Future-Proofing Your Business: Insights from Customer Data on Environmental Continuity, Safety & Sustainability

What are the key concerns organizations have as they review their business continuity plans and prepare themselves against unexpected costly downtime caused by environmental factors?

In today's ever-changing landscape, business continuity remains a paramount concern for organizations. Threats like downtime, data loss, disruptions, and employee health continue to be top of mind.

We first published a report on Business Continuity Concerns in 2022 that our readers found to be extremely informative and valuable; this updated white paper incorporates the latest industry statistics. We recently surveyed 3000 professionals to gather their insights on environmental concerns, business continuity planning, and their experiences with outages. The survey results provide valuable data on how businesses are preparing for disruptions and ensuring maximum uptime in the future.

To focus on additional concerns users have with current business initiatives, we also inquired about safety and compliance in the workplace, along with sustainability efforts. Their responses helped to paint a picture of businesses who are looking to the future to protect their people, property, and productivity to provide peace of mind to everyone in their organization.

What environmental concerns are top of mind?

Heat and high temperatures remain the largest environment concern for organizations, with **77%** of survey respondents listing it as their top worry. This is an understandable concern as high heat can lead to a wide range of issues within an organization and its facilities.

Data Center / Server Room Outages

High heat is one of the leading culprits of data loss and downtime. Data center environments must stay within specific defined ranges to ensure optimal server, hard drive, and appliance performance. When data center temperatures reach **81°F (27°C)** they are at the top range of recommended temperature, according to the American Society of Heating, Refrigerating and Air Conditioning (ASHRAE).

Once that temperature is exceeded, hard drive performance begins to drastically decrease and shortens hardware life – even a 5°C increase in temperature can reduce hard drive life by almost two years, leading to early failure, data loss, and crashes.

ASHRAE Suggests Temperatures of 64-80°F (18-27°C) for Data Centers.

Recent information shared by The Uptime Institute noted that while reported data center and server room outages are decreasing in frequency, the costs associated with those outages are steadily rising due to the higher costs of goods and services. Ongoing concerns over rising temperatures overall due to climate change, along with power grid infrastructure issues, will negatively impact organizations over the coming years.*****

Cold Storage Concerns

Freezers and refrigerators in multiple industries are impacted when heat rises within their units. Whether it is edible goods that can no longer be served or sold for fear of foodborne illness, vaccines that lose effectiveness, or stored samples that can no longer be used, cold storage temperatures that move outside of their required zones will cause irreparable harm.
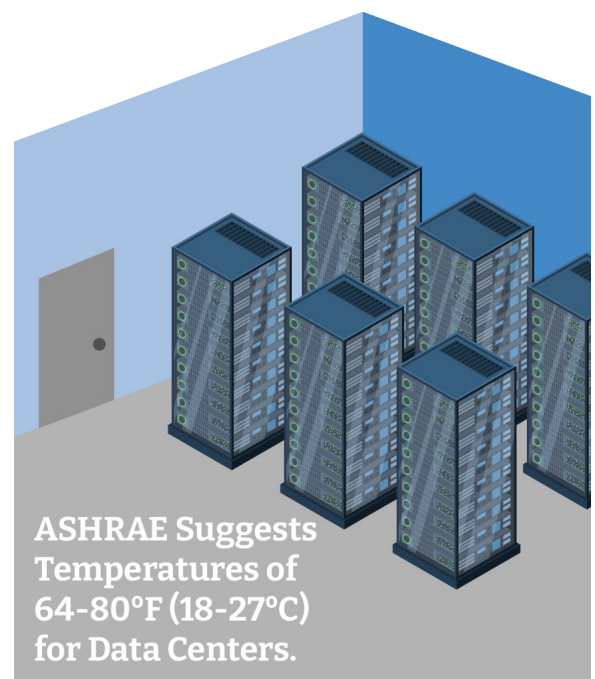
Safety & Compliance

High heat, when combined with high humidity, results in a high heat index which can cause a wide range of health-related problems. Employees become fatigued more easily, decision making is impaired, and serious health concerns can come on quickly, including dizziness and fainting. These conditions are also ripe for mold or mildew growth, which can also lead to health-related concerns.

Higher temperatures than normal, even without high humidity, can cause problems for the people within your facilities. *An increase of just 8 degrees can result in a 10% decrease in the cognitive abilities of your staff, students, or tenants.* For any organization, be it a business, educational facility, or hospital, keeping temperatures in recommended ranges and not getting too hot can help prevent a wide range of potential problems that can cause downtime.

