

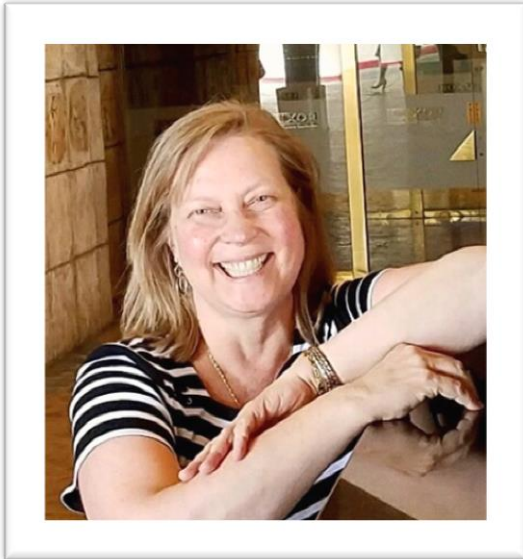


Improving Customer Flow in the Lobby

MoreSteam MBB Webcast Series

September 25, 2018

Welcome



- Welcome
- Introductions
 - Ellen Milnes
- “Improving Customer Flow in the Lobby”
 - Tyler Vonderheide
- Open Discussion and Questions

About MoreSteam

From training to project completion, a full solution to support your enterprise process improvement deployment



Largest



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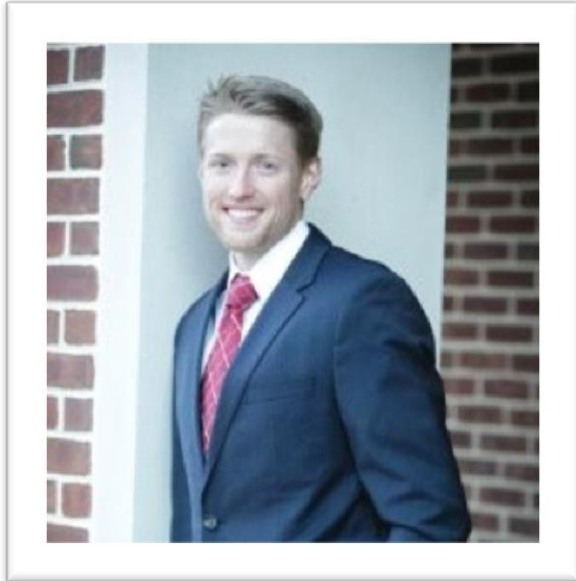
accenture



GoToWebinar Attendee Panel



About Our Presenter



Tyler Vonderheide

Continuous Improvement – Southwest Airlines

- Prior to Southwest, Tyler held engineering and lead positions with Lockheed Martin
- Certified Six Sigma Black Belt
- BS in Mechanical Engineering from University of Florida and MBA from Southern Methodist University

Objectives

For today's session lets...

- Learn about the history of Continuous Improvement (CI) at Southwest
- See how we're solving a Customer flow problem in one of our largest airports with:
 - The People who do the work
 - Advanced time and motion study software
 - Video analytics
 - MoreSteam Process Playground simulation software
- Answer any questions you may have

Southwest Airlines

From a cocktail napkin to over 57,000 Employees our Vision is to become the world's most loved, most flown, and most profitable airline



Our 57,000 Employees connect People to what's important in their lives through friendly, reliable, and low-cost air travel



Born from a cocktail napkin in 1967 was an innovative point to point airline



Southwest serves 99 destinations across the US and 10 additional countries

45
consecutive years
of profitability

Record
130M+
Customers served

Launched our
**New
Reservation
System**
the largest technology
project in our history

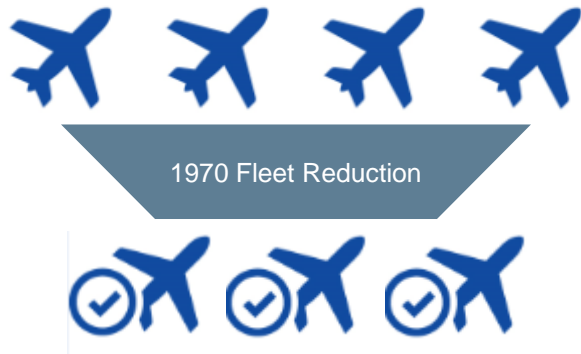
Ranked
#1
in Customer Satisfaction
by the U.S. Department
of Transportation (DOT)¹

At year end 2017 we...

