



**City of Dallas**

# **Building Inspection Call Center Process Improvement**

**Toyota and PI Team Workgroup**

**Government Performance and  
Financial Management**

**October 25, 2021**

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Tony Rader, Continuous Improvement Specialist,  
Budget & Management Services

Sheila Gray, 311 Manager, 311

Amanda Nabours, IT Architect, Information and  
Technology Services

Alex Rodriguez, Strategic Planning Manager,  
Dallas Fire-Rescue



## **Continuous Improvement Leaders:**

Tony Rader, DWU, LSS Black Belt

Alex Rodriguez, DFR, Strategic Planning Manager, Six Sigma Black Belt Professional

Sheila Gray, Manager 311, LSS Green Belt

Amanda Nabours, IT Architect

## Project Team:

Elaine Mendez – Sr. Office Assistant

Patrick Blaydes - Manager

## TSSC:

Hitomi Scott – Project Lead, Senior Manager,

Bobby Graves – Advisor,

Jamie Bonini – Advisor, TSSC VP





# Purpose

Provide a high-level overview of the Process Improvement project at BI Call Center

## Agenda

1. Background

2. Business Need

3. Outcomes

4. Initial Condition

5. Kaizen Activities

6. Reflections & Learning



# I. Background



## Organization:

- Building Inspection Call Center & Walk-Up Service:  
Oak Cliff Municipal Center, 320 E. Jefferson Blvd., Dallas TX 75203  
- Focus Area - Call Center (5 employees)  
Answer various questions related building permits, inspection, etc.  
from customers.
- Increased need for Call Center services after Covid 19 due to the limited Walk-up services.

## Duration:

- 4 month initiative to improve customer service using Toyota methods and lean six sigma



## II. Business Need



**Business Need:** Improve customer service at Call Center.

1. Increase the # of calls handled. (Reduce Abandon Rate).
2. Reduce the number of in-coming calls.
3. Reduce the length of time customers are waiting.
4. Understand the capacity of the Call Center to staff appropriately during peak time.

