

THE COST OF INTERNET DOWNTIME

The impact of outages on UK businesses in 2023

EXECUTIVE SUMMARY

- » In today's fast-paced business landscape, the reliance on the internet and seamless connectivity is constantly growing, thanks to the influence of the cloud and digital transformation initiatives.
- » But with this dependence comes increased costs if the internet falters. Compared to 2019, 81,000 additional businesses experience financial losses the moment connectivity slips away. Beyond the 8-hour mark, 240,000 more companies find themselves in the red.
- » These costs affect businesses of all sizes, with the median time for financial losses to kick in standing at 6 hours for those with employees. This applies to all firms with employees, from micro-companies with 2 to 10 employees and large enterprises boasting over 250 staff members.
- » Cumulatively, UK businesses experienced 8.8 million internet failures and 50.5 million hours of disruptive downtime in 2023, where their ability to trade or access essential services was affected. The financial impact of this downtime came with a price tag estimated at £3.7 billion.
- » Small and medium-sized businesses were hardest hit, facing frequent incidents and prolonged downtime. Sectors such as hospitality, IT, and manufacturing bore the brunt of lost productivity and financial setbacks.
- » Our research has unveiled a compelling correlation between businesses leveraging cutting-edge technologies like cloud productivity tools, AI, and automation, and those suffering losses from internet outages. Moreover, those embracing e-commerce, automation, and public cloud services incurred the highest costs during disruptive downtime.
- » Whilst internet downtime can't always be prevented, measures including good planning, higher capacity services and expert support can reduce the risk of internet failure and mitigate the ensuing disruption and financial fallout.



INTRODUCTION

In the dynamic landscape of the UK business arena, particularly the small and medium-sized enterprises (SMEs) that form the UK's economic backbone, there has been an impressive surge in the adoption of cutting-edge technologies in recent years.

The infusion of automation, AI, cloud productivity tools, and cloud telephony in this segment of the business community has skyrocketed by an astonishing 1,000 % since 2019¹. These investments in transformative digital technologies are not just a trend but the lifeline for survival and prosperity in today's hyper-connected, fiercely competitive business environment.

Yet, with great innovation comes a heightened reliance on internet connectivity.

This report presents the findings of a comprehensive study that examined the reliance of modern businesses on internet connectivity and their ability to withstand disruptions to this critical service.

The study highlights a key finding: internet connectivity is closely linked to business performance in today's digital landscape, and disruptions can have financial consequences.

This report is more than just an observation. It provides actionable resources for businesses.

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¹ Beaming, January 2024: Navigating the Tech Landscape SME IT Adoption & Investment Plans for 2024

HOW LONG COULD YOU MANAGE WITHOUT CONNECTIVITY?

