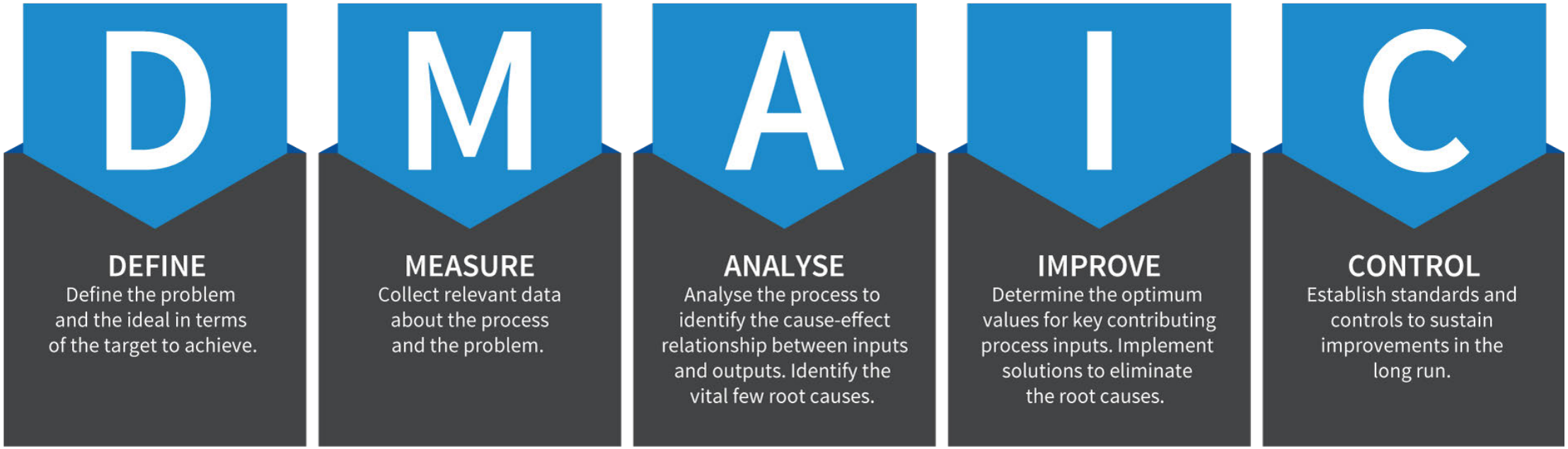
# Mental Health Tickets Process

CCHCS LEAN SIX SIGMA PROGRAM

GREEN BELT| [redacted]

MENTAL HEALTH QUALITY MANAGEMENT

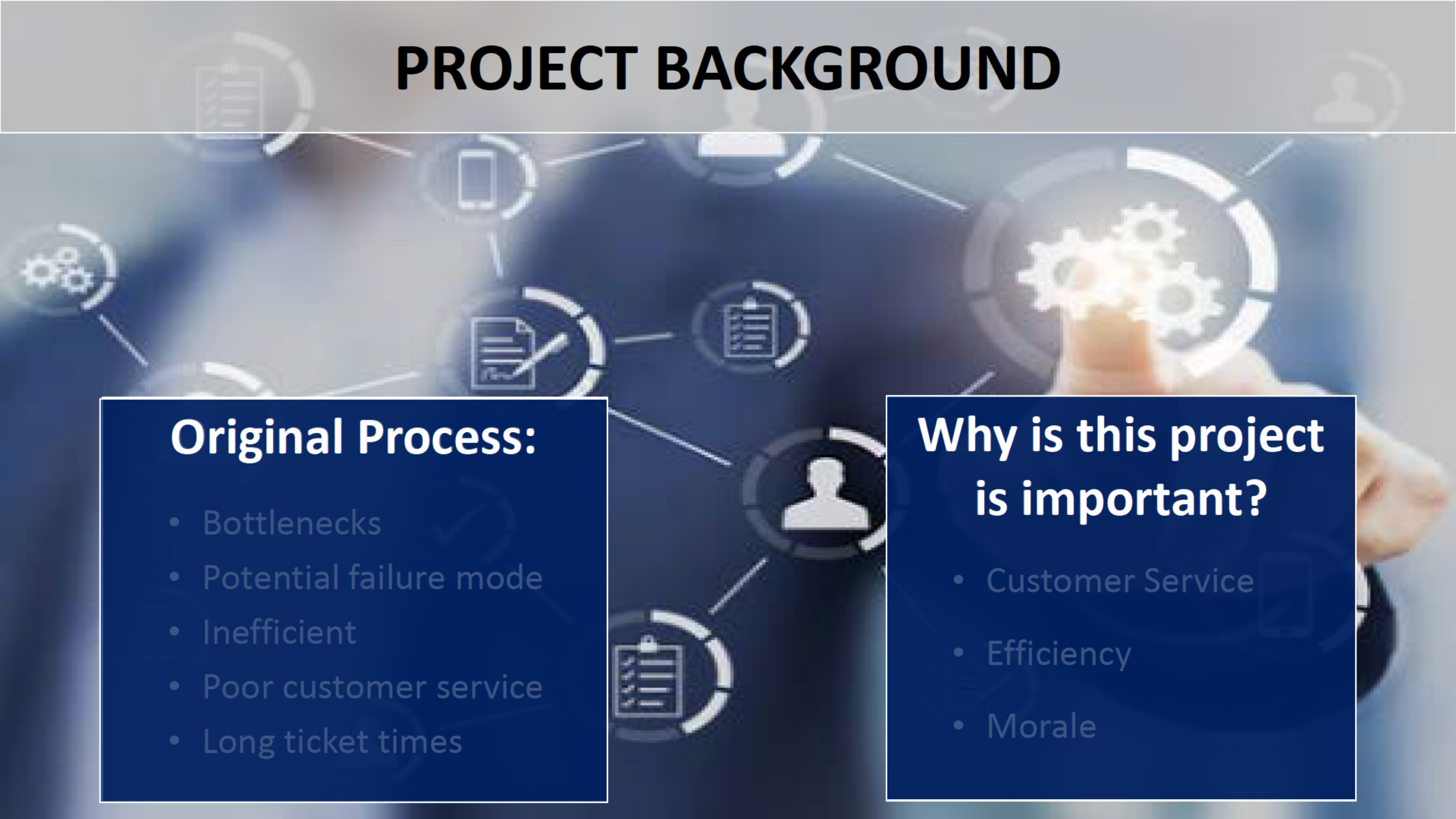
# Lean Six Sigma Methodology



# Define Phase

Define and scope the problem, identify the key metric and the team that will work the project, and create the project charter.

