

## Call Center Operations and SLA Monitoring Blueprint



This application brief demonstrates a Web-based solution for monitoring and obtaining time sensitive insights for call center operations and service level agreements with metrics and dashboards.

There are multitudes of metrics monitored in call centers, and most often, the metrics are monitored in isolation, appearing in reports generated hourly or daily from disparate systems, such as the switch, CRM, dispatch, network and manufacturing applications. Monitoring in such a fragmented, dispersed manner provides far fewer insights and opportunities for responding quickly and decisively to fine tune operations. For immediate, effective actions, there is a critical need for a call center manager or director to have simultaneous line of sight across a vast array of key correlated metrics.

The *IBM Cognos Call Center Operations and SLA Monitoring Blueprint* provides call centers and customer service organizations with a proven cross-system grouping of metrics that help improve real-time efficiencies for a call center's most valuable assets, its customers and agent organization. These metrics are constantly being updated in real time with the powerful, patented in-memory streaming analytics engine of IBM Cognos® Now!. Call center management, for example, can view metrics on up-to-the-moment call trends and dynamics, agent performance and SLA performance. They can also receive alerts when certain thresholds have been met or exceeded. In addition, with this solution, the call center can create reports on real-time key performance indicators and provide examples of corrective actions being taking to address immediate business issues.

The *IBM Cognos Call Center Operations Blueprint* includes four key dashboards with accompanying metrics:

- Call Center Operations Dashboard
- Call Center Agent Dashboard
- Call Center Manager Dashboard
- Call Center Senior Manager Dashboard

Each of the dashboards provides role-specific metrics and real time information that is relevant for the optimal performance of a call center operation on an hourly and daily basis. It should be noted that the dashboards are representative dashboards, primarily focused on an inbound call center environment, and are not comprehensive in their display of all key metrics.

## Call Center Dashboard

The Call Center Operations Dashboard (Figure 1) provides an up to the moment snapshot of the overall health of call center operations specific to each call center site. Call center managers can see—at a glance—multiple call center KPIs and agent performance KPIs as they relate to call volume and call handling activities. Call-center specific KPIs, such as call volumes, call abandonment rates, calls in progress, calls completed and open calls are also provided as an example. These metrics are constantly being updated in real time. This dashboard provides a typical set of commonly monitored metrics within an inbound call center operation. This dashboard serves as a representation and should not be construed as a complete set of all critical metrics.

The Call Center Operations Dashboard can also serve as an introduction for other role-specific dashboards:

- Active Calls – key attributes
- Total Calls within SLA by Severity
- Call Count over multiple categories
- Average Active Calls by Severity
- Average Call Queue Time (over past 24 hours)
- Number of Calls by Services



Figure 1 – Call Center Dashboard

A critical objective of a call center is to provide a real-time understanding of its environment and a 360 degree view of its customers. To serve customers optimally, management's view must be up to the moment or minute to accommodate quick decision-making when faced with rapidly changing conditions in the call environment. Customer-specific SLAs for queue time, handling time and so on are important to monitor on an ongoing, real-time basis using a variety of dimensions including type, location, customer type, call center site, etc.

Call volume statistics, such as actual count by minute/hour, and call statistics, including completed, transferred, abandoned and dropped, can be used as early warnings to initiate call volume handling capability by increasing the number of agents, shifting Level Two agents on to the phone and rolling in agents from other call centers (Figures 2 and Figure 3) below.

