

IBM Data Virtualization Manager in Detail + Demo

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AGENDA

1. Data Processing in Historical Perspective
2. Hardware and Software Modernization
3. Data Processing Challenges and Needs
4. IBM Data Virtualization Manager (DVM) Solution
5. IBM Advanced Analytics for z/OS - Integrated Solution

Q & A

SUMMARY



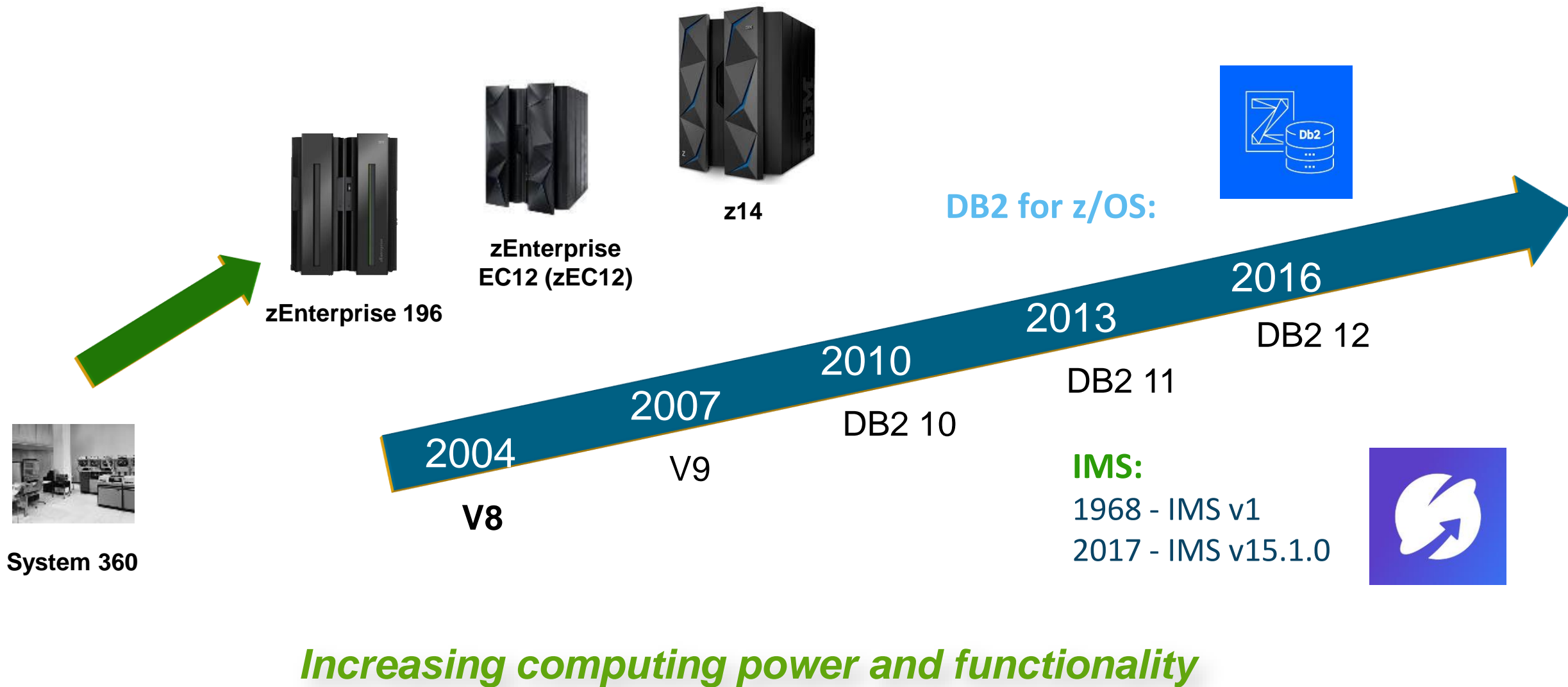
Data Processing in Historical Perspective