# PROJECT BACKGROUND



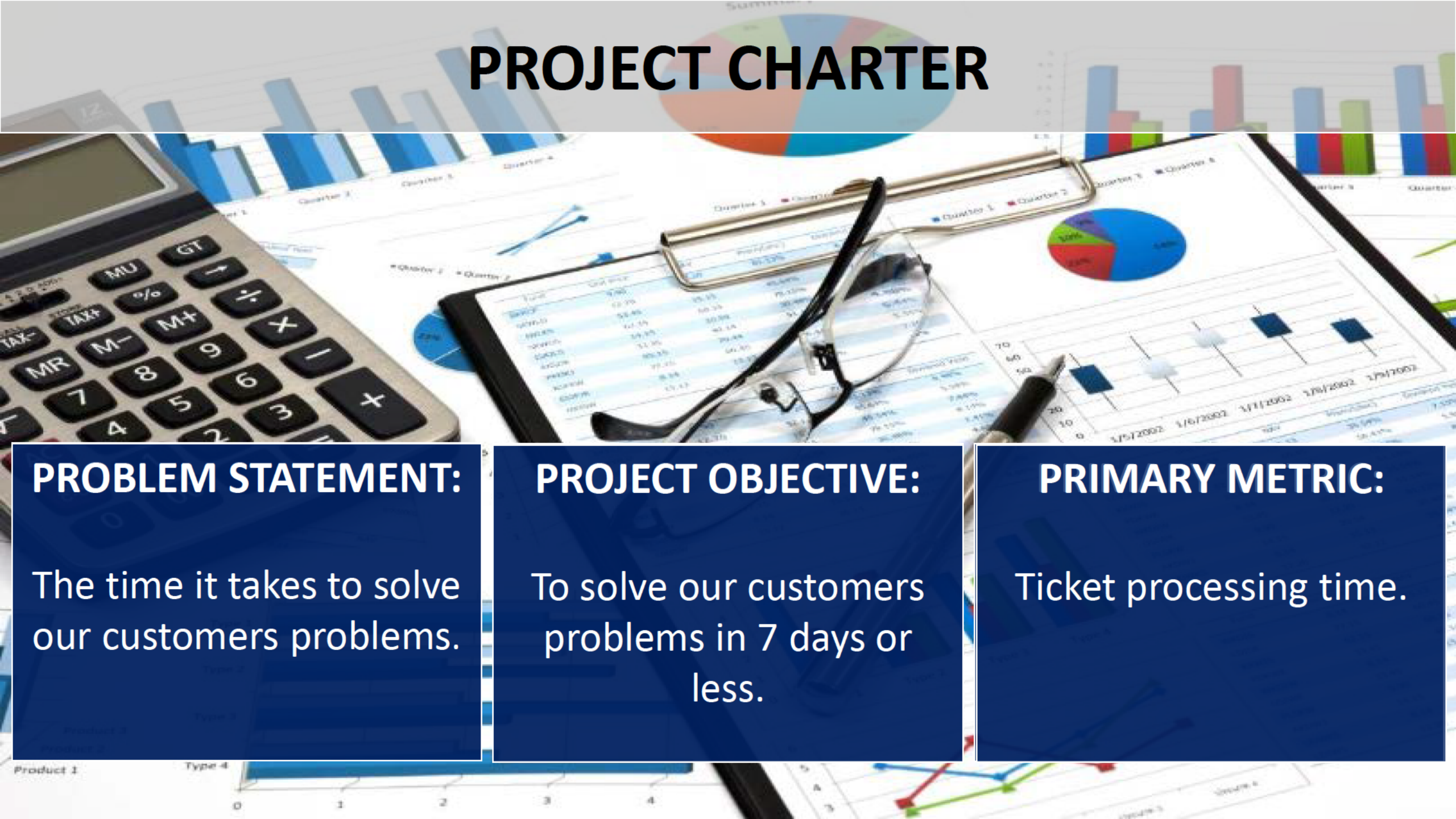
## Original Process:

- Bottlenecks
- Potential failure mode
- Inefficient
- Poor customer service
- Long ticket times

## Why is this project is important?

- Customer Service
- Efficiency
- Morale

# PROJECT CHARTER



## PROBLEM STATEMENT:

The time it takes to solve our customers problems.

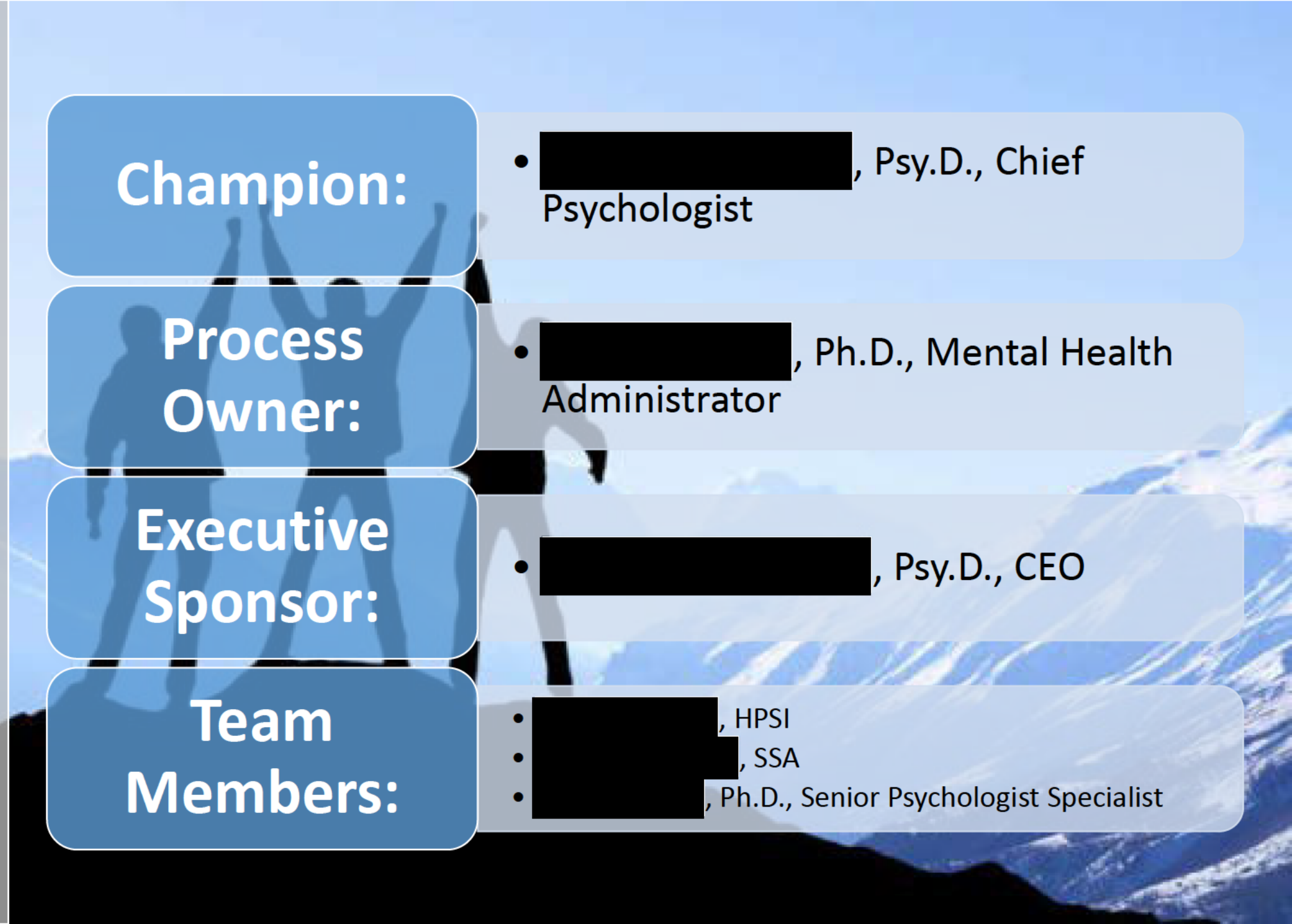
## PROJECT OBJECTIVE:

To solve our customers problems in 7 days or less.

