

2016 IMS Technical Symposium

IMS meets IDAA

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Data is
transforming
industries and
professions.



Customer experience
is #1 priority
in any industry



Enterprises have
plenty of data.

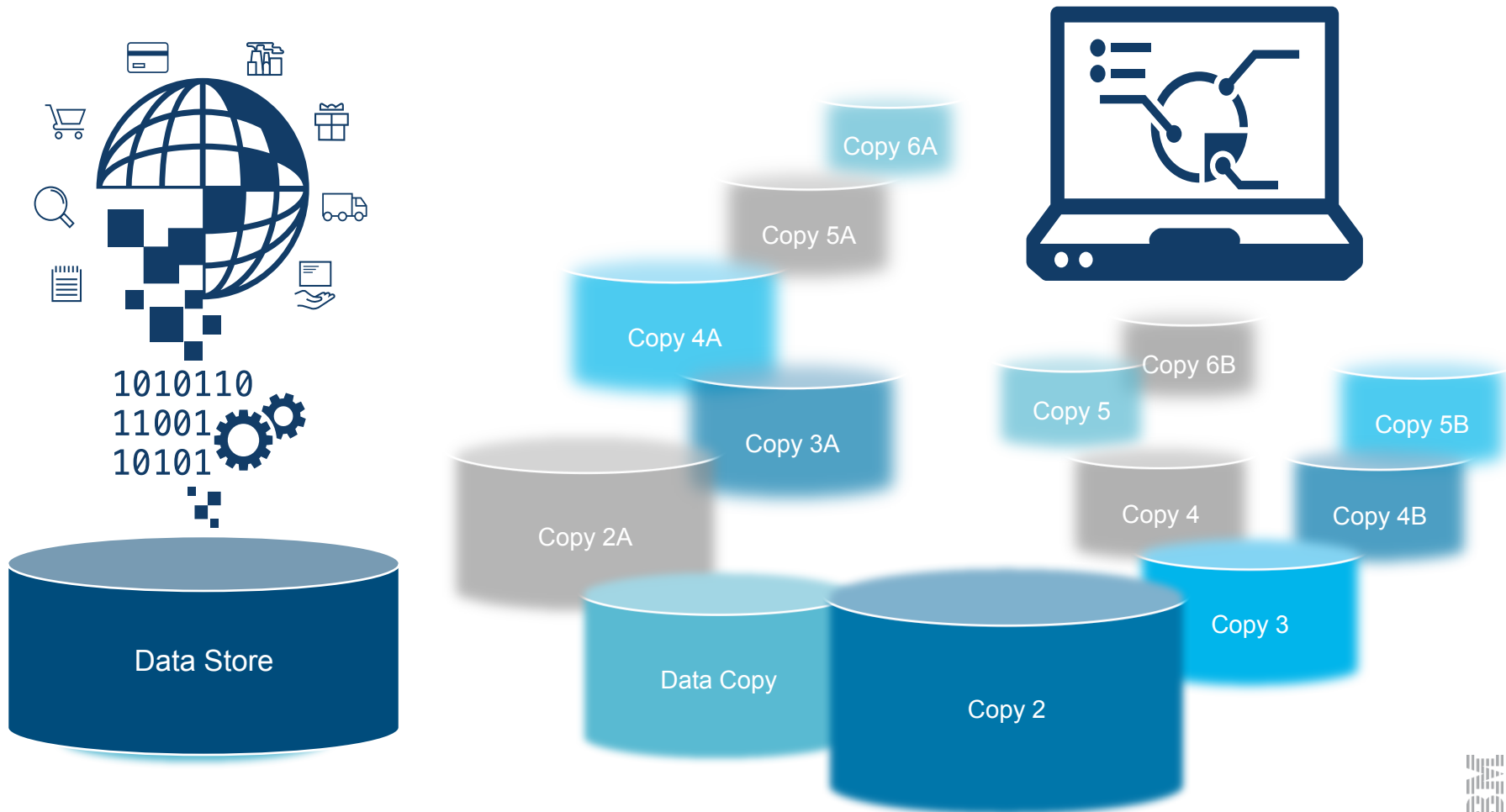
#1 is rich **transactional
data** from hundreds of
business applications



Is this *your* view of doing **Analytics**?



It's time to **change** the perspective
Moving data for the sole purpose of analysis
is costly, risky and unnecessary



Integrating BA/BI with operations requires a hybrid environment - IMS and the Analytics Accelerator (IDAA)



DB2 Analytics Accelerator personalities

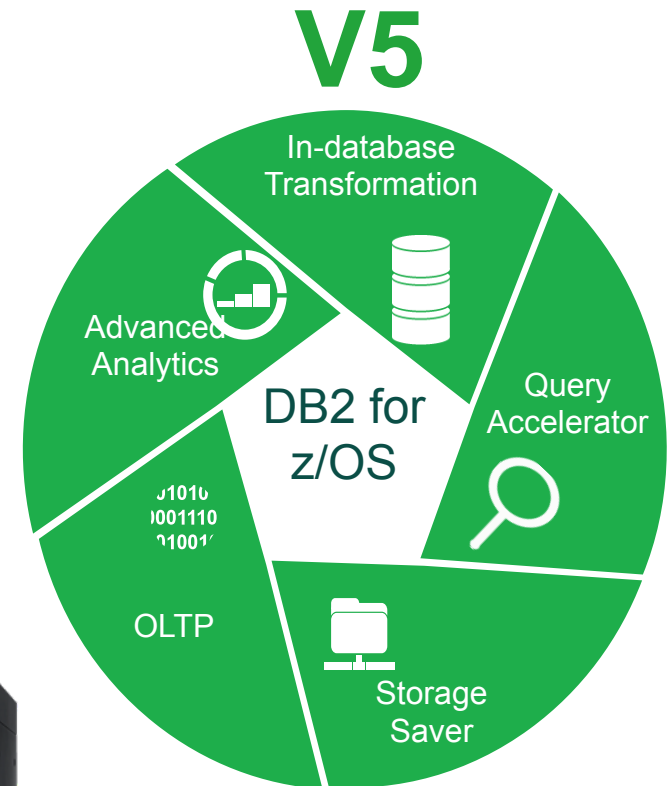
- Access path – fast scan with hardware assisted early filtering
- Full width index
- Specialty engine
- Archive
- Integration hub: fast 'federated joins across heterogeneous sources
- Query and ETL acceleration

