



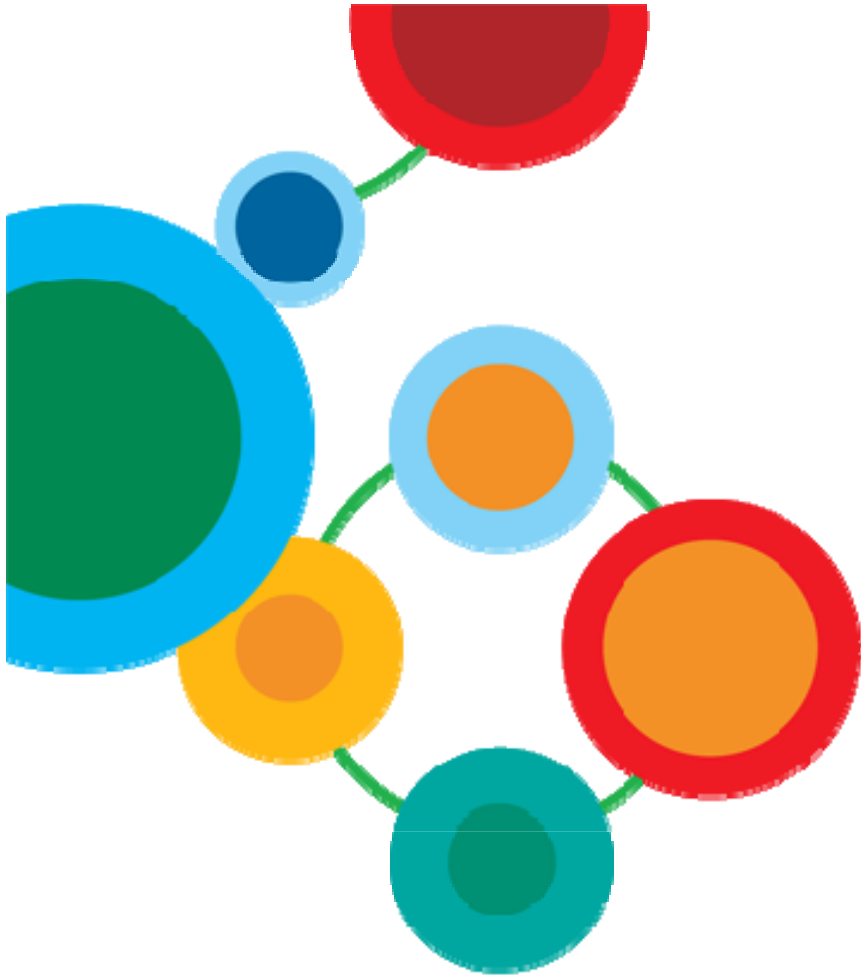
IMS with Cognos Operational Business Analytics

Session Number IMS-3602

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IBM Software

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Customers are telling us today ...

- Their current data warehouse and analytics strategy does not support real-time, operational access
- The existing data warehouse refresh cycle is too long for certain users and the information held therein is not detailed enough for operational use
- They have a significant investment in IMS and would like to integrate it within their overall data access infrastructure, not simply extract the IMS data to load elsewhere



All departments, all users, in all roles across the organization need access to business insights



Executives



Business Managers



Line of Business Manager



Business Users



Business Analyst



Financial Analyst

How are we doing?

Why?

What should we do next?



Real-time or historical; operational or strategic

Guided or self-service access and exploration...

Foresight using Statistical, and Predictive Analytics...

