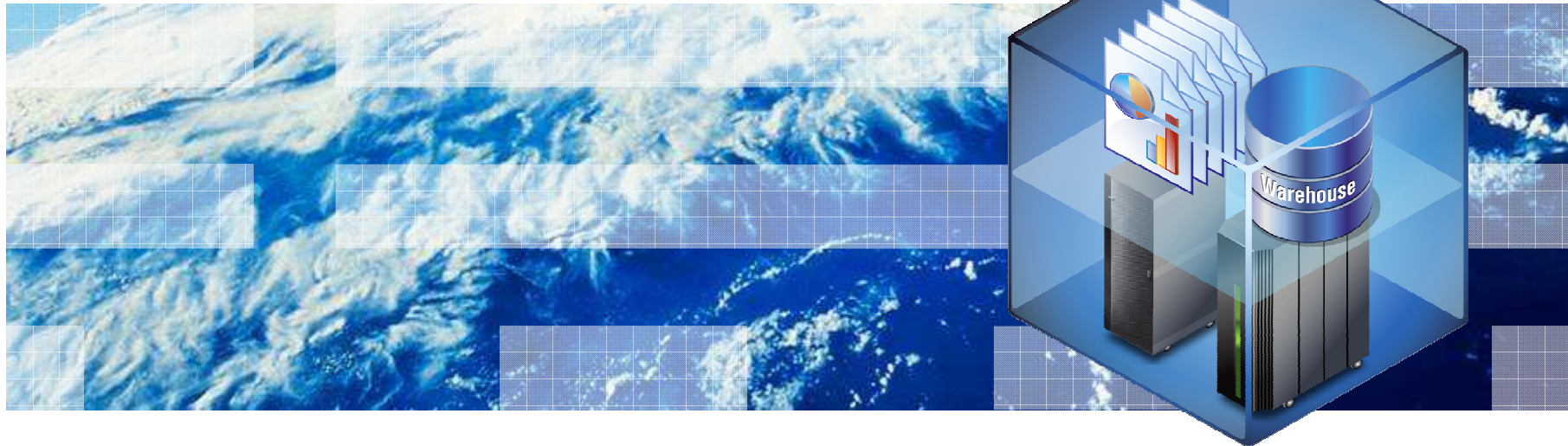


IBM Smart Analytics Optimizer



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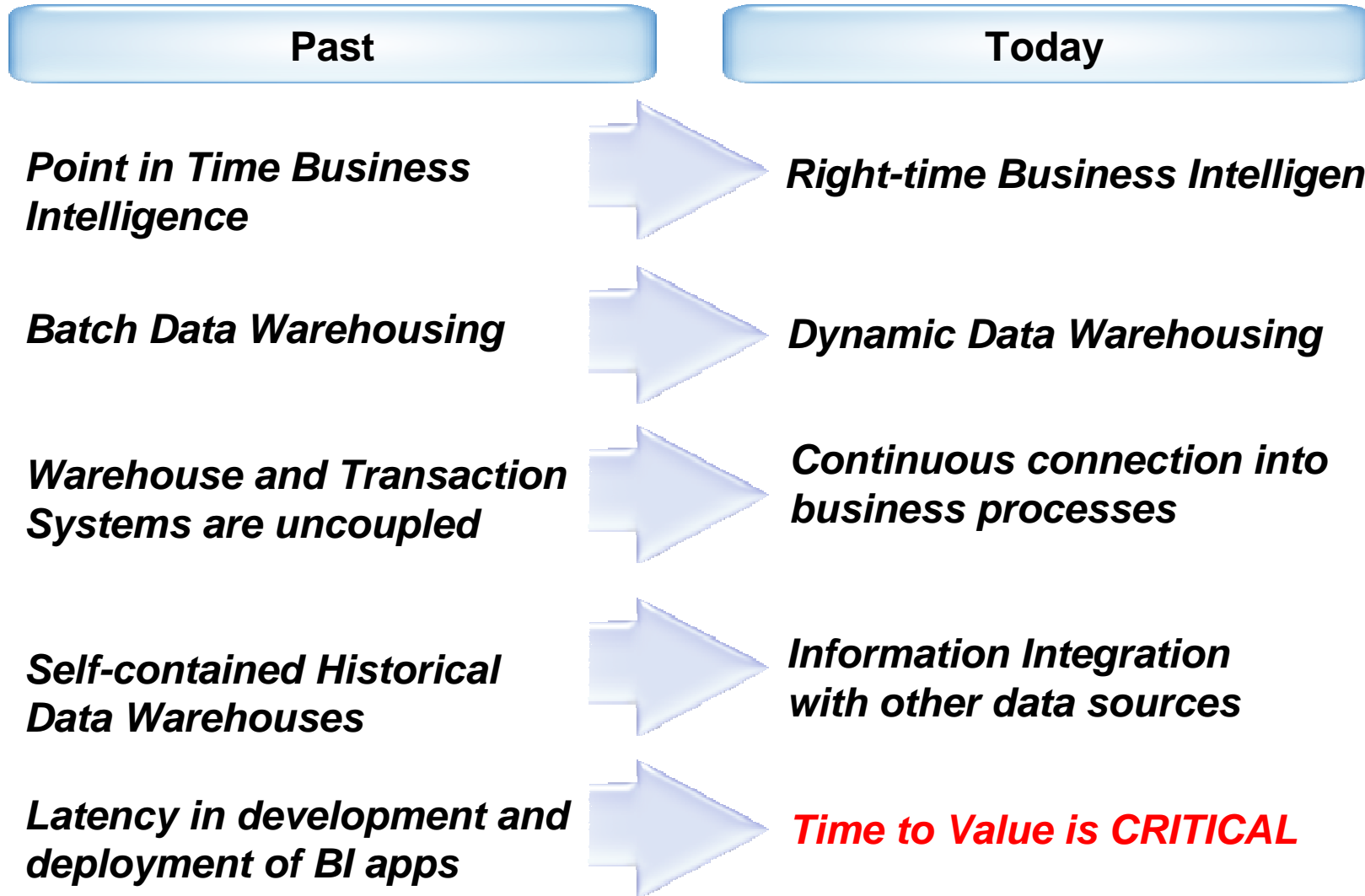
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Business Intelligence Becoming Mission-Critical



The Challenges

Using Information to Drive the Business

Support Dynamic business processes

- Larger sales from right-time upsell information
- Fraud detection at the time of transaction
- Improved profitability through right-time supply chain information
- Mitigated risks with accurate, timely information

Discover business opportunities

- Recognize changes earlier for immediate action
- Predict changes and opportunities
- Better understand the opportunities as they emerge



Respond to economic change

- Understand and trend the constantly changing business environment
- Identify poorly performing products and channels
- Recognize improving segments and profitable markets

Support the business by meeting all BI requests

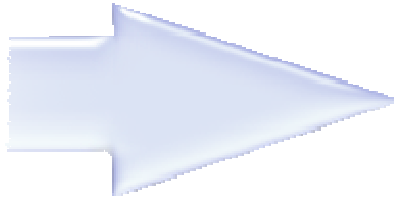