IBM System 360	1964
IBM IMS	1968
VSAM	1970s
ADABAS	1971
SMF/RMF system data	1980s
DB2 for z/OS	1983
DB2 UDB LUW	1993

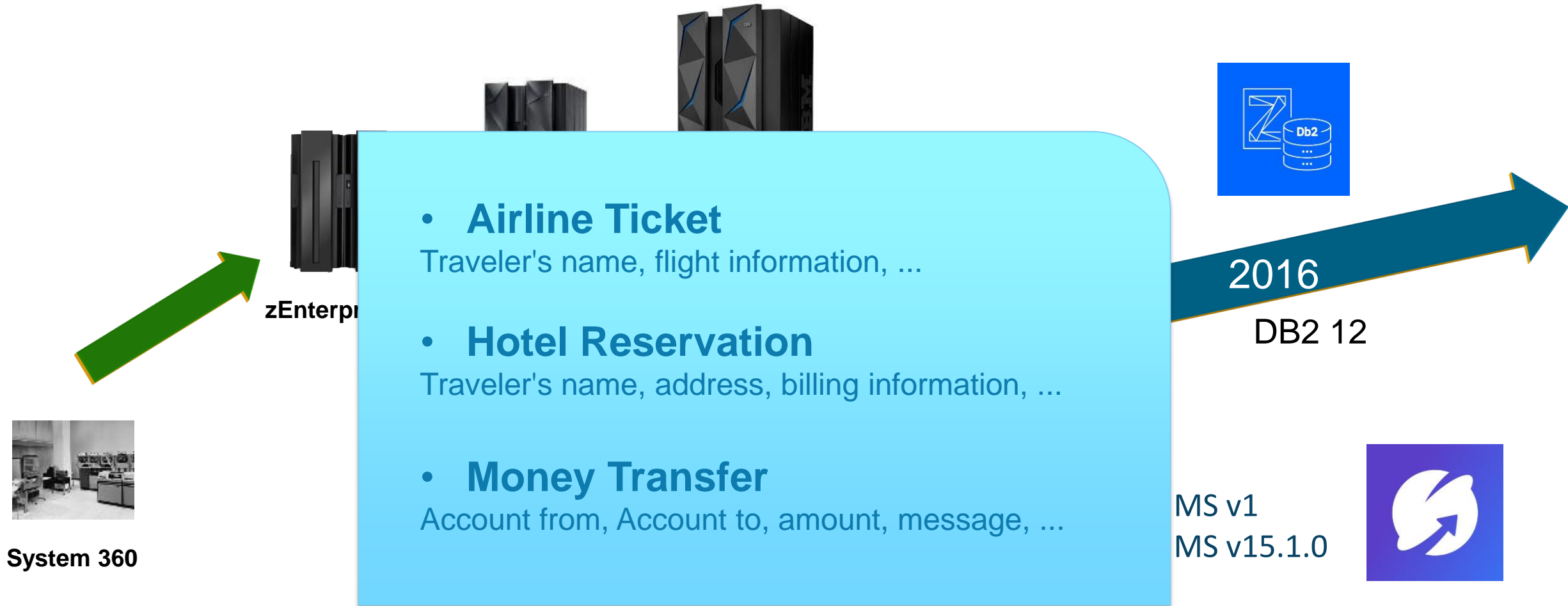


