CloudCatalyst

Navigating the cloud revolution

Empowering innovation with Generative AI

Atos | aws

The pace of innovation is unforgiving. Businesses still clinging to outdated, on-premises infrastructure are slowly falling behind, trapped by the limits of legacy systems.

But for those ready to adapt, the cloud offers more than just scalability and cost savings — it's a catalyst for transformative innovation. The future belongs to those who harness the power of **Generative AI** and cloud technologies, driving creativity, productivity, and operational agility across industries.

With **Atos CloudCatalyst**, in strategic partnership with AWS, businesses can seamlessly migrate from mainframes to the cloud while unlocking the full potential of **AI-driven transformation**. This isn't just about moving data; it's about redefining possibilities. The ability to innovate at speed, scale globally, and automate intelligently will determine the leaders of tomorrow.

The only question left is: How fast can your organization adapt?

Future cloud-driven innovation

The future of business is here, and it is powered by the cloud. Companies that fail to embrace cloud technology are not just missing out on operational efficiencies — they're missing out on innovation itself. The cloud's capacity to scale on-demand, handle massive data loads, and enable real-time collaboration is the backbone of digital transformation across industries.

Yet, this transformation is more than just about moving workloads off-premises. **Atos CloudCatalyst,** in collaboration with AWS, offers a seamless and secure path to modernizing your infrastructure. This enables organizations to harness the power of **Generative AI,** unlocking new levels of productivity, creativity, and operational agility that were previously unimaginable. Whether your goal is to reduce costs, improve efficiency, or drive new growth, the cloud is the foundation that makes it all possible.

The transition to cloud-based infrastructure is no longer an optional upgrade, it's a strategic imperative. As organizations face increasing pressures to adapt and innovate, moving to the cloud is the first step toward creating a technology stack that allows for true agility and future-proofing.

Mainframe to cloud migration

Why it's essential for modern organizations

For decades, mainframes have been the workhorses of enterprise IT. But in today's fast-moving digital world, these systems have become a bottleneck to innovation. Mainframe systems are rigid, costly to maintain, and lack the flexibility to integrate with modern tools like **AI and big data analytics.** For businesses looking to remain competitive, migrating from mainframes to the cloud is no longer a question of if but when.

The high maintenance costs of mainframe systems continue to drain resources that could be invested in innovation. Scaling on mainframe infrastructure is expensive and slow, limiting organizations' ability to respond to changes in market conditions. Moreover, integrating legacy systems with

modern applications such as **Generative AI** and cloud-native analytics tools is often fraught with challenges, hindering growth and operational efficiency.

Migrating to the cloud through **Atos CloudCatalyst** allows businesses to overcome these challenges. By leveraging AWS's elastic infrastructure, companies can dynamically scale their operations, reducing costs and enabling real-time responsiveness. With **Atos CloudCatalyst,** the migration process is streamlined, ensuring that businesses can modernize without the disruption typically associated with large-scale migrations. Cloud-based infrastructure opens up opportunities to innovate at scale while maintaining high levels of security and operational continuity.

The CloudCatalyst solution

Atos CloudCatalyst was designed to simplify the complex process of mainframe-to-cloud migration. By automating key steps in the migration journey and leveraging the robust capabilities of AWS, CloudCatalyst ensures that businesses can migrate their most critical workloads securely and with minimal downtime. The solution addresses key concerns such as business continuity, security, and operational scalability.

The migration journey often involves multiple stages, from workload discovery and application refactoring to the actual data migration itself. **CloudCatalyst** automates much of this process, reducing the need for manual intervention and minimizing human error. This results in faster migrations, fewer disruptions, and greater control over the process.

Security is a top priority throughout the migration process. CloudCatalyst provides end-to-end encryption to ensure data remains secure, both in transit and at rest. AWS's advanced security services, including **identity and access management (IAM)**, **multi-factor authentication (MFA)**, and **Amazon GuardDuty** for threat detection, ensure that data is continuously monitored and protected against potential vulnerabilities.

Another key advantage of CloudCatalyst is cost efficiency. By optimizing workloads for the cloud, businesses can leverage AWS's pay-as-you-go model, ensuring they only pay for the resources they need. This eliminates the inefficiencies and high operational costs associated with maintaining physical infrastructure, allowing organizations to redirect resources toward innovation and growth.