## PRIMARY METRIC:

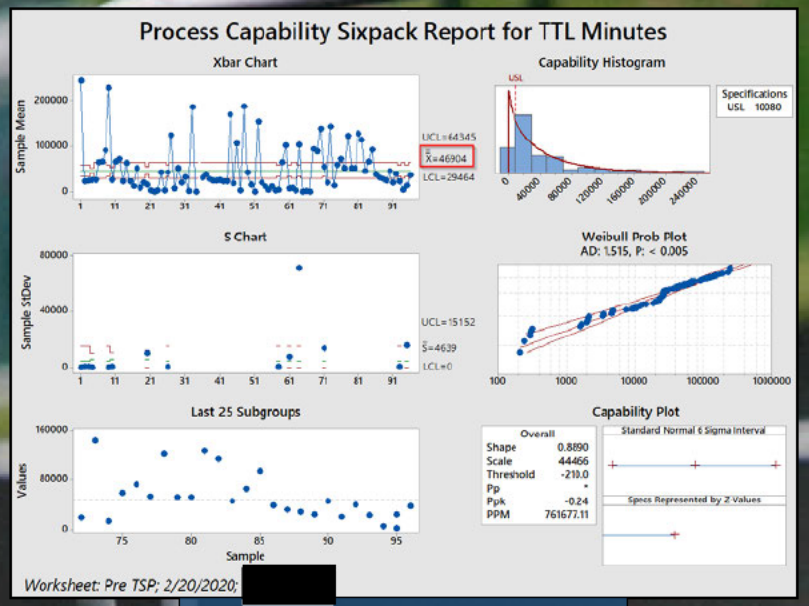
Ticket processing time.

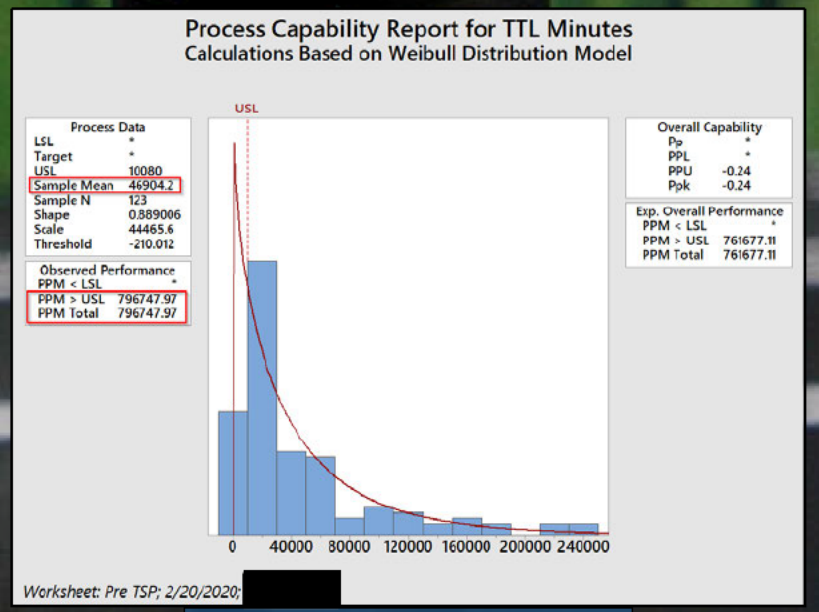
# TEAM MEMBERS



| | |
|---|---|
| **Champion:** | • [redacted], Psy.D., Chief Psychologist |
| **Process Owner:** | • [redacted], Ph.D., Mental Health Administrator |
| **Executive Sponsor:** | • [redacted], Psy.D., CEO |
| **Team Members:** | • [redacted], HPSI<br>• [redacted], SSA<br>• [redacted], Ph.D., Senior Psychologist Specialist |

