



SLA monitoring in the customer service environment

Meeting the challenges with
operational business intelligence

Contents

- 3 Business problems**
Challenges to effective SLA monitoring
- 5 Business drivers**
SLA monitoring: Process and challenges
- 7 The Solution**
Meeting the challenges with operational business intelligence
- 14 Conclusion**
SLA monitoring with Operational BI:
A competitive differentiator

Abstract

Putting customer needs in writing via a service level agreement (SLA) can help ensure customer satisfaction, even in the customer service environment. The SLA defines what the company will deliver to customers, thus providing a clear view of what the company must achieve. Yet monitoring compliance with SLAs can be a challenge; the data used to measure performance may not be real-time and may reside in different IT systems. One answer is operational business intelligence – a fact-driven assessment of what is happening *now*, which enables companies to react to potential customer service issues before they become problems.

Overview

Service Level Agreements: Defining customer satisfaction

There is no such thing as a loyal customer. There are only satisfied customers that stick around as long as their needs are met. Unfortunately, however, the old cliché is true: if you don't satisfy your customers, it's a sure bet your competitor will. Customer satisfaction begins – and ends – with meeting the customer's needs effectively and efficiently. But how do you successfully meet the customer's needs in a cost-effective and efficient way?

One way is to put customer needs in writing via a service level agreement (SLA). Used to be, SLAs were the province of telecommunications and computer network equipment providers. Today, however, more and more service providers of every ilk are finding that SLAs are a great way to ensure that customer needs are fulfilled using effective and efficient business processes. They're a win-win deal.

A closer look at SLAs

An SLA is a very specific contract between a customer and a service provider that describes the type of service(s) to be provided, as well as the quality level of those services. SLAs usually contain a list of service-level objectives (SLOs) that the service provider will meet as a minimum contractual obligation. They also typically provide a remedy if the SLOs are not met on a consistent basis.

As an example, let's look at a provider of managed information technology (IT) services. The SLA between the service provider and its customer might contain an SLO stipulating that any equipment and services managed by the provider will have 99.5% "uptime." As a penalty for not meeting the SLO, the service provider might have to provide the customer with a 15% rebate on services-to-date, or with a full refund of service charges incurred during the downtime.

Most companies that sell equipment and provide ancillary services, or that provide services of any kind, have some type of SLA defined for at least their most valuable customers. That's where the problem starts. The question becomes, "How do you keep track of all those different requirements?"

Business problems

Challenges to effective SLA monitoring

As with any goal worth attaining, effectively monitoring SLAs presents a host of challenges. The first challenge companies often face is a complex IT environment. To monitor SLAs successfully, information from various, disparate sources must be aggregated and integrated to form a coherent picture of business activities vis-à-vis the SLA parameters. In most companies' IT environments, this is a very difficult, complex task that requires a sophisticated IT infrastructure that many companies don't have – or don't use proficiently.

The IT culture at many companies also presents a challenge. Often, both the IT staff and management are laser focused on managing the IT infrastructure, which they should be. The problem lies in the fact that it's often difficult for them to switch gears and work with the customer-service organization to use the power of the IT infrastructure to help monitor and manage SLAs.

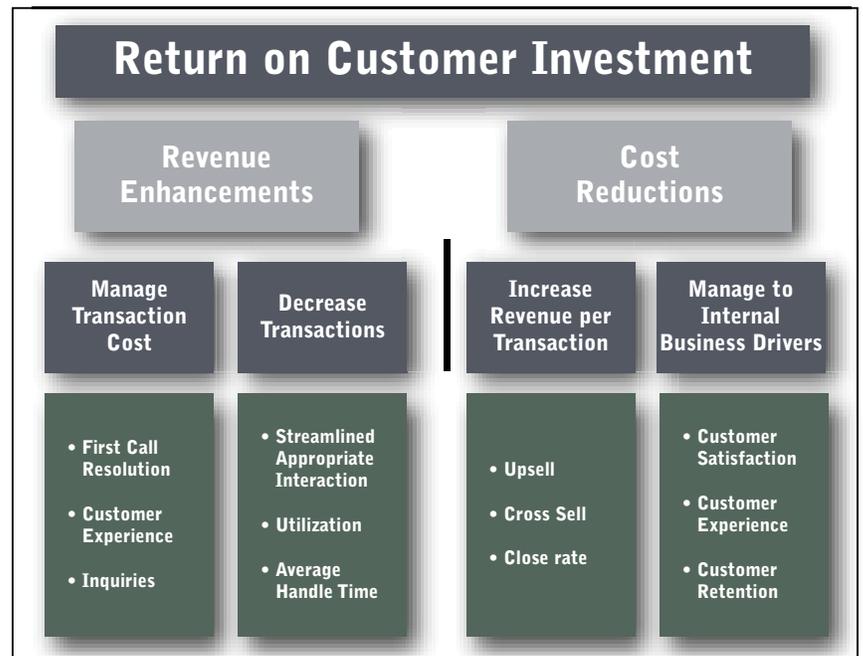
This inability to use IT to monitor and manage SLAs leads to a lack of visibility into SLA compliance in real-time, or near real-time. Access to real-time information is critical because SLA compliance could be at acceptable levels one minute and, literally, five minutes later, be in jeopardy of dropping below set thresholds – thus triggering SLA penalty clauses. The atmosphere created by such latent information is one of constant reactivity or “firefighting” at many companies, when what's needed instead is a proactive problem-solving mentality that could be enabled with more real-time, up to the minute information.

