

Lakes of data are valuable only if you can surface the insights hidden within their depths. You need an analytics platform that will transform huge volumes of data into accurate, actionable, automated insights—at the speed of your business.

With a focus on artificial intelligence (AI) and machine learning, the Micro Focus approach to predictive analytics enables you to capitalize on your most valuable business asset—your data.

Conquer the Competition with Advanced Analytics and Machine Learning

Companies that use advanced analytics and machine learning are twice as likely to be top quartile financial performers, and three times more likely to execute effective decisions.¹

However, while 75% of business leaders identify "growth" as the key source of value from analytics, only 60% of these leaders have predictive analytics capabilities. Gaining a solid competitive advantage depends on your ability to transform massive volumes of data into meaningful insights.

Unlocking the full potential of big data can provide an in-depth understanding of customer behavior, uncover opportunities, reduce risks, enabling you to personalize the consumer experience, prevent churn, detect fraud, and increase your bottom line. Unfortunately, the growing velocity, volume, and variety of data has increased the complexity of building, testing, and deploying predictive models, since few tools are capable of processing these massive data sets at the speed of business.

With Micro Focus Predictive Analytics, you can:

- Predict with accuracy
- Act in time to influence
- Simplify complex processes



 $^{{\}it 1.\, "Creating \, Value \, through \, Advanced \, Analytics." \, Bain \, \& \, Company, February \, 2015}$

^{2.} www.marutitech.com/machine-learningpredictive-analytics/



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The Micro Focus Approach

Predict with Accuracy

The larger your data sets, the more accurate your predictions. Analyze all of your data with machine learning and build precise, constantly updated predictive models based on huge volumes of data—not just data samples. Then complete the business intelligence puzzle as you gain real-time insights from unstructured data such as text, video, image, and audio.

Act in Time to Influence

When it comes to analytics, accuracy is useless without speed. You need to deliver accurate insights in milliseconds. Strengthen your predictive powers and unlock meaningful trends, patterns, and relationships in your data. With speed and accuracy, you can influence outcomes at the pace that your business—and customers—demand.

Simplify Complex Processes

Time-consuming, complex processes put your organization at risk of falling behind the competition. Automate the monitoring, discovery, analysis, and remediation of all data types—from any source, in any format.

Our approach includes a variety of solutions to help your organization gain competitive advantage and meet whatever big data challenge faces your organization.

Micro Focus Predictive Analytics Solutions

Customer Behavior Analytics

To understand, retain, and engage with today's increasingly sophisticated customers, quickly analyzing large volumes of various data sources is a must. With our solutions, your organization can analyze customer data at massive scale and extreme speed, offering in-depth insights into customer interactions.

Gain advanced analytical insights

Improve customer web experiences, test and iterate products and services, improve marketing and campaign effectiveness, lower customer acquisition costs, and reduce churn.

Analyze clickstream data

Find out which pages are the most effective and which pages visitors ignore, enabling you to improve user experience.

Discover the most effective series of steps to encourage conversions, sales, and add-on purchases.

Predict customer churn

By combining sources of customer behavior data and applying built-in machine learning, organizations can better understand, identify, and predict the early signs of customer churn and take measures to increase customer retention.

PRODUCT

Vertica

Vertica is trusted by thousands of leading data-driven enterprises around the world, including AT&T, Etsy, Cerner, Intuit, Uber, and more to deliver speed, scale, and reliability on mission-critical analytics. Designed for use in data warehouses and other big data workloads, Vertica delivers the fastest, most scalable advanced analytics platform, forever independent from underlying infrastructure, with built-in machine learning and advanced analytics.

case study deltaDNA



Objective

Enable developers to understand and react to player behavior in near real-time.

Strategy

Offer a sophisticated player analytics application for game developers.

How Micro Focus Helps

Vertica enables developers to yield real-time insight into player behaviors and maximize player engagement. The impressive query speed of Vertica software is more than a technological accomplishment. It enables deltaDNA to deliver crucial capabilities to game developers: they can design games that analyze and respond to player behavior in a matter of milliseconds, even on huge data sets

"Thanks to Vertica software, we're transforming gaming industry analytics."

MARK ROBINSO

CEO, deltaDNA

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Unleash the Power of Text, Image and Audio Data

Make better business decisions faster with Al-powered analytics. Extracting insights from virtually any unstructured data—regardless of origin and format—enables unified, context-sensitive search and knowledge discovery across video, image, audio, and text data.

