

ORACLE[.]

End User Monitoring with Enterprise Manager

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Agenda

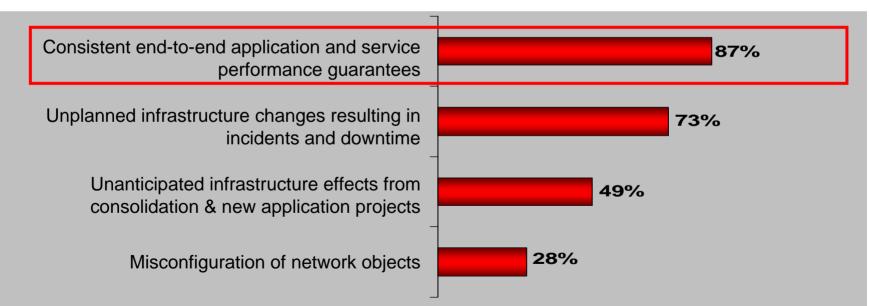
- Why should we monitor end users?
- Oracle's Application Performance Management Solutions
- Oracle's End User Monitoring Solutions
- Active Monitoring
- Passive Monitoring
- Customer Case Study
- Q&A

Analysts Agree: User Experience is critical

"Real life experience shows: 74% of problem alerts come from end users complaining to the service desk about performance problems, not from monitoring infrastructure components!"

Jean-Pierre Garbani.

Forrester Research 2004

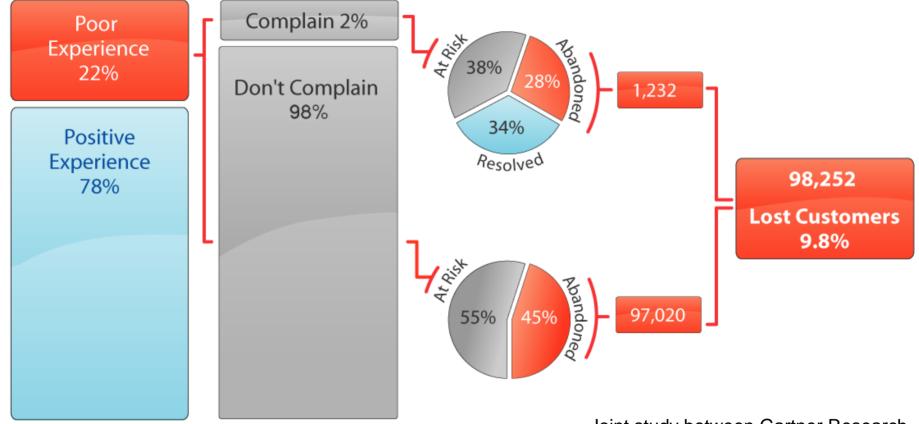


Source: Forrester Research, Top Five Challenges For Enterprise IT Infrastructure Managers — And How To Resolve Them, Thomas Mendel, March 2005

