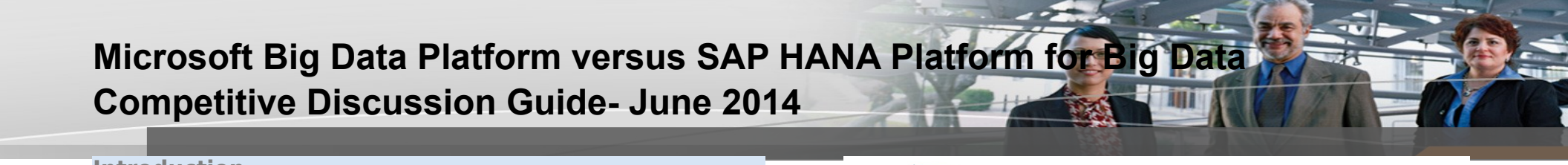
Microsoft Big Data Platform versus SAP HANA Platform for Big Data Competitive Discussion Guide- June 2014



Introduction

This document provides guidance for Microsoft® field sales representatives to discuss customers' concerns about a Big Data platform, and how solutions from Microsoft can help address those concerns. This guide provides information and facts to help field sales representatives compete effectively against SAP HANA Big Data solutions. Use this guide to:

- Initiate sales conversations with technical decision makers (TDMs) and business decision makers (BDMs) to identify sales opportunities.
- Understand key messages and strategies for positioning Microsoft Big Data Platform.
- Sell Microsoft products i.e. HDInsight, Hadoop (Hortonworks Implementation) on Windows, Microsoft Analytics Platform System (APS), Azure Machine Learning CloudML, the Microsoft Azure Intelligent Systems Service, and Microsoft Power BI tools against SAP HANA Big Data Solutions.

Use this discussion guide in conversations with:

- **TDMs:** Information Technology (IT) Administrators, IT Managers (IT Implementers), VP of IT, Director of IT, and Chief Architect
- **BDMs:** President, CEO, Chairman, and COO

1 | Big Data Introduction

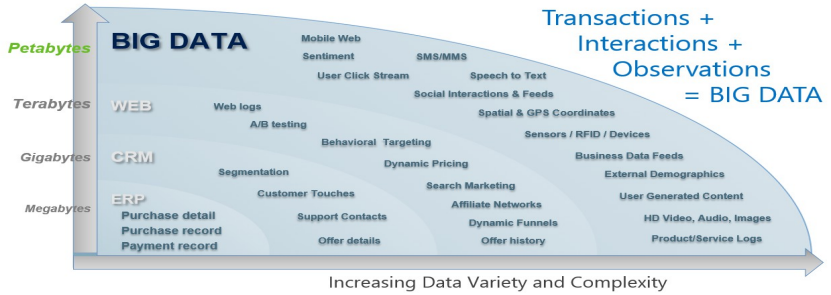
A: What is Big Data?

Big Data refers to the problems of capturing, storing, managing, and analyzing massive amounts of various types of data. Most commonly, this refers to terabytes or petabytes of data, stored in multiple formats, from different internal and external sources, with strict demands for speed and complexity of analysis.

Data is referred to as **"big data"** because it is being collected in ever escalating volumes, at increasingly high velocities, and in a wide variety of unstructured formats and variable semantic contexts. Big data collection does not provide value to an enterprise on its own. For big data to provide value in the form of actionable intelligence or insight, not only must the right questions be asked and data relevant to the issues be collected, but also the data must be accessible, cleaned, analyzed. It must then be presented in a useful way, often in combination with data from various other sources that establishes perspective and context, in what is now referred to as a mashup.

According to Gartner "*Big data" is high-volume, high-velocity, and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making.*

Big Data is truly all about analytics. Big Data is all about better analytics on a broader spectrum of data, and therefore represents an opportunity to create even more differentiation among industry peers.



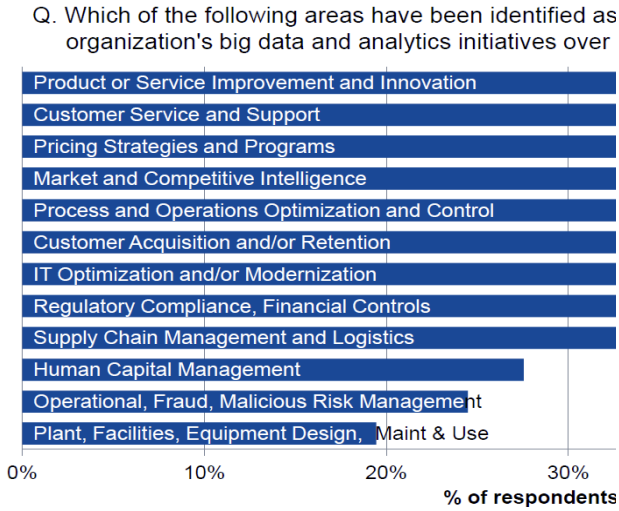
Source: *Hortonworks TechEd 2014*

B: Big Data Information Management Vs Traditional Information Management

Traditional Information Management	Information Management Big Data style
▪ Requirements based ▪ Top-down design ▪ Defining "truth" ▪ Integration and reuse ▪ Technology consolidation ▪ Data warehouses and content management ▪ Competence centers ▪ Better decisions ▪ Enterprise wide	▪ Opportunity oriented ▪ Bottom-up experimentation ▪ Establishing "trust" ▪ Immediate use ▪ Tool proliferation ▪ "World of Hadoop" ▪ Hackathons ▪ Better business ▪ Domain focus (marketing and ops, among others)

Source: *Gartner Data Center Conference 2013*

C: Why We Need It?