Recently, in the United States OSHA (Occupational Safety and Health Administration) announced that fines for workplace incidents, including those related to their ongoing heat safety initiatives, would be increased. As a result, **68%** of survey respondents noted that they are concerned about remaining in compliance for workplace safety. We expect safety regulatory bodies in other countries, such as EU-OSHA and CCOHS, to follow suit with stricter heat and heat index guidelines to protect workers in both indoor and outdoor environments; part of those guidelines include proactive monitoring and reporting along with historical data collection.

Power Loss and Water Leak Concerns

Professionals surveyed also noted that unexpected power loss (**5%**) and water leaks (**4%**) were also environmental concerns that they felt could impact their business continuity. While backup generators and uninterruptible power supplies are far more widespread than even just a few years ago, any power disruption can cause damage to an organization's ability to remain up and running.

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Water leaks are also a problem, especially when they remain undetected. Insurance data shows that *water damage is 10 times more likely to occur than fire damage*, yet many organizations do not proactively monitor for potential leaks in the same way that they monitor for fire or smoke. Addressing potential leaks in your business continuity plan will help your organization remain vigilant about potential water damage and downtime that will result from a leak.
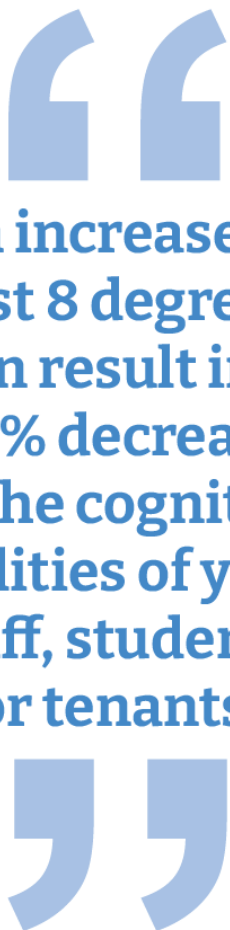
How prevalent and costly are downtime events?

Nearly one third of the professionals who responded to the survey (**28%**) have experienced downtime events in the previous 24-month period. While this is an alarming number on its face, this shows further proof that no organization is immune from downtime, no matter how well prepared they are. However, this statistic is far lower than in 2022, where an astounding **56%** of respondents noted that they had experienced outages. This decrease shows that organizations have been more focused on building resilience into their networks and mission-critical systems.

What is more concerning than the number of organizations that have experienced downtime is the length of time that their organizations couldn't operate. Nearly **30%** of respondents had downtime lasting 1 – 4 hours, while another **29%** of respondents had downtime lasting 4-8 hours. Put together, nearly 60% of organizations had downtime that lasted anywhere from half a day to a full day!
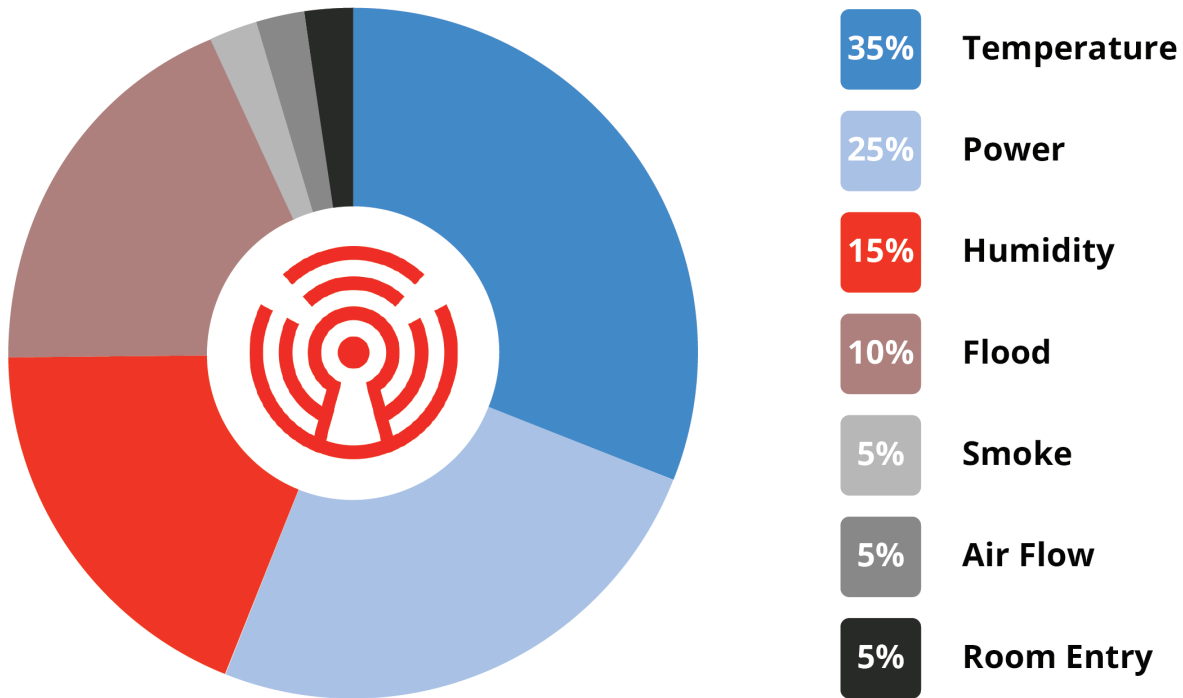
Downtime Costs and Losses