A final challenge that many companies face, even when they have adequate access to information, is the inability to perform effective analysis on that information, especially in real-time or near real-time. They're essentially “flying blind” with respect to how the call center is performing against SLA metrics such as: time to answer calls, number of open calls, number of calls reaching their SLA thresholds, and number of current SLOs in breach status. They also often find it difficult to get a handle on SLA monitoring metrics that affect their bottom line, such as: number of repeat calls, calls escalated to second-tier service analysts, issue severity level, time on repeat calls, number of repeat dispatches and call abandonment rates.

Business drivers

SLA monitoring: Process and challenges

In order for SLAs to do their job, progress in meeting the parameters of each SLA for each customer must be monitored in some fashion. It's impossible to monitor SLAs manually; information technology must be employed. During the ongoing performance of services, the service provider uses its IT infrastructure to monitor service levels in accordance with SLAs. The provider also allocates and uses available resources effectively to avoid potential violations of SLAs, and to make sure that service levels don't exceed SLA levels (thus costing the provider money in the form of free services provided).



The process of meeting SLA requirements for every customer makes for a very interesting – albeit efficient – call-center operating environment in companies that employ them as a way to manage their customer service processes. It's often the case at these companies that call center agents utilize scripts and flow-charts to handle customer calls. For example, if a customer calls in with an issue, the agent will first consult the SLA for that customer. Next, as per the SLAs parameters, the agent will assess the problem and attempt a solution. If there is no readily available solution, the agent will “escalate” the problem to a higher level. The process goes on until the problem is solved. This happens for every call, every problem, in rote fashion.

Repetitive as it may sound, it works. Customers have a clear picture of how their problems will be handled – and what they can expect if the problem isn't solved. Service providers have a process their agents can follow every time with the expectation that the problem can and will be solved. This lock-step precision leads to effective and efficient customer service in an environment where expectations are known and met much more often than not.

SLA monitoring is vitally important in determining the effectiveness of call center and customer service operations. With the right real-time metrics in place, call-center and customer-service management can readily determine how effective – and cost efficient – their operations are. SLA monitoring, and reporting, can also be utilized to provide evidence to customers that SLAs are being managed effectively, thus increasing customer satisfaction, a critical measure of a customer service organization's performance level. Still, it's not as easy as it sounds. SLAs are often intricate documents with many parameters and penalties for not meeting those specific parameters.

The Solution

Meeting the challenges with operational business intelligence

To be sure, monitoring SLAs and maintaining high customer satisfaction scores, all while keeping operating expenses to an acceptable level, is no easy task. It can be done very effectively, however, with the right tools. Those tools include specific business intelligence (BI) applications that enable companies to leverage BI capabilities on operational information, continuously monitoring the information in real-time. This operational business intelligence (Operational BI) functionality is crucial to meeting the challenges presented by SLA monitoring activities.

An Operational BI primer

Traditional business intelligence tools have been on the market in some form for nearly two decades. Typically, these tools are attached to data warehouses or data marts to enable slicing and dicing, as well as trending, of historical data. However, in the past few years, many companies have realized the need to extend BI capabilities to the analysis of real-time, operational information.

Operational BI is not enterprise BI. Enterprise BI leverages the power of enterprise data warehouses to enable companies to analyze aggregated information for reporting, trending, and forecasting tasks. The information is rarely real-time; indeed, it's often fairly latent. That usually doesn't matter, however, because enterprise BI users are more concerned with strategic analysis and decision-making – i.e., with answering the question, “How have we been performing, and – based on that information – how do we expect to perform in the future?”

In contrast Operational BI users need to know what's happening in the moment. These users need to greatly reduce the interval between events and actions. They also typically need to make hundreds of decisions that require real-time, or near real-time information. Enterprise BI tools do not typically provide that functionality, whereas Operational BI tools do.

