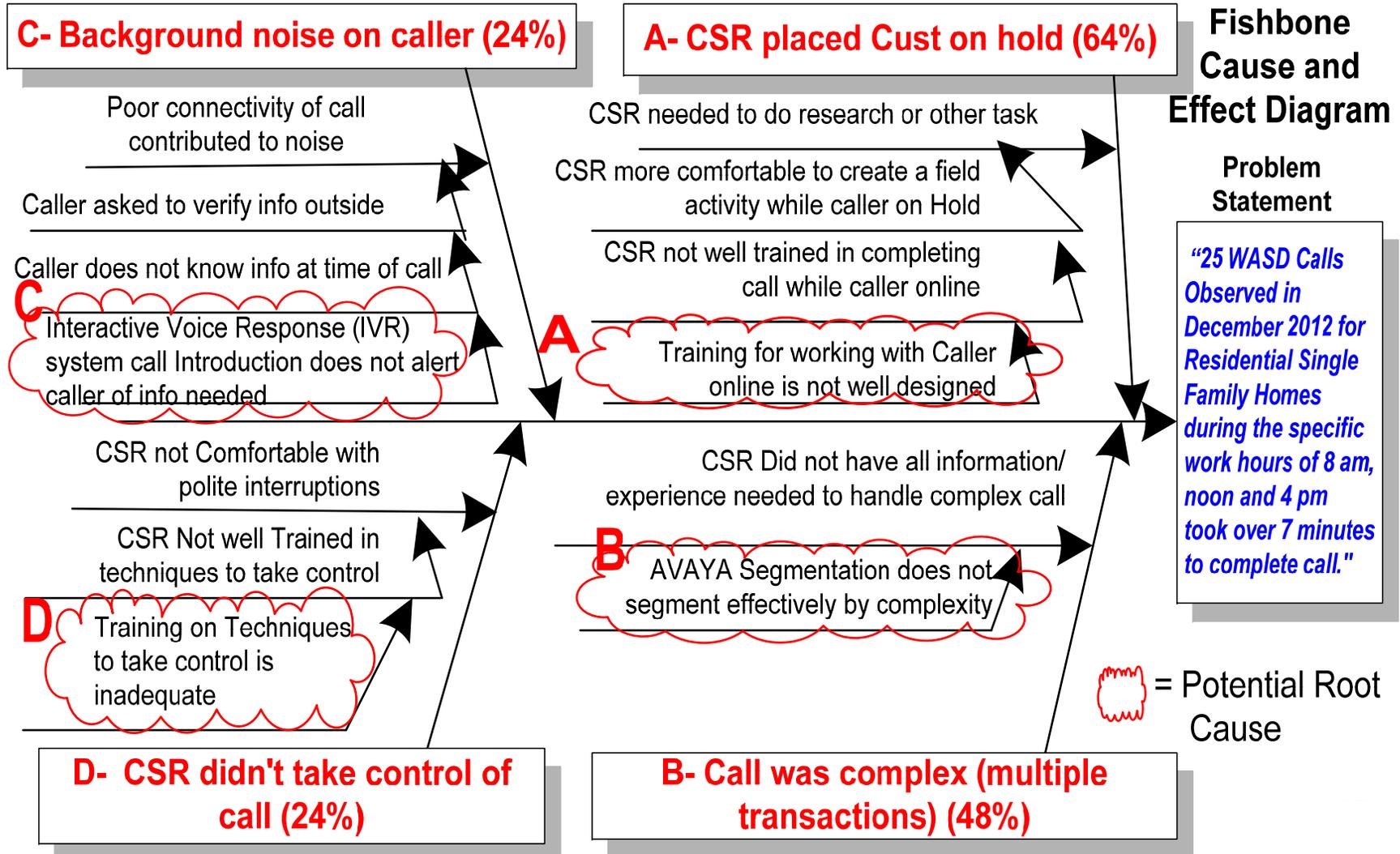
Problem Statement: *"25 WASD Calls Observed in December 2012 for Residential Single Family Homes during the specific work hours of 8 am, noon and 4 pm took over 7 minutes to complete call."*



Identify Potential Root Causes

9.,10.

