



Customer Success Story

Exact Sciences

FOUNDED IN: 2014

LOCATION: WISCONSIN

EMPLOYEES: 5,000+

AREA OF FOCUS: LIFE SCIENCES

Exact Sciences Increases Customer Engagement with a Doctor-and-Product 360 Solution built on TigerGraph

Introduction

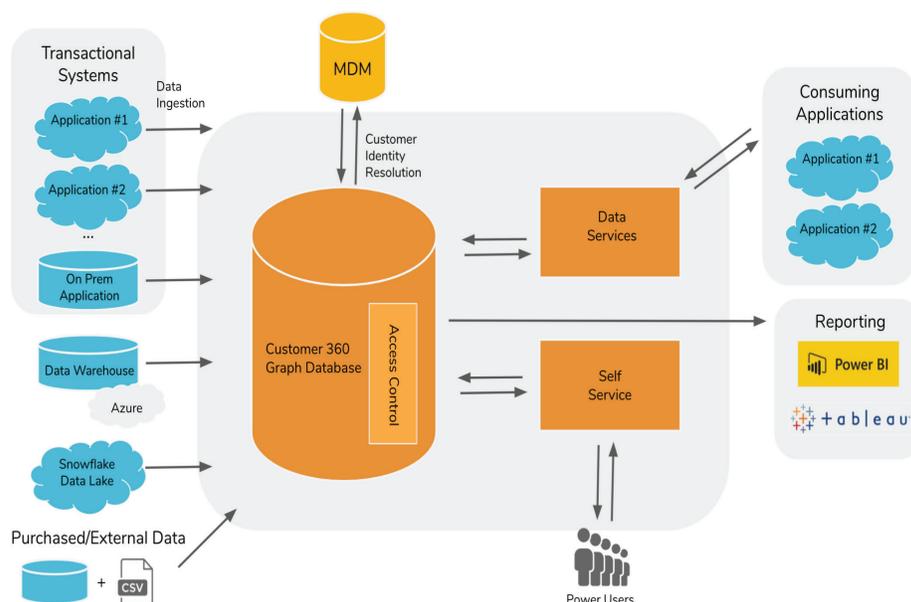
Exact Sciences Corporation is a molecular diagnostics company that focuses on the early detection and prevention of colorectal cancer. The company launched Cologuard in 2014, the first stool DNA test for colorectal cancer. In July 2019, Exact Sciences acquired Genomic Health, a genetic cancer detection company. Exact Sciences, headquartered in Madison, WI, had revenues of \$1.3B in 2019.

The Challenge

Exact Sciences was looking for a way to market more effectively to medical professionals. This involved identifying the appropriate physicians to reach out for a given use case, the best times and channels to utilize, understanding the role of influencers, and more. Although the company had a rich library of information in its data warehouse, the marketing team wanted a way to uncover insights that were obscured. Exact Sciences realized that relational databases were not up to the task and began searching for a graph database and analytics solution.

Key Pain Points

- Doctor & Customer Journey—Where have they been and where are they going
- Hidden Churn Data—Lack of movement, feedback
- Churn Avoidance—Customers who have left, quit product/service
- Time—History, points, marketing and locations
- Positive Intervention—Effort to avoid churn campaigns
- Geographical View—Locations, clinics and doctors for region impact



“We would like to use our current technology and build on top of it. We are utilizing Snowflake and our SQL systems and bolt on [TigerGraph] to make our lives easier and provide much better insights.”