The hybrid computing Platform on z systems

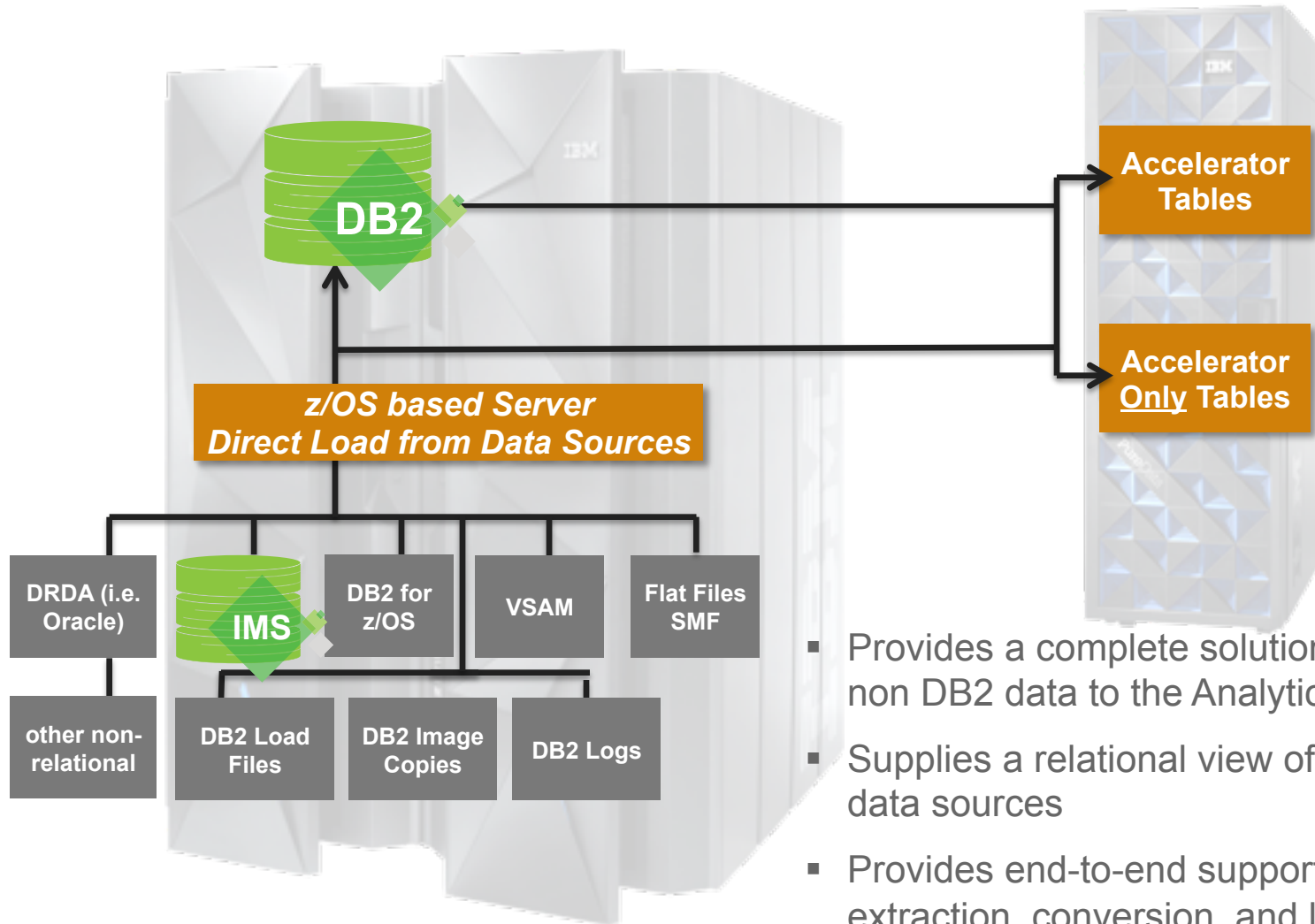
- Supports transaction processing and analytics workloads concurrently, efficiently and cost-effectively
- Delivers industry leading performance for mixed workloads
- The unique heterogeneous scale-out platform in the industry
- Superior availability reliability and security

IDAA no longer just accelerates reports and queries: Transform and model data without moving it

- Near real time high volume **operational reporting** in a cost effective way.
- Near real time analytics on the transactional data to spot **fraud patterns and behavior**
- Centralized, hybrid analytics/transactional environment and drive **real-time business insight for banking solutions**
- Loading and joining **other types of data beyond DB2** provides business insight

