KONICA MINOLTA

VENTURE INTO THE CLOUD OR STAY ON-PREMISE?

SMEs CAN REAP THE BENEFITS OF BOTH WITH A HYBRID EDGE IT SOLUTION

Giving Shape to Ideas

SUMMARY

Where are company data best stored and processed – in the cloud or on-premise? This thankfully outdated dichotomy is still shaping the discussion when it comes to managing IT infrastructure in companies, particularly for small and medium-sized businesses (SMEs).

CLOUD

On one side of the discussion stand the benefits of pursuing a cloud computing approach: it offers easy data access from everywhere, and a service provider takes care of all infrastructure needs. Another compelling argument: storage capacities and computing power are flexible and not constrained by on-site, expensive and management-intense infrastructure capacities.

ON-PREMISE

On the other hand, however, there are clear benefits of storing and processing data locally: sensitive company information is confined within the walls of the company, local access to the information is fast and independent of internet bandwidth capacities, and last but not least, the solutions that manage a company's data may belong to the company itself, making a change of system possible. Otherwise, customers may find themselves 'locked' into a system they would rather prefer to replace.

HYBRID

Yet, as suggested above, there is thankfully a third option: hybrid edge IT platforms can free SMEs from the need to choose one of these specific paths, allowing them to combine the benefits of both cloud and on-premise solutions. These solutions allow the storage and (pre-)processing of data on-site. However, where useful and the benefits outweigh, specific data can be saved and processed externally.

Such edge IT solutions also spare the customer another disadvantage that a classic on-premise approach may entail: as the hybrid solution is managed by a service partner, it frees up internal IT resources – an aspect particularly relevant for SMEs with normally limited IT personnel to start with, and aggravated by the current skilled labour shortage in IT. SMEs in particular need proper working IT systems that support them in their daily business in order to maintain their competitiveness. As every company has its own specific requirements, finding the right partner to deploy the ideal setup tailored to its needs is key.

HOW CAN IT EMPLOYEES BE ENABLED TO TAKE ON THE DEVELOPMENT OF NEW, OPTIMISED DIGITAL PROCESSES?

"In today's competitive business environments, our SME customers must constantly work on their production and administrative efficiency. They need to drive their business forward. To do so, it is more important than ever to be able to rely on powerful, state-of-the-art IT. However, this must not tie up important internal resources: the focus of their staff has to be on their core business. This applies to their IT team as well, as it is increasingly becoming an integral part of value creation in their companies," says Daniel Schellhase, Senior Product Manager Platform & Technologies, Konica Minolta Business Solutions Europe GmbH.

This is not the case when IT employees are occupied with repetitive and time-consuming administrative tasks such as managing user rights, troubleshooting, managing updates, backups and so on. In this case, they are not able to take on the development of new, optimised digital processes so crucial for business success in future, for example. But how can this be ensured, when a company's IT requires increasing attention – new tools need to be made available, maximum levels of security must be ensured and mobile access to information made possible? Here, edge IT

platforms offer a significant advantage over a traditional on-site IT infrastructure: it is also an ideal integration point for managed services from external providers. It can thus help by both offering a powerful IT performance and freeing up internal IT resources.

Located at the 'edge' between the internal IT structures and external providers, a hybrid solution can store and process data on site, but also send pre-processed data for further processing and storage into the cloud.

Hybrid edge IT solutions spare SMEs the disadvantage that a classic on-premise approach may entail:
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THE BEST OF BOTH WORLDS: ADDRESSING THE IT CHALLENGES SMEs FACE TODAY WITH A HYBRID EDGE IT PLATFORM

The flexibility such edge computing platforms provide is highly valuable, particularly for small and medium-sized businesses, as their IT today needs to meet a multitude of requirements – and will have to do this even more so in the future.

REDUCING LATENCIES AND SPEEDING UP PROCESSES

Firstly, operations need to be smooth, stable and fast, as Daniel Schellhase from Konica Minolta explains: "Long loading times kill productivity, as do unreliable connectivity and unavailable data. The tolerance for low IT performance is decreasing – and rightfully so, as at the same time all enterprise processes are speeding up."

Here, the question as to where data is processed and stored can make a significant difference: edge solutions process data on-site, close to where they are produced – reducing latencies, improving and speeding up processes. This may be particularly relevant in rural areas, for example, where many small and medium-sized businesses are located. Internet connection speeds may even be limited for businesses, and large data transfers can hence eat up valuable time.