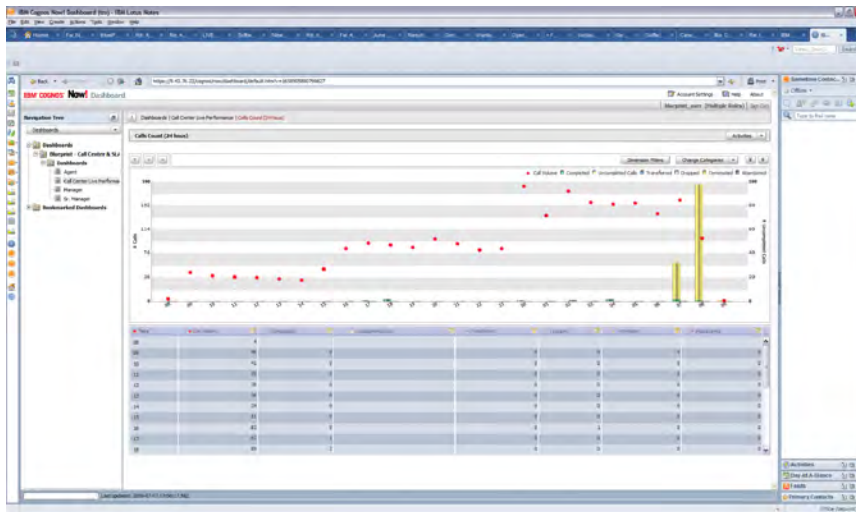


Figure 2 – Call count over 24 hours

In Figure 3, the *Blueprint* has filtered the view by call center location. Individual call center calling statistics are provided over a 24-hour period for completed, uncompleted, transferred, dropped, terminated and abandoned calls. Watch points can be set up to initiate management alerts if defined performance indicators, such as dropped or abandoned calls, meet or exceed certain thresholds.

The alerting and reporting functionality of the *Blueprint* enables agents, managers and call center executives to share, review and act quickly on real-time information about agent staffing, SLAs in jeopardy, strategic customer issues, call volume anomalies and more.

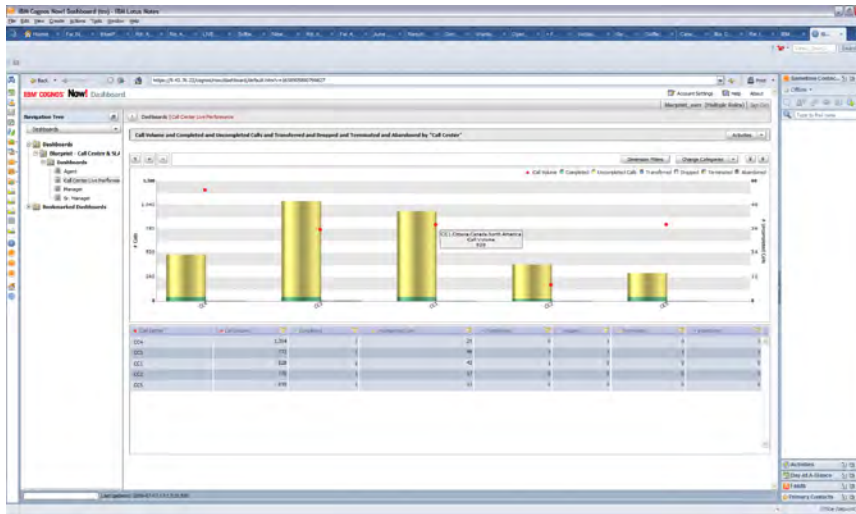


Figure 3 – Call count statistics by call center location

Many inbound call centers concentrate on two agent-specific metrics, average call handling time and length of queue time. Figure 4 illustrates the metric for understanding the breakdown of total calls (on hold, in queue, active, and answered) by multiple filters such as time (by week, day, hour, minute), by agent, by call center site, by severity and so forth—all streaming in real time.

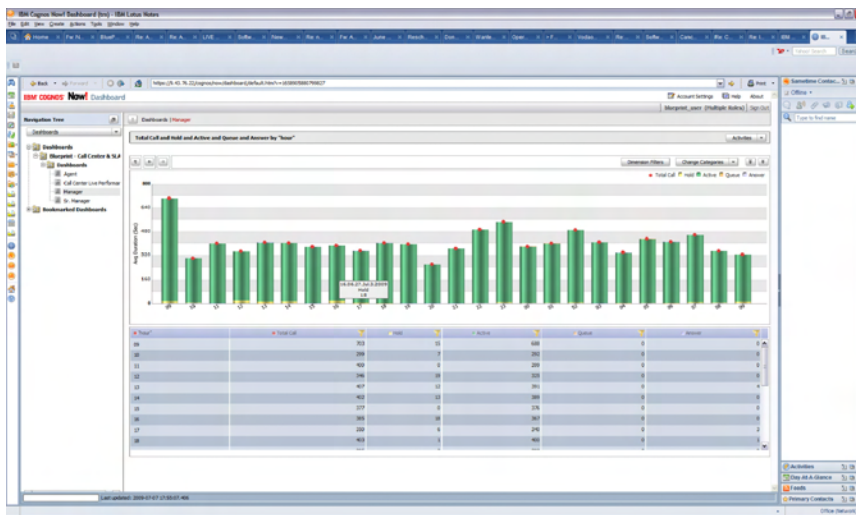


Figure 4 – Call metrics: total, hold, active and answered

Figure 5 shows the real-time filtered view of total calls at a specific call center location with call details by each agent.