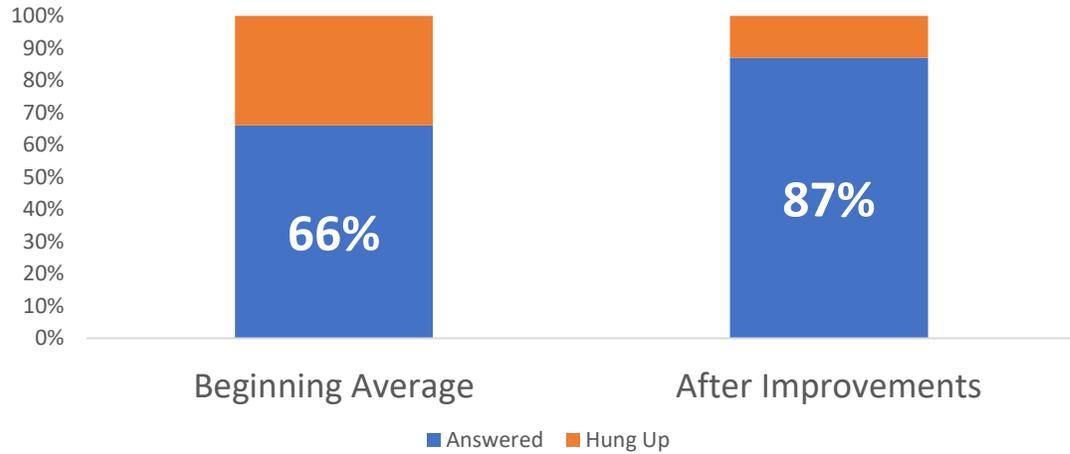




# III. KPI Results - Outcomes

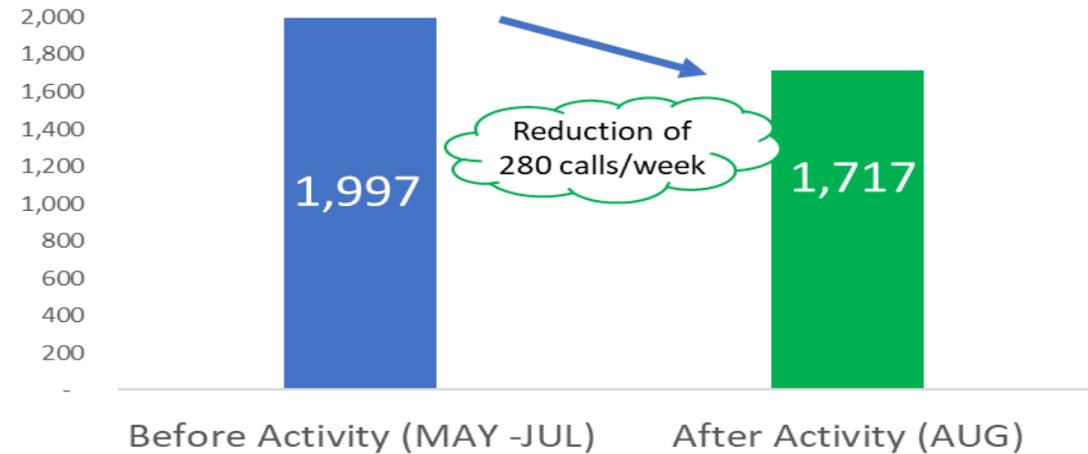
1.

### Handled Rate



2.

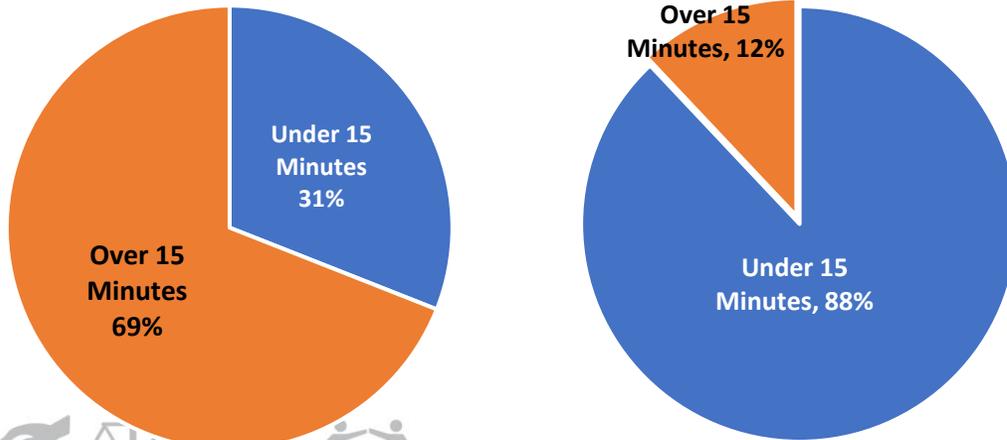
### Weekly Ave. Call Volume



3.

