2025
IT & Technology
Checklist

12 things IT leaders should consider in 2025

Atos

Foreword

As we begin a new year, it's a great time to explore some of the critical challenges and technology trends that IT leaders will face in 2025. Our goal is to provide a strategic blueprint to navigate an increasingly complex technological and regulatory environment. Today's IT leaders face the dual challenges of driving innovation while ensuring operational resilience. The document provides a comprehensive framework that will help IT leaders build agile, ethical, future-ready organizations that can thrive in a dynamic and competitive market landscape.

Automation remains pivotal for improving efficiency and accuracy, enabling businesses to shift resources from routine tasks to higher-value activities.

Artificial intelligence is transformative, from data processing to personalization and operational optimization. By integrating AI into applications, organizations can enhance user interaction, foster product innovation and establish continuous learning systems that adapt to evolving customer needs. Data becomes even more invaluable as IT leaders are advised to ensure its accessibility, facilitating real-time decision making and cross-functional collaboration. This data-centric approach supports a culture where insights drive actions, empowering teams to predict trends, adapt swiftly and reduce biases in decision-making.

With **data privacy** and **cybersecurity** at the forefront, safeguarding sensitive information will be the key to complying with global regulations, securing customer trust and mitigating the financial risks associated with breaches. User experience, both internal and external, is also an important competitive differentiator. By creating intuitive, seamless experiences, organizations can enhance productivity, drive customer loyalty and maintain a competitive edge.

As **cloud computing** evolves, leaders should re-evaluate the balance between cloud services and on-premises solutions, optimizing for cost, control and performance. Furthermore, **edge computing** is becoming a strategic approach to reduce latency, improve data security and support scalable IoT implementations. Ethical AI practices and sustainability are also essential for long-term success. AI governance ensures that technology aligns with regulatory and ethical standards. At the same time, sustainable IT practices, such as energy-efficient infrastructure and circular economy models, are becoming both a moral and an economic imperative.

I hope the following checklist will provide valuable guidance for navigating the technology trends that will shape 2025 and assist you prioritize the IT projects and actions to implement within your organization. I wish you the best of luck in 2025 and beyond.

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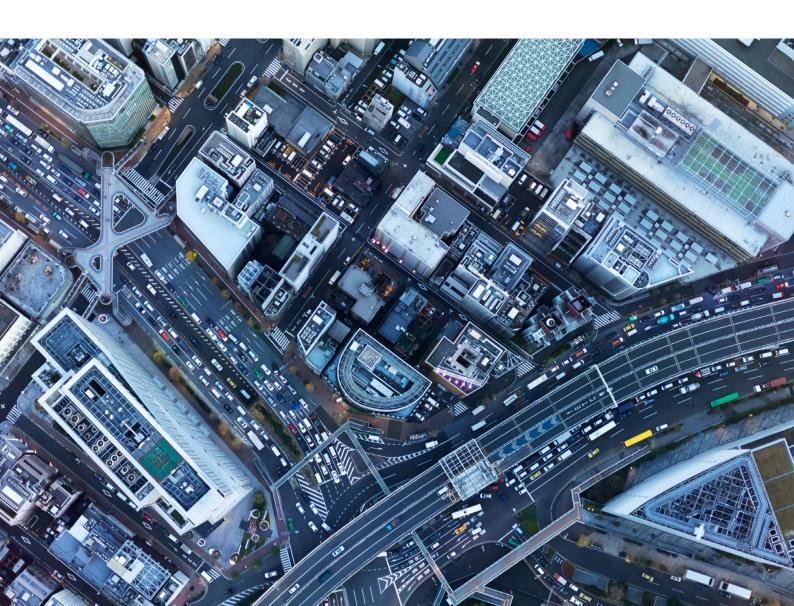
The 12 top priorities for IT leaders in 2025

At Atos, we know that today's IT leaders are under increasing pressure to drive innovation and enhance organizational resilience in a highly competitive digital landscape. The following points highlight key areas where IT leaders can focus to remain relevant, agile and secure:

1. Automate more of your business

Your journey towards streamlining operations is far from over, and there are still plenty of opportunities to enhance your business through automation. However, organizations often need help in this area. Challenges include integrating disparate technologies, scaling automation and ensuring alignment with cybersecurity practices.