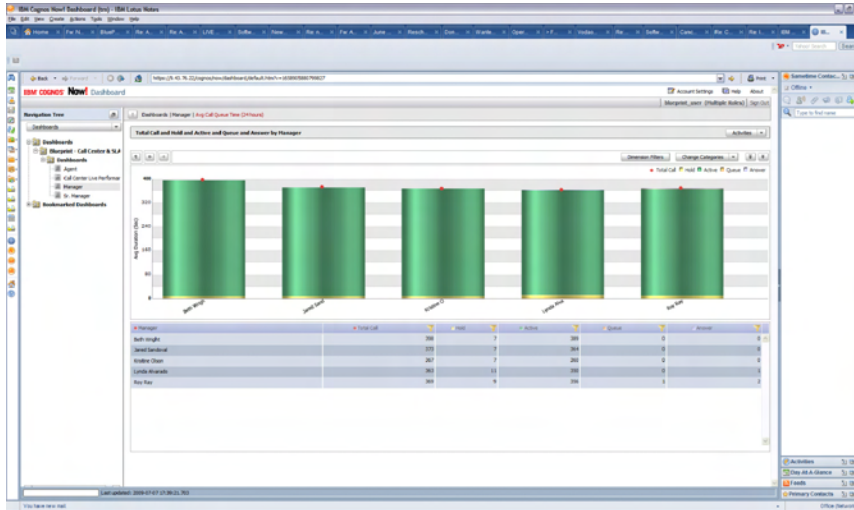


Figure 5 – Total calls at a specific site with specific agent details.

SLA site-specific performance measurement is also captured on the dashboard. A call center manager can have a constantly updating view of Total Calls by Severity within their preset SLA boundaries. The manager can see that, of calls within their prescribed SLA, 18.6% are high priority, while the vast majority, 44%, are low priority calls. A call center manager can use this metric as an early warning indicator for additional staffing if the percentage of high priority calls begins to accelerate suddenly beyond 30% and 40%, for instance. This information can also be correlated in real time to a sudden jump in incident reports.

The manager can also review Call Priorities by severity in aggregate categorized by High, Medium or Low levels of severity and defined by average answer time, average active time and average hold time. Management’s concern is triggered by average hold time spiking for High and Medium priority calls and an alert can be constructed to meet a call center-specific threshold for seconds/minutes on average hold to bring additional agents online to drive down average hold time to accepted levels. Trending KPIs, such as level 1 and level 2 service resolutions, can be tracked in real time or provided at the end of the day.

Hourly trend lines for average call handling or average calls in the queue can also be monitored in real time and compared with similar timeframes within the hour, day or week by management in order to best gauge agent staffing.

## Call Center Agent Dashboard

The agent dashboard provides an individual, roles-based view for each type of agent for multiple call center sites. In Figure 6, we see Agent A. Ryan signing into his dashboard.