# BASELINE CAPABILITY/PERFORMANCE




**Average Ticket Time**

**33 Days**

**Defective Rate**

**80%**

# HIGH LEVEL PROCESS MAP

Ticket Received → Respond if necessary → Investigate → Resolve → Respond → End

No Standardized Timeline

No Queue Coordinator

Staff Not Optimized

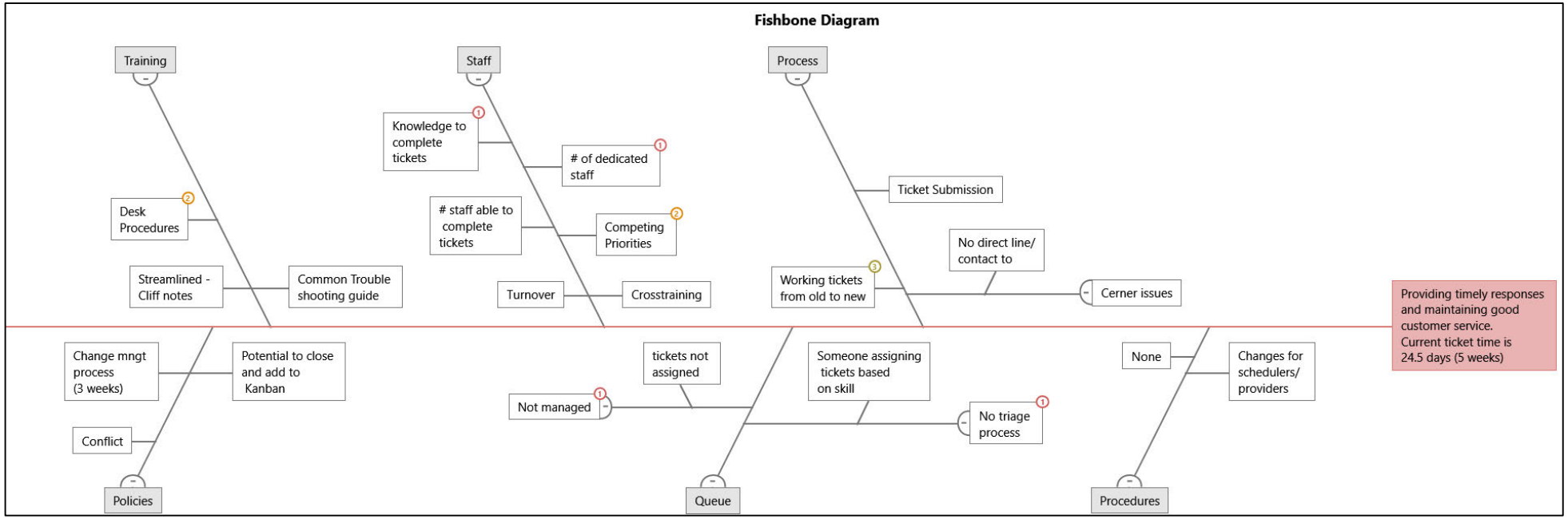
Bottlenecks

Unprotected Time

OPPORTUNITIES FOR IMPROVEMENT

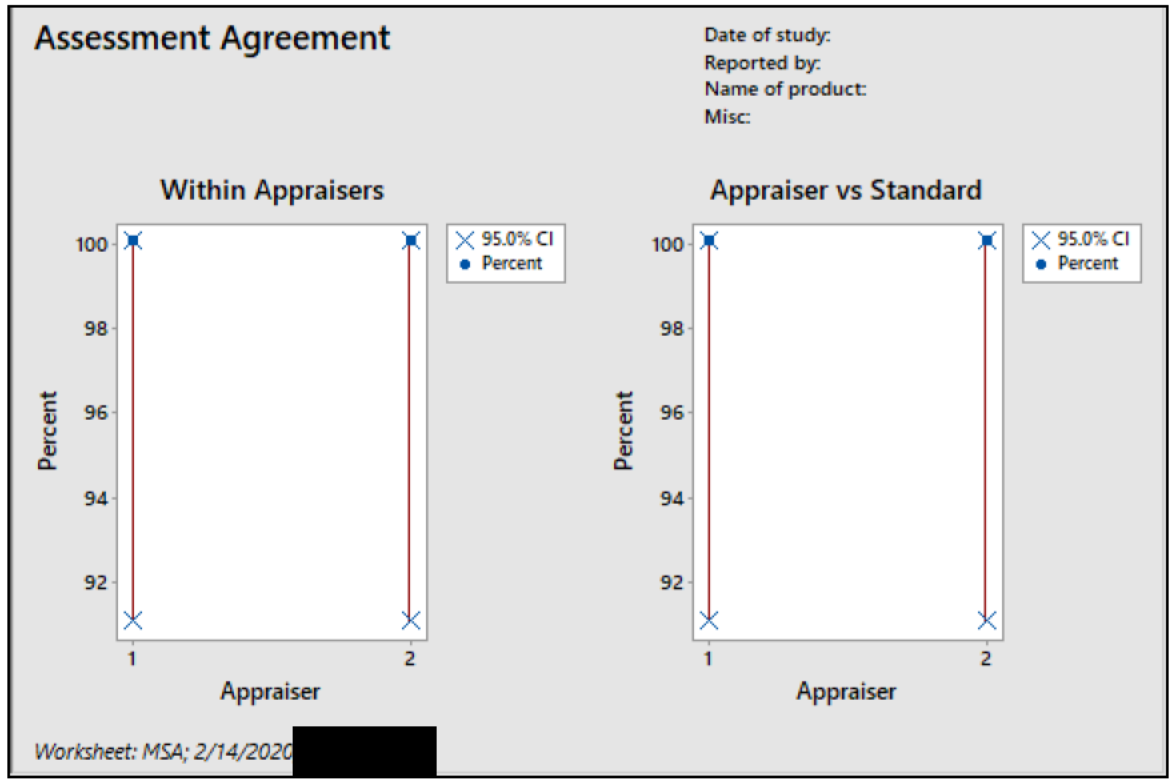
# Brainstorming Using Fishbone

- Identification of potential Critical X's; Timeline, Staff Capability, and Training.
- Competing priorities were identified, and became more of an obstacle during the improvement phase.



# Measurement System Analysis

- 100% agreement, the data has been validated.




**Within Appraisers**

**Assessment Agreement**

| Appraiser | # Inspected | # Matched | Percent | 95% CI |
|---|---|---|---|---|
| 1 | 32 | 32 | 100.00 | (91.06, 100.00) |
| 2 | 32 | 32 | 100.00 | (91.06, 100.00) |

*# Matched: Appraiser agrees with him/herself across trials.*

**Fleiss' Kappa Statistics**

Identical assessments. Cannot compute kappa.

**Each Appraiser vs Standard**

**Assessment Agreement**

| Appraiser | # Inspected | # Matched | Percent | 95% CI |
|---|---|---|---|---|
| 1 | 32 | 32 | 100.00 | (91.06, 100.00) |
| 2 | 32 | 32 | 100.00 | (91.06, 100.00) |

*# Matched: Appraiser's assessment across trials agrees with the known standard.*

**Fleiss' Kappa Statistics**

Unique value in assessments and standards across samples. Cannot compute kappa.

**Between Appraisers**

**Assessment Agreement**

| # Inspected | # Matched | Percent | 95% CI |
|---|---|---|---|
| 32 | 32 | 100.00 | (91.06, 100.00) |

*# Matched: All appraisers' assessments agree with each other.*

**Fleiss' Kappa Statistics**

Identical assessments. Cannot compute kappa.

**All Appraisers vs Standard**

**Assessment Agreement**

| # Inspected | # Matched | Percent | 95% CI |
|---|---|---|---|
| 32 | 32 | 100.00 | (91.06, 100.00) |

*# Matched: All appraisers' assessments agree with the known standard.*

**Fleiss' Kappa Statistics**

Unique value in assessments and standards across samples. Cannot compute kappa.

# Analyze Phase

Analyze data to determine the critical inputs affecting the primary metric.

# Failure Modes and Effects Analysis (FMEA) Findings

- FMEA highlighted our teams inability to navigate any part of the process without the necessary experience and knowledge.
- Major delays occur without a required timeline to respond/view tickets.
- With the current process we did not have enough staff capable to resolve tickets.
- Less experienced staff are incapable of resolving tickets without a troubleshooting guide and ample training/experience.
- Due to jargon included in requests, interpreting requests is challenging without the necessary experience.

