



**MSRCOSMOS**  
PROMISE DELIVERED

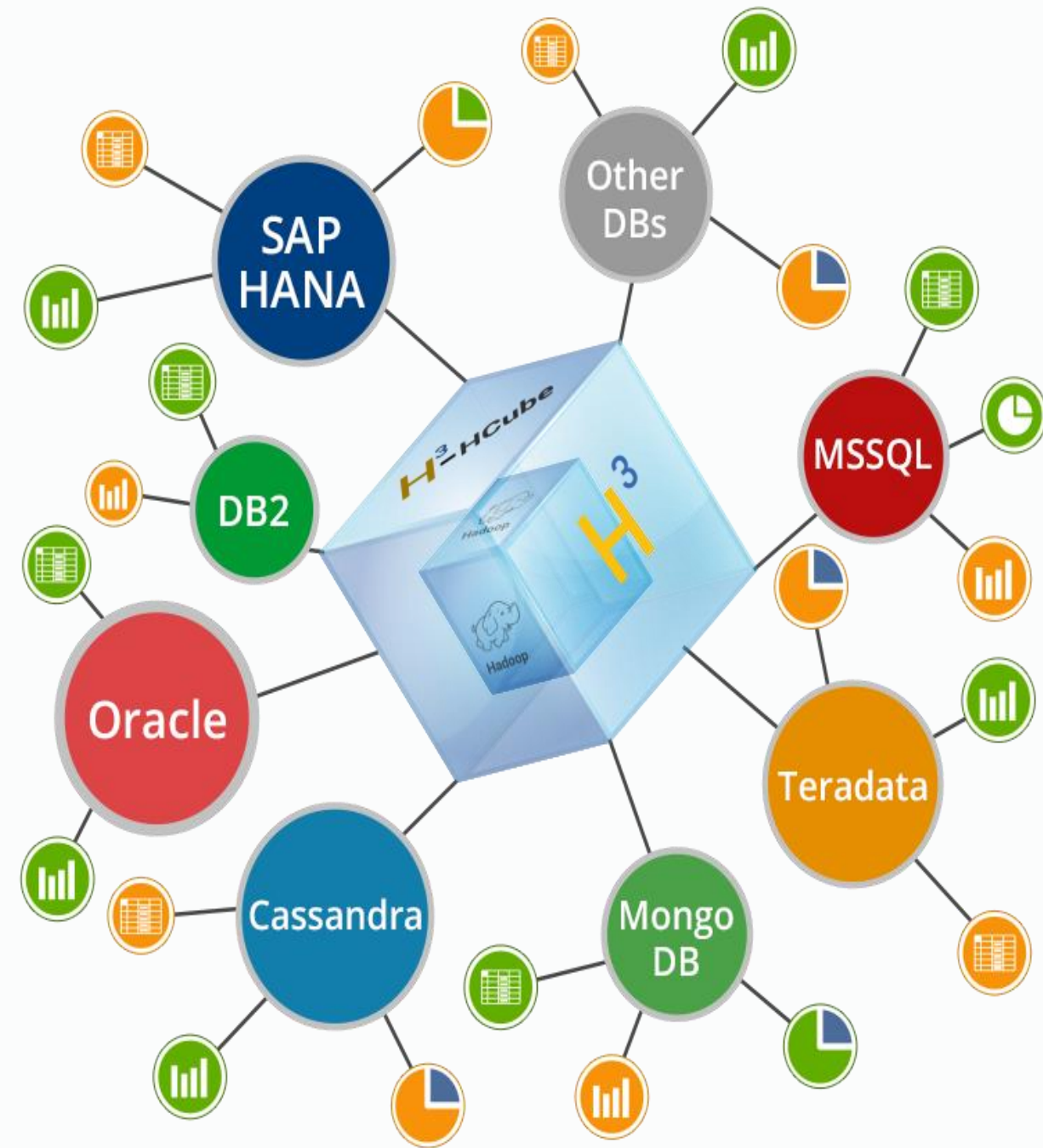
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**HCube**

