



Mobilizing Financial Services Data for Customer Centricity

By David Loshin, President of Knowledge Integrity, Inc.

The financial services industry is at an inflection point. Global banks have emerged from the financial credit crisis of 2008 confronted with a vast number of challenges and are seeking new ways to thrive in a world transformed by market uncertainty, ultra-low interest rates, and growing regulatory pressures and costs. Stiff market competition, exacerbated by emerging fintech players and banks, has required traditional global financial services organizations to look at new ways to support customer acquisition and retention.

Most recently, the COVID-19 pandemic has highlighted the need for closer engagement between banks and their customers. With customer demands for ease of use, mobility, and use of embedded finance, banks are continuing to develop and strengthen their customer experience with digital technologies. Financial services companies are innovating quickly to create products and services to remain competitive, acquire new customers, and retain existing customers.

Customer acquisition and retention is achieved through a deep knowledge of customers with offerings and services that provide differentiated and personalized experiences. Customer data fundamentally informs corporate partnerships and product creation, and institutions require full customer visibility to meet customer needs. As such, financial products are increasingly designed and microtargeted to specific customer personas.

In the early 2000s, there were three technology concepts driven by the desire for customer centricity: customer relationship management (CRM), customer data integration (CDI), and master data management (MDM). These technologies were positioned as a way for an organization to create a single source of truth with respect to customer information from across systems supporting different lines of business.

In that pre-cloud era, the implicit messages of adopting these technologies were twofold:

1. A technical process to extract customer data into a single, unified environment would result in a single source of conformed customer data from which all business applications could draw
2. The customer data in the repository would be of the highest quality, consistency, and freshness

Successful efforts by organizations, especially in the financial services industry, have effectively leveraged integrated customer data. However, a combination of growing systemic complexity, increasing data volumes, and changing expectations continues to challenge the goal of attaining a single source of truth about customer data. For instance, in a recent TDWI survey, while 60 percent of all respondents felt that their MDM solutions needed some amount of upgrade, 75 percent of financial services respondents felt this way.¹

¹ See the 2021 TDWI Best Practices Report: Modernizing Data and Information Integration for Business Innovation, available at tdwi.org/bpreports.



Multiple trends are accelerating the motivation to adopt full-scale governed customer centricity in the financial services industry. Ongoing desired business outcomes include:

- **Revenue growth:** Using customer analytics to identify next best actions, improve product suitability, and prescriptively influence customer decisions
- **Customer retention and growth:** Using customer insight to reduce churn and extend the customer relationship
- **Up-sell/cross-sell:** Analyzing consumer behaviors to identify up-sell/cross-sell opportunities and expand the customer's product footprint and grow customer engagement
- **Compliance:** Global financial businesses need to comply with a growing number of international data privacy and data protection laws

Industry trends are also influencing the need for customer centricity, such as:

- **Transfer of wealth:** Financial institutions must be prepared for forecasted changes in the industry triggered by the anticipated transfer of accumulated baby boomer wealth
- **Changing customer behaviors:** Changes in customer behavior precipitated by the COVID-19 pandemic have alerted organizations to the need for improved resilience to unexpected situations
- **Digital-native customer experience:** The need to meet user expectations for personalized digital experiences

- **Increased demand for interoperability:** The need to work with partners, channel networks, and other third parties facilitating internetwork transactions

All of these trends must be reviewed in the context of explosive data growth associated with customers and their digital footprints across different engagement channels (e.g., e-commerce, email, physical POS transactions) and multiple partners. These trends highlight the need for a radical transition in a company's technology infrastructure. Financial institutions will find that aging on-premises legacy technology will hamper competitiveness with newer financial technology companies, big tech companies integrating payment mechanisms, and other emerging partnerships that leverage digitally transformed platforms.

IMPROVING DATA INTEGRATION AND MANAGEMENT

All organizations prize accuracy and insight for personalization, greater efficiency, and 360-degree views of customer interaction. For example, across all industries, 33 percent of respondents to a recent TDWI survey noted the importance of modernizing data integration to drive more informed marketing, sales, and service (Figure 1). However, although 29 percent of respondents to that same survey stated that provisioning single, complete views or versions of the truth (e.g., a 360-degree customer view) was critical, for those respondents in financial services, that number was higher (42 percent).²

² Ibid.



Which of the following are currently the most important objectives for modernizing your organization's data integration and management? (Please select up to your top five.)