Despite these challenges, automation offers numerous benefits. It can lead to significant efficiency and cost savings by reducing the time spent on repetitive manual tasks, enabling employees to focus on more strategic work. This not only boosts productivity but also reduces operational costs. Additionally, automated processes are easier to scale, which supports business growth and agility. Automation also plays a crucial role in minimizing human error and improving data entry, billing and customer support accuracy.

Don't miss out on the advantages of automation. Start automating your business processes to boost productivity, reduce costs and scale effortlessly.

2. Implement more AI

AI is everywhere, and now is a fantastic time to harness its efficiencies. However, organizations face several challenges when implementing AI. These include a lack of skills, the high GPU time cost and difficulties moving from proof of concept (POC) to production. Partnering with an organization like Atos can help you overcome these hurdles.

The benefits of implementing more AI are substantial. AI can provide data-driven insights by processing large volumes of data at scale, identifying patterns and insights that humans might miss. It can also enhance personalization and customer experience by delivering tailored recommendations, improving user satisfaction and loyalty. Additionally, AI can streamline complex processes, from supply chain management to fraud detection, improving overall operational efficiency.

Start integrating AI into your business processes in 2025 to boost productivity, reduce costs and scale effortlessly.

3. Create AI-driven apps

Now is the perfect time to explore building your own AI strategy to stay ahead of the game. This journey begins with adopting an AI-first approach to app development. However, several challenges must be considered, such as the complexity of AI models, ethical and bias concerns and dependence on external platforms or services.

Regardless, the benefits of AI-driven apps are substantial. Enhanced user interaction is one of the key advantages, as AI-driven apps can deliver more innovative, more personalized experiences, such as chatbots for customer service and recommendation engines for e-commerce. Additionally, AI-driven features enable companies to offer unique products that provide a competitive edge by attracting and retaining customers. Furthermore, AI-driven apps that learn from user interactions can continuously adapt to changing customer needs, improving and delivering consistent value over time.

If you are behind the curve already, start developing your AI strategy today to enhance user experiences, drive product innovation and ensure continuous learning and improvement.

4. AI governance and ethical AI

As AI becomes deeply embedded in business processes, leaders must ensure compliance with evolving AI regulations around transparency, accountability and fairness. In 2025, this will likely include adhering to stricter local and international AI governance frameworks like the EU AI Act.

Establishing ethical AI practices is essential for building trust with customers and stakeholders. Addressing biases in AI algorithms to ensure fairness is crucial. Leaders should focus on setting up teams and protocols to continuously audit AI systems, ensuring they align with organizational values and societal norms. Here are three ways to mitigate coded bias:

- **Acknowledge bias from the start**

  Recognize that bias exists in your algorithm. Consider the diverse backgrounds, perspectives and input of end users when building your next model. Listen to their feedback and learn about their overall experience to better understand what is missing, what needs to change and how the model can best serve them. A great way to solicit feedback is through simple surveys via social media, personal email, or project-specific communication.

- **Value data quality over quantity**

  The data that goes into a machine learning model determines how smart and efficient the AI system will be. However, more data doesn't necessarily mean smarter AI. Feeding your model too many samples and data sets might increase bias. Instead, carefully review and select the data before it's fed into the model. Ensuring accurate AI involves selecting training data based on quality rather than quantity.

- **Monitor the algorithmic process**

  When building your ML model, monitor the algorithmic process, reviewing results in real time to ensure consistency as the build continues. This is imperative to ensure unintended bias doesn't occur at any step along the way. Identifying and narrowing down a problem early on makes finding a solution much easier.

5. Make your data more available

Your data is invaluable and in 2025, developing a clear strategy to maximize its worth is crucial. However, making data available comes with its own set of challenges. Data security is a significant concern, as more data sources increase vulnerability to cyberattacks. Ensuring data quality is also critical, as poor-quality data can lead to distorted analyses and financial impacts. Additionally, there is often a talent shortage, with businesses needing help finding the right people to work on data. Data access can be complicated by different devices, networks, locations and roles, and data integration is another challenge, as data from various sources and formats must be combined into a single format.

The benefits of making data available are substantial. Access to real-time data enables faster, more informed decision making at all levels of the organization. Making data readily available also breaks down silos, allowing for more seamless cross-functional collaboration and innovation. Furthermore, with accessible data, organizations can gain deeper insights into customer preferences and behaviors, refining products and services to better meet market demand.

Take advantage of data availability by developing your data strategy to enhance decision making, foster collaboration and improve customer insights in years to come. You'll thank me later.