Unstructured data analytics can provide structure to unstructured data. For example, text analytics can extract entities (names, phone numbers, postal codes, etc.) and concepts, which can be used as input for predictive models. Speed analytics can complement text analytics by converting audio data such as call center recordings into text (speech-to-text). It also generates structured data such as speaker identity, language spoken, etc. Likewise, image and video analytics can support predictive models by extracting structured data (e.g. identity, license plate, physical object, etc.) out of static and moving images.

Harness any data

With connectors for more than 150 sources and support in excess of thousands of data types, you can access any data—inside and outside your firewall—and index it without relocation or disruption.

Generate actionable insights

Unified text, video, image, and audio analytics helps you create value by unlocking patterns, trends, and relationships across your complete corpus of unstructured data.

Find the most relevant information

Intelligent data discovery from virtually any source, including the Dark Web, with dynamic data-led discovery.

PRODUCT

IDOL

IDOL uses artificial intelligence (AI) to deliver text analytics, speech analytics, video analytics, and unstructured data analytics on an extremely diverse set of file formats across an exhaustive range of data repositories. With this world-class breadth of data analytics coverage, IDOL supports applications ranging from enterprise search to open source intelligence and chatbots. It enables a real-time focus on the most valuable data within a vast sea of irrelevant or low priority of information.

CASE STUDY **RTVE**



Objective

Significantly reduce TV production times by creating an easily searchable repository.

Strateg

Transform media production by accelerating multimedia data search and retrieval across 20M+ assets from days to seconds.

How Micro Focus Helps

IDOL provides a fast and scalable multimedia information repository with contextually relevant asset discovery capability powered by Al. It fully supports the organization's digital transformation goals for continual innovation.

"Using Micro Focus IDOL, our journalists have over 20 million media assets at their fingertips. It has completely revolutionized the way television is produced within RTVE."

JUAN DE MEER

Chief Information Officer, RTVE

IoT Analytics

The Internet of Things (IoT) will soon include millions—if not billions—of connected devices, generating a staggering amount of sensor data. To capitalize on this trend, your organization must do more than collect and manage this data, which is a formidable challenge on its own. Your success hinges on choosing a proven big data analytics platform that stores and analyzes volumes of sensor data at extreme scale.

Predictive Maintenance

Continuously monitoring machine and sensor data helps equipment manufacturers and service providers predict and address maintenance issues before they occur.

Vehicle Telematics

Sensor data from delivery trucks helps businesses ensure driver safety, schedule maintenance before mechanical issues can disrupt fleet operations, and enable intelligent route optimization to reduce fuel costs and emissions.

Smart Buildings

Facilities personnel use monitors to gather data on building systems, including heating, ventilation, and air conditioning (HVAC) equipment to anticipate and troubleshoot issues before they escalate to "hot" or "cold" calls.

Product Monitoring

Data collected on how customers are interacting with physical features enables product management and engineering teams to analyze user behavior and experience in intelligently guiding future product development.

Smart Devices and Wearables

Product developers are embedding sensors into consumer electronics to uncover user-specific insights and value-added services across a wide range of needs—everything from smart appliances to fitness trackers.

Smart Metering

Utilities are deploying digital, networked advanced metering infrastructure (AMI) to systematically track consumption and demand data across regions.

PRODUCT

Vertica

CASE STUDY Auckland Transport



Objective

Improve public transportation safety and efficiency for more than a million citizens in New Zealand's largest city.

Strategy

Shift from reactive investigation to proactive problem management.

How Micro Focus Helps

Micro Focus IDOL analyzes real-time CCTV feeds to provide scene analysis, Automatic Number Plate recognition, and Object Classification for surveillance and gathering of evidence and pedestrian safety and traffic flow statistics. These capabilities enable Auckland Transport to detect traffic violations, mitigate congestion and parking problems, and discover patterns that yield insights for proactive measures.

Vertica analyzes real-time transport system sensor data to provide advanced geospatial analytics for monitoring vehicles on-road with exact location and movement, which enables operational monitoring, incident management, anomaly detection, and predictive insights for route optimization.

"As a transport agency, our IDOL analytics platform is helping us exceed customer expectations and shape positive perceptions."

ROGER JONES

Executive General Manager Auckland Transport microfocus.com/analytics

Al for IT Operations

IT Operators are handling a storm of events every day, and digital transformation initiatives are causing that storm to grow exponentially. Help your IT Operations teams be more efficient and agile with our AI for IT Operations solution (AIOps). It couples big data analytics and machine learning with automated monitoring and remediation to provide a complete AIOps platform. Accelerate root cause analysis, improve mean time to resolution (MTTR), and spot issues before end users are impacted.