### Beginning of Project

### After Improvements



1. Answer Rate is Up
2. Call Volume is Down
3. Wait Time is Down – Significantly

Wait for Zoning appointment reduced from  
 5 days ➡ 1 day



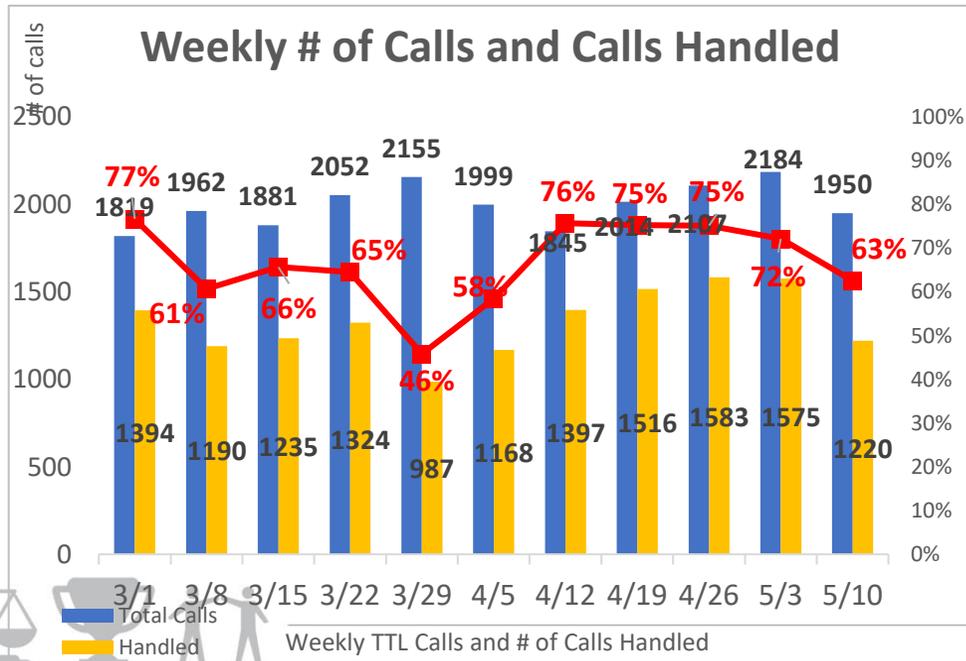


# IV. Initial Condition (2) – Call Center Environment

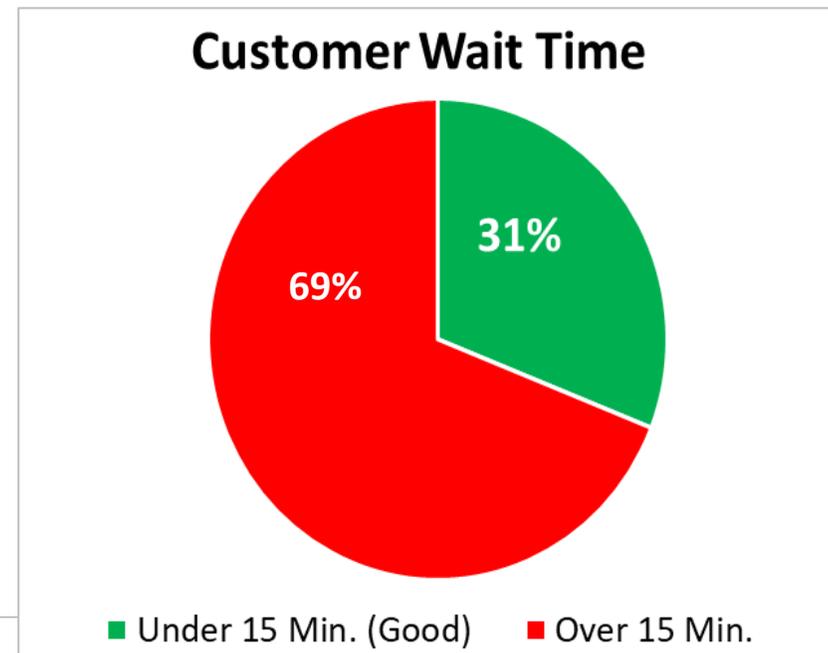
- 5 Team Members, 3 are from Temporary Agency
- Lack of necessary tools - PC & 2 Screens, Headsets
- No training standard
- Some had no access to necessary systems
- # of calls were increasing
- Dealing with frustrated and angry customers
- Isolated and difficult to communicate to other sections of BI