Operational BI solutions offer “one-stop-shopping” interfaces that users can use, and customize, to view and drill down on critical operational information in real-time. These interfaces, known as operational dashboards, present information – and possibly key performance indicators (KPIs) – in an aggregated view that is easy to read, understand, and use. The information is typically continually updated and monitored – as frequently as necessary – throughout the business day. It’s made available in graphical formats such as charts, alerts, and gauges that depict how well the organization or frontline operation is, or is not, performing against specific and highly correlated operational KPIs and metrics.

Another feature of Operational BI solutions is user self-sufficiency. Users can update their operational dashboard with new metrics or they can add data sources to create additional metrics. They can modify the drill-down algorithms and set new alerts, alert thresholds and watch points – all without bringing in IT.

Leveraging operational BI for SLA monitoring success

Operational BI tools are a good fit for SLA monitoring tasks. Effective monitoring of SLAs, and response to issues that arise, requires speed to support collapsed decision-making timeframes. Speed requires access to real-time information. Operational BI tools provide that access. Access to real-time information provides customer service representatives, second-tier analysts, field technicians and management with a continuous feed of updated operational information to enable them to track performance against key metrics and the necessary intelligence to take the appropriate corrective actions.

As we discussed earlier, there are several challenges to successful SLA monitoring. They are:

- Reducing complexity in the IT environment
- Inability to leverage the power of enterprise IT to gain visibility into SLA compliance
- Inability to access information in real-time for quick problem solving or avoidance – leading to a perpetual reactive mode in dealing with customer issues
- Inability to perform analysis in real-time to measure SLA compliance and operational performance against key metrics

These challenges have one thing in common: they involve the inability to access critical information when it's needed in order to solve or avoid costly problems. Operational BI solutions enable call-center staff and management to meet these challenges by presenting real-time, or near real-time information in a user-friendly, customizable format that puts the right information in the right hands at the right time for the right corrective actions.

At many companies the IT environment is a complex landscape of disparate systems on different platforms. An Operational BI solution can help reduce this complexity by making the complexity transparent to users. The transparency is achieved in that information is aggregated from multiple enterprise systems and fed into a single server to be distributed in real-time, or near real-time to users in the form of an operational dashboard that lets them see and act upon the information they need, when they need it.

Operational BI solutions' functionality also helps users leverage the power of enterprise IT to gain insight into SLA compliance – thus facilitating the SLA monitoring process. Information on SLA metrics, gathered from any needed enterprise system, is presented in a graphical format that users can easily customize to meet their needs. So, the power of the company's IT infrastructure is at the fingertips of users.

This power, presented in the form of access to real-time, or near real-time, information enables call-center analysts and managers to go from a reactive, “firefighting,” mode to a proactive problem-solving mode by utilizing alerting functionality that allows analysts to know when SLA thresholds are in danger of being breached. This allows call-center analysts to become proactive problem solvers and seek out solutions to issues before they become problems, or to take preventive action even before issues arise. Since problem-solving costs money – especially when the problems are major – preventing or reducing the severity of problems can reduce operating expense for the call center.



Agent Performance

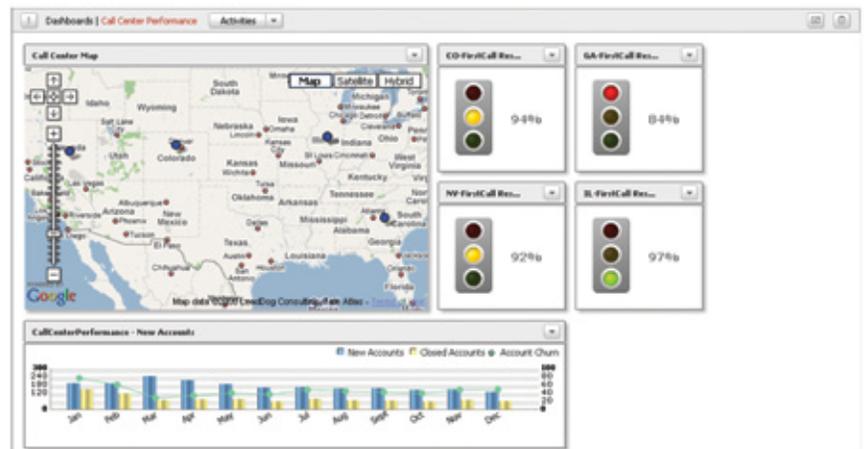
Finally, the alerting functionality, along with gauges, charts, and other visual aids on an Operational BI solution’s dashboard, enables call center analysts to keep abreast of the status of key SLA monitoring metrics such as number of repeat calls, calls escalated to second-tier service analysts, issue severity level, number of repeat calls, and call abandonment rate. Measuring progress against metrics such as these is at the heart of effective SLA monitoring. When a company can determine, at a glance, how well it’s performing against its key SLA monitoring metrics, its management can make better-informed and faster decisions, and develop more effective strategies vis-à-vis performance improvement for its call center workforce, field techs and value propositions for its customers.

