CENTRAL FLORIDA EXPRESSWAY AUTHORITY

Customer Service Center Performance Assessment

March 2017

Internal Audit, Risk, Business & Technology Consulting

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EXECUTIVE SUMMARY

Overview

In accordance with the 2017 Internal Audit Plan, Protiviti conducted a follow-up assessment of the Central Florida Expressway Authority (CFX) customer contact center operation's performance leveraging a contact center subject matter expert . The last performance assessment was performed in 2015. Since then, the third party vendor operating the contact center has changed, and a new scheduling system, Monet, has been implemented.

The customer contact center currently leverages a total of 60 full and part-time agents to support its customer contact center operations, (excluding image processing personnel), up 30% from 46 full and part-time agents at the time of last audit in May 2015. The average daily call volume is approximately 2,400 calls per day, which is relatively consistent the average daily call volume range of approximately 2,200 - 2,500 calls per day in May 2015. The call volume follows a consistent pattern, with volume peaks in the morning and late afternoons and the highest volumes occurring on Mondays and Fridays. The increase in the number of agents represents the total agents on staff, not necessarily the number of agents per shift. Although the call volume remained relatively consistent for FY2015 and FY2017, having more agents available for staffing allowed the contact center to collapse call groups and achieve service level goals more consistently.

The customer contact center services consist of UTN payments (36%), customer service (29%), VES Response Line (23%), account replenishments (5%), and new E-PASS accounts (1%).

The technology used in the customer contact center is based on an Avaya 8700 platform that is implemented in a configuration using multiple physical data centers. CFX implemented Monet Workforce Management in January of 2017 and a new SwampFox IVR (Intelligent Voice Response) solution in June of 2016, tools that enable them to more effectively match agent staffing to call volume patterns and to more effectively route calls and forecast agent scheduling needs.

Overview

The objectives of the review were to:
1. Perform an assessment of the contact center in 2017 considering change in vendor operating the center and the new technology CFX has put in place since the time of the 2015 audit. The assessment included a review of six months of call data, from the period of July 2016 to January 2017, to evaluate the progress made toward implementing the prior recommendations made during the 2015 review.
2. Evaluate the use of Monet for Workforce Management and other supporting operational systems and services for additional needs or opportunities to improve usage.
3. Verify the accuracy of data between the new Monet Workforce Management solution and the existing Avaya ACD solution.

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EXECUTIVE SUMMARY

⊚	**Approach**

The customer contact center performance review was accomplished through the execution of four inter-related work streams designed to analyze, document, and quantify the customer contact center 's application of people, process, and technology to provide customer service:

- People: Executive, Operations, IT, and customer contact center Management Interviews
- Process: Detailed Call Analysis
- Statistical Analysis: Review and analysis of customer contact center historical reporting
- Technology: Infrastructure and Application Review

The review was conducted in February of 2017 with the assistance of CFX management and the third party customer contact center operations vendor.

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EXECUTIVE SUMMARY

Summary of Results

Overall, CFX has improved the effectiveness and efficiency of the customer contact center operations since the time of the last review in 2015. The table below provide a summary of the progress made toward implementing the prior recommendations made during the 2015 call center performance review:

Observation #	FY15 Observation	Status of FY15 Observations
Observation #1: Call Handling Performance	The customer contact center is experiencing prolonged periods of high Average Speed of Answer (ASA) times. There are opportunities to improve agent utilization and manage scheduling to decrease the average speed of answer and positively impact the customer experience.	CFX implementation and subsequent use of Monet's Workforce Management solution has made a demonstrable difference in the effective and efficient management of staff while improving overall customer experience through better maintenance of service levels and answer rates. Call handling performance in the customer contact center has been significantly improved in all key areas identified as opportunities in the 2015 review. Performance appears to be far more consistent across time-of-day and day of week.
Observation #2: Customer Call Experience	There is inconsistent and duplicative information presented to customers on the customer contact center phone menus and prompts. There are opportunities to improve caller experience for those dialing into the center by making prompts, menus and messaging more consistent.	CFX implemented a new IVR solution provided by SwampFox to address this issue and to provide additional automation opportunities.
Observation #3: Reporting and Analytics	CFX and the third party customer contact center vendor have opportunity to more fully utilize available performance reports to monitor customer contact center key performance indicators. The customer contact center currently tracks Average Speed of Answer, After-Call-Work, and handle times but does not track or monitor the factors that drive these statistics. There are opportunities to improve the customer contact center efficiency and effectiveness by reviewing and utilizing additional statistical reports which Internal Audit has partnered with CFX to help develop as a part of this review.	CFX now has access to a substantial amount of performance data including Avaya ACD statistics, WFM data, Quality data, etc. that enables it to capitalize on opportunities to be more efficient and effective within the center, as supported by the data reviewed and statistical analysis conducted during this review.