***Source**: IDC Big Data and Analytics Maturity Survey, July 2013*

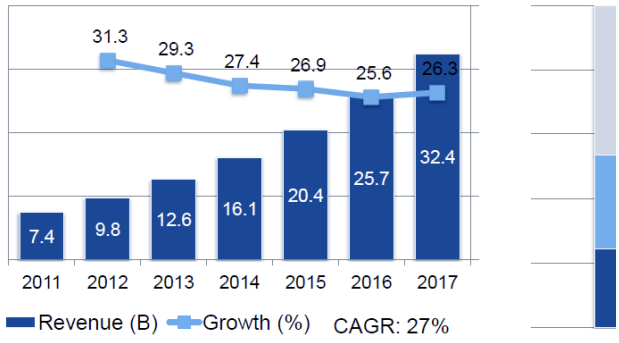
D: What Are Typical Use Cases for Big Data?

Following are the high value use cases that can be the first step into big data:

1. **Data Warehouse Modernization**: Modernize the data warehouse with new technology: In-memory, stream computing. Hadoop, appliances, while building confidence in all data.
2. **Enhanced 360 degree View of the customer**: View all internal and external information sources to know everything about your customers.
3. **Security Intelligence Extension**: Lower risk, detect fraud and monitor cyber security in real time.
4. **Big Data Exploration**: Find visualize, understand all big data for improved decision making.
5. **Operations Analysis**: Analyze a variety of machine data for improved business results.
6. **Anomaly Detection**
7. **Predictive Maintenance**

E: How Big is the Big Data Market?

In 2014, the Big Data Market will cross the $15 billion mark. The market will grow at the 5 year CAGR of 27% or 6x times faster than the overall IT market. Infrastructure will represent the largest and also fastest growing segment. Therefore, it is important to drive deployment on Windows Azure. (***Source**: IDC report WC20140522*)



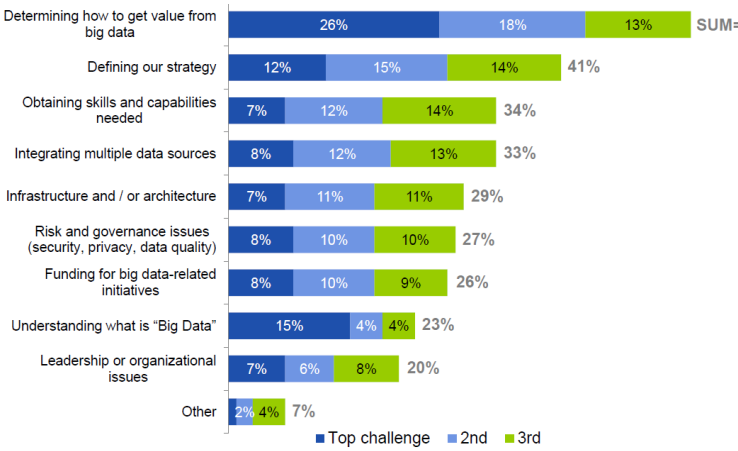
***Source**: Gartner presentation - Big Data Opportunities, New Answers and New Questions 2013*

F: What Technologies Are Used to Drive Value From Big Data?

N = 465 (multiple responses allowed)

***Source**: Gartner Survey Sep 2013*

G: Big Data Challenges Faced by Customers



***Source**: Gartner Symposium Event 2013*

H: Big Data Use Cases

	Scenario	Industry Example	Customers
1	Advertising optimization	**Advertising organization** improves campaign effectiveness and boosts ad revenue with big data by providing crucial analytics to advertisers, faster	YAHOO
2	Social insights	**Data Services** firm enables near real-time queries and more detailed insights into social media data	KLOUT
3	Intelligence gathering	**Law enforcement** agency improves accuracy and shortens the time to investigate criminal cases from two years to two weeks	
4	Equipment monitoring	**Utilities** software vendor scales to meet customer needs for storage and analysis to manage data from smart meters	FERRANT computer systems
5	Performance forecasting	**Hotel chain** determines the best growth opportunities by analyzing individual locations and the business as a whole	
6	Decision-making support	**Healthcare provider** aggregates various data and delivers faster access to information to improve health outcomes	ASCRIBE

I: "Row" Strategies: What Will Be Needed

Winning Formula = Data + Analytics + E

- **Data:** domain-specific, ***massive heterogeneous, mul*** collection, integration, and provisioning
- **Analytics:** cloud-based exploration, weak signal disco model refinement, linked to ***real-time sense/monitor*** y triggering corrective activity (e.g. re-plan) yielding ***prio***
- **Execution:** mobile-centric, cloud-based ***orchestrated actions*** or ***interactive (Q&A) advisory systems*** (e.g
- **Packaging:**
  - Bundle and integrate the required elements into a product/
  - Incorporate partner elements and/or acquire additional ele
  - Offering available as cloud-deployed, value-added, outcon

Hadoop in Cloud	SAP Hana One, dbPaaS	Microsoft Azure HDInsight	Hadoop-based ma service in the clou Microsoft Azure. I with other tools fr Microsoft.
Analyze Streaming Data Process and leverage streaming data	SAP Hana Cloud Platform, aPaaS SAP Hana Cloud Integration, iPaaS	The Microsoft Azure Intelligent Systems Service (AISS)	Microsoft Azure In Systems Service h enterprises embra Internet of Things securely connectin managing, and ca machine-generate a variety of senso devices.
Cloud Machines Learning	Vertica on AWS Cloud supports R and Hadoop	Azure Machine Learning CloudML	Azure Machine Lea offers a data scien experience that is accessible to busi analysts and dom reducing complexi broadening partici through better too

