Research Report Part II

The Avoidable Cost of Downtime

Phase 2

MAY 2011

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Avoidable Cost of Downtime
Phase 2

Executive Summary

CA Technologies commissioned independent research to explore companies' experiences of IT downtime. Two thousand organizations across North America and Europe were surveyed and the data has provided invaluable insights into how they are affected by IT downtime and recovery.

The survey data is being developed into a series of themed reports. The first phase, the financial impact of IT downtime and data recovery, was launched in December 2010. This second phase is focusing on hidden forms of damage to the business, including the employee productivity dip associated with IT downtime, and disaster recovery policy.

The data from the second phase of the Avoidable Cost of Downtime showed that throughout North America and Europe, IT outages are frequent and lengthy. During these periods, business-critical systems are interrupted, leading to a drop in productivity of the staff affected. Downtime also affects businesses in other ways. The survey found that it damages companies' reputations, staff morale and customer loyalty. Despite this, many organizations do not have a formal and comprehensive disaster recovery policy in place.

Key Findings

THE KEY FINDINGS OF PHASE 2 OF THE SURVEY (**NORTH AMERICA AND EUROPE**) ARE:

- Organizations are collectively losing more than 127 million person hours (127,249,275) each year through IT downtime and data recovery. On average, each company loses 545 person hours a year.
- Each business suffers an average of 14 hours of downtime per year, during which time employees are only able to work at 63% of their usual productivity.
- After systems are back up and running, organizations lose an average of nine additional hours per year to data recovery time. During these times, employees' productivity only climbs to 70%.
- 50% of organizations revealed that IT outages can damage a company's reputation. 18% thought this would be 'very damaging'.
- 44% of respondents believe IT downtime can damage staff morale and 35% report it can harm customer loyalty.
- A third (33%) of organizations surveyed did not have a fully developed and formal disaster recovery policy in place. 20% report it is currently being developed and the remaining 13% have no formal policy planned.
- 87% of businesses indicated that failure to recover data would be damaging to the business. 23% said this would be 'disastrous'

Further Information
For further information about the *Avoidable Cost of Downtime* please go to:
www.arcserve.com/costofdowntime

Survey Results

Productivity

When IT systems fail an organization's staff need to find alternative ways to perform their tasks. However, as many business operations are becoming wholly reliant on the use of IT systems and access to networks, any failure often means staff are left unable to perform their duties. Productivity drops, and revenue generation is negatively impacted.

The impact on productivity can be measured by looking at the number of staff affected by an IT outage, multiplying that figure by the length and frequency of outages, and considering how much of the affected role is dependent on the failed systems. Across Europe and North America this produces some interesting and often alarming results.

TOTAL NUMBER OF PERSON HOURS LOST PER YEAR

	TOTAL	NORTH AMERICA	EUROPE
Person hours lost	1,270,249,275	70,607,477	37,160,146

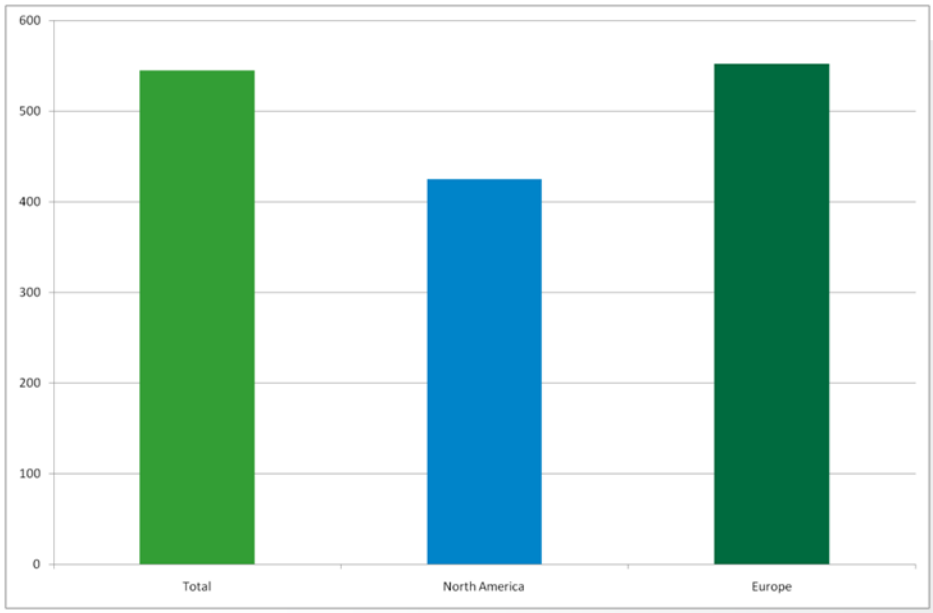
*Please note: The number of person hours lost for North America and Europe do not equal the total because the total figure is based on the overall average mean for person hours and those for Europe and North America are based on their own respective means with no weighting to take account of differences in relative sample and universe sizes.

