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# Financial Services of the Future

## **Banks of the Future Must Look Like— Or Lose Business to—Big Tech Companies**

Financial organizations are facing unprecedented competition—and it's not just from fintechs. Big tech companies are now the biggest threat. They've entered and disrupted the market. Google is expanding plans to offer digital banking services in the U.S. and is partnering with banks to provide digital checking and savings accounts. Meanwhile, Amazon launched AmazonBasics for mortgages and insurance coverage that grows with each purchase.

## Table of Contents

- 3 Driving Answers Across the C-Suite
- 3 The Future of Banking Hinges on Data
- 4 Banking on Organizations' Most Valuable Asset
- 4 Data-Driven Companies Know the Secret to Success
- 5 Handle Complex Data Sets of the Future
- 7 About Teradata

Big tech companies know how to integrate and optimize massive amounts of data to understand customer behaviors, preferences, and trends, then act on those insights to engage customers at an individual level. They present offers not to groups, but to a segment of just one person.

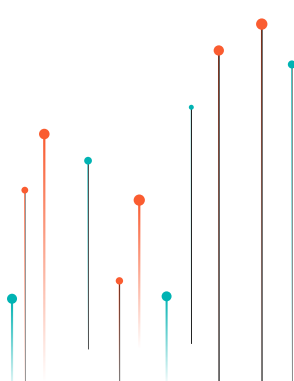
Banks and financial organizations must do the same, and they must act quickly. They should think of their competitors like this: In Ernest Hemingway's classic novel "The Sun Also Rises," a character is asked how he went bankrupt. "Two ways," he answers. "Gradually, then suddenly." The parallel for the financial industry is to ask, "How will big tech break banking?" The answer is, "Two ways. Gradually, then suddenly."

What does this mean for financial organizations? It means big tech companies are cobranding with them to gain entry and expertise in the industry. Big tech will test financial products and services with their partners and acquire data. Then they'll cut the cord with banks and seek to dominate the market by themselves, leaving banks competing for the scraps. Financial organizations that don't have a strategy for competing with these non-traditional players could lose massive market share.

### Data Analytics Orchestration for Financial Companies

Data orchestration automates processes to convert data into results. Leading financial organizations are leveraging an orchestrated analytic and data foundation that includes:

- Financial and customer data that's rapidly ingested, removing latency and increasing quality
- Maximum agility and cloud flexibility to scale and store data
- Advanced discovery capabilities to get new results from data
- Analytics for financial-specific programs
- High availability and scalability for serving analytics
- Automation built across all processes
- Operational application integration, monitoring, and debugging
- Financial model management, tracking, and high performance
- Provenance of data, model fairness, and user privacy



## Driving Answers Across the C-Suite

Banks of the future must bring together and use 100 percent of their data with an intelligent analytics platform that has end-to-end data orchestration at hyperscale. This gives C-level executives a smart, unified, value-focused solution that delivers results via enterprise-scale analytics.

CEOs will see the value of their company increase based on business improvements that drive enhanced earnings and revenue. They'll benefit from complete, contextual data analytic insights to exceed customer expectations in a digital world, solve problems, and inform decision making.

CDOs will champion strategies to enable data-driven successes, such as new levels of automation, and predicting and identifying fraud. They'll do what no other role has accomplished—bringing together all data and using data science to inform and drive every opportunity.

CTOs will benefit from next-generation technology that's optimized by value and capabilities. This lays the groundwork for decommissioning older, expensive, less efficient technology that's creating data silos and other inefficiencies.

CFOs will close the books daily for earnings before interest, taxes, depreciation, and amortization (EBITDA) and earnings per share (EPS) reporting. They'll gain the ability to predict future customer profitability via world-class forecasting and operations. They'll also have better insights and tools for compliance, avoiding risk, and reporting.

CMOs will leverage self-service marketing and personalization across all product and service channels. In addition, CIOs will gain greater efficiencies while focusing on a cloud-first strategy and agile, hybrid execution.

To achieve these groundbreaking capabilities, financial organizations of the future must manage and optimize their data to drive success across their businesses and deliver analytics at scale in production. They'll also need the ability to connect, integrate, and analyze billions or trillions of records each day from all areas of the business to get maximum insights.

## The Future of Banking Hinges on Data

Financial organizations are experiencing rapid change. COVID-19 permanently altered the way people and businesses bank, accelerating the demand for digitization, mobile banking, and world-class data analytic solutions.

A McKinsey survey revealed that customers' digital engagement levels in Europe climbed 10 percent to 20 percent after the coronavirus outbreak, while the use of cash was cut in half. The survey also identified new opportunities, with 30 percent to 40 percent of customers expressing a greater need for advice, and up to 40 percent wanted products to help them through the crisis.

Fintech companies did not benefit from a shift in customer preferences. In fact, downloads of fintech apps declined during the pandemic. This shows that fintechs are not bank and financial companies' biggest challengers. Big tech companies are.

