

Better manage business uncertainty with an "ecosystem approach" to predictive analytics

Improved speed, efficiency, and real-time intelligence can power go-forward growth and personalization for businesses, and their valued customers.

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Words like "anemic" and "fragile" are being used to describe today's global economic outlook, which is making consumers understandably skittish. But for edgy businesses, this translates into one word, uncertainty, and one big problem: how can you intelligently protect and grow your business when you don't know what's ahead?

It can be a paralyzing head-scratcher because, without reliable go-forward analytic insights and direction, it's often easier to plod ahead with "more of the same" strategies, reacting to shifts in markets and consumer behaviors, and hoping you don't get blindsided or left behind.

This white paper explores a better approach. It explains how moving from traditional data analytics, which can involve slow and burdensome production processes, to a seamless analytics ecosystem can put businesses back in control, enabling them to become more predictive and, ultimately, more personalized, customer-centric and profitable in any economic environment.

What is an analytics ecosystem?

Traditional approaches to data analytics involve lots of moving parts, usually managed in separate environments and often by separate teams with separate objectives. Put another way, there are a lot of potential conflicts and resource-intensive pain points that can delay production timelines, making it difficult to get analytic projects to market in a timely manner.

Apart from the internal costs and the diversion of often limited analytic resources, there are very real opportunity costs associated with production delays. The longer it takes to launch an analytic model or score, the more likely it is to be outdated and less effective in today's mercurial marketplace.

The **Equifax Ignite® analytics ecosystem** is different. Instead of siloed components, processes, systems and platforms, it unifies all the moving parts — multisource data, the latest analytics tools, AI and machine learning techniques, and a real-time feedback loop — within a single, cloud-based environment.

Far more than a one-stop shop, a shared analytics ecosystem unlocks organization-wide innovation and experimentation, by enabling teams with different types of expertise to work more efficiently, iteratively, and collaboratively across the business, in the cloud. Not only can they build and update analytic projects faster, but they can also learn in real time from model outcomes and make swift, data-driven adjustments on the go to become more predictive and continuously align the business with changing conditions and customer preferences.

Key advantages of this holistic approach include:

- Faster speed to market, and revenue. The production process moves faster when teams work within an analytics ecosystem since they spend less time managing data, analytic environments and project hand-offs. And when projects get to market faster, they start generating revenue faster. Internal Equifax studies have shown this approach can help get analytic models and scores to market up to 60 percent faster.
- Improved operational efficiency. Using a shared analytics ecosystem versus functional teams working in silos promotes organization-wide visibility and transparency. Internal experts such as business users, analysts and data scientists can problem-solve together throughout the production process. Recently,
 72 percent of business leaders in a Harvard Business Review (HBR) Services Analytic survey indicated that it's increasingly important to unify analytic and operational workloads in a single cloud data warehouse.
- Increased predictiveness, agility, and flexibility. An analytics ecosystem that
 includes built-in access to a direct feedback loop enables the business to monitor
 real-time outcomes of models and scores, learn from those outcomes and better
 predict more tailored and personalized "next-best steps" for their customers.
 Likewise, they can also make on-the-go adjustments that support continuous
 market alignment.

Now let's dig deeper and examine three capabilities that differentiate the Equifax Ignite analytics ecosystem from other approaches, and how these capabilities can help businesses perform better.

of business leaders who are familiar with their organization's data analytics report that real-time analytics capabilities have become more important in the past two years.

Transforming Data into Business
 Value through Analytics and AI

Capabilities of a unified analytics ecosystem.

Unified data management, in the cloud.

Businesses acquire volumes of customer data daily, ranging from sales and marketing data, credit risk data and collections data, to transactional data such as purchase behaviors, how often they check their account balances, and much more.

Yet, these data are often stored and managed separately, in different systems that never interface or integrate. Teams rarely, if ever, see the complete picture of the customer; they only see the slice of data pertaining to their functional role. It's like looking at one piece of a picture that's been ripped apart; it's hard to tell what's really going on.

Further, teams often use their "slice" of data to engage with customers at overlapping intervals with different, and sometimes conflicting or duplicate messages. This can create poor customer experiences, waste internal resources, and damage brand perceptions. In addition, maintaining disparate data can spark other problems including:

- Poor data hygiene and data integrity, since teams may have duplicate customer files, outdated contact information, etc.
- Burdensome data prep that slows analytic projects due to the time (often months or longer) required to cleanse, standardize and integrate multiple data streams.
- Partial views that drive inaccurate customer insights and disappointing customer experiences.
- Increased IT costs to manage data in multiple repositories and systems.
- Difficulty augmenting existing data with new insights.