Common Business Model



Message Sources



Relational Sources



Application Sources



OLAP Sources

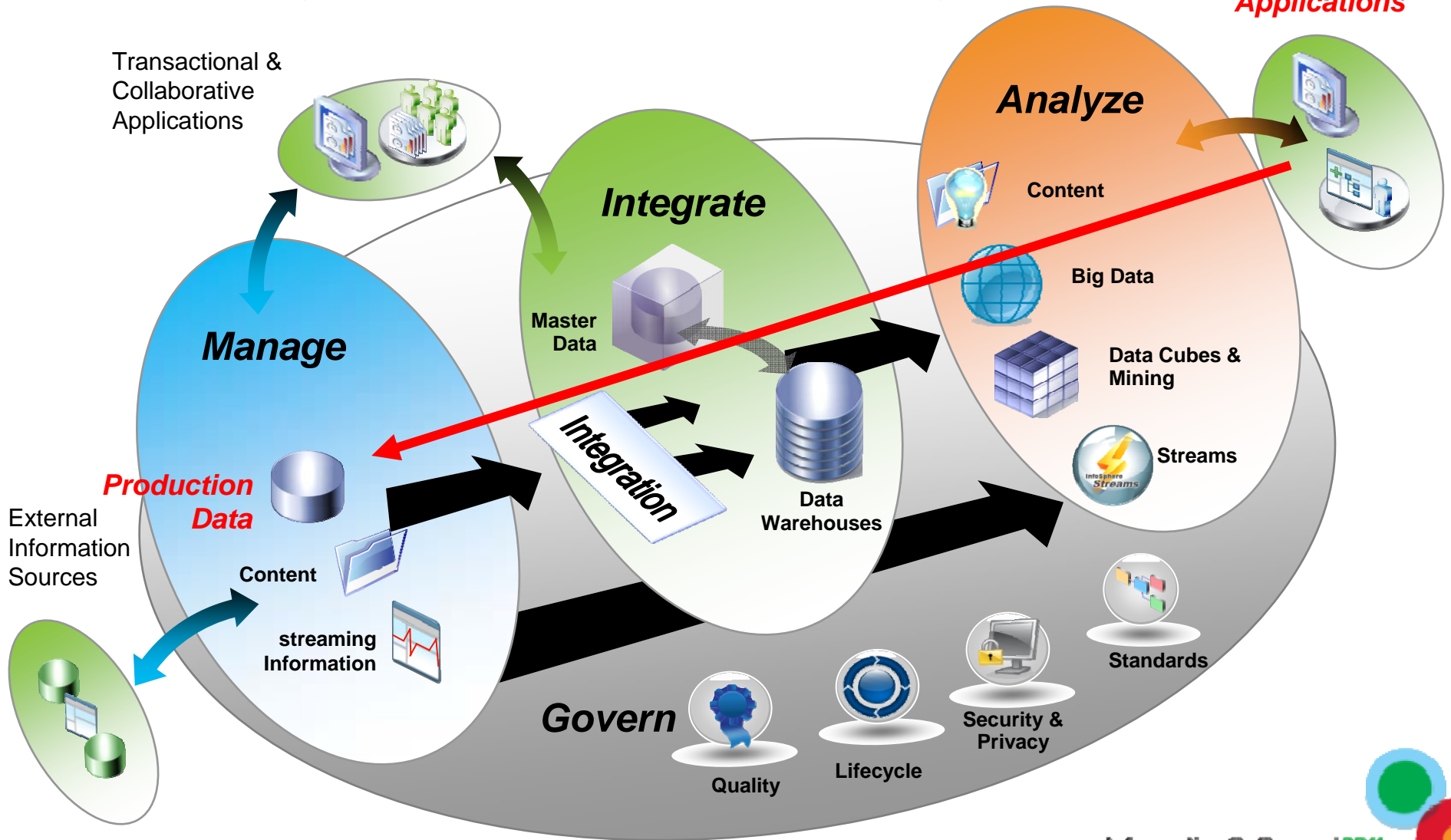


Modern and Legacy Sources



A modern enterprise data strategy & environment enhanced by Operational Business Analytics