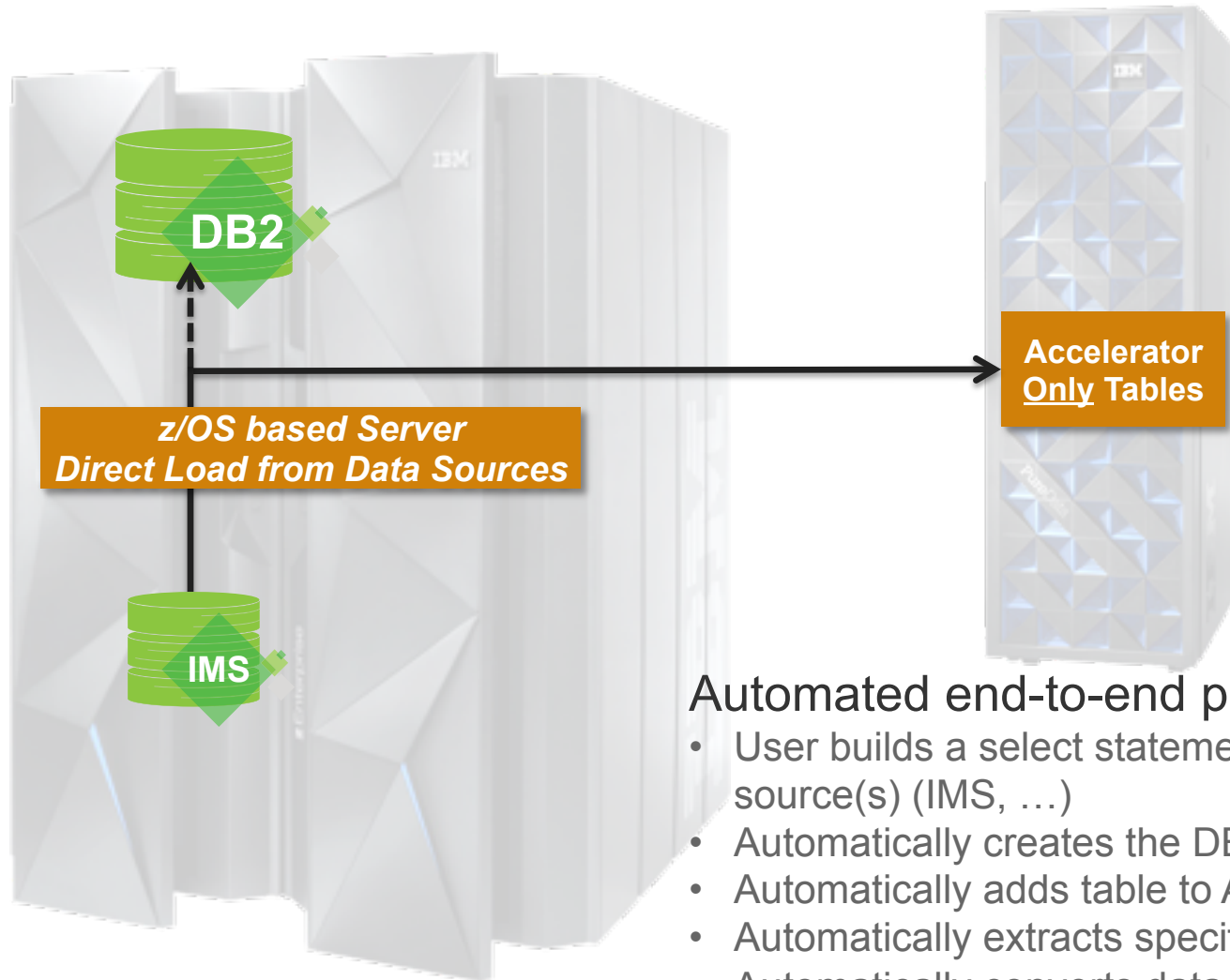


IBM DB2 Analytics Accelerator Loader for z/OS v2.1



- Provides a complete solution to load DB2 **and** non DB2 data to the Analytics Accelerator
- Supplies a relational view of non-relational data sources
- Provides end-to-end support for data extraction, conversion, and loading to accelerator in one step

IBM DB2 Analytics Accelerator Loader for z/OS v2.1

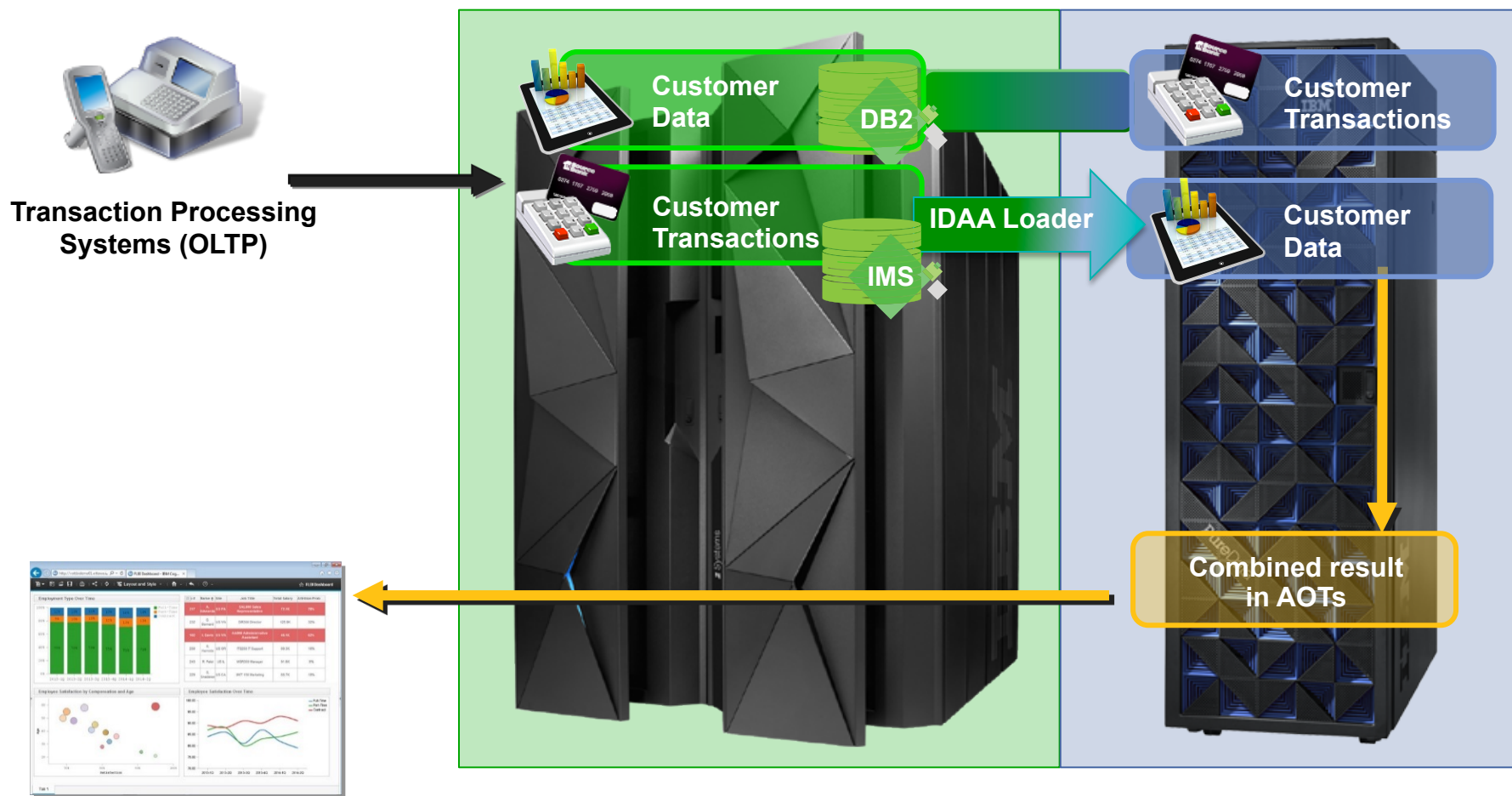


Automated end-to-end process:

- User builds a select statement from data source(s) (IMS, ...)
- Automatically creates the DB2 table
- Automatically adds table to Accelerator
- Automatically extracts specified source data
- Automatically converts data to necessary DB2 format (in memory)
- Automatically loads data to Accelerator
- Automatically enables table for acceleration

Integrate IMS and DB2 data for analytics

Load external data to the accelerator and save combined analytic results in accelerator-only tables

