



# Reducing Business Risks with DBAaaS

Proactive database management for security, resilience, and growth.

Unlock the hidden value in your data.

[www.cybersamurai.it](http://www.cybersamurai.it)

This white paper examines the critical role of [Database Administration as a Service \(DBAaaS\)](#) in mitigating operational risks for businesses across various industries.

Perhaps not fully acknowledged as a critical and increasingly cost-effective element of any digital transformation strategy, we discuss the impact that a proactive and continuous database managed service can have on building greater security, resilience and agility into the business.

Find out how implementing DBAaaS has the potential to de-risk your operations and support your business growth.

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# Introduction

## WHY DATA MANAGEMENT IS CRUCIAL IN MODERN-DAY BUSINESS OPERATIONS

Security is paramount in today's digital landscape, where transactions are electronic, records are digitised, and business value is increasingly tied to the information they hold. And data just keeps on growing. In fact, according to UK-based media research company Raconteur, it is predicted that [463 exabytes of data will be created globally each day by 2025](#) –that's equivalent to over 212 million DVDs created per day. This means businesses face escalating risks as managing, securing, and utilising this vast data requires significant resources and effort.

Importantly the rise of artificial intelligence (AI) has made effective data management even more critical. AI processes and learns from underlying data and its power hinges on the quality of the data it uses. It can bring huge cost savings, operational and competitive advantages to a business. It's no wonder that [data has been hailed as 'the new gold'](#), a highly prized commodity deserving of the same level of protection as any valuable asset.

Despite this, the investment into database management is often limited and many organisations lack dedicated database administration resources. But today, as the stakes get higher, steps must be taken to resource up and build in a more proactive database strategy – to improve operational efficiency as well as to reduce the business risks that can hamper growth.

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## THE 6 BIGGEST RISKS IN TRADITIONAL DATABASE MANAGEMENT

We see many cases where there is little or no database strategy, the use of multiple unconnected systems, outdated technology and limited or no investment into dedicated and skilled database resources. In many cases database administration is handled part time by the IT department or a junior member of staff.

Companies remain in a state of inertia – keeping basic administration going but no optimisation to leverage its true value and often business do not feel the pain of not managing their data, they are just less efficient, the impact of which can be experienced in other areas of the business.

However, when issues arise, they become reactive, often causing internal disruption and high expense. It's a bit like letting your tyres degrade until you have puncture and having to deal with the inconvenience and costs of the repair and recovery.

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Often businesses do not feel the pain of not managing their data, they are just less efficient, the impact of which can be experienced in other areas of the business. However, when issues arise, they become reactive, often causing internal disruption and high expense. It's a bit like letting your tyres degrade until you have a puncture and having to deal with the inconvenience and costs of the repair and recovery. This approach exposes companies to the following risks.

## **1 Data Integrity and Accuracy Issues**

Inaccurate data can result in incorrect decision-making, affecting areas like inventory management, sales, marketing and financial reporting. Incomplete data can have the same effect and is often due to disparate, unconnected data sources. Only seeing half the business story is risky, especially when making decisions about investment.

Poor management often leads to duplicate and inconsistent records, complicating data analysis and customer relationship management systems.

Additionally, poor maintenance can cause data corruption, resulting in the loss of critical information and necessitating costly data recovery efforts.

**“When issues arise businesses become reactive causing disruption and high expense!”**

## 2 Security and Compliance Vulnerabilities

Databases often contain sensitive and confidential information. If not managed or secured properly, several security risks arise:

**Data Breaches:** Inefficient management may result in weak security measures, increasing the risk of cyberattacks and data breaches. This can lead to significant financial losses, legal liabilities, and damage to your reputation.

**Unauthorised Access:** Without proper controls, unauthorised users might gain access to sensitive data, risking intellectual property theft or misuse of customer information.

**Compliance Failures:** Failure to manage databases in line with data protection regulations (such as GDPR in Europe) can result in hefty fines and legal penalties.