Generative AI, driving innovation across industries

The applications of **Generative AI** are broad, spanning multiple industries:

Healthcare: AI is being used to improve the accuracy of diagnostics and enable personalized treatment plans based on real-time data analysis.

Retail: AI-driven insights are optimizing supply chains, creating personalized shopping experiences, and predicting consumer trends.

Manufacturing: Predictive maintenance powered by AI is reducing downtime and enhancing operational efficiency.

Finance: AI is transforming fraud detection, real-time risk assessment, and financial modeling, allowing businesses to make smarter decisions faster.

Generative AI is transforming industries at an unprecedented pace. From automating repetitive tasks to enabling real-time insights, AI technologies are becoming essential tools for driving business outcomes. Businesses across industries are adopting **Generative AI** to enhance creativity, streamline operations, and improve decision-making processes.

However, the adoption of AI requires immense computational resources — resources that traditional on-premises infrastructure struggles to provide. The cloud, particularly AWS, offers the scalability and flexibility required to power large-scale AI models. By migrating to the cloud, businesses can unlock the full potential of **Generative AI**, enabling them to analyze vast amounts of data, make real-time decisions, and innovate at speed.

These innovations are possible because the cloud provides the necessary infrastructure for AI models to thrive, enabling businesses to implement cutting-edge technologies without the limitations of traditional data centers.

Cloud, as the foundation for AI innovation

Generative AI thrives on data — and lots of it. For businesses to fully leverage the power of AI, they need access to high-performance, scalable cloud infrastructure capable of processing massive data sets in real-time. That's where AWS excels.

AWS offers a suite of AI and machine learning tools that can be easily integrated into any business's operations. For example, **Amazon SageMaker** allows businesses to build, train, and deploy machine learning models quickly and efficiently.

Tools like **Amazon Rekognition** and **Amazon Comprehend** enable businesses to analyze images, videos, and text, unlocking valuable insights and creating new opportunities for automation.

The cloud is not just a storage solution — it is the foundation for innovation. As more businesses adopt **Generative AI,** the ability to process, analyze, and deploy AI models at scale will become a critical factor in determining which companies lead and which companies fall behind. AWS provides the computational power and flexibility needed to ensure that businesses can not only keep pace with AI innovation but drive it forward.

Simplifying AI integration

Integrating Generative AI into business workflows can be a complex and resource-intensive process. Many organizations face challenges with data silos, outdated infrastructure, and application incompatibilities that make it difficult to fully leverage AI. **Atos CloudCatalyst** simplifies this process by offering a seamless, automated solution that connects AI applications with the cloud infrastructure they need to thrive.

By leveraging **AWS's AI capabilities,** CloudCatalyst enables businesses to integrate AI at scale. Whether it's deploying **Amazon SageMaker** models or integrating AI-driven analytics into decision-making processes, CloudCatalyst makes it easier for organizations to access and deploy advanced AI tools without the usual technical and logistical hurdles. The result is faster time-to-value, increased productivity, and more agile operations.

With CloudCatalyst, businesses can unlock the power of Generative AI to enhance operations, improve customer experiences, and innovate more rapidly. By ensuring seamless integration between AI applications and the cloud, CloudCatalyst provides the foundation for businesses to continuously evolve and innovate.

The path to AI-readiness

Successfully integrating **Generative AI** into your operations requires more than just technology — it demands a clear roadmap for transforming your infrastructure, managing data, and deploying AI solutions at scale. For organizations looking to drive true innovation, ensuring **AI readiness** across every layer of the business is critical.

To help you navigate this complex journey, we've outlined the **5 key phases of Generative AI readiness,** guiding you from infrastructure assessment to continuous AI-driven innovation. These phases will ensure your business has the foundation it needs to unlock AI's full potential, supercharging productivity and agility.

5 Phases of Generative AI readiness

Phase 1:
Infrastructure assessment and planning

Assess your current IT infrastructure to determine its capability to support AI workloads. Identify gaps, legacy systems, and bottlenecks that need modernization.

Key focus

Legacy system assessment, cloud compatibility.

Outcome

Clear roadmap for modernizing infrastructure.

Phase 2:
Data management and integration

Ensure data is centralized, accessible, and structured for AI applications. Proper data governance is critical to feeding AI models with clean, usable data.

Key focus

Data governance, centralization, and AI-ready datasets.