# KEY FINDINGS #1

## Lack of Standardized Timeline

### RESPONSE TIME

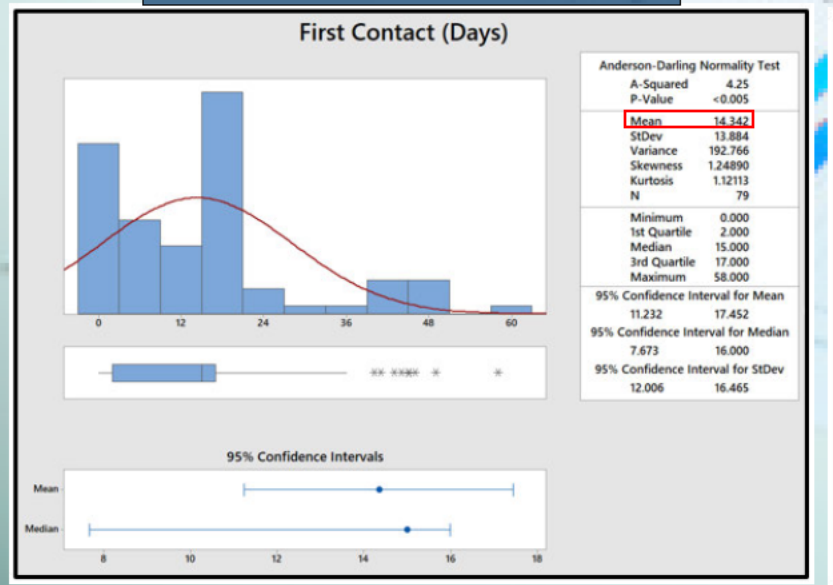
**14 Days**

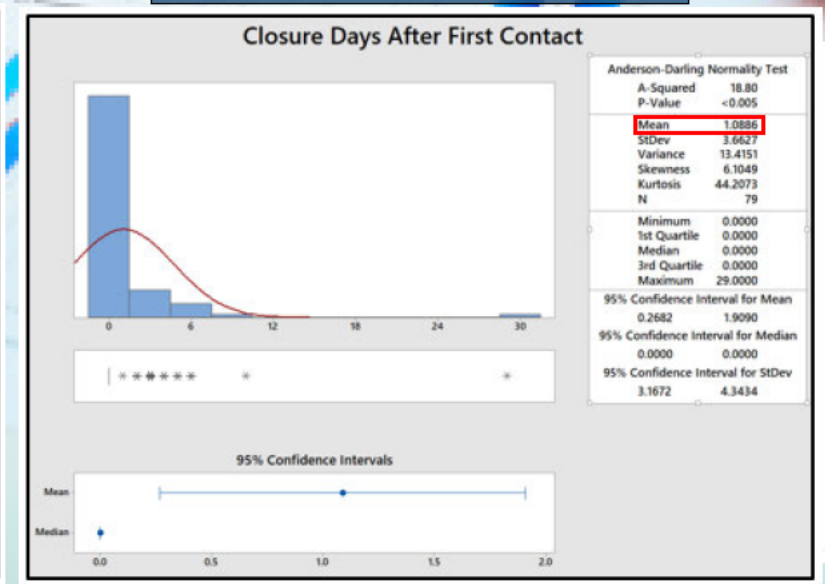
### CLOSURE TIME

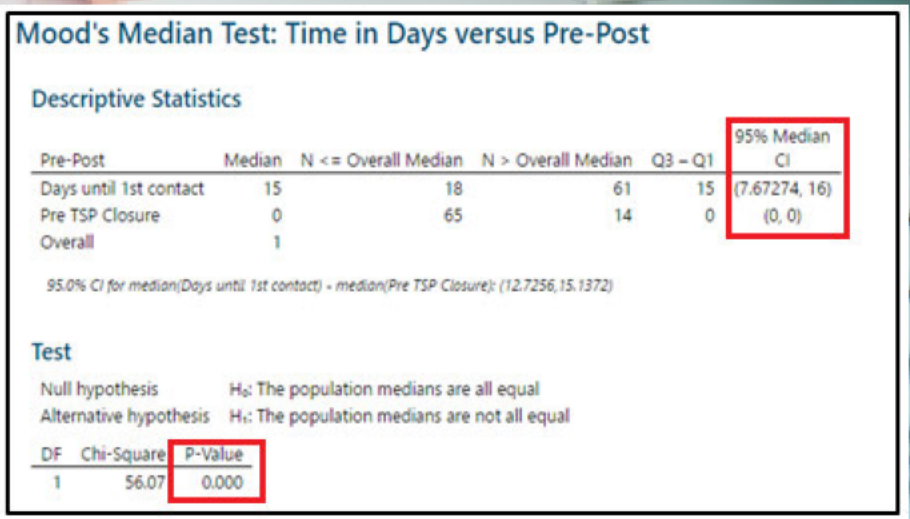
**1 day**

### HYPOTHESIS TEST

**Bottleneck Proved**



**Mood's Median Test: Time in Days versus Pre-Post**

**Descriptive Statistics**

| Pre-Post | Median | N <= Overall Median | N > Overall Median | Q3 – Q1 | 95% Median CI |
|---|---|---|---|---|---|
| Days until 1st contact | 15 | 18 | 61 | 15 | (7.67274, 16) |
| Pre TSP Closure | 0 | 65 | 14 | 0 | (0, 0) |
| Overall | 1 | | | | |

*95.0% CI for median(Days until 1st contact) - median(Pre TSP Closure): (12.7256,15.1372)*

**Test**

Null hypothesis $H_0$: The population medians are all equal

Alternative hypothesis $H_1$: The population medians are not all equal

| DF | Chi-Square | P-Value |
|---|---|---|
| 1 | 56.07 | 0.000 |

# KEY FINDINGS #2

## Queue Coordinator

### GUIDANCE AND OVERSIGHT

Direction and guidance to resolve tickets and complete builds.

### INEFFICIENT

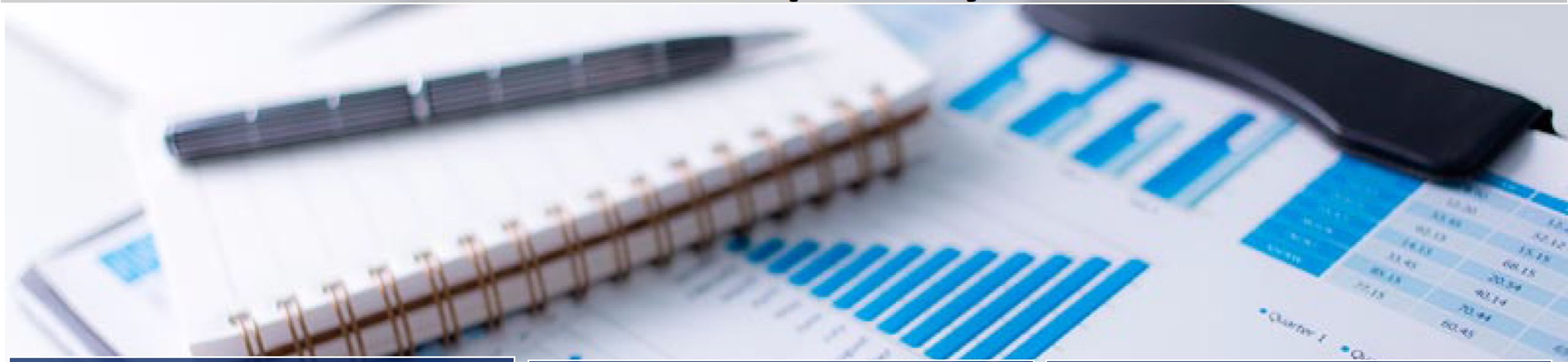
Time spent reviewing/interpreting requests vs resolving tickets.

### TICKET TIMES

Start times delayed, ticket closure times increased.

# KEY FINDINGS #3

## Staff Capability



### KNOWLEDGE RESTRAINTS

Challenge interpreting requests and identifying the corresponding work.

### TROUBLESHOOTING

Troubleshooting tickets is a challenge without the necessary experience.

### FAILURE MODE

Single point of failure.

# CRITICAL X's

## LACK OF STANDARDIZED TIMELINE:

Artificially inflates the number of tickets in our queue, negative impact on customers, and increases ticket time.

## STAFF CAPABILITY:

There's not enough capable staff to research, resolve, and correspond with customers.

