

A large white Boeing 747-400 aircraft is parked on a tarmac under a blue sky with scattered clouds. Ground crew members in high-visibility vests are visible near the aircraft's main cabin door, which is open. A service vehicle with a red and white checkered pattern is parked nearby. The aircraft's tail features a blue and yellow logo.

Data & Analytics Squad for End-to-End Data Product Development

Industry: **Airlines / Air Transport**

*Image for illustrative purposes only

Summary

A leading airline and air transport company in Mexico strengthened its Data & Analytics capabilities by enabling a specialized team provided by Novacomp. The squad supported the full development cycle of new data products — from requirements gathering and source mapping through implementation, documentation, and production rollout — in compliance with the organization's data governance guidelines.

Key challenges

- Increasing the speed of data product development without compromising quality, documentation, or traceability.
- Covering different seniority levels and specializations, from Lead to semi-senior profiles.
- Aligning data product delivery with the client's internal data governance standards.
- Integrating complementary roles such as Data & AI Engineer, Data Scientist, and Data Governance to expand service capacity.

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Approach

Novacomp structured a specialized squad model designed to support the full lifecycle of data products and integrate with the client's governance and delivery processes:

- Formation of a comprehensive Data & Analytics team with Lead Data Engineer, Data Engineer, Data Analyst, and complementary profiles.
- Involvement from the identification of business needs and functional understanding.
- Source mapping, data analysis, technical design, and data product construction.
- Technical and functional documentation aligned with the client's data governance guidelines.
- Support through testing, stabilization, and production deployment of data products.

Results

- Greater execution capacity for developing new data products.
- Faster time-to-value for analytics initiatives prioritized by the business.
- Improved documentation and technical traceability of deliverables.
- End-to-end capability coverage through a multidisciplinary team.
- Flexibility to bring in specialized profiles as client demand evolves.

Technologies used

Component	Technologies / Capabilities
Data engineering	AWS Glue for ETL/ELT processes, data modeling, pipelines, and data integration and exploitation jobs.
Analytics	Amazon Athena and AWS analytics services for data products, business metrics, and analytical consumption.
AI and data science	AWS Bedrock and AI capabilities on AWS, with Data & AI Engineer and Data Scientist profiles for advanced use cases.
Data governance	AWS Glue Data Catalog, delivery guidelines, documentation, traceability, roles, and data governance controls.



Conclusion

The service allowed the client to scale its Data & Analytics capacity through a flexible, specialized, results-oriented model. Novacomp contributed talent, methodology, and hands-on support to accelerate data product creation while maintaining alignment with the client's data governance standards.

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