## Initial Results

Could not keep up with the increasing # of Calls  
**66% average Answered Rate**



69% of customers waited in queue  
**over 15 minutes**





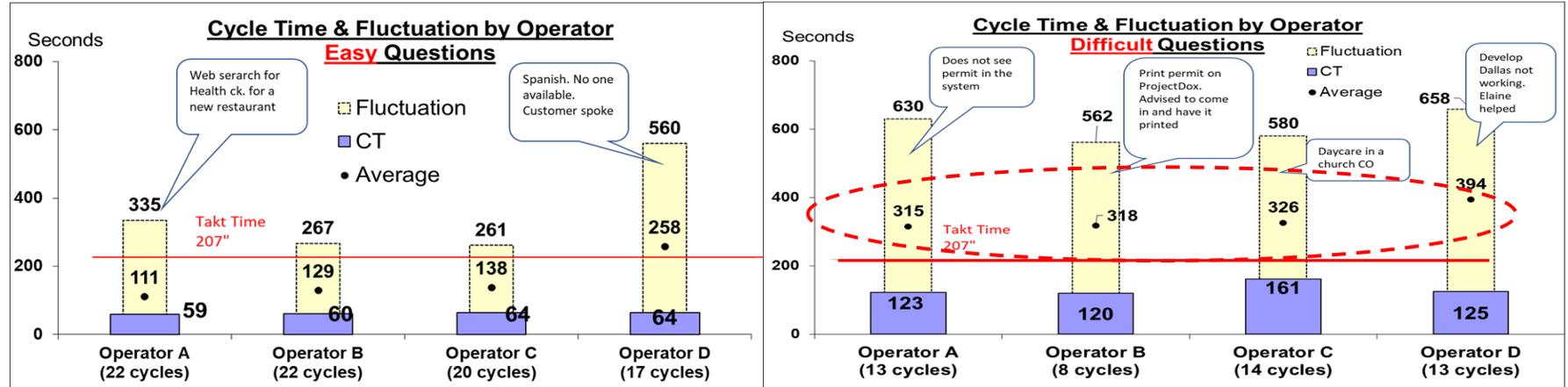


# V. Activity(1) – Understand Cycle Time

## Before Condition:

- Problem: Average Cycle Time is longer than the target pace (Takt Time), unable to answer all calls.

- No training standard
- Skill requirement was not clear for hiring
- Some had no access to necessary systems

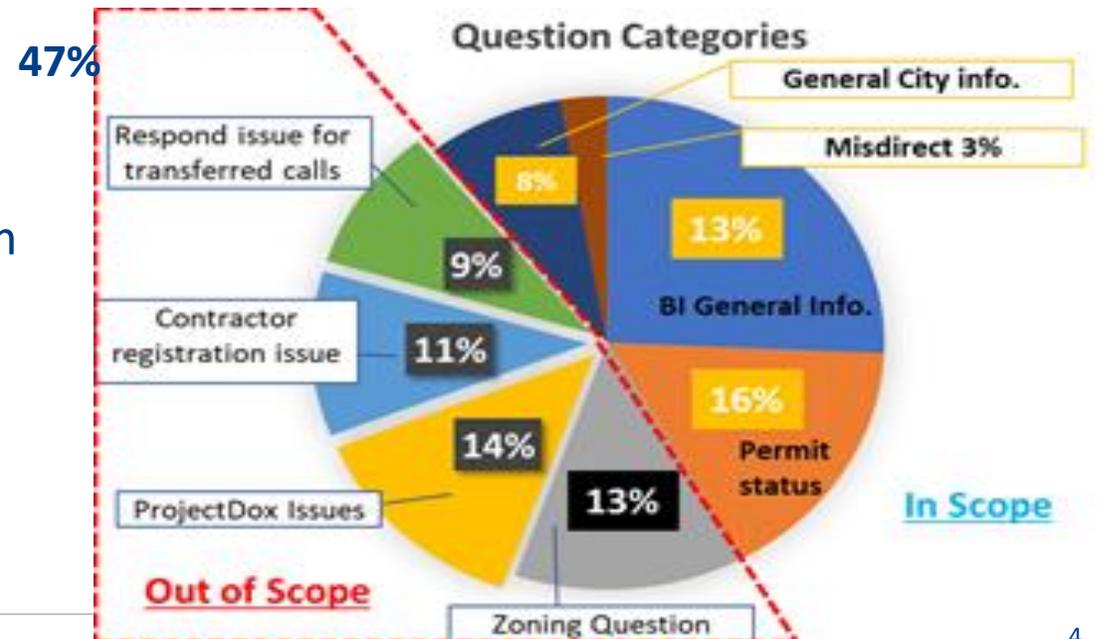


## Breaking down questions into categories(150 Calls)

47% of the questions were out of Call Center's Scope. These calls affected the performance of Call Center Team Members and # of incoming calls