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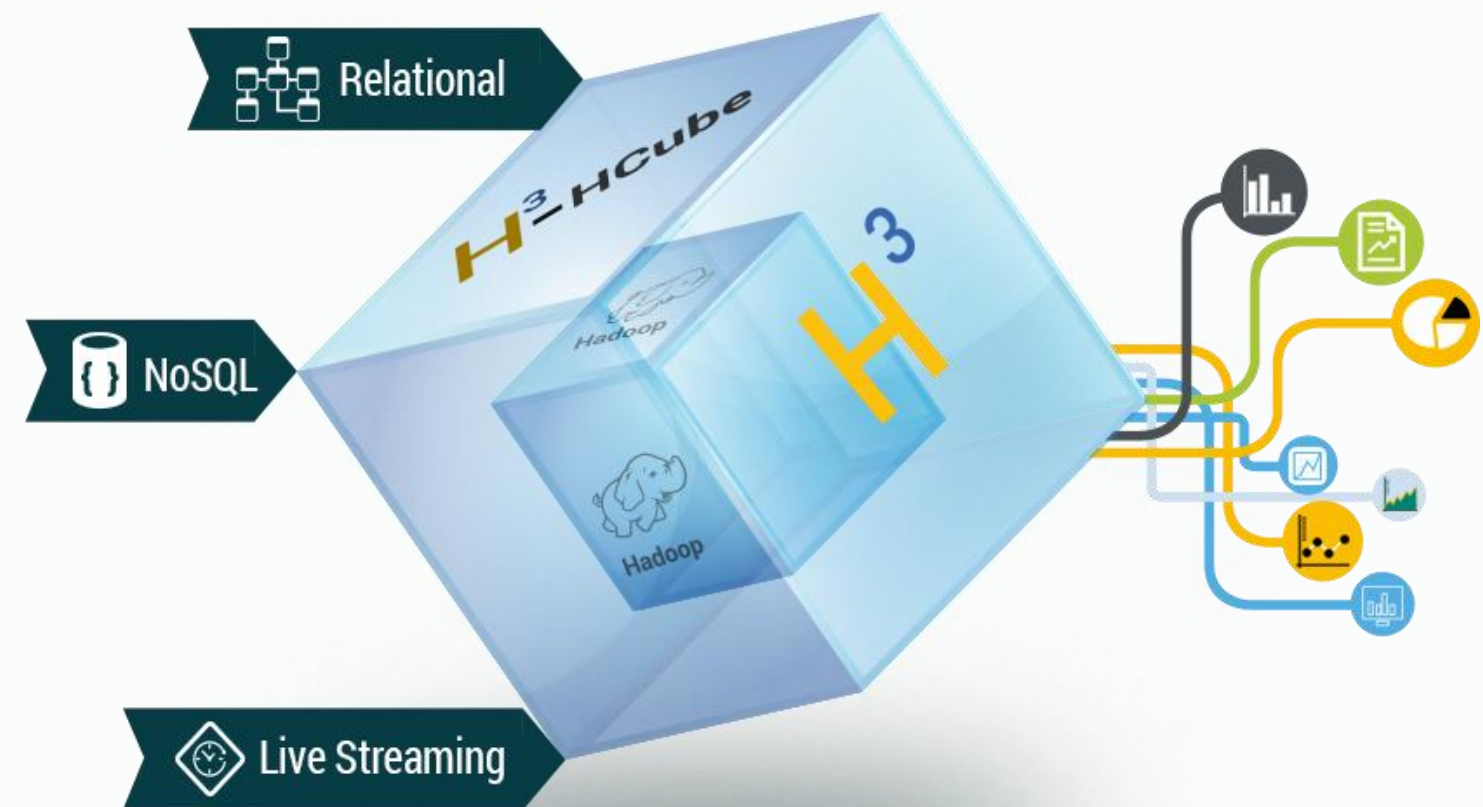
# HCube

**INGEST**s business data from any source;  
**TRANSFORM**s it to business intelligence,  
& makes enterprises **LOAD**ed with business drivers through **ANALYTICS**!