The Equifax Ignite analytics ecosystem dissolves data silos that can stunt visibility, growth, and innovation by connecting and unifying data together in the cloud, creating seamless, 360-degree customer views. Specifically, it includes automated keying and linking technology that intelligently connects disparate data across multiple sources — including existing customer data, plus new third-party data as well as data from Equifax — to build consolidated customer profiles that are visible and accessible across the business.

Moving forward, the built-in identity resolution capability continuously consolidates, updates and refreshes the data for ongoing accuracy and data integrity. It's an elegant, automated solution for identity resolution that can provide a comprehensive picture of customers across the business, as well as detailed interrelationships and interdependencies between their income, spending and credit relative to household demographics, lifestyle, and more.

Once connected, these comprehensive insights can help businesses understand where a customer is "right now" — at the moment of engagement — so they can craft more personalized moments and offers throughout the customer's journey.

Creating a centralized, always-ready repository of customer data can also shrink analytic production timelines by eliminating, or at least minimizing, labor-intensive data preparation that usually requires a skilled data scientist, a position many smaller businesses lack.

To see how Equifax Ignite makes it easy to centralize and link business data, click here.

100%

of cloud-powered companies have improved decision-making through cloud transformation. [They] are much more likely to have an enterprise-wide data strategy than other companies (88% versus 59%). This means they develop a streamlined architecture to modernize their data into an integrated view... and concentrate on building the skills and operational changes needed to become a data-driven organization."

— PwC 2023 Cloud Business Survey



It's about quality, not quantity. Centralize and link data for better data quality.

In a few easy steps, identity resolution technology within the Equifax Ignite analytics ecosystem can convert disconnected, one-dimensional data into actionable insights and predictive views of customers and prospects that can be used to move the business forward.

Step 1

Ingest all datasets.

Step 2

Connect and match disparate data to individual prospects and customers.

Step 3

Add in additional data from Equifax such as credit, affluence, income, bill-pay behaviors, and more.

Step 4

Anonymize each record and use a consumer key to protect PII.

Step 5

Produce a single, consolidated view of each consumer.

Billing data



Single, combined, anonymous view

85%

of financial services organizations say poor contact data quality adversely affects business processes and efficiency, and only 40% are confident they have accurate and complete customer profiles, according to Equifax independent research.

— USIS research report

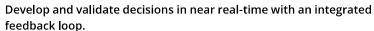
Optimize and innovate with a direct feedback loop.

The most valuable analytic resource within any company is its human expertise. Yet, optimizing that resource by keeping internal experts engaged and on the same page can be challenging. For example, the objectives of a marketer or credit risk officer who understands the business problem may not always align with those of a data analyst or data scientist. While they may share the same high-level goal, they're often working from different playbooks and systems, using complex technical jargon, and placing different values on different incremental outcomes. It's a big reason why analytic projects frequently go off the rails.

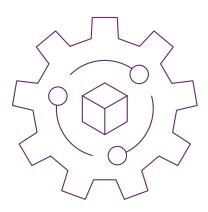
Another optimization issue is the data itself. Sometimes the data inputs are off, or sometimes market conditions slowly — or suddenly — shift, causing model performance to weaken or drift, potentially harming both the customer and the business.

The Equifax Ignite feedback loop gives businesses the visibility, agility, and flexibility to quickly identify and correct these and other issues. Unlike other monitoring tools that require the use of a separate application, it's integrated directly within the analytic ecosystem to help reduce process friction, accelerate reaction, and adjustment time and keep all stakeholders and data streams continually optimized and synchronized.

- Project stakeholders get frequently updated reports and dashboards, enabling both technical and non-technical users to get on the same page, clearly understand how analytic scores and models are performing, and quickly collaborate on next steps and strategies. This internal alignment helps optimize and accelerate analytic production processes.
- Teams can also innovate and experiment by feeding outcome data back into the Equifax Ignite ecosystem to create new products and pricing models or improve the performance of existing ones. They can perform faster reject inferencing and swap sets, run "what if" analyses, evaluate champion/challenger performance, on-us and off-us analysis, benchmarking view trends, refine models, and more.
- Businesses can keep models optimized by using the feedback loop to detect signs
 of weakening performance and drift. They can then make immediate updates to
 course-correct models or develop new ones if needed based on changing
 consumer preferences and economic conditions.