Continuous Improvement | At Southwest

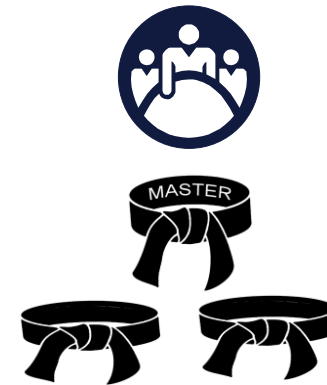
The Program at Southwest is all about supporting our Employees with Continuous Improvement tools to improve Customer Value

Our continuous improvement history



- CI has always been a part of the Southwest culture
- Our employees are natural problem solvers

Unlocking the hidden talent



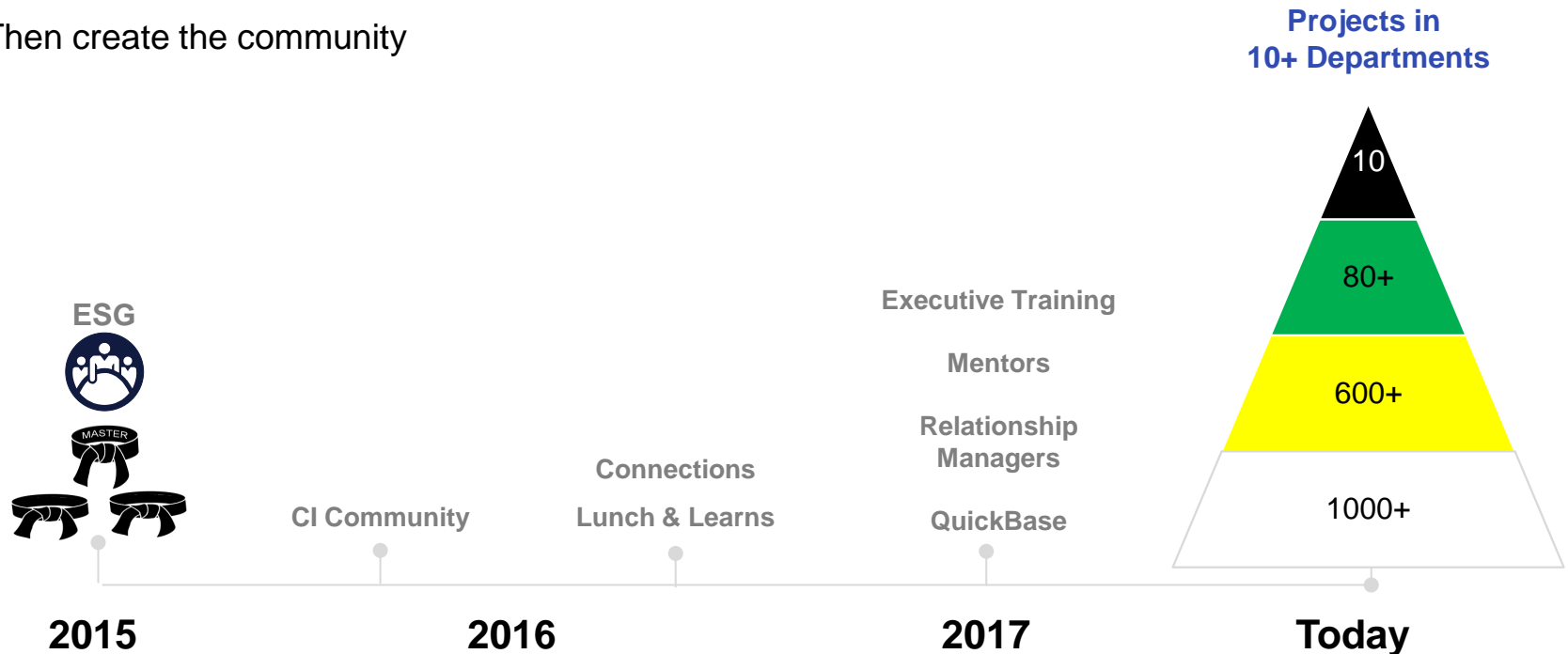
- We developed a Team of CI experts (current SWA employees), to partner with the Teams across SWA to:
 - Provide training for CI
 - Support the application CI tools
 - Create a community of CI practitioners