# HCube: Key features

- Seamlessly integrates big-data with
  - On-premises databases & data warehouses like Oracle, SQL Server, MySQL, and DB2
  - In-memory data-stores like SAP HANA, etc.
  - Messaging & event streams like HTTP, JMS, etc.
  - Relational data-stores like Teradata & Netezza
  - NoSQL data-stores like MongoDB & Cassandra
  - Datascience and ML pipelines
- Extracts table data from source database servers to HDFS, Hive, & HBase
- Allows conditional transfer of table content to Hadoop
- Batch-wise job execution & built-in job scheduler
- In-built Change Data Capture (CDC) feature
- Flexible user interface to perform data transfers; integrates with any reporting tool



# HCUBE Data Ingestion - Sources

- **Databases**

- Oracle
- SQL Server
- DB2
- MySQL/MariaDB
- SAP HANA (In-Memory)

- **No-SQL**

- MongoDB
- Cassandra

- **File Transfer**

- Enterprise File Service
  - FTP
  - File Shares

- **Mainframe**

- Binary data transfer to handle computational fields
- Accepts Fixed/Variable Length files
- Custom Hive SerDe to accept Cobol Copybook to parse/read mainframe raw files

## Machine Learning:

- ML pipelines
- Clustering
- Classification
- Regression

- **Streaming**

- TIBCO EMS/WebSphere MQ
- Active MQ/Rabbit MQ
- Other JMS Specs
- HTTP

- **Data Warehouse**

- Oracle
- Teradata
- Netezza

- **Server Logs**

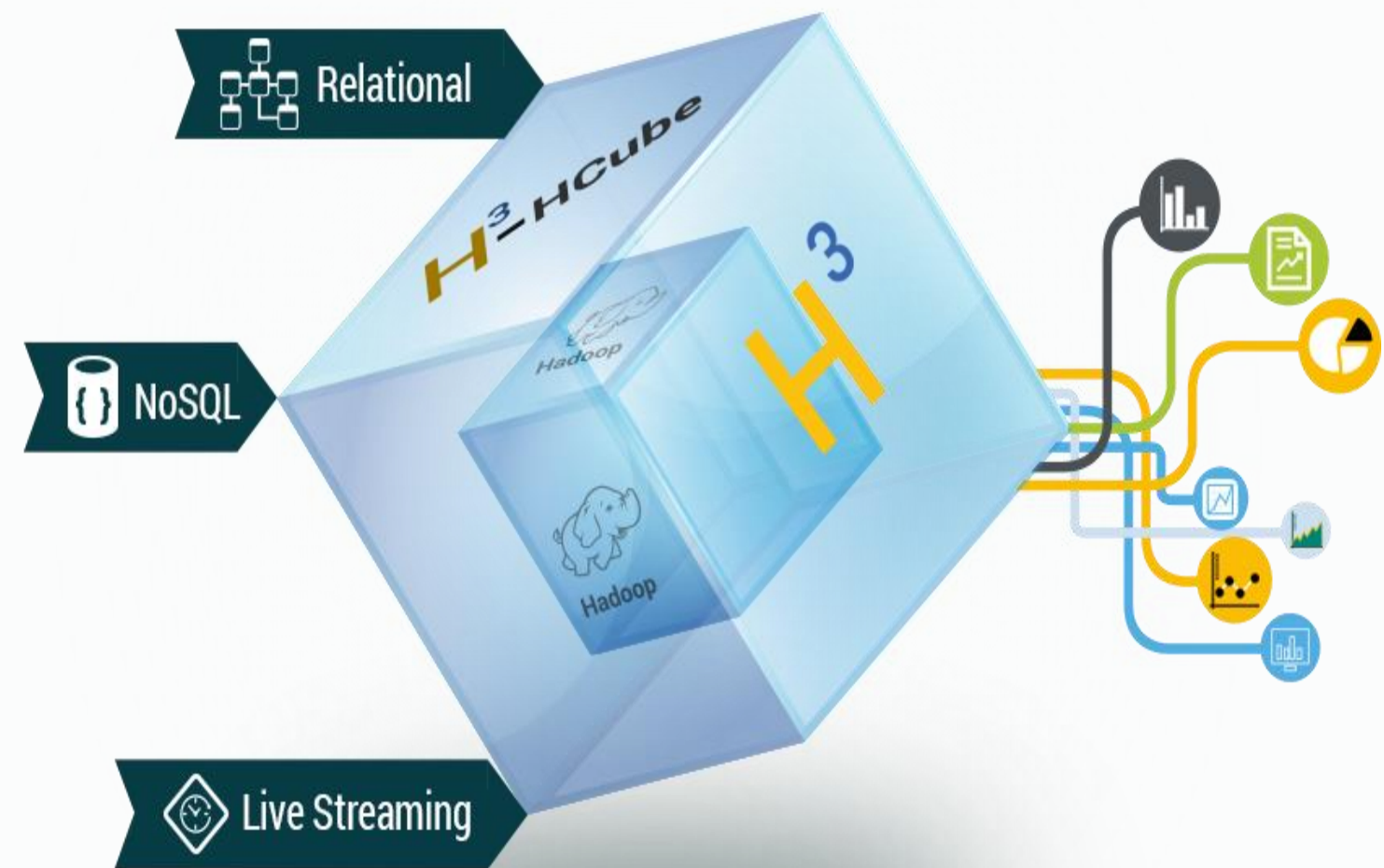
- .....MANY MORE.....