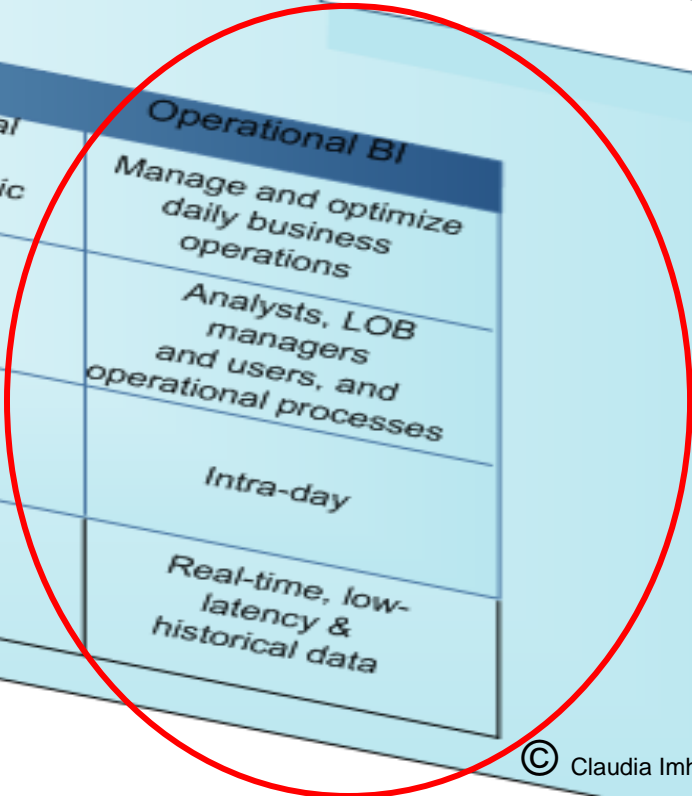
Business Analytics Applications





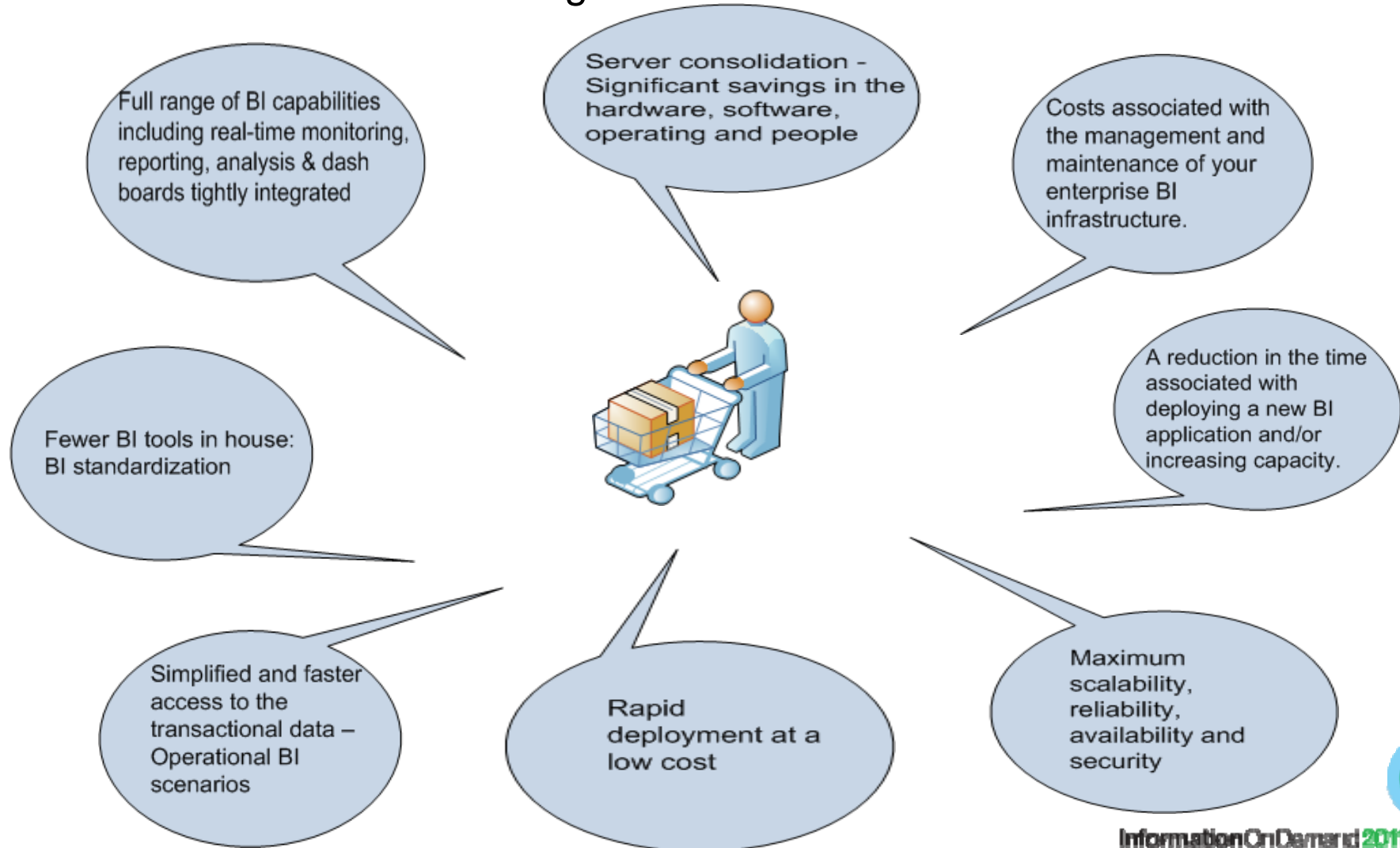
The Three Levels of Business Intelligence

