Smart Data and AI

The Next Generation Data Platform for Analytics
About obtaining insight from ... by ...

(Data)

(Analytics)
Over 90% of the world’s data cannot be googled
The winners in this new digital era are **data** and **analytics** driven companies.

Yet only 15% of organizations have the **capability to leverage all data** and advanced analytics across their organization today.

HBR Insight Economy Study
To win, you must architect against disruption
A (Big) Data Platform for Analytics – Past/Present
Different Analytic Workloads, Different Data …
Data and Analytics are the **Necessary Foundation** for a **Modern Business** Built on Cloud Technologies

### Make sense of industry business needs and take action

<table>
<thead>
<tr>
<th>DESCRIPTIVE</th>
<th>+</th>
<th>PREDICTIVE</th>
<th>+</th>
<th>PRESCRIPTIVE</th>
<th>+</th>
<th>COGNITIVE</th>
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</thead>
<tbody>
<tr>
<td>Discover</td>
<td></td>
<td>Predict</td>
<td></td>
<td>Integrate</td>
<td></td>
<td>Understand</td>
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<td>Report</td>
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<td>Decide</td>
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<td>Automate</td>
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<td>Reason</td>
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<tr>
<td>Analyze</td>
<td></td>
<td>Act</td>
<td></td>
<td></td>
<td></td>
<td>Learn</td>
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</tbody>
</table>

### Gain unique insight into people, things and businesses

<table>
<thead>
<tr>
<th>DATA YOU POSSESS</th>
<th>+</th>
<th>DATA THAT HELPS YOU COMPETE</th>
<th>+</th>
<th>DATA THAT’S IN MOTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer records</td>
<td></td>
<td>News</td>
<td></td>
<td>Internet of Things</td>
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<tr>
<td>Transactional systems</td>
<td></td>
<td>Events</td>
<td></td>
<td>Sensory data</td>
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<td>Institutional expertise</td>
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<td>Image data</td>
<td></td>
<td>Geo-spatial</td>
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<td>Operational systems</td>
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<td>Social media</td>
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<td>Weather</td>
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<td>Content systems</td>
<td></td>
<td>Acquired Data</td>
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</tbody>
</table>
IBM (Big) Data Platform for Analytics – Data Flows

All Data Sources
- Streaming Data
- Text Data
- Applications Data
- Time Series
- Geo Spatial
- Video & Image
- Relational
- Social Network

Big Data Platform Capabilities
- Information Ingest
- Real Time Analytics
- Warehouse & Data Marts
- Analytic Appliances

Advanced Analytics / New Insights
- Cognitive
  - Learn Dynamically?
- Prescriptive
  - Best Outcomes?
- Predictive
  - What Could Happen?
- Descriptive
  - What Has Happened?
- Exploration and Discovery
  - What Do You Have?

New Data Consumers
- Watson
  - AI, Deep Learning, Machine Learning, …
- Alerts
- Automated Process
- API
- Case Management
- BI & Analytic Applications
- Cloud Services
- ISV Solutions
- People
The Next Generation Data Platform ...

– Hybrid
  • Data
  • Data Repository & Formfactors (SQL, NoSQL, Hadoop, Opensource ...)
  • Data Deployment options (Datacenter & Multi Clouds)
  • Workloads: Transactional & Analytical

– Infinite Flexibility & Scalability
  • Start small, grow (compute, storage, ...) and move fast
  • Pay-as-you-go model

– Highest Performance Levels
  • Zero latency to obtain results
  • Always On.
  – Infused Advanced Analytics (ML, DL, AI, ...) onto data
The Next Generation Data Platform ...

- **Open**
  - Support for all data types and data flows
  - Rapid new data source onboarding
  - Virtualization, Federation, Integration, Replication, Deploy ...
  - Bridge data stores for seamless data integration or application movement
  - Write your application once — but run it anywhere with application portability

- **Enabled and Empowered Users**
  - New Data Consumers, Data Scientists, ...
  - Analytical sandboxes, Self Service dashboards, Democratize access

- **Governance, Security & Privacy**
  - Profile, Cleanse, Integrate, Mask, Catalog all types of data
  - Business Policy driven data visibility
  - Encourages collaboration and communication
The Next Generation Data Platform …

Hybrid Data, Hybrid Data Repository, Hybrid Technology Formfactor, Multi Cloud
Ultra Modern, Next Gen Data Platform for Analytics

From Descriptive up to M.L. & A.I.

Analytics
- Customize & Extend with Analytic capabilities
- Analytic Services
  - IBM
  - Partner
  - Custom

Data
- Core Cloud-native Data platform Services
- Cloud-native Data Micro Services
- Collect Data
  - Databases
  - Enterprise Data Warehouse
  - Hadoop, NoSQL, ...
  - Fast data ingest / Streaming data
  - Data Virtualization
- Organize Data
  - Data Integration and Transformation
  - Data Movement
  - Data Curation
  - Governance, privacy: policies & rules
  - Data asset lifecycle management
- Analyze Data
  - Dashboards & business reporting
  - Data visualization & exploration
  - Machine learning & deep learning
  - Model management & deployment

Vendor & Open Source
- From Descriptive up to M.L. & A.I.

Multi-Cloud & Hybrid
- Deployment Options
  - Install on multi-cloud native platforms
  - Amazon Web Services
  - IBM Cloud
  - openstack
  - OPENSHIFT
  - Microsoft Azure
  - Data Center
IBM Cloud Pak for Data

From Descriptive up to M.L. & A.I.

Analytics

Customize & Extend with Analytic capabilities

Analytic Services

IBM
Partner
Custom

Data

Core Cloud-native Data platform Services

Cloud-native Data Micro Services

Collect Data
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Multi-Cloud & Hybrid

Deployment Options

Install on multi-cloud native platforms

Vendor & Open Source

From Descriptive up to M.L. & A.I.
Cloud Pak for Data System & Multi Clouds

Today, IBM offers clients choice, flexibility, portability, openness, scalability, …
Combined with Data, Virtualization, Integration, Governance & Analytics

Above shows only a subset of all supported data sources
Today, IBM offers clients **choice, flexibility, portability, openness, scalability, ...**

Combined with **Data, Virtualization, Integration, Governance & Analytics**
Cloud Pak for Data System – Performance Server

The ultimate mix!

- Data
- Hyper Converged Infrastructure
- Next Gen Cloud Infrastructure
- Bare Metal Performance
View a demonstration ? Meet the Experts ?

or try a live POC at IBM Digital Technical Engagement

https://ibm-dte.mybluemix.net/ibm-integrated-analytics-system
https://ibm-dte.mybluemix.net/ibm-db2-warehouse-on-cloud
https://ibm-dte.mybluemix.net/ibm-db2-big-sql
https://ibm-dte.mybluemix.net/ibm-db2-warehouse

Product Tour of IBM Integrated Analytics System

 предпочитите 5-15 минутный обзор

Want to see for yourself? Take a short test drive of IBM Integrated Analytics System to introduce you to the product. You'll be able to:

- Quick Tour the IBM Integrated Analytics System console
- Investigate System Issues and Hardware Warnings
- Add, Edit, and Delete a User
- Load data from a CSV file into a new Schema and a new Table

Test Drive IBM Integrated Analytics System
THANK YOU :)