



Microsoft Big Data Solution Brief



Microsoft is taking Big Data to a billion people by providing easy access to all data, big or small, and enabling end users to analyze all data with familiar tools like Excel. We also give IT a complete data platform to scale insights across their organizations with confidence.

Reduce the time from raw data to insight and action in a world that demands fast business decisions to stay ahead.

Today, your company is capturing an unprecedented volume of information – including vast amounts of unstructured data such as files, images, videos, blogs, clickstreams, and geo-spatial data. You may have access to internal and external data and services and need to combine and analyze information from social media sites like Twitter, Facebook, Instagram and LinkedIn.

Batch processing is not keeping up with this data explosion and doesn't enable timely decisions. You need it processed in real-time to make actionable results.

New technologies, such as Apache Hadoop, can store and analyze petabytes of unstructured data inexpensively. But you need to deploy and manage it like Enterprise software not a science project. You need to analyze data from Hadoop easily to glean business insights.

Key Customer Challenges

Managing data explosion

Organizations need the right tools to make sense of the overwhelming amount of data generated by a growing set of data sources such as websites, social media sites like Twitter, Facebook, LinkedIn, and smart grids, among others.

Understanding a growing variety of data

Over 85% of new data is unstructured. Many companies want to use Apache Hadoop but lack the necessary internal expertise. Microsoft provides a streamlined deployment and setup experience that simplifies the complexity of Hadoop and makes it accessible to your business.

Enabling real-time analysis of data

Organizations need to make sense of the real-time data being generated every second of every day – from manufacturing and supply chains to social data streams. In fast-moving industries the ability to make the right decisions in real-time yields real competitive advantage. Yet many organizations do not have the tools to make timely and accurate decisions.

Achieving simplified deployment and management

Despite its promise, Hadoop today can be complex and requires highly specialized skills to deploy and manage. Organizations need a streamlined deployment and setup experience that simplifies the complexity of Apache Hadoop.

The Microsoft Big Data Solution

Microsoft's vision is to enable all users to gain actionable insights from virtually any data, including insights previously hidden in unstructured data. To achieve this, Microsoft has a comprehensive Big Data solution that offers:

A modern data management layer that supports all data types – structured, semi-structured and unstructured data at rest or in motion. Microsoft makes it easier to integrate, manage and present real-time data streams, providing a more holistic view of your business to drive rapid decisions.

An enrichment layer that enhances your data through discovery, combining with the world's data and by refining with advanced analytics. Have you ever wanted a quick answer to a question, but realized you had no way of gathering and analyzing the correct data without your IT department's help? Microsoft gives you the ability to connect and import data, create visualizations, and run reports on your own whether that be at your desk or on the go.

An Insights layer that provides insights to all users through familiar tools like Office. Microsoft has built rich, 3D data visualizations and storytelling right into Excel. This makes it easy to slice, dice and visualize multiple data sources – even modify them on the fly while presenting in PowerPoint – helping you uncover insights that would have otherwise remained hidden in static charts.



HDInsight is Microsoft's new Hadoop-based service, built on the Hortonworks Data Platform (HDP) that offers 100% compatibility with Apache Hadoop.

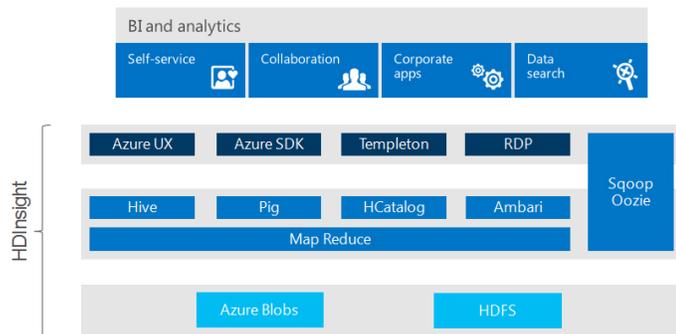
HDInsight enables customers to gain business insights from structured and unstructured data of virtually any size and activate new types of data irrespective of its location.

Rich insights from Hadoop can be combined seamlessly with the Microsoft Business Intelligence (BI) platform to give customers the ability to enrich their models with publicly available data and services using familiar tools like Office and SharePoint.

Key Benefits

Easy access to data, big and small, to drive the best decisions

Combine your data with external or unstructured information and things become very interesting. Power Query, a new tool for data discovery, easily combines data from multiple sources in Excel. Windows Azure HDInsight allows you to get started in Hadoop with just a few clicks. HDInsight is 100% Apache Hadoop, so your investment is future-proof. Combine your relational and non-relational data with [PolyBase](#) available in [SQL Server 2012 Parallel Data Warehouse](#).



Analyze all data with powerful, familiar tools

You can get insights faster when you enable business users to analyze all data, since these users are the domain experts who know the right business questions that need answers. We deliver faster insights by enabling end users to easily analyze all data types with familiar tools like Excel. Power Query helps you find the data you need, internally or externally, including unstructured data from Hadoop clusters. Analyze the data in Excel using Power View. Visualize the data with Power Pivot and map it with Power Map, a 3D mapping tool in Excel. Publish results to SharePoint or a Power BI site to scale insights from individual users to the whole organization.



Complete data platform for IT

Once your end users find useful insights in Excel through their analyses, you need a complete data platform to help IT scale this across the organization. Microsoft offers a complete data platform that enables IT to scale with confidence. Our Big Data solution offers Enterprise-class security and governance along with support for all types of analytics – corporate and self-service BI, real-time, predictive and prescriptive – combined. Create repeatable business processes that deliver insights automatically to find the ROI in your data.

Additional Information

www.microsoft.com/bigdata

<http://www.windowsazure.com/en-us/solutions/big-data/>

<http://www.windowsazure.com/en-us/services/hdinsight/>

Get Started with HDInsight

<http://www.windowsazure.com/en-us/documentation/services/hdinsight/?fb=en-us>