	Strategic BI	Tactical BI	Operational BI
Business focus	Achieve long-term business goals	Manage tactical initiatives to achieve strategic goals	Manage and optimize daily business operations
Primary users	Executives & business analysts	Executives, analysts & LOB managers	Analysts, LOB managers and users, and operational processes
Time-frame	Months to years	Days to weeks to months	Intra-day
Data	Historical data	Historical data	Real-time, low-latency & historical data



Using Cognos for Enhanced Reporting and Operational BA

Simplifying the management and maintenance of your enterprise BA infrastructure.
 Customers want the following from their BI and DW infrastructure:



Reporting & OLAP



	2008 Q1	2008 Q2	2008 Q3	2008 Q4
Consumer Electronics	171,963,885.18	2,296,883.00	18,538,170.00	3,662,486.00
Home Theater	511,124,389.43	2,429,260.00	58,031,170.00	3,662,486.00
Video Products	10,008,438.84	1,000,000.00	5,128,750.00	1,078,333.00
Entertainment Media	96,067,534.37	1,524,380.00	2,369,444.30	923,133.00
Home Office	18,181,713.03	655,000.00	3,699,360.00	1,068,530.00
All Materials	333,260,134.82	18,434,270.00	96,366,814.30	13,425,988.00

■ Enterprise Reporting

- Supports multiple report types: Production, Managed, Ad-hoc, Financial, etc
- Operates from a single metadata layer
- Can be personalized and targeted
- Can be distributed via email, portal, MS-Office, search application and mobile device
- Can assist in the management and optimization of daily business operations
- Capable of reporting on real-time data
- Presents complex data in a business way so it is easy to understand