Components of a best-of-breed Operational BI solution for SLA monitoring

A best-of-breed Operational BI solution can provide most, if not all, the powerful features and capabilities that we've discussed above. Unfortunately, not all Operational BI solutions are created equal. The best Operational BI solutions have a winning combination of power, speed, ease of use, scalability, and low cost of ownership that makes them rise above the rest.

Ease of use and high functionality

The first fundamental component of a top-notch Operational BI solution is user interface that is intuitive, customizable, and robust—preferably in the form of an operational dashboard that displays continuously updated information in an intuitive format. These operational dashboards should contain user tools such as graphs, gauges, and alerting schemes. Users can glance at the operational dashboard and instantly observe what's happening in critical parts of the customer support center with key customer accounts. In the case of SLA monitoring, this means keeping abreast of key metrics such as the ones we've discussed above.



Call Center Performance

The operational dashboards should be fully user customizable, including the ability for users to define and tweak their own metrics, as warranted by information needs. This reduces dependence on IT and lets users create the environment they need – as they need to – in order to perform their jobs most effectively.

The best Operational BI solutions will also contain some variant of breach forecasting capabilities. Breach forecasting is simply another form of alerting that indicates, based on recent history, if or when SLA terms will be breached. The algorithms for breach forecasting continuously perform calculations to determine whether or not current SLA requirements are in compliance, and to determine whether or not conditions or issues causing the potential breach should be allowed to persist.

Ease of deployment

The next crucial component of a best-of-breed Operational BI solution is ease and rapidity of deployment. There are two types of Operational BI solutions that will fit these criteria: software as a service (SaaS) solutions and hardware and/or software appliances. These solutions are good for companies that need a quick, easy, and rapid deployment. SaaS solutions are typically deployed through, and owned, by the Operational BI solution vendor. The customer isn't responsible for maintenance of any hardware and doesn't typically buy any equipment or software packages. The downside of SaaS solutions is that if the vendor's systems go down, the company has little power to resolve the situation.

Hardware and software appliances are just as easy to deploy, and they allow companies to manage their own hardware, software, and data. Essentially, appliances are out-of-the box, plug-in solutions – with corresponding seat licenses – that come as a turn-key product. There is no time spent researching and procuring hardware or software – the appliance has it all. And, the system is ready to go from day one, so that analysts can gain instant insight into business operations and SLA compliance in an accelerated timeframe.

Streaming data integration

The key to true Operational BI lies in the ability to quickly – in real-time or near – real-time – integrate information from multiple enterprise sources. Best-of-breed solutions will have some sort of streaming database capabilities that feed continuously-updated information to users through the operational dashboard, according to the alerting and monitoring features the user has selected.

Scalability

Scalability, or the ability of the Operational BI solution to change and/or grow as business needs change, is also absolutely critical. Data volumes will grow over time. The number of users will increase, and business needs and complexity will increase. That's a given. The best Operational BI solutions have the ability to scale up power, performance, and features as needs change and grow, without sacrificing ease of use.

Low cost of ownership

Cost and time to market is always an issue. No company has time or money to burn. Top-notch Operational BI solutions reduce total cost of ownership (TCO), first by being easy to deploy, use and customize, thus reducing dependence on outside consultants and internal IT resources. With SaaS or hardware/software appliance Operational BI tools, companies can deploy a comprehensive Operational BI solution in days or weeks instead of months. Scalability also reduces TCO by ensuring that the solution will grow with the business, reducing the chances of having to re-tool if the environment undergoes a sea of change or the company grows too rapidly.

Conclusion

SLA monitoring with Operational BI: A competitive differentiator

When companies have an effective SLA monitoring program in place – especially one that’s fueled by a best-of-breed Operational BI solution – they gain a competitive advantage. That advantage lies in being able to better satisfy their customers’ needs through having improved insight into operational information. Better insight into operational information enables front-line call-center staff to detect and deal with most customer issues before they become major problems that cost major money in terms of lowered customer sat scores or financial penalties. Even if issues cannot be solved via phone contact and dispatches are necessary, field technicians can be far more effectively utilized.

More effective SLA monitoring also has cost advantages. It tends to lead to lower operating expenses through lower breach percentages with their corresponding penalties. Operational BI solutions also reduce costs via their ease of deployment. The money saved by reduced costs can be spent on customer-service improvement initiatives. Satisfied customers tend to turn over far less frequently than dissatisfied customers, thus driving down the expense of customer acquisition. That’s a pretty clear competitive advantage.

SLA monitoring and Operational BI are not silver bullets. They won’t solve problems outside their scope of performance. However, with an effective SLA monitoring solution, companies will gain an advantage providing their workers with the information they need to do their jobs more rapidly and effectively. More effective companies are more competitive companies obtaining greater market share and commanding higher premiums and shareholder value.



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