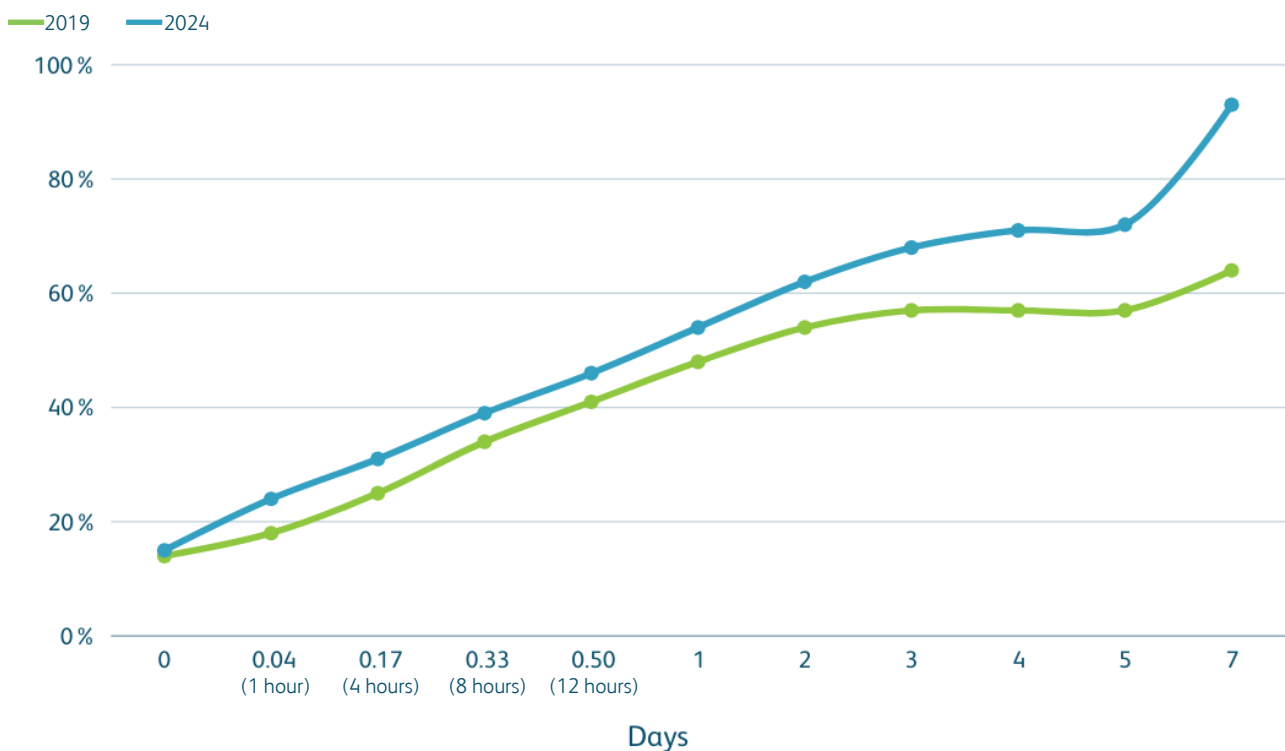
In January 2024, we asked researchers at Censuswide to survey 500 UK business leaders about their use of technology and the internet to discover the extent of their preparedness for the risks associated with disconnection.

For 15 % of the UK business population, totalling around 850,000 enterprises, the financial repercussions of internet or network failure are immediate – money starts slipping away the moment connectivity falters. These losses manifest as missed opportunities and operational disruptions.

As time ticks away, the number of businesses experiencing financial setbacks rises. Within the first hour of disconnection, 24 % of UK firms, 1.3 million nationwide, are already losing money. After 24 hours, the toll climbs to more than half (54 %) of all companies and over 80 % for those with more than 10 people.

Connectivity is required for real-time communication, collaboration, and data exchange. The pivotal role of e-commerce in sales and transactions, coupled with the surge in remote work initiated by the pandemic, has catapulted our reliance on these tools.

After how long would your business start losing money without connectivity?



Source: Beaming, Censuswide & Opinium

The 15 % of businesses experiencing immediate financial impact when connectivity fails represents a slight uptick from the 14 % recorded in 2019. While this may seem marginal, it translates to 81,000 additional UK companies affected by internet dependency.