2 | Snapshot: SAP and Microsoft Big Data offerings- Comparison

Customer Requirements	Big Data Solution Components		Microsoft Advantage
	SAP HANA	Microsoft	
Unlock Big Data: Search and navigate data within existing systems	SAP Lumira on SAP HANA, SAP Business planning and consolidation	Excel, Power Query, Power Map, PowerPivot and PowerView	Familiar tools, business user friendly, work with all types of data, easy setup and cost effective
Analyze Raw Data: Ingest data as-is into Hadoop	SAP HANA enterprise edition	Hadoop on Windows	*100% compatible and scalable environment for deploying Hadoop based applications. * Integrate deeply with Microsoft tools and applications
Customer Requirements	**Big Data Solution Components**		**Microsoft Advantage**
	SAP HANA	**Microsoft**	
Reduce cost with warehouse solutions Integration with warehouse	SAP Business Warehouse	Microsoft Analytics Platform System (APS)	*Scale-out appliance with data warehousing and Hadoop in one box. *Seamlessly combine relational and non-relational data with PolyBase, a feature of SQL Server 2012 Parallel Data Warehouse.
Business Intelligence	SAP Hana, SAP Lumira on SAP Hana	SQL Server, Predictive analytics, Reporting, Dashboards based on SharePoint Server, and SQL Analysis services	*Empower users to discover, analyze and visualize data with powerful self-service BI in Excel *Enable collaboration and sharing of reports and data in a managed and secured environment with SharePoint or SharePoint Online

3 | What are Microsoft's Offerings?

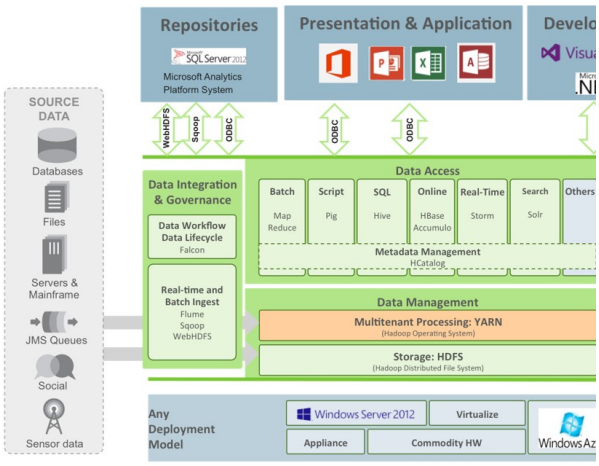
Hadoop on Windows and on Microsoft Azure:

With Hadoop for Windows, appliance and HDInsight Service, there is unprecedented choice for Windows enterprises for their Hadoop deployments. HDP (Hortonworks Data Platform) for Windows is the Microsoft recommended way to deploy Hadoop on Windows Server environments. For cloud-based deployments, HDInsight Service is a 100% compatible and scalable environment for deploying your Hadoop based applications.

1. HDP for Windows

100% Apache open source Hadoop software for Windows Server

Hortonworks and Microsoft have partnered to bring the benefits of Apache Hadoop to Windows. Through this partnership, Microsoft focused on delivering enterprise grade solutions that integrate deeply with Microsoft tools and applications.



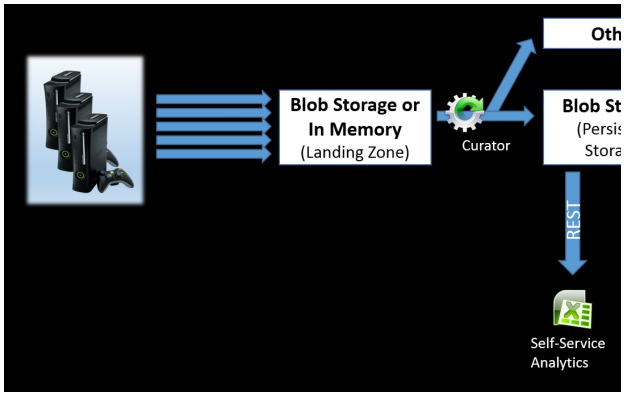
2. Microsoft Azure HDInsight

Hadoop-based managed service in the cloud via Microsoft Azure

HDInsight is a Hadoop-based service from Microsoft that brings a 100 percent Apache Hadoop solution to the cloud. A modern, cloud-based data platform that manages data of any type, whether structured or unstructured, and of any size, HDInsight enables you to gain the full value of big data.

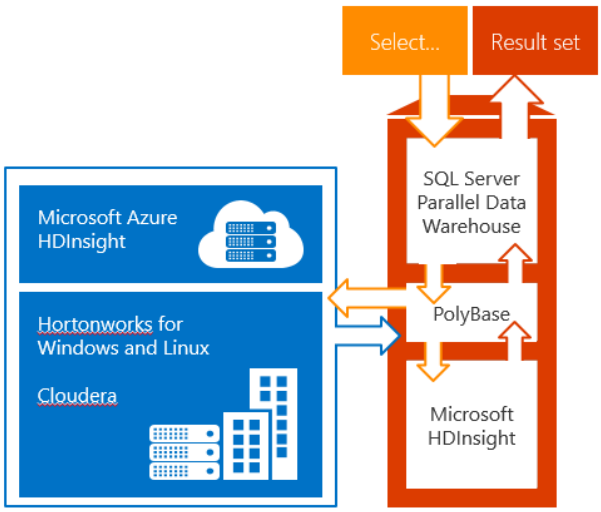
With HDInsight, you can seamlessly process data of all types through Microsoft's modern data platform, which provides simplicity, ease of management, and an open Enterprise-ready Hadoop service all running in the cloud. You can analyze your Hadoop data with PowerPivot, Power View and other Microsoft BI tools.