When it comes to financial loss, nearly a quarter of respondents (**24%**) reported a monetary loss due to lost productivity and lost revenue due to not being able to conduct business. Some organizations may be well-equipped to absorb losses as a cost of doing business, however even a small to medium sized business could be badly impacted with a loss of productivity and revenue for just a few hours. Even more concerning were the 2% of respondents who noted their losses extended into the six-figure range.

30% Of Outages Are Caused By Environmental Factors

35%	**Temperature**
25%	**Power**
15%	**Humidity**
10%	**Flood**
5%	**Smoke**
5%	**Air Flow**
5%	**Room Entry**

Whether it's lost data or lost goods that were damaged or rendered unusable, or simply lost productivity, experiencing downtime with this sort of financial hit is unacceptable no matter the organization's size. These types of figures help to reinforce the need to have a defined business continuity plan that is understood and in practice throughout the organization.

Is Business Continuity a Focus for Organizations?

In our 2024 survey, **20%** of the respondents noted that their organization did not have a documented business continuity plan. This figure is well below the **31%** of respondents who didn't have a business continuity plan in 2022, which is encouraging to see.

When asked why they felt their organization was not fully prepared in the event of an unexpected outage, nearly half of all respondents (**41%**) noted that

budget constraints were the primary reason for not being prepared. Based on the financial losses noted previously, it may make sense for organizations to evaluate their risk and determine how much budget they should allocate to business continuity to prevent potential downtime as a result from environmental factors.

While budget was the top concern preventing organizational business continuity, many respondents felt that staffing (**20%**) and organizational knowledge (**20%**) were barriers to helping prevent downtime. These responses remained in line with our 2022 survey. With many organizations still firmly entrenched in hybrid or remote work models, having adequate "boots on the ground" can reduce the ability for organizations to fully inspect all aspects of their facilities on a regular basis. Installing and maintaining remote monitoring capabilities via hardware and software can help mitigate the impacts of reduced staffing.

Additionally, implementing learning modules or working with third party vendors to identify gaps within the organization's knowledge base can quickly bring a staff up to speed on where their weaknesses are when it comes to their potential business continuity. For organizations that may not have the ability or budget to work with outside help, there is a wealth of freely available helpful information, documentation, and tools available online they can take advantage of. Resources such as business continuity checklists and downtime calculators can help identify key pain points and areas where organizations can focus their efforts to help prevent downtime.

Looking To The Future - Sustainability Efforts

For our 2024 survey, we asked if organizations currently had sustainability efforts or goals in place, and if so, how were they being monitored?

Over half of respondents (**58%**) noted that their organizations did not currently have any sustainability efforts in place. While sustainability is still in its relative infancy overall, many organizations are looking to sustainability when faced with rising power and cooling costs, while also looking at the footprint their consumption is having on the environment.

Of those who did note having sustainability efforts in place, many did not know who in their organization was responsible for those efforts, or who was monitoring those efforts to prove viability. 5% of respondents noted that their sustainability efforts were manual and time consuming; a proactive automated approach would certainly be preferable. This way, initial baselines could be set and then monitored over time to prove whether their sustainability efforts were showing improvement and gains.

Take Steps To Prevent Costly Environmental Downtime

No organization can maintain 100% uptime. Problems can and will occur that can cause costly downtime events and negative impacts on your organization. Taking the time and steps to implement business continuity plans, installing proactive monitoring, and having defined steps in place in the event of an incident will help your organization quickly recover, reduce loss, and hopefully allow you to prevent an outage from even occurring at all if you are fully forewarned and prepared.

Business continuity is far more cost effective than disaster recovery, especially when considering some of the costly losses reported in the survey that informed this report. Investing budget into proactive measures is proven to prevent far more costly losses in the event of extended outages and downtime caused by unexpected environmental factors. By taking proactive steps now to prevent downtime, your organization will be prepared and ready to identify potential outage events, saving thousands of dollars in lost revenue and productivity.

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