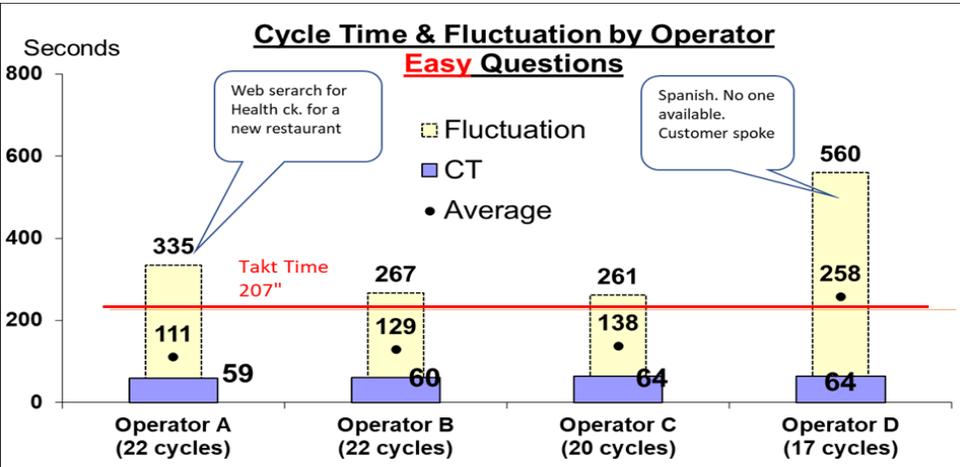
## Kaizen Opportunity to reduce incoming calls