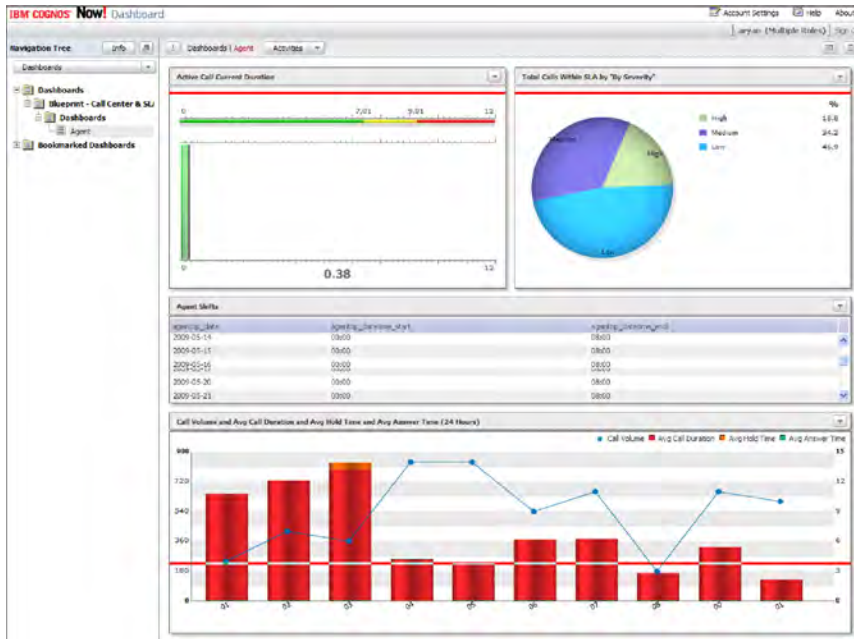


Figure 6 - Call Center Agent Dashboard

The agent has four key metrics available:

- Active call duration with a thermometer showing average time per call watchpoints
- Calls within SLA by Severity specific to the agent
- Shift statistics
- Call Volume statistics







Figure 9 – Average hold time spike

### Call Center Manager Dashboard

The Call Center Manager Dashboard provides an aggregate view of site-specific call center metrics, including individual agent statistics in multiple dimensions. The dashboard includes the following metrics:

- Active calls by agent statistics
- Call count
- Average queue time
- Calls by severity within SLAs

In Figure 10, in the Active Call display, the call center manager can see at a glance all agents' active calls in progress, understand their severity, the customer's identity and understand which calls are nearing or in excess of the average call duration during that shift. Most importantly, this real time view also enables the manager to understand the call category – support (with associated severity level), sales closure, direct response, upselling and so on.



Figure 10 - Active call display

Figure 11 shows call statistics for all agents at a specific call center. In this example, for instance, the manager can obtain a bar chart or text that provides a continuously monitored perspective of agent performance over an hour, shift or week time horizon. A manager, after reviewing the graph, might question Agent Washington for his outlier “hold time” over the course of the shift and might check to review his customer satisfaction scores over the past month. Another agent might be recognized for their outstanding performance in calls handled with outstanding customer satisfaction scores. With this information, the manager has the opportunity to provide some instant feedback and training to agents.

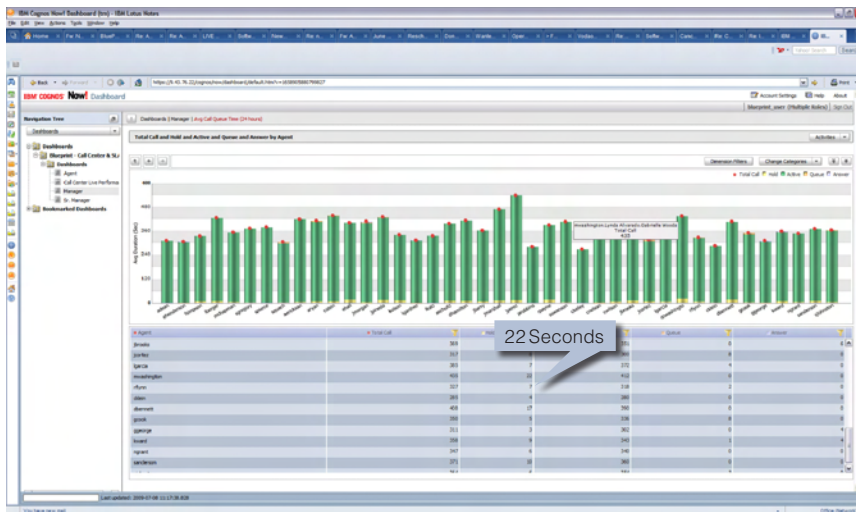


Figure 11 - Call statistics for all agents in a specific call center

After reviewing call and agent statistics, a manager can also take immediate action by assigning a task to an agent, group or other management team members in an e-mail with a corresponding severity level, comments and assigned deadline date for task completion (Figure 12).