PERSON HOURS LOST – BY VERTICAL SECTOR AND COMPANY SIZE

	FINANCE	PUBLIC SECTOR	RETAIL	MANUFACTURING
Person hours lost	5,365,365	38,625,883	53,430,392	17,458,257

	SMALL (50-499 EMPLOYEES)	MEDIUM (500-999 EMPLOYEES)	LARGE (1000+ EMPLOYEES)
Person hours lost	120,767,070	4,749,365	6,373,816

AVERAGE NUMBER OF PERSON HOURS LOST PER COMPANY, PER YEAR

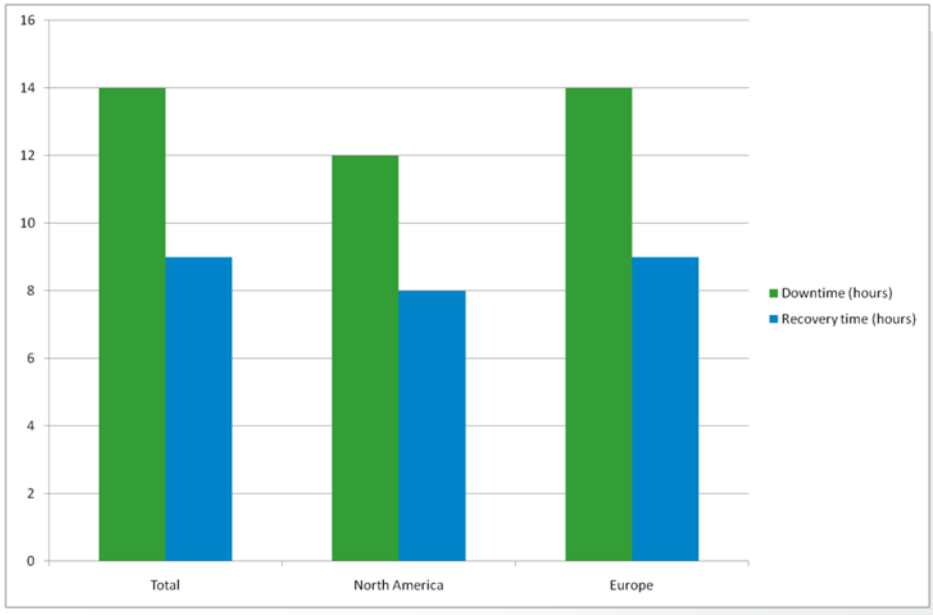


The average organization loses 545 person hours per year through IT downtime. European companies lose an average of 552 person hours per year while those in North America lose 425.

Comparing the different vertical sectors, organizations in the public sector lose the person hours per year – 994. Retail companies lose the least – 370.

Large and small companies both lose more than the average number of person hours per year through outages (614 and 573 man hours respectively). Medium-sized companies only lose an average of 378 person hours per year.

