

# OpenText™ Magellan™

A comprehensive AI and analytics platform that unlocks insights from Big Data and Big Content

Pre-integrated solution delivers machine learning, text mining, advanced analytics, and enterprise-grade business intelligence (BI) that enable enterprises to use their structured and unstructured data to inform better decisions

Today, organizations are sitting on vast stores of data that are growing ever larger in increasingly diverse formats. And a growing share of this data is Big Content, i.e., data which is unstructured and typically stored and managed in document form, such as contracts, business plans, proposals, and incident reports. Big Content also includes online text such as news articles and blog posts, and social media such as Twitter and Facebook.

These organizations know there is value in their data and are starting to see how others are using artificial intelligence (AI) and analytics profitably. But the sheer volume and variety of formats make extracting that value complex, expensive, and time-consuming. The effort to deploy and integrate the disparate technologies required to handle and analyze massive amounts of data, leveraging AI and machine learning, can be intimidating, especially when it comes to unstructured data. This kind of information often contains more context and valuable insights than structured, transactional data because it is usually written in natural language and reflects human opinion, intention, emotion, and conclusions. However, this complexity adds an extra layer of challenges.

OpenText™ Magellan™ is a uniquely practical solution to these problems. The pre-integrated Magellan platform delivers AI, machine learning, text analytics, data discovery, advanced analysis, and scalable, interactive business intelligence, which enables enterprises to harness their structured and unstructured data to make smarter decisions.

## Magellan: Addressing the real-world challenges of AI

AI, or cognitive computing, is no longer science fiction. Many organizations are using it to automate repetitive tasks, spot patterns, predict trends, and discover new ways to streamline their business or derive profit. However, building an effective cognitive analytics system requires a lot of high-powered data science talent, which is often scarce.

Moreover, IT teams are quickly realizing that assembling the components of a cognitive analytics system from disparate proprietary technologies is costly, time-consuming, and complicated, and may end up rigid and hard to customize.

## ANALYST OPINION

*"Magellan... sees [OpenText] taking advantage of the deep understanding of unstructured data it has built up from its roots in search and content management."*

*"Magellan represents the logical starting place for OpenText's customers to infuse their applications with machine-learning smarts."*

**—Krishna Roy and Nick Patience, 451 Research, LLC**

## How Magellan enhances OpenText EIM solutions

Function	Customer experience management	B2B network	Business process management	Enterprise content management	eDiscovery & investigations
Data sources	Customer histories, web content, chats, social media	Trading partner information, supply chain, transactions	Case management, HR, employee records	Documents, archives, contracts, email	Legal documents, emails, contracts
Insights	<ul style="list-style-type: none"> <li>Combine and analyze all customer touches across channels</li> <li>Automatically detect key decision points in customer journey and take action</li> <li>Choose the next best experience based on all customer data</li> </ul>	<ul style="list-style-type: none"> <li>Find best vendors/suppliers</li> <li>Optimize delivery routes to reduce time and fuel costs</li> <li>Find alternatives to disrupted supply chains</li> <li>Predict and avoid delays</li> </ul>	<ul style="list-style-type: none"> <li>Recommend more efficient processes</li> <li>Rate employee effectiveness</li> <li>Determine next best action</li> <li>Maintain SLAs (service level agreements)</li> </ul>	<ul style="list-style-type: none"> <li>Find related documents</li> <li>Classify documents</li> <li>Perform semantic analysis</li> <li>Understand customer sentiment</li> <li>Analyze contracts for patterns to optimize deals</li> </ul>	<ul style="list-style-type: none"> <li>Classify and group documents</li> <li>Perform machine learning-based text analysis</li> <li>Predict timeframes, resources and accuracy for discovery projects</li> <li>Forecast discovery project burn-rate</li> </ul>
OpenText product suite	Experience	Business Network	Process	Content	Discovery

Magellan is the answer. Instead of bogging enterprises down with installation and integration complexity, Magellan delivers an AI-powered analytics platform ready to go that includes machine learning, data discovery, text analytics, and sophisticated visualization and dashboarding, drawing from the proven, widely used BI and analytics components of the OpenText™ Analytics Suite.