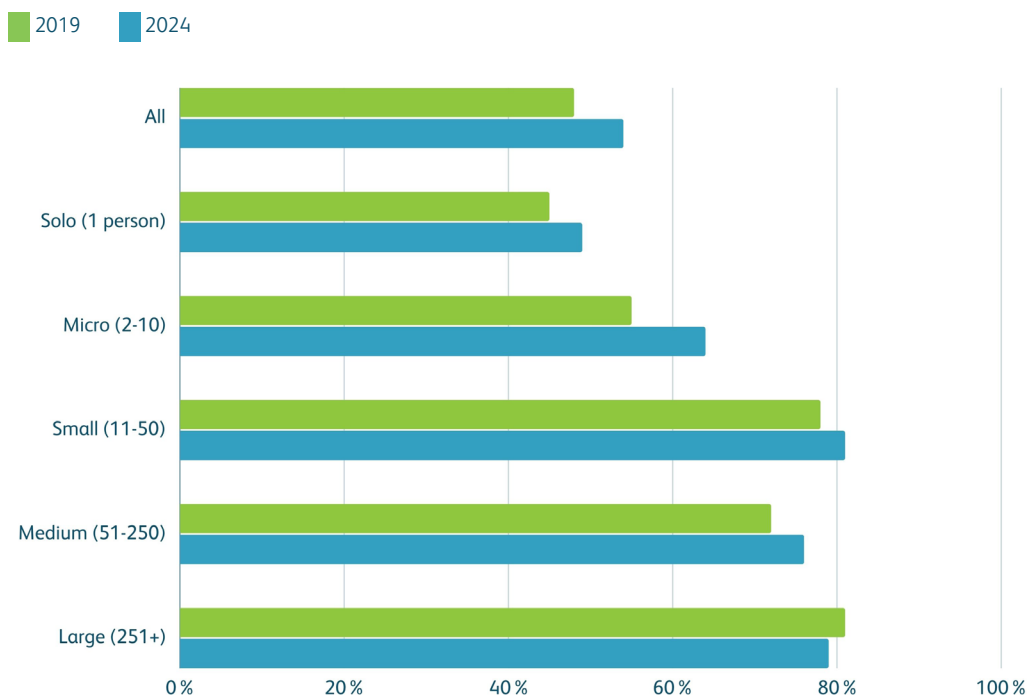
In 8-hour internet outages – a standard working day – 39 % of UK businesses experience financial losses. This marks an increase from the 34 % reported in 2019, adding nearly 240,000 more companies to the list of those financially impacted.

The median time for businesses with employees to start losing money when the internet fails is 6 hours. This applies to micro companies with 2 to 10 employees up to large enterprises with more than 250.

Facing the prospect of increased vulnerability to financial losses due to internet failures might be daunting. However, it's crucial to weigh these costs and risks against the potential savings and benefits associated with embracing the cloud and other online services.

The good news is that businesses can enhance their resilience to internet outages, even as they adopt new technologies and innovative working methods. If you rely on the internet and haven't already, it's worth considering measures to keep your business ticking when confronted with connectivity disruptions.

% of businesses losing money after 24 hours with no connectivity



Source: Beaming, Censuswide & Opinium

FIRMS LOST 51M HOURS TO INTERNET OUTAGES IN 2023

Productivity challenges have become a persistent issue for UK businesses in recent years, posing threats to their competitiveness, profitability, and overall economic growth. Internet outages present a significant source of disruption to productivity.

Tackling productivity concerns has emerged as a paramount goal for businesses in the UK. In 2024, over a third (35 %) of leaders in small and medium-sized enterprises (SMEs) pinpointed greater efficiency and productivity as their most crucial technology objective. The escalating reliance on online technologies amplifies the impact of disruptions.



Our study unveils a stark reality, in 2023, UK businesses collectively experienced **8.8 million internet failures** that impeded their ability to trade or access essential services and a staggering **50.5 million hours of downtime**, where companies were offline and unable to operate effectively.

Internet Outages by Business Size in 2023

	Number of Outages (Ave. per business)	Total Duration of Outages (Ave. per business)	Average Duration of Outages (Hours)	Total Outages Across All UK Businesses	Total Hours Lost Across All UK Businesses
Solo (1 person)	1.1	8.4	7.6	4.6 million	34.5 million
Micro (2-10)	2.8	9.4	3.3	3.3 million	11.1 million
Small (11-50)	3.6	18.7	5.2	798,000	4.2 million
Medium (51-250)	3.4	18.7	5.5	126,000	690,000
Large (251 +)	3.2	14.4	4.5	265,000	115,000
All	1.6	9.1	5.7	8.8 million	50.5 million

Source: Beaming & Censuwide

SMEs bore the brunt of internet disruptions, encountering an average of 3 to 4 failures and enduring nearly 19 hours of downtime each in 2023. It's plausible that these businesses faced additional, unnoticed failures throughout the year, but our inquiry focused solely on those that actively disrupted operations.

For enterprises adhering to the standard 8-hour workday and 5-day workweek, this translates to more than two working days lost to downtime annually, constituting approximately 1 % of their productive time.