# IMPROVEMENTS

## Standardized Timeline

- Ticket queue reviewed daily
- Protected staff time

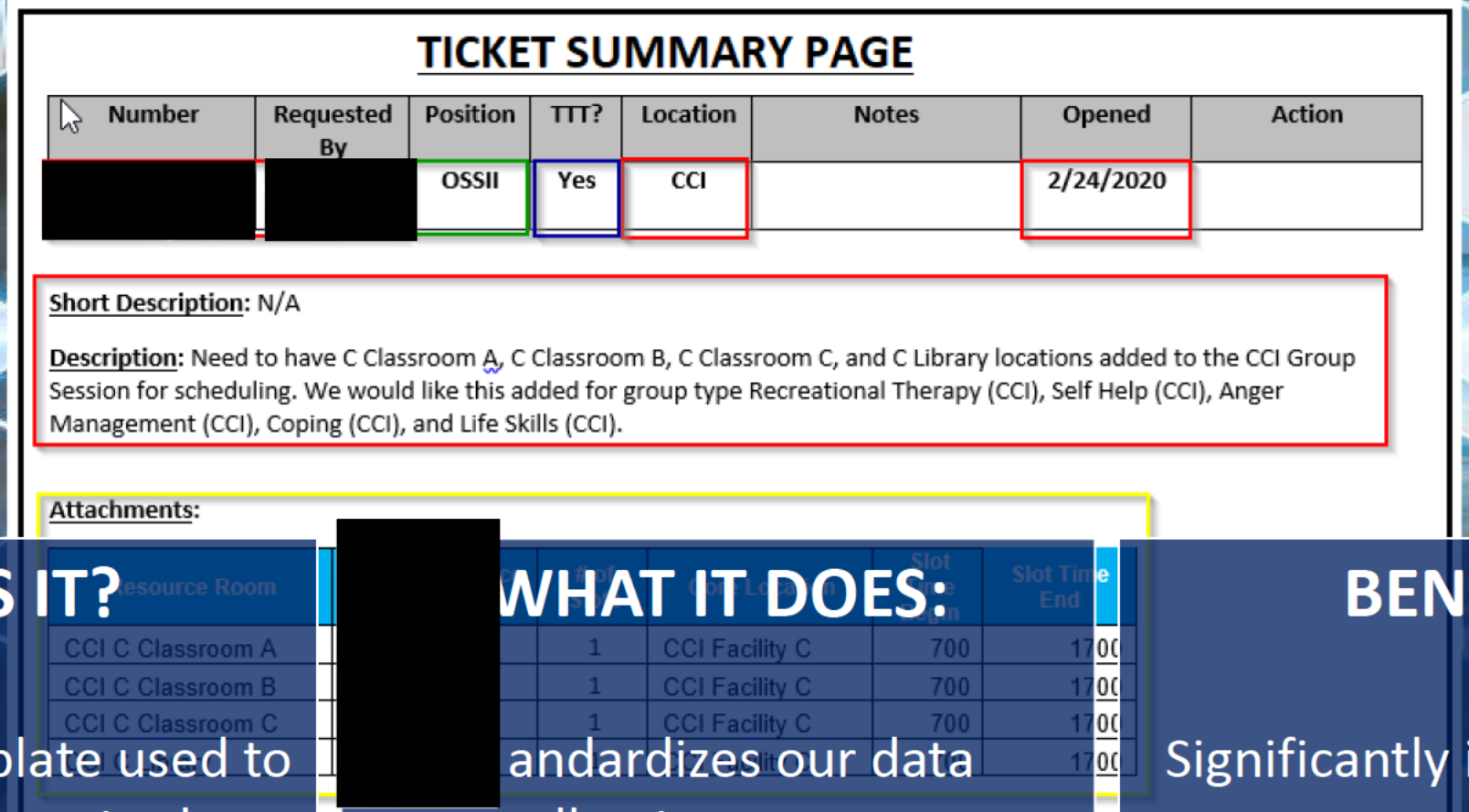
## Staff Capability

- Queue Coordinator
  - To interpret requests
  - Provide guidance and direction

## Other Improvements

- Customer focused approach
- Troubleshooting guide
- Improved communication

# TICKET SUMMARY PAGE (TSP)



## TICKET SUMMARY PAGE

| Number | Requested By | Position | TTT? | Location | Notes | Opened | Action |
|---|---|---|---|---|---|---|---|
| [redacted] | [redacted] | OSSII | Yes | CCI | | 2/24/2020 | |

**Short Description:** N/A

**Description:** Need to have C Classroom A, C Classroom B, C Classroom C, and C Library locations added to the CCI Group Session for scheduling. We would like this added for group type Recreational Therapy (CCI), Self Help (CCI), Anger Management (CCI), Coping (CCI), and Life Skills (CCI).

**Attachments:**

[redacted]

| Resource Room | | | Slot Time End |
|---|---|---|---|
| CCI C Classroom A | 1 | CCI Facility C | 700 | 1700 |
| CCI C Classroom B | 1 | CCI Facility C | 700 | 1700 |
| CCI C Classroom C | 1 | CCI Facility C | 700 | 1700 |

| Content Location Legend |
|---|
| Service Now Main Page |
| Global Address Book |
| Mental Health Site Page |
| Service Now Attachment |

## WHAT IS IT?

Easy to read template used to process details required to resolve tickets.

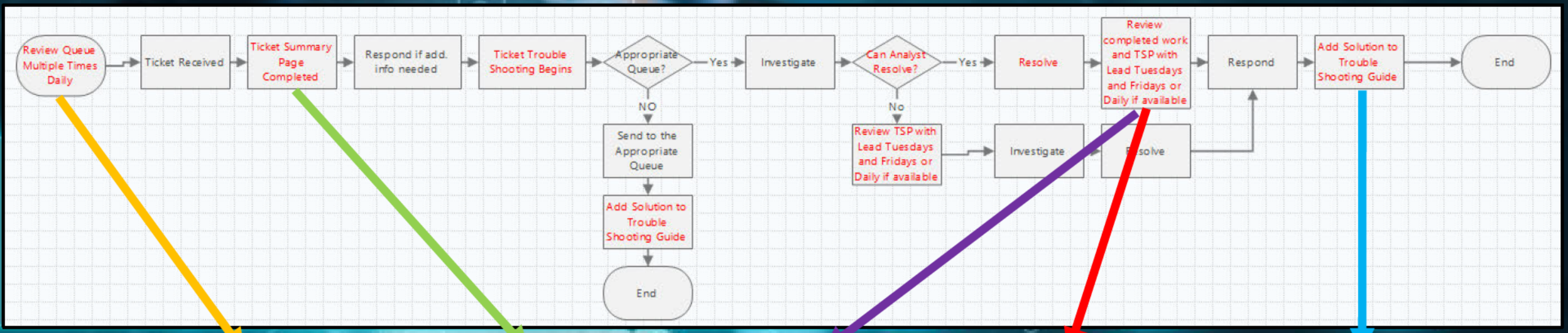
## WHAT IT DOES:

andardizes our data collection process.

## BENEFITS:

Significantly improves ticket processing time.