Poor Performance = Less Revenue

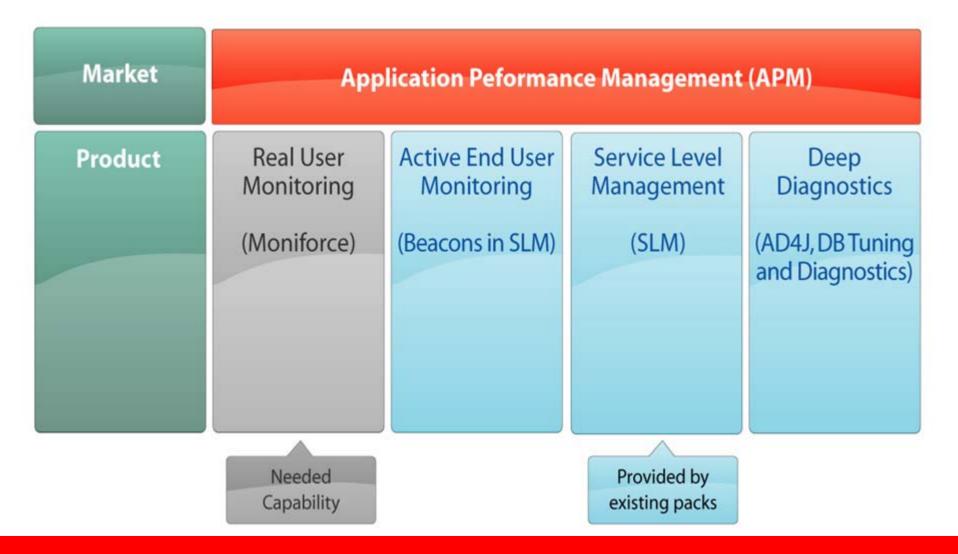
Typical Result is 10% Revenue Loss

1,000,000

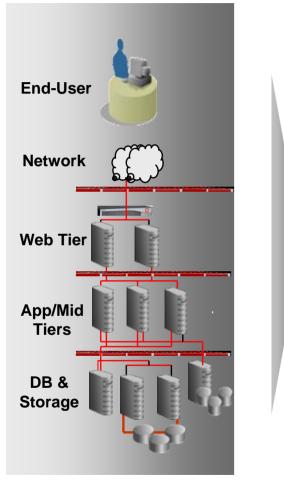


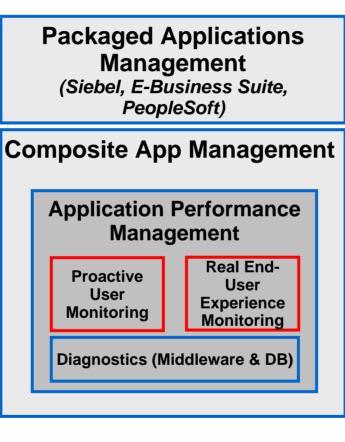
Joint study between Gartner Research and Response Tek

Application Performance Management



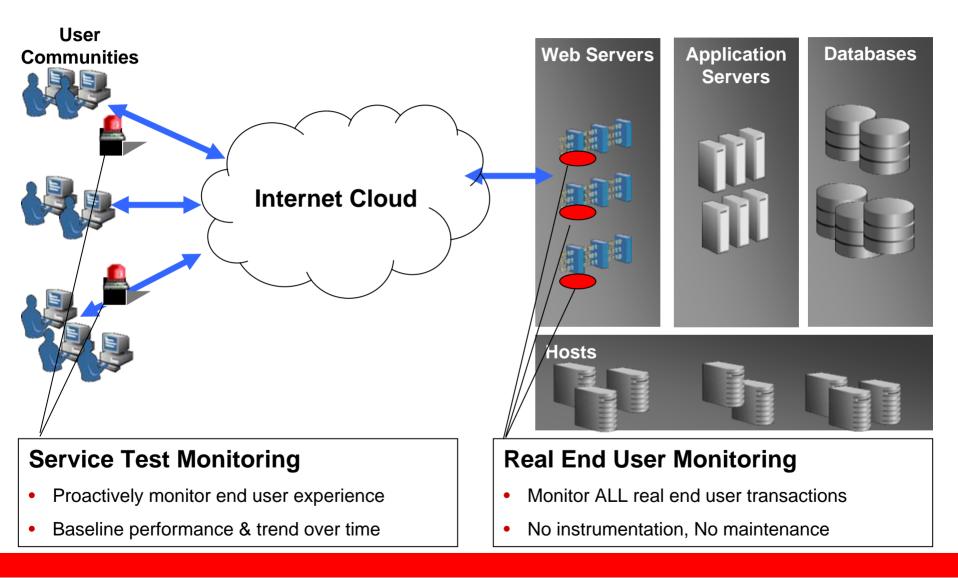
Comprehensive End User Monitoring





- User Experience is ultimate measure of application performance
- Comprehensive end user monitoring enables you to be proactive, and measure business performance
- Integrates with diagnostics for complete Application Performance Management

User Experience Management Approaches



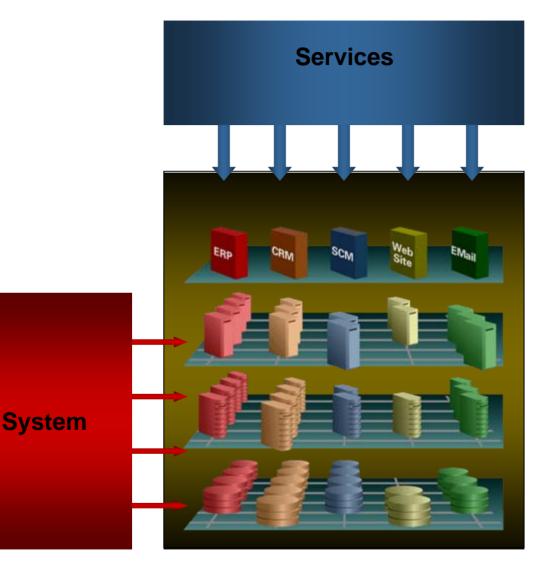
Active Monitoring

SLM: Best Approach

- Model
 - Focus on end-user perspective
 - Map business service to IT resources
 - End-to-end relationships of 'service' from end-user and system perspectives
- Monitor
 - Instrument service availability, performance, usage, business metrics
 - Service level compliance ٠
- Diagnose
 - Enable administrators to quickly pinpoint cause of service problems
- Report
- Centralized reporting and viewing
- Business and administrative level reporting
- Out-of-box and customized reporting



Grid Control: Systems and Services



Services

- Provide business function for end-users
- Business processes or Applications

System

- Data center infrastructure
- Hosts, Databases, Application servers, etc.