- Run queries that were forbidden in the past
- Dramatically reduce DBA efforts to tune the system
- Respond quickly to new LOB requirements

IBM Smart Analytics Optimizer

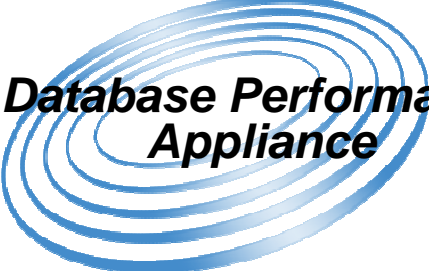
Unlocking unprecedented value from enterprise data



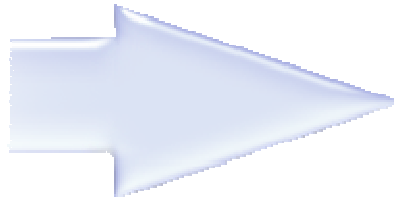
**Extreme performance
for complex queries**



*Breakthrough technologies
providing an order of
magnitude performance
improvement*



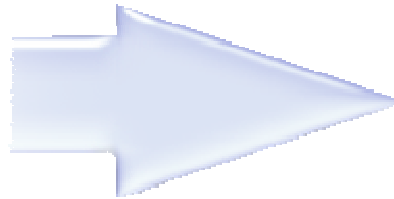
**Database Performance
Appliance**



*Quickly and simply deploy,
hands-free operations, no
query tuning, with application
transparency*



**Proven operational
characteristics**



*Inherits the availability,
reliability, and security of
System z*

Extreme performance for complex queries

- ✓ Rapidly delivers information to decision makers through breakthrough technologies providing an order of magnitude performance improvement.
- ✓ Enables decision makers to submit queries they never dared in the past, that analyze trends, predict outcomes, and produce better business results.