Enterprise Continuous Improvement history

Our program is only a few years old, but our principles are built on proven methods

Southwest formed the Enterprise CI Team in 2015 as the Company's "CI Center" to help achieve the CI Vision

- Initial focus was to show value
- Then create the community



➤ The Enterprise Team is responsible for our overall CI deployment strategy, and is strongly committed to supporting CI talent at Southwest

The Continuous Improvement Vision



Section 2

Customer flow in MDW

MDW Airport

Our busiest airport in the system was experiencing Customer confusion and long lines during peak travel periods



When Customers arrive

Two possible options

- Full Service
- Self Tag Line



Self Tagging Kiosk (STK)

Self Tag Line

- Customers drop off their checked bags
- Less time then the Full Service line



Bag Drop

- Check ID
- Provide bags to Agent

➤ When there's over 1600 customers trying to go through this process our Employees noticed lines that extended outside of the building

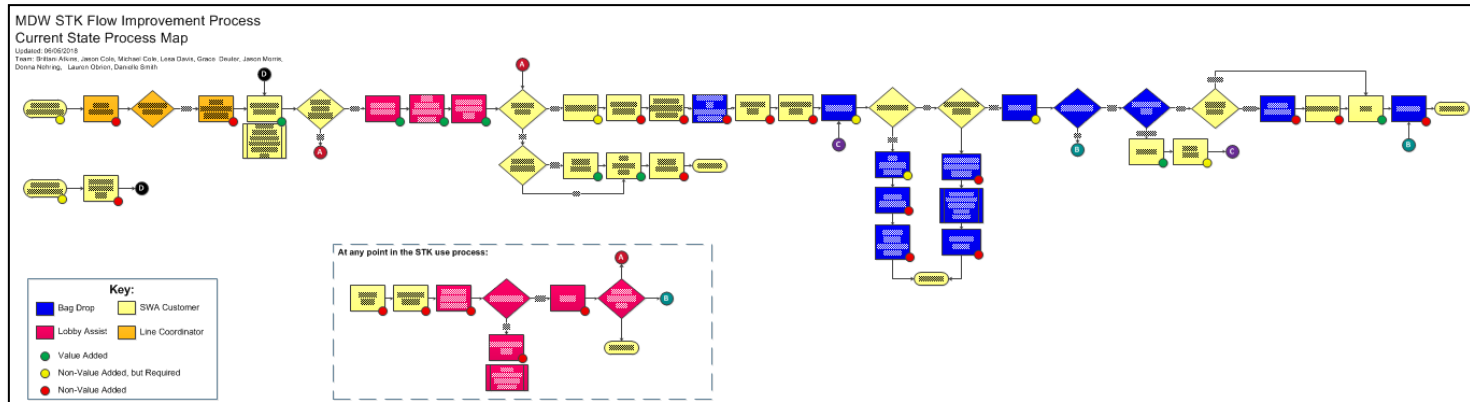
Kickoff

We kicked off the project with the Employees who do the work utilizing a 5 step problem solving approach



Define

After going to the Gemba we mapped the process and completed a Spaghetti Diagram to understand the different Customer flows through the MDW lobby



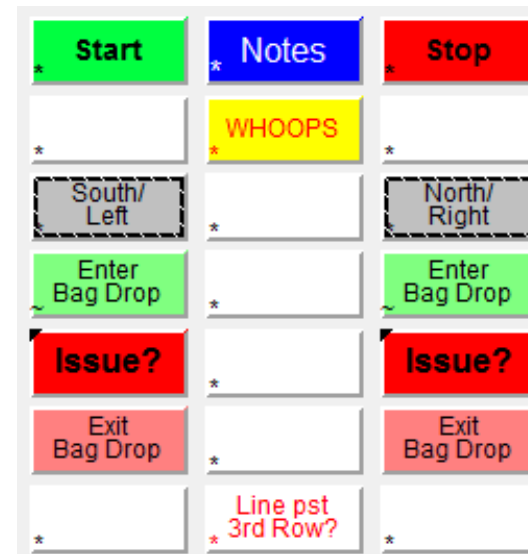
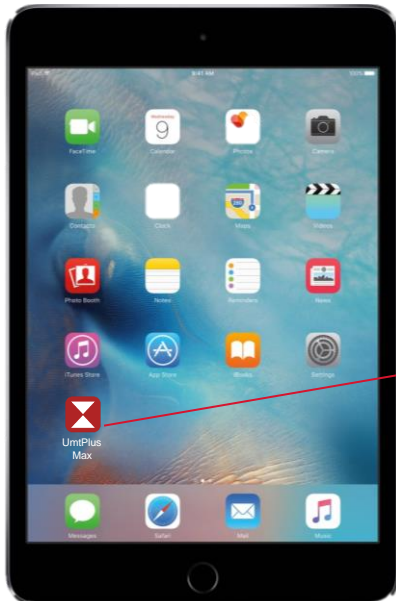
➤ During the process mapping we uncovered potential bottlenecks in the process leading to long lines and Customer confusion