Organisations are targeted by malware and hackers regularly, whose goal is to take or exploit data usually for financial gain. As said, data is valuable – not just because of what you can extract from it internally but here we see how it is valuable externally. Holding data hostage until ransoms are paid is increasingly common, with [50% of UK businesses and 32% of charities](#) reporting to have experienced some form of cyber security breach or attack in the past 12 months.

Not only does the data breach cause expensive downtime, but security issues damage customer trust, can sink a public organisation's stock price and cause a ripple effect of damage throughout a company's supply chain and business ecosystem.

Small to mid-sized companies can be at greater risk when it comes to recovering post-breach. In fact, [60% of small companies go out of business within six months](#) of a data breach or cyber-attack. Despite this, [51% of small businesses have no cyber security measures](#) in place.

“60% of small companies go out of business within six months of a data breach or cyber-attack”



### 3 Operational Downtime and Performance Issues

Poor database management can be operationally disruptive directly affecting the efficiency and reliability and output of your operations.

**System Downtime:** Inadequately maintained databases can lead to unplanned downtime, disrupting productivity, order fulfilment, communication and customer service.

**Slow Performance:** Inefficient queries and lack of indexing can slow database performance, causing delays in data retrieval and processing, hindering team productivity and frustrating customers.

**Scalability Issues:** As your business grows, poorly managed databases may struggle to scale, causing performance bottlenecks and necessitating costly and time-consuming unplanned upgrades or migrations.

### 4 Customer Satisfaction and Retention Problems

An inefficient database management strategy will not only cause internal impact but can importantly influence how you are viewed by customers and your target audience.

Slow databases delay customer service responses, frustrating clients, and damaging trust. Additionally, inaccurate customer data leads to errors in shipping and billing, creating negative experiences. These issues can result in decreased customer loyalty and lost business, ultimately harming the company's success and reputation.



## **5 Increased Costs**

Perhaps the fundamental risk to any business is the cost of putting data issues right. Resource time – particularly overtime, loss of business through downtime or delays and reduced business due to security issues and reputational damage can create a genuine financial impact.

Furthermore, SQL server sprawl can also keep the cost of running databases high. Where multiple instances are running perhaps due to acquisition, licence and resource costs to maintain them far exceed the costs if there was consolidation.

## **6 Missed Opportunities**

Data can provide insights and with AI those insights are richer and more valuable than ever. But the data it analyses must be robust, complete and accurate and presented in a way that it is easy to consume so you understand the story it is telling you, which may include opportunities for investment or expansion that could fuel business success.

Proactive and dedicated database management underpinned by robust IT solutions and regular audits can mitigate these risks, safeguarding business efficiency and increasing growth potential.

## LOWER YOUR RISK SCORE BY DRIVING UP YOUR DATABASE MATURITY

The maxim 'you don't know what you don't know' is fitting within database administration and its undervalued importance.

Many organisations are working on a surface level with no obvious challenges or data loss – until something happens. It is often only when a backup is required that organisations discover that it has failed or stopped backing-up months prior. Weaknesses in data security become evident once they are alerted of a breach, or the fragmented meta data becomes a pressing issue once databases can no longer be accessed.

Health check programmes provide a light diagnostic service to help organisations identify underlying risks that may not be obvious. The programme runs internally without the need to share any logins or information externally and checks the speed, storage, and memory usage of the system along with security measures.

“ Our health checks revealed back-up issues have been found in 57% of organisations. ”

Ryan Freeman,  
COO Cyber Samurai



The health check reports on the company's database maturity, its risk scores and areas of weakness, classifying risk levels from Priority 1 or P1 through to P250.

P1 issues identify an immediate and substantial risk which could cause considerable disruption or permanent damage a company's operations.

