Reliable data and analytics are an important aspect of working and succeeding in a field as fast paced and crucial to the American economy as the mortgage industry. In our special data and analytics guide, we feature the experts who are helping servicers monitor and analyze their business statistics in some seriously powerful ways.

These industry leaders are helping lenders, servicers, and other mortgage professionals predict and model consumer behavior, mitigate risks, and better serve their buyers.

As data and analytics play an increasingly larger role in influencing decision-making, no one is arming mortgage professionals more with the knowledge they need to make important decisions than the companies featured in the following pages. Take a look to find new partners who can take your business to the next level and prepare you for the changing industry landscape.
Black Knight, Inc.

**COMPANY DESCRIPTION**
As one of the world’s leading fintechs, Black Knight is a premier provider of software, data, and analytics across the loan life cycle to the mortgage and consumer loan, real estate, and capital markets verticals. Black Knight’s seamless integration of its technology solutions with insightful data and powerful analytics, along with Black Knight’s deep understanding of the entire mortgage ecosystem, provides clients with a holistic view of their portfolio to help them achieve stronger performance.

**BUSINESS LINES, SERVICES, AND PRODUCTS**
Black Knight delivers actionable intelligence to help clients reduce risk, increase profitability and support compliance.

**Comprehensive Data**
- Public Records: Comprehensive property data covering over 99.9 percent of the U.S. population
- MLS: Current, nationwide MLS data through an exclusive partnership with Realtors Property Resource – RPR®
- McDash Loan-Level Mortgage Performance: Extensive repository of servicer-contributed, loan-level data

**Advanced Analytics**
- Machine learning and data science
- Valuation solutions (e.g., AVMs, HPI)
- Property, market and portfolio analytics
- Prepayment and default model

**GEOGRAPHICAL SCOPE AND COVERAGE AREA**
Black Knight's public records data covers more than 99.9 percent of the U.S. population from over 3,100 counties in all 50 states. Black Knight also offers MLS data from across the U.S., as well as access to mortgage performance data from over 167 million first mortgage loans and more than 20 million home equity loans.

**KEY FEATURES/BENEFITS**
Black Knight’s innovative data and analytics solutions benefit lenders, servicers, investors and other professionals by helping to improve strategic and tactical performance, reduce costs, mitigate risk, increase revenue, and generate leads.

Black Knight’s data is collected and updated to deliver high-quality information with exceptional breadth, depth and currency. With this superior data feeding Black Knight’s analytics, combined with its proven methodologies, the company is able to deliver key intelligence for improved decision-making.

**The Black Knight Difference**
Black Knight provides proven enterprise technology solutions for origination, servicing, and default to many of the nation's leading financial institutions. No other provider offers the advantages delivered through Black Knight’s integration of decision-quality data and analytics with premier mortgage technology solutions and platforms across the complete loan life cycle. Through close collaboration with clients, Black Knight can develop solutions that effectively address client needs and support their continued success. The company has decades of expertise and long-term stability, and it continuously invests in technology, data, and analytics to deliver new and innovative solutions, solving problems in unique ways as the industry evolves. Highlights include:

- **Rapid Analytics Platform (RAP):** Unique virtual analytics lab that provides exceptional speed and flexibility, and puts the power of Black Knight data, analytics and innovative data sciences into the hands of clients.
- **Growth & Retention Suite:** Leverages Black Knight’s extensive data assets and applies advanced analytics to support lender growth and retention efforts.
- **Index Suite:** Offers key intelligence about the housing and mortgage markets:
  - Home Price Index (HPI) – Provides an accurate picture of home prices for all property types and conditions; forecasts market scenarios for the next five years.
  - Origination Index – Measures origination activities and trends by geography, cohort and different risk drivers over time.
  - Mortgage Performance Index – Measures prepayment, default, delinquency activities and trends by geography and cohort over time.
  - Mortgage Market Index – Tracks changes in portfolio-risk profiles.
- **Home Listing Index** – Measures housing market liquidity, active listing inventory and active listing-price trends.
- **AFT™ Prepayment & Credit Model:** A comprehensive competing risk model that calculates prepayment, default and loss probabilities that cover all mortgage asset classes including reverse mortgages.
- **Servicing Analytics Suite:** Helps servicers more easily identify portfolio risk and create effective loss mitigation strategies; delivers intuitive, timely and actionable loan-level metrics.
- **Enterprise Business Intelligence:** An actionable intelligence suite that helps mortgage lenders and servicers better understand and act upon their data. The solution aggregates and links loan data from Black Knight’s technologies and third-party applications with Black Knight’s industry data.
First American Data Tree

**COMPANY DESCRIPTION**

As the nation’s largest provider of residential property data, mortgage information and recorded document images, First American offers **data-at-your-service**. With a consultative approach, they can help clients discover the power of incorporating data into any aspect of their business and are there to ensure it is successfully implemented into client workflow. Mortgage lenders and servicers leverage the company’s industry-leading datasets via DataTree.com, FTP, XML and First American’s “match and append” service, which blends property data into files provided by the client, to client-custom specifications.