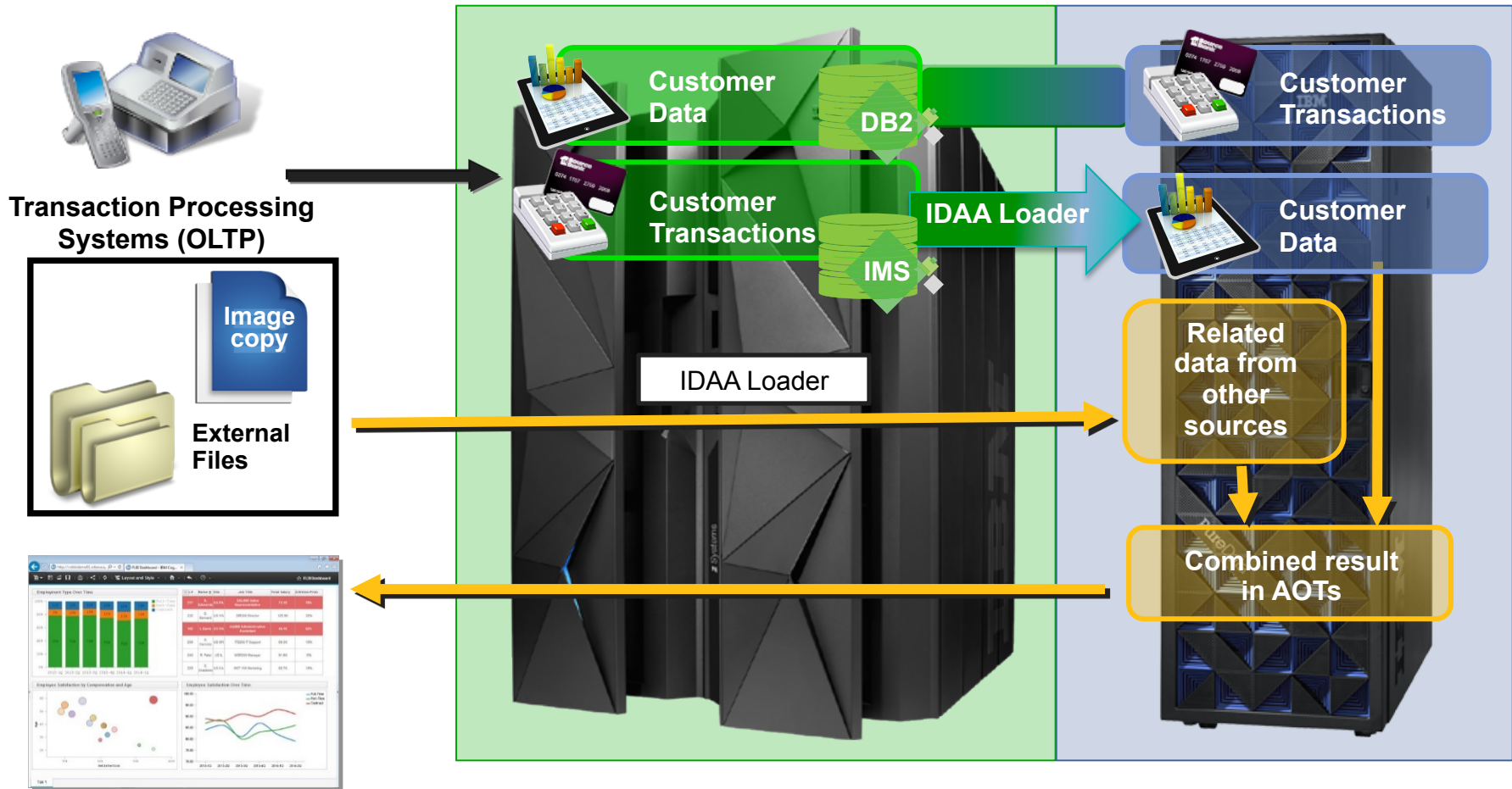


Analytics

Data for transactional and analytical processing

Integrate more data sources for analytics

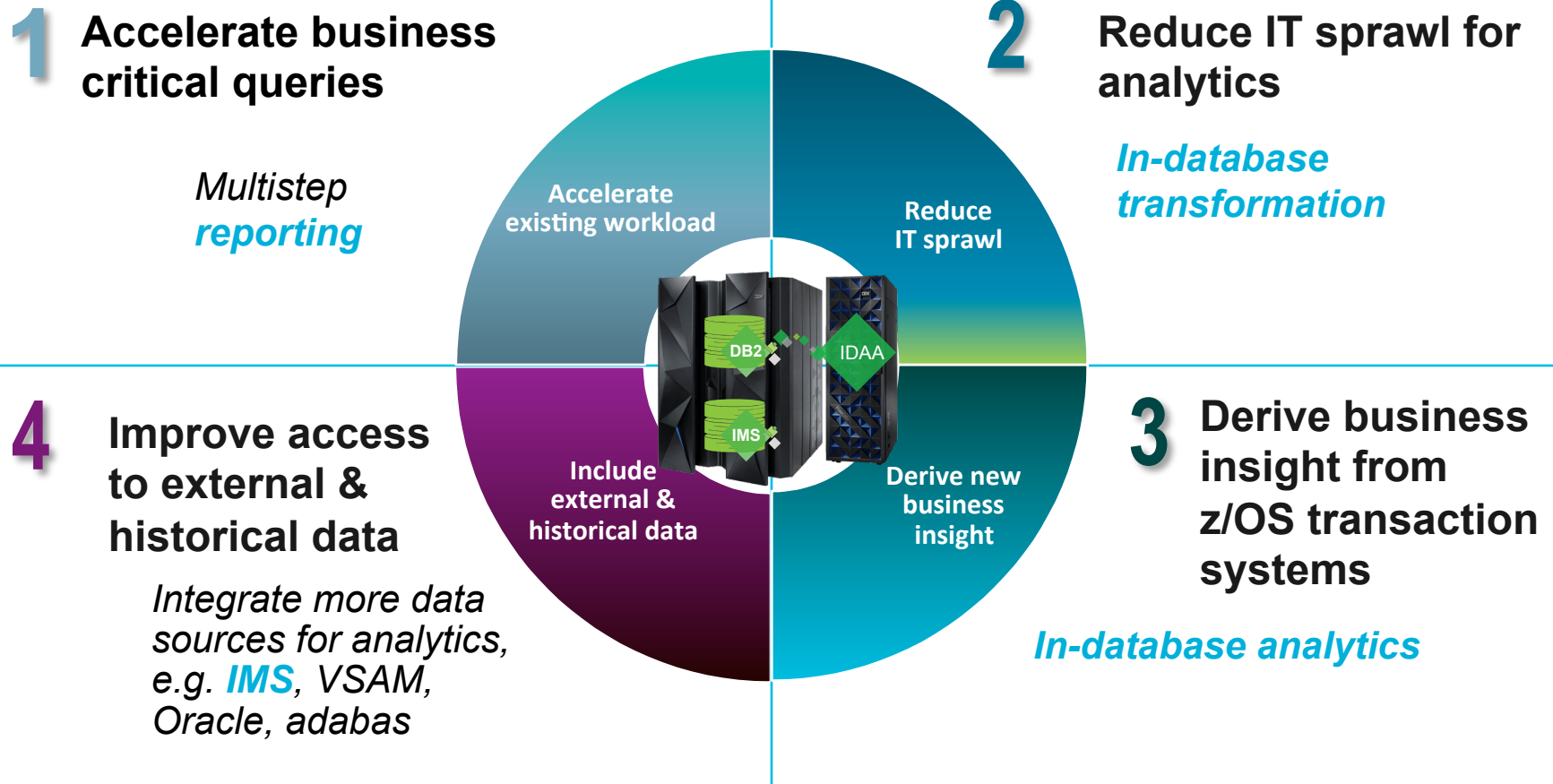
Load external data to the accelerator and save combined analytic results in accelerator-only tables