Increasing volume of valuable enterprise data

Hardware and Software Modernization

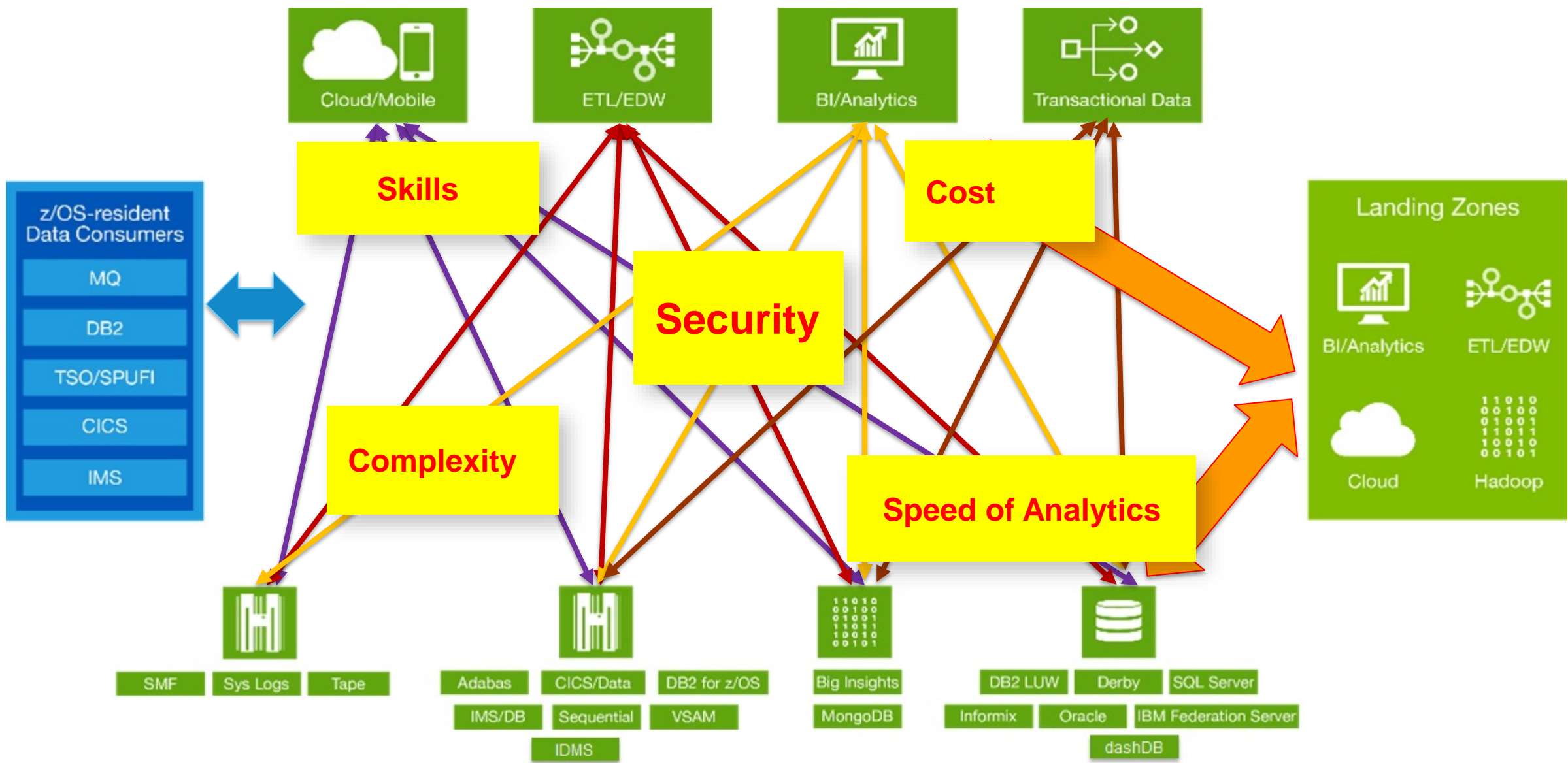


Data First - essential part

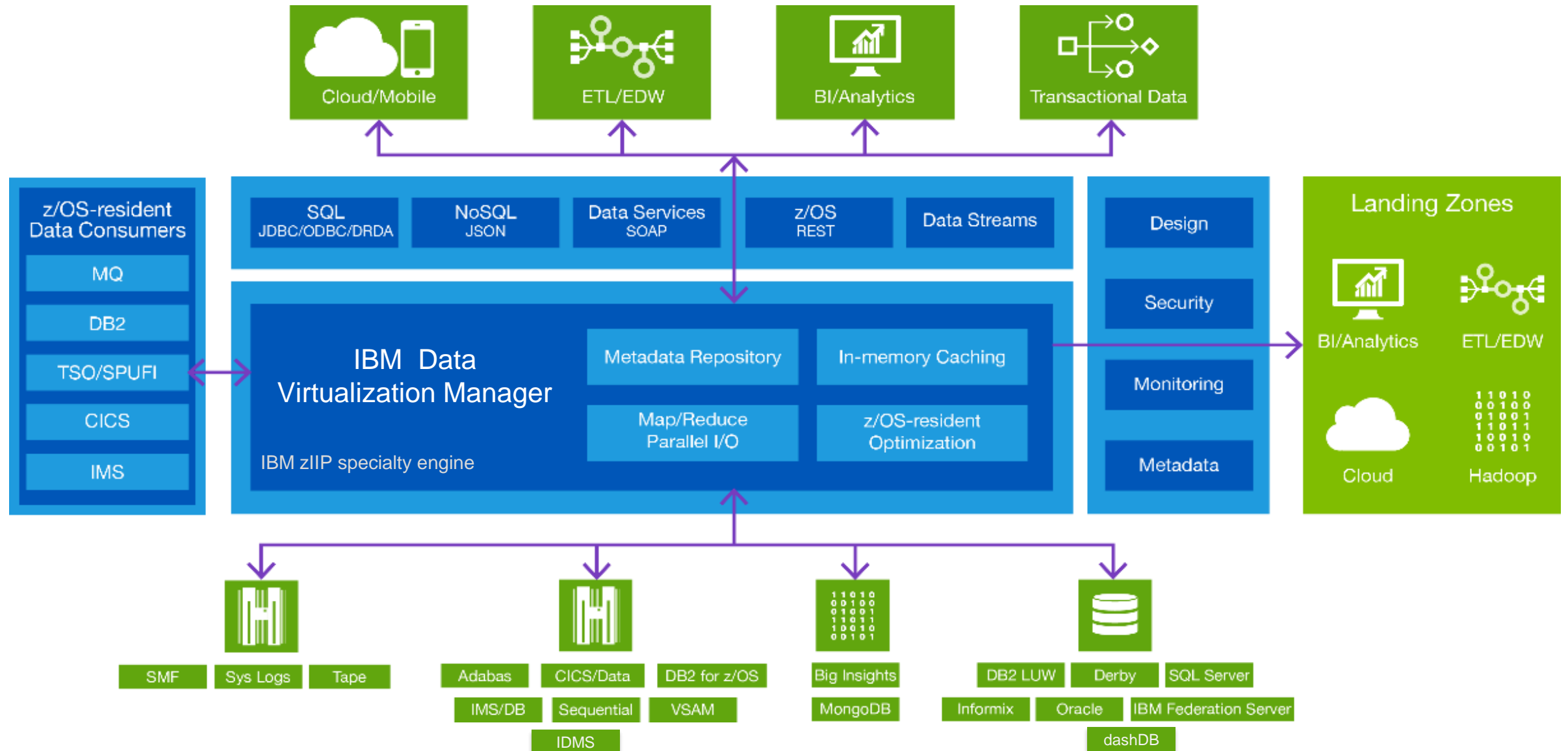


