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The Real Costs Of Planned And Unplanned Downtime

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FORRESTER OPPORTUNITY SNAPSHOT: A CUSTOM STUDY COMMISSIONED BY IBM AUGUST 2019

Downtime Is A Business Burden: IT Leaders Must Invest In Solutions To Reduce The Impact

Downtime is a period when technology services are unavailable to users. There are two types of downtime. Planned downtime is scheduled, for the purpose of implementing upgrades and configuration changes. While unplanned downtime is unexpected, due to circumstances such as systemwide failures and power outages. Both types pose significant costs to businesses.

IT leaders are most concerned with the business disruption linked to planned downtime and the recovery process linked to unplanned downtime, as both lead to lost revenue. To solve these challenges, IT leaders must invest in technologies that help reduce all downtime.

In August 2019, IBM commissioned Forrester Consulting to conduct a study of 100 IT directors in large US enterprises to understand the reality of downtime at their organization.

Key Findings



Planned and unplanned downtime is common within organizations. Due to its nature, unplanned downtime is more costly, but planned downtime poses unexpected and avoidable business costs.



IT leaders struggle with: 1) business disruption during planned downtime and 2) data recovery during unplanned downtime. Both lead to a loss in revenue and productivity, and both impact corporate reputation.



IT leaders must consider technologies that decrease business disruption and increase availability levels.¹ Such investments will result in greater business productivity and higher revenue.

Organizations Frequently Experience Downtime

Organizations experience planned and unplanned downtime on a regular basis. Our survey respondents indicate that they experience planned or unplanned downtime at least once a quarter, with close to half experiencing planned downtime quarterly and unplanned downtime bimonthly.

Due to its nature, our respondents find that, on average, unplanned downtime costs 35% more per minute than planned downtime. Companies are often unprepared for unplanned downtime, and when it occurs, the reaction time causes a loss of productivity and money.

“How frequently does your organization experience planned and unplanned downtime?”

Planned downtime

Weekly or more 1%

Monthly 9%

Bimonthly 15%

Quarterly 46%

Yearly 29%

Unplanned downtime

Weekly or more 6%

Monthly 35%

Bimonthly 44%

Quarterly 12%

Yearly 2%

Planned Downtime Is A Significant Cost To Enterprises

Unlike unplanned downtime, IT leaders can schedule, monitor, and control planned downtime. Because businesses have this control, the common belief is that planned downtime doesn't result in significant business losses. However, the survey respondents indicate otherwise.

On average, our respondents estimate that planned downtime costs their organization \$1.5 million in their previous quarter and \$5.6 million in their previous year. Because planned downtime is costly, some enterprises attempt to avoid it. However, avoiding downtime for the necessary bug fixes and security updates results in a greater risk of unplanned downtime, creating a downtime cycle.

Average length and cost of planned downtime

Last Quarter

224
Average minutes



Last Year

830
Average minutes



\$1.5 million
Average cost



\$5.6 million
Average cost

Base: 100 IT directors in large US enterprises
Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, August 2019

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Challenges Of Planned And Unplanned Downtime

IT leaders are having problems managing the amount of time their systems are down. For planned downtime, nearly 40% of IT leaders rank application and system restart time as a top challenge, and 37% rank service restoration time as a challenge. Companies are also struggling with being as efficient as possible while the system is down: 38% say they are challenged to find a long enough maintenance window to accommodate the necessary changes. The longer the system is down, the more costs are incurred, which makes managing the planned downtime challenges critical.

During unplanned downtime, IT leaders are trying to regain a status quo while losing as little money as possible — forty-nine percent of surveyed enterprises list data recovery as a top technical challenge, and 53% rank loss of revenue as a top business challenge.

“What are the top three challenges your organization faces when it comes to planned/unplanned downtime?”

Planned downtime

● Rank 1 ● Rank 2 ● Rank 3

Bring-up or bring-down time

14% 10% 15%

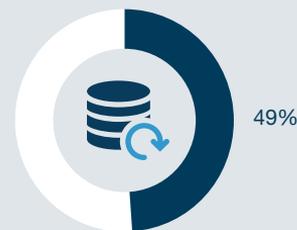
A long enough maintenance window to accommodate changes

13% 16% 9%

Service restoration time

12% 15% 10%

Unplanned downtime



Data recovery



Lost revenue

Downtime Disrupts Business Operations

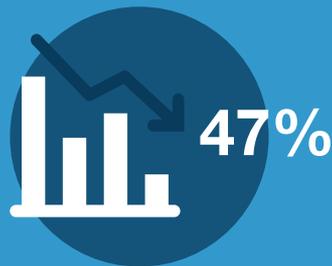
The challenges that organizations face directly disrupt business operations and, in turn, cause loss of productivity and revenue. IT leaders indicate that the costliest aspects of downtime are lost revenue (53%), lost productivity (47%), and the negative impact on corporate reputation (41%).