Sharat Endapally, Data Engineer, Exact Sciences

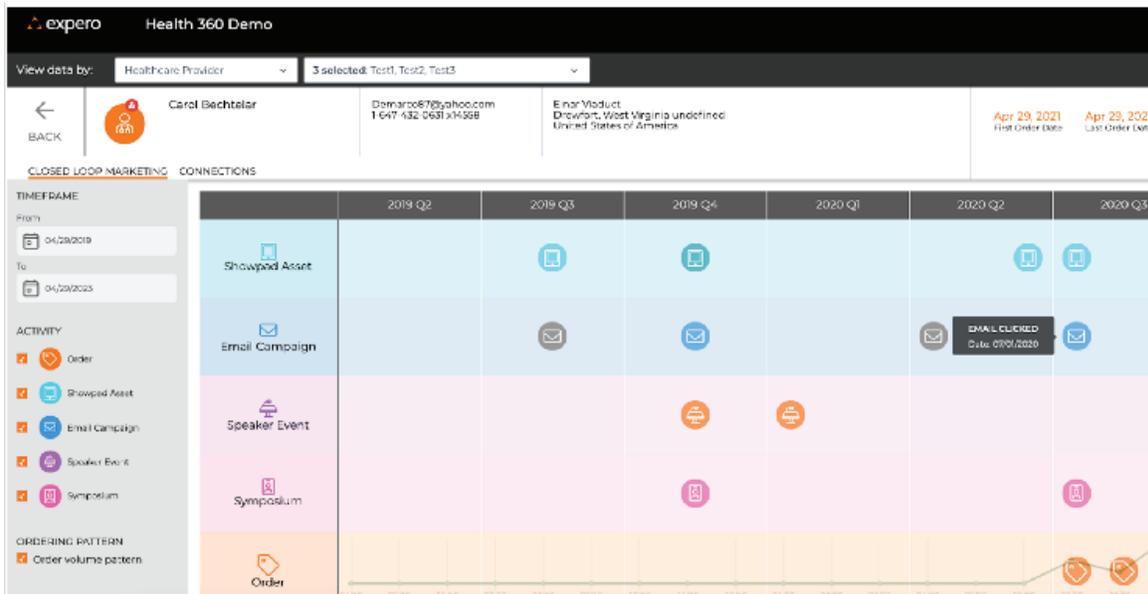
The Solution

After evaluating software from Amazon Neptune and Neo4j, Exact Sciences selected TigerGraph to provide a graph database and analytics. Exact Sciences exports data from its Snowflake warehouse to TigerGraph using an Apache Spark connector, along with data from HubSpot, Microsoft, Salesforce, and other applications. Once the data is in TigerGraph, a combination of deep link analytics and pattern matching identifies causality and recommends next-best-actions. Exact Science uses a visualization toolkit from Expero to provide its marketing team with dashboards that make data interpretation easy.

Connected Data Analytics for Analyzing Relationships

- Product - All interactions, doctors and clinics with products and relationships
- Transactions - Product orders, amounts, locations, types of orders
- Actors - Doctors, clinics, patient interactions with products and services
- Locations - Physical locations, corporate entities, zip codes
- Marketing Events - Trade shows, marketing events, training and information sessions
- Territory - Customer, doctor and clinic interactions with regionality and sales efforts

HEALTHCARE PROVIDER JOURNEY ACROSS MULTIPLE SALES AND MARKETING TOUCHPOINTS



"Each of the swimlanes is a different touch point, a different way that we interact with our customer. In traditional data analytics, I would say that this is very hard to achieve, but bringing everything together into one particular view, to see what actually made a difference, really means a lot. This is the power of graph."

Sharat Endapally, Data Engineer, [Exact Sciences](#)

The Results

The Exact Sciences team is accomplishing more, because of the insights and recommendations that TigerGraph enables, and they are doing so easier than ever before. Best of all, by communicating more effectively with medical professionals about its products, Exact Sciences is improving the early detection and prevention of colorectal cancer.

More Resources

- Watch this presentation by Sharat Endapally of [Exact Sciences at Graph + AI Summit](#)
- Learn more about the [TigerGraph Snowflake Connector](#)
- Read the [solution brief on accomplishing more with a data warehouse](#) using TigerGraph

Some of Our Customers

intuit.