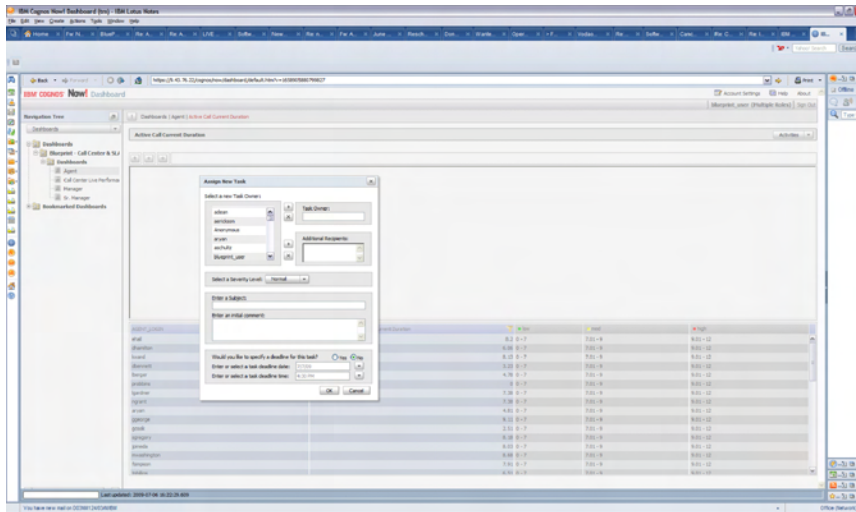


Figure 12 – Taking corrective action

A manager can also quickly review real-time call statistics specific to their call center operations. Figure 13 shows an example. A call center manager with multiple sites in a specific geographic location, such as Canada, might immediately see the spike in uncompleted calls in their Ottawa call center operation and move quickly to their Active Calls and Average Queue Time metrics for Ottawa to obtain more details that could explain the spike.

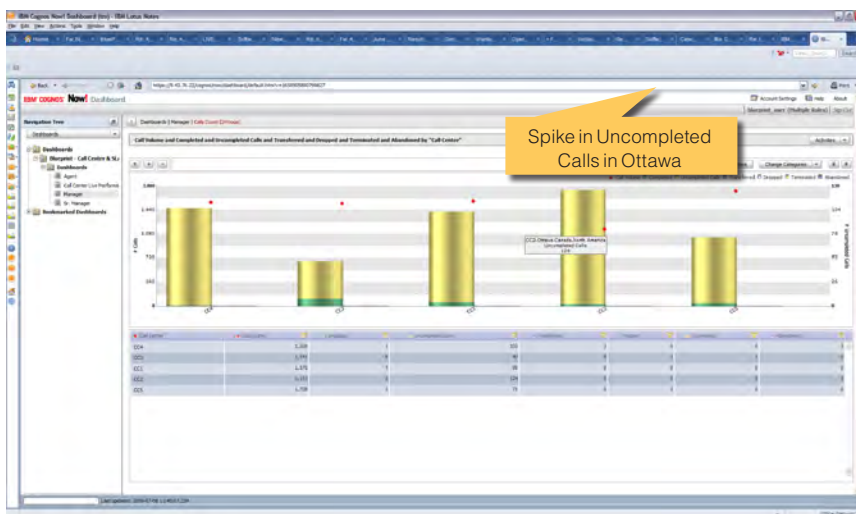


Figure 13 – Call statistics showing a spike in uncompleted calls in Ottawa

## Senior Manager Dashboard

The final *Blueprint* dashboard provides an executive perspective of all call center site operations. Although the executive dashboard can provide real time information, the dashboard metrics are more historical to allow for trending and analysis over a longer period of time. Dashboard metrics include real-time call count, call volume and call statistics also seen in the manager dashboard (Figure 14). An additional trending metric, Previous and Current Month SLA, appears in the lower right quadrant.