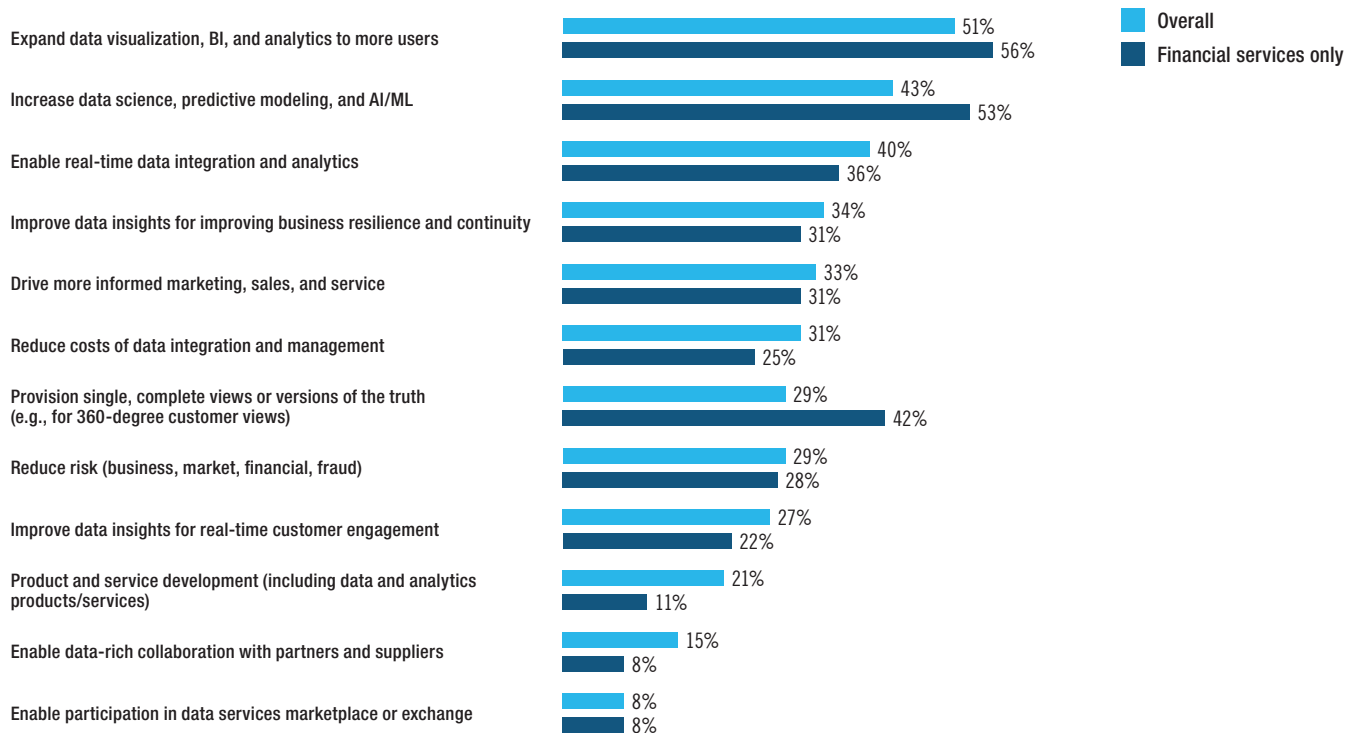


Figure 1. Based on 347 responses across all industries. A maximum of 5 responses allowed.

Effectively creating a 360-degree customer view to enable customer centricity is critically dependent on effective and trustworthy data integration. Unfortunately, a combination of factors with existing siloed legacy infrastructures hampers customer data integration and, consequently, customer centricity. Some challenges to data integration and management include:

- **Legacy constraints** such as reliance on antiquated business rules that make it difficult to adapt to emerging needs as business conditions change. Additionally, the complexity (and opacity) of how deeply ingrained the implementations of business processes are in heritage system architectures can limit development agility.

- **Processing issues** such as batch processing that impedes the ability to inform decisions in real time. Additionally, having too many manual and redundant processes slows the introduction of innovative technologies.
- **Data issues** such as not knowing what customer data is available and accessible and the absence of a reliable single source of customer data slow analysis and diminish the usability of analytics results. Some organizations only use data produced by internal systems, which limits rounding out a full-scale customer profile that could be informed by data accessed from external sources or shared among external trading partners. Additionally, customer data can be structured (e.g., transaction data),



unstructured (e.g., claims or call center logs), and semistructured (e.g., email), making it difficult to normalize and combine data to make meaningful insights.

- **Governance and compliance issues** such as the fact that customer data monetization must be consistent with customer data privacy preferences and in compliance with data privacy laws. Additionally, the absence of data governance for siloed data and inconsistencies across data silos can be a challenge.

Modernization in the financial services industry provides a shorter runway for customer data integration, especially when taking advantage of newer technologies built for the cloud.

Modernizing to the cloud in a way that embraces data access and integration with multiple third-party systems and APIs enables streamlined and consistent integration of customer data.

When coupled with integrated analytics, these innovations enable the ability to present personalized customer experiences in real time that benefit customers and institutions at the same time.

ACHIEVING A TRUE 360-DEGREE CUSTOMER EXPERIENCE

Financial institutions want to provide their customers with a personalized digital experience while exploiting opportunities for new business driven by analytics. A true 360-degree customer profile leverages a combination of advanced machine learning, AI, and other analytics models that have been applied to high-quality customer data from internal and external sources, all integrated into a coherent view and made available to workflow applications in real time.