JAGUAR LAND ROVER



opencorporates

PaganTis

IPPEN DIGITAL PLATFORM

Kickdynamic

wish

- Real-time fraud detection at 7 out of the world's top 10 global banks
- Care path recommendations for 50 million patients
- Personalized offers for 300 million consumers
- Energy infrastructure optimization for 1 billion people



“Once we have everything built in graph, we can react to changes in real-time. Graph is at the centre of everything we do.”

Dr. Jay Yu
Distinguished Engineer and Architect,
Intuit

“With TigerGraph we can join sources of data together and make connections within the data that previously we couldn't. We can now answer questions that, for the last 20 years, we didn't think were possible to ask.”

Harry Powell, Director of Data & Analytics,
Jaguar Land Rover

About TigerGraph

TigerGraph is the only scalable graph database for the enterprise. TigerGraph's proven technology connects data silos for deeper, wider and operational analytics at scale. Seven out of the top ten global banks use TigerGraph for real-time fraud detection. Over 50 million patients receive care path recommendations to assist them on their wellness journey. 300 million consumers receive personalized offers with recommendation engines powered by TigerGraph. The energy infrastructure for 1 billion people is optimized by TigerGraph for reducing power outages. TigerGraph's proven technology supports applications such as fraud detection, customer 360, MDM, IoT, AI, and machine learning.

For more information visit www.tigergraph.com and follow us at: [Facebook](#) [Twitter](#) [LinkedIn](#)

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Get Started for Free at Tigergraph.com/Cloud

[TigerGraph Cloud](#) graph database as a service is built for agile teams who'd rather be building innovative applications to deliver new insights than managing databases.

Cloud Starter Kits

TigerGraph Cloud [Starter Kits](#) are built with sample graph data schema, dataset, and queries focused on specific use cases such as fraud detection, recommendation engine, supply chain analysis and/ or a specific industry such as healthcare, pharmaceutical or financial services.

STARTER KIT	OVERVIEW
COVID-19 ANALYSIS	Detect hubs of infection and track the movements of potential spreaders
CUSTOMER 360-ATTRIBUTION & ENGAGEMENT GRAPH	Create a real-time 360 view of the customer journey for attribution and engagement insights.
CYBERSECURITY THREAT DETECTION-IT	Block cybersecurity threats by detecting interconnected events, devices and people
ENTERPRISE KNOWLEDGE GRAPH (CORPORATE DATA)	Analysis of corporate data including investors and key stakeholders.
ENTERPRISE KNOWLEDGE GRAPH (CRUNCHBASE)	Knowledge graph examples featuring crunchbase data with startups, founders and companies.
ENTITY RESOLUTION (MDM)	Identify, link and merge entities such as customers with analysis of attributes and relationships.
FRAUD & MONEY LAUNDERING DETECTION	Multiple types of fraud and money laundering patterns.
GSQL 101	Introduction to TigerGraphs powerful graph query language.
HEALTHCARE GRAPH (DRUG INTERACTION/ FAERS)	Healthcare example focused on public (FAERS) and private data for pharmaceutical drugs.
HEALTHCARE-REFERRAL NETWORKS, HUB (PAGERANK) & COMMUNITY DETECTION	Analyze member claims to establish referral networks, identify most influential prescriber's and discover the connected prescriber communities.
MACHINE LEARNING & REAL-TIME FRAUD DETECTION	Mobile industry example for detecting fraud in real-time and generating graph-based features for training the machine learning solution.
NETWORK & IT RESOURCE OPTIMIZATION	Network and IT resource graph for modeling and analyzing the impact of the hardware outage on workloads.
RECOMMENDATION ENGINE (MOVIE RECOMMENDATION)	Graph-based movie recommendation engine built with public data.
SOCIAL NETWORK ANALYSIS	Social network example for understanding and analyzing relationships.
SUPPLY CHAIN ANALYSIS	Example covering inventory and impact analysis.