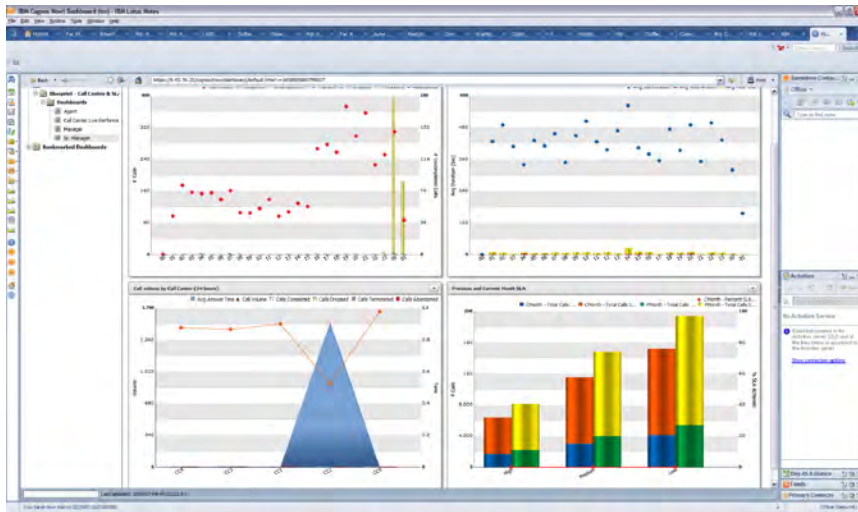


Figure 14 – Senior Manager Call Center Dashboard

Figure 15 shows the comparison of current month calls meeting the set SLAs versus calls that met the set SLAs in the prior month, which can be obtained by drilling down a level. This information helps senior managers understand the potential financial penalties when customer accounts making high severity calls are not being met within established SLAs or the possible risk of customer attrition as established SLAs are unmet. These views can be filtered for call centers, agents, customers and more. Another related metric could be monthly customer churn and the financial penalties accrued by missed SLAs when applicable.

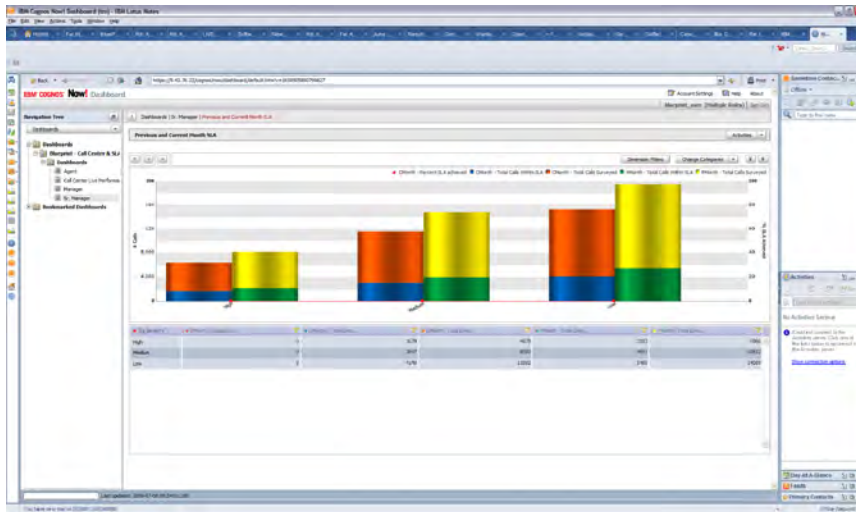


Figure 15 - Comparing calls

Figure 16 shows an abrupt increase in call volume in the Ottawa site with an immediate spike in call answer time. If the call volume, answer time and queue time increase over the next few minutes, the senior manager could take action and redirect agents from other Canadian call centers to absorb the overflow of call volume to maintain normal queue and answer times.