New Infrastructure for workload optimized solutions

- **Integrated infrastructure that is managed by System z through Hardware Management Console and firmware**



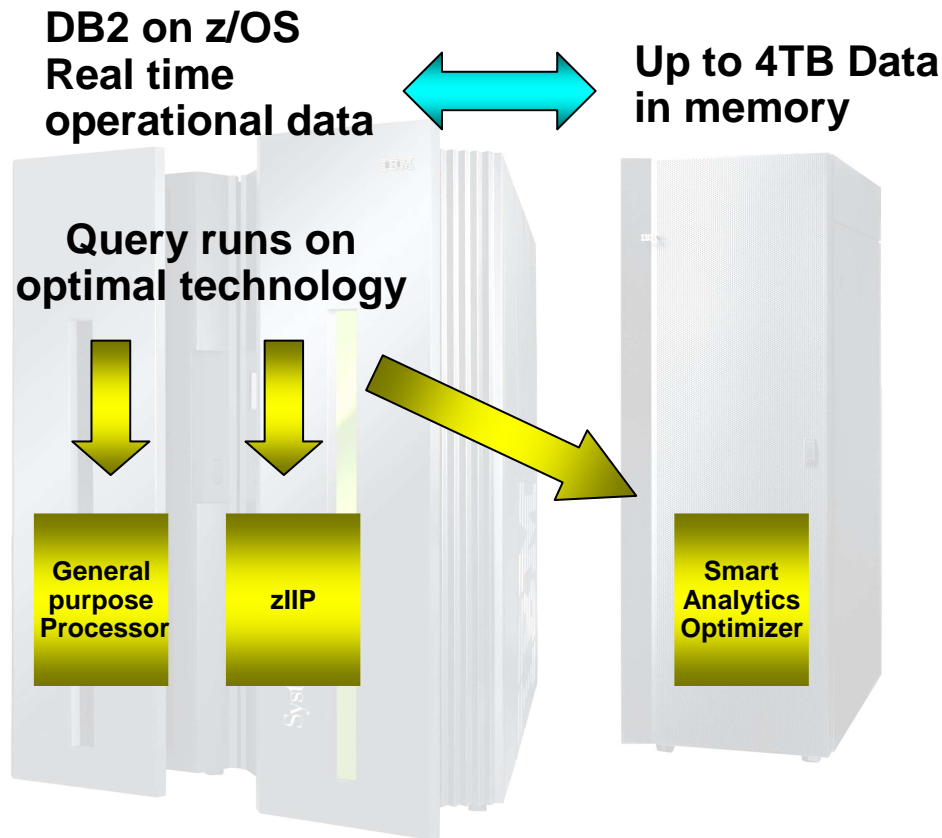
Benefits of a System z workload optimized infrastructure

- improve service and reduce risk by extending System z operational control to heterogeneous environment
- Reduced cost by deploying best-fit technology to drive efficiencies across integrated solutions

Creates New Opportunities for Existing Systems by Using New Technology Approaches

