



i n v e n t



HP World 2001
Defining and Managing
Service Level Agreements

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Agenda

- Summary
- Definitions
- Characteristics
- Change Management
- Performance Measurement
- Benefits
- Questions

Summary

Managing service levels in today's business climate is tightening the requirements of the defined service. No longer is the availability of a system's environment the prime characteristic. Service levels must now also include response to changes, time frame of response and time frame of resolution and completion. In addition service levels must be more predictable, have established limits and be statistically measured and reported.

These new requirements are the typical measures the client uses to measure their business performance. It makes sense that the service you provide be managed and measured in similar fashion.

Defining Service Levels

What is a service level agreement?

- SLA - A service level agreement defines the boundaries of service delivery for clients. Much of the focus of the last decade has been on system availability. Reducing single points of failure, clustered systems, and resilient systems are all well established methods of improving service to clients.
- Typical Characteristics - A service level agreement needs to identify the boundaries of service delivery and identify the critical metrics to be measured. These are detailed descriptions that clearly define what service will be provided. What is not included in the service is as important as what is included. No deliverable should be left to interpretation by either party.

Defining Service Levels

What is a service level agreement?

- Typical Characteristics of an SLA –
 - Basic Services
 - Service Management and Review
 - Reporting
 - Notification and Escalation Management
 - Call Management
 - Event Detection and Notification
 - Monitored Processes and Events
 - Systems Operations
 - File System Backup and Restore Operation
 - Production Job Scheduling
 - High Availability

Defining Service Levels

What is a service level agreement?

- Typical Characteristics Continued –
 - System Management
 - Reactive Performance Support
 - Performance Data Collection and Reporting
 - Performance Trend Analysis
 - System Fault Isolation and Resolution
 - System Preventive Maintenance
 - System Configuration and Support
 - Printer Definition and Subsystem Management
 - System Security
 - User Administration
 - Database Operations
 - Monitored Database Events
 - Application Operations
 - Monitored Database Events

Defining Service Levels

What is a service level agreement?

- Typical Characteristics Continued –
 - Computing Environment and Resources
 - Hardware Resources
 - Service Package by Resource
 - Software Resources
 - Network Resources
 - Services Summary
 - Service Boundaries
 - Service Goals
 - Service Level Objectives
 - Server Availability
 - Implementation
 - Server Availability Calculation
 - Reporting
 - Exceptions
 - Service Fee Schedules
 - Fee and Pricing Adjustments

Managing Change in SLA's

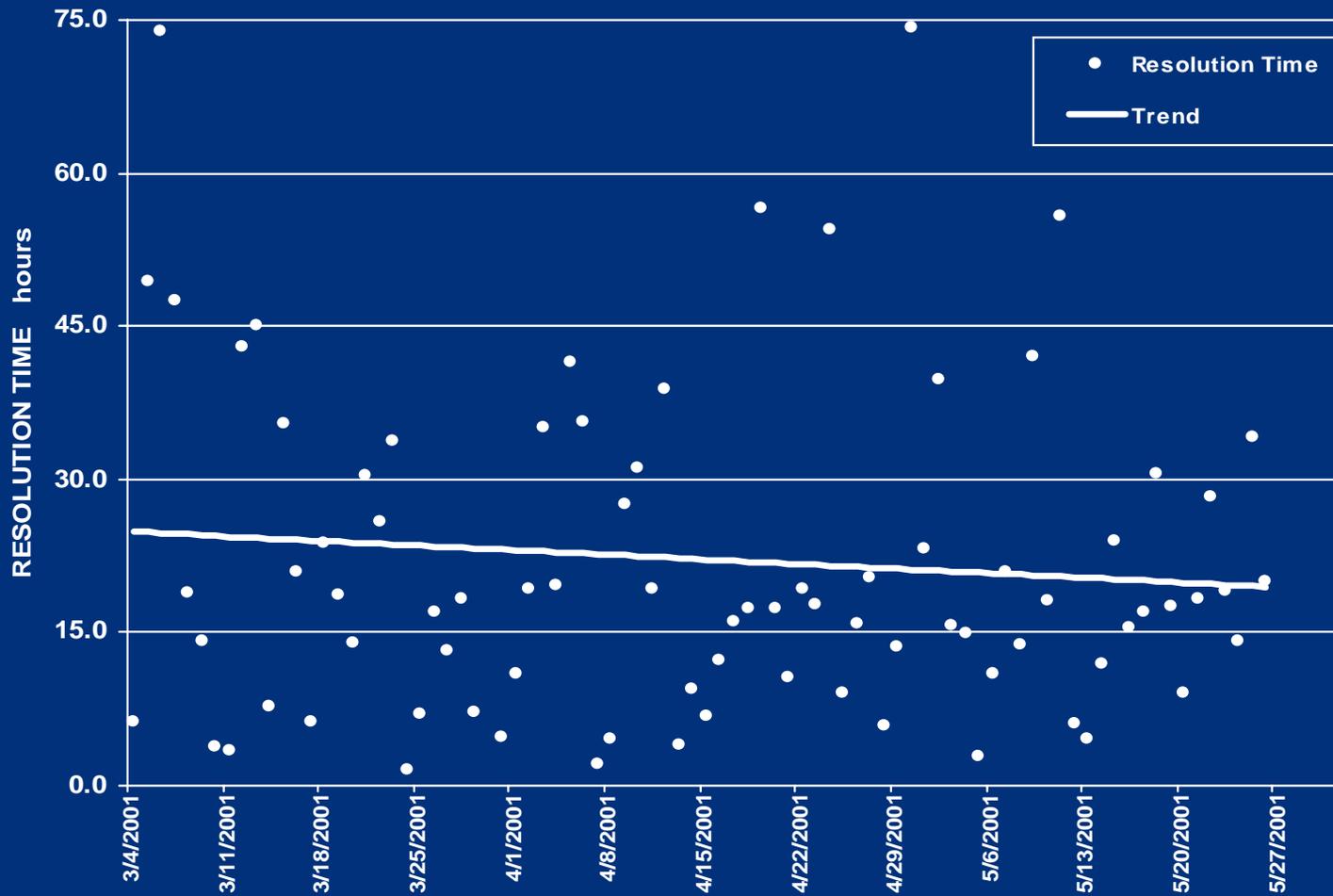
- Managing Changes – Change is certain. How effectively change is managed will determine the success or failure of a service level agreement. There is an element of trust that must be present in both parties to be successful. Identification of risk is essential for successful change.
- Change Request – A document that describes the reason for a change, expected time frame for its implementation, budget expectations, a description of the change, dependant resources and functional area. Replies to the change request should identify commitments to cost, time frame, environment risk, resources, back out plans and any pre-requisites.
- Change Order – An action that is authorized by both parties to implement the desired result of the change request. Change orders are also subject to change, via the change request process. It is important to note that the environment is most vulnerable to impact during the execution of change. Therefore proper documentation, skills, project control and escalation management is essential to success.

