

Annual Report on Incidents, Tools & Processes

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# Executive Summary

Companies have invested heavily in IT Service Management (ITSM) systems, however, these solutions by themselves don't enable companies to organize their responders to act quickly enough when an IT outage occurs. With the average cost of unplanned downtime totaling \$8,662 USD per minute according to respondents, every minute counts. One area of the incident management lifecycle our research shows has yet to be optimized is the time it takes to assemble the IT response team, also known as the response process. In the event of a major IT incident, it takes respondents an average of 27 minutes, maxing out at 150 minutes in some cases, to assemble the response team.

### **Key Findings**

92%

of respondents have invested in IT Service Management systems

43%

of respondents manually reach out to response / incident management teams

27mins

is the average time it takes to assemble response teams in the event of an incident 91%

experienced at least one major IT incident or outage in the past year

29%

have no formal process in place to know who's on-call if an IT incident or outage occurs

\$8,662

is the average cost (USD) of unplanned downtime per minute



### Overview

The "State of IT Incident Management" research was conducted in September 2016. A total of 152 IT professionals across 22 industries were surveyed about their IT incidents, incident management tools, and processes. The goal of this research was to gain insight into the incident management trends and challenges facing today's businesses, especially when it comes to managing and responding to major IT incidents.

The sample for this survey focused on larger organizations, with 86 percent of respondents from companies with more than 1,000 employees, and 52 percent of those respondents from companies with more than 10,000 employees. Survey respondents included a wide array of IT professionals, with the most common titles being IT manager, IT project manager, IT director and IT operations manager. Approximately one third (32 percent) of companies surveyed report that they deliver IT services over the Internet to online customers, while the remaining 68 percent of organizations mainly deliver IT services to their employees, and 45 percent have also either fully implemented, or are in the process of implementing, a DevOps methodology and culture.