Gain a complete view of your IT operations data

Advanced machine learning enables you to leverage all of your data, both structured and unstructured. Events, logs, topology, and data from any metric grants you a complete view of your IT operations analysis.

Predict future performance and prevent issues from impacting users

Machine learning algorithms automatically calculate baselines, taking into account data patterns and seasonality to predict future performance. Plus, real-time, intuitive anomaly alerts notify you when performance exceeds baseline, preventing IT issues from impacting end-users.

Identify trends and abnormal behavior

The Time Machine feature, data playback, and intuitive dashboards enable you to identify trends and pinpoint IT issues in minutes. Automated analysis across known and unknown incident data types filters out noise, determines relevant clusters, and analyzes text to identify abnormal behavior.

PRODUCT

Operations Bridge

Operations Bridge (OpsBridge) is the industry's first containerized product that automatically monitors all hybrid IT resources—any device, operating system, database, application or service—and applies AlOps to all data types. Containerization provides easier and faster installation and upgrades than traditional deployments. It reduces data noise, proactively detects problems, rapidly executes remediation, and improves collaboration across teams and tool silos. OpsBridge also provides a unique combination of quality of service monitoring coupled with deep application health analytics. Customers have seen a 90% reduction in events, 70x faster root cause detection, a 50% reduction in MTTR, improved customer experience, and a reduction in the overall cost of IT Operations.

CASE STUDY Large bank in Italy



Objective

Improve IT efficiency and reduce cost of operations.

Strategy

Automate operations, powered by AlOps to help reduce IT cost and improve efficiency.

How Micro Focus Helps

This customer implemented Operations Bridge, granting them powerful AlOps capabilities to automatically filter out over 700,000 events per week that were not critical to their business services. This has improved IT operator's ability to prioritize workloads, reduce the number of tickets raised in IT, and to have a more proactive approach to IT operations management.



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Security Analytics

Customer information and IP are two of the many sensitive, high-value assets that organizations must protect.

Unfortunately, traditional security approaches leave security operations center (SOC) teams contending with rigid rules and false alarms instead of investigating real threats. Our user and entity behavioral analytics (UEBA) gives SOC teams a new lens to detect unknown threats. Using unsupervised machine learning, UEBA bypasses rules and thresholds and assesses the potential risk of a user or entity in your enterprise, finding the threats that matter quickly.

Accurate anomaly detection powered by advanced analytics

UEBA leverages more than 450 built-in unsupervised machine learning models to extract available entities (users, machines, IP addresses, servers, printers, etc.) from within log files and observe relevant events to determine expected behavior. New events are evaluated against previously observed behavior, as well as the behavior of a user or entity's peers, to assess potential risk.

Reduced false positives with unique baselining

Anomaly detection algorithms that expect the same behavior from every entity results in a flood of distracting false alerts. Unsupervised machine learning measures "unique normal"—an individual digital fingerprint of each entity. You can continuously compare this baseline to itself or peers.

Improved SOC efficiency with fast, accurate investigation

An intuitive user interface (UI) enables efficient investigation and effective decision-making by providing a contextualized view of potential risks. Dashboards, timelines, filtering, and search capabilities enable analysts to quickly refine data and logs down to the most relevant information.

Efficient resolution and remediation

Use output risk assessments to initiate actions via automation, orchestration, and alerting solutions to execute faster-than-human actions as risks emerge. Plus, downloadable reports summarize immediate organizational risks.

PRODUCT

Interset

Interset UEBA augments existing security tools and empowers SOC teams to identify and respond to the threats that matter before data is stolen. Interset leverages unsupervised machine learning to measure the unique digital footprint of systems and users, distilling billions of events into a handful of prioritized threat leads. What used to take months can now take minutes.

CASE STUDY

Source-code theft from a high-tech firm



Objective

Detect theft of high-value IP critical to the business. Aware of two engineers who stole source code, this multi-billion-dollar company spent more than \$1 million on deploying a large security vendor to prevent future IP theft. A year later, the vendor was unable to detect the known engineers.

Strategy

Connect the dots between unusual behavior and real security threats with advanced analytics.

How Micro Focus Helps

Interset UEBA empowers SOC to find unknown or difficult-to-find insider threats or targeted outside attacks. By analyzing source code logs, Interset easily found the two known engineers and detected an additional 11 users who accessed and stole source code in North America and China through suspicious activities like unusual source code access patterns for a specific user.

Using innovative technology such as machine learning and AI, our Predictive Analytics portfolio of solutions and products can help your organization—no matter the industry focus or use case—become more efficient, increase profits, and better adapt to a changing environment.