Pre-integration of all the components serves as a “force multiplier” that lets businesses make the most of precious data science talent and extend the benefits of AI-enriched analytic insights to a wide range of users across the organization.

This gives businesses of all types a cost-effective and timely method of leveraging machine learning to drive their critical decisions. Magellan uncovers insights from Big Data and Big Content and empowers IT teams, operational users, and business analysts to share findings, make more informed decisions, and act with more impact.

### Transform your enterprise information management systems with AI

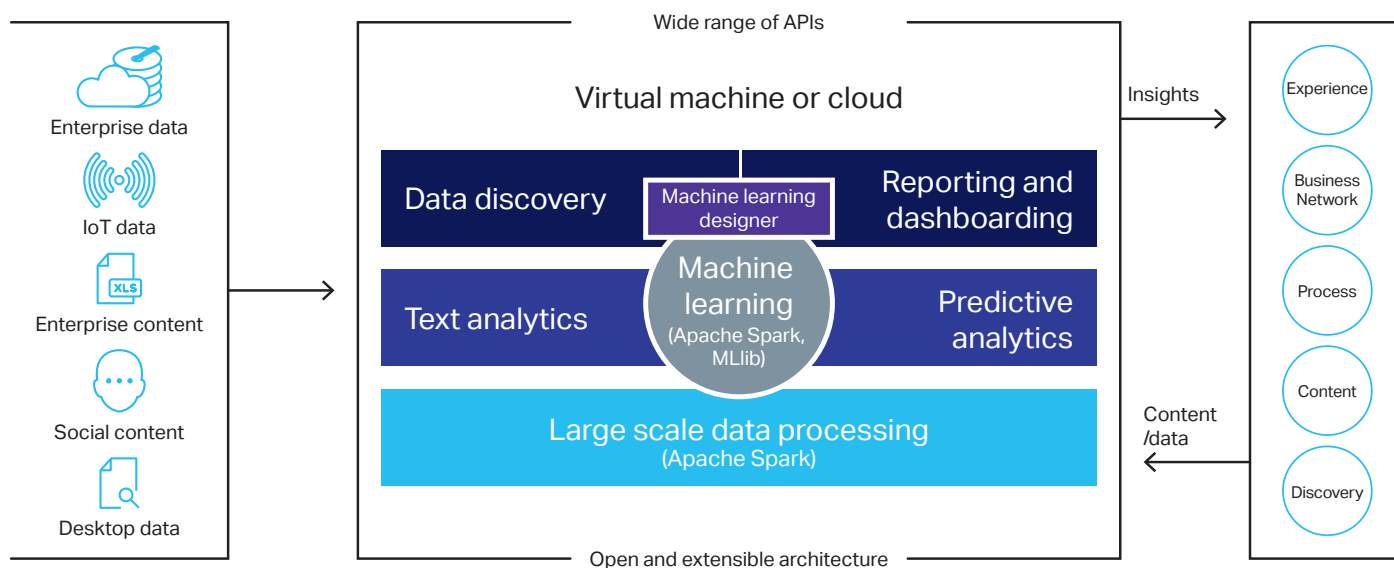
With data collection and storage continually getting easier and cheaper, companies are drowning in data. Their challenge now is to derive value from those terabytes of structured and unstructured data, ranging from databases and documents to IoT sensor data or social media feeds. That's where Magellan comes in. It's designed to easily access and organize data from enterprise information repositories, regardless of the source or format, and help users at any skill level engage with it on a self-service basis.

The benefits are even quicker to realize if you're already using industry-leading enterprise information management (EIM) solutions including OpenText™ Experience Suite, OpenText™ Business Network, OpenText™ Process Suite, OpenText™ Content Suite, and OpenText™ Discovery Suite.

Magellan is designed to smoothly integrate with these other OpenText products, unlocking the value of EIM data in their repositories. OpenText EIM offers a complete solution for helping information flow through a digital enterprise, from engagement to insight.