Architecture- Use Cloud Building Blocks



3: Microsoft Analytics Platform System (APS)

Scale-out appliance with data warehousing and Hadoop in one box. Seamlessly combine relational and non-relational data with PolyBase, a feature of SQL Server 2012 Parallel Data Warehouse.

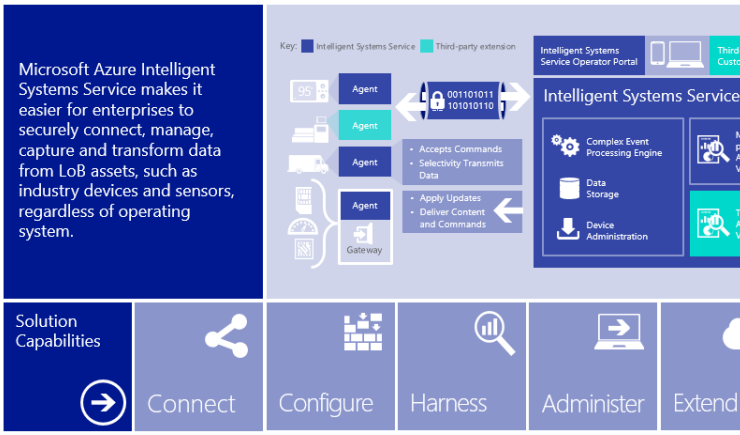


- Provides a single T-SQL query model for PDW and Hadoop with rich features of T-SQL, including joins without ETL
- Uses the power of MPP to enhance query execution performance
- Supports Windows Azure HDInsight to enable new hybrid cloud scenarios
- Provides the ability to query non-Microsoft Hadoop distributions, such as Hortonworks and Cloudera

4 : The Microsoft Azure Intelligent Systems Service (AISS)

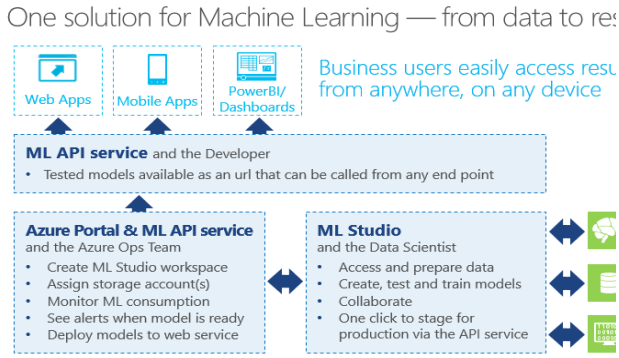
The Microsoft Azure Intelligent Systems Service helps enterprises embrace the Internet of Things (IoT) by securely connecting, managing, and capturing machine-generated data from a variety of sensors and devices.

Enterprises using the Intelligent Systems Service to extend the Microsoft Azure cloud across connected devices and sensors can capture vital data, analyze it with familiar Microsoft tools like HD Insight and Power BI for Office 365, and then quickly take the appropriate action that drives impact. Underlying all of these capabilities is enterprise-grade security developed and supported by Microsoft.



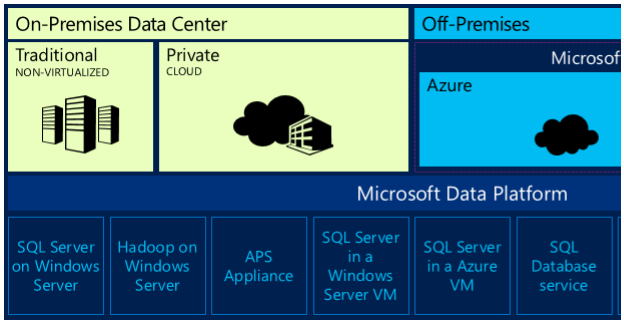
5: Azure Machine Learning CloudML

Azure Machine Learning offers a data science experience that is directly accessible to business analysts and domain experts, reducing complexity and broadening participation through better tooling.



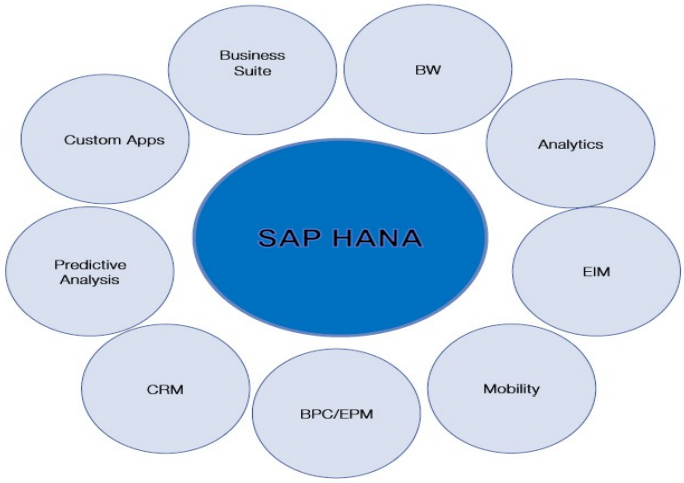
6: Familiar powerful BI tools

Microsoft's Big Data solution offers familiar, accessible tools to all users. With powerful BI tools such as Power Query, Power Map, PowerPivot and PowerView, customers can easily analyze all data types, including unstructured data from Hadoop clusters.



4| SAP: The Cloud Company Powered by SAP HANA

SAP Big Data Strategy is based on HANA platform. SAP High-Performance Analytic Appliance (HANA) was introduced in 2011 as a column-oriented, in-memory database appliance that can support transactional processing and analysis of massive quantities of data in local memory. The objective of getting results very quickly and business decisions can be executed without delay. In 2014, SAP HANA matured as an in-memory data platform that is best suited for performing real-time analytics, and developing and deploying real-time applications.