# PROCESS MAP


Review Queue Multiple Times Daily
Ticket Received
Ticket Summary Page Completed
Respond if add. info needed
Ticket Trouble Shooting Begins
Appropriate Queue?
Yes
NO
Send to the Appropriate Queue
Add Solution to Trouble Shooting Guide
End
Investigate
Can Analyst Resolve?
Yes
No
Review TSP with Lead Tuesdays and Fridays or Daily if available
Resolve
Investigate
Review completed work and TSP with Lead Tuesdays and Fridays or Daily if available
Resolve
Respond
Add Solution to Trouble Shooting Guide
End


Tickets Reviewed Daily
TSP
Optimizing Staff
Protected Time
Troubleshooting Guide
HELP
PROCESS MAP UPDATES

# UPDATED CABABILITY/PERFORMANCE ANALYSIS

## Average Ticket Time

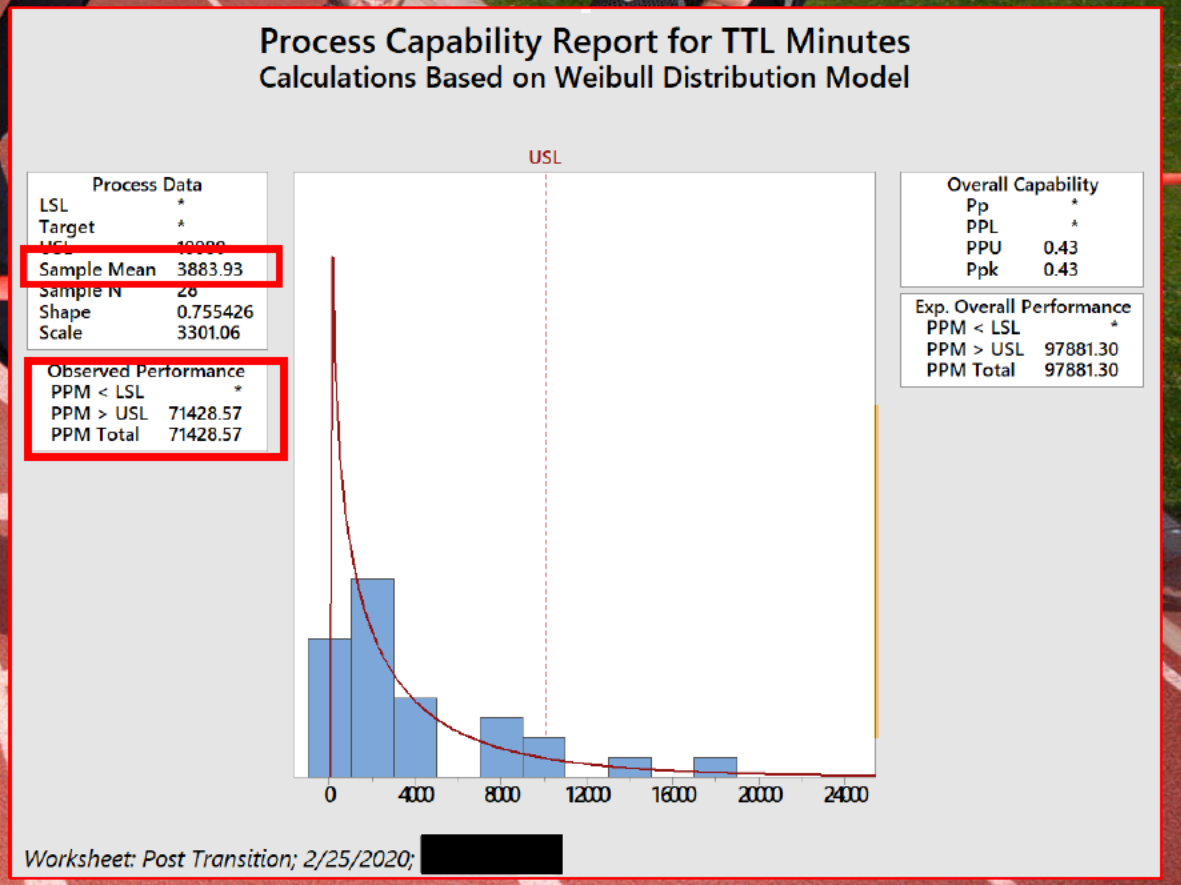
**3 Days**

**(Previously 33 days)**

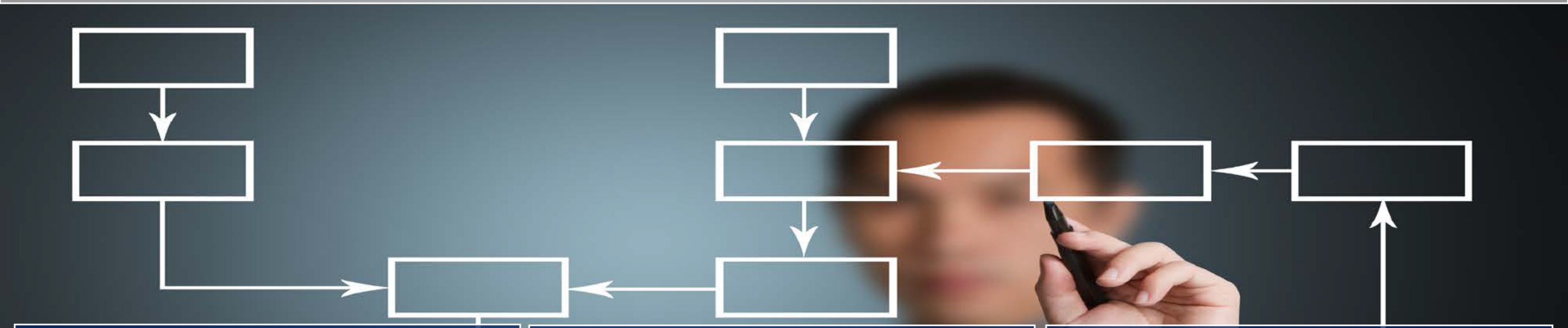
## Defective Rate

**7%**

**(Previously 80%)**



# CONTROL PLAN



## Critical X Controlled

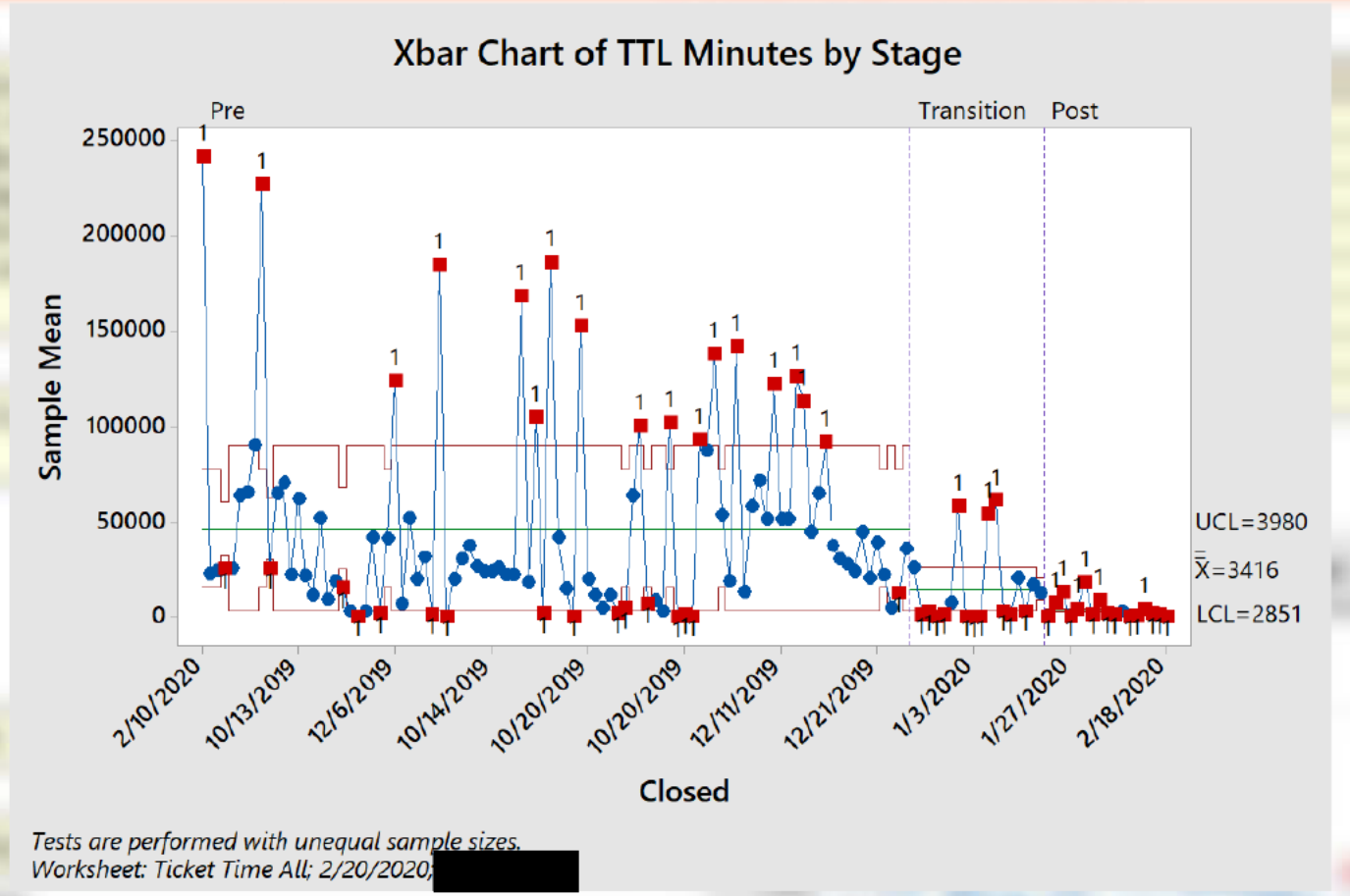