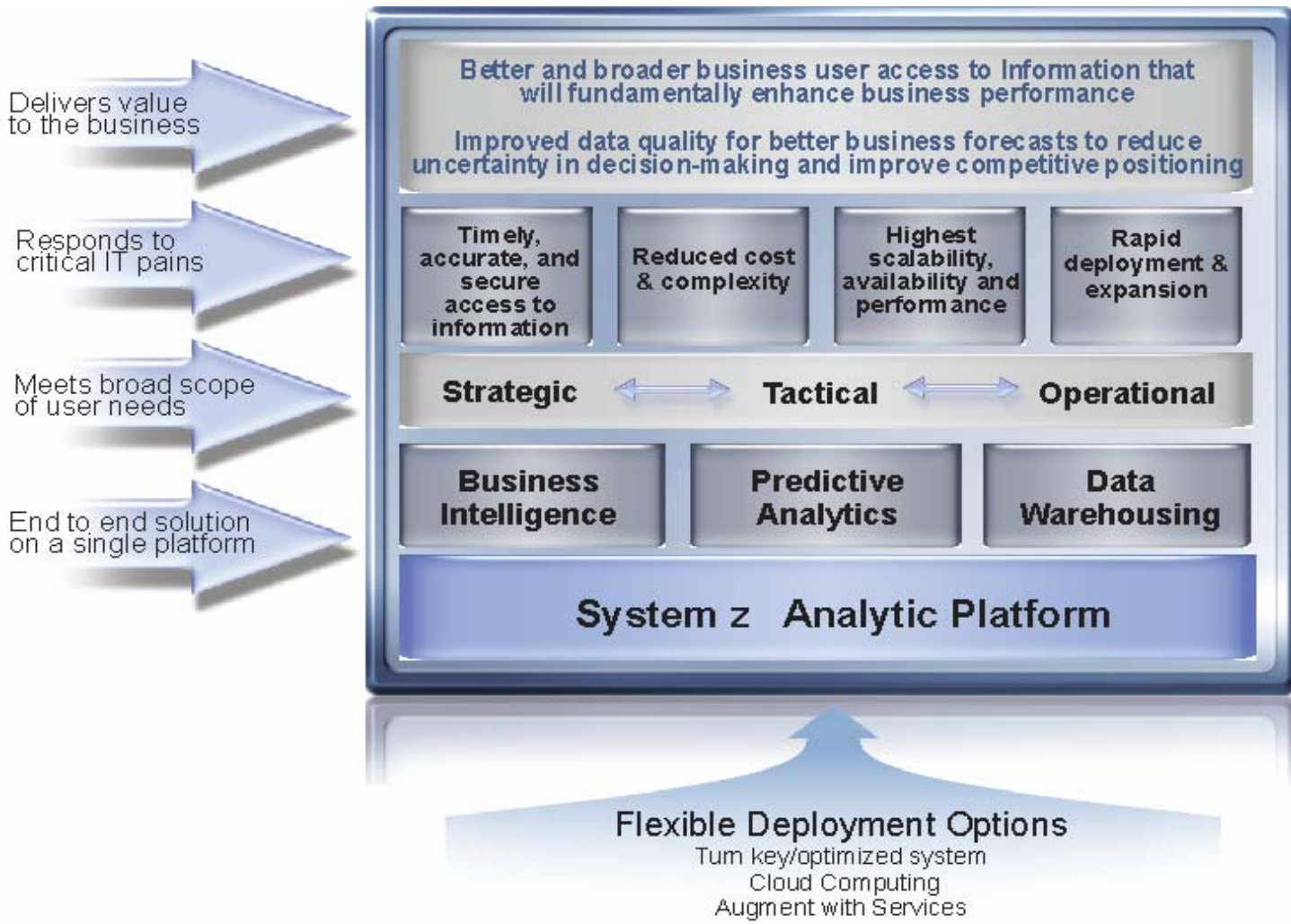
■ Analysis

- Enables the guided exploration of information that pertains to all dimensions of your business
- Moves from summary level to detail levels of information effortlessly
- Analyzes and reports against online analytical processing (OLAP) and dimensionally aware relational sources
- Gets to the “why” behind an event or action to improve business performance.
- Identifies potential problems and recognizes business trends



A new option ...

IBM Business Analytics and Data Warehousing on System z



The Value of Using Cognos for Enhanced Operational BA

Operational Business Analytics

- A type of BI that helps drive and optimize business operations on a daily basis
 - Extends the use of BI to a much wider user audience
 - Enables more timely business decisions; in relation to real time or right-time BI Processing
 - Allows business users to report on, analyze and optimize business operations
 - Reduces the time between the discovery of problems or opportunities and taking action on them

Cognos 10 and Operational BI

- Cognos Real-Time Monitoring
- Offers operational dashboards for real time monitoring of key performance indicators and operational metrics across different data sources

The Solution

Cognos with IMS 11 – JDBC access to Operational information

- IMS is often the ‘hub’ for data within an enterprise
 - Manages data that reflects the most current state of the business

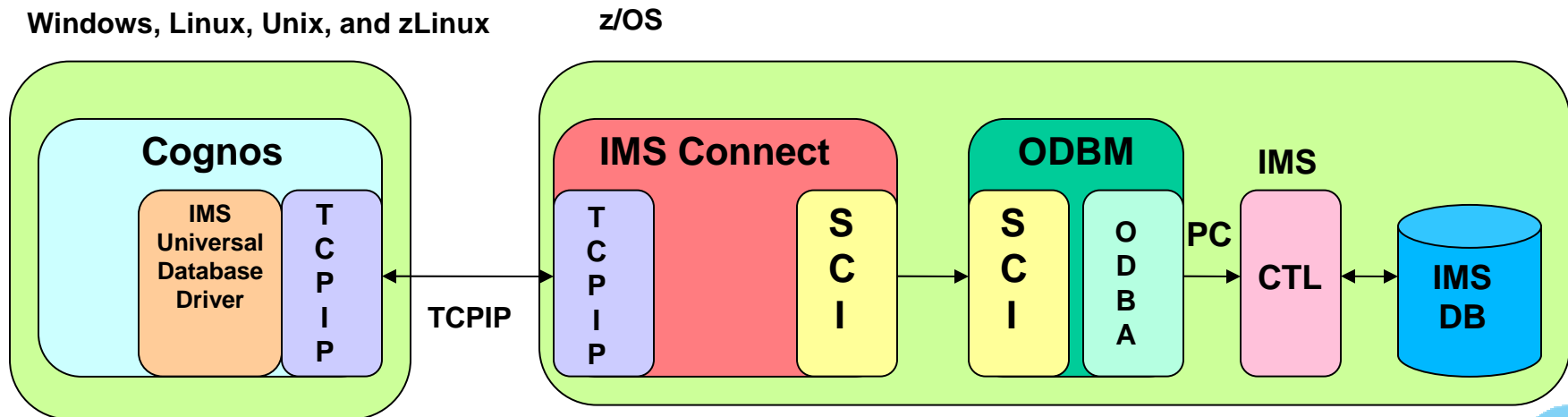
- Before IMS 11, often difficult to directly access IMS data
 - No built-in ad hoc query capabilities in IMS
 - Standard tools often did not support hierarchical data; left to write own interfaces and reports or had to purchase bridging tools
 - Must be skilled in IMS to integrate with IMS and write reports