A: Why HANA?

After a rocky period for SAP, where sales weren't growing and they experienced some leadership challenges (Bloomberg), the company decided to expand its market by extending its reach beyond business applications and into adjacent markets in Mobile, Cloud, and Data Platform.

In order to be able to reach its goal of doubling its addressable market, and becoming the "Business Platform" company, SAP has identified its 5 key areas for expansion: Cloud, Applications, Analytics, Mobile, and Database. All of these are powered by the HANA platform, and cut across 11 Lines of Business in 24 Industries.

SAP's success in the Data Platform market will be core to its success in achieving its growth ambitions in these 5 areas. Thus, SAP has stated that its goal is to be the #2 database vendor by 2015 (InformationWeek).

To achieve this goal, SAP has focused on HANA, which plays a critical role in its business platform narrative.

B: What is SAP HANA?

I: SAP HANA appliance (Hardware)

SAP HANA is positioned as a flexible, data source agnostic appliance that allows you to analyze large volumes of data in real time, without the need to materialize aggregations. It is a combination of hardware and software, and it is delivered as an optimized appliance in cooperation with SAP's hardware partners for SAP HANA.

- Optimized appliance delivered by HW partners (HP, Dell, Cisco, IBM, etc.)
- All-in-one platform to power all SAP solutions

II: SAP HANA database (Software)

The SAP in-memory database is a hybrid in-memory database that combines row-based, column-based, and object-based database technology, optimized to exploit the parallel processing capabilities of current hardware. The heart of the SAP HANA database is the relational database engines. There are two engines within the SAP HANA database:

- The **column-based store**, storing relational data in columns, optimized holding tables with huge amounts of data, which are aggregated and used in analytical operations.
- The **row-based store**, storing relational data in rows, as traditional database systems do. This row store is more optimized for write operation and has a lower compression rate, and query performance is much lower compared to the column-based store.

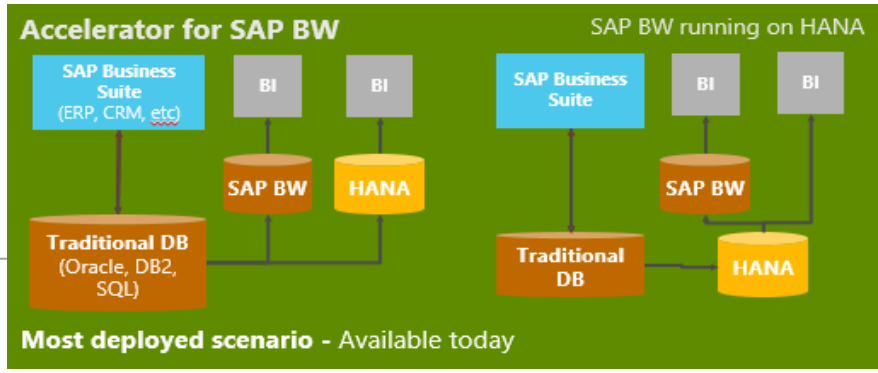
Column-based and Row-based stores are for both analytics and transactions.

III: HANA in Cloud

Separate hardware and software to enable virtualization and cloud scenarios.

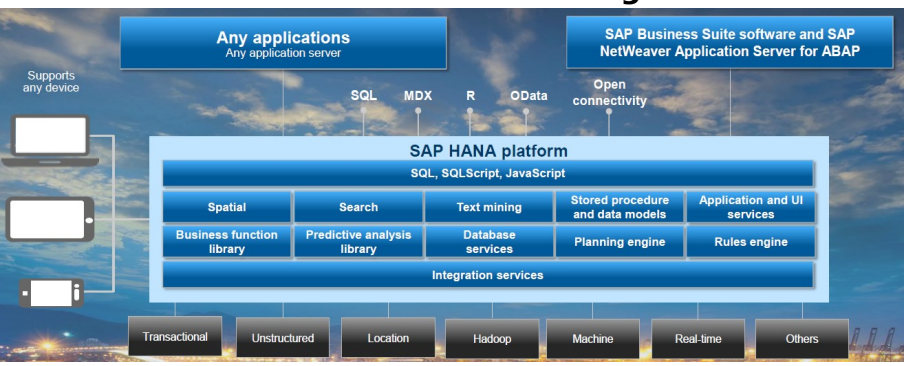
- HANA available on AWS today (primarily test/dev, limited production scenarios)
- HANA on VMWare for test/dev
- HANA Enterprise Cloud – BYOL
- Public Cloud (AWS) – $1/hr. + compute

BW schema for HANA and updated the replication interface from the Business Suite applications to feed into the new schema.



Position HANA plus Hadoop as a platform for real-time analytics for any data source, from SAP ERP to social data.