Paired with OpenText EIM solutions, Magellan's AI-powered insights can boost their value in many ways:

- For Experience Suite, which brokers the flow of information for initial and ongoing customer interactions to deliver a superior experience, Magellan can combine and analyze customer histories, web content, and chat transcripts, plus external sources of unstructured data, such as social media, to deliver a fully integrated view of all customer touches across all channels. It can automatically detect key decision points in the customer journey and recommend actions to take, or offer the next best step for a given customer.
- For Business Network, Magellan can ingest and analyze trading partner and supply chain transaction records and help spot the best vendors or suppliers, optimize delivery routes to shrink time and fuel needed, predict delays, and find alternatives if supply chains are disrupted.
- For Process Suite, which captures and orchestrates the flow of information across complex business processes, Magellan can digest case management archives, employee records, and similar unstructured documents to help find more efficient processes, maintain SLAs (service level agreements), accurately rate employee effectiveness, manage risk prudently, or detect fraud, just to name a few examples.
- For Content Suite, which organizes and stores a wide range of enterprise information assets, starting with email, invoices, case records, contracts, and other business documents, Magellan can efficiently discover related documents, analyze their mood and sentiment, and point out areas where contracts can be optimized.
- For Discovery Suite, which leverages unsupervised machine learning for discovery analytics against enterprise content, Magellan can optimize the data discovery process by predicting project performance metrics such as accuracy and timeliness, as well as advising on resource allocation and adjusting the billable burn rate in real time. This supports litigation, investigations, and regulatory compliance by enabling faster access to key documents, terms, and entities.



## The powerful technologies behind Magellan

### A prebuilt and integrated platform

Magellan combines existing OpenText BI and analytics solutions with custom machine learning modules in a framework that leverages open standards for easier integration of the components and with external applications and data sources.

If businesses assembled these pieces themselves, it would take months of complex development—and that's before even setting up the algorithms to analyze any data. Magellan provides an easier way to implement an AI and analytics platform, at lower total cost of ownership and with far less complexity.

The Magellan BI package delivers:

- Data discovery
- Reporting and dashboarding
- Text analytics (including sentiment analysis)
- Sophisticated predictive analytics
- Machine learning (via the MLlib library)
- Machine learning designer (Magellan Notebook)
- Large-scale data processing (Apache Spark™)
- A wide range of APIs for easy customization
- Open and extensible architecture

### Data discovery

The data discovery component of Magellan makes it easy for anyone to quickly access, blend, store, and analyze data, identifying business trends, gaps, and relationships that they may never have known existed. It provides a drag-and-drop experience for exploring data including set analysis with Venn diagrams, Pareto and distribution charts, profiles and correlations, and more.

The discovery feature provides a range of data engineering and enrichment methods enabling users to aggregate and decode data, build expressions to create calculated fields, create numeric and quantile ranges, build parametric columns consisting of query-based values, and rank records.

### Business intelligence, reporting, and dashboarding

An effective business intelligence solution will not only come up with reliable findings and deep insights, it will deliver them to stakeholders in a visually compelling way that makes them easy to understand and act on. The business intelligence reporting feature of Magellan lets users create their own dashboards, reports, and visualizations from insights developed in other components, then easily share or embed them.

Magellan's business intelligence tools can be used by anyone—no need to understand the underlying data science.

### Text analytics

The text analytics component of Magellan provides sophisticated Natural Language Processing capabilities, including sentiment analysis, against unstructured content from a vast number of sources, including the web, social media, documents, and more.

The feature provides transformation, enrichment, and persistence of processed unstructured data into the Magellan data store. Metadata processed by text analysis is then leveraged for predictive analytics, dashboards, and visualizations, providing an easy way to understand and share insights.

### Predictive analytics

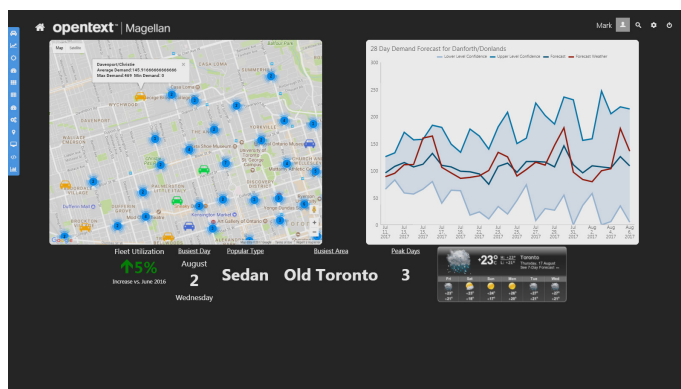
Magellan's predictive analytics component leverages custom data models created by data scientists in Apache Spark, presenting them as drag-and-drop models. This allows operational users to apply advanced algorithms to their data to learn likely behaviors, forecast outcomes, anticipate risk, and make recommendations.