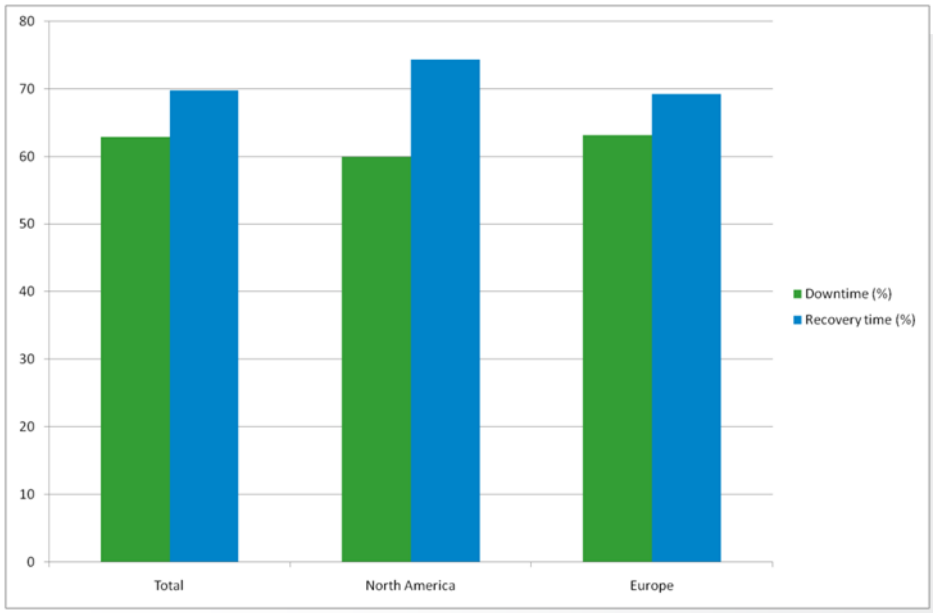
DOWNTIME AND RECOVERY TIME



Organizations suffer from an average of 14 hours of IT downtime and nine hours of recovery time (when systems have been restored but data still needs to be recovered). The figures for North America are slightly lower: 12 hours of downtime and eight hours of recovery time.

Organizations in the public sector experience the longest downtime (18 hours) and recovery time (11 hours) per year. The retail, finance and manufacturing sectors have shorter periods of downtime and recovery time – 22, 21 and 20 (total) hours respectively.

IMPACT OF DOWNTIME AND RECOVERY TIME ON PRODUCTIVITY

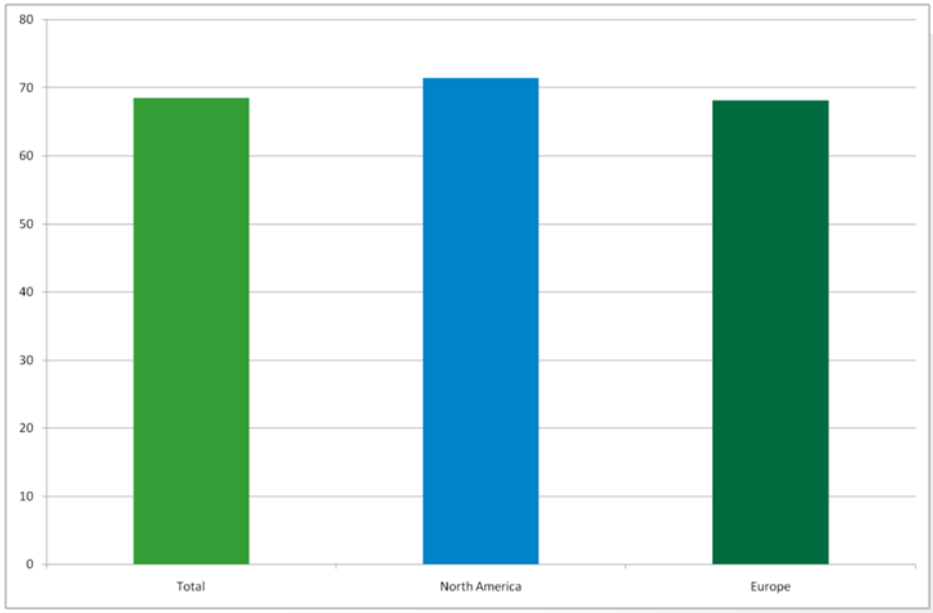


Overall for North America and Europe, during periods of IT downtime staff were only able to work at 63% productivity. During data recovery time, this increased to just 70% showing how necessary the availability of data is for employees to carry out their jobs satisfactorily. In North America, staff were left able to work at a slightly lower rate - at 60% productivity - but when systems were back up and running, this productivity level climbed to 74%.