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EXECUTIVE SUMMARY

Summary of Results (continued)

Observation #	FY15 Observation	Status of FY15 Observations
Observation #4: Standardized Call Flow and Quality Assurance Processes	There is not a standardized call flow established to ensure consistent customer call handling and service. In addition, the quality assurance process does not evaluate customer contact center agents on a standard call flow. Aligning Quality Assurance forms and monitoring to a standardized call flow can serve to improve overall quality measurement while enabling analysts to focus on those behaviors that have the greatest impact on call quality.	CFX Quality Assurance (QA) Program is now functioning effectively and is supporting CFX operational goals of achieving effective and consistent customer service to its customers.
Observation #5: Inbound Call Deflection and Avoidance	There is an opportunity to reduce inbound call volume by improving the customer contact center agent messaging and improving the Authorities web presence to make it more user friendly. Reduced call volume can lead to cost reductions.	In June of 2016, CFX implemented an IVR solution from Swampfox to identify callers, direct calls, and automate common functions such as payment of toll violations. The new solution has deflected between 40-50% of the calls that would have otherwise required agent assistance to complete.
Observation #6: Call Automation	Up to 30% of a customer contact center agents call handling time is spent identifying the customer and retrieving their account information. There is an opportunity to reduce the call handling time by introducing call automation, which would identify and validate customers prior to reaching the call cent agent.	CFX has implemented a new IVR system that has significantly improved CFX's ability to identify inbound callers, enable faster service, and automate common transactions (for example, UTN payments).

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	2017 Observations

Internal Audit identified the following four observations and enhancement opportunities while performing the 2017 performance review. Internal Audit classified the findings using a relative priority of high, medium, or low to provide management with a basis for evaluating them in the overall context of this report.

Observation #	Observation:	Relative Priority
Observation #1: Service Level Performance	While CFX is doing a very good job of maintaining overall service levels, CFX identified an issue with maintaining service level at the end of shift (beginning around 4:00 to 4:15 PM each day) due to contact center agents going off shift, this was verified during the review.	Medium
Observation #2: Business Analytics / Performance Monitoring	Customer contact center management now has access to a substantial amount of performance data including ACD statistics, WFM data, Quality data, etc. However, this data is not easily accessible to work force managers or contact center staff via wallboards or analytics dashboards, which could improve CFX's use of the available data to increase effectiveness and efficiency managing the center.	Medium
Observation #3: Intelligent Voice Response (IVR) Solution	The new SwampFox IVR (Intelligent Voice Response) solution implemented in June of 2016 has been very effective, although there is opportunity to improve the reporting used to monitor IVR utilization. The current reporting makes it difficult to ascertain how calls are flowing through the IVR and what paths these calls are taking.	Medium
Observation #4: Quality Assurance Program	CFX Customer Contact Center Quality Assurance (QA) Program is functioning effectively and is supporting CFX operational goals of achieving effective and consistent customer service to its clients. The program could benefit by increasing the number of screen recordings captured for QA purposes, real-time reporting of QA activities, supervisory personnel conducting QA monitoring, and contact center agent preparation time to review marketing material, QA feedback, etc.	Medium

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DETAILED OBSERVATIONS

DETAILED OBSERVATIONS

Observation 1 – Service Level Performance

Relative Priority: Medium

In January of 2017, CFX implemented Monet Workforce Management to provide customer contact center agent forecasting and schedule adherence reporting. Based on the performance data in Appendix A, it appears the Monet solution has aided in the following improvements

Call Handing Performance	FY 2015	FY 2017
Average Speed of Answer	36 sec	30 sec
Abandoned Calls (daily)	8 – 10%	3%
Agent Aux Time Usage	Above 25%	15%

The above data suggests CFX is using the Monet solution very effectively to generate staffing forecasts and schedules and CFX has implemented the leading practice of routinely regenerating forecasts and daily/intraday schedules as conditions require it (e.g. unexpected absence or unavailability of staff which would otherwise impact service levels). In addition, CFX has maintained a schedule adherence of approximately 85-90%, based on reports generated by the Monet platform.

Analysis conducted on data from the Monet solution and on comparable reports from the Avaya ACD indicates that both systems are tracking call volumes, distribution and call handling performance accurately and consistently.

While CFX is doing a very good job of maintaining overall service levels, CFX identified an issue with maintaining service level at the end of shift (beginning around 4:00 to 4:15 PM each day) due to the number of agents going off shift at this time of day. This was verified based on the data evaluated during the review.