The nature of data remains, format and usage grows with business needs

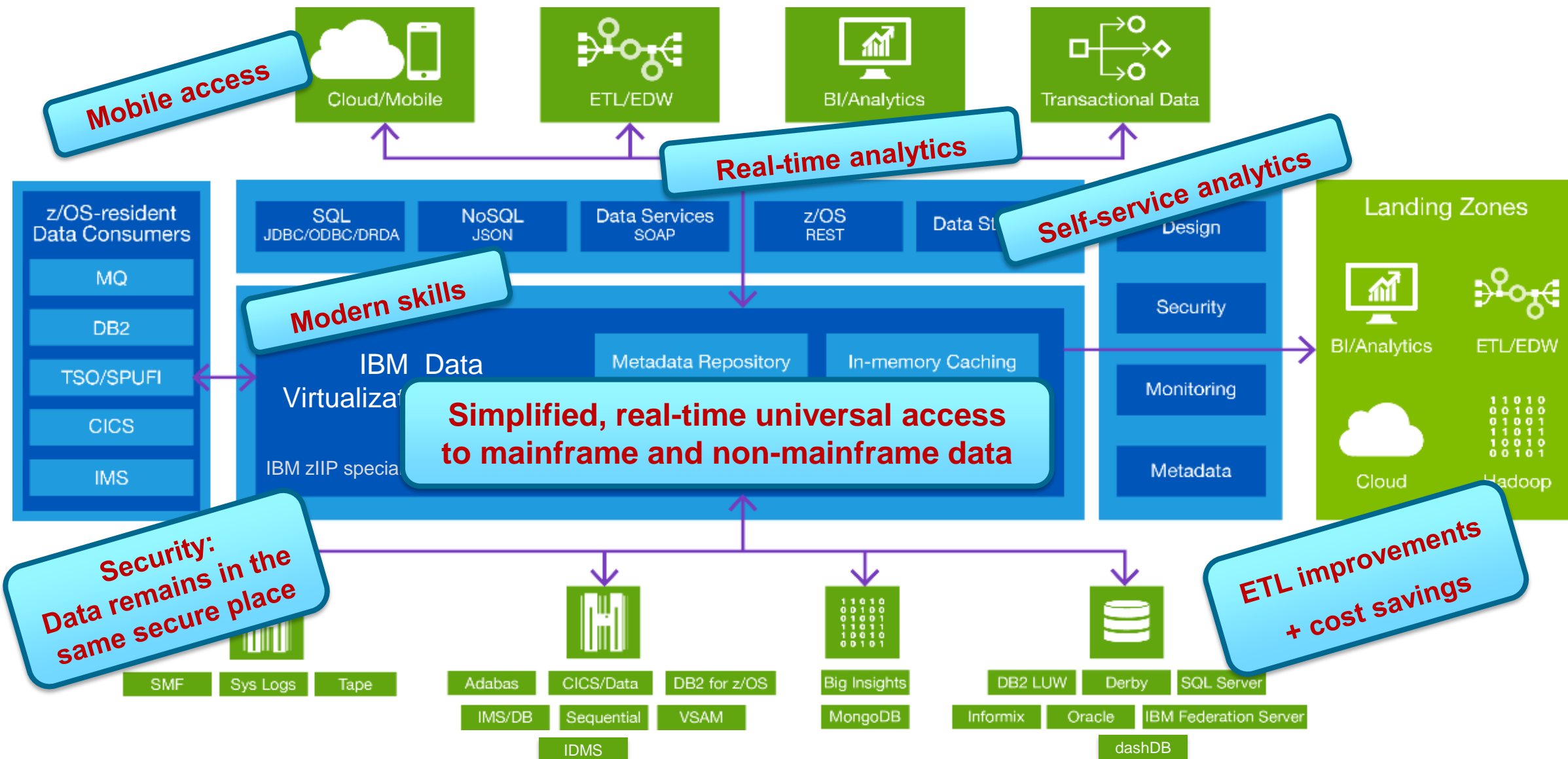
Data Processing Challenges