While 1 % might seem modest, its impact on productivity can be substantial. Consider this: a 1 % boost in productivity for a company with turnover at the UK average of £806,381² equates to an extra £8,000 per year. On a broader scale, a 1 % improvement across all UK businesses would be worth £22 billion.

² MerchantSavvy, February 2024: UK Business Statistics 2024

The hospitality sector emerged as the most severely affected, grappling with prolonged periods of internet downtime in 2023, losing an average of 27 hours throughout the year.

The process of restoring connectivity at these establishments took almost 8 hours, on average, possibly exacerbated by the fact that hospitality businesses often operate during evenings and weekends.

Internet Outages by Business Sector in 2023

	Number of Outages (Ave. per business)	Total Duration of Outages (Ave. per business)	Average Duration of Outages (Hours)	Total Outages Across All UK Businesses	Total Hours Lost Across All UK Businesses
Business Services	2.9	10.6	3.7	1.5 million	5.7 million
Construction	3.5	14.7	4.2	1.9 million	8 million
Education	2.1	10.7	5.0	410,000	2 million
Finance & Accounting	3.6	15.4	4.3	177,000	763,000
Hospitality	3.4	26.8	7.9	477,000	3.7 million
IT Computing	3.8	19.1	5.1	747,000	3.8 million
Manufacturing	3.0	19.6	6.5	508,000	3.3 million
Retail	1.7	6.8	4.0	570,000	2.3 million

Source: Beaming & Censuswide

OUTAGES COST BUSINESSES £3.7 BILLION LAST YEAR

The financial repercussions linked to internet outages are multifaceted and, as previously highlighted, carry substantial costs. These costs manifest in various ways, encompassing:

- 1. Loss of Productivity and Revenue:** Disrupted operations lead to diminished productivity and potential revenue loss.
- 2. Customer Diversion:** The unavailability of e-commerce functionality prompts customers to explore alternative providers.
- 3. Communication Breakdown:** Delays in decision-making and missed opportunities arise from a communication breakdown.
- 4. Ineffective Workforce:** Employees struggle to work efficiently without access to crucial data and systems.
- 5. Overtime Costs:** The necessity for overtime to cover postponed work adds to the financial burden.
- 6. Financial Operations Disruptions:** Late payments, penalties, and other losses result from disrupted financial operations and delays.
- 7. Supply Chain Disruption:** Increased operational costs stem from disruptions in the supply chain.

In our study, business leaders were tasked with estimating the financial impact of downtime on their organisations in 2023. The findings unveiled a clear correlation between the cost of internet outages and the size of the business. For solo enterprises with just one employee, the cost hovers around £250 per year, escalating to over £25,000 for companies with more than 250 personnel.

By multiplying the median loss levels for each business size by the total number of companies in the corresponding population, a stark reality emerged – **UK companies collectively lost a staggering £3.7 billion last year due to internet downtime.**

This underscores the critical importance of fortifying businesses, regardless of size, against the financial implications of internet disruption. Addressing these challenges head-on is a matter of financial prudence and a strategic imperative for sustaining business continuity and growth.

Cost of Internet Outages by Business Size in 2023

	% UK Businesses Experiencing Downtime	Number of UK Businesses Experiencing Downtime	Median Cost of Downtime	Total Cost of Downtime
Solo (1 person)	32 %	1.3 million	£250	£333 million
Micro (2-10)	64 %	751,000	£1,800	£1.3 billion
Small (11-50)	87 %	193,000	£7,500	£1.4 billion
Medium (51-250)	89 %	33,000	£15,000	£491 million
Large (251 +)	78 %	6,000	£25,000	£155 million
All	42 %	2.3 million	£1,600	£3.7 billion

Source: Beaming & Censuswide

Our research also unveiled a compelling correlation between adopting advanced technologies, such as cloud productivity tools, AI, and automation, and the incidence of losses from internet outages. Notably, businesses with higher utilisation of these cutting-edge tools were more vulnerable to disruptions.

Furthermore, our findings indicated that the businesses incurring the highest costs due to internet downtime often have the most extensive adoption of e-commerce, automation, and public cloud services. This suggests a direct link between technological sophistication and the potential financial impact of internet outages.