Analytics

Data for transactional and analytical processing

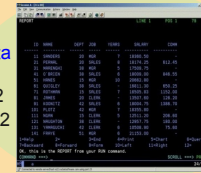
New use cases with Accelerator-only tables and in-database analytics



QMF for z/OS 11

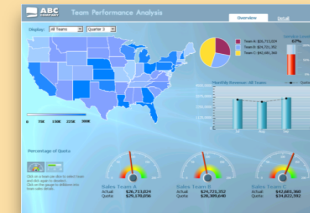
- QMF for z/OS is a visual business intelligence tool that provides interactive dashboards, reports and analytics via modern interfaces such as the web and mobile devices.
- Access to many data sources DB2 as well as IMS via JDBC

TSO Client Data Sources:
DB2 LUW, DB2 iSeries and DB2 VM/VSE



ID	NAME	TYPE	VALUE
1	DB2 LUW	DB2 LUW	1.0000
2	DB2 LUW	DB2 LUW	1.0000
3	DB2 LUW	DB2 LUW	1.0000
4	DB2 LUW	DB2 LUW	1.0000
5	DB2 LUW	DB2 LUW	1.0000
6	DB2 LUW	DB2 LUW	1.0000
7	DB2 LUW	DB2 LUW	1.0000
8	DB2 LUW	DB2 LUW	1.0000
9	DB2 LUW	DB2 LUW	1.0000
10	DB2 LUW	DB2 LUW	1.0000

Web, workstation, mobile client data Sources:
All Relational DBs,
Hierarchical DBs,
Unstructured data



Analytics:
Dashboards,
visual reports,
Dynamarts,

- **IMS DB customers can create analytics accessing IMS DB data:**
 - QMF reports and dashboards can be created by directly accessing IMS DB data
 - Using the DB2 Analytics Accelerator Loader for z/OS, QMF for z/OS can query data from IMS in the DB2 Analytics Accelerator without impacting transactional workloads
- QMF pricing is based on the DB2 for z/OS footprint.
 - Access to all other data sources is at **no additional cost**
 - i.e. if you currently license QMF for z/OS to access DB2, then **access to IMS is at no additional cost.**

Join the QMF Beta Program starting now!

➤ **Faster analytics and additional data sources:** e.g. VSAM, Adabas, and more

- The speed of QMF data federation is provided with new in-memory analytics technology
- A single query can quickly analyze data from multiple data sources

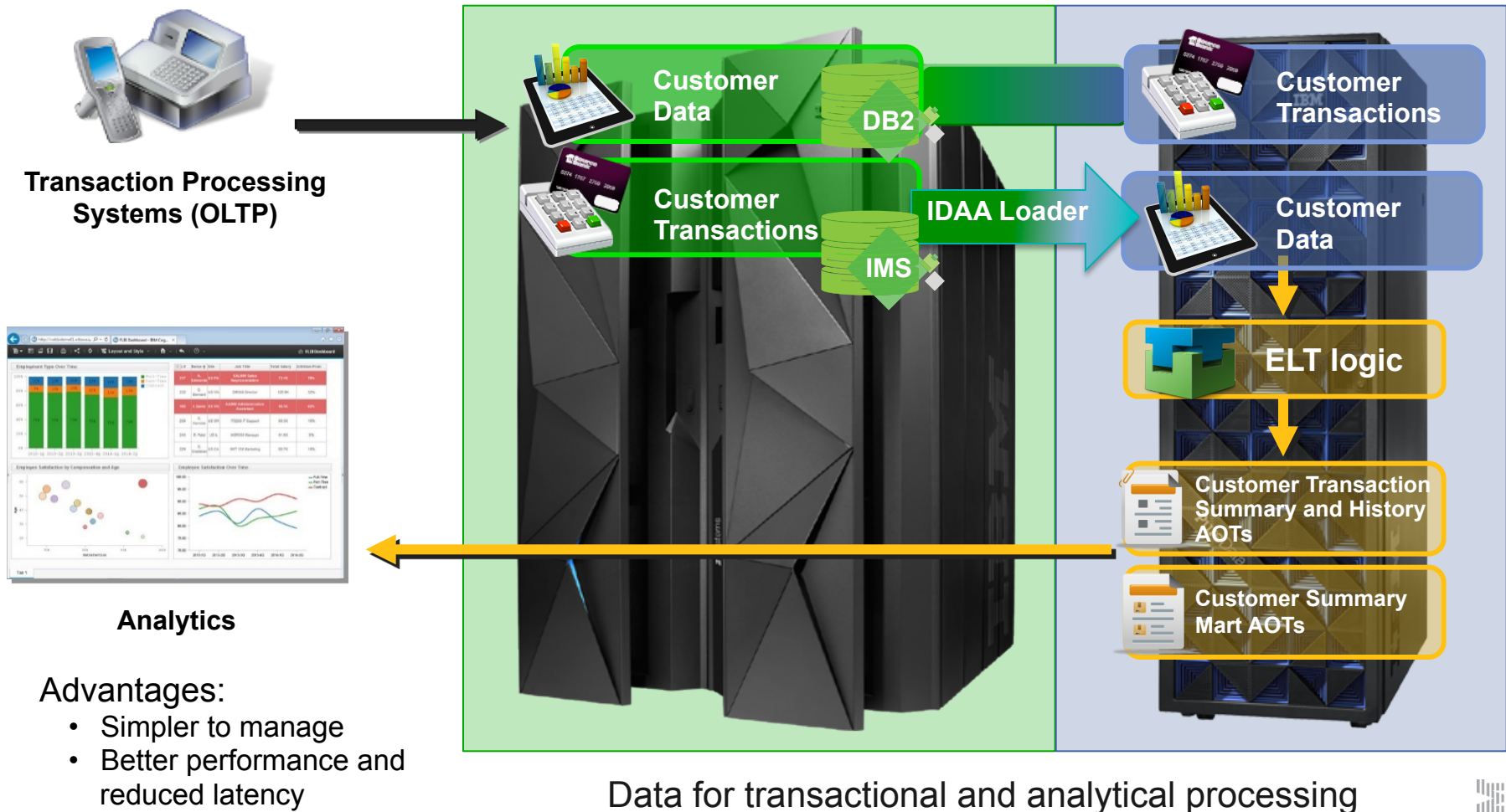
➤ **True Self-Service BI**

- All users can create visual business insights with the **new web client** visualization interface
- Rapid deployment of business information using effective and immediate collaboration with others