Performance Management

- Key Performance Indicators – While compliance with the metrics in the SLA is a minimum requirement, how do you identify a characteristic that drives continuous improvement? Performance indicators are a method to do this.
- Selected Examples – What follows are some key indicator examples that can be applied to determine progress towards continuous improvement.
 - Response Time – Time from ticket creation to first work being done.
 - Pending Time – The amount of time the ticket spent in a status other than working. This time is subtracted from the overall time to resolve.
 - Resolution Time – Time from ticket creation to ticket close, minus the pending time.
 - Bounces – The number of times the ticket changed status, in part or support group during its life.
 - Exceptions – Occurs if the response time or escalation time (time from ticket creation to first escalation) exceeds thresholds.

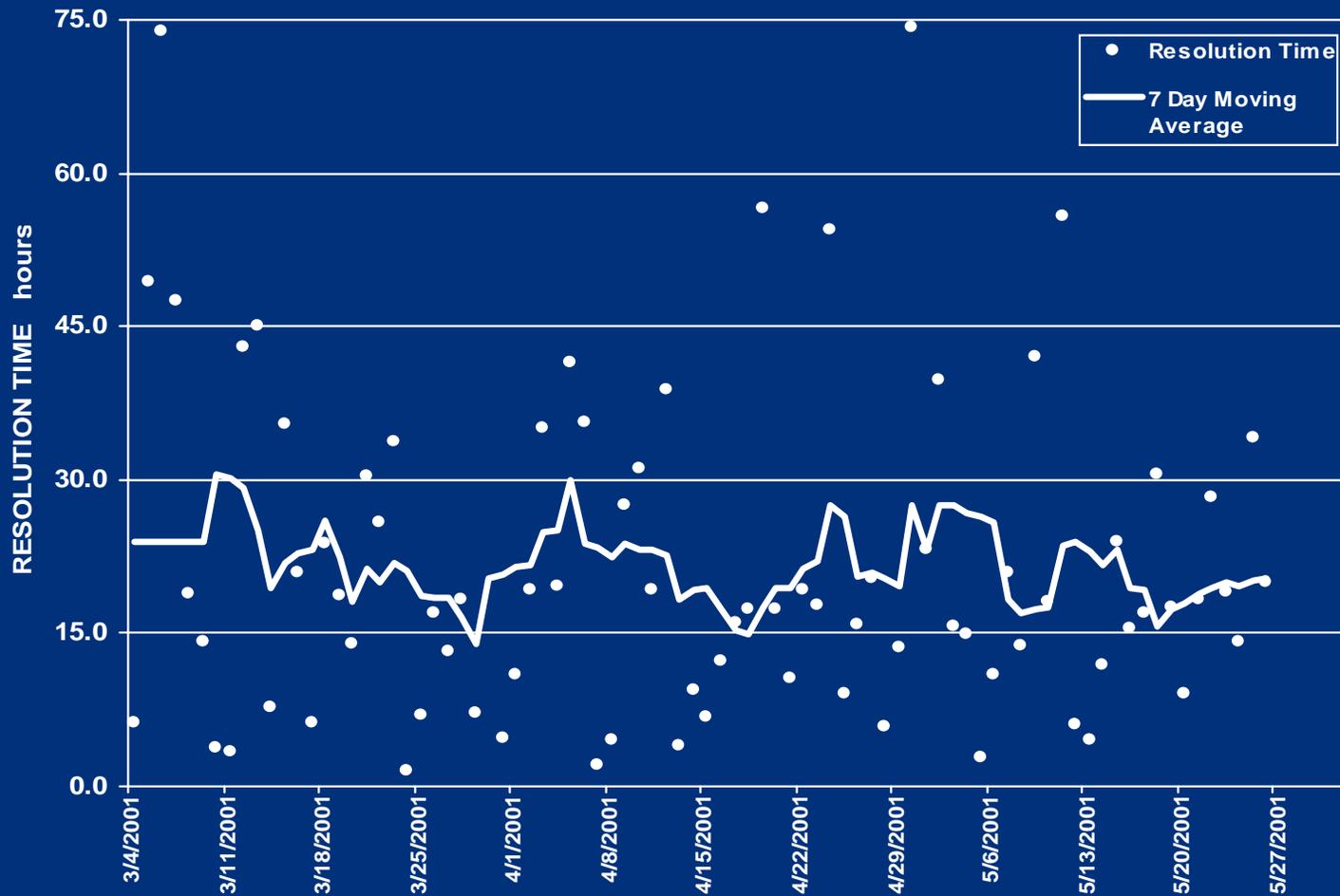
Managing Performance Examples

NETWORK TICKET
Resolution Time Trend Chart



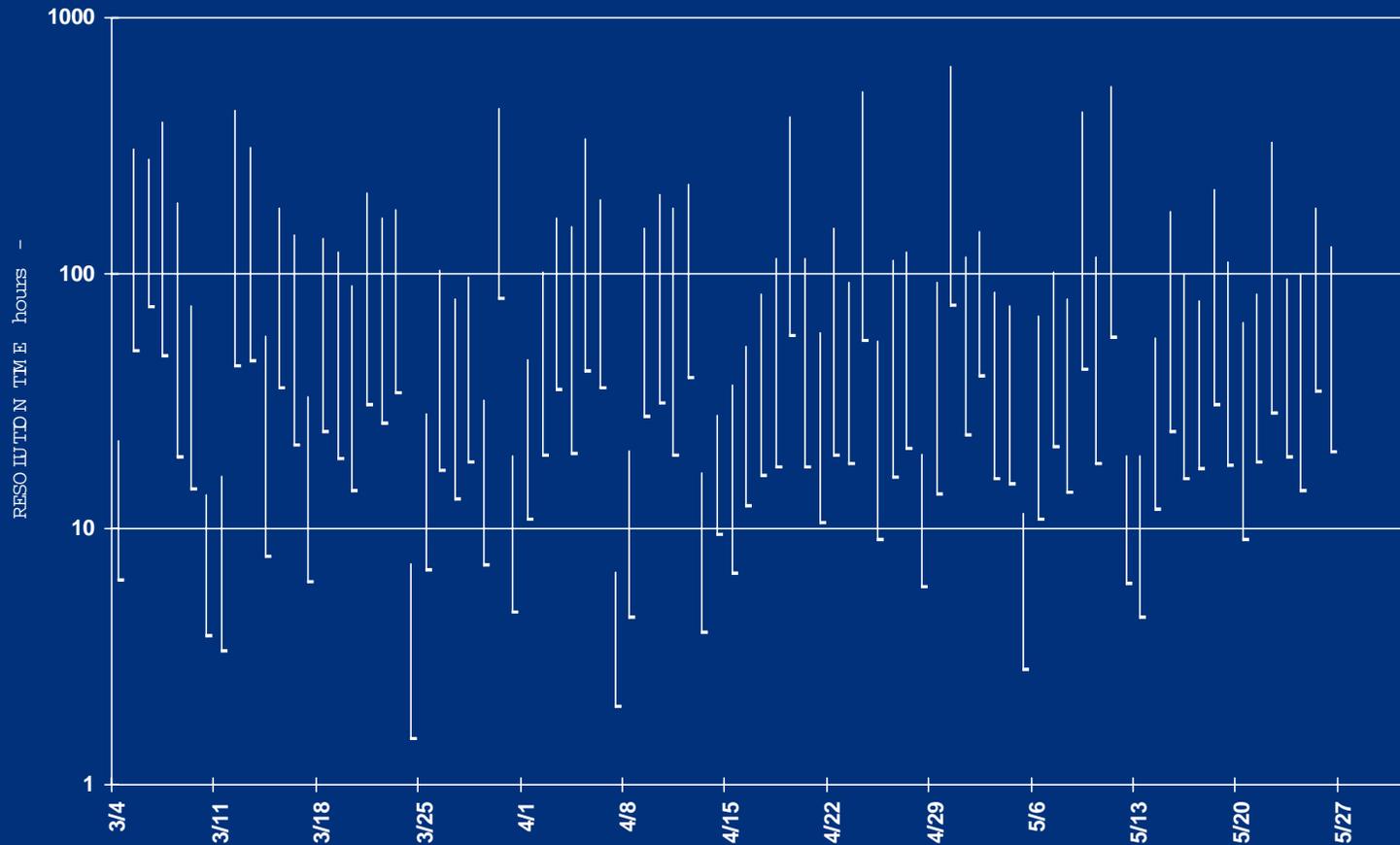