As businesses increasingly embrace innovative technologies to enhance productivity and efficiency, they simultaneously expose themselves to heightened risks associated with internet downtime. Recognising this intricate relationship is crucial for devising strategic plans that harness the benefits of advanced technologies and fortify organisations against the potential downsides, ensuring a resilient and productive business environment.

Cost of Internet Outages by Business Sector in 2023

	% UK Businesses Experiencing Downtime	Number of UK Businesses Experiencing Downtime	Median Cost of Downtime	Total Cost of Downtime
Business Services	60 %	517,000	£600	£323 million
Construction	90 %	792,000	£600	£495 million
Education	59 %	184,000	£250	£42 million
Finance & Accounting	91 %	73,000	£1,300	£91 million
Hospitality	85 %	192,000	£600	£120 million
IT Computing	84 %	266,000	£2,000	£555 million
Manufacturing	82 %	221,000	£1,500	£277 million
Retail	54 %	297,000	£1,500	£372 million

Source: Beaming & Censuswide

STRATEGIES TO REDUCE THE RISK OF INTERNET FAILURE

While it might seem counterintuitive coming from an internet service provider, the reality is that no form of connectivity offers total immunity to disruptions or failures. Connectivity can fail for various reasons, including external influences such as power cuts, cyber-attacks, extreme weather conditions, and cable damage. Internal issues like faulty kit can also cause loss of service.

Understanding this landscape of potential connectivity threats, we offer strategies to reduce the risk of internet failure and mitigate disruption and financial impact when it does occur:



Plan for downtime like other risks

Business resumption plan: Treat internet downtime with the same seriousness as fire, flood, and theft. Include it in your business continuity plan (BCP).

Insurance cover: Consider interruption caused by downtime when organising business insurance.



Review all kit

Identify critical equipment: Review if there is equipment absolutely fundamental to the functions of the business. Hold spares based on manufacturer-provided mean time to failure (MTTF) data, factoring in global supply chain issues that may impact the replacement speed.

Have essential kit on hot standby: For core assets like firewalls and Storage Area Networks, consider hot standby redundancy, where a backup system is running and ready to take over instantly if the primary system fails, for immediate failover during outages.

Successful equipment retirement: Implement a thorough asset lifecycle management process. Remove and securely destroy end-of-life equipment to ensure it is not inadvertently used again.



Address power vulnerabilities

Prepare for power outages: Power is a common cause of downtime for business-grade Ethernet fibre services. Evaluate your utilities and create a plan for external power outages out of your control.

Implement business continuity measures: While optimising power consumption, consider outage impacts. Assess on a site-by-site basis and what the plan for business continuity is in these circumstances.

Install an Uninterruptible Power Supply (UPS): Install a UPS device to safeguard equipment from damage in the event of a short-term power supply issue. This will prevent data loss and protect from damage due to surges.



Mitigate connectivity risks

Consider diverse routing: To ensure that key sites remain connected, businesses should consider diverse routing. This provides separate paths for dual fibre services to ensure critical functions remain operational even if one network experiences an outage. Be aware that different providers do not necessarily offer route or equipment diversity.

Install a connectivity backup: Consider alternative technology, such as mobile broadband, as a secondary emergency backup connection.



Safeguard data integrity and security

Maintain data security: whatever the reason for the downtime, it should not result in a loosening of security or the removal of processes used to protect the confidentiality of the data, such as access control. Be aware that cyber criminals sometimes use internet downtime as a distraction when pursuing a target.

Plan for data reconciliation: This scenario should be planned for if a site is isolated from the internet and work needs to be completed offline. It is not just a matter of considering system availability but also the integrity of the data processed in isolation. Once connectivity is returned, a manual input process or software reconciliation may be required to add the data back in to company databases and systems.

Boosting the resilience of your business to internet downtime is not simply a technical issue; it is a business issue that companies can mitigate through the right technology, good planning and picking the right business partners. By taking a little time to consider your options today, companies can enhance their resilience to connectivity challenges and save valuable time later by ensuring the highest levels of uptime and productivity, safeguarding against potential disruptions and financial losses.



Certificate number 9849

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