# Business aviation cautiously pioneers generative AI amid security and accuracy concerns



In recent years, the business aviation sector has been steadily exploring the potential of generative artificial intelligence (genAI) technologies to enhance operational efficiency and streamline workflows. However, delivering on the promise of these advanced tools involves overcoming significant challenges, particularly regarding data privacy and the nuances of automation. As firms transition into an era increasingly influenced by digital technologies, careful consideration and robust strategies are paramount.

The broader corporate landscape underscores these challenges. A recent survey revealed that more than half of the largest U.S. companies regard AI as a potential risk to their operations, a sharp increase from just 9% in 2022. Key concerns include competitive and operational uncertainties, particularly in sectors like media, entertainment, and healthcare. Despite apprehensions, a substantial number of firms have also witnessed the positive impacts of AI on customer service and operational processes, highlighting a dual narrative of caution and optimism.

Among the business aviation firms leading the charge in AI adoption is Bitlux, a Florida-based charter brokerage. The company's president, Kyle Patel, indicates that youthful leadership plays a crucial role in embracing new technologies. Patel notes that about a third of his firm's bookings are made using cryptocurrencies, and the deployment of generative AI tools has transformed internal operations significantly. He likens the system to a digital personal assistant, utilising AI for various tasks, from managing emails to prioritising daily responsibilities based on multiple variables. Such innovative applications exemplify a willingness to experiment and adapt, a hallmark of younger enterprises not shackled by longstanding industry conventions.

Yet, the integration of AI in business aviation isn’t without its complexities. Security and data integrity remain at the forefront of concerns as firms navigate the deployment of AI. Web Manuals, a Swedish digital aviation document solutions provider, highlights the importance of developing its own AI system, named Amelia. This approach aims to mitigate risks associated with third-party tools while ensuring compliance with stringent data protection standards. Chief Technology Officer Richard Sandstrom acknowledges that prioritising security compliance often takes precedence over straightforward development, given the inherent risks of data mishandling in AI systems.

The technological landscape also poses challenges for businesses looking to harness the power of AI effectively. A KPMG survey indicated that while 65% of U.S. executives anticipate significant impacts from genAI in the coming years, 60% feel ill-equipped for immediate implementation. Among the hurdles identified are not only the need for substantial processing power and technical expertise but also the organisational challenges of managing change and establishing a culture conducive to innovation. These findings resonate with broader sentiments that while the potential of generative AI is vast, many stakeholders must address skills shortages and create supportive frameworks for adoption.

Moreover, the issue of AI "hallucinations"—the phenomenon where systems provide erroneous information while appearing credible—cannot be overlooked, especially in safety-critical sectors like aviation. Both FL3XX, which focuses on flight management, and MySky, a cost management platform, emphasise their commitment to integrating AI without compromising accuracy or privacy. CEO Paolo Sommariva states that FL3XX employs AI grounded in verified operational workflows, a crucial factor for maintaining trust in an industry where errors can have dire consequences.

The message is clear: while generative AI tools offer transformative prospects, their application within the business aviation sector must be carefully navigated. Striking a balance between innovation and risk management is essential; as companies seek to leverage AI for competitive advantage, they must also remain acutely aware of the implications of automation on operational integrity and customer trust. Engaging with stakeholders through frameworks that delineate usage policies and risk assessments could pave the way for more robust and responsible AI integration.

Ultimately, the journey towards widespread acceptance and effective use of generative AI in business aviation reflects a broader trend across industries. A focus on solid governance, continuous learning, and proactive risk management will be essential as organisations strive to benefit from the opportunities that these emerging technologies present. In a landscape marked by both hesitation and hopeful anticipation, the coming years will reveal whether industry players can adeptly harness the transformative power of generative AI while safeguarding their foundational values of privacy and reliability.