Public sector organizations are the least productive during IT outages, reporting that employees can only work at 58% productivity during downtime and 67% during recovery time. Staff in the finance sector are the most productive, working at 67% productivity during downtime and 72% during recovery time.

Small companies were found to be the least productive during both downtime and recovery time – 56% and 62%. Medium and large companies experience similar levels of productivity – 67% and 66% during downtime, and 74% and 73% during recovery time.

STAFF AFFECTED

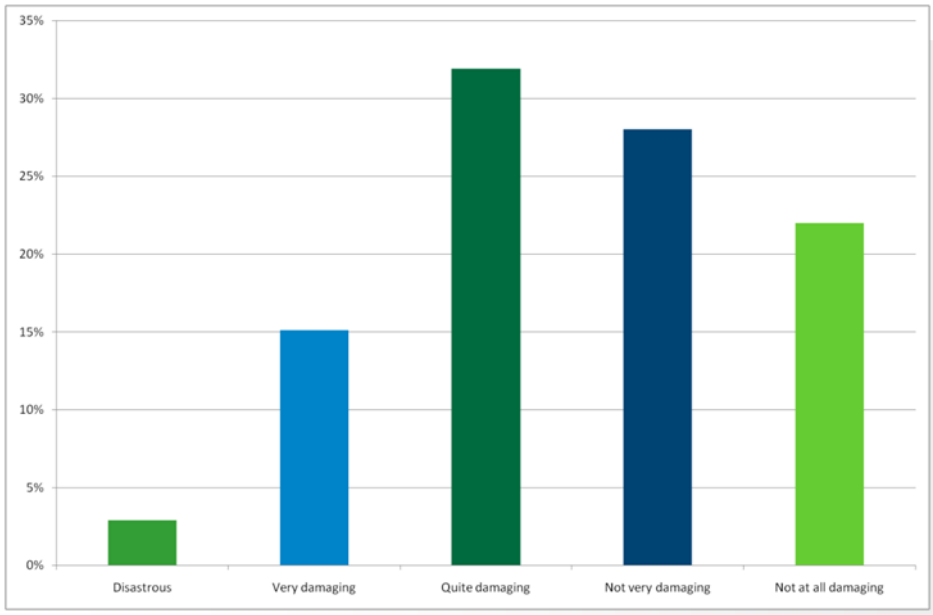


Organizations reported an average of 68 staff are affected by each IT outage (same in Europe). In North America, 71 members of staff are affected by each outage.

In the public sector, IT outages affect 91 members of staff, on average. In the retail sector, this drops to 49.

Unsurprisingly, more staff are affected in large companies than small ones – 96 compared with 50.

EFFECT OF DOWNTIME ON COMPANY REPUTATION

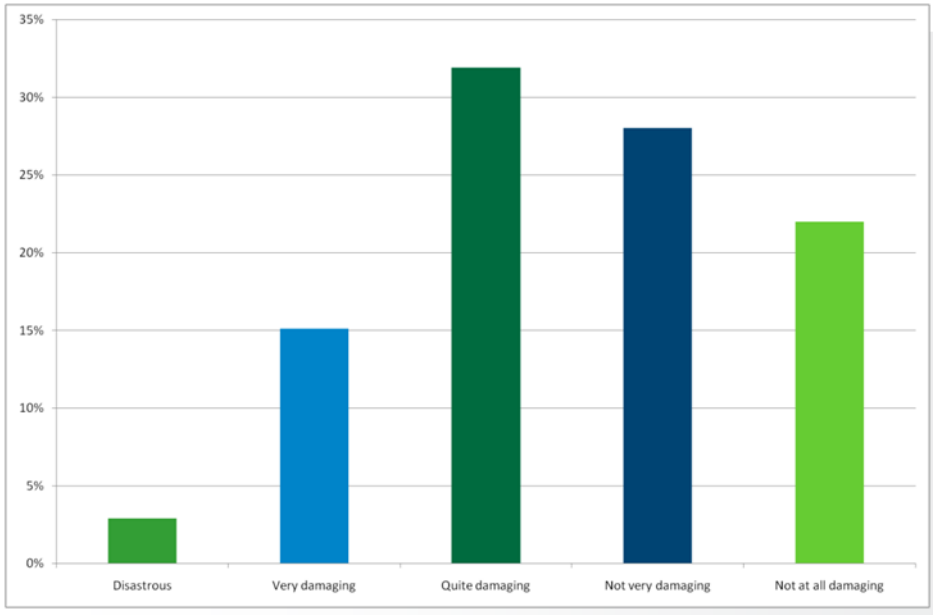


Across North America and Europe, half (50%) of respondents revealed that an IT outage would have a damaging effect on a company's reputation. 18% claimed this would be 'very damaging'. Similar figures were found in both North America and Europe.