“Which of the following costs does your organization face due to planned and unplanned downtime?”

(Rank top 3)



Lost revenue



Lost productivity



Lost brand equity
or trust

Base: 100 IT directors in large US enterprises
Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, August 2019

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Enterprises Must Invest In Technologies To Increase Availability

IT leaders are ready to invest in technologies that help decrease downtime by speeding up the restart process. Nearly 80% of businesses indicate they'd invest in a technology that would accelerate their middleware restart and recovery process. In addition, 77% of businesses plan to increase investments in solutions that would process backlog quicker, and 75% would invest in a technology that would decrease the amount of bring-up time.

IT leaders anticipate these investments will decrease their average annual planned downtime by 28% and their average annual unplanned downtime by 16%.

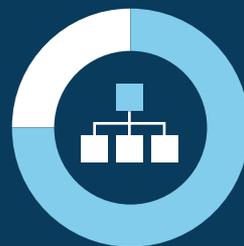
“How likely is your organization to invest or increase investments in a mainframe technology with the following capabilities?”



79% Faster restart and recovery



77% Processing backlog



75% Bring-up time

Investments In New Recovery Technologies Alleviate Downtime Challenges

IT leaders expect their investments to solve top planned and unplanned downtime challenges. When asked about the benefits of experiencing close to zero downtime, 50% of IT professionals indicate that it would allow them to run maintenance more frequently, addressing a top challenge for planned downtime. Forty-six percent of IT leaders indicate that less downtime would mean faster data recovery, addressing one of the top challenges of unplanned downtime. The right investments can help expedite planned downtime, reduce unplanned downtime, and, as a result, help reverse the ugly cycle of downtime.

“If your organization experienced close to zero downtime, what technology benefits would you expect to see?”



- Ability to run maintenance more frequently (50%)
- Faster data recovery (46%)
- Faster restoration of service after an outage (41%)
- Faster disaster recovery (40%)

IT Leaders Expect A Strong Return On Their Investments

Beyond technology benefits, 63% of IT leaders anticipate that their investments in new recovery technologies will increase revenue. In addition, over half of IT leaders expect their investments in new technology to reduce operating costs, improve their competitive advantage, and grow employee productivity.

“If your organization experienced close to zero downtime, what business benefits would you expect to see?”

63%

Increased revenue

53%

Reduced operational cost

51%

Improved competitive advantage

50%

Increased employee productivity

Base: 100 IT directors in large US enterprises
Source: A commissioned study conducted by Forrester Consulting on behalf of IBM, August 2019

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Conclusion

Downtime of any kind is a significant business cost. However, organizations are still experiencing planned and unplanned downtime on a regular basis, which results in a loss of business productivity and revenue.

- Planned downtime disrupts business workflows and ultimately results in revenue and productivity losses. IT leaders are concerned with the amount of time their systems are down and the cost it has on their organization.
- Unplanned downtime is unpredictable, and it creates extra costs for organizations. From a technical perspective, IT leaders are concerned with the data recovery process during unplanned downtime. From a business perspective, IT leaders are concerned with the overall loss of revenue caused by unplanned downtime.
- Organizations are investing in new recovery technologies that will increase resiliency and help decrease both their planned and unplanned downtime. In return, IT leaders expect higher revenues and reduced business costs.

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Methodology

This Opportunity Snapshot was commissioned by IBM. To create this profile, Forrester Consulting supplemented this research with custom survey questions asked of 100 respondents in IT leadership roles at large US companies with a revenue of \$250 million or more. The custom survey began and was completed in August 2019.

ENDNOTES

¹ Source: "Design for Dependability By Embracing A Future Of Trusted Technology," Forrester Research, Inc., February 25, 2019.

ABOUT FORRESTER CONSULTING

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Demographics

RESPONDENT LEVEL

Director in IT: **53%**

VP in IT: **41%**

Senior-most IT decision maker: **6%**

COMPANY EMPLOYEE SIZE

5,000 to 19,999: **83%**

20,00 or more: **17%**

COMPANY REVENUE

\$250M to \$499M: **55%**

\$500M to \$999M: **22%**

\$1B to \$4.9B: **14%**

\$5B or more: **9%**



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