# HCUBE Data Ingestion - Highlights

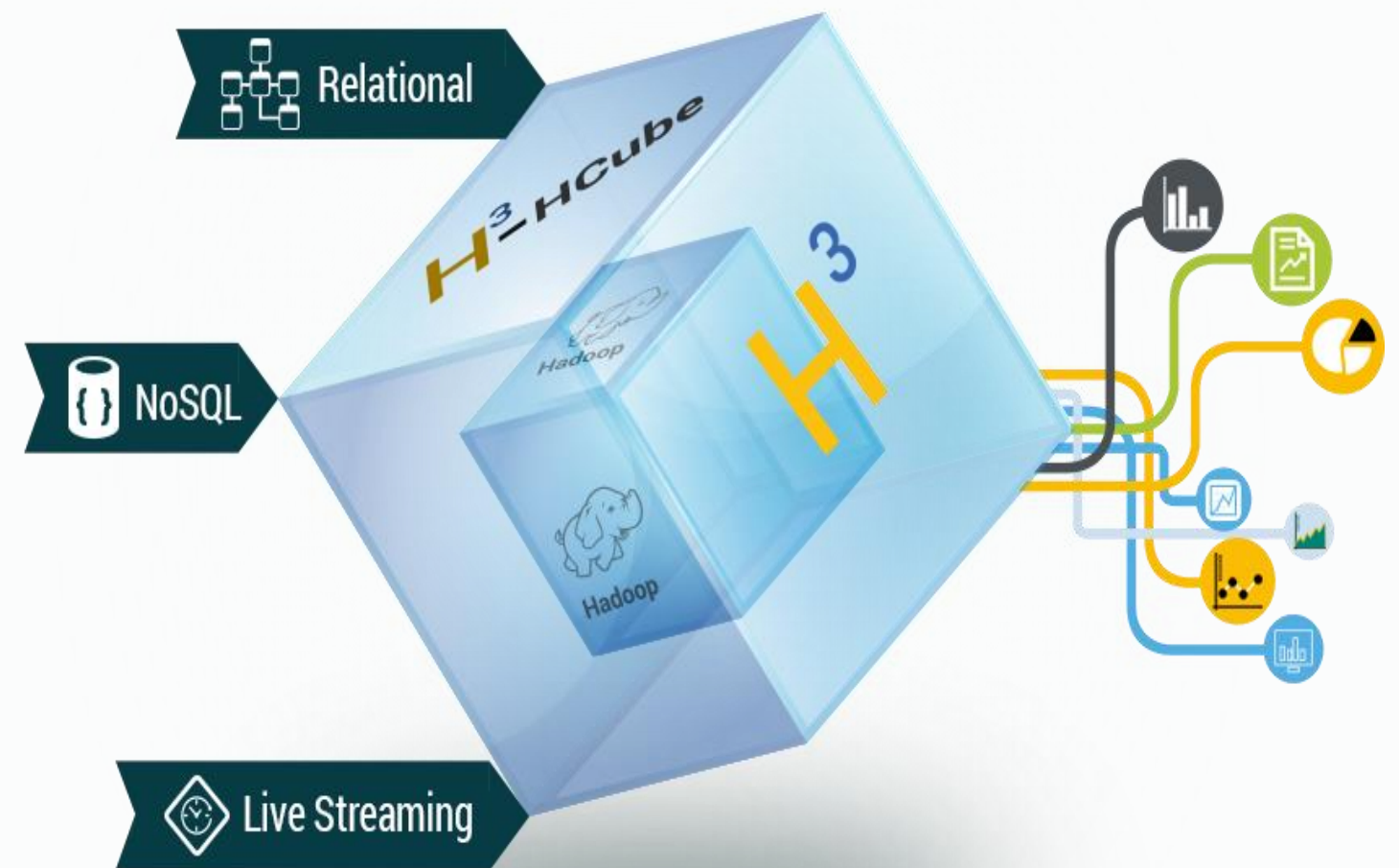
## • Highlights

- Load data into HDFS/Hive/Hbase with customized partition rules
- Conditional Data Transfer
- In-built Change Data Capture feature
- Configuration driven Data Ingestion
- Ready made connectors for ~100 Data Sources
- OOTB Integration with IoT
- Hive table creation from CSV/Zip dataset with ORC + Snappy
- Ships with Data Quality framework for De-duplication and Decision Modeling
- Role based authentication & authorization
- Simple and Modern UI for data ingestion administration and management



# HCUBE - Benefits

- OOTB Vertical Starter Kits
- Faster time to Ingest Data
  - 54% reduction in time & effort
- Lower TCO
- 48% Increase in Performance
- Easy Cross-Platform Integration



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# HCUBE - Data Preparation & Analytics

- Data Preparation

- Hive table creation from CSV/Zip dataset with ORC + Snappy
- Ships with Data Quality framework for De-duplication and Decision Modeling