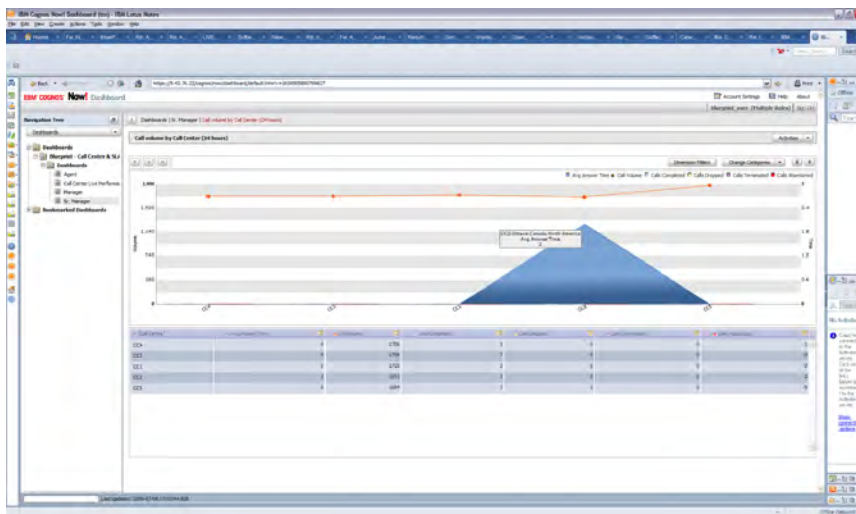


Figure 16 - Ottawa call center volume

Call statistics and attributes for all call centers are critical to call center and customer service executives. Patterns of dropped and abandoned calls in relation to increasing call volumes, average queue and call handling times for all call centers with corresponding spikes in these trends on an intra-daily and weekly basis are especially important. Figure 17 demonstrates a view of this information.

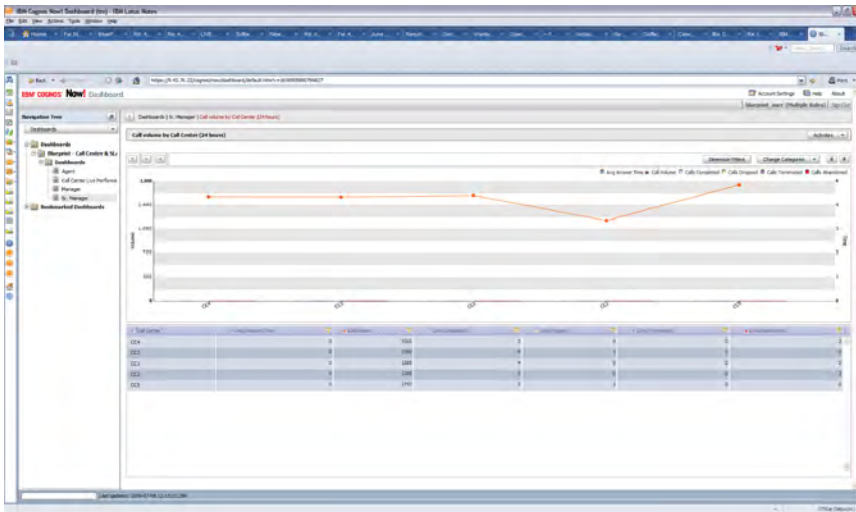
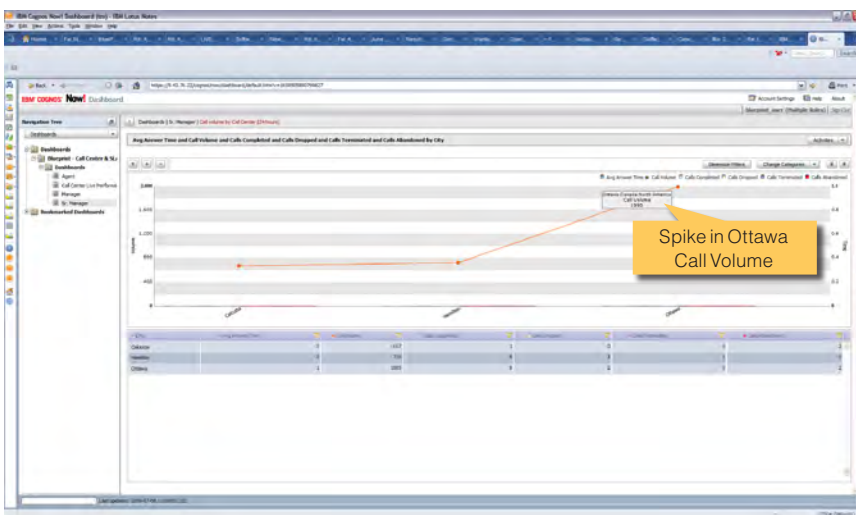


Figure 17 – Call statistics and attributes important to executives

A senior manager can also drill further into the call center grouping to understand which call center sites are experiencing the volume and further understand underlying factors contributing to the spike in volume.

Figure 18 shows that there is a spike in overall call volume in Ottawa that is nearly triple the calls in the Hamilton or Calcutta sites. This could be readily explained by shift changes or might merit more investigation into current spikes in incident reporting. If the manager has created watch points for the call metric and knows the typical call volume norms for time window for each site, the manager can take quick, decisive action to address an out of norm, rapidly building call volume.



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