Modeling Services

- A Service is an entity that exposes a useful function to its end-users:
 - Generic
 - Web Application
 - OCS Application
 - Forms Application (EM 10.2.0.3)
 - Aggregate

Examples:

ORACLE Enterprise Manager 10g		Setup Preferences Help Logout						
		Iome Targets Deployments Alerts Policies Jobs Reports						
Hosts Databases Application Servers Web Applications Services Systems Groups All Targets								
Aggregate Service : OCS								
Page Refreshed May 10, 2005 10:03:17 AM PDT 🖹								
Home Charts Topology								
This graph shows the service dependencies of this aggregate service and its sub-services, and the systems on which these services run. Any causes of service failure identified by Root Cause Analysis have been highlighted; select any of these highlighted links to view details associated with the cause.								
Overview								
Selection Details Nothing Selected								
Home Charts Topology								
Related Links								
Access	Blackouts	Edit Service						
Edit Service Level Rule Reports	Metric and Policy Settings Target Properties	Metric Baselines						
Home Targets Deployments Alerts Policies Jobs Reports Setup Preferences Help Logout Copyright © 1996, 2005, Oracle Al rights reserved. About Oracle Enterprise Manager ▶Show Management Pack Information								



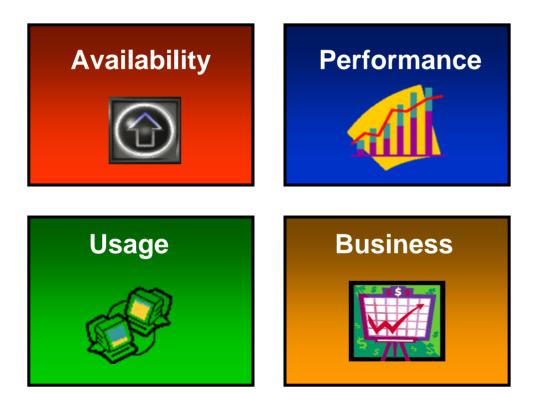
Online Trading



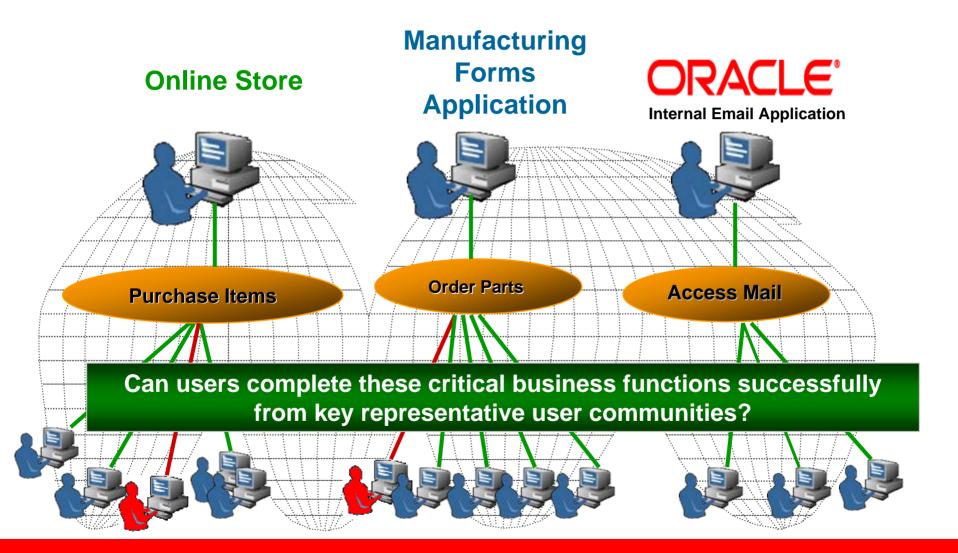




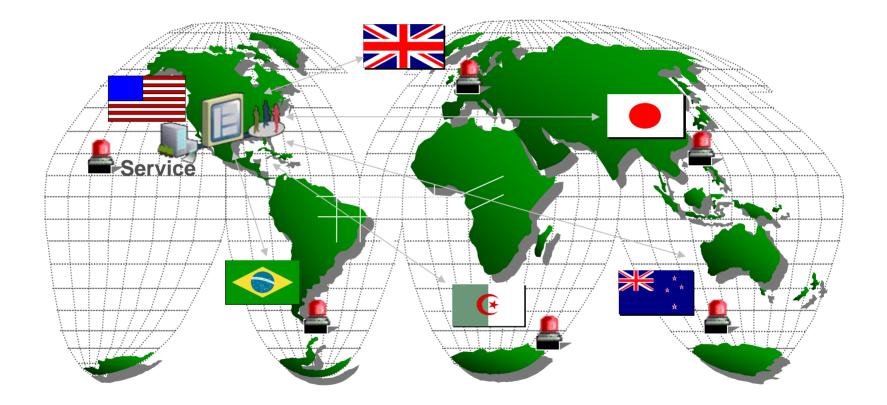
Service Level Monitoring



Service Availability (Test-based)



Service Availability (*Test*-based) Modeling User Communities Using 'Beacons'

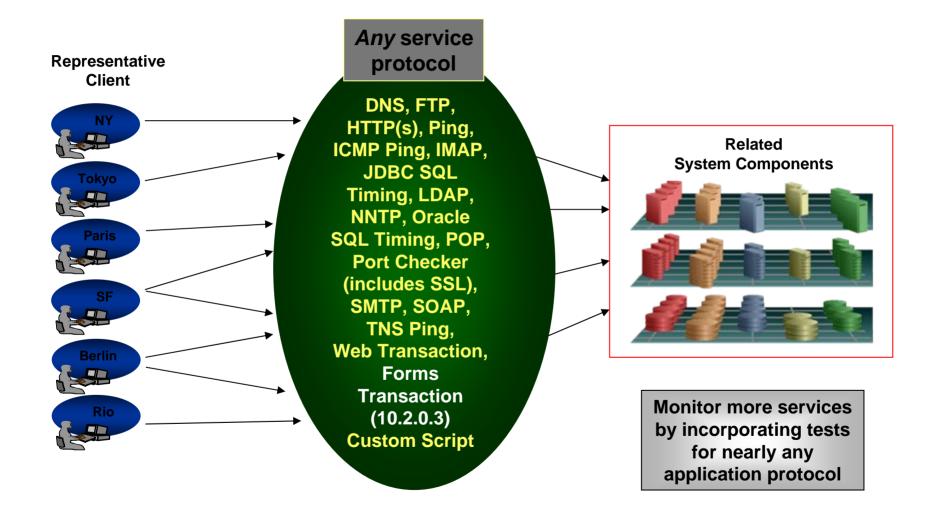


Availability may vary from location to location

Service Availability - Beacons

- Installed with Management Agent
- Easily configured through GC console
- Placed in each user community or representative geographical location
- Plays back service tests (and recorded web / forms transactions)
- Supports various protocol tests

Rich Coverage for Service Test Protocols



Service Level Compliance

- Service Level parameters specification:
 - Business Days, Hours
 - Availability Criteria
 - Performance Criteria
- Calculation of Service Level over a time-period as:
 - % of time during business hours Service meets the availability and performance criteria
- Comparison of achieved Service Levels to requirements in your SLA

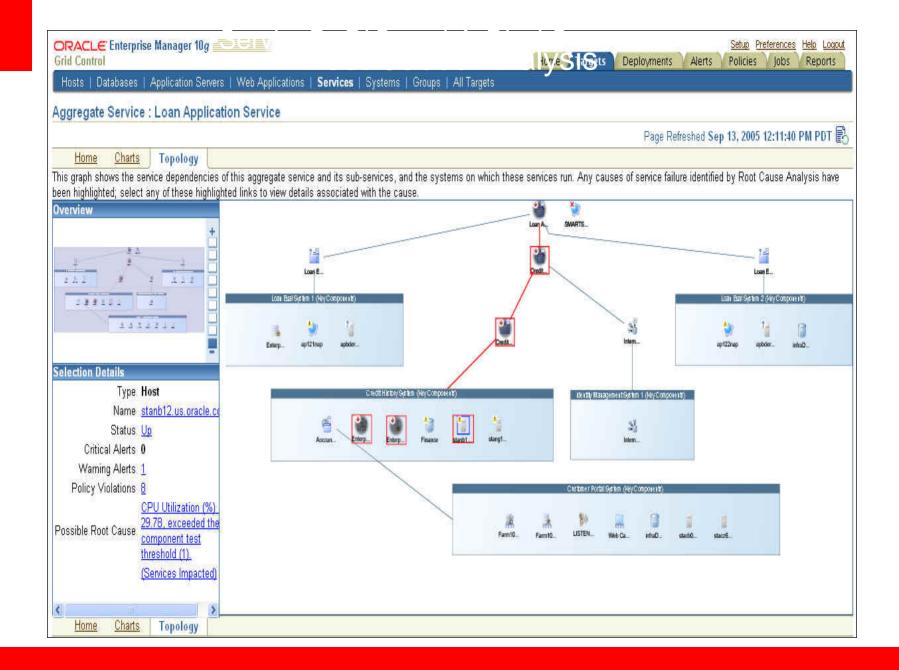
Service Level Management for Web Applications