The public and retail sectors were most concerned about the damage to company reputation from an outage: for both sectors 54% of companies reported that it would be 'damaging'. In the manufacturing sector, only 44% of respondents thought an IT outage would have a damaging effect.

More medium and large companies reported that IT downtime would have a damaging effect on company reputation than small companies – 56% and 57% compared with 38%.

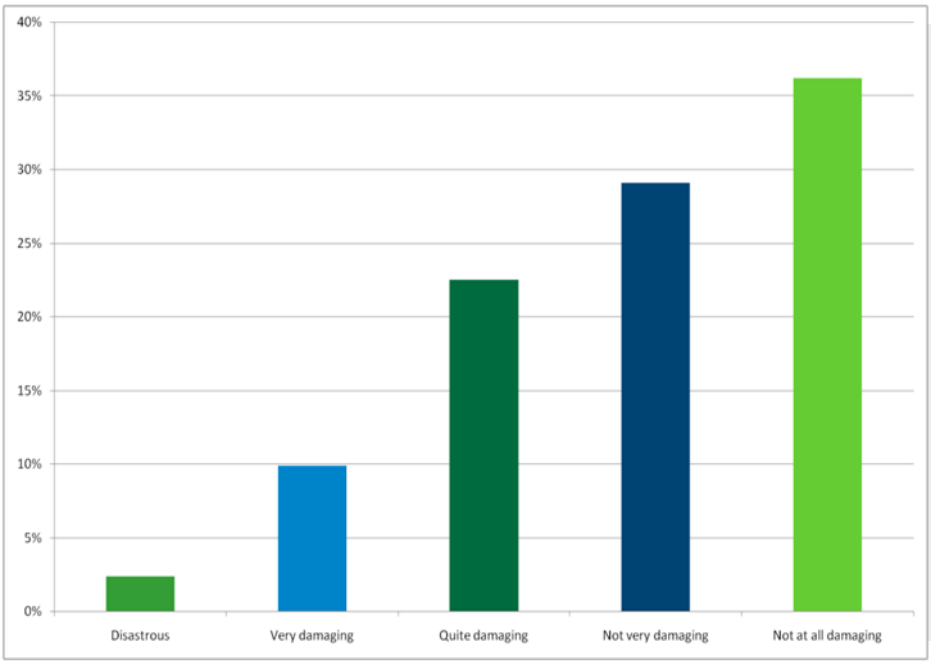
EFFECT OF DOWNTIME ON STAFF MORALE



Downtime was also found to have an impact on staff morale. 44% of organizations reported that the effect would be damaging. 16% of companies in North America thought the effect would be 'very damaging' (13% in Europe).

Large and medium organizations were also more concerned about the effect of outages on staff morale than small companies. 50% of large and 47% of medium thought this would be 'damaging' compared with just 35% of small companies. There was no significant difference between the vertical sectors.

