

Merck TIV Report

Score: 36.78% (166/450)

Category: Technology Laggard

Assessment Date: 2025-09-01

Section Summary

Section	TIV Score	Category
Part 1: Business & Strategy	20%	Technology Laggard
Part 2: Apps & Data	44%	Technology Follower
Part 3: Infrastructure	46.67%	Technology Follower
Total TIV Score	36.78%	Technology Laggard

Business & Strategy Analysis

Assessment of business strategy and technology leadership reveals a lack of organizational commitment to digital capabilities development through executive structure, strategic initiatives, and technology talent acquisition.

- Management structure lacks key roles such as CDO and CTO
- No evidence of AI leadership
- Technology mentioned as a strategic priority but lacks a detailed roadmap
- No recent hiring activity for data and tech roles
- No redundancies in tech/data roles
- Mixed employee sentiment regarding tech culture

Applications & Data Analysis

Technical platform evaluation demonstrates a moderate level of digital architecture maturity, data management sophistication, and customer experience optimization capabilities.

- Website uses modern HTML, CSS, and JavaScript frameworks
- Evidence of modern REST APIs and secure headers
- Basic rules-based personalization and light experimentation noted
- Enterprise consent management platform in place

- Some evidence of systematic coding, but not fully clean
- Basic CRM integration noted

Infrastructure Analysis

Infrastructure assessment shows a moderate level of cloud strategy implementation, security posture, and operational scalability aligned with modern technology practices.

- Primary partnership with AWS for cloud services
- Some evidence of traditional data structures, but not fully modern
- Evidence of Kubernetes usage for orchestration and GPU usage for AI compute
- Medium CI/CD maturity found
- Modern TLS, encryption-at-rest, GDPR compliance, privacy policies, IAM practices, and DevSecOps practices found

Evidence Gaps & Assumptions

Areas with insufficient evidence:

- AI leadership
- Hiring velocity and quality
- AI Cloud Partnership
- AI/ML Ops Maturity
- Deployment cadence
- Data quality & observability
- AI Security

Recommendations

Key improvement areas based on gaps identified:

1. Appoint key roles such as CDO and CTO to drive technology strategy
2. Develop a detailed technology roadmap
3. Increase hiring activity for data and tech roles
4. Establish partnerships with AI cloud services
5. Improve AI/ML Ops Maturity
6. Implement continuous deployment practices
7. Enhance data quality & observability measures
8. Strengthen AI security measures

Overall Assessment

Merck demonstrates a low commitment to technology infrastructure and digital capabilities. The company shows strengths in website technology and security measures but has opportunities to improve in areas such as leadership, hiring, and AI/ML operations.

Evidence Sources

Leadership & Management:

- Company website: <https://www.merck.com>

Financial & Investment:

- Company investor relations:
<https://www.merck.com/investors/annual-reports>

Technical & Performance:

- Company website: <https://www.merck.com>
- Performance tools: <https://developers.google.com/speed/pagespeed/insights>