- Most installations periodically copy IMS data to a relational store to run reports
 - They then only have access up to the point of copy, not current business state

IMS Integration with Cognos

IMS V11 Open Database:

- IMS V11 allows distributed access over TCP/IP using the IMS Universal Database Driver (JDBC)
- IMS Connect and Open Database Manager now work together as a DRDA server for IMS data
 - Shipped with IMS V11 – requires System Programmer for initial setup



Using Cognos with IMS

Discovering New Business Value in Existing Data

Cognos Data Source Supports:

- **Generic JDBC Driver**

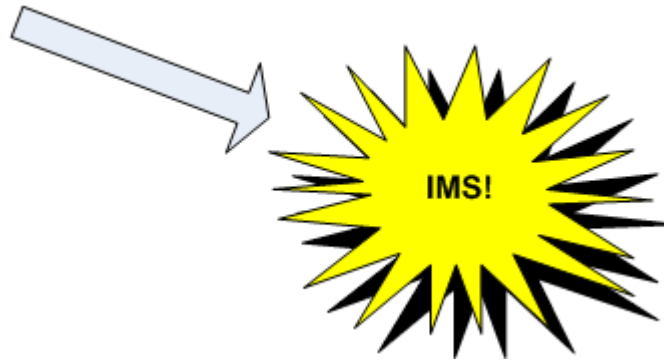
- DB2

- Oracle

- Informix

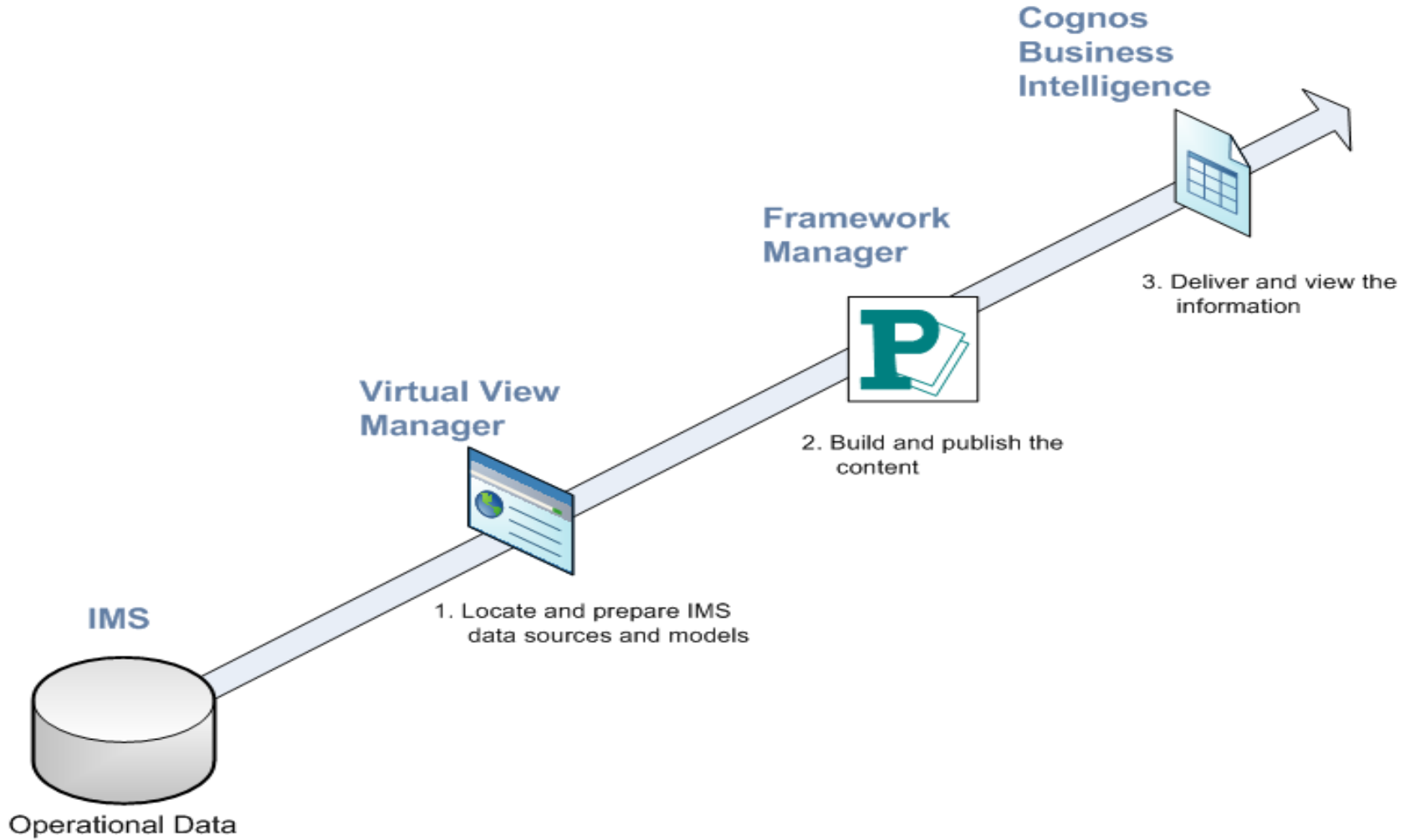
- Sybase

- MS SQL Server



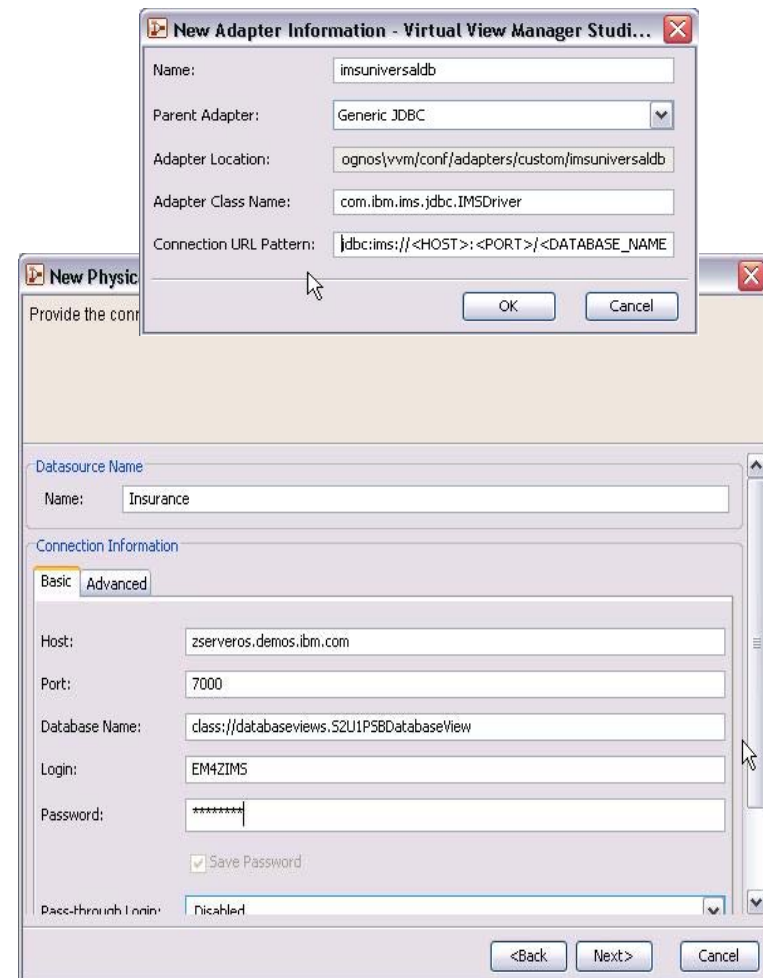
IMS Integration with Cognos

Three Steps to Building Cognos Applications with IMS



Step 1: Setup Virtual View Manager (Data Tier)

