IT Transformation to Next-Generation Operations Centers

Assure Business Service Reliability by Optimizing IT Operations
IT Operations Must Support Business Transformation

To remain competitive, grow revenue and boost profitability, businesses are in a constant state of change: supporting new applications business processes, launching new products and services to customers, entering new markets and even changing their fundamental business models in order to grow.

This eBook will help you build a strategy to support this type of business transformation and the accompanying array of complex IT Operational initiatives:

- Supporting a constant flow of innovative services to the business and its customers
- Delivering services through social media, unified voice, video and data, bring-your-own-device and other modern mechanisms
- Deploying new infrastructure (such as cloud platforms and converged networks) and technologies to support new services
- Maintaining new and legacy services at high levels of quality

Transformation Initiatives

1. Move toward standardized infrastructure, especially for data centers, private clouds and remote office networks, to economize and streamline support

2. Transition to modern monitoring tools that improve management of infrastructure domains in the context of application performance

3. Correlate data across domain monitoring tools to model service delivery end-to-end and pinpoint service impacting issues

4. Establish policies that drive consistent incident and problem management based on service delivery status

5. Train Level 1 Support on cross-domain monitoring to transform them from event management to business service management
IT Operations Must Support Business Transformation

To remain competitive, grow revenue and boost profitability, businesses are in a constant state of change: supporting new applications business processes, launching new products and services to customers, entering new markets and even changing their fundamental business models in order to grow.

In an economy of tight budgets and low tolerance for increasing headcount, it’s no surprise that **IT Operations is straining under the pressure of these challenges.**

Operations must transform quickly along with the business or suffer a widening gap between its staff’s capability and the business’ expectations.

**Transformation Initiatives**

1. Move toward standardized infrastructure, especially for data centers, private clouds and remote office networks, to economize and streamline support
2. Transition to modern monitoring tools that improve management of infrastructure domains in the context of application performance
3. Correlate data across domain monitoring tools to model service delivery end-to-end and pinpoint service impacting issues
4. Establish policies that drive consistent incident and problem management based on service delivery status
5. Train Level 1 Support on cross-domain monitoring to transform them from event management to business service management
The Consequences of Today’s Operational Status Quo

IT Operations teams who fail to transform their processes to a new level of efficiency will find themselves in a precarious status quo that can negatively affect customer experience, interrupt application services and business processes—ultimately threatening revenue.

Telltale signs of a widening gap between IT Operations and the business include:

1. **Constant Firefighting**
   On average, across hundreds of organizations, 54 percent of service problems are first detected by users. Even a lower percent can be disastrous in terms of adversely impacting business process and customer satisfaction, in addition to IT’s reputation.

2. **War Room Meetings**
   An astounding 82 percent of IT organizations report that triage conference calls are standard operating procedure when a service severely degrades or goes down. These long, ad hoc meetings can draw in dozens of monitoring staff, including managers and technical leads, to debate root cause as they divert valuable time from their “day job,” and the business suffers.

3. **IT Innovation Takes a Back Seat**
   It is common for organizations to devote up to 80 percent of their IT resources to finding and fixing problems. Escalating too many incidents to infrastructure subject matter experts and application development staff diverts talent from added-value business projects.

For IT organizations being asked to develop and create new services, it’s readily apparent that this reactionary posture will serve only to widen the IT Operations-Business Gap.

Furthermore, with so many new services to be implemented, IT teams need to become experts in the various risks inherent to the services they deploy—an expertise that is almost impossible to achieve if most of the organization’s time is spent troubleshooting.

---

1 Enterprise Management Associates, 2014
If You Hear This, the Gap Is Widening Between IT Operations and the Business...

**Operations Center**
“Another meeting to find root cause.”

**Line of Business Owner**
“How are my services doing today? Are they at risk?”

**Systems Administrator**
“Flooded with events and alerts. Which are more important than the others?”

**IT Director**
“I am not confident about maintaining SLAs when we launch.”

**CIO and VP**
“Too much firefighting. We need more people developing new applications and deploying services.”

**Service Desk Manager**
“We are drowning in tickets, and half of them go to the wrong team and sit there.”
“Silo’d and event-focused monitoring” best sums up the root cause of the IT Operations-Business Gap status quo. IT monitoring and administration typically operate as discrete units focused on meeting service level targets for each “silo” (i.e., technology domains, such as servers, networks, storage, etc.). This is largely a consequence of how most monitoring tools are built to manage IT elements in separate domains. Traditional processes prevent Operations from understanding and monitoring business services, which are delivered to customers across domains.