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DETAILED OBSERVATIONS

Observation 1 – Service Level Performance (continued)

Recommendation :

Management should consider the use of flex part-time staff or adjusting shift start times to address the drop in service level at the end of the day.

Management Response:

Management concurs.

Management Action Plan:

CFX has made the necessary staffing adjustments to increase service levels at the end of the business day. CFX will continue to monitor the performance levels to ensure adequate service levels are maintained.

Action Plan Owner / Due Date:

David Wynne, Director of Toll Operations / Completed as of June 1, 2017

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DETAILED OBSERVATIONS

Observation 2 – Business Analytics / Performance Monitoring

Relative Priority: Medium

Through the changes and improvements CFX has made to its organizational structure, QA programs, and Workforce management, the organization has easy access to accurate and complete historical data related to performance as well as real-time (and near real time) data from its various platforms. While this data is all available via various historical reports, it is not generally available to the broader contact center team (agents and supervisors) or to the management team.

Recommendation

CFX could further improve its ability to monitor and manage the centers operation by making contact center data available in highly-consumable analytics dashboards, particularly those designed to provide historical data for trend analysis and those designed to provide real-time data for intraday management. The use of highly visible dashboards showing real-time performance often enables a management team to more readily identify and respond to conditions in the contact center which may require immediate attention (unanticipated call volumes, service level issues, etc.) and improve overall service.

The Avaya ACD and the Monet Workforce Management systems store the data needed to create these dashboards and wallboards. However, these tools do not have a visual studio functionality to design dashboards in a consumable, user-friendly presentation. Management should consider a visual studio product to provide the functionality to create the dashboards.

1. The process of setting up and implementing business analytics and related dashboards typically follows the approach outlined below:

2. Identify the data and Key Performance Indicators (KPI) that should be presented and/or trended for performance monitoring

3. Agree upon how these Key Performance Indicators will be measured and calculated

4. Determine source data/systems responsible for producing or providing data required to support analytics

5. Design and set up a repository for data to be managed in the analytics solution

6. Design Dashboard UI's including all visualizations, filters, and drill-downs

7. Implement dashboards in the center. Examples are provided in Appendix B.

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DETAILED OBSERVATIONS

Observation 2 – Business Analytics / Performance Monitoring (continued)

Management Response:

Management concurs.

Management Action Plan:

CFX Toll Operations will identify a number of key performance indicators for performance monitoring that will be displayed on the dashboards within the contact center. CFX will also determine the frequency of measurement to be displayed on the dashboards (real-time, weekly, monthly metrics, etc). In addition, CFX will work with the third party contact center vendor to create business analytics related to the content of the dash boards.

Steps four and five in the recommended approach will be tabled at this time due to the complexity of the recommendation and lack of resources. These items may be revisited in the future as part of the back office replacement project

Action Plan Owner / Due Date:

David Wynne, Director of Toll Operations, and Corey Quinn, Chief of Technology and Operations / April 30, 2018

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DETAILED OBSERVATIONS

Observation 3 – Intelligent Voice Response (IVR) Solution

Relative Priority: Medium

In June 2016, CFX implemented an IVR solution from Swampfox to identify callers, direct calls, and automate common functions such as payment of toll violations. At the time of this audit, the IVR solution was having a significant impact on the center, deflecting between 40-50% of the calls that would have otherwise required agent assistance to complete. By servicing callers in the IVR, CFX is completing the transactions more rapidly, while simultaneously reducing the number of agents required to handle customer contacts.

While the IVR solution has been very effective, the reporting used to monitor IVR utilization could be improved. The current reporting makes it difficult to ascertain how calls are flowing through the IVR and what paths these calls are taking.

Recommendation

CFX should work with Swampfox to implement the following enhancements to its IVR reporting so the use of the IVR can be more effectively monitored and improved over time.

Implement Call Path Reporting – Call path reporting would allow CFX to track the path of calls through the IVR by showing the following:

1. Show all paths taken through the IVR by calls for a given reporting period, including the total number of calls that used the path and the percentage of total calls that took the path

2. Service automation utilization – this reporting shows the total number of calls that attempted to utilize each servicing module (e.g. provide payment locations or accept payment), the number that completed successfully, the number that abandoned in the transaction (without completing), the number that completed the transaction, the number that ended the call/abandoned after completing, and the number that opted to an agent.

3. Error reporting – listing/count of all calls that were forced to either abandon or op—out to an agent due to a specific error such as payment failure, web service failure, etc. by failure type and "node".