The team completed Cause and Effect Analysis and found...



The team next looked to verify these four (4) Potential Root Causes.

Verify Root Causes

The team collected data to verify the root causes and found.... 11.,12. 

Root Cause Verification Matrix		
Potential Root Cause	How Verified?	Root Cause or Symptom
A Training for working with Caller online is not well designed	Team reviewed the training techniques and procedures for processing call online (and not place caller on Hold) and found that empowering call representative reduce the handle time	Root Cause
B AVAYA Segmentation does not segment effectively by complexity	Reviewed AVAYA IVR Call segmentation and found inhertant system limitations	Root Cause
C Interactive Voice response (IVR) system Call Introduction does not alert caller of info needed	Reviewed AVAYA IVR Call segmentation and found inhertant system limitations	Root Cause
D Training on Techniques to take control is inadequate	Team reviewed the training techniques and procedures for taking control and found additional training was necessary	Root Cause

...all potential root cause were validated as root causes.

Identify and Select Countermeasures

13.,14. 

The team brainstormed many countermeasures and narrowed them down to these for evaluation:

Countermeasures Matrix						
Problem Statement	Verified Root Causes	Countermeasures	Legend:			
			Ratings			
			Effectiveness	Feasibility	Overall	Take Action? Yes/No
<p>“25 WASD Calls Observed in December 2012 for Residential Single Family Homes during the specific work hours of 8 am, noon and 4 pm took over 7 minutes to complete call.”</p>	<p>A - Training for working with Caller online is not well designed</p>	A1- Clarify (and Train on) Caller Hold Policy	4	5	20.00	Y
		A2- Create Script for Most Common "Hold" Activities	4	5	20.00	Y
		A3- Generate "Caller Hold Summary" to identify Hold Time, CSR and reason	4	3	12.00	Y
		A4- Monitor CSRs realtime for Caller holds	5	5	25.00	Y
	<p>B - AVAYA Segmentation does not segment effectively by complexity</p>	B1/C1- Revise IVR Segmentation Call Flow and add Complexity/ and info needed	3	3	9.0	N
		B2/C2- Train all 10 Skills to remaining full-time employees	5	3	15.0	Y
	<p>C -Interactive Voice response (IVR) system Call Introduction does not alert caller of info needed</p>	B1/C1- Revise IVR Segmentation Call Flow and add Complexity/ and info needed	3	3	9.0	N
		B2/C2- Converted 12 part-time positions to full-time positions and train all 10 Skills	5	3	15.0	Y
	<p>D - Training on Techniques to take control is inadequate</p>	D1- Revise training (including scripts) to include "Best Practice" techniques to take control of call	5	5	25.0	Y

The team selected all countermeasures for implementation.



Identify Barriers and Aids

The team performed Barriers and Aids analysis on the selected Countermeasures.

Countermeasure(s): Implement 7 Countermeasures to Reduce CSR Call Handle time

Barriers		Aids
Impact (H, M, L)	Forces against Implementation	Forces For Implementation
H	1) Limited manpower <i>(Supported by Aid: B, C, D, E)</i>	A) Existing training Program
M	2) Cost <i>(Supported by Aid: A, B, C, D, E)</i>	B) Management very supportive of team's efforts in saving costs
H	3) Possible Worker Pushback <i>(Supported by Aid: B, C, D)</i>	C) Better Caller experience
		D) Consistency and quality
H	4) Vendor Contract Limitations <i>(Supported by Aid: B, E)</i>	E) Technology exists

The team next sought to incorporate this analysis into the team's Action Plan.



Develop and Implement Action Plan

Legend:
 ■ = Actual
 □ = Proposed

The team implemented an Action Plan for the team's Countermeasures.

16. 