• Inherits all the monitoring features of a Service:

- Availability, Performance, Usage, Business Metrics, SLA Compliance
- Web Application service monitoring features:
 - Web Transaction: http/s Web application 'service test' for monitoring availability and performance
 - Transaction Recorder automatically records web transactions for service test monitoring and are played back using beacons
 - Test Performance identifies bottlenecks within the network, server, connect time, or content of transactions and pages

Service Level Management for Forms Applications

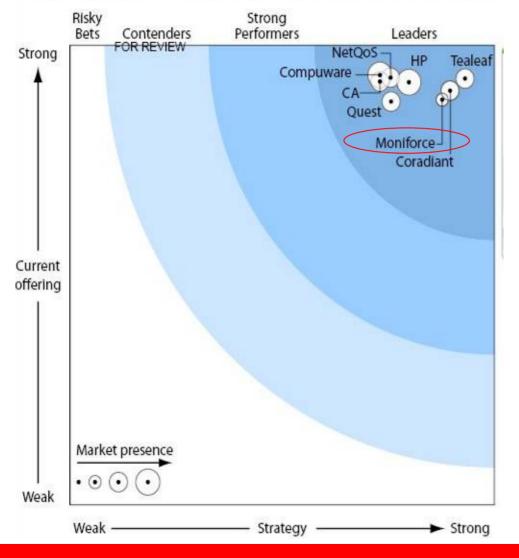
- Forms Service Test / Transaction Monitoring
 - Available from EM 10gR3
 - Supported for Forms versions 9.0.4, 10.1.2, 6i
 - Monitors transaction metrics:
 - Forms total transaction time
 - Login time
 - Avg time per message
 - Network latency
 - Slowest message block time
 - Database time
 - Monitors Forms Application availability, performance, usage, service level compliance
 - Monitors key Forms transaction- runform, callform, commit etc



Passive Monitoring

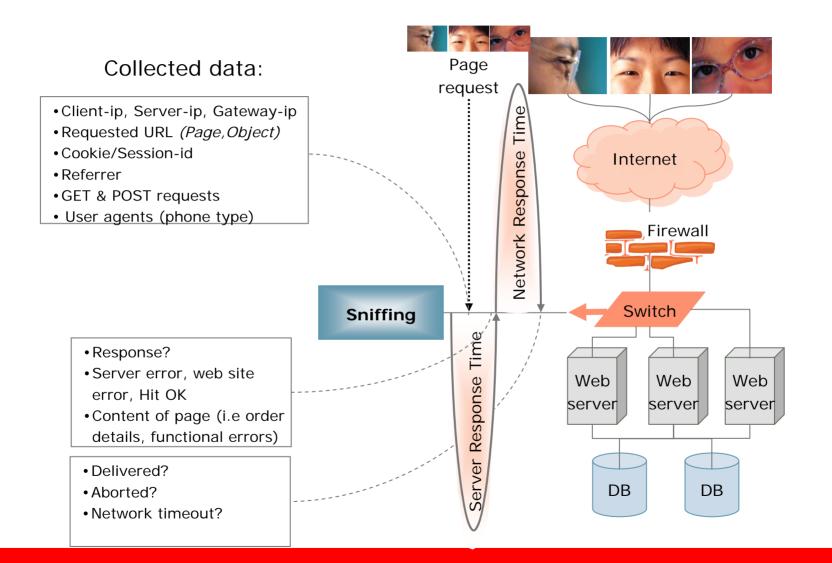
Why Moniforce?

Figure 5 Forrester Wave™: Appliance-Based End User Experience Monitoring, Q2 '07



- Moniforce the EMEA leader
 - Relatively new market with regional leaders – no worldwide de facto leader
- 100+ customers across several industries
 - Strong presence in financial services, telecommunications, e-commerce, and government
- Strong Product
 - Only offering that combines both performance management and business analytics in a single solution
 - Mature product, tested and customized in large deployments with demanding financial services customers

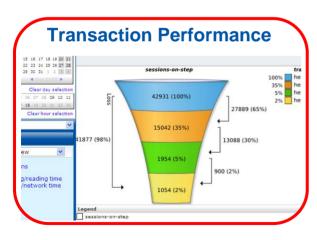
Architecture: Network Protocol Analysis (NPA)