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DETAILED OBSERVATIONS

Observation 3 – Intelligent Voice Response (IVR) Solution (continued)

Management Response:

Management concurs.

Management Action Plan:

CFX has identified a Call Path Report within IVR that consists of historical graph ,error reporting, and service utilization. CFX will work with the third party contact center vendor to provide data in an acceptable format and provide an internal link for Toll Operations to access the data.

Action Plan Owner / Due Date:

Corey Quinn, Chief of Technology and Operations / April 2018

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DETAILED OBSERVATIONS

Observation 4 – Quality Assurance Processes

Relative Priority: Medium

The workforce management quality assurance (QA) team has developed and consistently maintains very effective reporting to monitor contact center agent performance. Although the reporting is fairly manual in nature, it allows the team to track individual agent performance and team performance over time and to identify trends in performance. QA has also incorporated the leading practice of conducting routine calibration sessions with the various QA analyst to ensure fair and consistent quality scoring across the team. This has enhanced the effectiveness and consistency of the QA process. While the QA process is being executed well and is achieving high levels of performance, there are enhancements that could further improve the effectiveness of the contact center.

Recommendation

CFX management should consider implementing the following:

1. Contact center supervisory staff should conduct one to two weekly QA monitors per agent. The use of supervisory staff in the QA process tends to help ensure cohesion between QA the rest of the contact center, while also providing positive input to the supervisors coaching and helping to identify other agent developmental activities.

2. While the QA team have developed and maintain effective historical reporting of QA activities and performance, having this data available in real-time would enable CFX to make intraday performance data available to agents, supervisors and management staff.

3. Fewer than 125 of the 2,594 recorded calls noted during the six month period under review had associated screen recordings. Screen recordings allow QA to monitor an agents use of the system during a call and is a valuable input to the overall QA process. Management should consider identifying why the system is not recording screens for all calls.

4. While contact center agents are provided 15 minutes for group/team meetings at the beginning of each agent's shift, the agents could benefit from a 10-15 minute period (weekly or daily based on the frequency of new information) to review QA results, coaching or other development materials, CFX marketing and program information or other data that would help to ensure that agents consistently serve customers efficiently.

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DETAILED OBSERVATIONS

Observation 4 – Quality Assurance Processes (continued)

Management Response:

Management concurs.

Management Action Plan:

Item 1 – CFX will incorporate supervisory staff into the quality assurance monitoring process.

Item 2 – CFX will develop a primary server to support IQ360, which will provide historical data for quality assurance activities and performance.

Item 3 – Screen captures are scheduled to be recorded for each call. However, the data is not being captured. CFX will review and work on a fix for this issue.

Item 4 – Weekly staff huddles will be used to provide coaching or other development materials, CFX marketing and program information or other data.

Action Plan Owner / Due Date:

David Wynne, Director of Toll Operations, and Corey Quinn, Chief of Technology and Operations

Item 1 –. Completed as of June 1, 2017

Item 2 – Completed as of June 1, 2017

Item 3 – April 30, 2018

Item 4 – Completed as of June 1, 2017

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APPENDIX A

Call Handling Performance Graphs

APPENDIX A - CALL HANDLING PERFORMANCE

Average Speed of Answer (ASA):

- 2015 (top right), ASA was over 36 seconds on average and varied substantially both from day-to-day and intraday.

- During 2017 (bottom right), ASA is far more consistent from day to day and averages below 30 seconds