WHAT: Implement 7 Countermeasures to Reduce CSR Call Handle Time

HOW	WHO	WHEN									
		2013									
		Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	
1. Develop Countermeasures:											
A1- Clarify (and Train on) Caller Hold Policy	Maria/ Vivian		■	2/28/13							
A2- Create Script for Most Common "Hold" Activities	Maria/ Vivian		■	2/28/13							
A3- Generate "Caller Hold Summary" to identify Hold Time, CSR and reason	Harold		■	2/28/13							
A4- Monitor CSRs realtime for Caller holds	Harold		■	2/28/13							
B1/C1- Revise IVR Segmentation Call Flow and add Complexity/ and info needed	Harold/ Debbie		■	2/28/13							
B2/C2- Train all 10 Skills to Part-Timers	Maria/ Vivian		■	2/28/13							
D1- Revise training (including scripts) to include "Best Practice" techniques to take control of call	Roberta/ Harold		■	2/28/13							
2. Secure Management Approval of Countermeasures (share benefits and Time savings)	Team				□	3/31/13					
3. Communicate/Train Staff in Countermeasures and related policies/procedures (share Improved Service & Time)	Team				□	Pilot	4/15/13				
4. Implement Countermeasures and Pilot	Team				□	Pilot	4/15/13				
5. Review Pilot and determine Benefits and adjust as necessary and present results to management	Team				□		4/18/13				
6. Establish On-going responsibilities and standardize countermeasures into operations	Damaris							□	On-going		



Countermeasure Implementation

Identifying the rights tools to improve the callers experience is essential. Therefore, the team developed a simple script that will keep the CSR focus reducing the time needed to handle a call

Miami Dade County - Water and Sewer Department - Customer Service Division CALL HANDLING SCRIPT

START WITH ENERGY AND ENTHUSIASM

Comments	Script
Introduction	"Thank you for calling Miami Dade Water and Sewer Department. My name is ___ and my employee ID is _____. How may I help today? Or May I please have the account number or property address that you are calling regarding?"
Mandatory Qualifying Questions	Q: (If not the account holder) Who am I speaking with? Q: What is your relation to the account holder? Q: (If existing account) For verification/security purposes, could you verify the last four (4) digits of your (or the account holders) SS#? Q: Could you also verify your Date of Birth (or the account holder's DOB)?

CREATE MOUNTAINS OF VALUE

Ready to Offer Help and Solutions	Q: If I understand your question, you need assistance with _____.
	Q: In reviewing your account's consumption/payment history, I noticed that _____.
	Q: Well, Mr./Mrs. Customer, customarily when _____.

Solution	Q: As a result of your inquiry/request, we will perform/schedule the _____. Does that work for you?
	Q: I would be happy to process that request for you. Pretty convenient, isn't it?
	Based on the information provided, you may be eligible for _____.

Recap	Follow the script and recap. Review issue/opportunity and solution offered.
	Q: I would like to confirm the information discussed _____. Is that correct?
	Just to reiterate, the following recommendations were made to you _____. To which you advised _____.

Closure	Q: Is there anything else that I can help you with today?
	If not, answer any remaining questions, or address any outstanding issues.
	Finish call by saying, "Thank you for calling Miami-Dade Water and Sewer. Have a great day!"



Countermeasure Implementation

In addition to the right tools, the Department developed a Call Strategy to assist the call taker throughout the conversation

Miami Dade County - Water and Sewer Department - Customer Service Division

Required Elements of the Call Strategy	
Component	Required Elements
Introduction	Greet using standard introduction and Address the customer by name.
	Ask for the customer's phone number, address, etc.
	Retrieve the account information as soon as you've identified the customer.
	Verify that you are speaking with the account holder.
Needs Analysis	Use closed questions to uncover specifics of the customer's need(s).
	View the customer's account for updates, problems, history, etc.
	Input the customer's need into the database.
	Identify the customer's need/issue and repeat it back to the customer to verify it is accurate.
Solution	Target solution.
	Verify the services and offerings that the customer qualifies for.
	Suggest an solution/offering to the customer.
	Ask the customer if your solution satisfies his or her need.
Closure	Gain acceptance. If not, go back to needs analysis.
	Confirm with the customer that your solution will satisfy his or her need.
	Input the solution into the customer information database.
	Get the customer's commitment to do his or her part in satisfying the need.