Below are few of the many ways a feedback loop can support the analytics production process.



VALIDATE FINDINGS Access data	BUILD SIMULATION MODELS Generate insights	EVALUATE MODEL OUTCOMES Deploy insights	ADJUST MODELS QUICKLY Evaluate strategy	ANALYZE RESULTS Optimize decisions
How likely are my customers to pay me versus their other lenders?	How will my strategies impact my business?	How am I trending against competitors in my industry?	Do I need to alter my risk models and scores?	Am I optimizing my profit equation so that I'm able to "say yes more"!
Do changing economic times pose a risk to my existing members, and can I step in to assist?	Have l incorporated all historical and supplemental data that fit within my risk tolerance?	Are my ru l es helping me make drive smarter revenue and better customer experiences?	What updates are needed to combat the effect of rising inflation on my customers? My business?	Are these results sustainable? Will they empower my company to grow?
Are my potential customers coming to me for additional credit, or are they choosing my competition?	What segment of customers/prospects should I target?	Is my model performing as l anticipated?	Are there new technologies that can make my models more predictable and cost effective?	What happened after my latest mailing?

Business user empowerment and engagement.

While businesses are increasingly embracing data and analytics, few have a big budget for data science manpower, which means analytics projects can get backlogged, fast. Business users rarely possess a detailed understanding of analytics and data science and often, understandably, take a hands-off approach.

However, engaging business users early and often in the analytics production process can benefit businesses in many ways.

- Business users are often experts on the customer and complex business problems, and can have a big impact on speed-to-market and revenue generation.
- Extending access to business users enables companies to gain far more use and value from their data and analytics investment.
- Expanded engagement helps streamline organization-wide efficiency and increase innovation across the enterprise.

The Equifax Ignite analytics ecosystem addresses this problem by providing end-toend environments that meet businesses where they are in terms of their analytic resources and proficiency.



For business users like managers and executives wanting easy access to insights, pre-configured environments are available with pre-built data sets, intuitive dashboards, data visualizations, and a catalog of curated standardized apps. It's all there in a point-and-click interface, explained in layman's terms, not "tech speak."



Analysts and data scientists wanting to simplify chores like data cleansing can access pre-configured data, features, and attributes created for standard use cases and unlock market intelligence, data exploration, and portfolio insights. It also includes integrated access to the InterConnect® decisioning platform to further accelerate production timelines.



Data scientists wanting to innovate can start from scratch in a do-it-yourself environment where they can define unique data and tools to build specialized insights, models, and scores. It includes access to everything, including all levels of pre-configured and raw data, current and historical data, as well as data prep and visualization tools, attribute and scoring development, and more.

This unconventional, yet business-friendly approach can help improve productivity by making data and analytics accessible to users at all levels of the business, driving organization-wide benefits including lower costs, higher revenue and improved innovation, business resilience and customer experiences, more personalized moments, and offers throughout their journey.

91%

of business leaders responding to the HBR survey agree that democratizing access to data and analytics is important to the success of their organizations. However, they also suggest that businesses are missing the mark, as "only 58% agree that their organizations are effective at giving employees across the enterprise access to data and analytics tools."

— Harvard Business Review Survey

Better support the customer lifecycle and specialized industries.

Instead of developing one-off projects in a vacuum, an analytics ecosystem offers a faster, more efficient approach. Within Equifax Ignite, curated environments that support common use cases throughout the customer lifecycle can help businesses work more efficiently by using pre-configured data selections that are proven to be effective.

Similarly, industry-focused environments are also available, crafted around distinct audience characteristics, preferences and profiles, as well as regulatory guidelines and restrictions. Detailed, industry-specific data is also included in these environments to further strengthen accuracy and predictive precision.

These curated solutions remove early-stage guesswork and eliminate the need to build new attributes and feature datasets from scratch. Businesses save untold time and resources and can develop and deploy high-performing, predictive models and scores to market in less time. Meanwhile, customers experience less friction and more personalized moments and offers throughout their journey.