- Standardized timeline
- Staff optimization
- Protected staff time

## Critical Y Controlled:

Doing a control chart to keep track of times

## Pending Improvements:

- HQ rollout
- Troubleshooting guide
- Desk procedures
- Continuous improvements




**Baseline Average:** 33 Days
**Current Average:** 3 days
**Current Capability:** 93%

# PROJECT IMPACTS


## Improved Customer Service

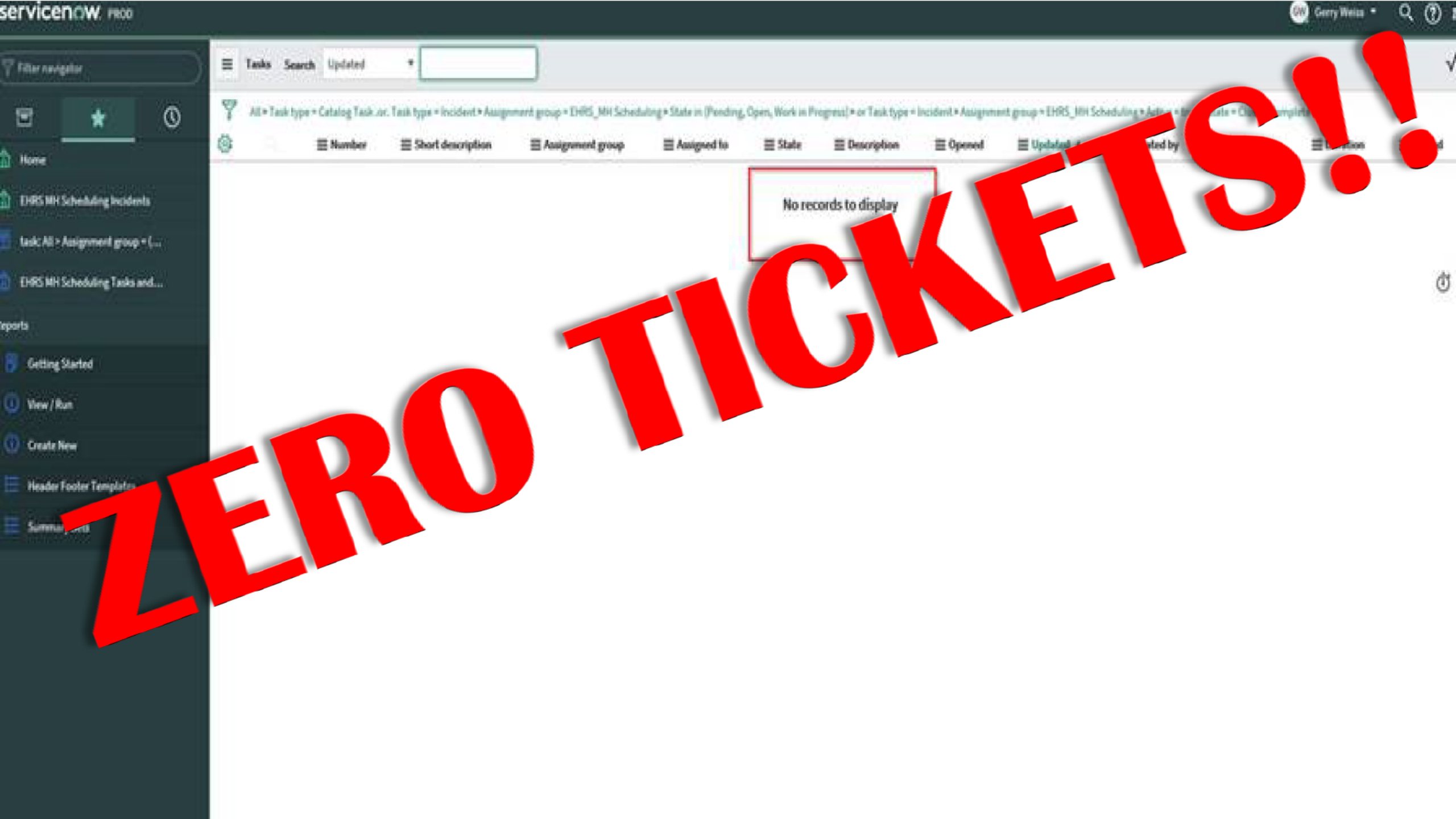
Customer focused approach to resolving tickets.

## Optimization

Steps to improve employee efficiency and addressed underutilized talent.

## Team Morale

“You don’t know how much stress you relieved for me”.


servicenow PROD
Gerry Weiss
Filter navigator
Tasks Search Updated
Number
Short description
Assignment group
Assigned to
State
Description
Opened
No records to display
Home
EHRS MH Scheduling Incidents
EHRS MH Scheduling Tasks and...
Getting Started
View / Run
Create New
ZERO TICKETS!!!

# Green Belt Contact Info

[redacted]