Which alarms are impacting which services and by how much?

Hard to tell if you don’t know which IT assets support specific services.

Each business service you deliver—whether it is online banking, streaming music and video, enterprise resource planning, electronic healthcare records, retail point-of-sale, etc.—involves a different set of unique and shared elements, such as physical and virtual systems, storage devices, routers and switches and applications. If you don’t visualize and monitor services, how do you know which alert is impacting which service?
Root Cause of the IT Operations-Business Gap

“Silo’d and event-focused monitoring” best sums up the root cause of the IT Operations-Business Gap status quo. IT monitoring and administration typically operate as discrete units focused on meeting service level targets for each “silo” (i.e., technology domains, such as servers, networks, storage, etc.). This is largely a consequence of how most monitoring tools are built to manage IT elements in separate domains. Traditional processes prevent Operations from understanding and monitoring business services, which are delivered to customers across domains.

Which alarms are impacting which services and by how much?

Hard to tell if you don’t know which IT assets support specific services.

Each business service you deliver—whether it is online banking, streaming music and video, enterprise resource planning, electronic healthcare records, retail point-of-sale, etc.—involves a different set of unique and shared elements, such as physical and virtual systems, storage devices, routers and switches and applications. If you don’t visualize and monitor services, how do you know which alert is impacting which service?
“Silo’d and event-focused monitoring” best sums up the root cause of the IT Operations-Business Gap status quo. IT monitoring and administration typically operate as discrete units focused on meeting service level targets for each “silo” (i.e., technology domains, such as servers, networks, storage, etc.). This is largely a consequence of how most monitoring tools are built to manage IT elements in separate domains. Traditional processes prevent Operations from understanding and monitoring business services, which are delivered to customers across domains.

Which alarms are impacting which services and by how much?

Hard to tell if you don’t know which IT assets support specific services.

Each business service you deliver—whether it is online banking, streaming music and video, enterprise resource planning, electronic healthcare records, retail point-of-sale, etc.—involves a different set of unique and shared elements, such as physical and virtual systems, storage devices, routers and switches and applications. If you don’t visualize and monitor services, how do you know which alert is impacting which service?
You might be managing performance and maintaining service levels in each silo, but who is managing performance across silos in terms of each business service you deliver?

**Little Issues Add Up**

<table>
<thead>
<tr>
<th>Time</th>
<th>SLA/OLA compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>05:00</td>
<td>99%</td>
</tr>
<tr>
<td>06:00</td>
<td>99%</td>
</tr>
<tr>
<td>07:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>08:00</td>
<td>99.99%</td>
</tr>
<tr>
<td>09:00</td>
<td>99.999%</td>
</tr>
<tr>
<td>10:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>11:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>12:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>13:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>14:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>15:00</td>
<td>99.9%</td>
</tr>
<tr>
<td>16:00</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

- **Unavailable**
- **Slow**
- **Available, performing as expected**
Little Issues Add Up

You might be managing performance and maintaining service levels in each silo, but who is managing performance across silos in terms of each business service you deliver?

Managing Performance and Availability in silos does not let you manage service delivery end-to-end.

<table>
<thead>
<tr>
<th>Time</th>
<th>Web Server</th>
<th>Systems</th>
<th>Mainframe</th>
<th>Database</th>
<th>Network</th>
<th>Application</th>
<th>Business Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>05:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SLA/OLA compliance
- Web Server: 99%
- Systems: 99%
- Mainframe: 99.9%
- Database: 99.99%
- Network: 99.999%
- Application: 99.9%
- Business Service: 85.9%

Unavailable, Slow, Available, performing as expected
IT Operations Transformation Roadmap

However frustrating the status quo can be for IT organizations, there is an exit strategy. Success depends on taking a step-by-step approach toward the goal of transforming from a silo’d technology alert-focused team to a business service-focused team. Transformation can be fast, and each step yields a tangible benefit in IT Operational efficiency.