Measure

With the help of umtplus the Team found a way to capture transaction times for Customers in the lobby



Work measurement software ideal for time studies, lean manufacturing, and self work sampling

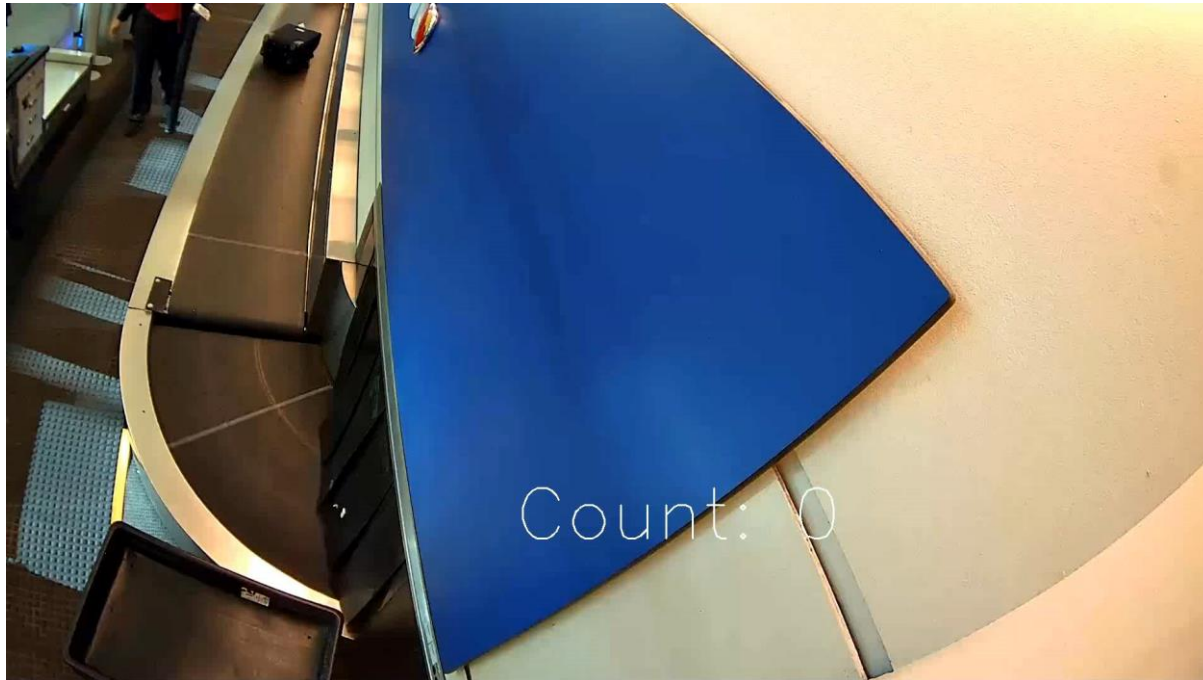


▶ UMT allowed us to build a custom time and motion study to understand Customer transaction times where the Team believed we had a bottleneck