- Data Query

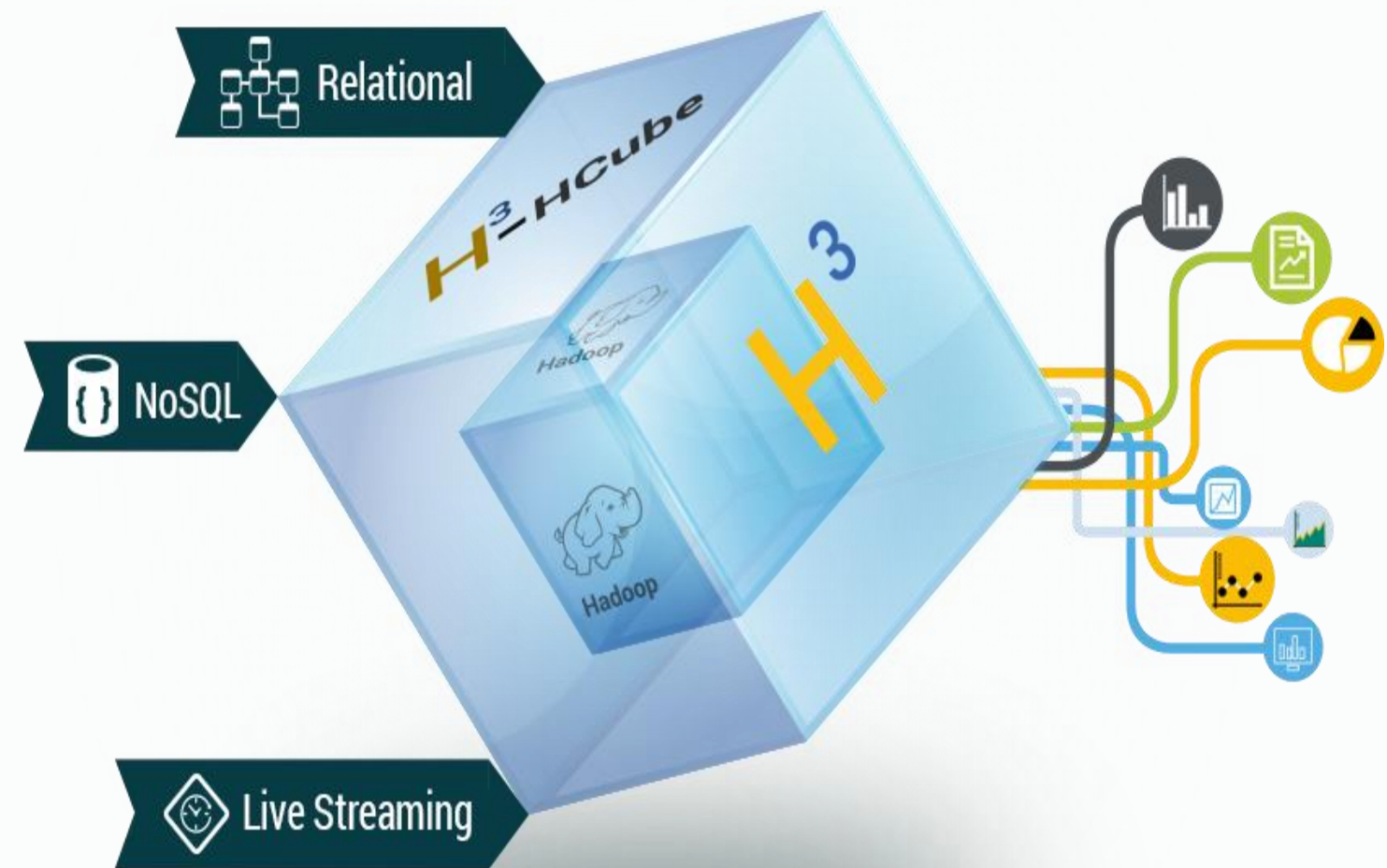
- A fast In-Memory Query Engine for interactive analytics
- Master-Worker architecture with workers co-located with Data Nodes
- Delivers 2x-4x times performance improvement over Hive/Tez
- Ideal for Business Users ad-hoc query processing

- Data Analytics

- Includes Yatch (In-House) for Data Exploration and Analytics
- Integrates with Zeppelin or other Enterprise Visualization tools
- Includes Vertical visualization templates