Workload optimized solutions in action

System z10 and the IBM Smart Analytics Optimizer



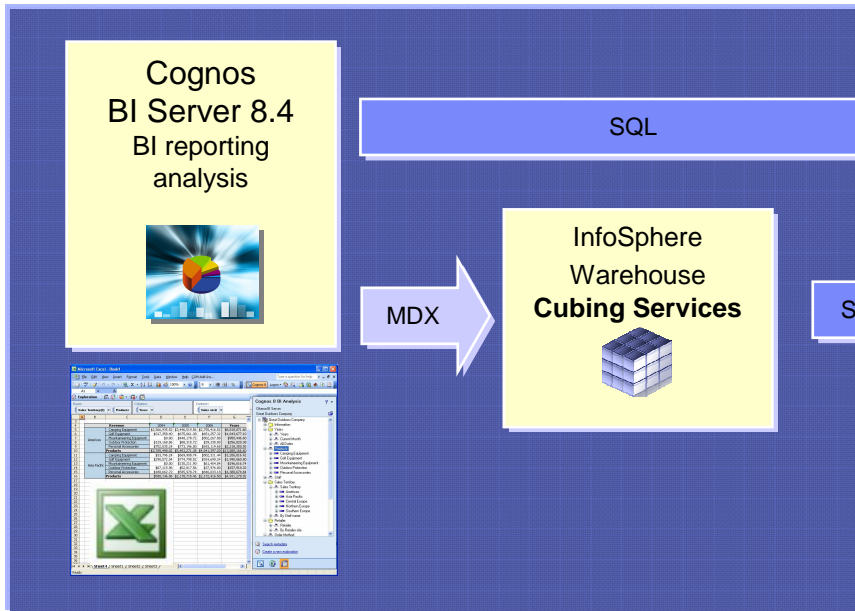
Benefits of a Smart Analytics Optimizer

- **Current data delivers accurate business insight**
- **z/OS and DB2 controls and secures critical data**
- **Reduced administration costs**
- **Optimizes technology usage to deliver:**
 - The right level of service
 - With lower risk
 - At reduced cost

Up to 10X improvement in performance for predictable and accelerated business insight

ISAO Integration and "Front-Ends"

Linux LPARS



IBM Smart Analytics Optimizer

- Cognos BI reports and ad-hoc analysis result in SQL or MDX (OLAP) requests
- Excel spreadsheets for interactive, situational LOB users
- Cubing Services adds MDX (OLAP) capabilities and provides additional (limited) in-memory caching
- ISAO marts may be considered as another option to support cubes (think: generalized MQTs)

As well as ANY tool that connects to DB2 today:

- DataQuant (z/OS)
- Business Objects
- Brio
- IBI - WebFocus

Database Performance Appliance



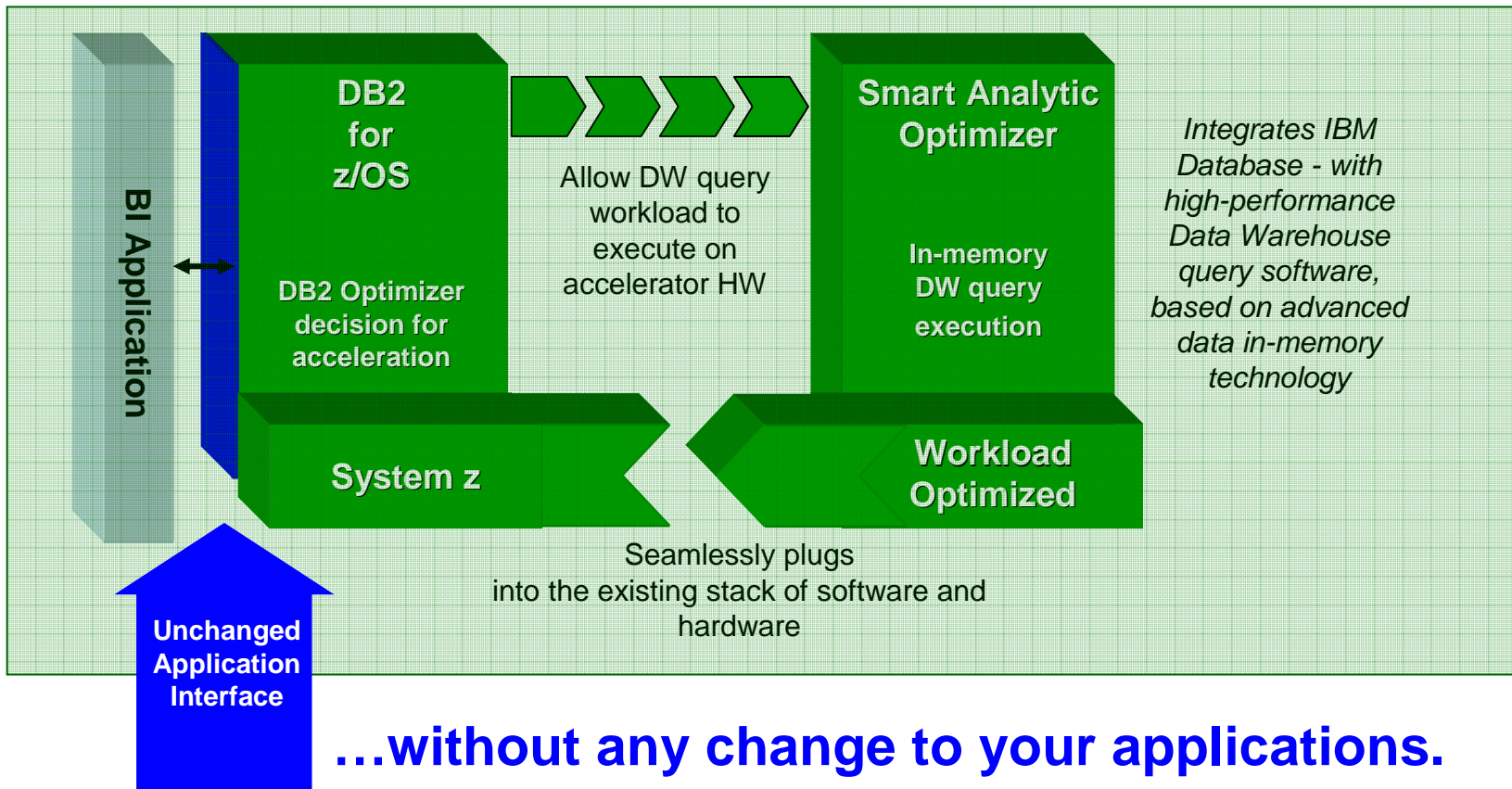
Significantly reduces the costs of running queries that were previously banned – Eliminates most DBA intervention