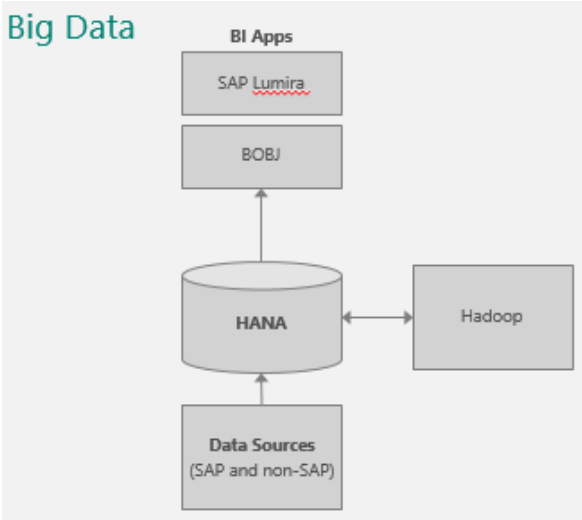
C: SAP HANA Platform: Big Picture



Announced in May 2014

D: SAP HANA Platform: Big Picture Available Today

SAP has introduced SAP NetWeaver Business Warehouse Accelerator (BWA), which is built for speeding up queries and reports in SAP BW by leveraging in-memory technology. Unfortunately, the BWA still was not good enough and SAP developed HANA to replace BWA. SAP realizes that HANA is not affordable to handle a large-scale implementation of an enterprise SAP BW deployment, so they provide two approaches to using HANA for analytics on BW. The diagram below represents the “side-car” approach where only portions of SAP BW are replicated to HANA for analysis. The newer approach as of June 2012 where HANA is used as the native database platform for SAP BW. The idea is to use HANA for smaller BW deployments, providing a faster deployment path than using an existing BW deployment with replication. To make this second scenario work, SAP “optimized” the



Hardware (in All Use Cases)	SAP certified appliances	SAP Hana: Infrastructure

F: How SAP Sells HANA?

E: SAP Hana Principal Use Cases Including Big Data

Use Cases	On-Premises Product	Cloud Services
Business Applications	SAP Business Suite, powered by SAP Hana SAP Business One, version for SAP Hana	SAP Hana Enterprise Cloud, MCaaS, for SAP ERP and SAP CRM
Analytics Applications (SAP Business Application Examples)	SAP Hana Live (embedded analytics) SAP Smart Business Cockpits	
Analytics Applications (Stand-Alone Examples)	SAP Social Contact Intelligence SAP Sales and Operations Planning SAP Smart Meter Analytics	
Analytics Applications (Third-Party Types)	Big data-enabled applications Predictive analytics Tagetik (corporate performance	
Business Intelligence and Data Warehousing	SAP Business Warehouse, powered by SAP Hana SAP Business Planning and Consolidation,	SAP Hana Enterprise Cloud, MCaaS
HTAP Appliances	SAP Hana, Platform Edition SAP Hana, Enterprise Edition SAP Hana, Extended	
Cloud Platform, PaaS	SAP Hana Studio	SAP Hana Cloud Platform, aPaaS SAP Hana Cloud Integration, iPaaS SAP Hana Cloud Portal, pPaaS SAP Mobile Platform, Cloud Edition SAP Lumira Cloud
IMDBMS (in All	SAP Hana	SAP Hana One,

5| Competing with SAP HANA Big Data Platform and Offerings

A: SAP Limitations

Infant product with V1 Risk

- Unclear messaging and strategy – What is the future of Sybase ASE and HANA?
- Limited high availability with “manual” disaster recovery
- Tremendous product churn: 16 significant updates between SPS4 and SPS5
- Releases half-baked features like foreign key support in SPS5
- Quick to deprecate features like “real” time log-based replication.
- SAP claims HANA will eventually support your non-SAP applications – but since HANA introduces an entirely new architecture, you may need to re-write these apps from the ground up.
- Microsoft relies on tens of thousands of partners to develop and maintain critical applications for its customers – just a year ago, the HANA ISV partner ecosystem numbered.

SAP only applications

- Severe changes in application coding cause additional risk
- Lack of focus in development due to new database release, object oriented cache replacement, full text search product, etc.
- Limited Partner Eco-system
- SAP’s focus is not to enable 3rd party software - still focused on getting HANA running with their own software.
- Rigid and closed schema for migration from BW to HANA
- HANA is for SAP applications and data – SQL Server and Windows Server are for any application, and BI on any data
- Millions of customers run non-SAP applications on SQL Server and Windows Server – but customers are beginning to run non-SAP applications on HANA
- SQL Server is the most widely-deployed database platform on the planet and has a huge ecosystem of support and knowledge – even on SAP’s properties (SDN)

Big box only

- Extreme licensing and services fees associated with HANA
- Time to Value : Lots of time/effort spent architecting & developing the enterprise solution
- No high availability support for HANA on AWS
- Just a hot data store with no support for the latest Big Data technology

Unproven in the DB space

- Very limited capabilities (i.e. scale, data load, DR)
- OLTP implementation is still in flux – SPS5 was half baked, but HANA SPS 8 contains a High Availability framework that is similar to AlwaysOn.
- Separate engines for column and row result in poor query performance between the two engines
- Transaction processing on HANA is brand new – do you trust your business to its High Availability & Disaster Recovery features that haven't yet been real-world tested?
- SQL Server & Windows Server HA/DR are battle-tested, supporting many mission-critical applications today at customers such as Bwin, Progressive Insurance, Hilton, and supporting over 1B transactions/day at a securities trading organization
- Under the hood, HANA actually still runs two databases, a column-store, optimized for analytics, and a row-store, optimized for transaction processing
- HANA still relies on SSD & spinning disks for logs and data persistence
- HANA limits the size of your database by being restricted to expensive memory and it doesn't allow for a single database for all uses

Requires re-architecting apps, limited ecosystem outside SAP

- Vendor and architecture lock-in
- High cost of re-architecture, as well as memory and license

Only accelerates queries

- Months needed to configure schema and BOBJ tools
- Expensive replication tools needed to move data into HANA
- No hybrid IT story to process data on-premises or off-premises
- Just because you have an in-memory database doesn't mean you're doing Big Data. HANA is only for traditional, structured data, giving customers no flexibility and no Big Data.
- Microsoft is implementing open source Hadoop on premise and in Azure, and introducing the Polybase unified query technology – SAP has none of these.
- End users can run their own high-powered analytics and visualizations with Microsoft PowerPivot and Power View – SAP has no answer to these.