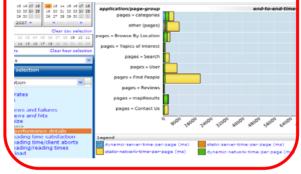
UXInsight Product Overview

Optimizing end-user experience through real end-user monitoring

29	KPI Monitoring
Overall	
	✓ failed pageviews
	✓ page load time (sec)
	• concurrent sessions
	O pageviews per min
	• traffic (mbps)
Page pe	erformance (user)
	Content-error-pageviews Duration: 11h 48m 48s
	✓ all-traffic(mbps)
	 end-to-end-time-per-page(ms)
	✓ network-time-per-page(ms)
	✓ page-load-time(ms)
	✓ page-read-time(ms)
	✓ server-time-per-page(ms)



Business Reporting

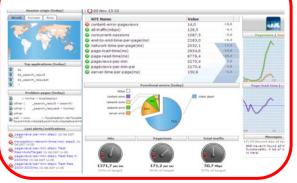


UXinsight key highlights:

- Replay of poor performance
- Executive dashboards
- Extensive KPI and SLA monitoring
- Full alerting capabilities
- Quick bottle-neck analyses
- Transaction performance analyses
- Customized reporting
- Trend analyses
- Full data integration via XML

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ccess Control						
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Executive dashboard



Oracle UXInsight

Key Buyers and Value Propositions

Improve Business Performance Optimize Application And User Experience

Proactive Monitoring And Diagnostics



Line of Business (LOB) Executive



Apps Manager / Apps Support



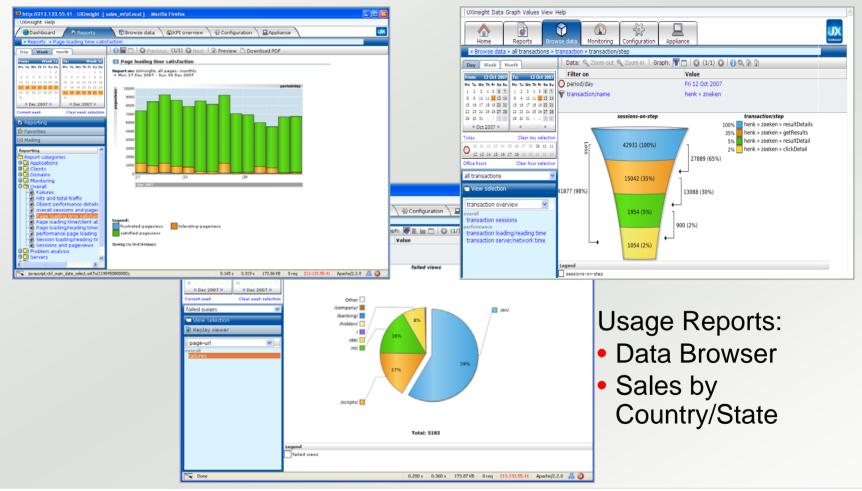
IT Operations

What Does UXInsight Do For:

Line of Business

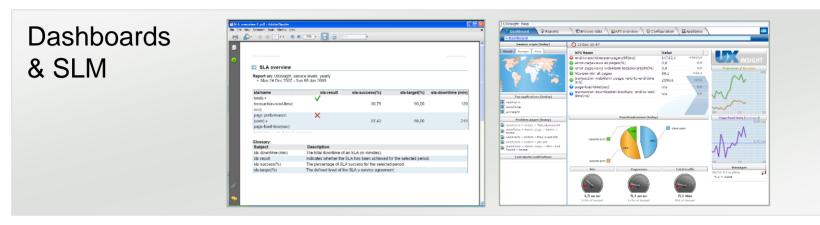
Satisfaction Reports

Business Transaction Funnel

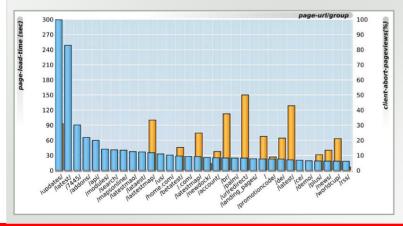


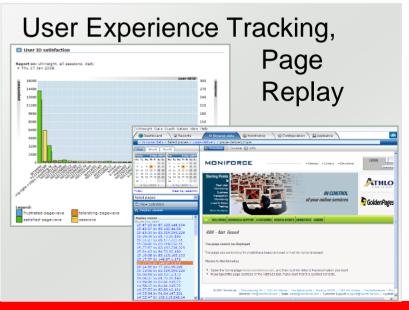
What Does UXInsight Do For: Application Owners and Application Support