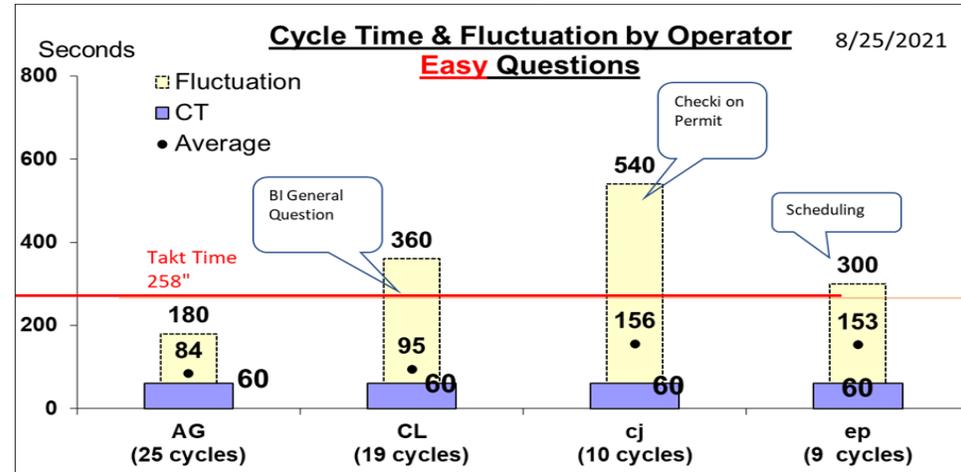


# III. Cycle Time Results

Before



After Demand decreased



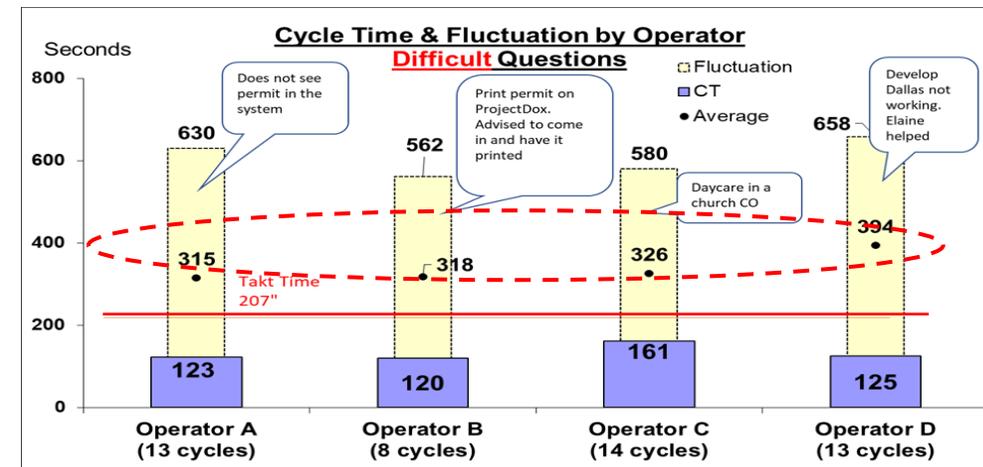
Pace (Average Cycle Time) is reducing

Able to Serve more Customers

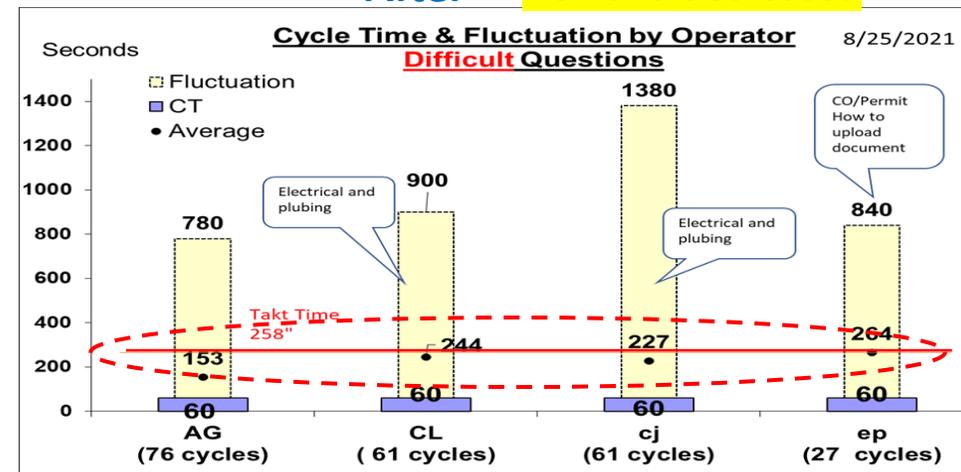
Takt Time is Increasing

Able to Spend more time with each Customer

Before



After Demand decreased



Averages are over Takt Time

Takt Time = Average call duration required to answer all calls.

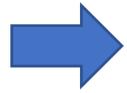
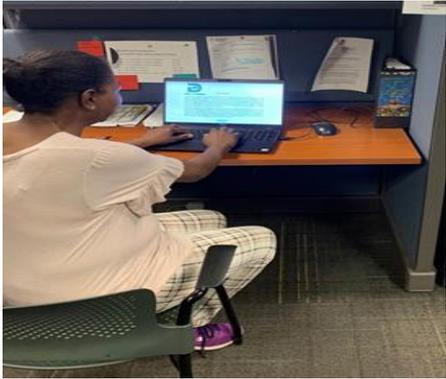
(Total Number of Available Minutes/Total number of Calls)





# V. Activity (2) – Providing Necessary Tools

Before Condition



After Condition



- Provided PC with two screens
- Using headset (Easier keyboard access)
- Skill training was completed
- Have access to ProjectDox, Posse, etc.



Responded to the Training Needs!