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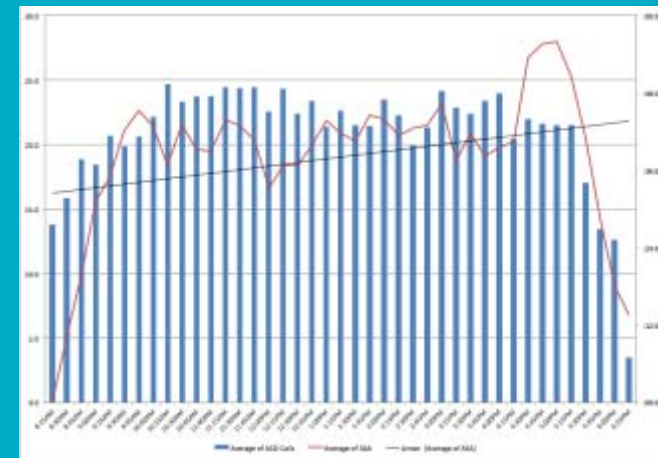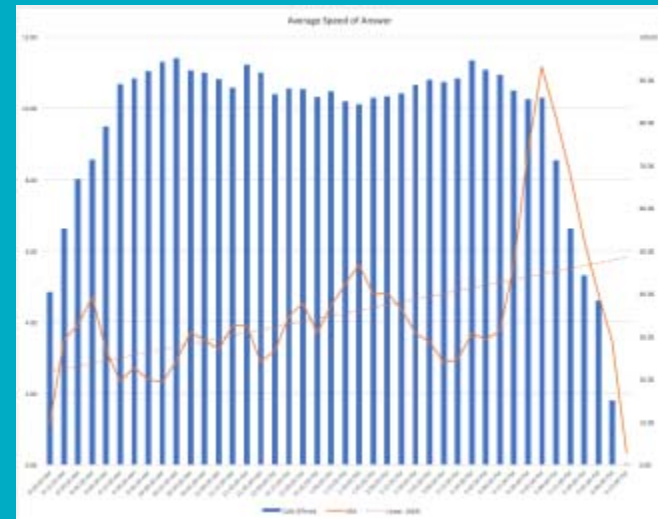
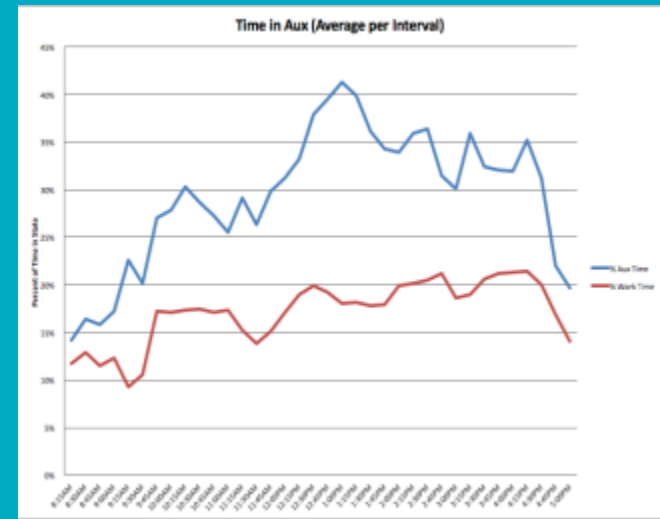# APPENDIX A - CALL HANDLING PERFORMANCE

Abandoned Calls:

- 2015 (top right), Average Call Abandonment rates were between 8 and 10% daily.

- 2017 (bottom right), Call Abandonment rates are consistently below 3% daily

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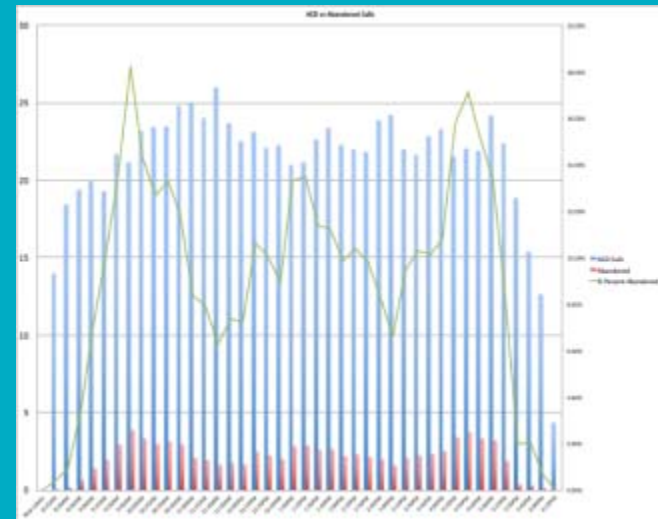
APPENDIX A - CALL HANDLING PERFORMANCE

Agent Aux – Work Time:

- 2015 (top right), Average Aux time usage averaged above 25% with ACW averaging over 15%

- 2017 (bottom right), total Aux time averages around 15% with ACW utilization very low as compared to staffed time

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APPENDIX A - CALL HANDLING PERFORMANCE

Agent Aux Detail:

- 2015 (top right), Average Aux utilization was at approximately 28% with ACW accounting for almost half that time.

- 2017 (bottom right), total Aux time averages around 15% with ACW utilization at less than 1% of staffed time.