Data Collection – After Implementation of Countermeasures

WASD Call Observation Evaluation Summary

BCB	DEMOGRAPHICS										MILESTONES			DURATION		
	WASD Staff Information			Caller Information							M	N	O	P	Q= P-M	R
	B	C	D	E	F	G	H	I	J	K						
Line #	Employee	Supv	Evaluator	Caller Type	Caller Gender	Customer Class	Actual Call Type	Was Call Segmented Correctly?	Service Type	Account #/ Address	2- Call Answered by CSR Date/Time		3- Call Handled and Ended Date/Time		Call Answrd TO Call Ended	Est'md # of Minutes that could have been Saved
				%Ownr	%F	%Res	%HB	%Y	%Water		Hr	Day			Average	
				45.7	69.9	84.0	12.9	69.1	4.9		Avg	%Mo			6.2	10.0

Q3

1	Maria Vergara	Judana Jimenez	Judana Jimenez	Owner	Male	Commercial	HB	Yes	Water & Sewer	5879654200	1/2/13 8:02 AM	8	We	1/2/13 8:09 AM	7	
2	Maria Vergara	Judana Jimenez	Judana Jimenez	Owner	Male	Commercial	HB	Yes	Water & Sewer	3642000000	1/16/13 2:00 PM	14	We	1/16/13 2:07 PM	7	
3	Maria Vergara	Judana Jimenez	Judana Jimenez	Owner	Female	Res-Single Family	OTHER	No	Water & Sewer	#112	2/1/13 11:29 AM	11	Fr	2/1/13 11:36 AM	7	