Outcome

High-quality data ready for AI processing.

Phase 3:
AI-optimized cloud infrastructure

Deploy cloud infrastructure tailored for AI workloads. Leverage high-performance computing, elastic scalability, and real-time processing capabilities.

Key focus

High-performance computing (HPC), elastic scalability, real-time processing.

Outcome

Scalable infrastructure for training and deploying AI models.

Phase 4:
AI deployment and workflow automation

Integrate AI into your business operations by automating workflows and enabling AI-driven insights for real-time decision-making and enhanced productivity.

Key focus

Workflow automation, real-time AI insights, AI-driven operations.

Outcome

Increased agility and operational efficiency through AI integration.

Phase 5:
Continuous AI innovation and evolution

Embrace continuous improvement in AI models and infrastructure. Adapt to new AI technologies and ensure scalability as your AI needs grow.
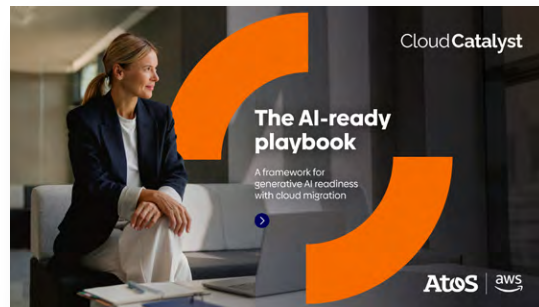
Key focus

Continuous optimization, scalability, adoption of new AI technologies.

Outcome

Future-proofed AI infrastructure with ongoing innovation.

For more detail...

Read the **CloudCatalyst Generative AI readiness framework playbook**

Download

Unlocking productivity and agility with Generative AI

Generative AI is driving a new wave of business agility and productivity. Organizations that integrate AI into their operations are able to automate repetitive tasks, analyze vast amounts of data in real-time, and make smarter decisions faster. The result is a more agile organization that can respond to market changes, customer needs, and operational challenges with greater speed and precision.

For example, AI-driven automation is freeing up employees to focus on higher-value tasks, driving innovation and improving efficiency. At the same time, AI-powered decision-making tools are providing businesses with real-time insights, enabling them to optimize processes, reduce operational costs, and enhance customer engagement.

In many cases, the impact of Generative AI goes beyond efficiency — it's also unlocking new levels of creativity.

From personalized content creation to AI-driven product development, businesses are finding new ways to engage customers and create innovative solutions.
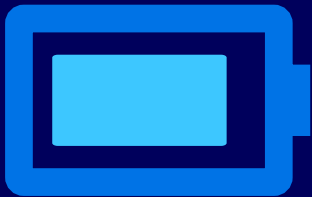
The cloud provides the scalable infrastructure needed to support these AI-driven innovations, ensuring that businesses can continue to innovate without the limitations of legacy systems.

Driving innovation and transformation

The future of business will be driven by the intersection of cloud infrastructure and AI innovation. As more organizations transition to the cloud and adopt **Generative AI,** the potential for innovation will continue to grow exponentially. Businesses that leverage AI to drive real-time insights, optimize operations, and enhance customer experiences will not only survive in the digital era – they will thrive.

Atos CloudCatalyst, in partnership with AWS, is positioning businesses to lead this next wave of innovation. By providing the tools and infrastructure necessary to integrate AI into operations, CloudCatalyst ensures that businesses can remain agile, scalable, and ready for whatever the future holds.

The future belongs to organizations that are ready to transform their operations by **embracing cloud migration and Generative AI.** With **Atos CloudCatalyst,** powered by AWS, organizations can securely and seamlessly migrate from legacy infrastructure to the cloud, unlocking new levels of innovation and efficiency. The integration of AI into business processes enables smarter decision-making, greater agility, and a faster path to market.

Now is the time to supercharge your cloud migration strategy and embrace the future of business innovation.

With CloudCatalyst, your business can be more than ready for the future – it can lead the way.

Take the next step in your digital transformation journey today.

To learn more, visit atoscloudcatalyst.com

About Atos

Atos is a global leader in digital transformation with 105,000 employees and annual revenue of c. €11 billion. European number one in cybersecurity, cloud and high-performance computing, the Group provides tailored end-to-end solutions for all industries in 69 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea) and listed on Euronext Paris.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.