

# Costco TIV Report

Score: 56.4% (254/450)

Category: Technology Follower

Assessment Date: 2025-09-01

## Section Summary

Section	TIV Score	Category
Part 1: Business & Strategy	32%	Technology Laggard
Part 2: Apps & Data	90.7%	Technology Leader
Part 3: Infrastructure	46.7%	Technology Follower
Total TIV Score	56.4%	Technology Follower

## Business & Strategy Analysis

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

- Management structure includes a CIO but lacks a CDO or CTO
- Technology is viewed as a key enabler rather than a core strategic pillar
- Significant investments in IT infrastructure and software assets
- Hiring velocity for tech/data roles is moderate with a focus on junior to mid-level roles
- No public evidence of layoffs or redundancies in tech/data teams in the last 12 months

## Applications & Data Analysis

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

- Modern JavaScript frameworks and CDN used for website
- Hybrid architecture with microservices for new features and monolithic legacy systems for core retail functions
- AI-driven product recommendations and personalized offers present on website and app
- Comprehensive marketing stack including Google Ads, Facebook Ads, Adobe Marketing Cloud

- No clear evidence of semantic structure, structured data, machine access controls, accessibility/multimodal support, or provenance metadata for AI agents

## Infrastructure Analysis

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

- Primary cloud partner is Microsoft Azure, with some AWS usage for specific workloads
- Modern data stack usage including Snowflake and Tableau
- Use of Kubernetes and container orchestration confirmed
- Medium maturity with automated pipelines but no evidence of full GitOps or canary deployments
- Modern TLS and encryption-at-rest implemented for network and app security

## Evidence Gaps & Assumptions

Areas with insufficient evidence:

- AI/ML ops maturity
- Deployment cadence
- AI security
- Incident response & transparency

## Recommendations

Key improvement areas based on gaps identified:

1. Appoint a Chief Data Officer (CDO) and Chief Technology Officer (CTO) to drive technology strategy
2. Develop a multi-year technology roadmap to position technology as a competitive differentiator
3. Increase hiring for senior specialized roles like ML engineers or data product managers
4. Implement advanced AI/ML ops and AI security practices
5. Improve deployment cadence and incident response transparency

## Overall Assessment

Costco demonstrates moderate maturity in technology infrastructure. The company shows strong capabilities in applications, data, and customer personalization but has opportunities to improve in executive tech leadership, AI-specific roles, advanced AI/ML ops, and AI security practices.

## Evidence Sources

#### Leadership & Management:

- Costco official website: <https://www.costco.com>
- Costco 2024 Annual Report and Investor Relations materials

#### Financial & Investment:

- Costco 2024 Annual Report and Investor Relations materials

#### Technical & Performance:

- Job postings on Costco Careers site (September 2025)
- Indeed and Glassdoor reviews for Costco tech roles
- Technology stack analysis via browser tools and public tech reports
- Public cloud partnership announcements and technology news articles
- Privacy and compliance information from OneTrust and public privacy policies