

FI Consulting Customer Analytics



Graph-Powered Intelligence for Financial Services

Graph databases provide a fundamentally different way to model and analyze customer data by focusing on relationships as first-class citizens. Instead of forcing connections into tabular joins, graph stores preserve the natural links between customers, accounts, transactions, devices, and third-party entities. This makes it possible to traverse complex networks of interactions quickly and to surface multi-hop relationships that are otherwise costly or impossible to detect with traditional relational approaches.

Graph algorithms—such as community detection, shortest-path, centrality, and pattern-matching—enable systematic exploration of these networks. By executing traversals and algorithms directly on the graph, analysts can uncover recurring motifs, identify tightly connected clusters, and detect anomalous link patterns that signal emerging risks or opportunities. These capabilities reveal latent structures in customer behavior, from hidden referral chains to coordinated fraud rings.

For banks and financial institutions, this richer context becomes competitive advantage—enabling more precise personalization, sharper focus on high-risk networks, and relationship-aware lifetime value. Graph-powered analytics reveal the full customer landscape, driving better decisions across acquisition, retention, risk, and compliance.

Customer Attrition

Predict and prevent customer churn through relationship pattern analysis

Product Propensity

Identify cross-sell and upsell opportunities using network-based recommendations

Customer Lifetime Value

Calculate true customer value through connected relationship networks

Fraud Detection

Detect fraud rings and suspicious patterns through connection analysis

Credit Risk

Assess risk exposure across interconnected entities and networks

Financial Householding

Map complex family and business relationships for complete household view