Unproven against SQL Server

- More than 37,000 SAP customers run SQL Server today – so far we know of 1 SAP customer (John Deere) running ERP on HANA. Even Gartner recommends waiting until at least 2015 before considering HANA.
- SQL Server is the #1 database in the world for SAP* and more customers are choosing SQL Server and Windows Server to run their SAP systems today than any other database.
- Gartner reports that more SAP respondents cited software quality as barriers to deployment, than for any other vendor.
- Few, if any Big Data-based systems are "standalone" in the sense that they do not require interoperability with other applications and databases. In real enterprises, interoperability requirements were particularly significant among financial services, health care, insurance, retail and telecommunications companies. One large banking institution reported, for example, that it expected to implement 40 to 50 different interfaces before its IBM Hadoop-based system could be brought into full operation.

Leadership in memory processing

- Microsoft has been shipping in-memory technology as part of Excel and SQL Server (PowerPivot) since 2010 – HANA was not generally available until a year later.
- More than 1.5 million users have Microsoft in-memory technologies in the hands today.
- HANA accelerates SAP transactions on the server – Microsoft in-memory technology accelerates client and server processing of any data.
- HANA is for SAP analytics, and soon for SAP transaction processing – Microsoft in-memory technology is for any IW doing analysis on any data in Excel, and with Hekaton, to accelerate any application on SQL Server.
- Under 200 SAP customers have actually implemented HANA – while more than 1.5 million customers have Microsoft in-memory technology in their hands today.
- 26 out of 30 SAP users rely mainly on Excel as their primary BI tool which uses Microsoft in-memory technologies.

Expensive

- At $160k / 64GB block for SAP HANA Enterprise SW licenses, your 10TB data warehouse would cost you over $50M (double the storage space is needed for in-memory processing) – and this does NOT include HW costs.
- Are you prepared to pay more than $5M / TB for your data? - reflected in higher ongoing full time equivalent (FTE) system administration staffing and may impact post-production quality of service.

B: Microsoft Differentiation

Deploy Hadoop On-Premise and/or Scale with the Cloud

With HDP (Hortonworks Data Platform) for Windows and HDInsight Service, there is unprecedented choice for Windows enterprises for their Hadoop deployments. HDP for Windows is the Microsoft recommended way to deploy Hadoop on Windows Server environments. For cloud-based deployments, HDInsight Service is a 100% compatible and scalable environment for deploying your Hadoop based applications.

Big Data in the Cloud

HDInsight is a Hadoop-based service from Microsoft that brings a 100 percent Apache Hadoop solution to the cloud. A modern, cloud-based data platform that manages data of any type, whether structured or unstructured, and of any size, HDInsight makes it possible for you to gain the full value of big data.

With HDInsight, you can seamlessly process data of all types through Microsoft's modern data platform, which provides simplicity, ease of management, and an open Enterprise-ready Hadoop service all running in the cloud. You can analyze your Hadoop data with PowerPivot, Power View and other Microsoft BI tools. Thanks to integration with Microsoft data platform.

Insights with Familiar Tools

Through deep integration with Microsoft BI tools such as PowerPivot, Power View, HDInsight enables you to easily analyze Hadoop data for insights. Seamlessly combine data from several sources, including HDInsight, with Power Query. Easily map your data with the new Power Map, a 3D mapping tool in Excel 2013.

Deployment Agility

HDInsight offers agility to meet the changing needs of your organization. With a rich library of Powershell scripts, you can deploy and provision a Hadoop cluster in minutes instead of hours or days. If you need a larger cluster, you can simply delete your cluster and create a bigger one in minutes without losing any data.

Enterprise-ready Hadoop

HDInsight offers enterprise-class security, scalability and manageability. Thanks to a dedicated Secure Node, HDInsight helps you secure your Hadoop cluster. You can also take full advantage of the elastic scalability of Azure. In addition, we simplify manageability of your Hadoop cluster through extensive support for PowerShell scripting.

Enterprise–ready Big Data OnPremise: Microsoft Analytics Platform System

- Integrated relational and non-relational data for a turnkey Big Data analytics appliance
- Security, manageability, and high availability for Hadoop
- Seamless querying across relational and non-relational data using simple T-SQL
- Insight into virtually all data types with familiar tools through native business intelligence

Next Generation Performance at Scale (APS)

- Linear scale-out architecture of up to 6 petabytes of data
- Up to 100 times the performance and 15 times more data compression than traditional data warehouses with In-Memory Column store
- Removal of traditional data warehouse bottlenecks with the MPP capabilities of SQL Server PDW
- Scalable user accessibility via running of mixed workloads at high concurrency

Engineered for Optimal value

- Lowest price per terabyte for a data warehouse appliance in the industry
- Choice of hardware through HP, Dell, and Quanta

Rich Developer Experience

HDInsight offers powerful programming capabilities with a choice of languages including .NET, Java and other languages. .NET developers can exploit the full power of language-integrated query with LINQ to Hive. Database developers can use existing skills to query and transform data through Hive.

SQL Server Expands Into Big Data

SQL Server 2012 supports structured data on scalable relational database and data warehouse offerings, and unstructured data on an Enterprise-ready Hadoop distribution. Move data between Hadoop and SQL Server with bidirectional Hadoop connectors for SQL Server 2012 and Parallel Data Warehouse. With Apache Hive, analysts can be provided SQL-like access to Hadoop so that customers can enhance their insights.