In-database transformation

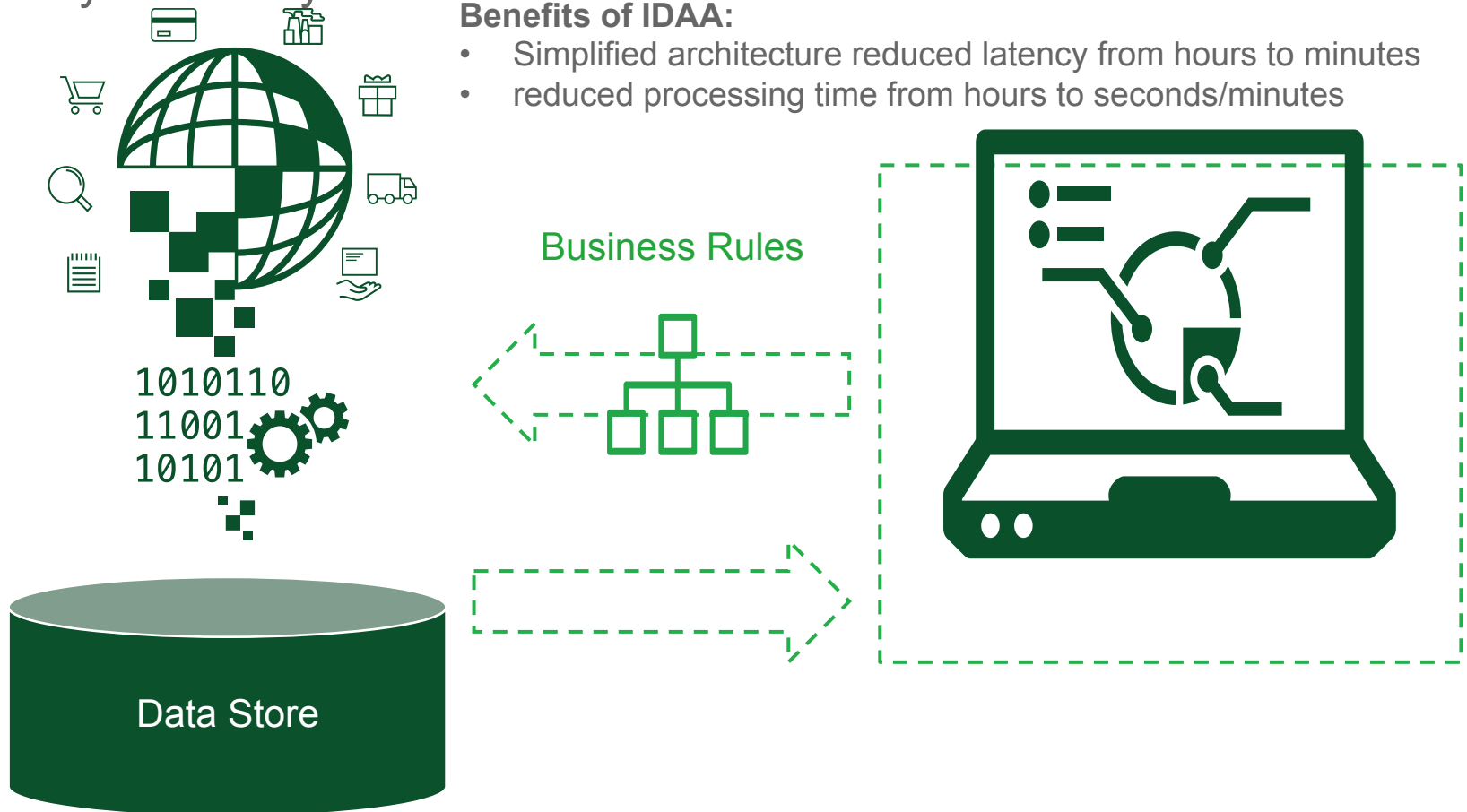
Using Accelerator-only tables and ELT logic in the Accelerator