Many IT organizations typically see these signposts en route to IT transformation:

<table>
<thead>
<tr>
<th>Phase 1:</th>
<th>Phase 2:</th>
<th>Phase 3:</th>
<th>Phase 4:</th>
<th>Phase 5:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status Quo—Flooded with alerts and tickets; reactive, silo’d monitoring and technology-focused, not service-focused.</td>
<td>Unify events and alerts into a single point of control, correlation and enforcement of standardized incident management and escalation processes.</td>
<td>Add a layer of intelligence that helps you discover and model a few “Priority 1” business services, monitor their status and see point of impact in each silo. Integrate service impact analysis with a Service Desk ticketing system.</td>
<td>Expand service modeling and monitoring and analyze impact to additional Priority 1 and 2 services across the business. Integrate service impact analysis with service level agreement tools for proactively preventing violations and penalties.</td>
<td>Integrate service impact analysis with process automation tools for dynamically adjusting infrastructure to maintain desired service reliability (performance and availability).</td>
</tr>
</tbody>
</table>
IT Operations Transformed

The IT organization that is truly services-focused is one that can access a complete 360-degree view of all the elements that comprise a service and can impact it.

This real-time data offers clearer visibility to the actual health of all services, so all levels of IT specialists and managers can prevent any problems that will adversely impact customer experience.
When You Know You Have Closed the IT Operation-Business Gap...

**Operations Center**
“We monitor business services and fix what is impacting them faster.”

**Line of Business Owner**
“I can see that my services are healthy and at low risk.”

**Systems Administrator**
“We see service impact alerts and tickets and prioritize our actions according to what is important to the business.”

**IT Director**
“We test our services in production to ensure reliability and minimize risk.”

**CIO and VP**
“We solve more problems at Level 1 and free SMEs to work on innovation and added-value projects.”

**Service Desk Manager**
“We automatically route to the right responder, prioritize actions and notify the business of our actions.”
Results of IT Operations Transformation

IT organizations that have achieved this transformation realize three main benefits:

1. Operations can prioritize and initiate actions based on business service impact versus lower-level technology events and alerts.

2. Operations can find root cause and resolve service issues more rapidly.

3. Operations Level 1 staff can resolve more problems themselves, free Level 2 and 3 staff to focus on more added-value projects and communicate service status with the business better.

Each echelon of the IT organization—from executives to operations managers and staff across all disciplines—can enjoy a shared view of each business service status and what needs to be done to maintain service reliability. This type of transformation enables IT to align with the business and prioritize every action according to the severity of service problems and the importance of services that are noticeably impacted or at risk of impact.
Return-on-Investment Snapshot

A common, actionable view of business services has measurable benefits for the entire business and can help close the IT Operations-Business Gap. Companies that help facilitate this transformation can expect positive outcomes across all facets of the IT organization.

- **37%** more service problems solved at Level 1 Operations
- **Alignment of IT** with business processes to help manage technology from a perspective of business services
- **25%** faster root-cause determination and mean-time-to-resolution
- **Consolidation of All Events and Alerts** helps to show technology monitoring groups the impact of their domains on services
- **One** service-oriented operations center console reduces complexity, eliminates chaos and focuses staff on maintaining service reliability
- **Prioritization of Actions and Escalations** are always in a service context

Based on research by TechValidate and CA Technologies, 2013
Best Practices to Close the IT Operations-Business Gap

By achieving a cross-domain understanding of service delivery, IT can begin the transformation to a services-oriented organization, one with cross-domain visibility into all aspects of IT that will:

- Improve service quality by quickly pinpointing problems across all technology domains, so they can be promptly resolved and quality can be restored.

- Enhance service predictability by identifying sources of risk to services across all technology domains, so these issues can be addressed before they affect quality.

- Optimize operations by reducing the manual labor for alert and service management, reducing triage and mean-time-to-resolution of service issues and improving cross-discipline communication and collaboration.
To Learn More About Creating a Service-Oriented IT Organization, visit www.ca.com/soi