IBM Data Virtualization Manager Solution

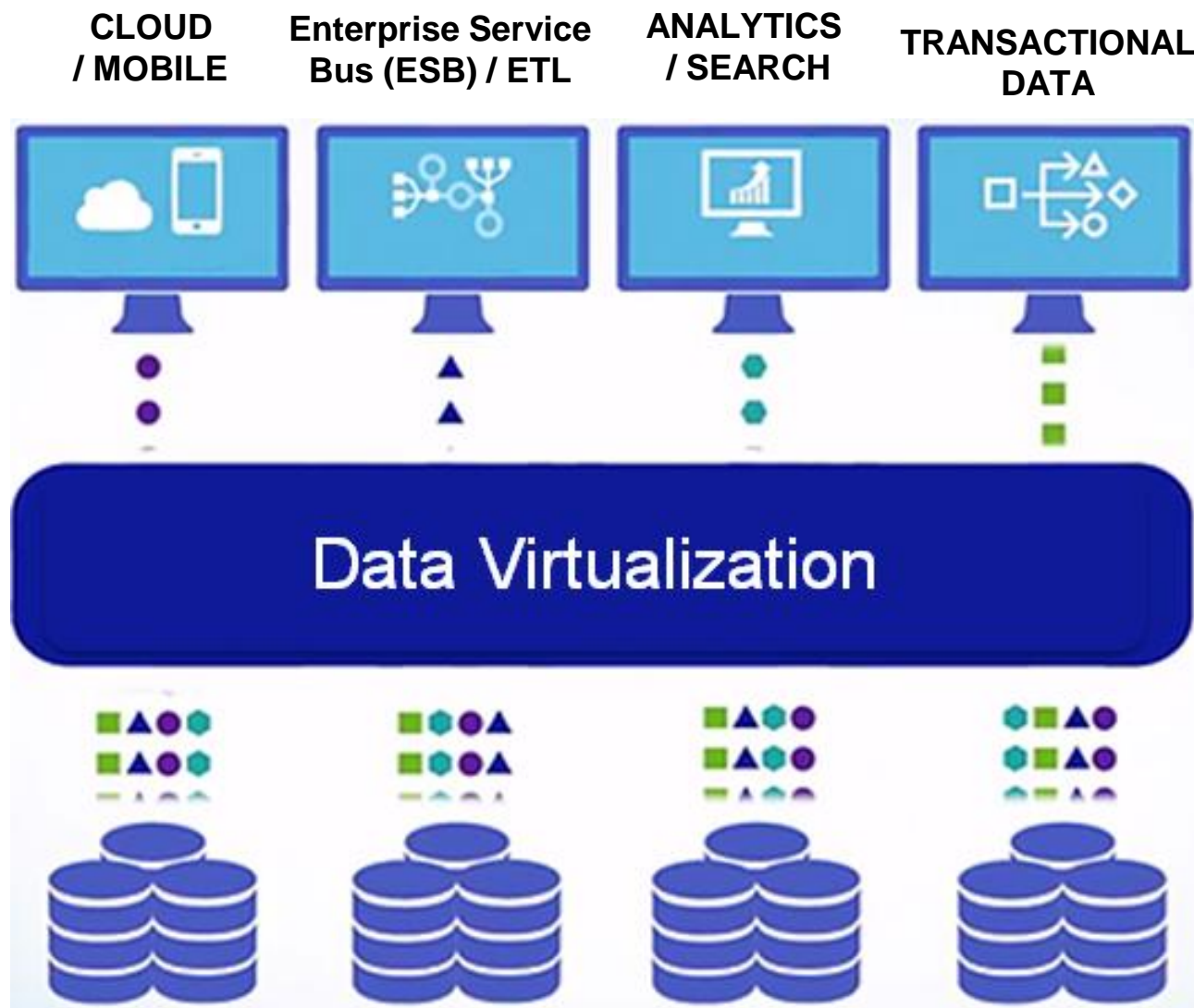


Needs and Challenges addressed by Data Virtualization Manager



Data Virtualization Concept

Enabling data structures that were designed independently, to be leveraged together, in **real time**, and **without data movement** (no need for Extract, Transform and Load - ETL)