### Reference Map

1. Paragraph 1: [[1]](https://aviationweek.com/business-aviation/maintenance-training/business-aviation-takes-measured-approach-ai-adoption), [[2]](https://www.ft.com/content/5ee96d38-f55b-4e8a-b5c1-e58ce3d4111f)
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5. Paragraph 5: [[3]](https://www.reuters.com/legal/legalindustry/developing-your-companys-generative-ai-policy-start-with-an-agile-5ws-framework-2024-11-18/), [[4]](https://kpmg.com/us/en/media/news/kpmg-generative-ai-2023.html)
6. Paragraph 6: [[1]](https://aviationweek.com/business-aviation/maintenance-training/business-aviation-takes-measured-approach-ai-adoption), [[6]](https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year)
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8. Paragraph 8: [[5]](https://www.panorama-consulting.com/generative-ai-adoption-challenges/), [[4]](https://kpmg.com/us/en/media/news/kpmg-generative-ai-2023.html)
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## Bibliography

1. <https://aviationweek.com/business-aviation/maintenance-training/business-aviation-takes-measured-approach-ai-adoption> - Please view link - unable to able to access data
2. <https://www.ft.com/content/5ee96d38-f55b-4e8a-b5c1-e58ce3d4111f> - A Financial Times article reports that over half of the largest U.S. companies view artificial intelligence (AI) as a potential risk to their businesses. The number of Fortune 500 companies citing AI as a risk has surged from 9% in 2022 to 56% in recent reports. Industries expressing the most concern include media, entertainment, software, telecommunications, healthcare, financial services, and retail. Companies like Netflix and Motorola cited competitive and operational risks, while Salesforce and Disney highlighted ethical, regulatory, and financial uncertainties. Despite these concerns, some companies, including Quest Diagnostics and Cigna, noted AI's positive impacts on customer service and operational processes.
3. <https://www.reuters.com/legal/legalindustry/developing-your-companys-generative-ai-policy-start-with-an-agile-5ws-framework-2024-11-18/> - A Reuters article discusses the importance of developing a generative AI policy within companies using an agile '5Ws' framework (Who, What, When, Where, Why). This approach helps organizations explore specific use cases, evaluate risks and benefits, and adapt policies accordingly. Key steps include involving stakeholders, focusing on governance and approvals for AI applications, and maintaining up-to-date Directors and Officers (D&O) insurance. The framework aims to prevent overwhelming policy documentation and helps avoid stalling AI adoption in business processes.
4. <https://kpmg.com/us/en/media/news/kpmg-generative-ai-2023.html> - A KPMG U.S. survey reveals that while executives expect generative AI to have a significant impact on business, many feel unprepared for immediate adoption. Nearly two-thirds (65%) of the 225 U.S. executives surveyed believe generative AI will have a high or extremely high impact on their organization in the next three to five years. However, 60% say they are still a year or two away from implementing their first generative AI solution. The survey highlights challenges in technology, talent, and governance necessary for successful implementation.
5. <https://www.panorama-consulting.com/generative-ai-adoption-challenges/> - An article from Panorama Consulting discusses the challenges organizations face when adopting generative AI, including computational resource demands, model training and maintenance, and organizational hurdles like change management. It emphasizes the need for substantial processing power and storage capacity, the scarcity of skilled AI professionals, and the necessity for effective change management strategies to address employee resistance and foster a culture of innovation.
6. <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year> - A McKinsey report highlights the rapid growth of generative AI tools, with one-third of survey respondents indicating their organizations use generative AI regularly in at least one business function. Despite this adoption, many companies are not fully prepared for the associated risks, with only 21% having established policies governing employees' use of generative AI technologies. The report underscores the need for organizations to address potential risks, including inaccuracy, cybersecurity, and regulatory compliance.
7. <https://www.vistage.com/research-center/business-operations/business-technology/20241205-gen-ai-adoption/> - An article from Vistage discusses the challenges and risks associated with generative AI adoption, including resistance to change, concerns about job displacement, and technical integration issues. It emphasizes the importance of addressing these challenges through effective change management strategies, securing buy-in from key stakeholders, and ensuring that AI systems are secure and free from biases to maintain a balance between automation and human involvement.