Measure | continued

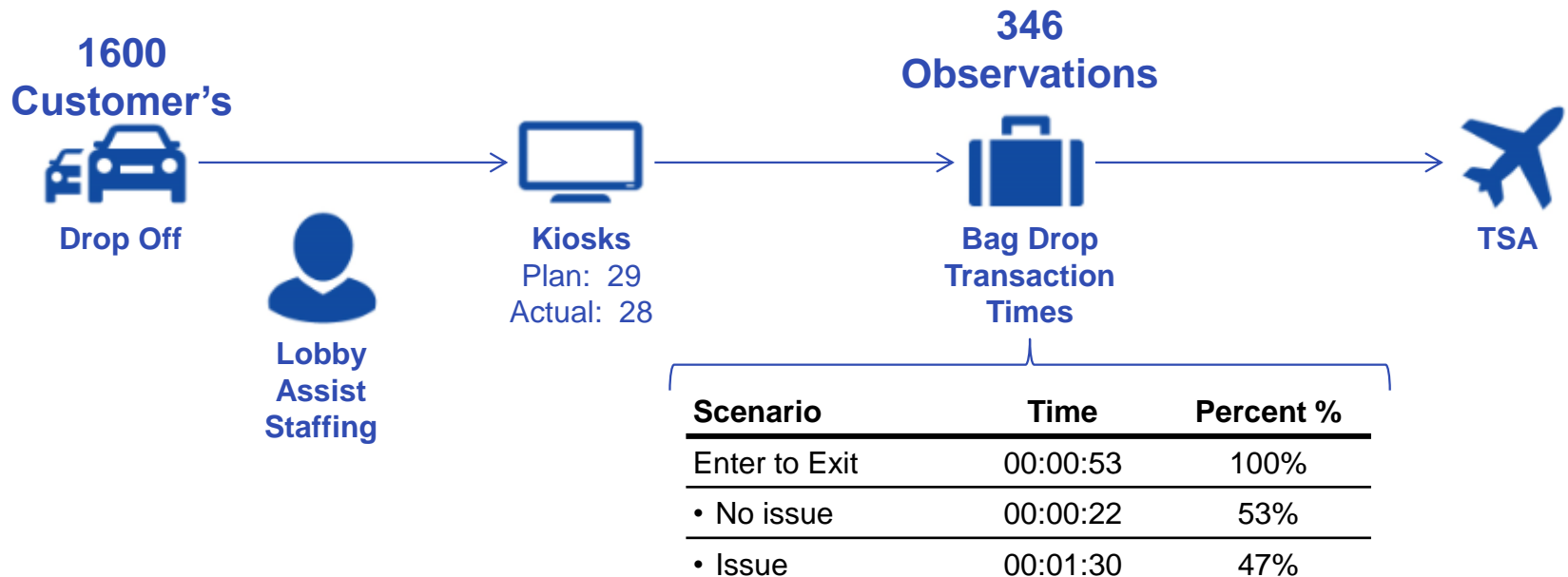
In addition to capturing Customer transaction times the Team wanted to understand the throughput rate of bags in case a solution with funding approval was needed

- The issue was there was no viable way to measure that data with an iPad. Rather we leveraged video analytics to count bags over the course of time to calculate the throughput rate



Measure | summary

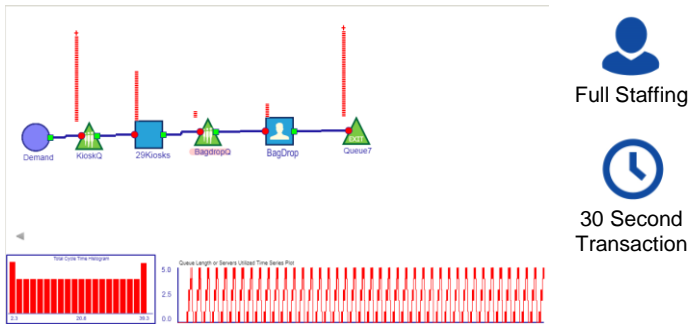
After capturing all the data from our Data Collection Plan the Team noticed staffing levels below plan and transaction time higher at Bag Drop when there were issues



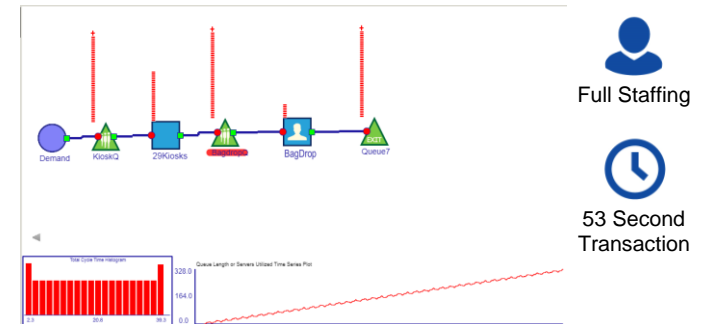
Analyze

To understand the impact of staffing vs. transaction times we utilized MoreSteam's Process Playground simulation software to analyze three difference scenarios