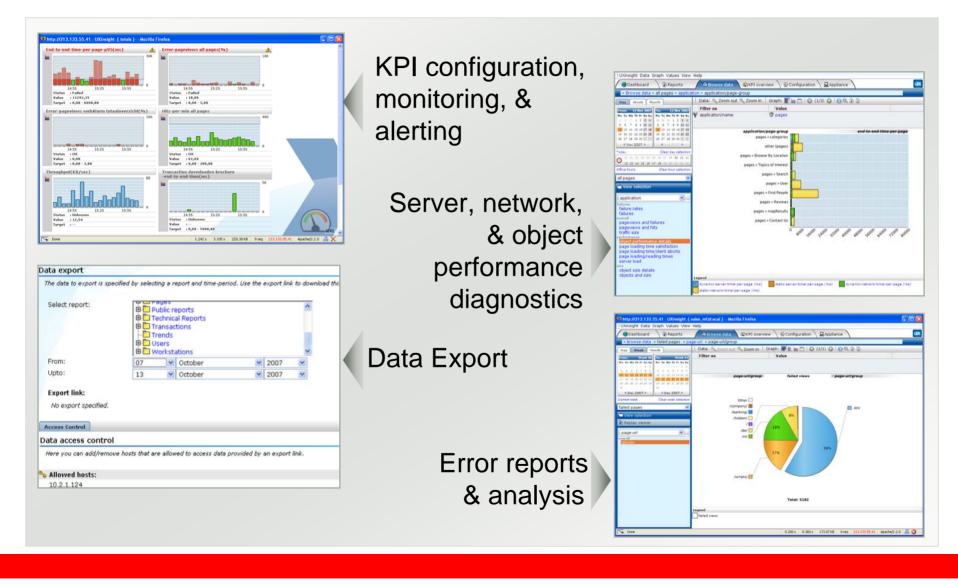
Business Service Monitoring (e.g. Order Entry, Buy Stock)





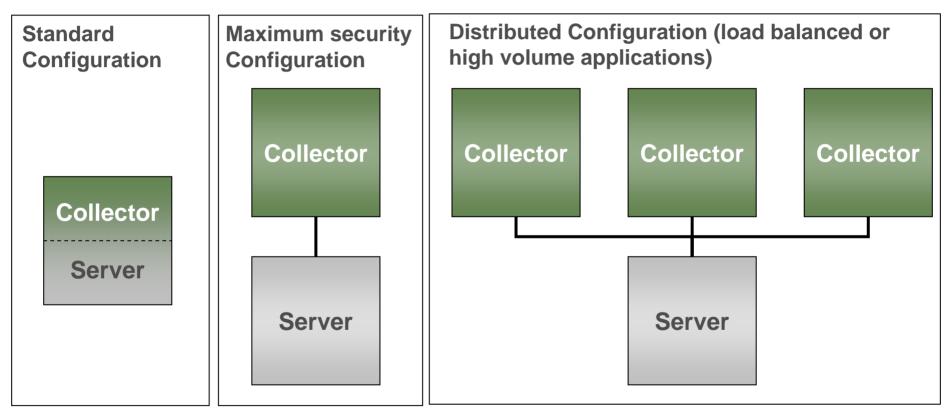
What Does UXInsight Do For: IT Operations





Deployment Configurations

Recommended configuration is Server = 2 CPUs and Standalone Collector = 1 CPU

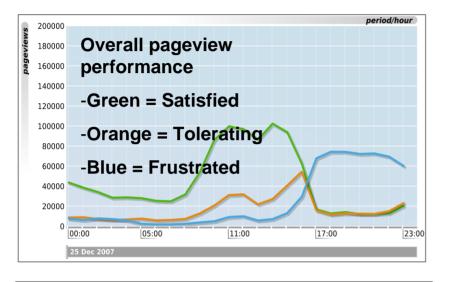


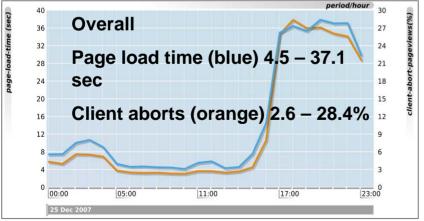
Example use case Leading navigational system provider

The web services provide a

- corporate website,
- shopping section and
- provision automatic software updates/upgrades