- Appliance-like, add-on device
- No need to change any application, just install and begin reaping the benefits of higher performance
- Rapidly add new applications and user requirements driving immediate value to the bottom line
- No need for indices, materialized query tables (MQTs), query plans or query hints

Optimizing to the Workload

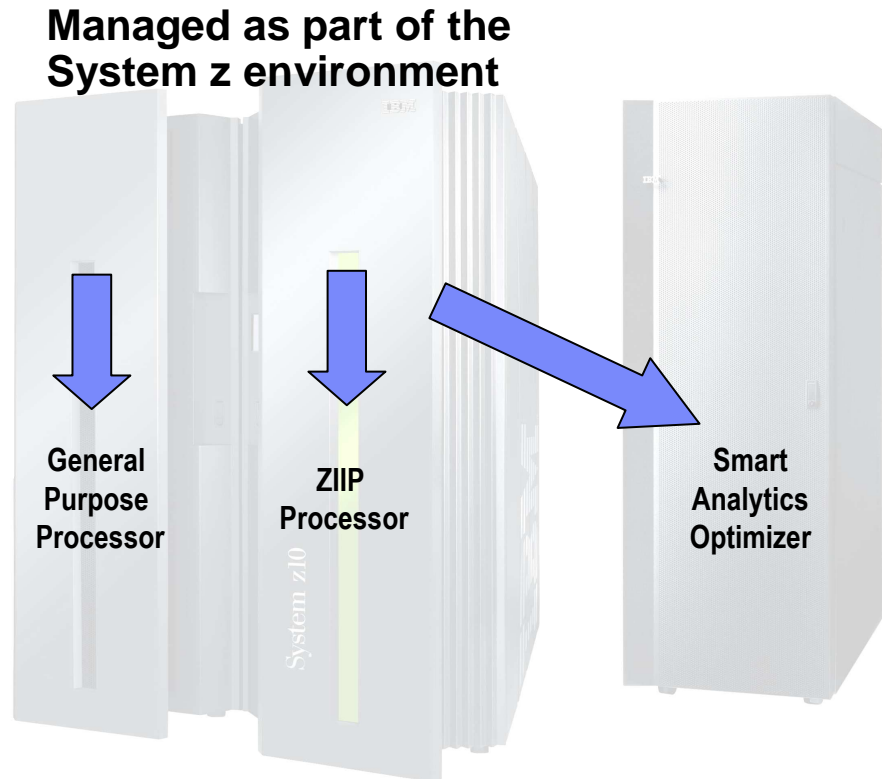
Marrying the best of each system

Total solution remains centrally managed by System z...



...without any change to your applications.