6. Become data-driven

Trust me when I say making your data more available is the first step towards becoming a data-driven organization. Transforming your IT infrastructure and data pipelines is crucial to ensure you harness all the opportunities that data visibility provides. However, there are several challenges to consider.

Cultural barriers can be significant, as organizations may resist change and rely on intuition and experience over data. Additionally, a lack of resources, knowledge or clear roles and responsibilities can hinder the transition to a data-driven approach. Finally, quantifying the return on investment (ROI) from new technologies like AI can be challenging.

But how can you benefit? Data-driven organizations can leverage predictive capabilities to anticipate trends, forecast demand and respond proactively to customer needs.

With data-driven insights, organizations can react faster to market changes and make strategic adjustments more effectively. Cultivating a data-driven culture encourages employees to rely on evidence-based decision making, reducing biases and improving outcomes.

An organization like Atos can help you take advantage of becoming data driven. Transform your IT infrastructure to enhance predictive capabilities, boost agility, and make informed decisions worth more than gold. In my experience, enterprises need to align their data strategies to mitigate issues when trying to maximize the benefits of using data.

7. Prioritize data privacy

Protecting your data assets is crucial to mitigate potential legal problems. Data privacy challenges include insider threats, where employees may inadvertently or intentionally compromise data security. The rise in cyberattacks has also made data breaches more common and severe, leading to significant financial losses. Human error, such as lost smartphones, shared credentials or accidental leaks of confidential information often expose sensitive data.

Prioritizing privacy helps organizations comply with global regulations like GDPR and CCPA, avoiding costly fines and penalties. Protecting customer data also builds trust, which can be a significant competitive advantage. Moreover, a solid commitment to data privacy reduces the risk of data breaches, which can lead to reputational damage and financial loss.

Don't overlook the importance of data privacy. I advise implementing robust data protection measures in 2025 to ensure regulatory compliance, build customer trust and manage risks effectively.

8. Increase cybersecurity protection

Cybersecurity is important enough that I will say it twice: It is crucial to recognize that cybersecurity issues are not a matter of if, but when. It's essential to galvanize your company now to protect against potential threats. While the benefits of robust cybersecurity measures are clear, complacency can be dangerous — especially for large enterprises with a high risk of being compromised.

Enhanced cybersecurity measures are vital for safeguarding sensitive data, including customer information, intellectual property and other critical assets, from cyberthreats. Strong security protocols also help maintain business continuity by preventing downtime and disruptions due to attacks, ensuring operations run smoothly. Additionally, in an era where customers are increasingly security-conscious, robust cybersecurity can be a significant differentiator that builds trust and loyalty.

Don't wait for a cybersecurity issue to arise. Take proactive steps to protect your data, maintain business continuity, and build customer confidence. Here are some actions you can take:

- Train your staff
- Protect endpoints
- Control access to your systems

To thrive in 2025, IT leaders must balance innovation with resilience, leveraging automation and AI to drive efficiency, enhance user experiences, and ensure data-driven, ethical and sustainable practices. These strategies collectively create a robust foundation for innovation, security and scalability, allowing them to build resilient and future-ready organizations.

9. Improve user experience internally and externally

Streamlining your operations to gain a competitive edge, especially for internal usage, is crucial. However, several challenges can impact user experience. For instance, ensuring accessibility is vital; a good design should be accessible to all users. Additionally, a disconnect between the design and development phases can result in a final product that doesn't meet user needs. Balancing growth with quality is another challenge, as rushing to build a product can lead to "squeaky doors" and "wobbly floors."

Maintaining consistency across platforms is also important, as a digital product needs to look and function the same on desktops, smartphones and tablets. Lastly, addressing performance bottlenecks is essential, as slow loading times and downtime can negatively affect the user experience.

Enhancing user experience has significant benefits. Improving internal user experience through intuitive interfaces and seamless workflows can boost employee productivity and job satisfaction.

A positive external user experience can increase customer retention and engagement, directly impacting revenue. Moreover, organizations that prioritize user experience can differentiate themselves, as customers increasingly prefer businesses offering easy-to-navigate and responsive digital interactions.

By addressing these challenges and focusing on the benefits, you can create a more efficient and user-friendly environment that supports your employees and customers.

10. Consider cloud repatriation

The promise of the cloud hasn't always lived up to our expectations. So, is returning to the data center a better option to control IT costs? It might sound crazy, but there are valid reasons why some companies are considering this move.