OUTCOMES

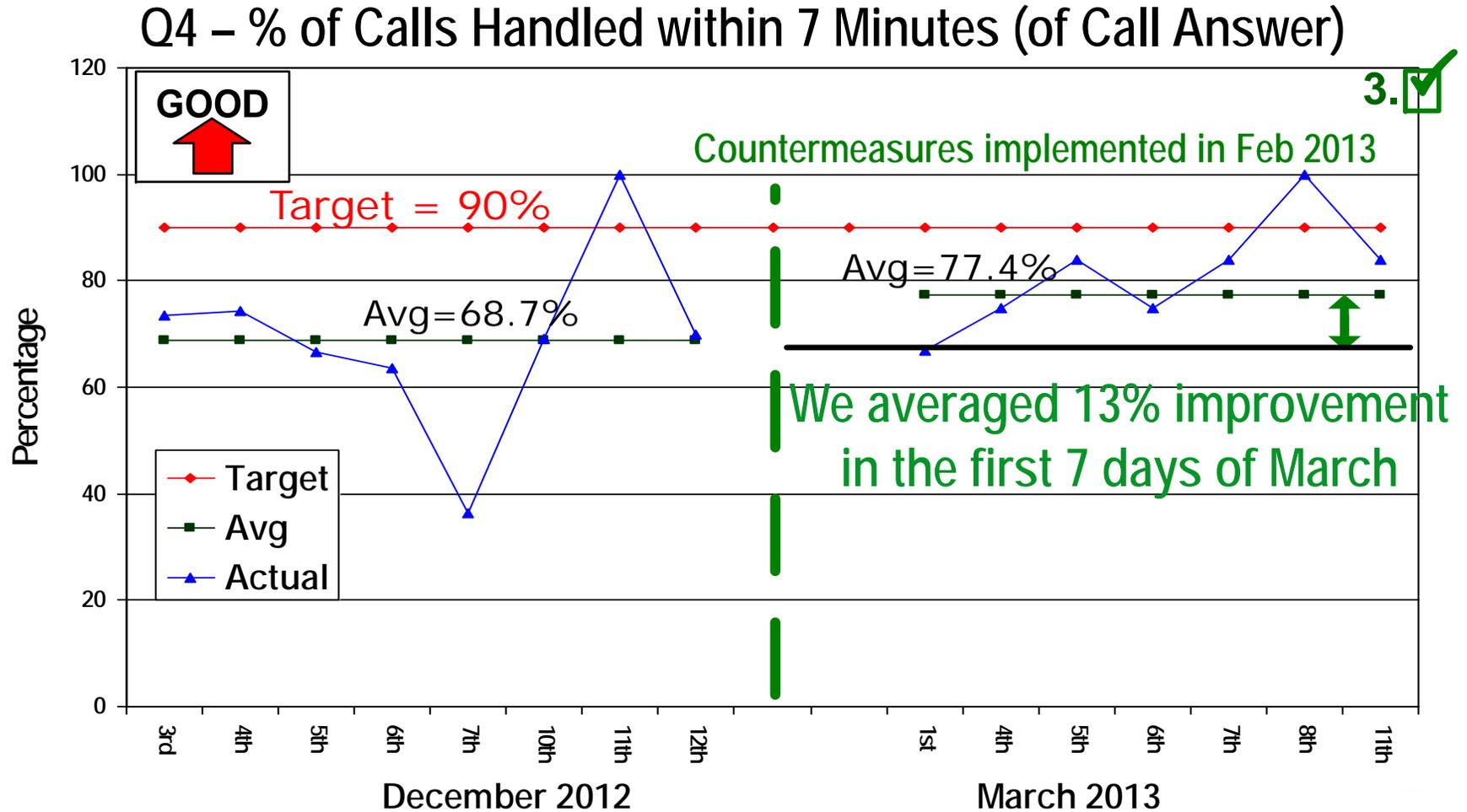
Timeliness	QUALITY RATINGS (5=Str Agree; 4=Agree; 3=Neither Agree Nor Disagree; 2=Disagree; 1=Str Disagree)															AI	AJ
S	1. CALL OPENING		2. ACCOUNT VALIDATION			3. PROBLEM ASMT / RESOLUTION			4. CALL CLOSING				5. CUSTOMER EXPERIENCE				
Call Handled within 7 Min?	GREETING AND CSR ID	ACKNOWLEDGE AND OFFER ASSISTANCE	ROST CALLER NAME AND RELATIONSHIP	ROST PHONE, EMAIL, SSN/FIN ADDRESS	UPDATE INFO	ACTIVELY LISTEN AND QUESTION	EXPLAIN CLEARLY & TEST UNDERSTNDG	FLW PROCEDURES & DOC RESOLUTION	CURLY SUMMARIZE RESOLUTION	OFFERED ADDL ASSISTANCE	PROVIDE APPROP REFERENCE #	THANKED CALLER	PROFESSION POLITE & HELPFUL	ESTABLISHED RAPPORT	SPOKE CLEARLY & EASY TO UNDERSTND	AVG Rating	Percent Score
%Y	1a	1b	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5a	5b	5c	Avg	Avg
73.3	4.2	3.7	3.9	3.2	2.7	4.2	4.2	4.1	4.0	2.8	2.8	3.3	4.3	4.2	4.3	3.8	72.7
	84.4	77.5	80.1	60.7	42.3	87.0	84.2	85.5	78.3	38.4	43.3	47.6	90.4	89.5	92.6		13%
Q4	P1a	P1b	P2a	P2b	P2c	P3a	P3b	P3c	P4a	P4b	P4c	P4d	P5a	P5b	P5c	Q1	Q2
Y	5	5	4	4	2	4	4	4	4	4	2	5	5	5	5	4.13	87
Y	4	4	4	4	4	4	5	4	4	4	5	5	5	4	5	4.33	100
Y	5	5	5	5	4	4	N/A	5	4	2	2	5	5	4	5	4.29	86



Review Results

17.,18.,19.,20. ✓

The team collected indicator data and reviewed results of it's countermeasures



The team was encouraged by the results and will continue to monitor the countermeasures.