Proven Operational Characteristics



Data continues to be maintained by DB2 for z/OS,

with its industry leading capabilities in:

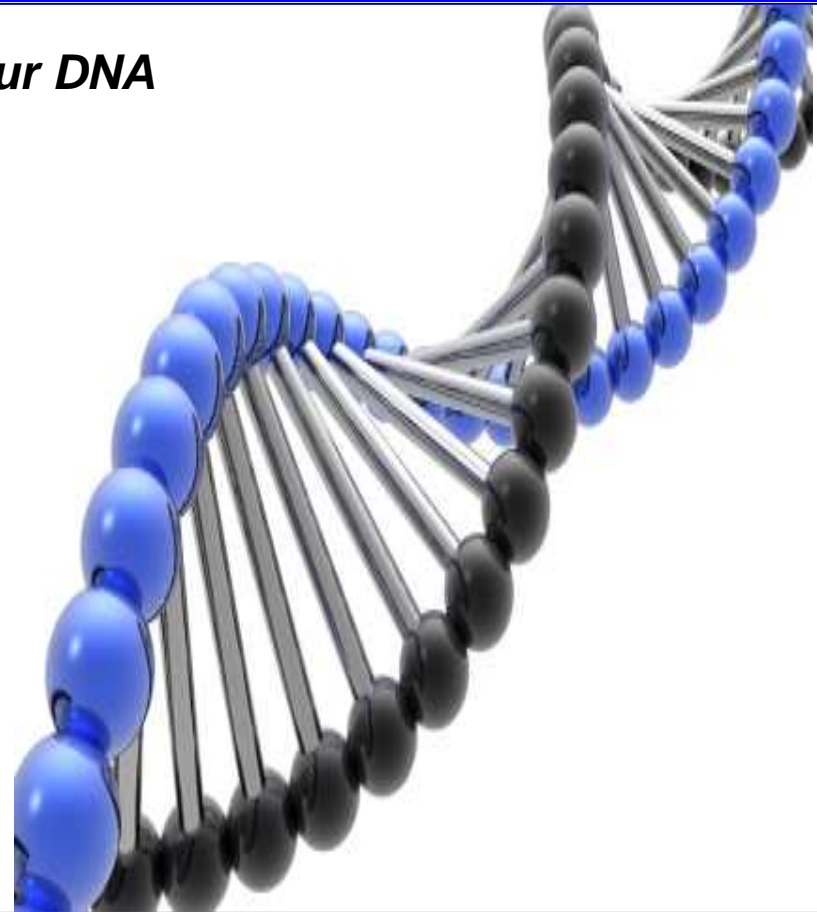
- *continuous availability,*
- *backup,*
- *and recovery*

Server Architecture Genetics

From the leading patent generating company

A High Performance Heritage - *Its in our DNA*

- Capitalizes on experience gained from High Performance Computing, Grid, Blue Jean, and many others.
- Data continues to be maintained by DB2 for z/OS, with its industry leading capabilities in continuous availability, backup, and recovery.
- Reduced risk through extending System z manageability and security across the entire system to improve quality of service for BI applications.



Options for Workload Analysis

Stage	Purpose
Questionnaire	→ Initial assessment based on size, query response time, update characteristics and customer pain points
Quick Workload Test	→ Assessment based on dynamic customer workload, runtime statistics, table sizes and SQL.
Detailed Online Workload Analysis	→ Assessment based on data mart definition for customer data model and offload capabilities in a real ISAO environment. Addresses all inhibitors for offload and data mart definition questions.