Cyber Samurai have been undertaking many health check projects for clients and in the majority of cases P1 relates to either back-up, reliability or security issues. From the recent health checks undertaken, back-up issues have been found in 57% of organisations – usually relating to back-ups not being performed, and reliability issues were present in 86% of organisations. Security issues can only be identified if enough access is provided to be able to assess common problem areas. However, ironically a common finding is in the way access and authorisation levels are set up internally.

A health check can be the first step to adopting a more proactive approach to maintaining database health and reducing risk. The output of which drives a plan of remediation which is cost effectively provided through [Data Administration as a Service](#) or DBAaaS.



**Find out more and book your  
health check today**



## RISK MITIGATION THROUGH SCALABLE DBA OUTSOURCING

A [2023 Forbes study](#) of 500 UK businesses revealed there is a growing and urgent need for technical expertise. In fact, 93% reported a perceived UK IT skills gaps and 42% said that they believed this was due to the “fast pace of technological advancements”. The reality is that not all businesses have the resources to plug that gap in-house, and thus are immediately exposed to all data-related risks covered in the previous section.

Cyber Samurai provide a solution to the ongoing DBA shortage coupled with the increasing demand for database administration. They provide a team of DBAs that can be plugged into a team at scale and cover all aspects of data management and protection, from data consolidation, migration and data accuracy through to automation requirements and data security.

Having an always-on, dedicated DBaaS offering provides dedicated time and investment into database best practice, implementing continuous updates, advanced security measures, and industry-compliance standards. Outsourcing database administration to DBaaS providers like Cyber Samurai enables organisations to be protected against data-related risks, and bypasses in-house resource and skill constraints thanks to the scalability of the service.

A lack of database resource can result in the continuous use of outdated systems and procedures that, in some cases, can be a ticking time bomb. Addressing these legacy issues, therefore, becomes a priority and a key benefit of deploying DBaaS.



## **CASE STUDY: GOVERNMENT SERVICES**

A local government administration body had legacy spreadsheets and VBA codes that had not been updated both of which were a source of inefficiency and risk.

Cyber Samurai implemented the required updates, and then undertook a SQL Server health check which revealed further issues and areas for improvement. For example, nobody was checking for file corruption and there were performance bottlenecks that they did not know existed.

Cyber Samurai implemented the Data Administration as a Service (DBAaaS) which provided skilled resource dedicated to continuous monitoring and optimisation of the company's data platform, eliminating the performance bottlenecks, minimising security risks and ensuring that the system ran smoothly and was always available.

The peace of mind that came from having expert DBAs overseeing their data infrastructure was invaluable.

**“Our data platform needs to run smoothly and to be available at all times, having DBAs monitoring gives us peace of mind.”**

**Head of Information Technology  
Local Government Services**

## **EXPERT RESOURCES ENABLE A PROACTIVE APPROACH TO DATABASE MANAGEMENT**

When things go very wrong with data, its often a national headline. Companies get hacked, customer details are shared, passwords compromised.

The challenge is around educating organisations of the risks ahead of encountering a problem. Negative stories have prompted many companies to take a proactive stance on data management and seek solutions that fit their needs and increase or improve resources

“ We've noticed a marked improvement in system performance, which has led to quicker access to data and more efficient healthcare delivery. ”

IT Manager  
Health Authority



## **CASE STUDY: HEALTHCARE**

A national healthcare provider began a partnership with Cyber Samurai in 2023 seeking a cost-effective solution for database administration that would ensure robust security and reliability for their critical healthcare data.

The collaboration was driven by the need to increase specialist resource to support a more proactive approach to preventing potential issues like data breaches and corruption, while staying within budget constraints.

The output of a SQL server health check revealed performance issues such as query processing and outdated indexing strategies, as well as inconsistencies in data backup and recovery processes. The health check also revealed opportunities for optimising data storage to manage costs more effectively.

By implementing the DBAaaS, their database performance and quality was improved significantly, resulting in faster data access and an increased efficiency in healthcare delivery. Furthermore, the implementation of reliable backup and recovery processes has ensured the integrity and availability of their critical health records.