Big tech companies have money, modern technology, and are deeply engrained in the daily lives of consumers and businesses. They have resources and capabilities to change the banking landscape in ways fintechs can't. Data is the only corporate asset many big tech companies own. "It's not that banking is where the money is, but rather where the data is and big tech has grown by monetising data," according to an article in Kiplinger that asked "Should You Bank With Google?"

### **Banks Have the Advantage of Consumer Trust**

One significant advantage banks have over others is customer trust. Research from Boston Consulting Group/Capgemini shows that 80 percent of people trust banks to manage their data securely, compared to just 5 percent for consumer-technology businesses. Among millennials and Generation Z, which are the most prolific users of digital services and devices, banks are more trusted than tech companies to give advice.

Banks of the future will need to fast-track their digital transformation and squeeze more value from data to maintain their competitive edge. This could involve partnering with innovative big tech companies. In 2019, 81 percent of banking executive said they would collaborate with partners to achieve their digital transformation goal, according to a survey by Finextra.

## Banking on Organizations' Most Valuable Asset

Best-in-class financial organizations utilize data and advanced analytics to engage customers with personalized offers, mitigate risk, drive investment decisions, and deliver answers across all business areas. But it's not enough.

Financial companies of the future will view data as their most valuable asset—and they'll push that asset even harder to uncover new answers. This approach, which liberates data from silos and integrates it across the enterprise, requires a strategic shift in financial organizations' mindsets. It entails making data the central focus of the business, practicing data analytics orchestration, and optimizing a unified, answer-oriented analytics model.

A data-driven approach with enterprise-scale analytics enables transformational improvements to:

- The customer experience, driving greater revenue
- Operational efficiencies, driving greater profitability
- Simplify the business, making it much easier to manage

Banks of the future will use more data than they're using now and see bigger returns. They'll move from a traditional bank with a few thousand users, segments of lots of customers, and a \$1 billion return to serving 25 million or more customers, seeing returns of \$15 billion or more in value, and having intelligent conversations with individual customers (Figure 1).

## Data-Driven Companies Know the Secret to Success

The battle over who controls the future of finance and banking will be determined by who is best able to integrate, optimize, and act on data. Data is the arsenal to win the war for customers.

Banks already have petabytes of hugely valuable data. The problem is they're unwilling or unable to turn that asset into actionable insights. Part of the challenge is silos. Customer, finance, business system, and other data is spread across the organization. Getting a unified business or customer view is nearly impossible.

Too many senior leaders look at data as a cost to be managed or an IT project. Banks of the future will take a different perspective—data will be seen as a critical asset to generate revenue. The more integrated data that banks have for analytics, the more effectively they can monetize it and drive desired outcomes.

### Big Tech Is Setting Its Sights on Financial Services

Big tech leaders like Google, Apple, and Amazon are already looking beyond onsite digital payments and moving into financial services.

- Apple launched a credit card that can be opened in 30 seconds
- Google is set to offer "smart checking" accounts
- Facebook is looking to create its own digital currency

When users tap a card or make an everyday transaction, big tech companies will not only capture their data, they'll put it to use to understand customer behaviors, spending trends, and more. Then they'll use those insights to better engage customers. Banks need to do the same.

Figure 1: Traditional vs. Bank of the Future Goals

	Traditional	Best-in-Class	Future
<b>Users/Staff/Customers</b>	2,500 users	50,000 staff	25,000,000 customers
<b>Return</b>	\$1 billion return	\$5 billion benefits	\$15 billion value
<b>Transformation of Customer Experience</b>	<ul style="list-style-type: none"> <li>Product driven, segment of many</li> <li>Limited personalized customer interactions in a timely manner</li> </ul>	<ul style="list-style-type: none"> <li>Customer centric, segment of few</li> <li>Orchestration of processes to optimize outcomes</li> </ul>	<ul style="list-style-type: none"> <li>Intelligent conversations, segment of 1</li> <li>AI-led listening to customer, effortless CX</li> </ul>
<b>Enhanced Risk Management</b>	<ul style="list-style-type: none"> <li>Customer-level risk decisions across products</li> <li>Portfolio-level risk management</li> </ul>	<ul style="list-style-type: none"> <li>Automated risk decisioning in some channels</li> <li>Personalized risk-based pricing</li> </ul>	<ul style="list-style-type: none"> <li>Fully automated decisioning</li> <li>Risk decisions integrated with balance-sheet optimization</li> </ul>
<b>Automation Via Digitization</b>	<ul style="list-style-type: none"> <li>Focus on individual processes to deliver efficiency</li> <li>Limited online customer view for core processes</li> </ul>	<ul style="list-style-type: none"> <li>Digitization to optimize cost-to-serve</li> <li>Rapidly becoming primary channel</li> </ul>	<ul style="list-style-type: none"> <li>Digital to scale business (e.g. wealth)</li> <li>Increased agility &amp; innovation driving data monetization through open banking</li> </ul>
<b>Capital Strength &amp; Regulatory Compliance</b>	<ul style="list-style-type: none"> <li>Regulatory activity is “push” for multiple reports</li> <li>Timely point solution with data quality issues</li> </ul>	<ul style="list-style-type: none"> <li>Integrated risk &amp; financial data orchestration</li> <li>Push report production with better quality data</li> </ul>	<ul style="list-style-type: none"> <li>Near real time “pull” framework with regulators</li> <li>Enterprise integrated platform with high data quality</li> </ul>
<b>Shareholder View</b>	<ul style="list-style-type: none"> <li>Data owned by IT, seen as a cost</li> <li>Market cap typically around book value</li> </ul>	<ul style="list-style-type: none"> <li>Data owned by business with IT support</li> <li>Market cap typically 1.5+ times book value</li> </ul>	<ul style="list-style-type: none"> <li>Data owned by CEO, seen as strategic asset</li> <li>5 of top 6 companies globally are data-driven</li> </ul>