Managing Performance Examples

NETWORK TICKET
Resolution Time 7 Day Moving Average



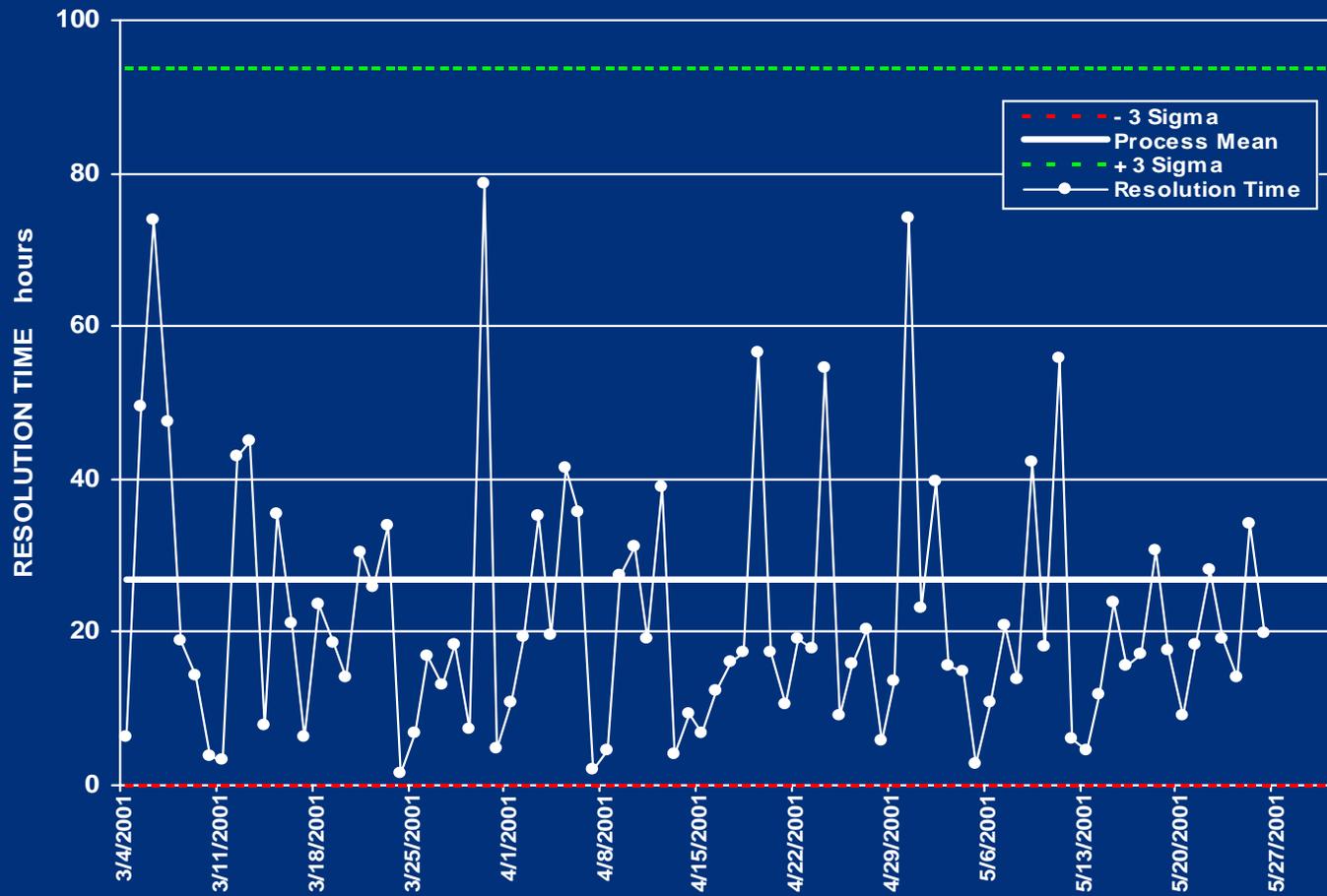
Managing Performance Examples

NETWORK TICKET
Resolution Time Range Chart

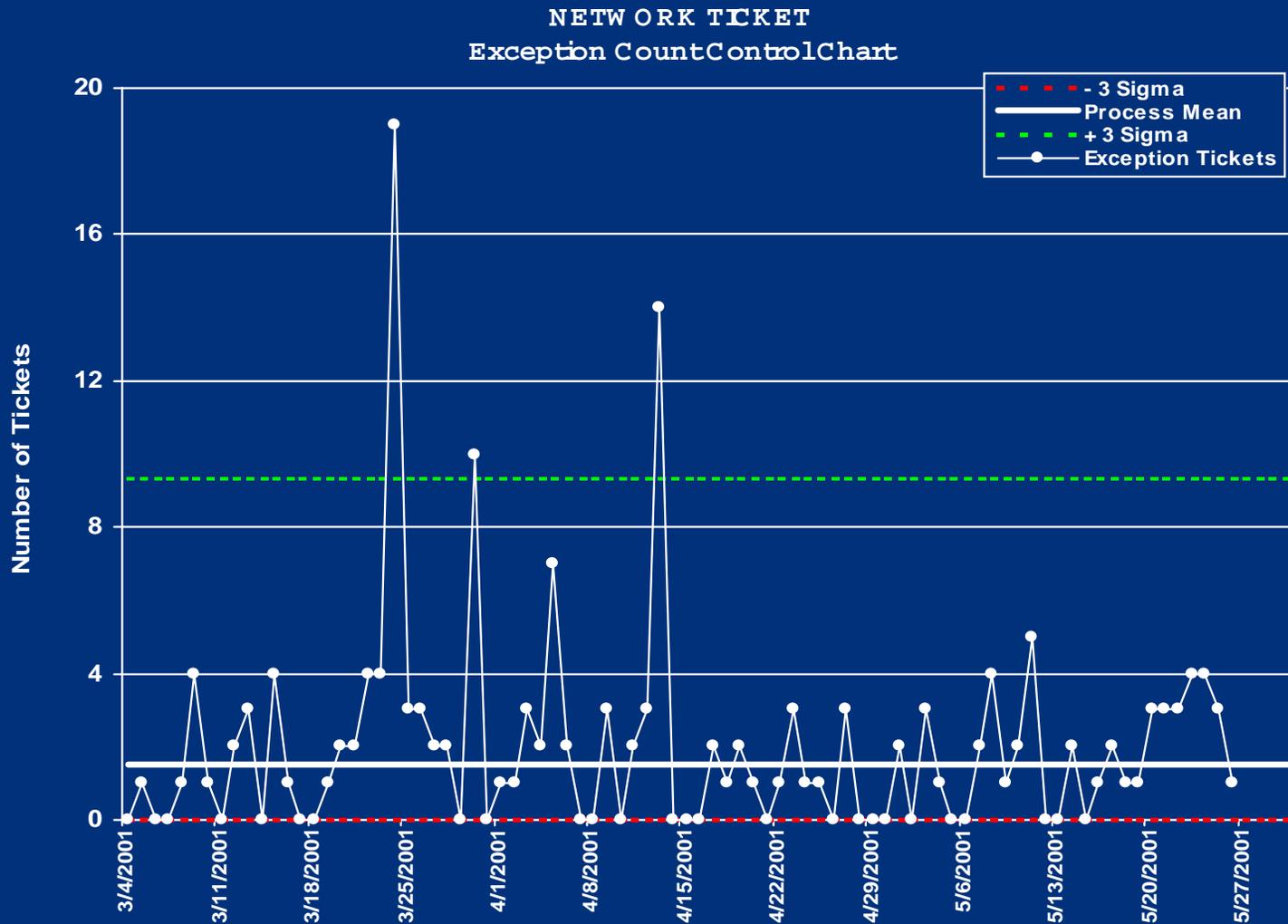


Managing Performance Examples

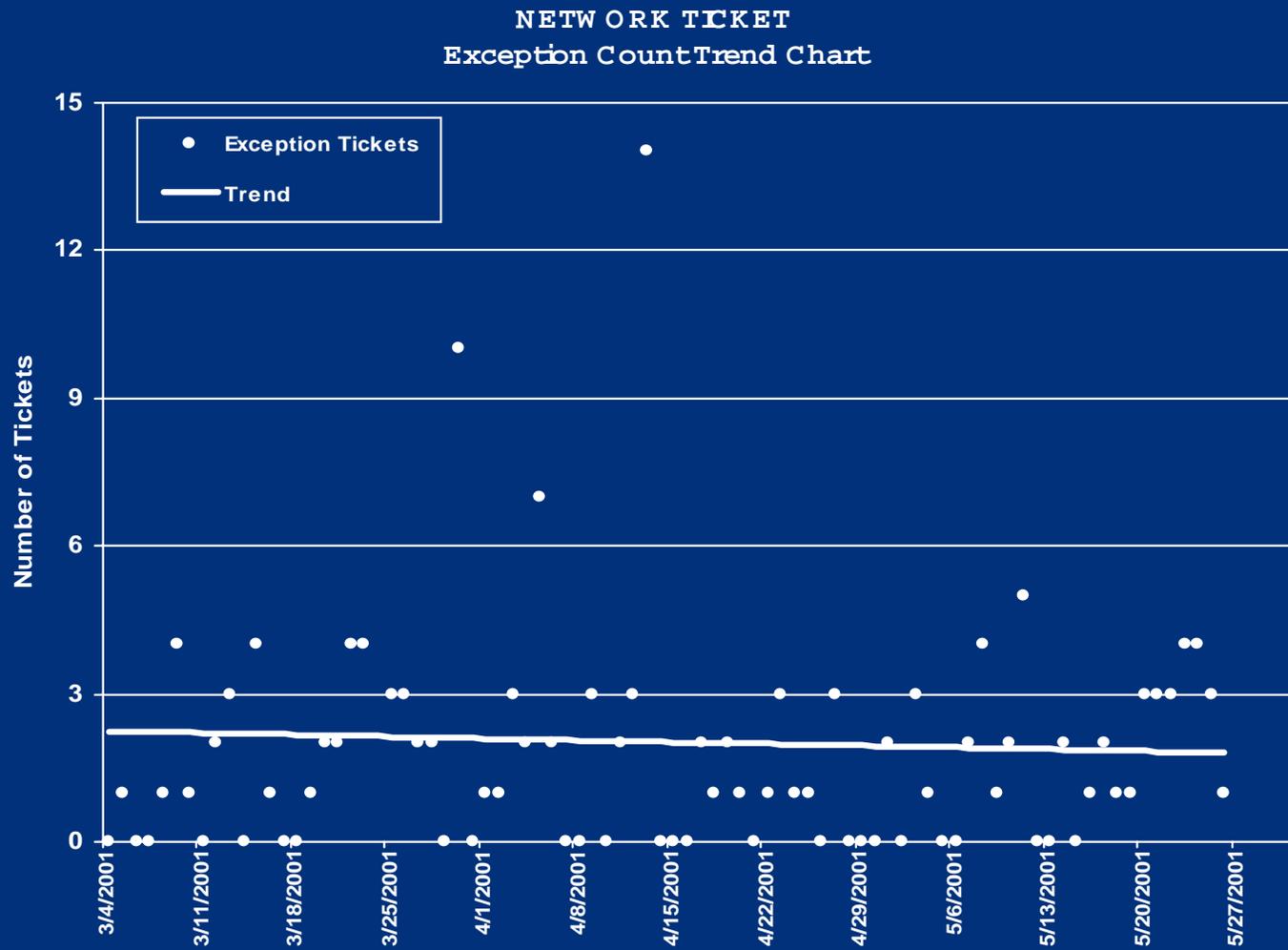
NETWORK TICKET
RESOLUTION TIME ControlChart