# HCUBE – Auditing & Monitoring

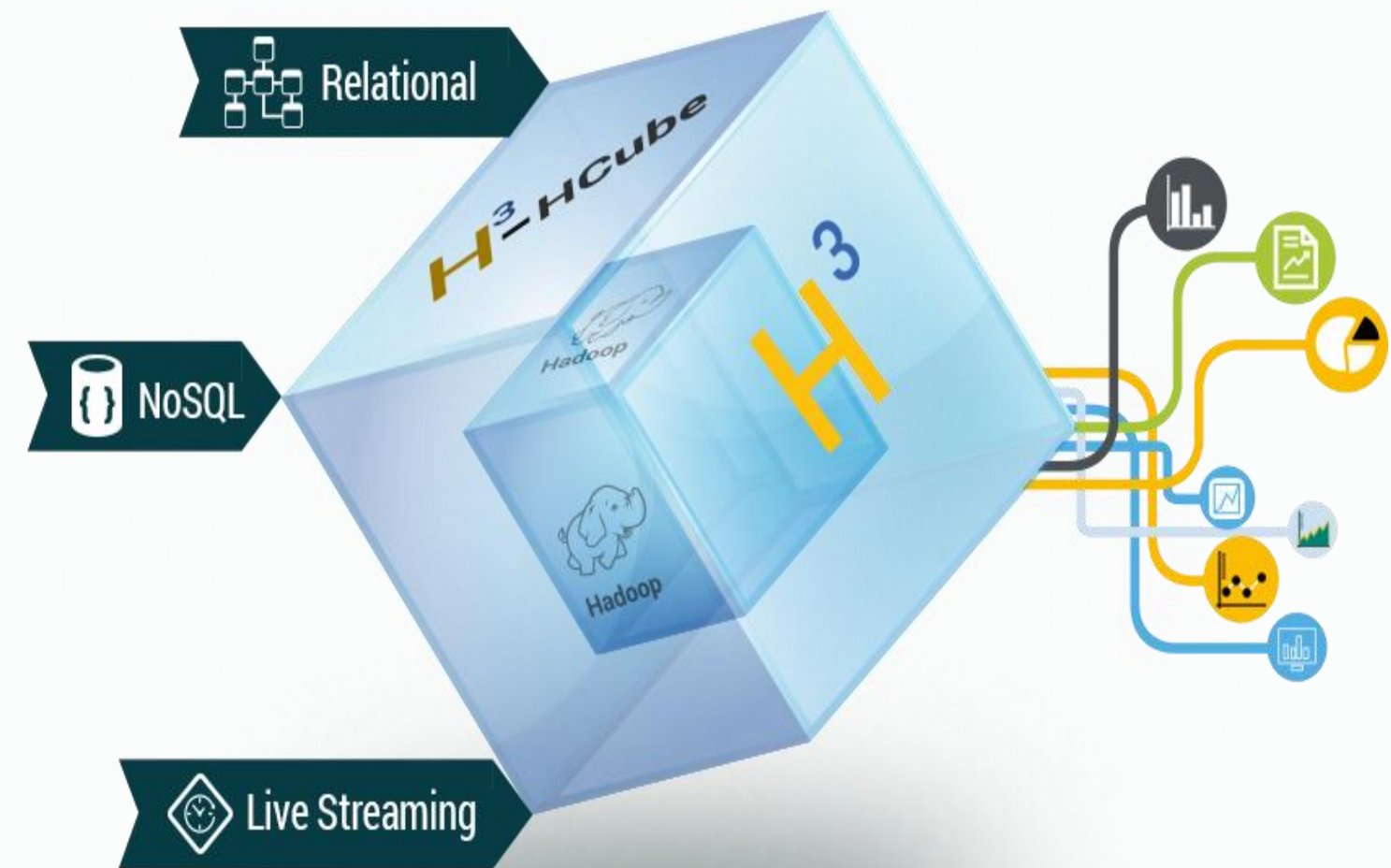
- **Job Scheduler**
  - In-built Job scheduler
  - Failure Notifications
  - Job status reporting
- **Auditing**
  - Hive Auditing hooks for capture MapReduce statistics
  - **Yatch** visualizations for Hive Auditing
- **Monitoring**
  - Batch Job Monitoring
  - Server metrics capture & reporting
  - Custom application metrics capture & reporting





# HCUBE – Deployment Options

- On-premise
  - Reach-out to us for Capacity Planning
- Cloud-Hosted
  - Pay as you scale
  - AWS/Azure Hosting
  - Includes Hadoop distribution
- Managed Services
- Docker Distribution
  - Get hands on with our Docker images



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Thank You



MSR COSMOS LLC