Before Condition

- No training standard
- No training tracking system
- Skill requirement was not clear for hiring

After Condition

### Clarified Training Requirement

BI Customer Service Call Center Training	
<b>Onboarding</b>	Software Requests/SAR forms Badge with building access Parking Access Hardware checklist
<b>Call Center Soft Skills</b>	Training Videos Call Center Script
<b>Software Training</b>	Posse Project Dox COD BI web page BI SharePoint site
<b>OJT Side by Side Training</b>	BI Call Center FAQ General Job Knowledge Scheduling Zoning Consultations

### Training Matrix

Training Name	TRAINING MATRIX											
	On Boarding			Call Center Soft Skills			Software Training			OJT Side by Side		
	Software Request Systems	Badge with Building Access	Training Access	Headset	Call Center Script	Posse	Project Dox	COD Webpage	BI SharePoint Site	Call Center FAQ	General Knowledge	Scheduling Zoning
	★	★	★	★	★	★	★	★	★	★	★	★
	★	★	★	★	★	★	★	★	★	★	★	★
	★	★	★	★	★	★	★	★	★	★	★	★
	★	★	★	★	★	★	★	★	★	★	★	★
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	★	★	★	★	★	★	★	★	★	★	★	★
	★	★	★	★	★	★	★	★	★	★	★	★

Ensure new hire is trained & all necessary tools are prepared before start.

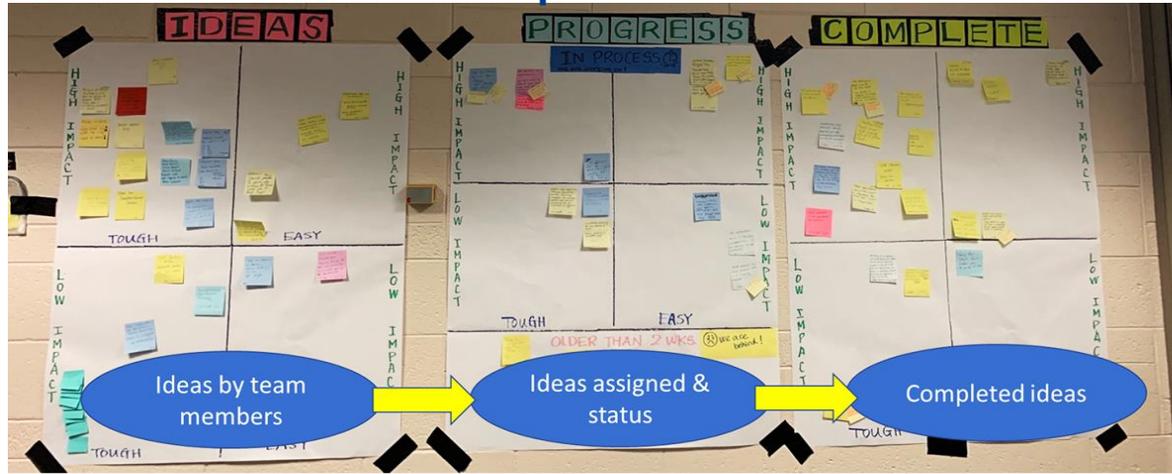


Created ProjectDox Training video

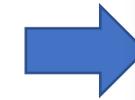


# V. Activity(3) – Team Member Engagement

## Ease & Impact Board



- Getting ideas from team members
- Kaizen team to track the status of completion



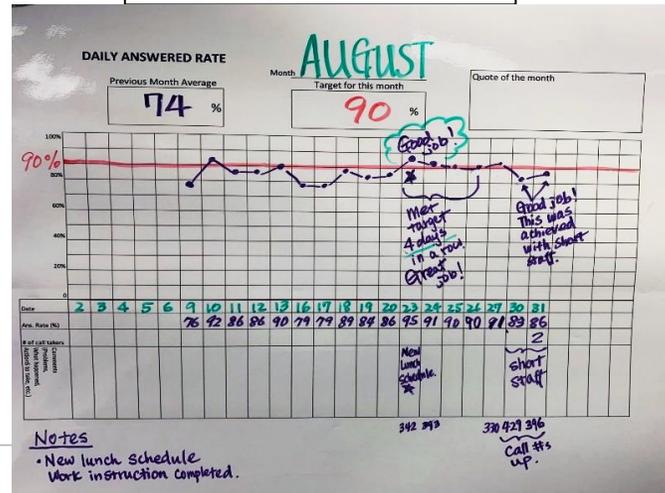
Over 60 ideas collected

## Daily Huddle for better communications & Teamwork

### Before Condition:

- No daily KPI data
- Not utilizing data
- Team's daily performance was not clear
- No problem solving
- Low morale