Nevertheless, even with a strong network infrastructure, the sheer amount of data created, for example by the increasing number of IoT devices found in companies today, sets limits to the external processing of data. This is particularly true for SMEs, as their processes increasingly rely on generating value from processed data: be it in their production processes, quality assurance, research and development, customer service, contract management and so on. No wonder, therefore, that the expected CAGR of edge computing use of SMEs is highest among all companies (37.5%).[1]

However, as a local IT infrastructure generally has limited computing power – or otherwise becomes overwhelmingly expensive – the connection to cloud-based services is an attractive option. Such an example can be the application of a resource intensive AI program in analytics-based decision making. According to Gartner, 20% of enterprise data is being produced and processed outside of data centres today. Gartner predicts the amount of data processed outside data centres to rise to 75–90% by 2025[2]. With a hybrid cloud-connected edge IT solution, the benefits of both can be combined: the relevant data are pre-processed locally and then sent to the cloud for deeper analysis. Here, a larger amount of computing resources can be allocated in a short period of time that would not be available with local infrastructure only.

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Edge computing market outlook – 2025; Allied Market Research; 2019;
https://www.alliedmarketresearch.com/edge-computing-market

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How Edge Computing Redefines Infrastructure; Gartner; 2018;
https://www.gartner.com/document/3888063

MEETING THE NEEDS FOR DATA PROTECTION AND DATA SECURITY

Secondly, this selective data handling approach made possible by an edge solution is also crucial when it comes to another IT challenge: meeting the needs for data protection and data security. "Consider the following application field as an example: the data created by the use of intelligent recognition devices for identification and access of employees is highly sensitive and – with regard to privacy and data protection – has to be handled with maximum care. "Such data can remain and be processed locally on an edge IT platform," Daniel Schellhase explains. The same goes for customer information falling under GDPR legislation in Europe. Here, many companies avoid storing such data with cloud solution providers that use servers outside the European Union, as this may entail legal issues, or at the very least make processes more complicated.

Having business-critical data secured off-site should, however, be considered as an important element in the IT security set-up as well. In the event of a disaster such as an earthquake, a fire or flood, a cloud-based back-up solution can ensure data is never lost. Automated data and backup management by a hybrid edge IT solution can ensure that such data are regularly and reliably secured without the hassle of manual processes for IT employees. At the same time, the provider ensures compliance with GDPR and data security. The relevance of such precautionary measures should never be underestimated – within one year of coming into effect, a total 89,217 data breach notifications were sent to the authorities.[3]

> 89,000 DATA BREACH NOTIFICATIONS
were sent to the authorities within one year OF GDPR coming into effect.

GDPR in numbers; The European Data Protection Board; 2019;
https://ec.europa.eu/commission/sites/beta-political/files/infographic-gdpr_in_numbers_1.pdf

However, despite having to meet these requirements, it is crucial that IT stays cost-effective and remains both flexible and scalable to match the increased dynamics SMEs find themselves in today. "Flexibility is a value in itself for our customers today. Software requirements in a company may change within a matter of weeks or data storage and computing power requirements can fluctuate depending on workflows, seasonal business effects, order volumes, and so on. Rigid licence volumes for software or a costly yet inflexible, internally managed IT infrastructure can then quickly translate into a massive burden for the budget and performance of an SME's IT and rob them of the flexibility and resources they need," says Daniel Schellhase.

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Konica Minolta Business Solutions Europe GmbH

CHOOSING THE RIGHT EDGE IT PLATFORM FOR A BUSINESS

In the past, cloud-based solutions were seen as synonyms for managed infrastructure services and flexibility, while 'on-premise IT' was associated with having to manage everything internally with internal resources. "Thankfully, this is no longer the case – and hybrid edge IT solutions play a key role in this development," explains Daniel Schellhase.

A prime example of such a solution is Konica Minolta's Workplace Hub in combination with the Konica Minolta Marketplace. Designed as a one-stop solution for SMEs in particular, this hybrid edge IT platform brings together the IT infrastructure needs of a business with the access to software and services they require with a simple and transparent management tool.

Konica Minolta tailors the Workplace Hub to the needs of its customers, adapting it to their specific requirements. The solutions implemented in Workplace Hub extend the on-premise functionalities to the cloud, processing specific data externally if required.

For this decision, the customer receives a clear recommendation based on a thorough analysis. Konica Minolta will evaluate existing network infrastructure, bandwidth, data usage and access requirements to deliver the best-fitting set-up for the individual customer situation.

Whatever the choice might be – data are stored either on premise or on highly secured Konica Minolta servers in Europe in order to ensure GDPR compliance at all times.

With regard to security, Workplace Hub also has a high level of built-in data security. Thanks to a partnership with Sophos, Konica Minolta security services include the XG-Firewall. It is also a gateway to and access point for a wide range of IT services that Konica Minolta can manage for its customers – be it their IT security, automated backup management or application monitoring – all supported via Konica Minoltas Help Desk if assistance is required. This ensures smooth operation of IT systems and helps to quickly resolve issues that arise, while at the same time freeing up internal IT experts from such arduous and repetitive tasks.

