



Audi TI-REX: Flexible, Configurable, and Scalable Reporting

In Brief

Audi AG partnered with Gloster to modernize its internal reporting infrastructure, replacing seven independent legacy systems with a single, flexible, and highly configurable solution. With more than 35,000 daily users, this platform has not only streamlined reporting but also empowered business users to generate insights without depending on IT expertise. It was designed to run on mainframe infrastructure, using Java and Angular technologies to replace legacy COBOL-based systems and interact directly with the DB2 database, enabling a more modern and sustainable architecture. The result is a scalable and intuitive tool that adapts to business needs in real time.







The Challenge

Despite its industrial prowess, Audi's internal IT and reporting systems were highly fragmented. Each department had individual, standalone tools running on the mainframe, tools built on outdated COBOL and stored procedure-based architectures. These systems were not only hard to maintain but also inflexible when business requirements changed, and updating reports often required developer intervention, lengthy test cycles, and system restarts.

The key challenge was to replace these rigid legacy systems with a modern, sustainable, and intuitive reporting platform — one that could evolve quickly as business demands shifted.

Objectives

- Onsolidate and retire 7+ outdated reporting systems
- Enable self-service reporting across departments, reducing IT dependency
- Deliver configuration-driven flexibility to accommodate real-time business needs
- Description

 Ensure system security and performance by leveraging mainframe-native Java architecture
- Build a long-term, maintainable, and scalable solution

The Gloster Solution

Gloster collaborated with Audi's internal teams, from proof of concept to full rollout. The solution is a modern reporting tool designed to operate seamlessly within a mainframe environment while offering the intuitive, drag-and-drop experience of modern BI platforms. The architecture is entirely configuration-based, meaning even non-technical users can customize data views and reports without developer support.

KEY FEATURES



Runs directly on IBM mainframes for optimal data access speed and security, eliminating the overhead of external queries.

COBOL-to-Java Modernization

Modernization: Portions of the original COBOL logic were replaced or abstracted with Java, increasing maintainability and developer accessibility.

Real-Time Configurability

New data sources or table fields can be added in minutes; the system reflects changes instantly without redeploying. Data Rooms and Permission Controls:

Users access curated datasets tailored to their role and authorization level, enabling secure and context-specific reporting.

Self-Service UI

Built on Angular, the frontend supports intuitive filtering, data selection, and export tools, eliminating the need for SQL knowledge.

BI-Style Reporting

Users can create sophisticated queries with ease using drag-and-drop functionality; outputs are configurable in table, matrix, or visual formats.

Implementation Highlights

Gloster proved Java apps could run efficiently on IBM mainframes, delivering the first working prototype.

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Business Impact

The solution provided by Gloster delivered immediate and long-term value:

- 35,000+ Daily Users: The platform is used across departments, from business support to manufacturing, democratizing access to data.
- 7 Legacy Systems Retired: Consolidation drastically reduced maintenance overhead and complexity.
 - Minutes Instead of Months: Configuration changes now take minutes rather than weeks, eliminating IT bottlenecks.
 - Sustainable Architecture: Using Java on the mainframe ensures performance and future-proof compatibility without increasing operational risk
 - IT Cost Reduction: Significant savings achieved through system unification and lower support burden.

What's Next?

Gloster and Audi continue to collaborate on advancing the platform:

- Web-Based Interface Expansion: Current updates focus on further improving the Angular front-end for seamless browser access.
- Feature Growth: Plans include adding analytics dashboards, enhanced muthorization workflows, and Al-driven data insights.
- Wider Group Integration: The platform is well-positioned for rollout across additional VW Group entities, thanks to its modular, configurable foundation.

Technologies Used

































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