The predictive component includes built-in analytic techniques, such as profiling, mapping, clustering, forecasting, creating decision trees, and more—all without requiring statistical expertise or coding.

### Large-scale data processing and machine learning

The core technology of Magellan is Apache Spark, the underlying general execution engine that provides in-memory computing for maximizing hardware capabilities. Data scientists leverage Spark to create and process custom machine learning algorithms using programming languages such as Scala, Python, SQL, and R, familiar environments that help make it easier for developers and data scientists to get to work.





**OpenText Magellan can perform predictive analytics for tasks such as anticipating demand for rental cars. Its results can easily be embedded in websites or other applications.**

Spark provides the MLlib machine learning library that is ready to go out-of-the-box, so developers can immediately leverage predefined processing pipelines and statistical routines on their data and content. Spark enables the flexibility and extensibility of an open stack while ensuring that enterprises maintain full ownership of their data and custom models.

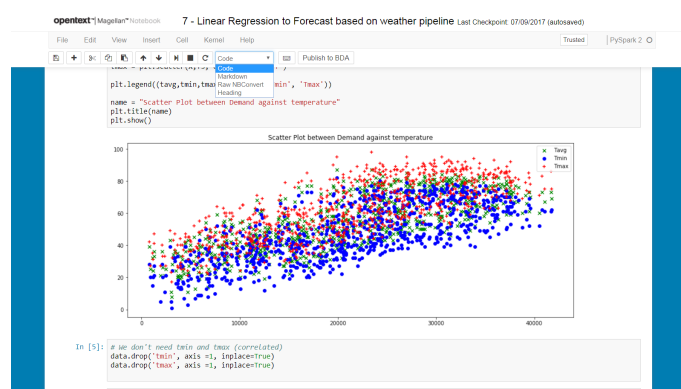
### Machine learning designer

The Magellan platform includes the Magellan Notebook (based on the Jupyter Notebook), a web application used to create and share code, equations, visualizations, and explanatory text encapsulated in a single document. It is used by data scientists to design custom machine learning models and data processing routines leveraging Spark MLlib. These Notes can be written in several popular languages, such as Python, Scala, or R, which ensures that data scientists can get to work quickly in a familiar environment.

Within the Magellan ecosystem, the machine learning designer becomes a central opportunity to create new machine learning routines and share them with operational users, who can leverage them to make smarter decisions without needing to understand the science or logic underneath.

### APIs for easy customization

Magellan can be quickly extended and customized by drawing on a wide range of built-in APIs, including REST and Javascript, which allow it to be integrated with any other standards-based technology. These APIs enable very detailed control over analytic features and functionality at any level to meet any functional requirement, from an interactive chart on a web page to an embedded predictive process.



**Magellan Notebook allows creation of custom machine learning models that can be shared with other users as a drag-and-drop analytic asset.**

By democratizing analytics, organizations increase the value of data and ensure adoption across the enterprise.

### Open, standards-based foundation

Magellan leverages open standards in components, including the Apache Spark computing platform and Jupyter Notebook, to create a flexible, easily extensible solution. Open technology standards mean the technology is continually updated and kept compatible with a wide range of complementary technologies by a large community of trained experts, on whom Magellan customers can draw for consulting expertise.

The technology can be customized and extended to meet any customer requirement. Plus, any customizations remain the intellectual property of the customer, unlike competitive offerings.

### Getting started with Magellan

Magellan provides a cohesive, flexible platform to enable machine-assisted decision making, automated analysis, and data-driven process optimization throughout your organization.

For the organization who wants to get started quickly with pre-integrated and economical machine learning and analytics, Magellan is unmatched. There has never been an easier or more powerful option for enterprises that need to implement AI.

Magellan cost-effectively supports innumerable use cases on a cohesive, highly scalable infrastructure perfectly equipped for handling massive amounts of structured and unstructured data.

To get started with Magellan, [contact us](#).

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