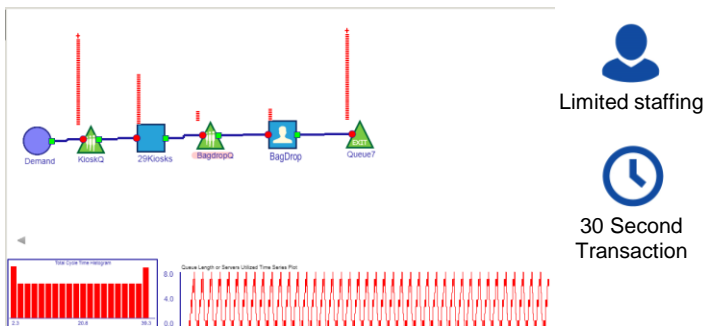
Simulation on original design - displayed a bag drop queue of no higher than 5 Passengers



Simulation on current state - displayed a bag drop queue that grows up to 323 Passengers



Simulation on current state - displayed a bag drop queue that grows up to 8 Passengers



Conclusion

- Staffing did not impact the queue quantity as much as the cycle time
- The high number of issues at bag drop were causing longer transaction times leading to a bottleneck at bag drop
- This was resulting in long lines leading to Customer confusion on where to go because the line was unorganized

Analyze | brainstorming

knowing now the Customer flow issue was due to a bottleneck at Bag Drop the Employees identified the 5 top causes which were then narrowed to root causes

Top Causes

Root Causes

1

Imbalance of staffing

Start times and breaks are not staggered

2

Customer's didn't have IDs in hand at Bag Drop

Customer's are unaware they need IDs in their hand

3

Customer Confusion on Full Service vs. Self Tagging

Lack of signage and triage

4

Variance in number of Agents assigned to Bag Drop vs. Lobby Assist

When it became busy Supervisors would pull Lobby Assists to help Bag Drop

5

Inconsistency in Help Desk utilization

Lack of clarity on Help Desk process

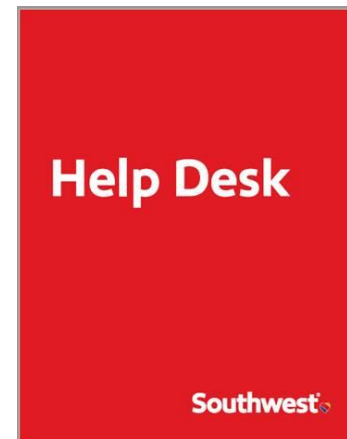
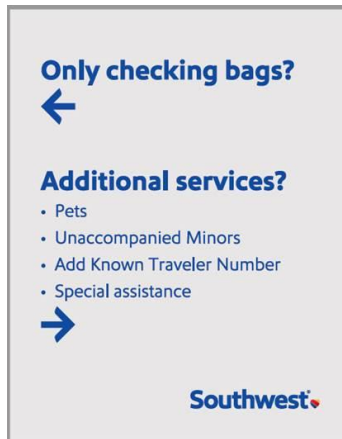
Improve