Example

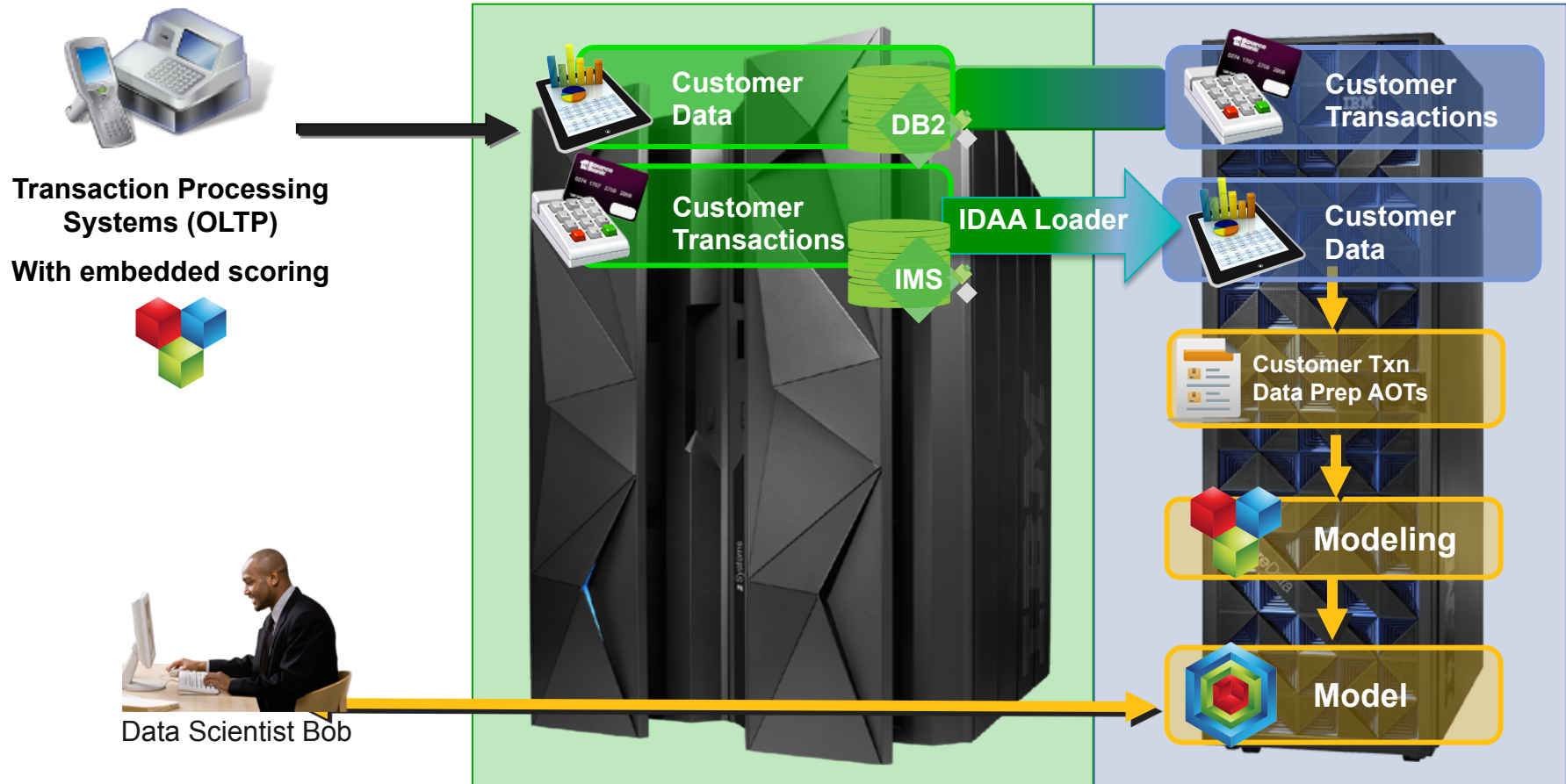
A Global Financial Services company has a core **transactional fraud detection/monitoring** platform.

Fraud analytics team require access to intra-day view of operational data to carry out analytics



In-database analytics

Data preparation (using AOTs) and SPSS modeling in the Accelerator

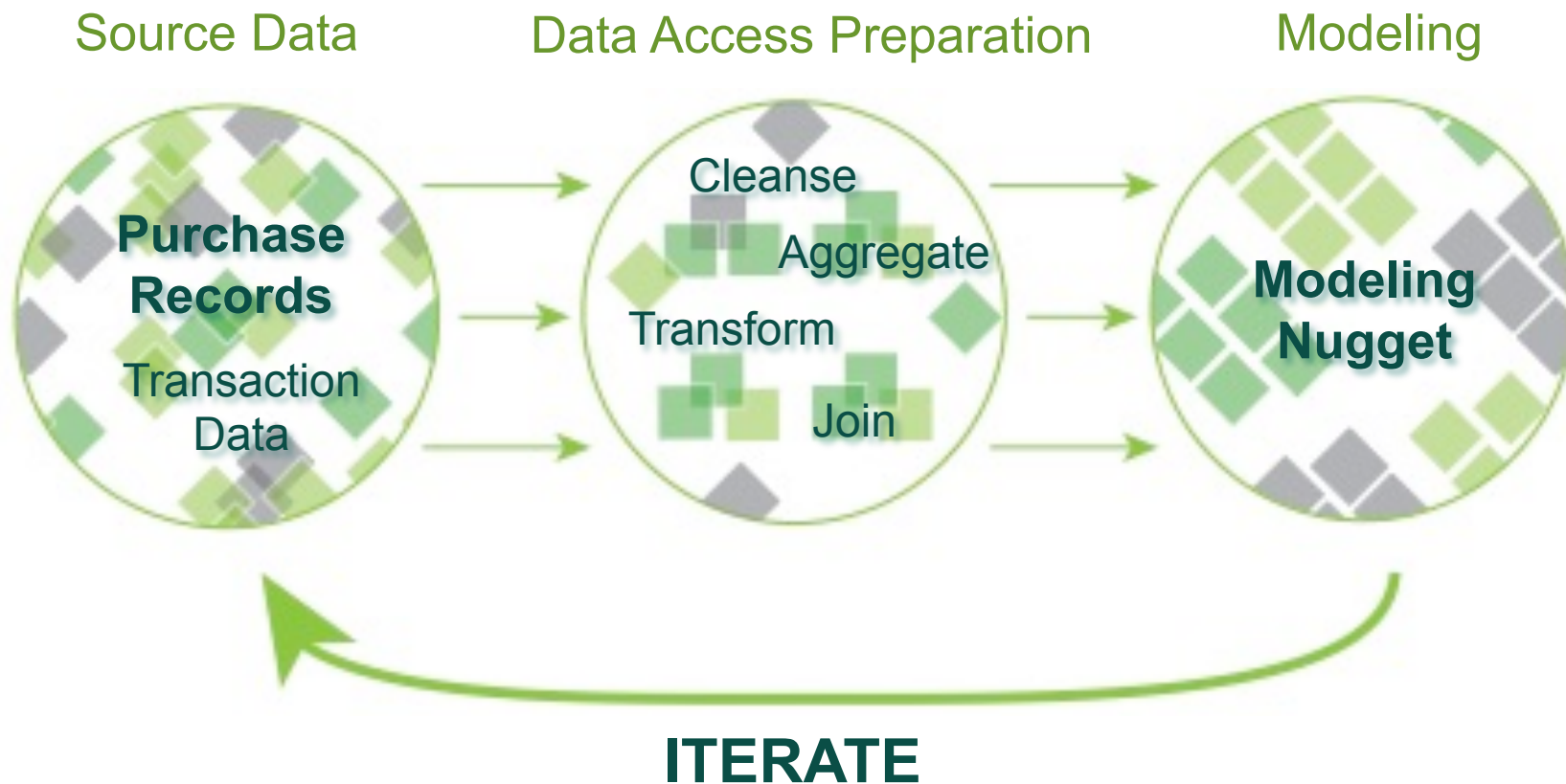


Data for transactional and analytical processing

Example

Better retail **customer insights** from loyalty program and suggested-sell based on customer's shopping cart

Dramatically reduce the time required to keep models current and improve accuracy by expanding the amount of data available for building those models.