Quick Workload Test

→ Customer

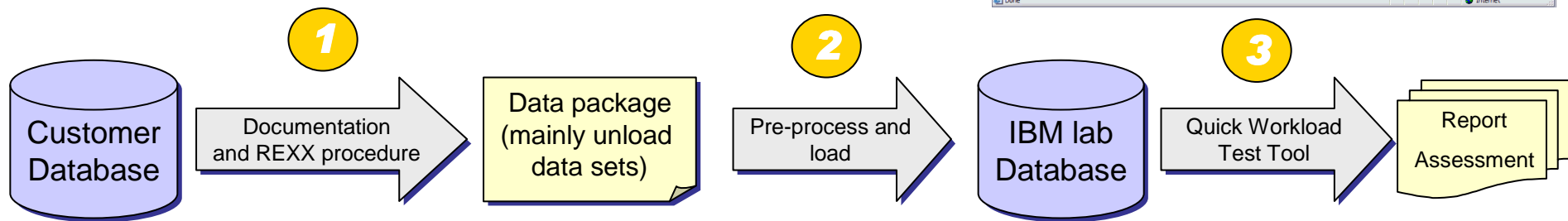
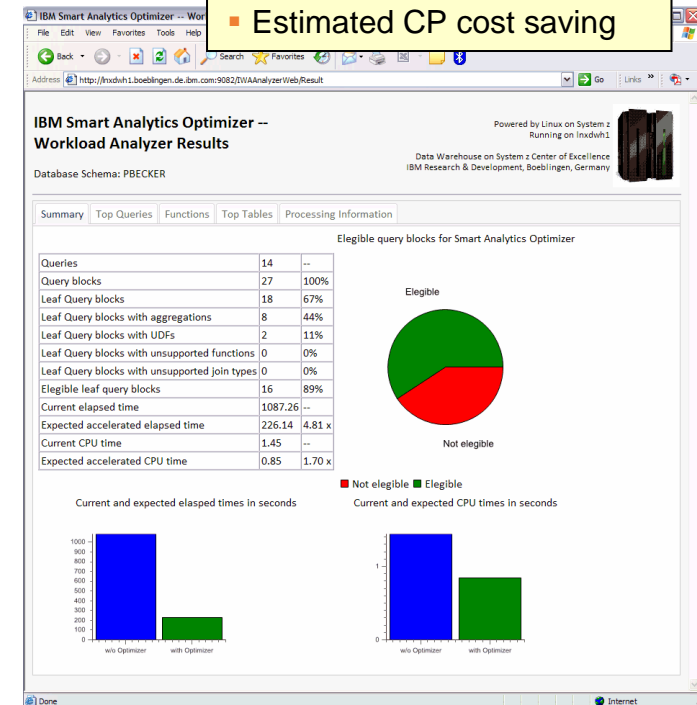
- Collecting information from dynamic statement cache, supported by step-by-step instruction and REXX script (small effort for customer)
- Uploading compressed file (up to some MB) to IBM FTP server

→ IBM / Center of Excellence

- Importing data into local database
- Quick analysis based on known Smart Analytics Optimizer capabilities

Report for a first assessment:

- Query offload potential
- Estimated performance gain
- Estimated CP cost saving

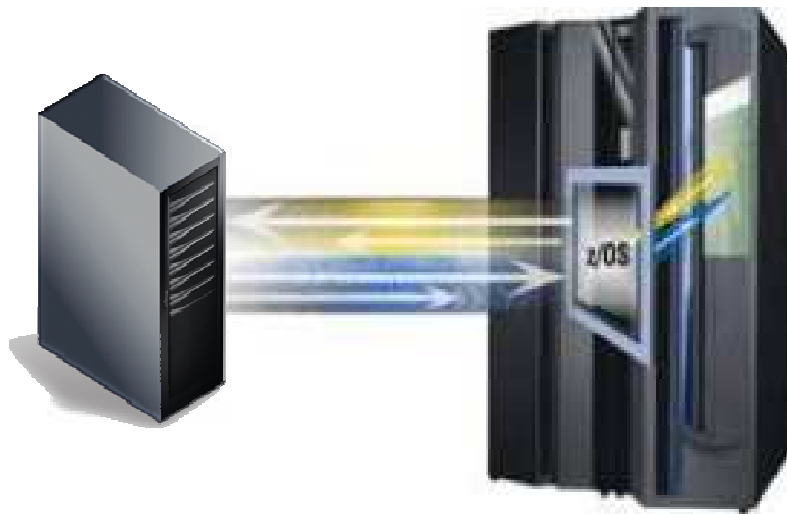


IBM Smart Analytics Optimizer

Capitalizing on the best of relational and the best of columnar databases

What is it?