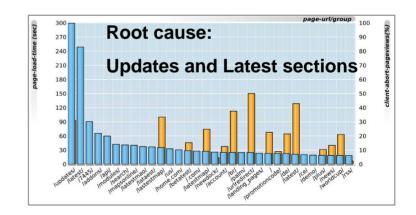
Christmas 2007, user experience suffers



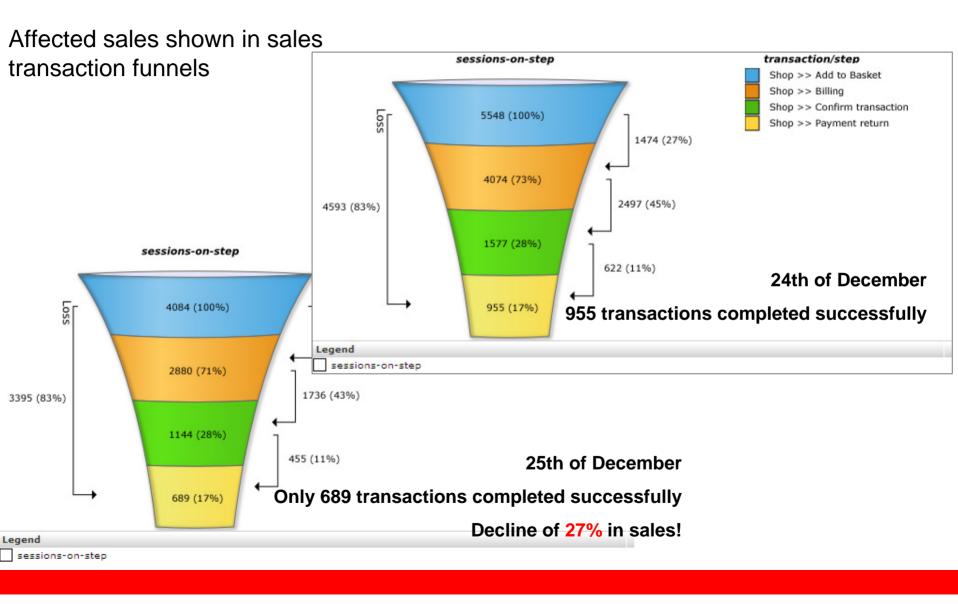


Overall performance was affected from after about 16:00, resulting in a drop of total pageviews and frustrating long page load times

Root cause: Updates and latest manuals sections



Sales is affected



Overview Affected users

UXinsight drill-down feature shows list of affected users on 25th after 15:00hrs

Day Week Mc	onth	Data: 🔍 Zoom out 🔍 Zoom in	Graph: 🕍 🔭 🗍	🕥 (1/8) 💟 🕦 🔍 🛃 🕵
From: 25 Dec 2007	To: 25 Dec 2007	Filter on	Value	
Mo Tu We Th Fr Sa Su	Mo Tu We Th Fr Sa Su	👕 user-id/group	🧒 anonymous	
26 27 28 29 30 1 2	26 27 28 29 30 1 2			
3 4 5 6 7 8 9 10 11 12 13 14 15 16	3 4 5 6 7 8 9 10 11 12 13 14 15 16			
17 18 19 20 21 22 23	17 18 19 20 21 22 23	user-id/id	pageviews	error-pageviews(%) \bigtriangledown
24 25 26 27 28 29 30	24 25 26 27 28 29 30	expedestrian@hotmail.com	1	100,0
31 1 2 3 4 5 6	31 1 2 3 4 5 6	carl.donakowski@gmail.com	1	100,0
« Dec 2007 »	« Dec 2007 »	sgonsauls@satx.rr.com	2	100,0
Today	Clear day selection	barbet2@aol.com	1	100,0
6	05 06 07 08 09 10 11	ringenbach@bigfoot.com	1	100,0
- 12 13 14 15 10 1		boddenberg@freenet.de	1	100,0
Office hours	Clear hour selection	frankwiedmann@web.de	1	100,0
all sessions	~	rmei1051@cox.net	1	100,0
🖆 View selection		freemanc3@shaw.ca	1	100,0
		ricmaxm@hotmail.com	1	100,0
user-id	A	hashbrowns820@aol.com	1	100,0
failures		aligreystoke@hotmail.com	1	100,0
failure rates		mark@breitner.dk	1	100,0
failures		akwinegar@sbcglobal.net	1	100,0
pageviews and fa	ilures	anl.nguyenhuu@gmail.com	1	100,0
pageviews/durati		eepkm.prummer@web.de	3	66,7
sessions and pageviews traffic		goodrichkn@scml.us	2	50,0
traffic per session		bambou.k@hotmail.fr	2	50,0
performance		frank@druckrecords.de	5	40,0
object performance		dragonjoe@rogers.com	3	33,3
page loading time page loading time		tomascaleojesu@msn.com	6	33,3
page loading time	cheric aborts	contractoreojeod@monteom	0	55,5