As Marketplace is an integral part of Workplace Hub, the internal IT team has a powerful platform for managing and easily implementing new applications. Konica Minolta ensures the compatibility of these solutions with the system as well as regular updates. Licences are also managed via Marketplace, providing an up-to-date overview at all times and control over access and costs. To deliver the cost efficiency and flexibility SMEs need, Konica Minolta only charges for services, capacities and applications actually used. "Within the applications and services provided in Workplace Hub, we also strive to ensure that, for our customers, this flexibility does not come at the price of binding themselves to a specific software supplier in the long run. We therefore base our implementation on compatible systems and formats," states Daniel Schellhase from Konica Minolta.

WITH REGARD TO SECURITY, WORKPLACE HUB HAS A HIGH LEVEL OF BUILT-IN DATA SECURITY: Thanks to a partnership with Sophos, Konica Minolta security services include the XG-Firewall.

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POWERFUL PLATFORM FOR MANAGING AND EASILY IMPLEMENTING NEW APPLICATIONS.

CUSTOMER VOICE: MOHYLA

Mohyla is a provider of high standard accounting services – and a good example of how an edge solution empowered by managed services can help a small business in meeting its specific IT needs. The Czech accounting firm required a robust IT system that ensured the highest level of data security with the ability to backup data on their own existing virtual servers. Konica Minolta implemented a Workplace Hub with proactive monitoring – a complete IT solution, integrated seamlessly with the firm's existing virtual servers. As a managed service provider, Konica Minolta is now taking care of their whole IT from print to digitisation and all business data processing via Workplace Hub.

Besides meeting these requirements, it is possible with Workplace Hub to free up the space formerly taken by a multi-function printer, solving another very specific challenge the customer faced. "As a small business, we don't have much space for IT equipment – but we rely on having a robust IT infrastructure to provide a high standard of accounting services. With Konica Minolta's Workplace Hub, we now have a complete IT solution in the same space where there used to be just a printer. What is even better is that the system integrated seamlessly with our existing virtual servers to protect, secure and store all data," says the company's owner, Peter Mohyla.

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Peter Mohyla, Company Owner
Mohyla CZ s.r.o., Czech Republic
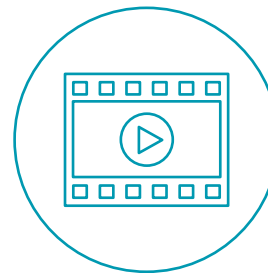
CUSTOMER VOICE: DURAND-EROLES-CASTAGNET

> "When a recent fire destroyed part of our business, we lost our server, which had all our data and applications saved locally. Now with Konica Minolta's Workplace Hub, everything is automatically backed up – no more interruptions and worries."

Nathalie Castagnet
Co-director, Durand-Eroles-Castagnet, France

How valuable an edge solution with automatic backup can be, is probably best demonstrated by the case of French pharmacy Durand-Eroles-Castagnet. "When a recent fire destroyed part of our business, we lost our server, which had all our data and applications saved locally. Now with Konica Minolta's Workplace Hub, everything is automatically backed up – no more interruptions and worries," explains Nathalie Castagnet, Co-director of the firm.

WATCH THE VIDEO AND GET A CLOSER LOOK!

USE CASE: RESTAURANT

Other examples for backup scenarios are the cash desks or ordering systems at shops or restaurants. Using cloud-only systems can become the single point of failure when the internet connection is interrupted or bandwidth is insufficient or even worse, the server is down. "Exactly this scenario is the worst nightmare of any restaurant owner when all tables are full, but ordering and checking out needs to be carried out on pen and paper because the online system doesn't function," says Daniel Schellhase. As an edge solution Workplace Hub can here act as a local cache, stepping in for the server in the cloud for an extensive amount of time. It can either keep bandwidth available for other purposes, e.g. internet traffic for employees or customers or allow the systems to run until the connection to the cloud is re-established. In both cases, the internet traffic can be batched, i.e. bundled and sent during the night or early morning, when more bandwidth is available.

Other examples can be construction sites or other temporary office spaces. In case broadband internet isn't available or data needs to be pre-processed on-site to reduce waiting times, a fully-managed local server is the ideal IT setup.

KONICA MINOLTA: THE RIGHT PARTNER FOR IMPLEMENTATION

"While we see the benefits of cloud and edge devices, every set-up has to handle the specific and individual requirements of the customer. Here, Konica Minolta accompanies the customer on every step of its journey to the optimal working IT set-up," concludes Daniel Schellhase from Konica Minolta.

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[1] Source: Edge Computing Market Outlook – 2025; Allied Market Research; 2019; https://www.alliedmarketresearch.com/edge-computing-market
[2] Source: How Edge Computing Redefines Infrastructure; Gartner; 2018; https://www.gartner.com/document/3888063
[3] Source: GDPR in numbers; The European Data Protection Board; 2019;
        https://ec.europa.eu/commission/sites/beta-political/files/infographic-gdpr_in_numbers_1.pdf