Results of a retail use case study

Past

No Acceleration

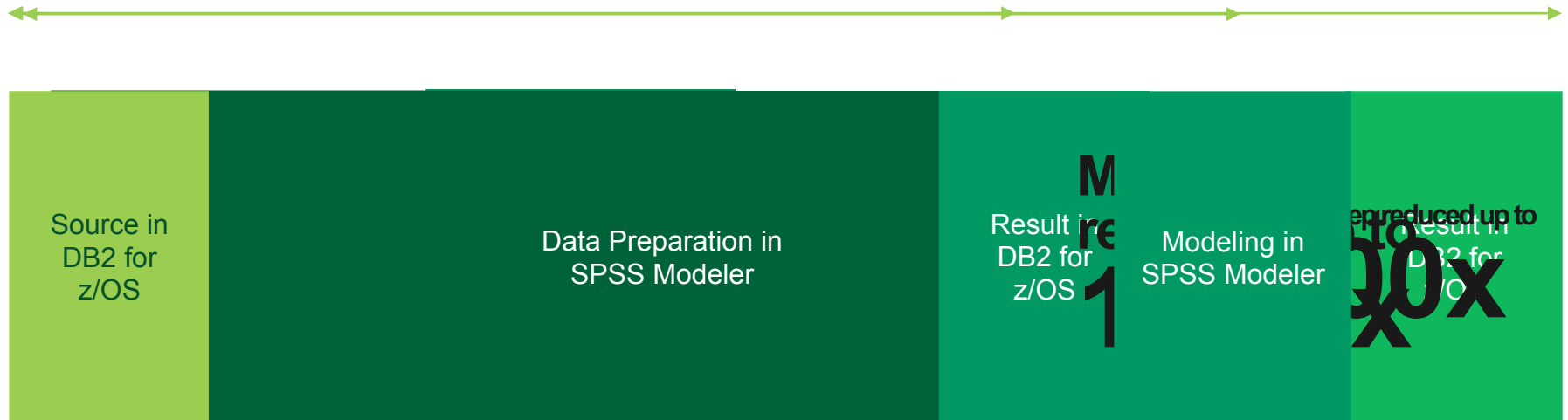
Today

Transformation
Acceleration (New)

Future

Modeling
Acceleration

Time



Benefit:

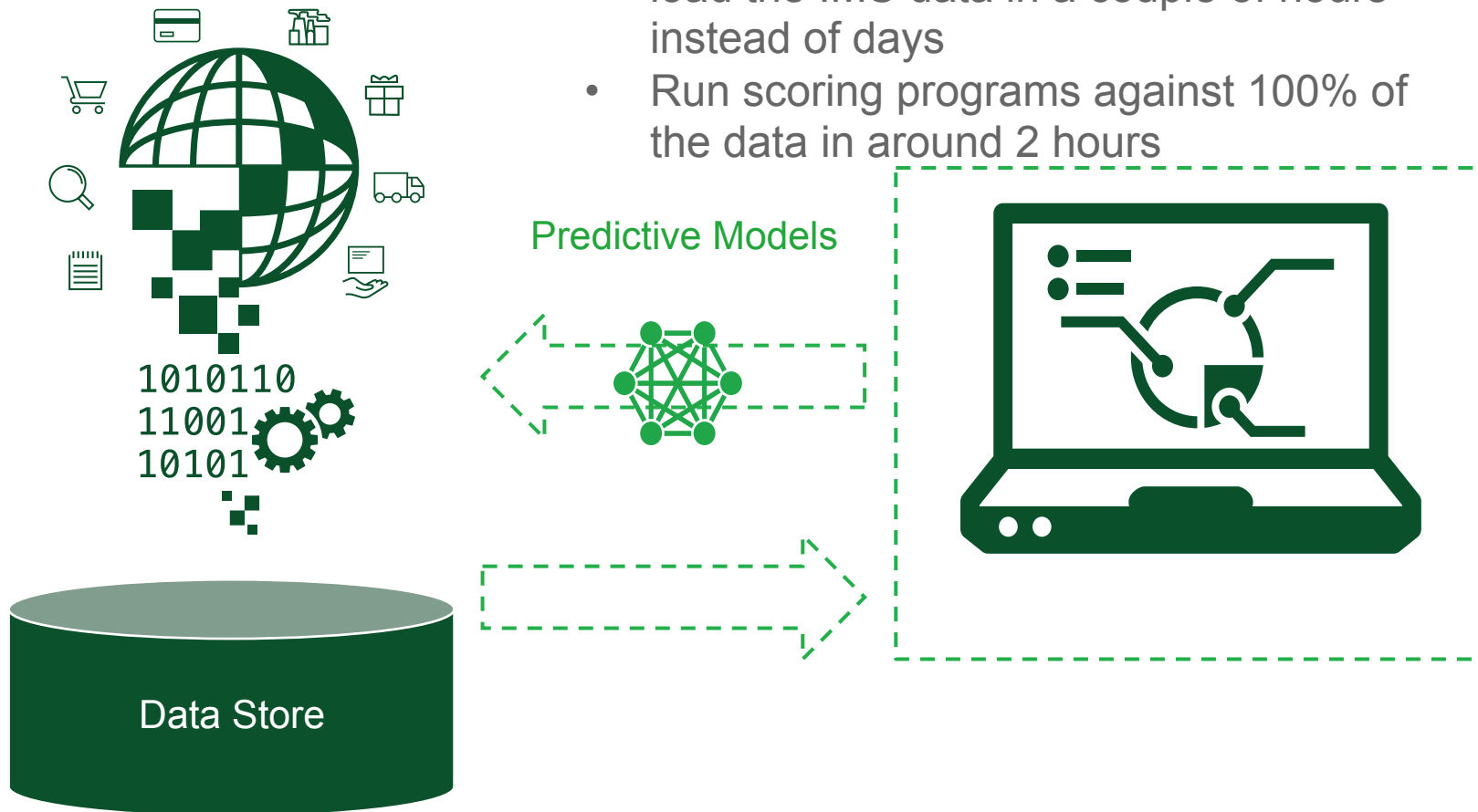
Improved accuracy of buying suggestions
reduced the turnaround time for model refresh from weeks to hours.

Example

Large North American insurance company needs more accurate **policy scoring** and better timing.

Benefits of IDAA and IDAA Loader:

- load the IMS data in a couple of hours instead of days
- Run scoring programs against 100% of the data in around 2 hours



Win the customer experience arms race

Integrate analytics with your transaction systems to compete in the Cognitive Era

Adopt a strategy that **analyzes data in place**

Drive **predictive intelligence** directly into
your core operations

Build on what you have, incrementally,
at your pace