Just as importantly, despite outsourcing their requirements, these improvements were achieved in a cost-effective manner, optimising data storage and management practices without compromising on quality and enabling them to consistently deliver high-quality healthcare services.

## 4 Key Benefits of DBAaaS



### Fast Time to Value

The implementation of DBAaaS in a company's operations is a speedy process. There is limited onboarding, training, or recruiter fees before deployment – it is a service that can be up and running in as little as four weeks. After the SQL server health check has been performed, the DBA can get straight to work and act on all the identified risks, and then operate in the different agreed-upon areas (protection, accuracy, BI, etc.).



### Access to Specialised Skills and Technological Resources

Your expert DBA comes with a supporting team of highly experienced, Microsoft SQL certified and security experts, who can be deployed seamlessly depending on the requirements.

The team also utilises industry-specific technology that most SMBs would not have access to, which allows to streamline the service and obtain results at a much faster pace. For example, Cyber Samurai maintains strategic partnerships with renowned technology providers and can develop bespoke solutions such as automated reporting that pulls out top-line information for board-level review, and detailed reports that pull multiple data sources together to give an in-depth, holistic insight into data management and quality.



## Scalability for Growth

Where internal teams cannot scale, managed database services like DBAaaS can provide round-the-clock support, ensuring prompt issue resolution, monitoring, and maintenance even during non-business hours.

And by continuous monitoring of database capacity, technical adjustments to scale the database infrastructure as required can be implemented quickly and then scaled scale back when the need has passed for extra cost-efficiency.

Similarly, the DBA managed service can be scaled to reflect the database requirements or as the company grows. Flexibility underpins both the bespoke subscription packages tailored to the business and database needs and the tiered standard DBAaaS packages. Both can be increased as needed.



## Cost Reduction

Skilled inhouse resource may be costing too much as DBA roles are now commanding around £50,000 per year and additional employee overheads are increasing as announced in the [2024 October UK budget](#). Furthermore, a contractor typically averages £450 per day; that's £9k per month based on 20 days' work plus an agency fee of between 15-25%. In comparison the DBA Service from Cyber Samurai can start as low as £1,000 per month for one SQL instance. Paid as a monthly subscription, DBAaaS creates a predictable expense for any cost-sensitive CTO and a cost-effective way of acquiring a range of skilled professionals.



# Conclusion

[Database administration](#) is vital to any business, increasingly so as the number of risks continues to rise, and data becomes a more valuable commodity. However, with financial- and human-resource limitations, skills shortages, and quickly evolving technologies, investing in full-time, in-house data management can prove a challenge as well as a risk. The bottom line is data is generally not being looked after.

Understanding the risks is the first step towards addressing this. If resources are limited, a flexible solution must be found, and that solution is an outsourced DBAaaS. A DBAaaS not only gives your business up to 24/7 cover and access to a specialist team with a wealth of knowledge and experience, but it also provides peace of mind. Those that choose to remain with the status quo and not implement appropriate data management leave themselves subject to increased costs and missed opportunities to improve efficiencies and growth.

For all these reasons, investing in [DBAaaS](#) is investing in your business. With a DBAaaS, you are protecting your business, enhancing the services you provide to your customer base, and ensuring the security and accuracy of your most valuable asset: your data.



## About Cyber Samurai

We are a Microsoft accredited database managed service provider delivering cost effective database resource and expertise on a project or subscription basis.

For 10 years we have worked with SMB's, enterprises and through other MSPs to optimise and secure databases, streamline data infrastructures, simplify, and automate processes and enable better visibility of business performance. Our mission is to help organisations unlock the value of their databases to drive growth and profitability.

### Contact us for further inquiries

**[info@cybersamurai.it](mailto:info@cybersamurai.it)**

**[www.cybersamurai.it](http://www.cybersamurai.it)**

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