

# Analyzing and Unifying an Incident Processing System

Josh Halbesma, Allison Marshall, Eduardo Rodriguez, Jeff Willer

# Background

- Users will often experience errors due to configuration, program error, or random bugs
- These errors are submitted as “incidents” through a Customer Support Portal and then routed through the Product Support department
- The incident resolution process is tracked by Product Support Managers and Global Functional Managers based on various key performance indicators
- KPIs:
  - Customer Satisfaction (CSAT)
  - Quality Assurance Analysis (QAA)
  - Initial Response Time (IRT)
  - Ongoing Response Time (ORT)
  - Calls to Customers (C2C)

# Problem

- Product Support Managers (PSM) are responsible for checking these various KPI statistics on a daily or weekly basis
- Manager must manually input the query details including time, engineer, customer, and other incident-specific data points to get the result set showing raw data
- Data then imported into various analytics software for Visualizations and trend analysis
- Repeated for each KPI the manager wishes to investigate each day

# Proposal

- Unify the systems to consolidate the data sources into single interface and creating tiles, so the manager can immediately see how a specific KPI is trending
- Create actionable tiles to allow the managers to immediately respond to any concerning information and lend aid the prevention or spreading of further issue
  - EX: Clicking on a tile showing trend downward on confirmed/auto-confirmed would open the relevant incidents immediately, and an outlook email/Skype incident directly to Engineer

Prototype



Submit New Incident



0

My Open Incidents



7

My Incident History



Survey Requests



4

Request Expert Call



Configuration and Testing

Configure New Product



Test in My System



# My Open Incidents

5

Incidents

Items (3)



Incident Number	Submission Date	IRT	ORT	Status	Last Response
155,233	10/30/18	0	55	In Process	11/16/18 Y >
154,677	10/14/18	0	0	Waiting for Customer Update	11/17/18 N >
155,466	11/18/18	600	600	New	12/31/18 Y >
155,334	11/14/18	0	366	In Process	11/14/18 N >
154,677	10/14/18	0	0	In Process	10/30/18 Y >

Report Escalation	View History	Review Communication	
! 0	👤 78	✉ 3	





Standard ▾

Not Filtered



## New Tasks Pending

Complete for Team

10  
of  
10[View All](#)

## Incidents Open with Team

Pending Engineer Update

Red Inc

124690

32 minutes

Green Garage

124325

45 minutes

Blue Shop

124342

100 minutes

Grey Industries

124123

285 minutes

Teal Timeworks

124877

360 minutes

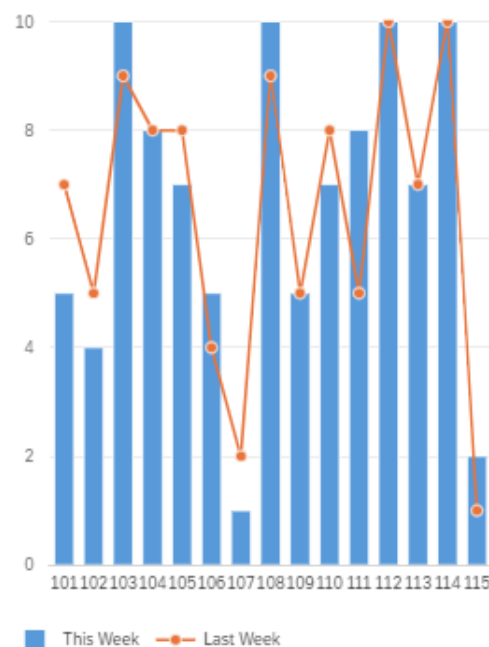
## Survey Scores

Total Surveys for Week

15

Target Deviation  
10 50%

This Week and Last Week by Question 1



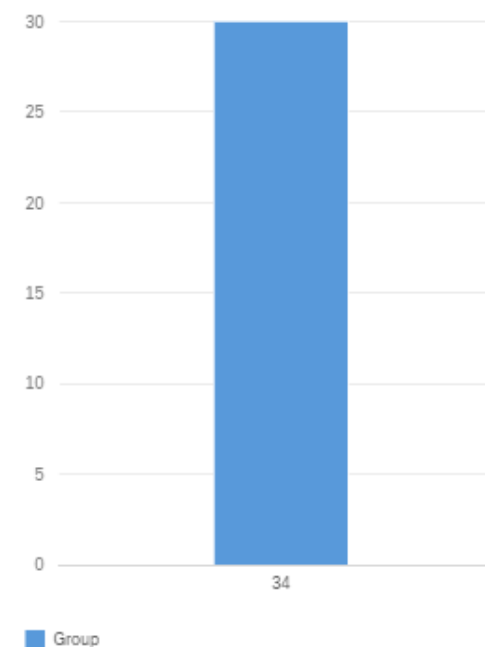
## Total Incidents Solved

Total Solved for Week

34

Target Deviation  
40 -15%

Incidents by Solved and .