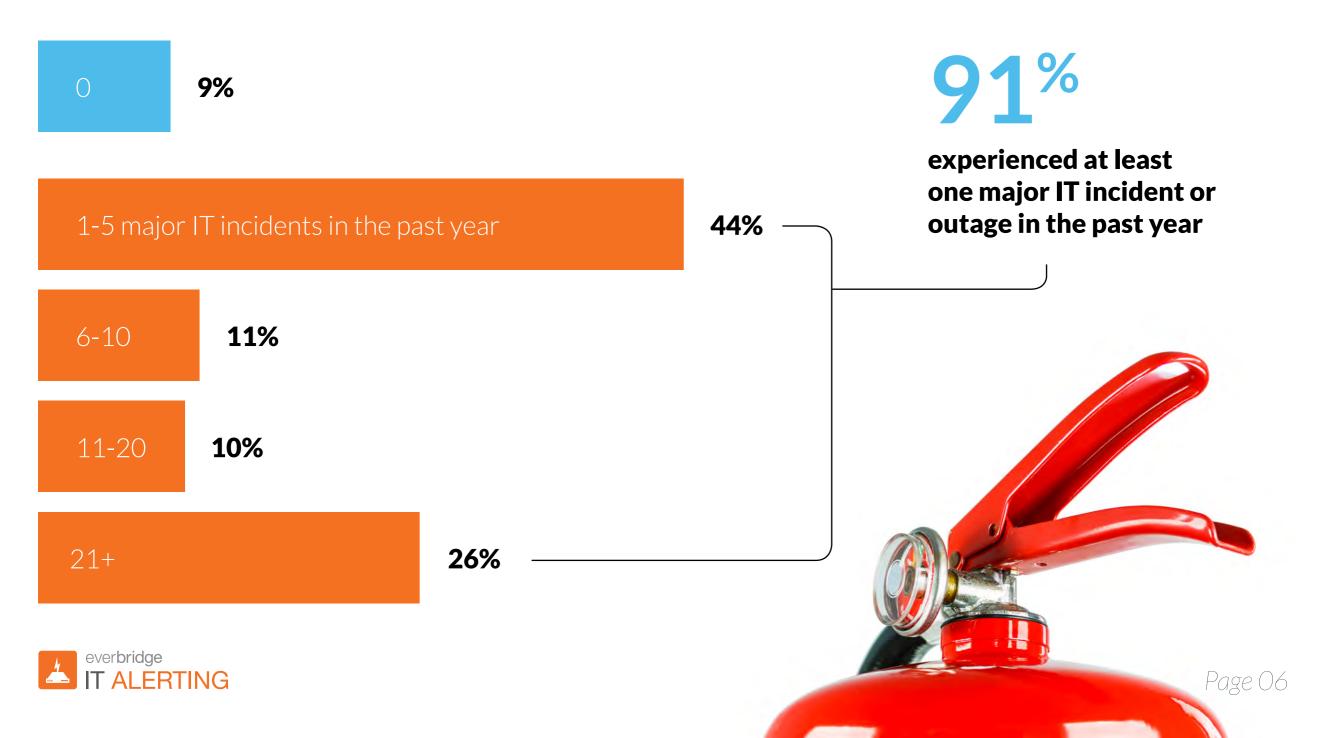
# IT Incidents and Major Incidents

Network Outages • Hardware Failures • Internal Business Application Issues • Unplanned Maintenance



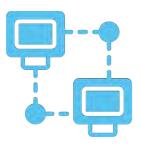
### Major IT Incidents a Real Area of Concern

For more than 90 percent of the organizations, major IT incidents are a real area of concern as they report at least one in the past year. And only 9 percent of respondents declare that their organizations did not report any major IT incident in the past year. 36 percent of participating companies report 11 or more major IT incident per year which equates to an average of 1 major incident per month.



### **Network Outages Affecting Majority of Organizations**

More than 60 percent of respondents reported network outages in the past year, and more than half also reported hardware failures and internal business application issues. 14 percent also reported that cyberattacks or DDoS attacks affected their organization in the previous year.



Network Outages

61%



Hardware Failures or Capacity Issues

58%



Internal Business Application Issue

**51%** 



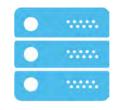


41%



Release Deployment

32%



Data Center Outage

26%



14%



### IT Incidents Impacting Employees the Most



### IT Incidents Affecting Multiple Parts of the Business

Aside from affecting employee productivity and the IT team specifically, incidents have also lead to decreased customer stratification in 34 percent of organization surveyed, revenue loss in 18 percent, and bad publicity or damaged brand image in 13 percent. Incidents have even gone so far as to cause a loss of business in 8 percent of organizations and a decreased stock value in 3 percent.



34%



Revenue Loss

18%



Bad Publicity / Brand Image Damage

13%



Loss of New Business / Existing Customer

8%



Driving Business to Competitor(s)