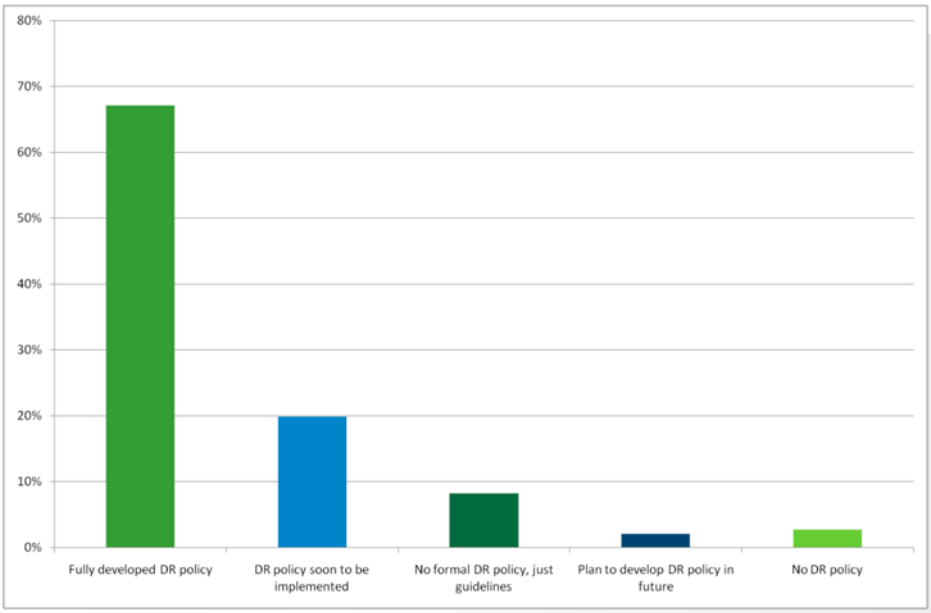
EFFECT OF DOWNTIME ON CUSTOMER LOYALTY



IT downtime was found to have a slightly less detrimental effect on customer loyalty. 35% of organizations across North America and Europe believed the effect would be damaging.

Large companies were the most concerned about the effect on customer loyalty – 42% thought it would be 'damaging'. 36% of medium and 27% of small companies thought the same. Again, there was not a significant amount of difference between the vertical sectors.

DISASTER RECOVERY POLICY

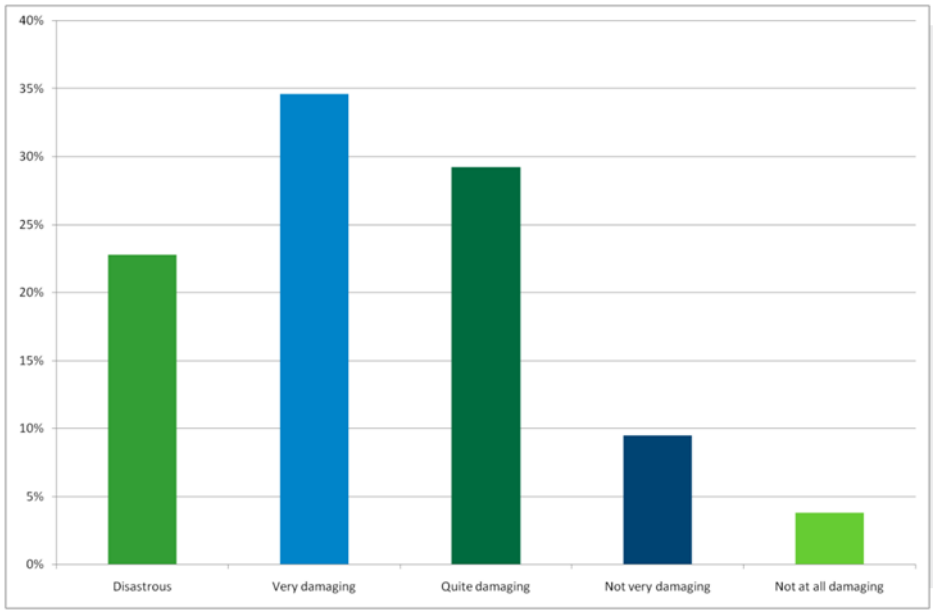


A third (33%) of companies across North America and Europe did not have a fully developed and implemented disaster recovery policy. One fifth (20%) claimed that a policy will soon be implemented. 13% had no formal policy and no current plans to develop one.

The figure varies widely between the continents. In Europe 30% of organizations did not have a current and formal disaster recovery policy, whereas over a half (56%) of companies in North America do not.

Fewer small companies have a disaster recovery policy in place than large – 38% do not have anything formal in place compared with 27% of large companies. Figures were similar between the different vertical sectors.

IMPACT OF FAILURE TO RECOVER DATA ON THE BUSINESS



The majority of organizations agreed that failure to recover data would have a damaging effect on the business (87%). 23% thought this would be 'disastrous'.