Simplify Operations

Hadoop on Windows Made Easy

With HDP for Windows, Hadoop is both simple to install and manage. It demystifies the Hadoop distribution so you don't need to choose and test the right combination of Hadoop projects to deploy. With Windows Azure HDInsight Service, deployment is simplified so much that 16-node Hadoop cluster can be live in the cloud in moments.

Clean and Easy Management

Apache Ambari, the open source choice for management of a Hadoop cluster is integrated and extends Microsoft System Center so that IT Operators can manage their Hadoop clusters side-by-side with their databases, applications and other IT assets on a single screen.

Secure, Reliable, Enterprise-Ready Hadoop

Offering the most reliable, innovative and trusted distribution available, Microsoft and Hortonworks together deliver tighter security through integration

with Windows Server Active Directory, ease of management through integration with Windows Server Active Directory, ease of management through System Center integration, and built-in high availability with Hortonworks Data Platform 1.3.

Complete Platform

Microsoft is only vendor with a complete solution that give users the flexibility they want to create and customize their own reports while giving IT strong controls for data security and governance. Deployment flexibility: on-premises, in the cloud (Windows Azure or third-party), or hybrid.

Lower TCO

- Built for performance on commodity servers, not expensive "certified" hardware
- Product innovations (e.g.: in-memory OLTP) are built into the core product, not expensive add-ons
- Lower administrative costs – reuse existing IT skills to manage both infrastructure and databases

6 | Win Against SAP

- Sell higher in the organization and engage with the LOB managers if appropriate.
- Understand SAP's motivation and sales tactics.
- Point out the complexity of SAP's solutions and future maintenance costs—push Microsoft's superior time to value.
- Highlight SAP's confusing, multiple cloud platform offerings.
- SAP has gradually lost blade server market share through the past three years — this share declined from 25% in 2010 to 18% in 2013. However, there is early evidence that Flex System and its derivatives are now returning the vendor to net growth.
- SAP's x86 server strategy has long lived in the shadow of much stronger marketing and messaging of Power and mainframe systems. The strong corporate commitment to PureSystems has yet to dispel speculation about the vendor's commitment to the x86 server market; and fresh speculation about SAP potentially divesting some or all of its x86 server business will create additional flux until the situation is resolved.
- Although we know SAP is investing strongly in reference and case study generation, client feedback indicates that the number of proven references remains limited.
- Despite the promise of HANA, SAP's marketing around integrated stack systems has not yet overcome the strength of Oracle's engineered system market momentum.

- Highlight the following weak SAP experience
  - HANA is closed – all external product connections don't work in current HANA version (e.g. Excel)
  - HANA requires a BW upgrade to at least 7.30 with support package
  - SAP requires replication of external data into BW or HANA
  - Hana requires data replication to accelerate BW
  - 26 of 30 SAP users rely on Excel as primary BI tool
- Highlight Microsoft profitability user experience
  - Primary UI is SharePoint & Excel
  - Minimal training is required for SharePoint & Excel
  - Microsoft will continue to support SharePoint & Excel for BI
  - Microsoft has broadest support for open standards and data connectivity
  - Microsoft solution supports older implementations of BW
  - Microsoft can merge external data without extraction/replication
  - Microsoft can accelerate BW without data replication
  - 26 of 30 SAP users rely on Excel as primary BI tool

Wining SAP Common Scenarios

I. Accelerate SAP BW

- Most SAP BW Deployments perform badly today;
- Hana positioned as a super BW Accelerator

Microsoft Opportunity

- Requires Major BW upgrade
- Puts Oracle/DB2 in play
- Upgrade DB under BW Accelerator
- SQL2012 with xVerocity can improve BW performance 5x

II. Replace SAP BW

- Often linked to SAP Business Planning and Consolidation (BPC)

Microsoft Opportunity

- Requires major application rewrites
- Replace BW with MS platform
- Re-platform BPC to MS
- Replace BPC Tagetik

III. CO-PA Scenario

- Cost/Profitability Analysis
- Next Generation financial control – real time views by products/segments

Microsoft Opportunity

- Broaden outside ERP
- Focus on current and future data sources
- Engage Partner with financial skills

IV. Big Data

- Big Data and unified data warehousing
- Smart Metering and other industry specific plays

Microsoft Opportunity

- Lead with MS Big Data vision and PDW
- Focus on current and future data sources
- Point out superior pricing model

V. Hana Real-Time

- Hana as OLTP database for all SAP modules
- You can start with Sybase

Microsoft Opportunity

- 50% new SAP deployments on SQL
- 37k SAP-SQL sites worldwide
- Proven Mission Critical
- Normal OLTP Execution

7 | Resources

SAP

SAP Big Data Solution http://www.sap.com/solution/big-data/software/overview.html

SAP Big Data http://www.sap.com/solution/big-data.html

SAP HANA http://www.sap.com/pc/tech/in-memory-computing-hana/software/analytics/overview.html

Microsoft

Big data

HDInsight

Intelligent System Services

Microsoft Analytics Platform System

Microsoft Hadoop Implementation

Modern data warehouse

Hortonworks & Microsoft

Microsoft Internal

- Unlock Insights on Any Data using Microsoft's data platform offerings:
  - Windows Azure
  - Windows Server
  - SQL Server
  - Microsoft Office
  - Power BI for Office 365
- Big data tab on the SQL Server InfoPedia page
- Leverage the Sales Desk to build customer-specific proposals
- SAP HANA Compete Infopedia
- How to win against HANA and Sybase - Compete WW Best Practices (Academy Live)
- Microsoft – SAP Alliance
- SAP on SQL Server 2012
- Microsoft Dynamics SAP Compete Infopedia
- BI Demo Catalog