6%



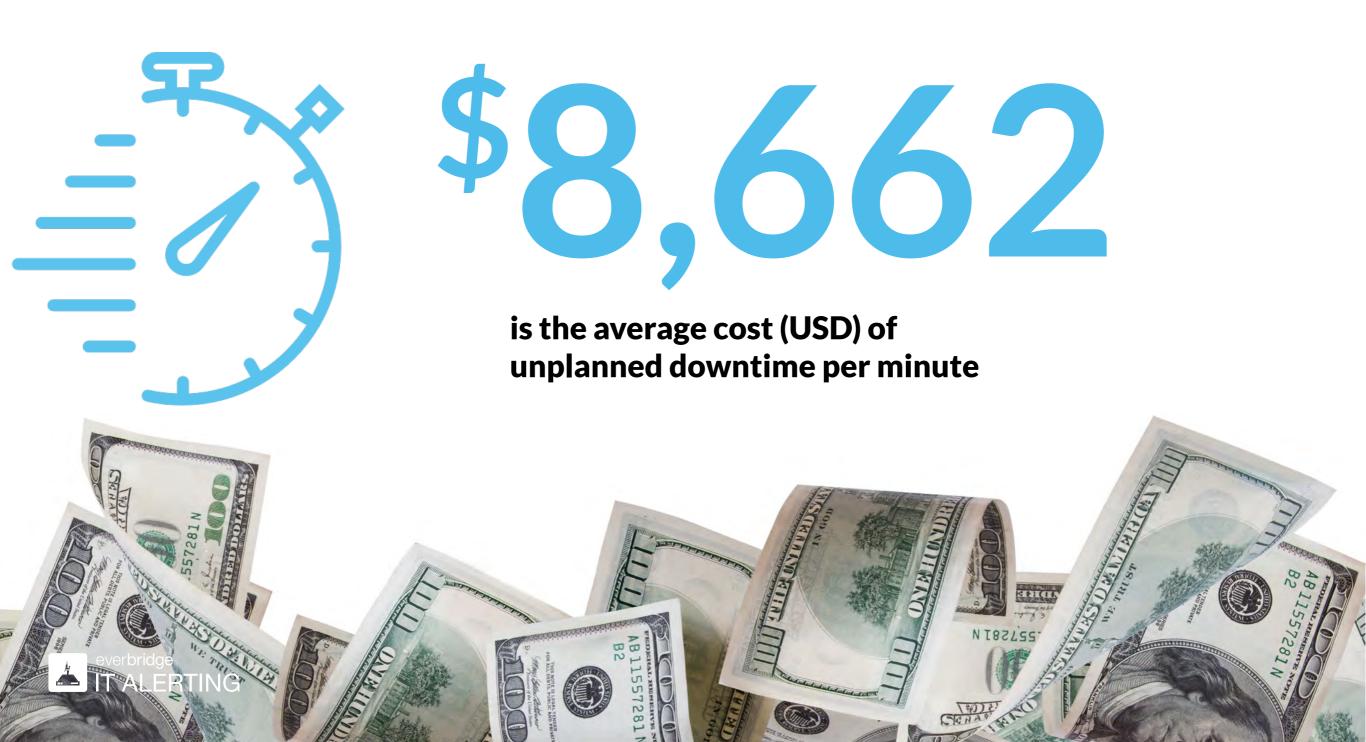
Decreased Stock Value

3%



### IT Incidents Cost Organizations Thousands Per Minute

Participants report cost of unplanned IT downtime had a large range; the average cost for organizations was \$8,662 USD per minute, with the median equating to \$7,200 USD per minute and maximum reaching \$100,000 per minute. Both \$5,000 and \$10,000 USD per minute, were the most reported costs, representing 27 percent of the responses, or 14 percent respectively.



# Incident Management Tools & KPIs

ITSM Tools • ServiceNow • BMC Remedy • HP • Mean Time to Resolve • Customer Satisfaction Metrics

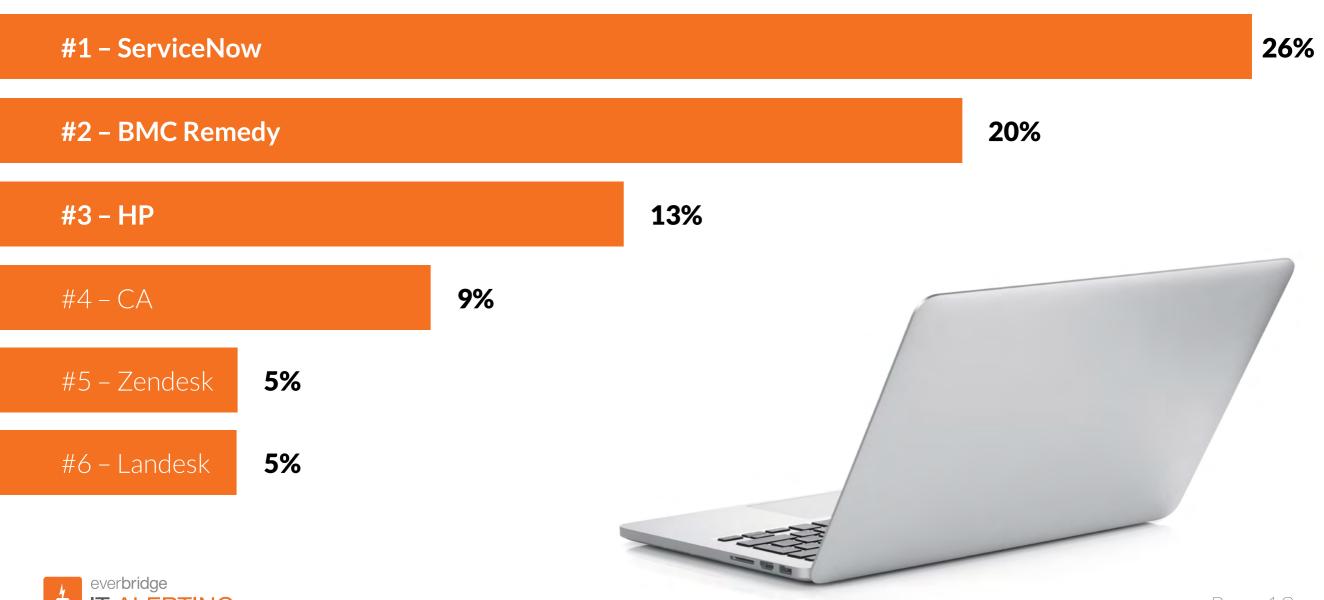


### **Companies Heavily Invested in ITSM Systems**

92 percent of respondents have invested in IT Service Management (ITSM) solutions to capture IT incidents and manage their resolution, with ServiceNow being the most commonly reported system used (26 percent).