Firstly, the cost of cloud migration can be high, especially during the transition period when businesses are paying for both cloud and on-premises infrastructure. Security is another concern, since cloud-based solutions can leave companies vulnerable to cyberthreats. Compliance with service laws and regulations can also be challenging when moving information to the cloud. Additionally, companies may want more control and customization over their data, which can be difficult to achieve in the cloud. Technical limitations and challenges integrating legacy systems are other factors that can make cloud migration complex.

There are significant benefits to cloud repatriation. Running them on-premises can be more cost-effective for some workloads, particularly for stable workloads with predictable needs. Cloud repatriation can also improve control over sensitive data, helping with compliance and data sovereignty requirements. Moreover, moving applications that require low-latency or high-performance computing on-premises or to a private data center can offer significant performance and latency benefits.

So, while the cloud offers many advantages, carefully weighing the costs and benefits is essential. For some companies, returning to the data center might be the right move to optimize costs, enhance control and improve performance.

11. Consider more localized IT like edge computing

It may be time to consider a decentralized approach to IT. Edge computing offers IT services commonly seen in data centers and the cloud, but why would companies consider an edge strategy? What is driving this move?

Companies may consider edge computing for several reasons. Real-time processing is a significant advantage, as edge computing allows companies to process data in real time or close to it, improving user experience. Low latency is another benefit, making edge computing ideal for situations that require minimal delay, such as IoT management. Privacy concerns also drive the move to edge computing, as users may prefer to keep sensitive data locally rather than send it to the cloud.

Additionally, edge computing is advantageous in remote areas like offshore oil platforms or mobility and transportation scenarios. Cost sensitivity is another factor, because edge computing can help optimize costs by processing data in different parts of the cloud continuum. Finally, edge computing supports autonomous operations, keeping processes running — even when connectivity to the cloud is impossible or unreliable.

12. Sustainable IT practices

By now, I shouldn't have to convince you that sustainability should be at the forefront of your company strategy. The evidence is clear: We are facing a climate crisis.

First, think about energy efficiency and reducing your carbon footprint in 2025. With climate initiatives and net-zero goals becoming the norm, it's crucial to focus on green data centers and energy-efficient infrastructure. It's also essential to monitor the carbon footprint of your IT operations, including cloud and edge deployments.

Next, let's discuss the circular economy and managing e-waste. Sustainable IT isn't just about energy; it's also about refurbishing, reusing and recycling hardware. Building partnerships with vendors prioritizing sustainable product lifecycles can help minimize e-waste and support your broader corporate sustainability goals. Here are some actionable steps you can take:

- **Consider renewable energy:** It's a cornerstone of sustainable development.
- **Recycle:** This reduces the need to extract new materials from the Earth, which is great for the environment.
- **Conserve energy:** Investing in energy-saving devices can save money and help the planet.
- **Use laptops:** They consume less power than desktops.
- **Turn off devices:** Encourage employees to turn them off when not in use.
- **Use efficient cooling systems:** Opt for energy-efficient systems.
- **Set green IT policies:** Establish policies that promote sustainability.
- **Go paperless:** Switch to recycled paper or go paperless to reduce waste.
- **Use virtualization:** This can reduce the environmental impact of data centers, increase flexibility, and lower maintenance costs.

No matter how obvious, all actions require a plan to ensure their effectiveness. Implementing these strategies can significantly improve your organization's sustainability efforts.

Conclusion

As we look ahead to 2025, the technology and business landscape is clearly evolving rapidly. Embracing automation, AI and data-driven strategies will be important for staying competitive and efficient. At the same time, we must prioritize sustainability, from energy efficiency and carbon reduction to circular economy practices and e-waste management.

Data privacy and cybersecurity remain paramount, as protecting our digital assets is essential for maintaining trust and compliance. Enhancing user experience will drive engagement and satisfaction, while considering cloud repatriation and edge computing can optimize costs and performance.

Focusing on these key areas will help us navigate the challenges and opportunities of the coming year with confidence and agility. Let's commit to continuous improvement, innovation and sustainability as we move forward into 2025.

About the author

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Ricky is a virtualization and cloud veteran with 30 years of experience under his belt. He is a digital technology and business leader, employing a creative, adaptive and business-centric leadership style that incorporates people, industry best practices as well as data and technology. As a digital technologist and member of the Atos Research Community (ARC), Ricky scans the horizon and advises both Atos and its clients about their digital strategies and technology investments.

In his spare time, he DJs and collects and remodels old computers.

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