Aux Detail (Daily Average)

Aux Time Detail (Average Daily)

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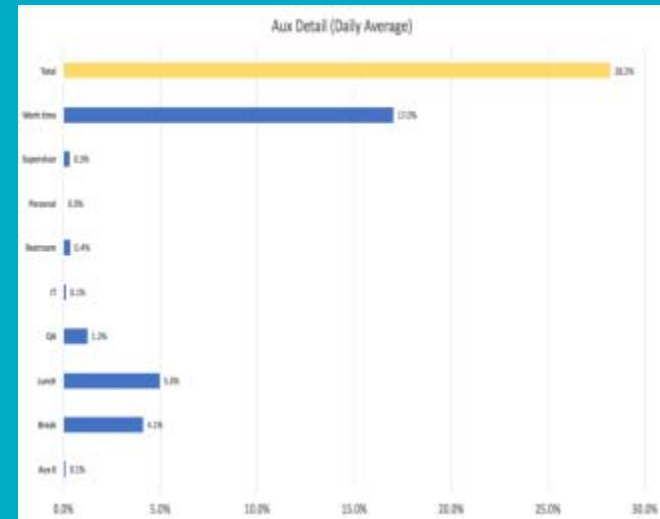
2017 Service levels drop at the end of day, starting between 4 and 4:15 PM.
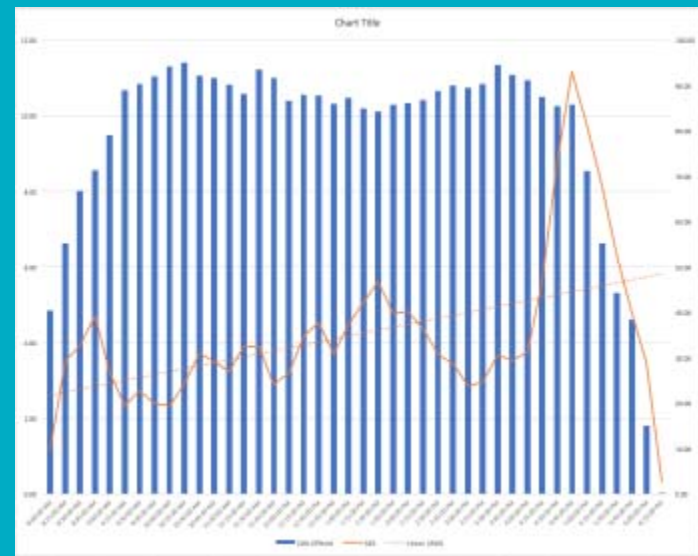
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APPENDIX B