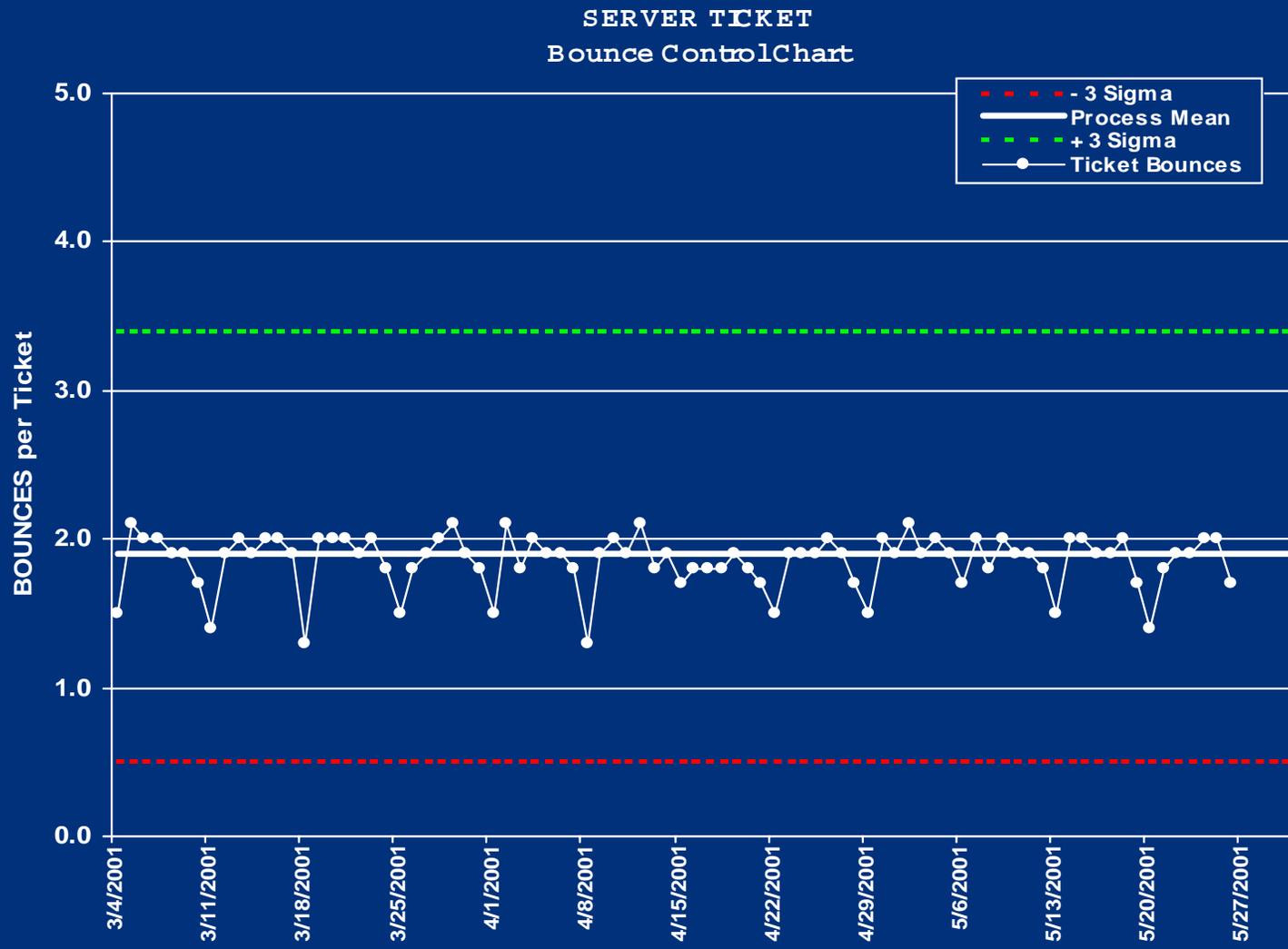
Managing Performance Examples



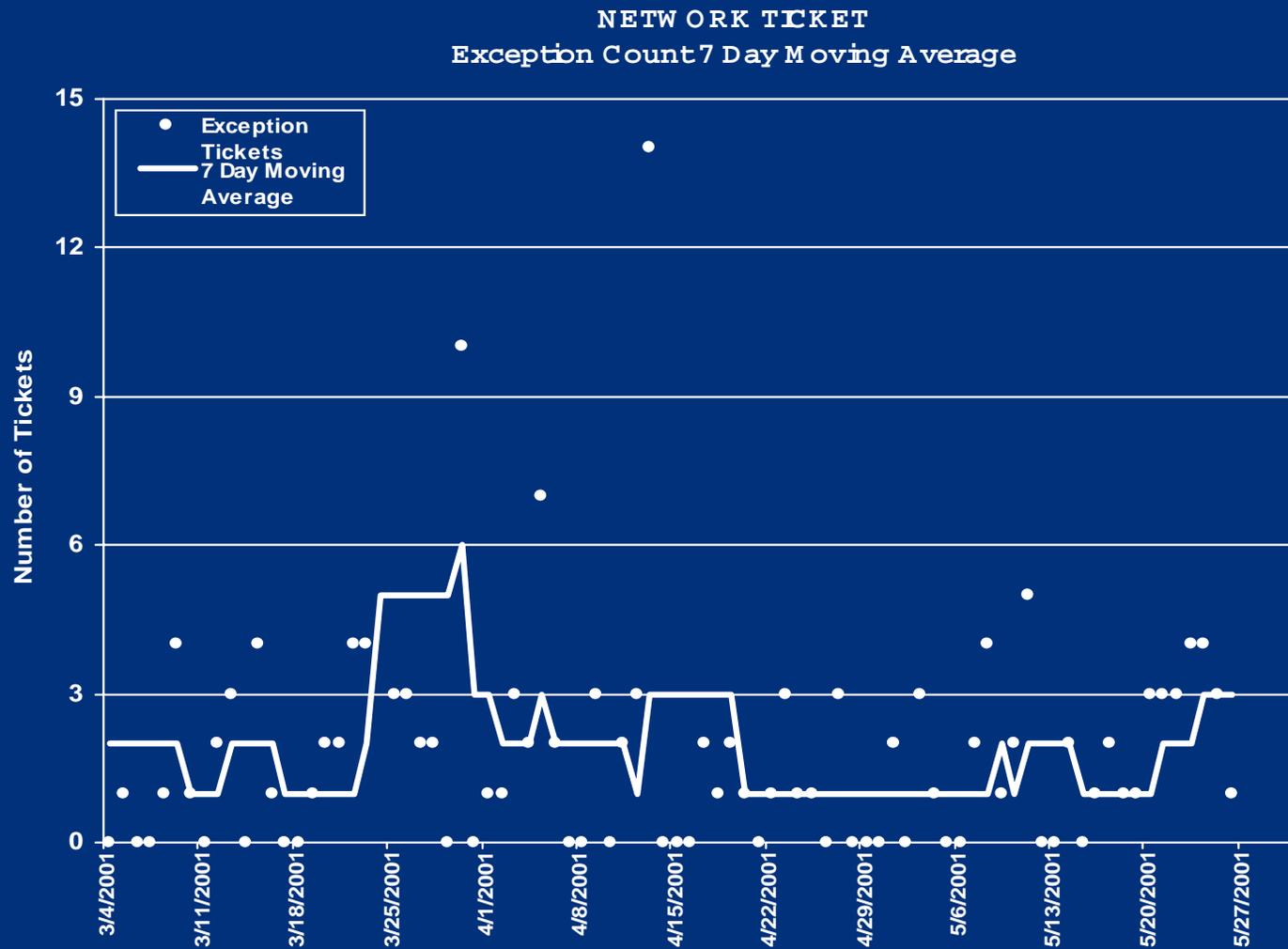
Managing Performance Examples



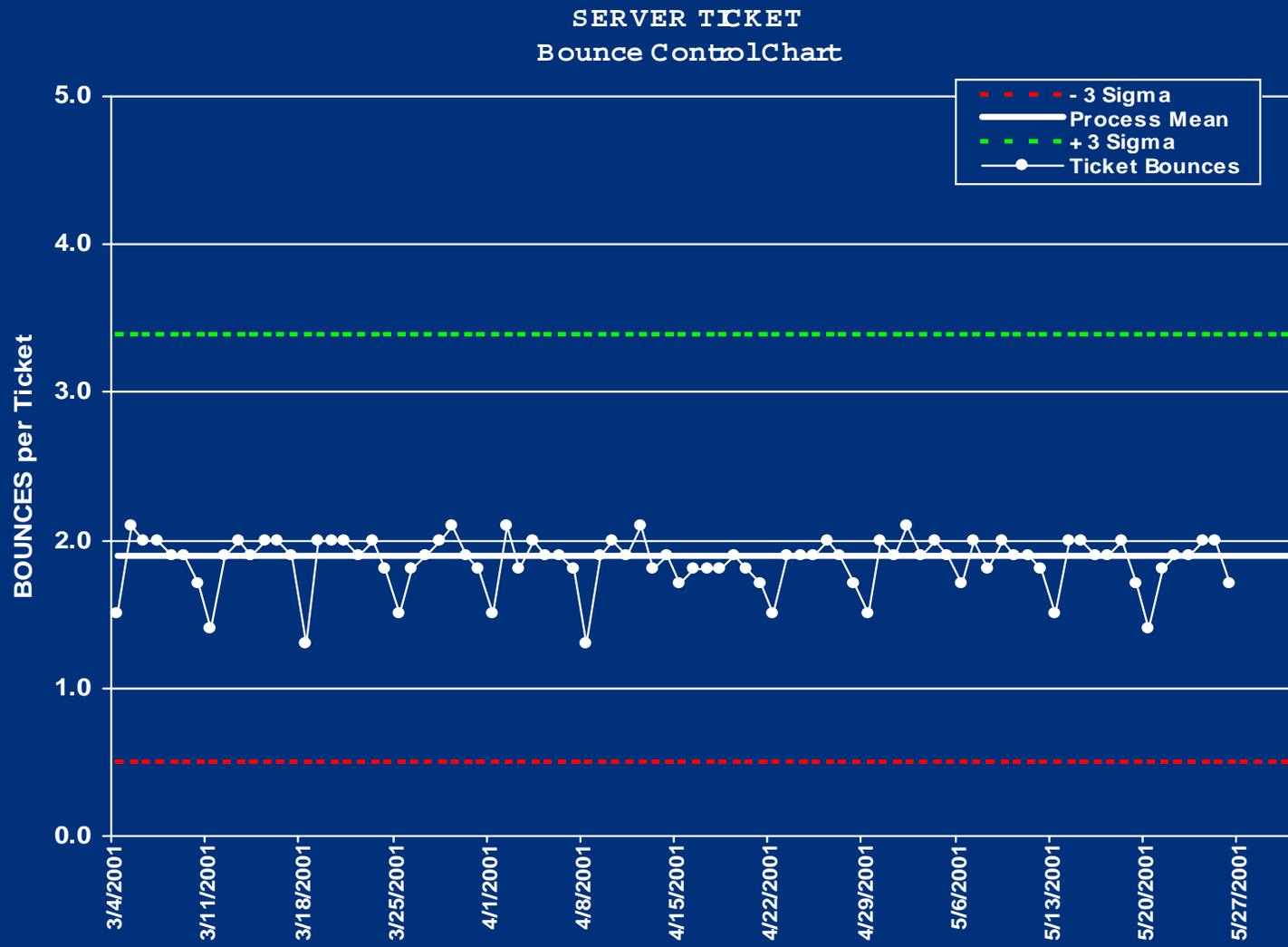
Managing Performance Examples



Managing Performance Examples

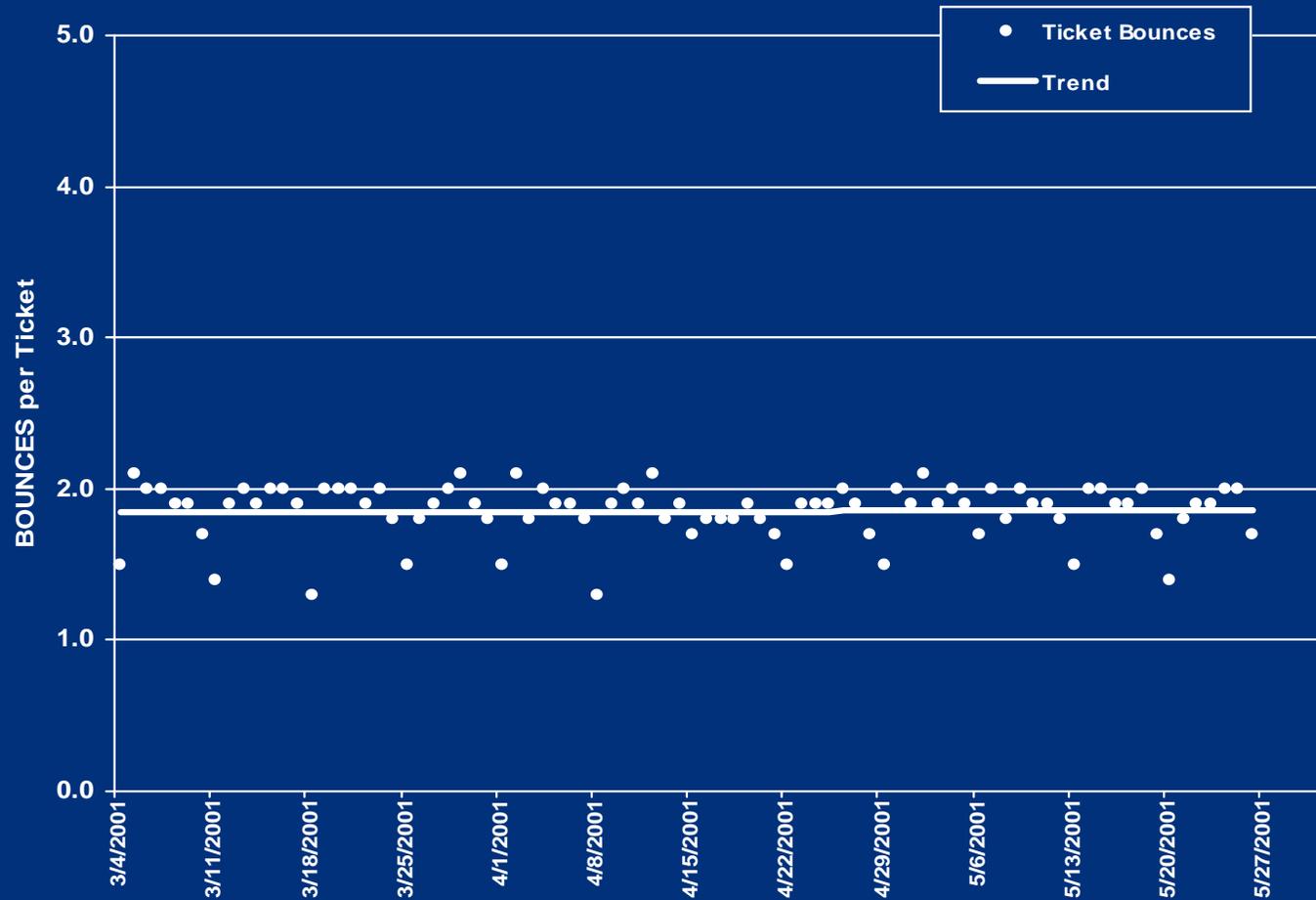


Managing Performance Examples



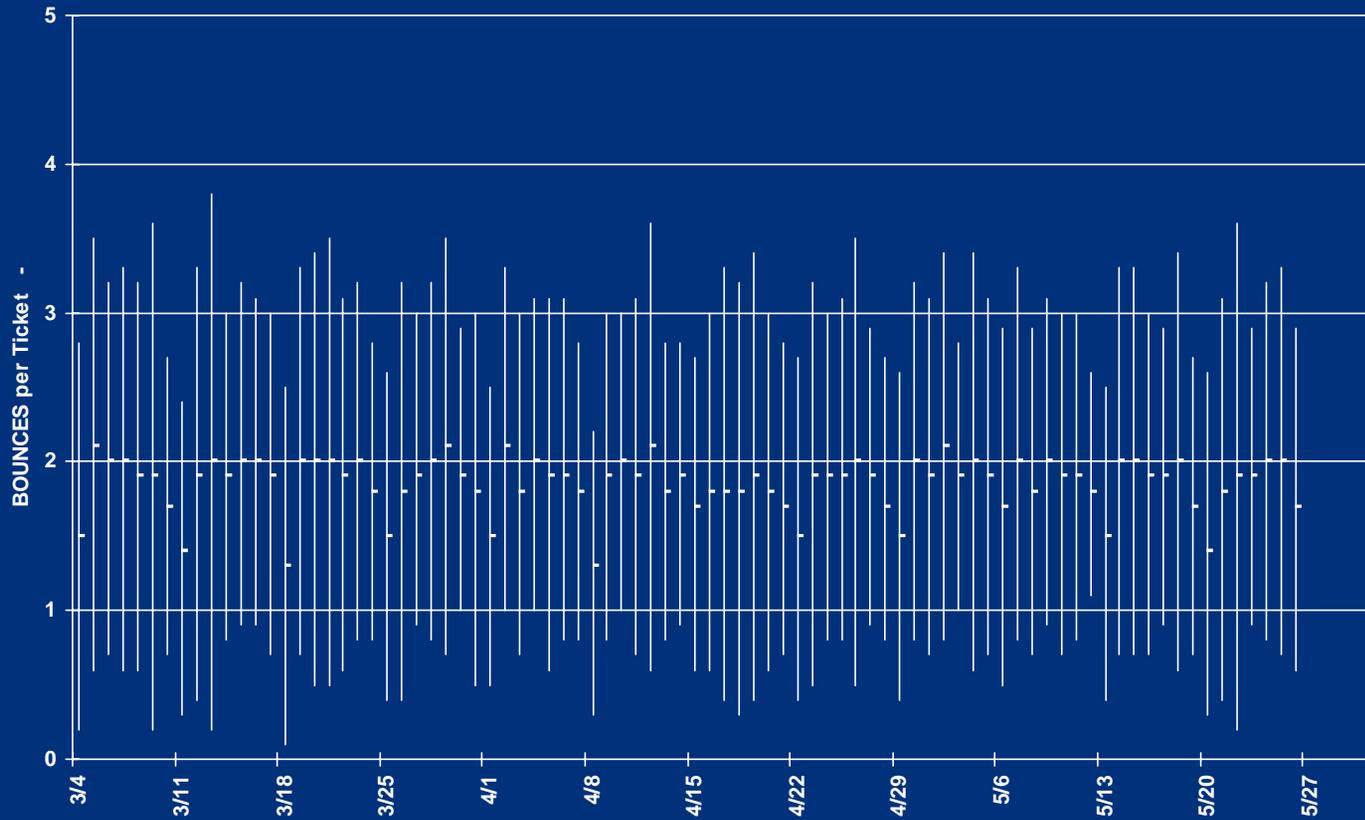
Managing Performance Examples

SERVER TICKET
Bounce Trend Chart



Managing Performance Examples

SERVER TICKET
Bounce Range Chart



Benefits

- Predictable Cost – A service level agreement provides the provider with effective resource management. It provides the client with a predictable element of costs above what might be considered out-tasking approaches. An SLA also allows for remedy and enforcement of the principles of service.
- Continuous Improvement – A service level agreement provides the discipline for both parties to make the changes required to extend the relationship. It also allows both parties to recognize the impact of change and corrective actions through the use of Key Performance Indicators.
- Improved Resource Utilization – A service level agreement provides a structure to reduce complexity and sets the environment for elimination of root causes for problems. Resources are directed in effective action to make improvements and not in repetitive reactive activities.

Q uestions