Large companies thought the impact of failure to recover data on the business would be more damaging than smaller companies – 28% thought it would be 'disastrous' compared with 20% of medium and 21% of small companies.

Conclusions

Phase 2 of the Avoidable Cost of Downtime survey looked into the impact of IT downtime on employee productivity levels, additional damage to the business and disaster recovery policy. Not only did it find that downtime across North America and Europe was frequent and lengthy, but that the effect of this downtime on employee productivity was significant. In North America and Europe, over 127 million person hours per year are lost due to service outages; hours which if not wasted in this way could be used to improve a company's revenue-generating ability.

Evidence of differences in IT downtime and disaster recovery policy was found between North American and European companies. The amount of downtime was lower in North American organizations and far fewer North American companies had formal disaster recovery policies in place than their European counterparts.

In addition, IT downtime is affecting companies in ways that are not so easily measurable but which may still affect the company's bottom line: company reputation, staff morale and customer loyalty.

Much of the impact on productivity can be reduced by more effective data protection strategies, but many organizations do not have a formalized policy in place. If this situation is rectified, it can lessen the frequency and length of IT outages and therefore improve productivity, reputation, morale and customer loyalty.

CA Technologies believes that many companies endure longer than necessary interruptions to their IT systems, because their data protection policies aren't robust enough. Businesses often focus their efforts on backing up data securely while neglecting to consider how quickly they can recover their data in the event of a failure. This 'speed of recovery' is a good starting point for businesses planning or re-evaluating their disaster recovery needs.

CA and its partners work with companies to help them plan and roll-out the policies and IT systems they need for effective data protection. With the right solutions in place, businesses will reduce IT downtime, increase productivity, and increase competiveness.

The majority of businesses are dependent to varying degrees on IT systems so when these fail, it results in an alarming drop in employee productivity.

Tips on Avoiding Downtime and Maximizing Staff Productivity

- Identify business-critical systems and data. The first step in minimizing the impact of downtime on an organization is to identify the applications and data that directly drive revenue, and the number of staff an outage would affect. All too often, organizations apply the same policy and process to all data. During a recovery, the availability of critical systems is hampered by the need to also recover non-critical data.

- Design the infrastructure to minimize the frequency of IT outages. For critical business applications, invest in infrastructure solutions, such as clustered services and replicated storage, which provide the highest levels of availability.

- Implement a data protection solution to deliver high-speed recovery. Replication and disk-based backup technologies allow faster recovery times. Make sure the solutions protect against logical corruption of data as well as physical failure. Granularity of the backup will drive more granular recovery – so that organizations can focus on their most critical data.

- Work with the right partner. Individual business may require different solutions. Specialized data protection partners can understand the specific needs of an organization and help deliver a complete solution.

Methodology

The fieldwork was conducted between July and November 2010 by Coleman Parkes Research*. 2,000 online interviews were carefully conducted with CIO/IT directors/IT managers where appropriate across companies in North America and Europe.

Fieldwork was conducted in an equal split across the following market segments:

- Finance
- Public sector
- Retail
- Manufacturing.

Fieldwork was also carried out in an even split across companies of the following sizes:

- 50-499 employees (‘small’)
- 500-999 employees (‘medium’)
- 1000+ employees (‘large’).

The following countries in Europe were surveyed: UK, France, Germany, Spain, Italy, Belgium, the Netherlands, Norway, Sweden, Finland and Denmark.

Calculating lost productivity

The total number of man hours lost due to avoidable IT outages takes into account the total number of hours of downtime when systems are offline, the total number of hours between system restoration and recovery of all data, the impact on staff productivity during both of these periods, the number of staff affected and the overall number of avoidable IT outages a year.

Universe estimates for the three different company size categories were obtained from published sources. This data was used to gross up the impact on productivity obtained from the survey. Sensitivity checks completed on relevant survey findings confirmed that it was not necessary to apply company size weights to individual survey records.

*Research carried out by Coleman Parkes Research Ltd

Resources to reduce the impact of IT Downtime

To find out more about how you can reduce IT Downtime
please visit www.arcserve.com/costofdowntime

Social Media Links – have your say too

- Facebook
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