Sample Dashboards

APPENDIX B - SAMPLE DASHBOARD
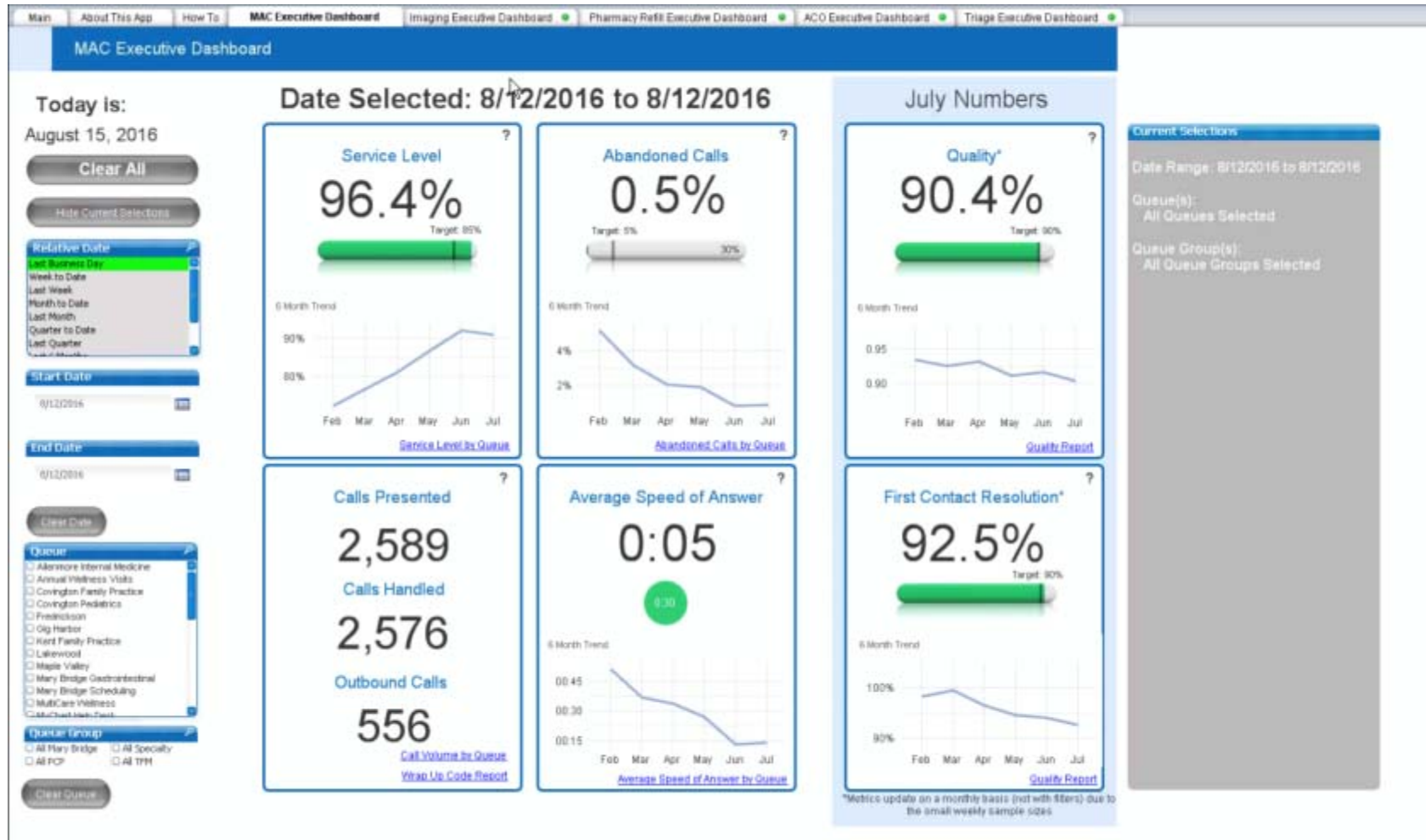
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APPENDIX B - DASHBOARD EXAMPLE
