



Delivering Service Operations at Mega-Scale

Alan Levin, Director
Microsoft Operation Center



By the Numbers

200+

By the Numbers

1,000,000,000+

By the Numbers

1,000,000+

Event Management

$$(((X \text{ Servers} * Y \text{ Monitored CIs/Server}) + (C \text{ Network Devices} * D \text{ Monitored CIs/Network Devices}) + (E \text{ Application Services} * F \text{ Monitored CIs/Application Service})) * (G \text{ Alarm Types})) * \text{Failure Rate}$$

Monitored Configuration Items = Lots of Zero's
Alarm Volume = Growing too Fast

Event Management

Don't Rely on Your Customer Telling You About Your Problems.

Detection

Incident Management

Don't Wait for the Fire Before You Determine How to Evacuate.

Classification

Incident Management

Establish a Process to Accomplish the Mission.

Who Is In Charge?

Service Operations Spectrum of Maturity

low

high

Event
Management

Detection by Escalation
High Signal Noise
No Correlation

Detection by monitoring
systems
Optimized/Tuned Signal
Correlation Engine

Incident
Management

Manual Correlation
No Documented Classification
Manual Escalations
Manual Notifications
Manual Mitigation

Correlation Engine
Automated Classification
First Touch Resolution
Automated Notifications
Self Healing

Problem
Management

Reactive
Undocumented

Proactive
System Integrated

Questions

Microsoft Data Center Resources

Datacenter Team's
Web Site & Blogs

www.microsoft.com/datacenters