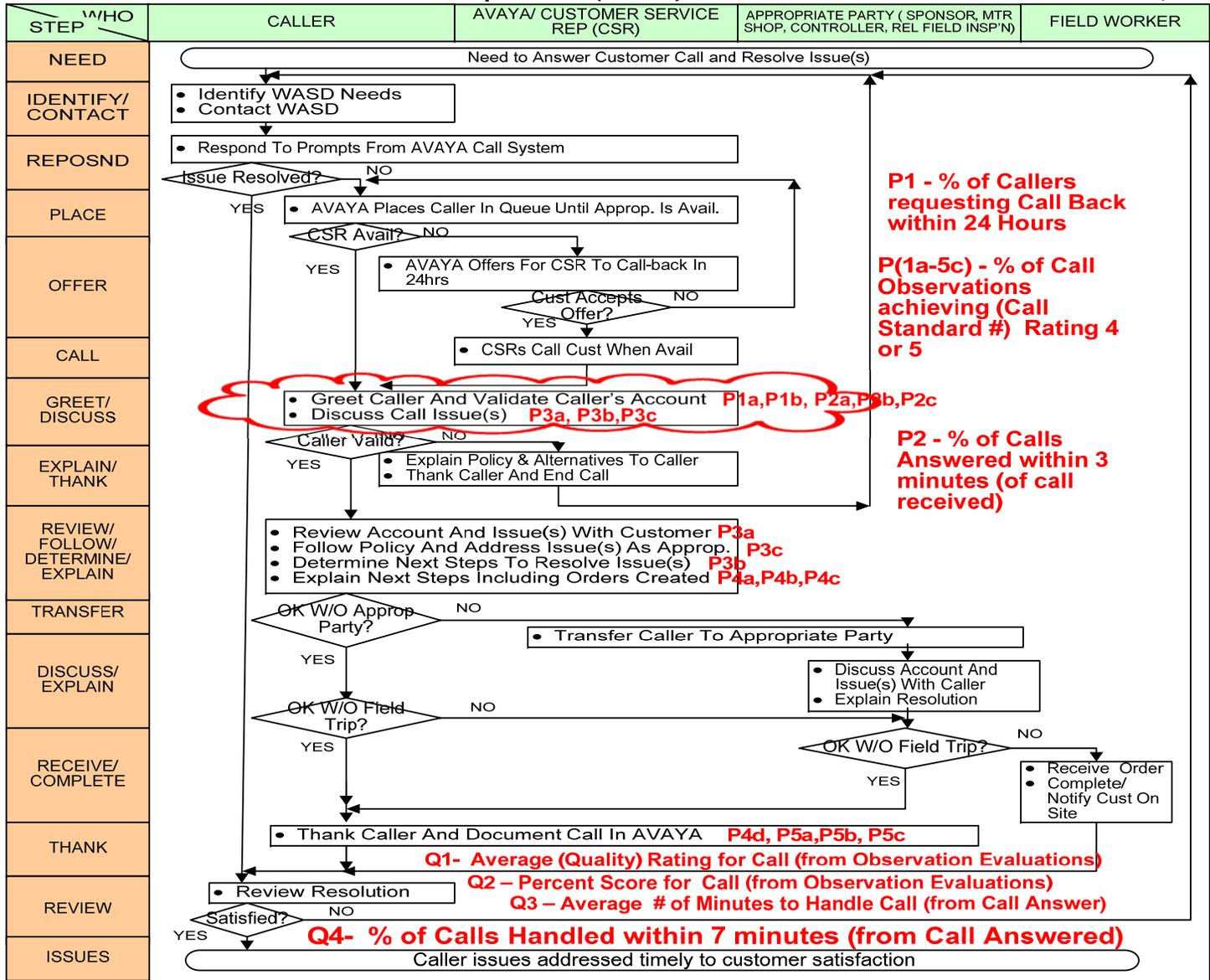


Standardize Countermeasures

21.,22.,23. ✓

The team revised the process flowchart and indicators.

Answer and Resolve Water and Sewer Department (WASD) Customer Calls (Process Owner: Harold Concepcion)



The team looked to standardize the Indicator monitoring

DMAIC_Story_Miami Dade_WASD Cust Svc Calls_Flowchart_AFTER_1-29-13 - Final.vsd 4/12/13



Standardize Countermeasures

21.,22.,23. ✓

The team Developed a Process Control System (PCS) to monitor the process on-going.