Data Virtualization Solutions - Vendors

- **Denodo**
- **Informatica**
- **SAP**
- **IBM**
- **Amazon Web Services (AWS)**
- **Cisco**
- **Red Hat - JBoss**
- **Oracle**
- **VMWare**
- **TIBCO**

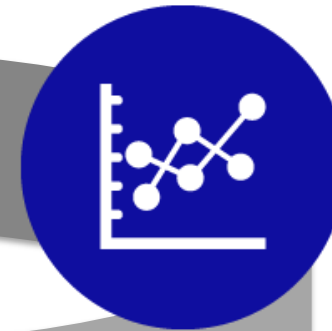
Mainframe Value Proposition for Data Virtualization Manager

Highly secured and encrypted data access



IBM Mainframe:
solid enterprise
architecture concepts
proven since 1964

DVM engine code optimized for z Hardware, CPU, and zIIP engine utilization



Mobile application enabled - APIs, z/OS Connect



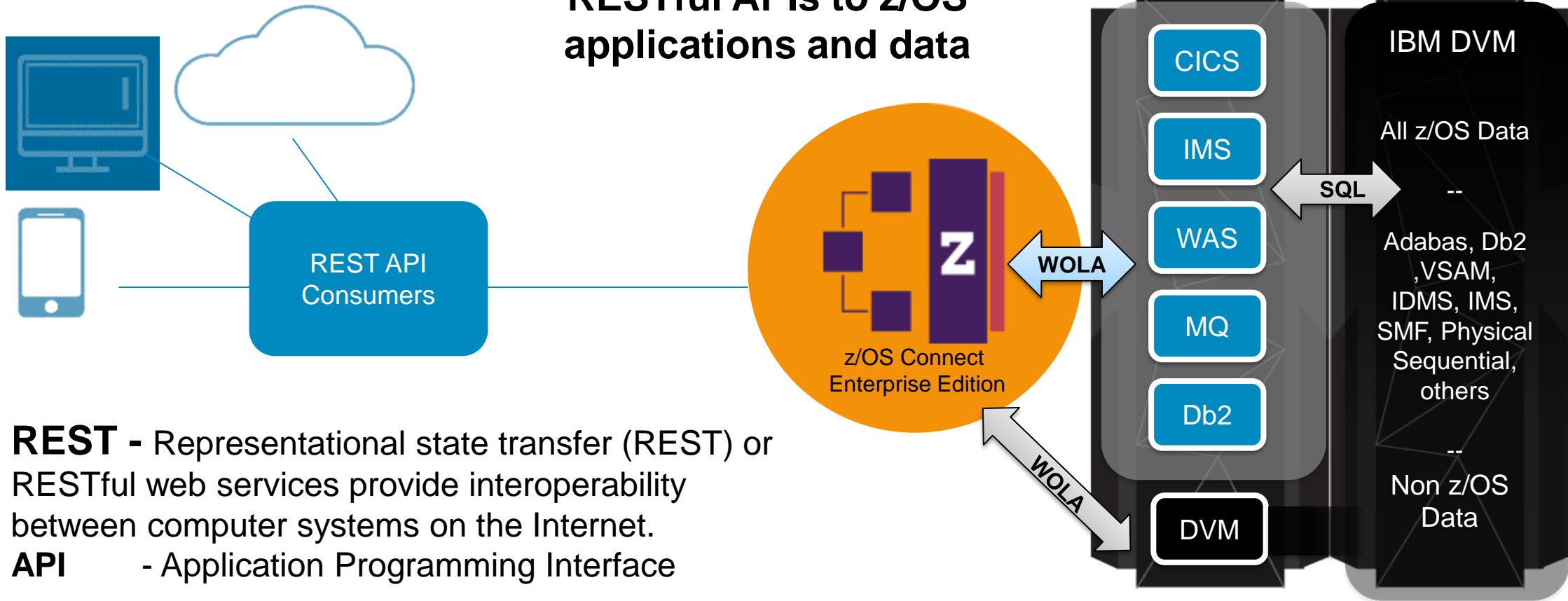
Designed for Cloud - scalability & virtual machine support since 1970s



IBM z/OS Connect EE and DVM - APIs to mainframe data

Application Programming Interface (API)

RESTful APIs to z/OS applications and data



REST - Representational state transfer (REST) or RESTful web services provide interoperability between computer systems on the Internet.