Use cases available within Equifax Ignite						
Prospecting Optimize and build marketing and target audiences.	Origination Streamline decisioning and mitigate new account fraud.	Account Management Nurture loyalty, grow share of wallet, manage ongoing risk.				
 Audience identification and targeting Prescreen and Invitation to Apply (ITA) Preapproval and prequalification Mobile offers Activation and treatment strategies Anti-Money Laundering (AML) and Know Your Customer (KYC) compliance Fraud prevention Marketing list 	 Optimize credit decisioning Refine and optimize pricing, approval/decline strategies AML/KYC compliance Fraud prevention Identity verification Reduce paperwork and manual verification 	 Tailor customer treatment strategies/loyalty programs Cross-sell and upsell Offer optimization Retention strategies Account monitoring Fraud prevention Identity verification Improve collections and debt recovery 				

Curated environments available within Equifax Ignite

By industry

Note: In addition to the industry specific insights listed, businesses can also access other exclusive multisource data from Equifax on wealth, property, assets, businesses, bankruptcies, and more.

Financial services	Insurtech	Auto lending	Higher education
 Envestnet Yodlee — consumer-permissioned bank data, including checking, savings, investments, and noncredit recurring expenses like rent and utilities, and more. Automated Valuation Model — produces estimates of the market value of a property. Enhanced Debt-to-income Score. Insight Score for Credit Cards — predict the likelihood of becoming 90 days past due within 24 months of account opening. Insights Score for Personal Loans — optimized for credit cards to score more consumers, reduce risk, and improve portfolio performance. ProspectX — estimates a consumer's likelihood to be in the market for a short-term loan. 	 Insight Score for Insurance — a risk score based on alternative account payment history data from the telecom, utility, and pay TV industries. Inflection Insurance Score® — an insurance risk score based on both advanced decisioning (point-in-time) and trended consumer credit attributes. Automated Valuation Model — produces estimates of the market value of a property. Peak Telecom and Utility Attributes — payment information from an industry-specific exchange to help identify risk. 	 Envestnet Yodlee — consumer-permissioned bank data, including checking, savings, investments, and non- credit recurring expenses like rent and utilities, and more. Risk Score — helps predict likelihood of becoming 90+ days delinquent within 24 months. Enhanced Debt-to- income Score. ProspectX — estimates a consumer's likelihood to be in the market for a short-term loan. The Work Number® — automated Income and Employment Verification service that instantly provides proof of income and employment. 	 Income estimates on individual modeled income with more than 77% accuracy across all income thresholds. Household income estimates up to \$2 million, including estimated income from wages, salaries, assets, retirement funds, and business income. Credit and debt attributes based on nearly 100% of the U.S. active credit population. Credit score Open student loans Outstanding student debt Debt-to-income ratio Mortgage indicator State of residence. Property value estimates. Graduates can be analyzed and compared by graduation year, sub-college, major/minor, gender, ethnicity, race, GPA band, SAT/ACT score, honors program, internship completed, scholarship/financial aid/Pell Grant, hybrid vs in-person, completed versus withdrawn, transfer student, first generation.

Functional overview and key components.

Everything that happens inside the Equifax Ignite analytics ecosystem begins with data. Within this inclusive environment, businesses can seamlessly upload and integrate their data with Equifax data and other types of third-party data, develop and deploy optimized marketing models via their preferred channels, and use the integrated feedback loop to monitor response rates, evaluate campaign data and analyze market intelligence.

The ecosystem is built on cloud-based technology for added security, flexibility and speed-to-market. Notably, it's also data agnostic and platform agnostic, which means businesses work with their data of choice and use their existing delivery channels/platforms, which reduces costs.

Here's a high-level look at how it works:











INGEST RAW DATA

DEVELOP STRATEGY

DEPLOY STRATEGY

ANALYZE RESULTS

MAKE BETTER DECISIONS FASTER

Instant access to the data you need. Quickly connect, synthesize, and organize siloed data exchanges.

Prep – Ingest – Key and link – Journal – Purpose Create, analyze, model, and execute decisions using an integrated platform.

Attributes – Models – Scores – Rules Deliver results to your chosen delivery and production platforms.

Equifax Ignite – InterConnect – APIs – Marketplaces – Online and offline channels Evaluate the results of your strategies.

- Recovery and collections
- Credit and risk
- · Identity and fraud
- Marketing
- ID verification
- Your identified challenges

Make quicker decisions, condense time-to-market, and earn revenue faster.

SMARTER REVENUE

+
BETTER CX

Here's how to get started:



Equifax Ignite will automatically key and link all the data together.



