

JAL Invests in A*Quantum to Accelerate Enterprise DX and Business Transformation Through Quantum Technologies

— Leveraging the Operational Deployment in Aircraft Maintenance to Drive Productivity Improvement and Future Business Creation —

Tokyo, JAPAN—Japan Airlines Co., Ltd. (“JAL”; Headquarters: Shinagawa-ku, Tokyo; President: Mitsuko Tottori) has invested in A Star Quantum Inc. (“A*Quantum”; Headquarters: Minato-ku, Tokyo; CEO: Koji Funabashi) through its Corporate Venture Capital (CVC) Fund I (*1), a startup specializing in quantum computing technologies, mathematical optimization, and high-speed data processing technologies.

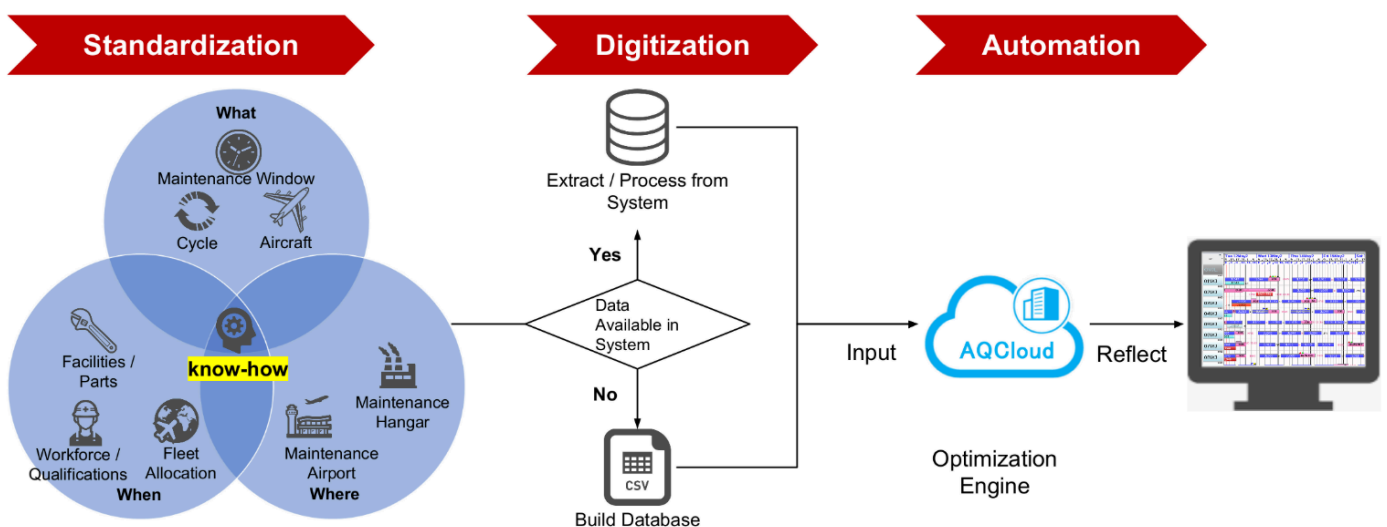
Through this investment, JAL aims to accelerate enterprise-wide digital transformation (DX), operational innovation, and the creation of new value utilizing advanced technologies.

Current Initiatives

The JAL Group is driving fundamental operational transformation through technology. As part of these efforts, JAL Engineering Co., Ltd., the aircraft maintenance arm of the JAL Group, has been jointly developing an automated optimization tool for aircraft maintenance operation planning with A*Quantum since July 2023. Full-scale operational deployment began in March 2026.

This initiative has already demonstrated significant progress in reducing the time required for complex planning processes. which had previously relied heavily on the expertise and experience of veteran employees.

JAL will continue working toward further improvements in operational efficiency (*2).



(*1) January 24, 2019 Release | Establishment of Japan Airlines Innovation Fund

<https://press.jal.co.jp/en/release/201901/005030.html>

(*2) July 31, 2023 Release | First in the Japanese Aviation Industry: JAL and AQuantum Optimize Aircraft Maintenance Planning Using Quantum Computing Technology

<https://press.jal.co.jp/ja/release/202307/007538.html> (in Japanese only)



Why JAL Is Advancing Quantum Technologies

The aviation business operates under highly complex constraints across a wide range of functions, including flight operations, cabin services, maintenance, airport operations, reservations, sales, and corporate support functions. In recent years, increasing data volumes, workforce constraints, and growing operational complexity have made it increasingly difficult to achieve fast and optimal decision-making using conventional experience-based approaches and existing systems alone.

JAL believes that advanced technologies such as quantum computing and mathematical optimization will become increasingly important in addressing these challenges.

A*Quantum is a startup with strong implementation capabilities, leveraging quantum computing technologies, mathematical optimization, and high-speed data processing to support the full process from data extraction and analysis to hypothesis generation and resource optimization. The company has built a proven track record of solving complex operational challenges across multiple industries.

Building on the success of the collaboration in the maintenance domain, this investment represents a strategic step toward leveraging A*Quantum's technologies to accelerate enterprise-wide DX, improve productivity, and explore future business opportunities across the JAL Group.

Future Outlook

Going forward, JAL will use the successful deployment in the maintenance domain as a model case and actively explore applications of advanced technologies, including quantum computing, to address operational challenges across the JAL Group.

In collaboration with JAL Digital Inc. and other JAL Group companies, JAL will further advance the implementation of technologies tailored to operational needs across business units. In addition, solutions validated through collaboration with A*Quantum and deemed applicable beyond aviation will also be evaluated for potential external deployment in the future.

【About A*Quantum Inc.】

A*Quantum is a startup focused on solving complex operational challenges using quantum computing technologies, mathematical optimization, and high-speed data processing technologies. Through its Quantum AI cloud platform "AQCloud," the company develops optimization solutions for domains involving complex constraints, including logistics, workforce scheduling, production planning, and maintenance planning.

<https://a-star-quantum.jp/en>