The Team identified the solutions within scope for each root cause

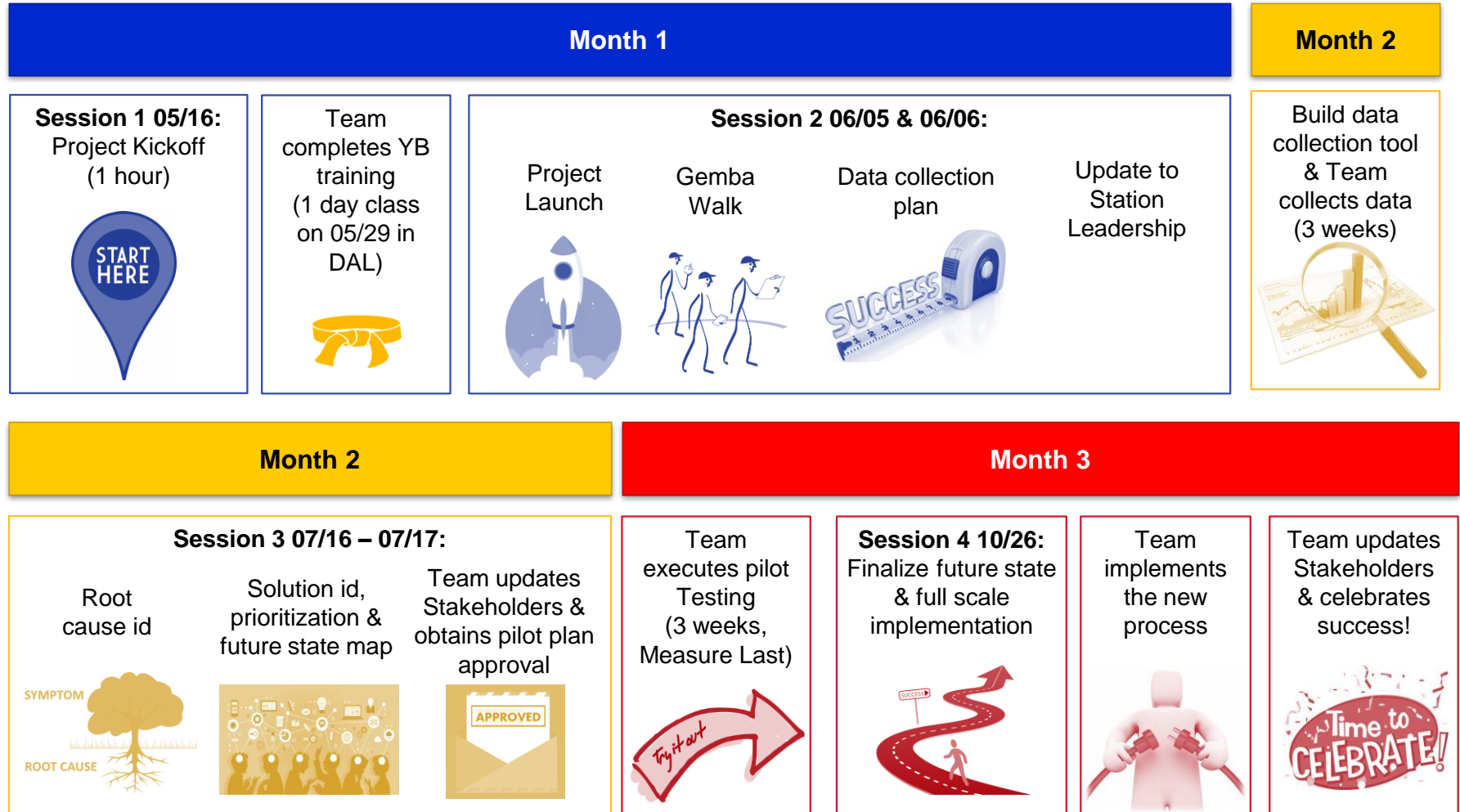
	Top Causes	Root Causes	Solutions
1	Imbalance of staffing	Start times and breaks are not staggered	Adjust Employee start times
2	Customer's didn't have IDs in hand at Bag Drop	Customer's are unaware they need IDs in their hand	Add floor decals and kiosk signage
3	Customer Confusion on Full Service vs. Self Tagging	Lack of signage and triage	Assign a Lobby Assist to triage and provide signage
4	Variance in number of Agents assigned to Bag Drop vs. Lobby Assist	When it became busy Supervisors would pull Lobby Assists to help Bag Drop	Determine correct ratio of Lobby Assist to Bag Drop
5	Inconsistency in Help Desk utilization	Lack of clarity on Help Desk process	Standardize process and share expectations

Improve | Future State signage

In addition to adjusting start times and fully utilizing the help desk the below signage was developed to reduce confusion and prep the Customers for Bag Drop



Project timeline




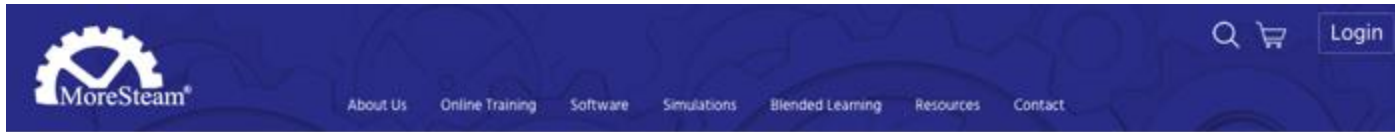
Next Steps

The Team's next steps are to validate improvements from their pilot test and report out to the Executive Sponsor



Questions?

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554,404

The number of professionals that have trained through MoreSteam programs.

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