Upload all data into Equifax Ignite. This includes data from all functional teams and departments across the business, plus third-party data.



Begin the analysis. With a comprehensive, connected view of prospects and customers, businesses can conduct analytics and build and update models to support their business goals. Plus, they can continuously update their analyses as fresh data becomes available, and as they integrate more data and campaign results from the feedback loop.



Export and download models to desired production platforms.

The Equifax Ignite ecosystem.

Below is a more detailed look at the Equifax Ignite analytics ecosystem components.



EQUIFAX IGNITE

This is the inclusive ecosystem.

- Rapid access to powerful multisource data for more predictive insights.
- Automated model deployment to accelerate analytics-to-production timelines.
- Feedback loop enables the continuous monitoring and refinement of analytics strategies.
- It connects data, multiple decisioning platforms, and technologies to deploy analytics using the latest tools and advancements with versatile, end-to-end decision management options, and a direct feedback loop that help businesses get to market faster.
 - Explainable and adaptive Al techniques drive model optimization.
 - Automated keying and linking technology connects disparate data across multiple environments.
- Flexible, modular applications support existing technology platforms.



INTERCONNECT DECISION HUB

This centralized decisioning platform interfaces with Equifax Ignite.

Businesses can use it to align analytic strategies with specific objectives across risk management, account opening and lending, compliance, and more.

Businesses can use this multisource data to update,

they can visualize and better understand customers

enrich and connect their existing customer profiles so

- Built-in data sources and business flows with pre-integrated consumer/ commercial data sources and orchestrations for the most common acquisition use cases.
- Built-in keying and linking supports a single view of customers across disconnected data sources.
- Customer acquisition interface offers the ability to submit, search and underwrite multiapplicant applications.
- Decision reports provide a clearer understanding of the acquisition process.
- Advanced Modeling
 Engine and Neurodecision
 Technology® support the
 development of more
 precise credit decisioning
 strategies and risk
 models that incorporate
 regulatory-required
 reason code generation.
- Standard and pre-built reports for deeper visibility into decisions.
- Collaborative, role-based access that enables the sharing of decisions intelligence across organizational silos to support better decisions at scale.



MARKET-LEADING DATA FROM EQUIFAX

This is the foundation of Equifax Ignite.

- Unique wealth, economic, and employment insights support a clearer understanding of customer lifestyles, needs, channel preferences, and areas of opportunity.
- Alternative data reveals how consumers handle their "everyday obligations" for cable, utilities, and cell phones, as well as alternative financial (alt-fi) payment arrangements.
- 100 percent of U.S. consumer credit data containing more than 220 million consumer credit files.

from every angle.

Best in class attributes

 all built and managed in the cloud — help boost performance and enhance predictability with more than 7,000 attributes across more than 60 industries.

Feedback loop

Best-in-class data, analytics, technology, and support

INTEGRATED TECHNOLOGY

INDUSTRY LEADING ANALYTIC TOOLS

Data visualizationAccess anonymized data in your channel/platform of choice in a variety of formats

Use case development Combine attributes and analytics for insight into specific problems or needs

Foundational assets/attributes Access a strong, centralized repository of robust data

Production/delivery platform integration

Connect with Equifax delivery channels to execute strategies, analyze performance, and resolve misconfiguration



Decisioning platform incorporation

Combine attributes and analytics for insight into specific problems or needs

PERSONALIZED SUPPORT WITH CONFIGURABLE SOLUTIONS

Right-sized packages

Obtain the data you need via scalable models and store findings in one place

Strategic partnership

Dedicated team to onboard, share best practices, and build use cases to maximize/optimize data output

Moving forward with confidence.

Businesses may not know what economic challenges and opportunities are around the corner, but one thing is certain. Inaction and passively sitting on the sidelines are no longer options in today's fickle, fast-moving marketplace.

To skillfully adapt and absorb disruptive shifts, businesses need direct access to real-time analytic insights that can help them move forward with confidence. The Equifax Ignite analytics ecosystem can help by removing barriers to real-time customer visibility and facilitating efficient, right-now collaboration across the business, ensuring that more predictive and up-to-date analytic models and scores get to market faster. It's a proven approach to increasing revenue and analytic ROI in any economic market, but also a smart strategy for keeping the business focused on its most valuable asset: its customers.

equifax.com/business

Transforming Data into Business Value through Analytics and Al PwC 2023 Cloud Business Survey Harvard Business Review Survey