Database



Component



Contract



Customer



Employee



Incident



Manager



Schedule



Support\_Component



Survey



Training



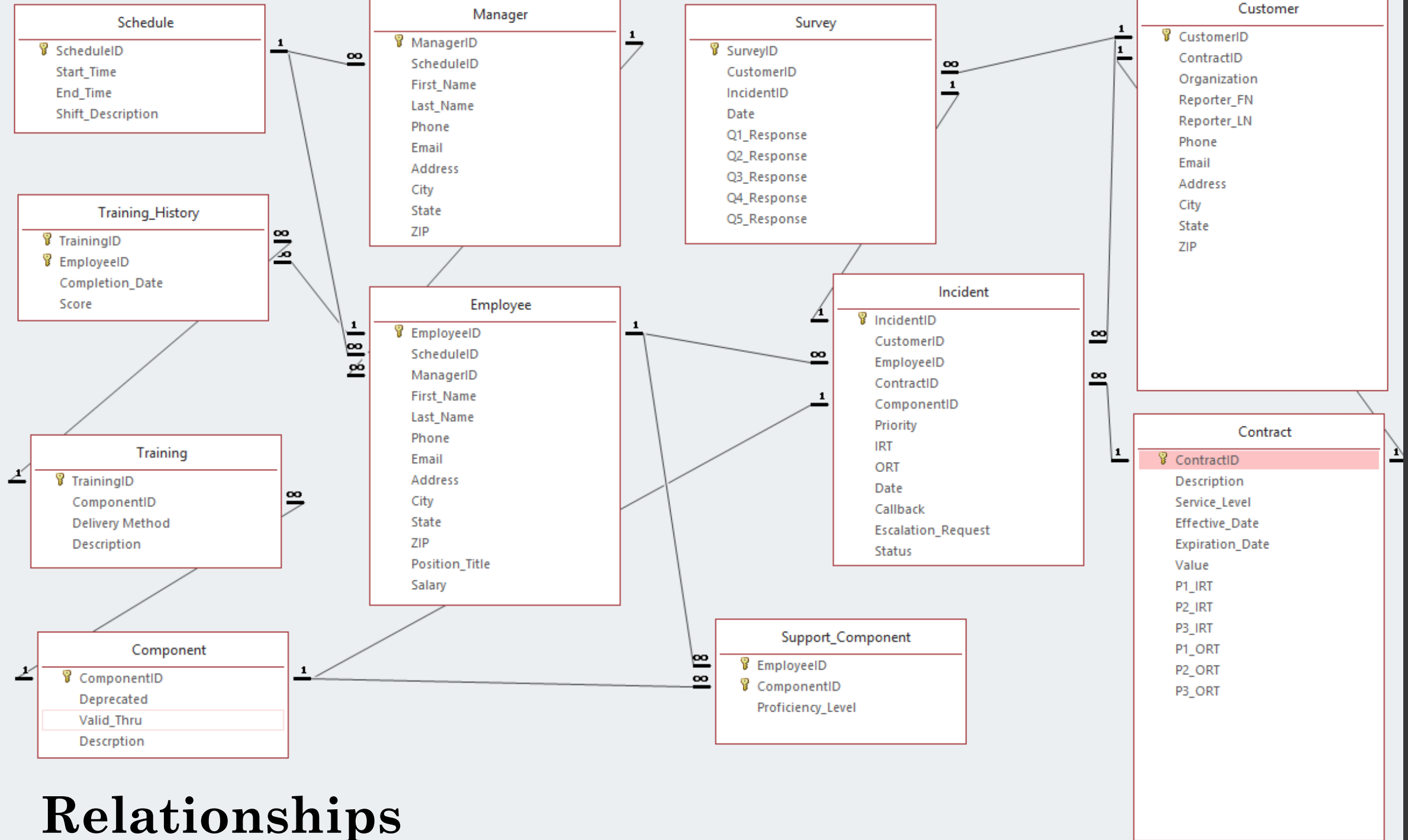
Training\_History

# Access Database

- Built to reflect all relevant data for the incident process and relevant entities
- Required additional tables to factor into the Manager's reporting process and employee system



Denotes Association Table



# Relationships

Forms

← → ↻ 🏠 incidentprocessingportal.com/Contract/Title

Input Contract Details

Please fill out all the questions listed below. Refer to the legal contract details for any additional questions.