- ✓ *A high performance, appliance-like add-on rapidly delivers information to decision makers faster, consistently, and transparently to all users.*

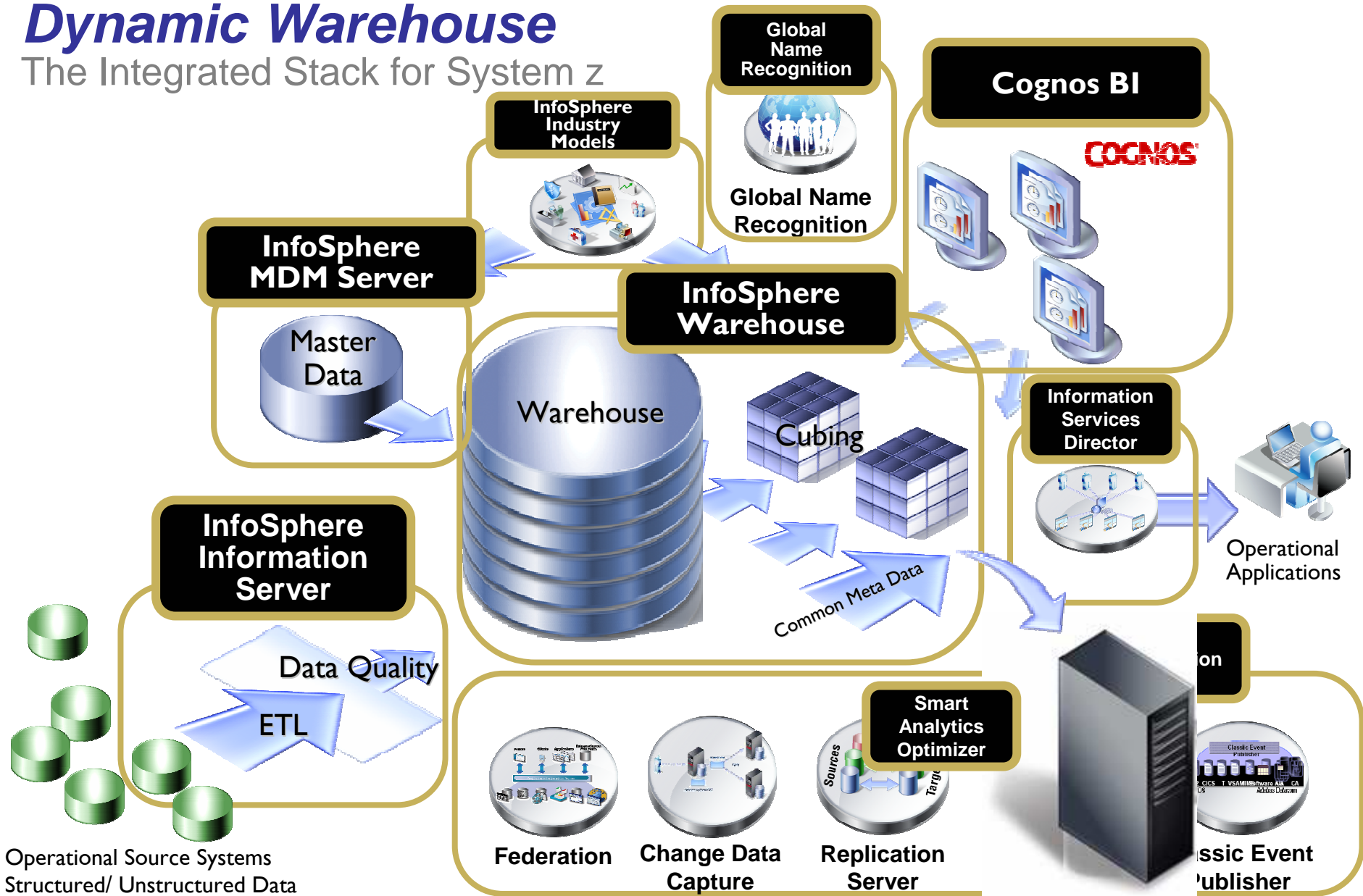


How is it different

- **Performance:** Featuring breakthrough technologies that deliver an order of magnitude performance improvement
- **Integration:** data is managed and secured by the most reliable database platform - DB2 for z/OS
- **Self-managed workloads:** queries are executed in the most efficient way
- **Transparency:** applications connected to DB2, are entirely unaware of ISAIO
- **Simplified administration:** workload optimized, appliance-like add-on that provides hands-free operations, eliminating many database tuning tasks

Dynamic Warehouse

The Integrated Stack for System z



Operational Source Systems
Structured/ Unstructured Data

Thank You