No ITSM / Ticketing Tool

8%





### **Majority Track Mean Time to Resolution (MTTR)**

More than 60 percent of participants say they use Mean Time to Repair (MTTR) to track incident resolution which makes it the metric the most widely used. Anything which can be done in a consistent and repeatable manner to improve the incident resolution process will have a significant impact on reducing MTTR, improving team performance, reducing cost and IT unplanned work.

61%
of respondents
track Mean Time to
Resolution (MTTR)

35% track a customer satisfaction metric

29% track Mean Time Between Failures

30% not using a KPI





# Incident Management Processes



Team Assembled



Remediation Applied





### Incident Detection Process

54%

of respondents have a 24/7 team monitoring (e.g. NOC, Command Center) for major IT incidents or outages

Issue Detected

Team Assembled

Remediation Applied

Validation

26%

have events picked up by a monitoring tool or service 20%

wait for customer(s) or user(s) to complain



# On-Call Personnel Management



of respondents use a online calendar to manage the scheduling of on-call personnel (e.g. Workday, Outlook, Google Calendar)

Issue Detected

Team Assembled

Remediation Applied

Validation

29%

have no formal process in place to manage on-call personnel

everbridge
IT ALERTING

24%

use spreadsheets, notebooks, and company phone books 21%

use a centralized on-call scheduled management solution

# Alerting / Notification Procedure

5/0

of respondents use a monitoring tool or ticketing system for sending alerts

Issue Detected

Team Assembled

Remediation Applied

Validation

43%

manually call or reach out to people

37%

have an in-house solution that sends out notifications

28%

use a mass /
emergency
notification system

11%

use a stand-alone IT service alerting solution



### Communication Channels Used



83%

use email to communicate with the IT team when an incident or outage occurs

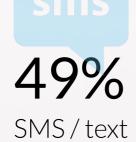
Issue Detected

Team Assembled

Remediation Applied

Validation















# Assembling the Response Team

# 27 minutes

is the average time it takes to assemble the response team on a conference call or in person in the event of a major incident.

Issue Detected

Team Assembled

Remediation Applied

Validation

17.5 minutes

median time to assemble response team

30 minutes

most commonly reported time

150 minutes

maximum reported time



# Related Team Assembly Costs

27 mins

is the average time it takes to assemble the response team on a conference call or in person in the event of a major incident.



\$8,662

is the average cost (USD) of unplanned downtime per minute

Issue Detected

Team Assembled

\$233,874

The research shows that the mean time to assemble the IT response team is 27 minutes. Using the average cost per minute found in this research, we can calculate that it costs an organization an average of \$233,874 USD between the moment IT has been made aware of an incident and the time the IT responders start investigating the issue.



# IT Incident Management Teams



### Incident Response Teams Vary in Size

Almost 60 percent of respondents have IT incident response/management teams of more than 10 people and 29 percent of more than 50 people. The bigger the size of the response team and the bigger the time to engage impact on the overall time to restore.