### After Condition:



- Visualizing daily performance of Call Center
- Manager holds daily Huddle
- Team gives feedback & surface problems
- Manager takes action to solve problems
- Managers have easy access to daily performance data



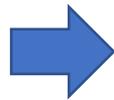
# V. Activity(4) – Customer Service Kaizen



## Optimal Staffing during Peak Time

### Before Condition:

- Peak Time not Identified
- Phones were not fully covered
- Cannot catch up with the customers in the queue after peak time
- Longer customer wait during peak time



### After Condition:

- Peak Time identified
- Standardized the way to staff during peak time
- Created Work Instruction Sheet for optimal staffing
- Phones are fully covered during Peak Time
- Reduced wait time for customers

### Work Instruction Sheet

Fully Staffed						
Work Station	1	2	3	4	Lunch Times	
8-9	Michelle	CL	AG	CJ		
9-10	Michelle	CL	AG	CJ		
10-11	Michelle	CL	AG	CJ		
11-12	Michelle	CL	AG	CJ	Evelyn	EM
12-1	Michelle	CL	Evelyn	EM	AG	CJ
1-2	Evelyn	EM	AG	CJ	CL	Michelle
2-3	Evelyn	CL	AG	CJ		
3-4	Evelyn	CL	AG	CJ		
4-4:30	Evelyn	CL	AG	CJ		

With 1 Out						
Work Station	1	2	3	4	Lunch Times	
8-9	SP1	CL	AG	CJ		
9-10	SP1	CL	AG	CJ		
10-11	SP1	CL	AG	CJ		
11-12	SP1	CL	AG	CJ	SP2	
12-1	SP1	CL	SP2		AG	CJ
1-2	SP2		AG	CJ	CL	SP1
2-3	SP2	CL	AG	CJ		
3-4	SP2	CL	AG	CJ		
4-4:30	SP2	CL	AG	CJ		

With 2 Out						
Work Station	1	2	3	4	Lunch Times	
8-9	SP1	CL	AG	SP2		
9-10	SP1	CL	AG	SP2		
10-11	SP1	CL	AG	SP2		
11-12	SP1	CL	AG		SP2	
12-1		CL		SP2	SP1	AG
1-2	SP1		AG	SP2	CL	
2-3	SP1	CL	AG	SP2		
3-4	SP1	CL	AG	SP2		
4-4:30	SP1	CL	AG	SP2		

Give clear instruction how to staff based on the # of staff out for the day



# V. Activity(4) – Customer Service Kaizen



## Zoning Questions

### Before Condition:

- Call transferred to Zoning section
- Long response time to customers
- Frustrated customers



### After Condition:

- **Schedule consultation with Zoning instead of transferring calls**
- Lead Time reduced from 3-5 days to 1 day
- Customers get answers quicker

## Website Improvement & Solving Major Problem

### Before Condition:

- Customers call with website problems
- No actions taken before



### Actions by Kaizen Team

- Kaizen team & IT worked together to clarified problems
- IT worked quickly to solve the problem



### After Condition:

- 17 updates made on website
- Largest problem solved! (Verification code not sent to customers=> No access to their account.)

17 calls/day → Zero





# VII. Reflections & Learning Points

- Respect for People
  - Proper Onboarding (Login, Building, Parking, and Software Access)
  - Giving Necessary Tools (Hardware, Headsets)
  - Standard needed for hiring Agency employees
- Employee Engagement
- Training is Needed
- Process Improvement
- IT Support is Crucial
- Process is Repeatable





# Ongoing Success

## September:

- Handle Rate 87%
- 7.5% waited over 15 minutes



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## Questions?





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