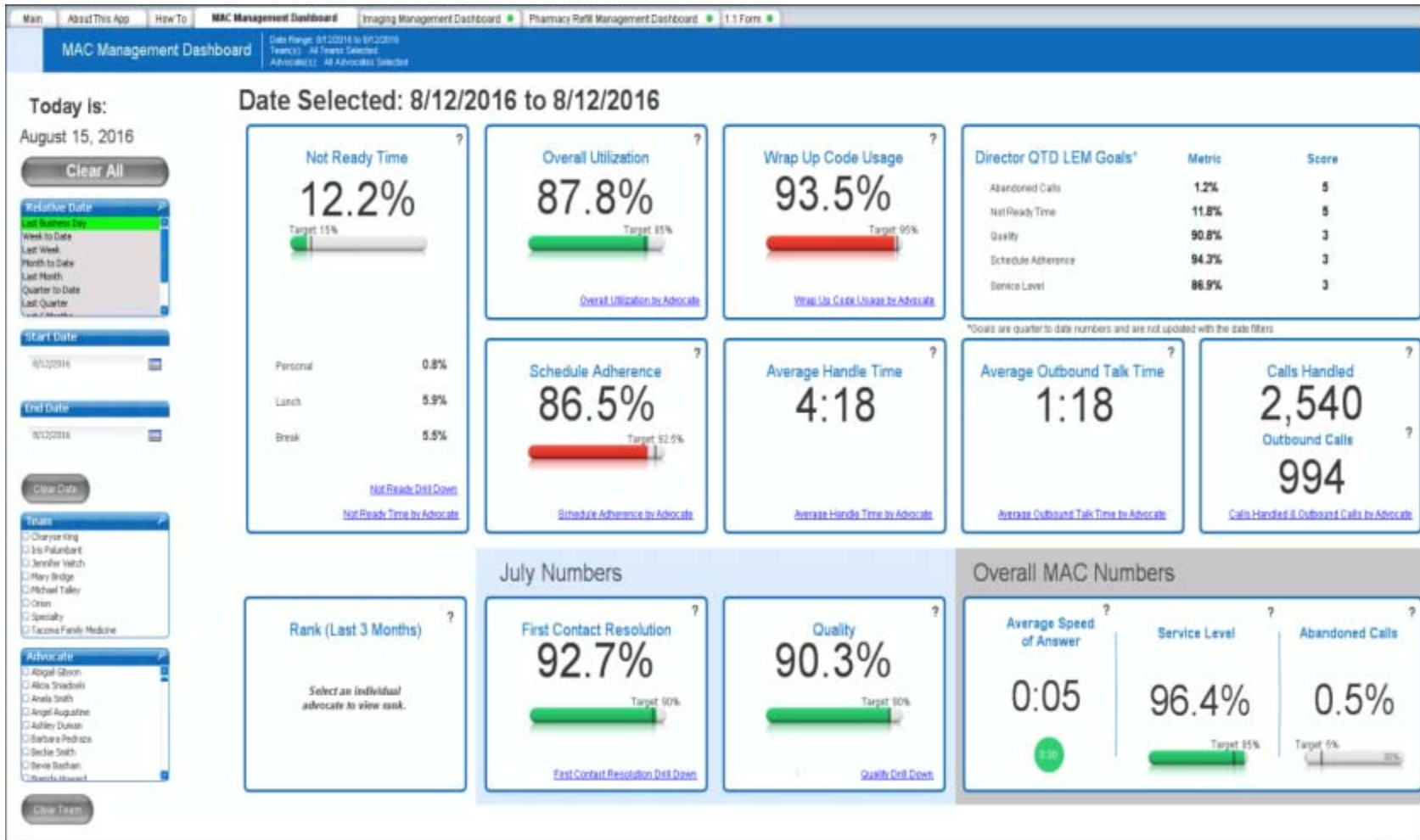
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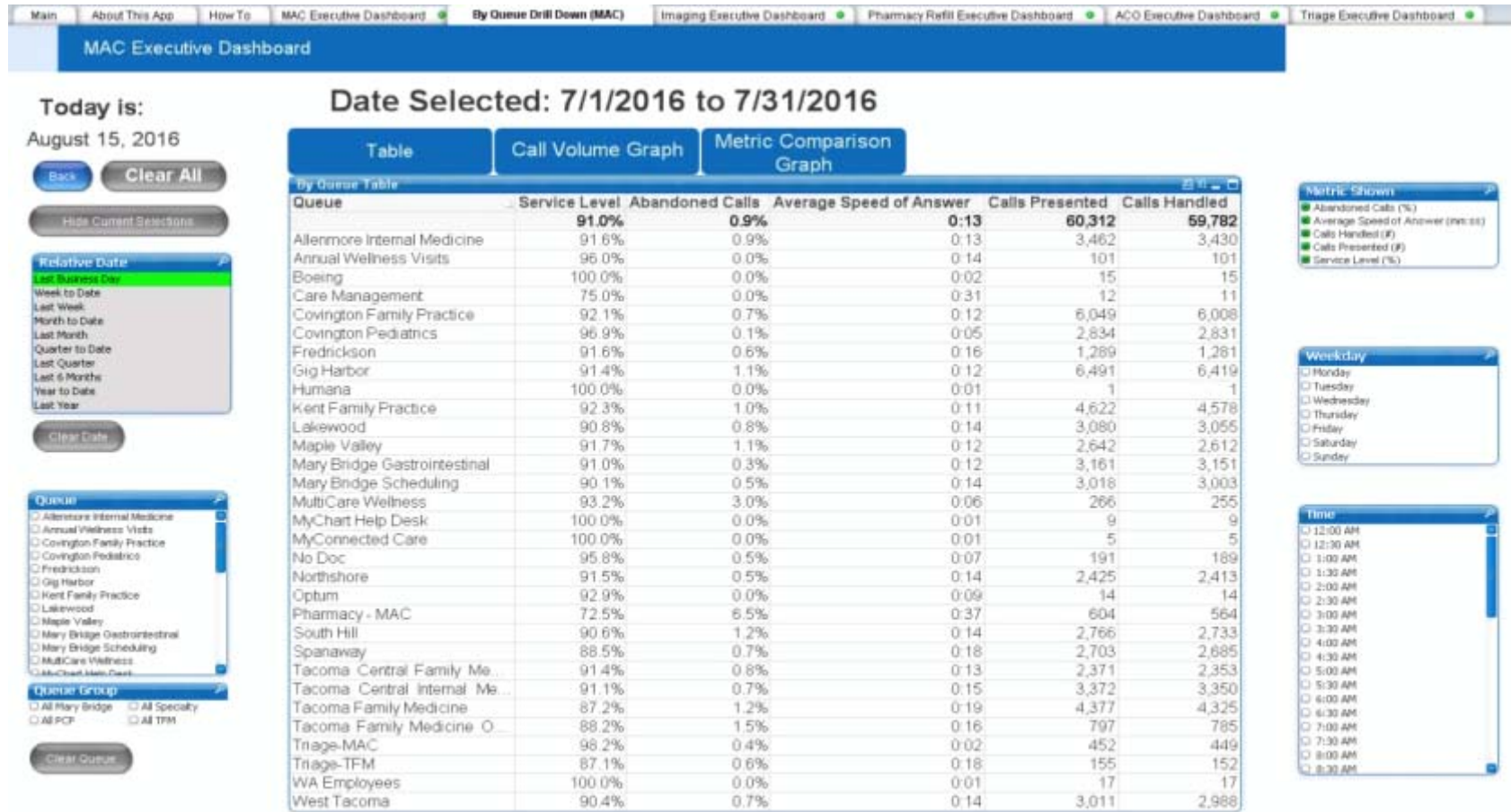
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