

IT Ops Research Report: Downtime and Other Top Concerns

Key Findings/Recommendations:

- **Organizations are becoming more concerned with downtime, but the budget priorities are lagging behind:** Regardless of company size, enterprises express a strong concern with minimizing downtime when managing multi-tier applications. Budget priorities don't seem to match this concern, however, as downtime does not rate as strong an IT revenue driver as other concerns such as security.
- **Changes are the leading cause of downtime for multi-tier business applications:** Organizations that make the most changes report the largest number of downtime incidents. Further, the largest companies make the most changes and are more likely to identify inadequate staging and testing – a top method to understand the impact of changes – as a top cause of downtime.
- **Downtime is a more serious concern for financial services companies and businesses that rely on e-commerce applications.** In transaction-heavy environments supported by the 24x7 Internet economy, downtime is a greater concern. As such, understanding the business impact of changes grows in importance.
- **Improving availability requires IT operations teams to leverage test and analysis capabilities to better understand the impact of changes before they are made in production.** Historically, test and analysis of applications has been a development and QA responsibility. As the number of changes across the business application stack grows due to more complex environments and IT trends, IT operations teams will need to understand the impact of changes and feel more certain about the changes they implement.

Key Themes:

Downtime Catching Up with Security

The survey revealed a potential disconnect between the top concerns for IT operations professionals and how budgets are presently allocated. While three other challenges – minimizing downtime, troubleshooting and ensuring high performance – ranked higher than security as top concerns, security still ranked as the IT expenditure driver among IT operations professionals.

Regardless of company size, downtime ranked as the top IT operations challenge, with 51 % of large enterprises (10,000 or more employees) selecting minimizing downtime as a top three concern in managing multi-tier applications. By contrast, security was less of a concern among medium and large enterprise companies. Only 32 % of medium enterprises (between 5000 and 9999 employees) and 36 % of large enterprises identified security as a top concern in this regard.

A Closer Look at Downtime Concerns

Looking at the types of companies that most cite downtime as their primary challenge, two key trends are worth noting. First, companies that consider e-commerce as a primary business application are almost twice as likely to identify downtime as their top concern (32 %) than other companies. Second, most were companies that highly prioritize CRM, with 16 % noting downtime as their top concern.

Additionally, more financial services firms consider downtime their greatest concern (25 %) than other companies from other industries. Healthcare firms cited downtime as their primary concern 15 % of the time – second most in the survey.

Downtime Incidents

The survey revealed that the average company experiences roughly 15 incidents of downtime per year. When analyzed against firmographic data, however, certain types of companies experience downtime at a slightly higher rate. From an industry perspective, computer-related companies (18.4) and healthcare/pharmaceutical companies (17.1) reported the most number of downtime incidents. Additionally, it would appear that e-commerce companies reported their concerns about downtime for good reason – companies of this type led all others with 18.3 incidents of downtime per year.

Regardless of industry or top application, small enterprises (750 to 4999 employees) report significantly fewer incidents of downtime (10.4) than medium enterprises (19.4) and large enterprises (18.7). IT professionals from large enterprises also reported the most significant cost of these incidents in terms of IT staff hours required to address downtime incidents – 3184 IT staff hours per year or roughly 265 hours per month. This is significantly higher than the mean for the entire respondent pool (2115 hours per year, 176 per month).

Sources of Downtime

Across all respondents, applications changes (including software patches, new releases, custom changes, and emergency changes) were identified as the primary source for downtime incidents with six of 10 of respondents (60 %). Hardware problems (21 %) and connectivity problems (16 %) were identified far less frequently. The specific application change that caused the most problems for companies was “emergency patches and fixes,” noted by 11% of respondents as the primary cause of application downtime.

Financial firms in particular focused on application changes as a primary cause of downtime incidents (68%). These firms also reported the least amount of trouble with hardware, with only 6% identifying this as a primary downtime cause.

Links Between Change and Downtime

The research revealed a strong link between the number of application changes that companies make and the impacts of downtime on these organizations. Companies that implement over 150 changes to their applications per year experience 22.3 incidents of per year at a cost of 3086 IT staff hours. This number is significantly increased from the average company's 15 incidents and 2215 hours.

The companies that make the most changes are also more likely to attribute downtime to inadequate staging and testing of those changes before they are made in the live environment. The companies that implement 150+ changes to their applications cited inadequate staging and testing 32% of the time, as compared to 20% for companies that made 16-149 changes and only 12% for companies that made 15 changes or less.

About the Report/Survey Firmographics:

StackSafe, Inc., a provider of pre-production testing and analysis solutions for IT operations teams, commissioned an independent, third-party research firm in May 2007 to conduct a survey of IT operational decision makers. The survey focused on top IT operations concerns, testing/staging procedures, change management, and other key topics.

Research Edge, Inc. of Portland, Oregon, a full service research firm recruited and screened 400 respondents who were and asked to complete a 30 minute web-based survey. A sample size of 400 provides an error margin of +/- 5% at a 95% level of confidence. Respondents verified company size, job position, industry, scope of IT decision making, etc. and were screened against the following criteria:

- Work for a company that employs over 750 employees
- Hold position of IT operations managers and/or responsible for IT operations
- Support multi-tier applications as part of daily position

About Research Edge:

Research Edge is a full service firm that specializes in quantitative and qualitative technology research. Headquartered in Portland, Oregon – and with partners providing 20+ years of experience with IT research – Research Edge provides worldwide coverage and an emphasis on business-to-business IT.

www.rsedge.com

About StackSafe:

StackSafe has developed a patent-pending software platform to meet an immediate need within the IT operations market for pre-production testing and analysis solutions. Capable of revolutionizing the way organizations introduce changes into their complex, multi-tier IT operations environments, the StackSafe™ solution is an easy-to-deploy, virtualized pre-production platform that enables organizations to understand the business impact of changes across the business application stack. The company is developing its flagship software for general availability in late 2007. StackSafe was founded in 2005 and is headquartered in Tysons Corner, Virginia.

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