**COMPETITIVE ADVANTAGE**

**Unparalled Data and Recorded Document Coverage**

Understanding that data is the new currency driving profitable mortgage lending and servicing, First American provides access to the broadest data coverage in the industry through DataTree—the home for First American’s data assets, including:

- 100% U.S. Property Ownership Data
- 6+ Billion Recorded Land Document Images
- Deeds, Mortgages and Foreclosures
- Liens, Assignments and Releases
- First American’s Nationwide Title Data
- HOA Contact Information
- Real Estate Listing Data
- PACE Loan Data

**ADDED VALUE TO CLIENTS**

DataTree.com offers several exclusive benefits that make it an indispensable tool for mortgage lenders and servicers:

- FlexSearch™ allows users to instantly search for any key word or phrase throughout billions of recorded document images anywhere in the nation.

- Title Chain and Lien Report provides direct access to the information contained in First American’s title databases, once exclusively available through the title company.

**TotalView** is an automated, comprehensive property research report. Property, ownership, encumbrance, and market data along with property tax, HOA data, and involuntary liens are compiled and all available in one report.

DataTree also offers easy online ordering for many of the typical services needed when processing a loan—perfect for home equity lending or to simplify every-day loan production.

- Flood Declarations
- Appraisals: FHA or Conventional
- Industry-Leading AVMs
- BPOs or Alternative Valuations

**Direct Data Access**

First American customers have the flexibility to choose how to leverage any portion of the property-centric data through the delivery channel that best fits their business needs.

**API Data Delivery**

Clients can experience the power and convenience of connecting their workflow to First American’s nationwide database of property information. Clients fuel their workflow in real time with quality data.

**Advanced Data Solutions**

First American’s team of data experts will work hands-on to identify and compile the property data, document images, mortgage, and homeownership information to help clients solve their toughest business challenges.

**Real Estate Data Licensing**

Clients use First American’s property-centric data to embrace new opportunities by licensing their entire database, or just the data sets they need. First American can’t wait to see what clients will build with their data.
Fiserv, Inc.

COMPANY DESCRIPTION

Fiserv’s approximately 24,000 associates worldwide are driving quality and innovation in Payments, Processing Services, Risk & Compliance, Customer & Channel Management, and Insights & Optimization with one thing in mind: to move money and information in a way that moves the world.

That kind of clarity, combined with a belief that change always brings opportunity, is what has made Fiserv a trusted fintech leader and innovator for more than 30 years. It’s what fuels their passion for being partners in possibility with their clients, and for providing innovative solutions and expertise that help their clients deliver financial services experiences in step with the way people live and work today.

Fiserv supports the origination and servicing mortgage markets with solutions to streamline the collection, review, and exchange of lending information. Using comprehensive analytics and intelligent automation, Fiserv provides tools that deliver internal efficiency and effective communication with clients’ customers and business partners. Fiserv’s solutions work with clients’ existing investments to provide data aggregation, risk analysis, issue identification and resolution, continuous data reconciliation, and audit controls throughout the lifecycle of the loan, pool, or servicing portfolio.

Getting accurate loan information: data sourcing and aggregation

AllData® automated asset verification from Fiserv enables clients to source asset data directly from over 18,000 financial account data sources while maintaining borrower confidence and privacy. With over fifteen years of account aggregation experience, Fiserv’s solution provides verification of all types of asset accounts—bank or credit union, brokerage, investment, retirement, and 401k. AllData® delivers integration flexibility for a proven turnkey solution for supporting secure, sophisticated asset verifications. With cleaned and normalized aggregated account data, clients reduce risk and cycle times while increasing operational efficiency and borrower satisfaction.

Maximizing internal operational efficiency: data review and reconciliation

LoanComplete™ from Fiserv converts file, pool and portfolio completion procedures into automated exception-based processes. It ingests data and documents from all sources, classifies and indexes the documents, extracts data from them, and compares that loan data to reconcile it to data stored in your other systems, to systematically streamline mortgage loan processing and servicing tasks. LoanComplete™ enables consistent quality control while freeing your staff to manage more complex issues, through contextual presentment of conflicting information for faster exception resolution.