Process Control System						
Process Name: Answer and Resolve Water and Sewer Department (W ASD)Customer Calls			Process Owner: Harold Concepcion			
Process Customer: Caller (W ASD New or existing Customer)			Critical Customer Requirements: Address customer concerns timely and accurately			
Process Purpose: Answer Calls and address customer concerns			Current Sigma Level: TBD			
			Outcome Indicators: Q1, Q2, Q3, Q4			
Process and Quality Indicators			Checking / Indicator Monitoring			Contingency Plans / Misc. • Actions Required for Exceptions • Procedure References
Process Indicators		Control Limits	Data to Collect	Timeframe (Frequency)	Responsibility	
Quality Indicators		Specs/ Targets	What is Checking Item or Indicator Calculation	When to Collect Data?	Who will Check?	
P1	% of Callers requesting Call Back within 24 Hours	4% or TBD	$100 * (\# \text{ of Callers requesting Call Back within 24 Hours}) / (\# \text{ of Callers})$	Monthly	Unit Supv	• AVAYA system • Escalate to Mgr if needed
P1a- P5c	% of Call Observations achieving (Call Standard #) Rating 4 or 5	90%	$100 * (\# \text{ of Call Observations achieving (Call Standard #) Rating 4 or 5}) / (\# \text{ of observations})$	Monthly	Unit Supv	WASD Call Observation Evaluation Summary
P2	% of Calls Answered within 3 minutes (of call received)	80%	$100 * (\# \text{ of Calls answered in 3 min}) / (\text{Total number of calls})$	Monthly	Unit Supv	• AVAYA system • Escalate to Mgr if needed
Q1	Average (Quality) Rating for Call (from Observation Evaluations)	4.0	$\text{Grand Average of (Sum ratings for Observation)} / (\# \text{ of calls standards rated})$	Monthly	Unit Supv	WASD Call Observation Evaluation Summary
Q2	Percent Score for Call (from Observation Evaluations)	80%	$\text{Grand Average of } (100 * (\# \text{ of 4 and 5 ratings per call}) / (\# \text{ of ratings}))$	Monthly	Unit Supv	WASD Call Observation Evaluation Summary
Q3	Average # of Minutes to Handle Call (from Call Answer)	TBD	$\text{Grand Average of (sum of minutes for all calls)} / (\# \text{ of calls})$	Monthly	Unit Supv	• AVAYA system
Q4	% of Calls Handled within 7 minutes (from Call Answered)	90%	$100 * (\# \text{ of Calls handled in 7 min}) / (\text{Total number of calls})$	Monthly	Unit Supv	• AVAYA system

Approved: _____ Date: _____ Rev #: _____ Rev Date: _____

The team looked ahead to the future.



Identify Lessons Learned

24.,25. 

Lessons Learned

- 1) Root Cause Analysis tools (Single Case Bore & Fishbone) helped the team identify Potential Root Causes: "Standards that Failed or People Failing Standards"
- 2) DMAIC Process was systematic and effective for problem Solving. The team learned to trust the process and "Let the Data take you to the Root Causes".
- 3) Conducting simple "Ice Breakers" at the start of team sessions was fun and an effective way to build team trust and rapport

Next Steps

- 1) Continue to monitor the countermeasures and performance results.
- 2) Continue to utilize the "WASD Call Observation Evaluation Summary" to improve the Quality of CSR Calls and provide all CSRs with the Call Strategy and Call Script
- 3) Analyze call Queue Data and address long duration Queue wait times



Key Observation

Observation Day: Dec 2012 at Noon

A	Wait Time :	22:00
B	Calls Waiting:	46

Rep. Skill Set

cs_eng_cm	3
cs_eng_ugl	2
cs_eng_ext	5
cs_eng_lien	5
cs_eng_conp	2
cs_eng_dm	1
cs_eng_hb	20
cs_span_hb	8
Total	46

Date	Time	A	B
2/25	12:30	10:02	45
2/26	12:30	3:18	4
2/27	12:30	9:46	34
2/28	12:30	12:58	41
3/1	12:30	2:20	8
3/5	12:30	12:58	53
3/6	12:30	5:22	5
3/7	12:30	0:00	4
3/8	12:30	11:45	36
3/11	12:30	0:00	0
3/13	12:30	1:58	9
3/14	12:30	16:19	51
3/15	12:30	12:21	32
3/18	12:30	17:57	47
3/19	12:30	15:15	50
Average		8.73	28