The 360-degree customer profile must include a full inventory of information. This inventory should include demographic data, transaction

histories, and customer behavior information, as well as additional data sets to help customer classification and segmentation to drive up-selling and cross-selling opportunities. This suggests several specific requirements to enable customer centricity including (but not limited to):

- **Data availability and accessibility:** A 360-degree customer profile is most accurately populated using customer data available from across the organizational landscape. This collected data must be combined with data sets sourced from external origins including open data sets, data shared among trading partners, and data products made available through an open data marketplace.
- **Data coherence:** Customers engage with businesses through a variety of distributed channels. However, data distribution allows inconsistencies to creep into static customer profiles. A customer-centric capability must access the most recent customer data from all data sources to ensure consistency.
- **Reduced data latency and rapid integration:** A corollary to the previous requirement is that to ensure availability of a coherent customer profile to support the customer experience in real time, the data must be accessed and integrated quickly.
- **Integrated machine learning models:** Support for real-time personalization and recommendation implies that predictive and prescriptive models can be embedded within the data pipelines.
- **Integrated risk mitigation:** A customer-centric 360-degree profile enables integrated information risk mitigation such as fraud detection and real-time prevention.
- **Data policy governance:** Integrated support for compliance with regulations such as Know



Your Customer (KYC), anti-money laundering, foreign account tax compliance (FATCA), and Common Reporting Standard (CRS), as well as implementation of policies enforcing regulatory protection of sensitive customer data.

Financial services organizations that want to support real-time, customer-centric business decisions must have a modern cloud-based solution to produce a true 360-degree customer view. To produce this view, the environment should facilitate the full data life cycle, including data acquisition, ingestion, integration, configuration, analysis, presentation, and sharing. Technologies built for the cloud help optimize data access and integration. At the same time, emerging Open Banking regulations are intended to simplify customer data sharing among different providers. Consider a combination of Open Banking APIs and third-party data markets to augment customer data profiles. Rapid access to shared data creates monetization opportunities for promoting new products and services, cross-selling products, and reducing customer churn.

MODERNIZING TO THE CLOUD AND WHAT TO LOOK FOR IN A TECHNOLOGY PARTNER

An emerging data sharing paradigm is making data access and collaboration in a governed and secure manner easier. This is enabled through several facets: first, the production of data services and products that can be accessed by collaborators and partners within the same data and technology ecosystem; second, the use of a safe and secure environment that allows these groups to bring data together for joint analysis (sometimes called a *data clean room*); and third, cloud-enabled multitenancy.

A modern approach to customer centricity requires data integration from sources within an organization's administrative domain and external, third-party providers. By being part of the same

cloud ecosystem, organizations can minimize data extraction, transformation, and loading costs while leveraging the same data security mechanisms. This means that organizations can append demographic and psychographic data to customer data or assess customer transaction behavior patterns based on geolocation, age, or socioeconomic information.

Safe and secure environments offer another way for organizations to securely collaborate and build 360-degree customer views. These safe spaces have been used by companies across industries for a variety of use cases, such as securely sharing aggregated customer data with advertisers without revealing proprietary or sensitive personally identifiable information (PII). Here, organizations can enable data sharing, double-blind joins, and restricted queries, and can leverage large amounts of computing resources against another organization's data.

Finally, cloud-enabled multitenancy simplifies data collaboration. Because multiple tenants share the same system platform, one customer can expose its data with others sharing the same instance while relying on data governance and controls. This facilitates building more holistic customer profiles and analytics that leverage internal and third-party data. For example, banks can assess customer transaction behavior patterns inferred in the aggregate by leveraging geolocation, age, or socioeconomic data.

Enabling these capabilities relies on participating in a collaborative ecosystem that allows for governed data sharing among data sharing partners. Look for a technology partner that understands these capabilities, employs a solution that uses best-of-breed tools designed for all cloud environments, and:

- Simplifies the migration of business applications and data to the cloud



- Allows multitenancy that simplifies access to shared data assets
- Reduces the complexity of integrating data pulled from across the enterprise data landscape
- Employs a microservices architecture that supports the full data life cycle
- Ensures data security and protection of sensitive information with data governance and controls
- Leverages other available and accessible customer data sets
- Takes advantage of embedded advanced analytics driving the modern customer experience

CONCLUSION

Accessing customer data across an institution to build a holistic customer profile is not a new concept in financial services. However, with the proliferation of data, more streamlined access to new technologies, and evolving customer expectations for a better, more personalized experience, financial services institutions need to evaluate how they are simplifying their data access, management, and analytics.

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TDWI Research provides industry-leading research and advice for data and analytics professionals worldwide. TDWI Research focuses on modern data management, analytics, and data science approaches and teams up with industry thought leaders and practitioners to deliver both broad and deep understanding of business and technical challenges surrounding the deployment and use of data and analytics. TDWI Research offers in-depth research reports, commentary, assessments, inquiry services, and topical conferences as well as strategic planning services to user and vendor organizations.

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