API - Application Programming Interface

WOLA - WebSphere® Optimized Local Adapter

IBM Data Virtualization Manager: ~ 37 supported data sources

Mainframe



CA IDMS

Syslogs
log streams



Sequential-file



File Systems



SFM

Magnetic Tape
Virtual Tape



Systems
Management
Facility SMF

Data for
IT Operational
Analytics

Non-Mainframe

IBM Db2 Family, Informix



ORACLE



20+ DRDA
data sources



Other DBs



Production Customer: Self-service Analytics for Investment Advice

Simplification

Real-time direct access to data instead of FTP'ing or replicating data to a myriad of locations

Scalable data access

Ability to scale to more than 5 billion ADABAS SQL calls per month

Enhanced Developer Productivity

Focus on adding new web functionality without having to change the data source.



Solution Components

Software:

- **IBM® Data Virtualization Manager for z/OS**

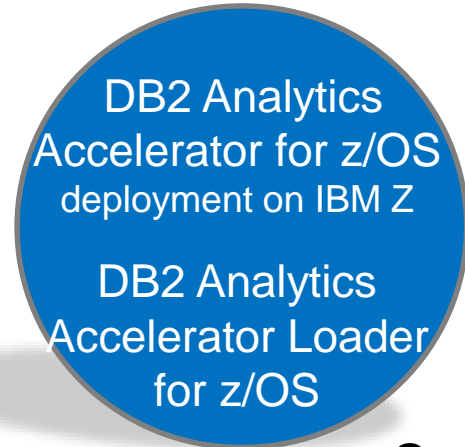
Data Virtualization Use Cases



IBM Advanced Analytics for z/OS - Integrated Solution

Universal Data Access

Data Virtualization for all enterprise data - on and off mainframe

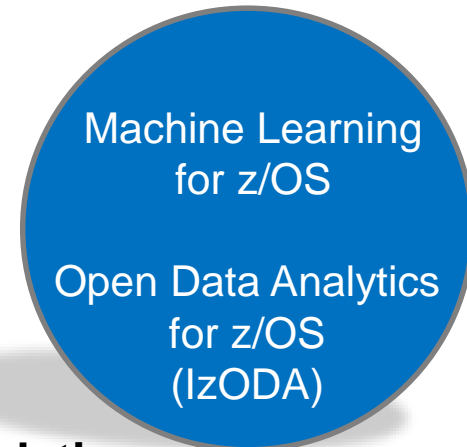
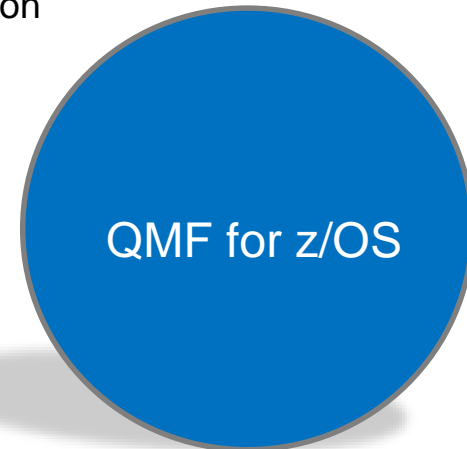


Query Acceleration

High-speed data load + processing for complex Db2 queries

Business Intelligence (BI) Solution

with Access, Virtualization and Visualization and Data Preparation



Predictive Analytics

Discovering patterns/meaning in data



IBM Data Virtualization Manager for z/OS



Simplified, real-time universal access to mainframe and non-mainframe data



Q&A

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