No dedicated team

9%

1 person team 2%

Team of 2-10 people

32%

Team of 11-25 people

18%

Team of 26-50 people

12%

Team of 51-100 people

12%

Team of 101+ people

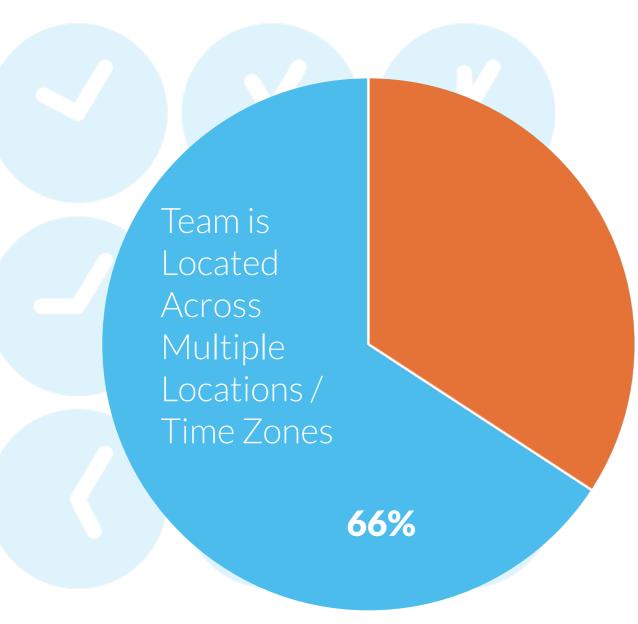
**17%** 





### Most Incident Response Teams Distributed

Two thirds (66 percent) of organizations have IT personnel required to respond to incidents spread out across multiple locations and time zones, compared to 33 percent who have the entire response team located in a single office or location.





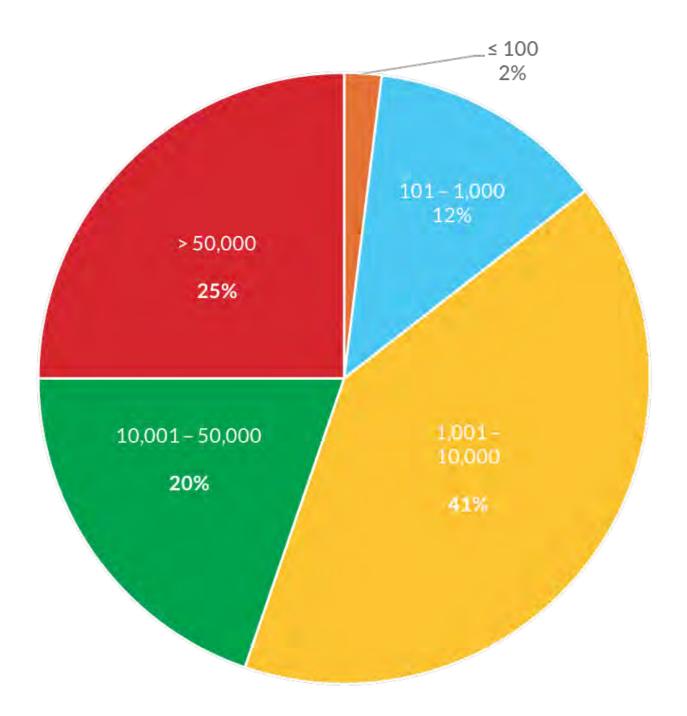


# Appendix



### Respondent Profile: Organization Size

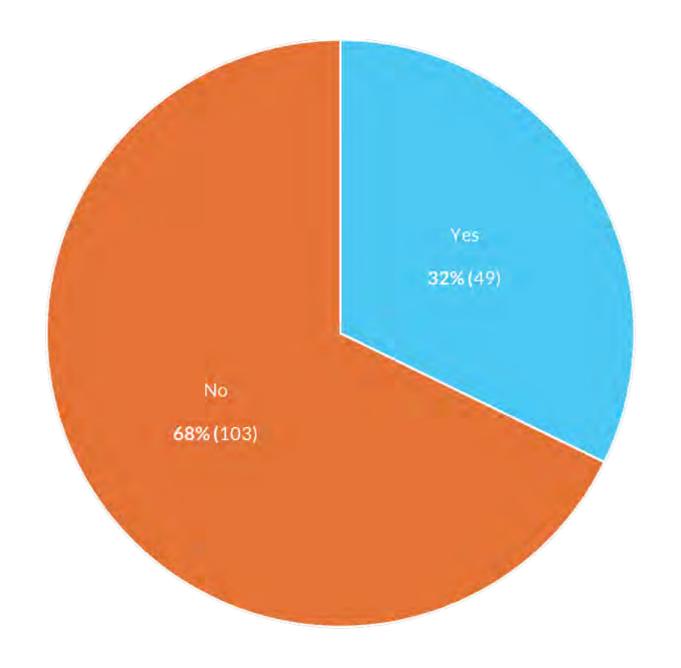
### How many people work at your organization?





# Respondent Profile: Organization Services

### **Does Your Organization Sell Products or Services**





### Respondent Profile: Organization Culture

### Would you say your organization has adopted DevOps culture?