The challenge with monetizing data is having the capability to integrate and manage all of it at scale. The second part of the challenge is making the data available to all users. Implementing a data analytics platform capable of capturing all data and making it pervasive across the business solves these issues. Big tech companies know this. That’s why they use data as a strategic asset to promote growth, operation models, and modern decision-making processes.

## Handle Complex Data Sets of the Future

An orchestrated approach to data analytics can solve the financial industry’s biggest pain points (Figure 2). The approach reuses data as part of a powerful analytics ecosystem that orchestrates every action and initiative to drive growth and value. For example, banks of the future will rely on data orchestration to continually transform to capture, engage, and retain customers.



Figure 2: Orchestrated Approach to Data Analytics

Traditional approaches using partial data or marketing to groups will no longer work. An intelligent transition from a fragmented data landscape to an integrated data environment is needed to provide an integrated customer view for real-time analytics that drive action.

As banks move into the future, processes such as data preparation, making decisions based on data, and acting on those decisions will be handled with end-to-end automation and become 100 percent data driven. Data and analytic orchestration will span many systems, functions, and data types. Meeting these demands requires a platform that delivers multidimensional scalability across eight core dimensions:

- Data volume
- Query concurrency
- Query complexity
- Schema sophistication
- Query data volume
- Query response time
- Data latency
- Mixed workload

Multidimensional scalability provides the advanced capabilities needed to run millions of productionized models, on trillions of interactions, every second of every day. This gives banks of the future the ability to run analytics at a granular customer, service, and monetary level.

### The Right Data Analytics Platform is More Important Than Ever

Every executive knows that data is the ultimate business driver. It drives everything—every decision, every pivot, every objective, and every move. That’s why it’s more important than ever for organizations to ensure they have the right data analytics platform and are taking the right approach to data.

Teradata works with many of the world’s most innovative organizations to maximize the value of their data. Teradata helps these companies understand their customers, make recommendations that strengthen relationships, improve the customer experience, and keep customers coming back.

Traditional banks are playing catch up with organizations that leverage all of their data. While most banks use data analytic solutions to handle the scale and complexity of their decision making, few have modernized their utilization to drive the dynamic engagement model and responsiveness that consumers now expect. Teradata can help banks consolidate and simplify their data estate to reduce costs and meet regulatory requirements while positioning them to engage with customers in an increasingly complex world.

### Best-in-Class Isn't Good Enough

Many financial organizations strive to be best-in-class and base their strategies on that goal. This is the wrong approach for forward-looking companies. Financial organizations of the future must meet the demands of scale, complexity, and speed that increase exponentially each year.

Meeting these demands isn't easy, but it's necessary. It cannot be done piecemeal, and it requires investing in the right data analytics solutions and gaining C-suite leadership. These demands move beyond discussions about cost per query for analytics and moving data to the cloud. They're about prepping the bank for the future and prospering in the future digital economy.

Organizations can do this with the Teradata Vantage™ data analytics platform, which has the key ability to hyperscale to support the business models and larger, more complex data sets of the future. It can help drive customer retention, advocacy, and value at a scale unlike any other technology provider.

The message for banks of the future is simple—they must find new and profitable uses across all of their data to be competitive. And they need data analytics to make this possible.

## About Teradata

Teradata is the cloud data analytics platform company, built for a hybrid multi-cloud reality, solving the world's most complex data challenges at scale. We help businesses unlock value by turning data into their greatest asset. See how at [Teradata.com](http://Teradata.com).

### Teradata Analytics Drive Financial Organizations' Success



Royal Bank of Canada dominates as a bank of the future by using data and analytics to prioritize customers' interests. This helps clients thrive and communities prosper.



Paypal turns customer data into smoother, safer commerce. "We went from two customer segments to 12, to now 277 million," said Sri Shivananda, SVP and CTO of PayPal.



Standard Chartered integrated more than 80 million transactional processing points from 600 sources to reconcile in just 60 minutes. It now has a "golden source" of financial data.



Verizon uses data and analytics to ensure a reliable network, improve customer satisfaction, and develop products and services consumers want.

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