With real-time quality reviews preconfigured to lending industry standards, LoanComplete™ simplifies regulatory compliance and operational activities with robust business rules for workflows, tasks, queues, and reminders. Clients control the conditional logic, error thresholds, and standardized user action parameters. LoanComplete™ accelerates the loan processes, improving profitability through operational efficiency.

Exchanging information effectively with customers and trading partners: sharing data

Fiserv solutions are designed for ease in data exchange—whether directly between systems or between people. The Secure Lending™ platform from Fiserv lets clients adopt paper-free lending at a pace that suits clients’ businesses by using one platform for borrower and partner collaboration, with version-controlled electronic document exchange between all parties.

Convenient electronic signature options keep documents in electronic format from application through servicing, including at closing. If borrowers prefer to review and sign paper documents, after printing them from the platform they can upload the ink signed version back into the same folder, along with any loan conditions required. Closing and title companies enjoy the efficiency of tracking both the loan closing document package from Fiserv clients and the documents they prepare, in a single secure online folder. Copies of all borrower or closing company uploaded documents, and extensive audit trails of their activity, are sent automatically to LoanComplete™ for file completion.

For secondary marketing and insuring, Fiserv speeds up loan file exchange using predefined file transformations and secure, tracked transmission; including support for FHA eCase Binder submissions. For advanced secondary market acceleration, the electronic vault supports the exchange of electronically signed notes, whether for loan sale or purchase or servicing rights transfers.

Delivering Competitive Advantage for Clients’ Business

Whether you call it the electronic mortgage, digital mortgage, or data-enabled mortgage—Fiserv helps lending institutions deliver it throughout the entire life of the loan. Integration flexibility gives clients the choice of how and where to use Fiserv solutions in your existing technology footprint.

Fiserv provides capabilities that enables its clients to move ahead of their competition with solutions that deliver an outstanding consumer experience and increased staff effectiveness.
MIAC Analytics

For over 28 years, MIAC has been the preferred provider of mortgage asset analytical software. MIAC Analytics™, MSR and whole loan valuation and brokerage services, secondary market, and MSR hedge advisory solutions to the financial community.

Since 1989, MIAC has built mortgage-pricing models for whole loans and MSRs.

In the early 1990s, MIAC pioneered the hedging of MSRs by leveraging Option-Adjusted Spread risk models. In the early 2000s, MIAC became the market leader in secondary market hedge advisory services and analytical software. After the financial crisis, MIAC utilized historical loan performance data to build behavioral models (Core™) that are integrated into Vision™ Balance Sheet/Income Statement simulation suite. MIAC Analytics™ also offers residential, commercial, and consumer loan due diligence services, using the VeriFi™ due diligence management solution in tandem with MSR and whole loan brokerage activities.

USA, Puerto Rico, and Europe

MIAC Analytics offers Current Expected Credit Loss (CECL) solutions and Comprehensive Capital Analysis and Review (CCAR) stress testing.

MIAC Analytics is a comprehensive suite of software solutions from loan-level due diligence and data auditing to asset pricing calculators to entire balance sheet and income statement simulation.

The largest and most challenging user of MIAC Analytics is MIAC. Yes, the largest financial institution license and use MIAC Analytics for asset pricing and balance sheet risk management, but the intimate and regular contact between user and developers, combined with tight adherence to formal software development and release procedures, enable MIAC Analytics to continue to be best in class.

MIAC is by far the largest provider of third-party pricing/valuation services of loans in the industry today. MIAC has developed and validated an open and transparent process software, methods, and results. These are the requirements of best-in-class CECL solutions.

MIAC’s models and software have been validated through formal OCC compliant model validations for over 20 years. These are the same tools the CECL users will be required to manage regularly to reforecast the current expected credit loss.

The primary reason MIAC’s software suite has seen so much success is that MIAC utilizes the software internally to perform valuation tasks. MIAC Analytics is continually being put to the test to address real world problems in forecasting current expected credit loss and is continually enhancing MIAC Analytics to make the tools more effective in their purpose.

The largest and most challenging user of MIAC Analytics is MIAC. Yes, the largest financial institutions license and use MIAC Analytics for asset pricing and balance sheet risk management, but the intimate and regular contact between user and developers, combined with tight adherence to formal software development and release procedures, enable MIAC Analytics to continue to be best in class.

MIAC provides more third-party asset valuations for residential and commercial mortgages and MSRs than any other RM.

MIAC Analytics is licensed to model and price more loan and MSR assets than any other analytics software in the financial industry.

Over $2 trillion in mortgage assets are priced and hedged with MIAC Analytics each month.

More MBS are priced with MIAC’s MIMs prepayment dealer consensus survey than any other prepayment survey.