ContractID

ContractID

Description

Enter description here

Effective Date

1/1/10

Expiration Date

1/1/10

Contract Cost

Enter contract cost here

Initial Response Time (IRT)

P1

minutes

P2

minutes

P3

minutes

On-going Response Time (ORT)

P1

minutes

P2

minutes

P3

minutes

Save

Submit

BIGCOContract 1csa44

← → ↻ 🏠 incidentprocessingportal.com/trainingrequest/Title

Training Request Form

Please fill out all the questions below. Your request form will be automatically forwarded to your direct manager. If you would like a copy sent to you for your recods, please indicate in the space provided below.

EmployeeID:

Training Description:

Date

1/1/10

Related Support Component

Select One

Forward Request Receipt

☐ No

☒ Yes

E-Mail

Save

Submit

BIGCOTrainReq 1csa09

← → ↺ 🏠 incidentprocessingportal.com/employeeTitle

Employee Information

Please fill out all the questions below. If you have any questions please contact your Human Resources Representative.

First Name (Name)

Last Name (Name)

Date of Birth 1/1/10

E-Mail (E-Mail Address)

Phone 1-(###)-###-####

Address (Street Address)

City (City)

State State

Zip (Zip Code)

Position Details

Position Title (Position)

ManagerID (ManagerID)

Salary (Salary)

ScheduleID (ScheduleID)

Start Date 1/1/10

SaveSubmit

BIGCEmployee 1csa22

← → ↺ 🏠 incidentprocessingportal.com/managerTitle

Manager Information

Please fill out all the questions below. If you have any questions please contact your Human Resources Representative.

First Name (Name)

Last Name (Name)

Date of Birth 1/1/10

E-Mail (E-Mail Address)

Phone 1-(###)-###-####

Address (Street Address)

City (City)

State State

Zip (Zip Code)

ScheduleID (ScheduleID)

SaveSubmit

BIGCManager 1csa10

← → ↺ 🏠 incidentprocessingportal.com/incident

Title

Submit Incident

Please fill out all the portions listed below. Once you hit submit, any relevant IRT/ORT timers will begin. Refer to your contract details for any additional information on agreed upon SLAs.

CustomerID

ContractID

Support Component

Select One

Priority

☒ Very High (P1) ☐ High (P2) ☐ Regular (P3)

Initial Response Time (IRT)

P1 minutes P2 minutes P3 minutes

Ongoing Response Time (ORT)

P1 minutes P2 minutes P3 minutes

Description

Enter description here

Date

1/1/10

Request Callback

☐ Yes ☒ No

Request Escalation

☒ Yes ☐ No

Save

Submit

BIGCOIncident 1csa54

← → ↺ 🏠 incidentprocessingportal.com/survey/

Title

Thank you for taking the BIGCO Product Support Survey

Please answer the questions below. You may skip any question and save your progress if you wish to leave and return to the page. This survey will expire **14 days** from incident confirmation. Refer to the scale below for assistance with questions 1 through 5.

	Extremely Dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely Satisfied
How satisfied are you with the support provided by your Support Engineer?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5
How satisfied are you with our products and product offerings?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input checked="" type="radio"/> 5
How satisfied are you with Product Support in general?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5
	Extremely Unlikely	Unlikely	Neutral	Likely	Extremely Likely
How likely are you to recommend Product Support within your organization?	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
How likely are you to use Product Support again in the future?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/> 4	<input type="radio"/> 5

Enter any additional comments or concerns here

Save

Submit

BIGCOSurvey 1csa99

# Reports



## Training History Report

## Search Training History

Employee First (First Name)

Employee Last (Last Name)

EmployeeID (EmployeeID)

Component Select One

Completion Date from: 10/01/2018

Completion Date to: 12/01/2018

Submit

[illegible]

## Incidents Solved by Processor

## Search Incident History

[illegible][illegible]