- Stop Virtual View Manager
- Copy IMS JDBC driver (imsudb.jar) and IMS database views* to:
 - \cognos\vvm\conf\adapters\ims
- *Database Views are generated using the DLIModel utility
- Start Virtual View Manager
- Add New Adapter
- Add New Data Source
- Publish IMS Segments (Tables)
- APAR PM12893
 - Generic JDBC support for Data Source Explorer and Cognos
 - July 31, 2010



Step 2: Define Meta Data (Framework Manager)



- Import the ODBC Data Source(s)
- Configure the Table relations
 - Required for usage of joins in Cognos
- Publish the Package for use in Cognos

Relationship Definition - CUSTROOT <-> POLYSEGM

Relationship Expression | Relationship SQL

Name:
CUSTROOT <-> POLYSEGM

Query subject:
CUSTROOT

Query subject:
POLYSEGM

New Link

HOUSENAME
DATEOFBIRTH
POSTCODE
CUSTOMERNUMBER
CUSTOMERDATA
HOUSENUMBER
LASTNAME
FIRSTNAME

CUSTROOT_CUSTOMERNUMBER
BROKERID
ISSUEDATE
POLICYNUMBER
BROKERSREFERENCE
LASTCHANGED
POLICYTYPE
EXPIRYDATE
COMMISSION
KWOTE

Cardinality: 1..1 Operator: = Cardinality: 0..n

Relationship impact:
Each POLYSEGM has one and only one CUSTROOT.
Each CUSTROOT has zero or more POLYSEGM (outer join).

Expression:
CUSTROOT.CUSTOMERNUMBER = POLYSEGM.CUSTROOT_CUSTOMERNUMBER

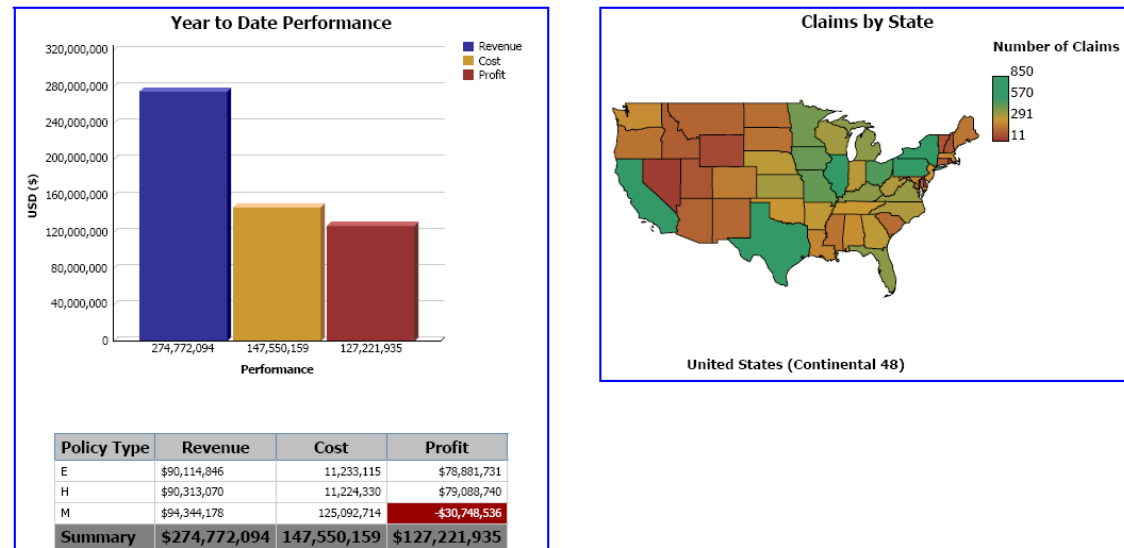
OK Cancel Help



Step 3: Generate the Reports (Application Tier)

- Open Report Studio (Cognos 10 interface has been enhanced)
- Select the published Package
- Drag the Data objects into the Widgets provided by Cognos

Performance Dashboard



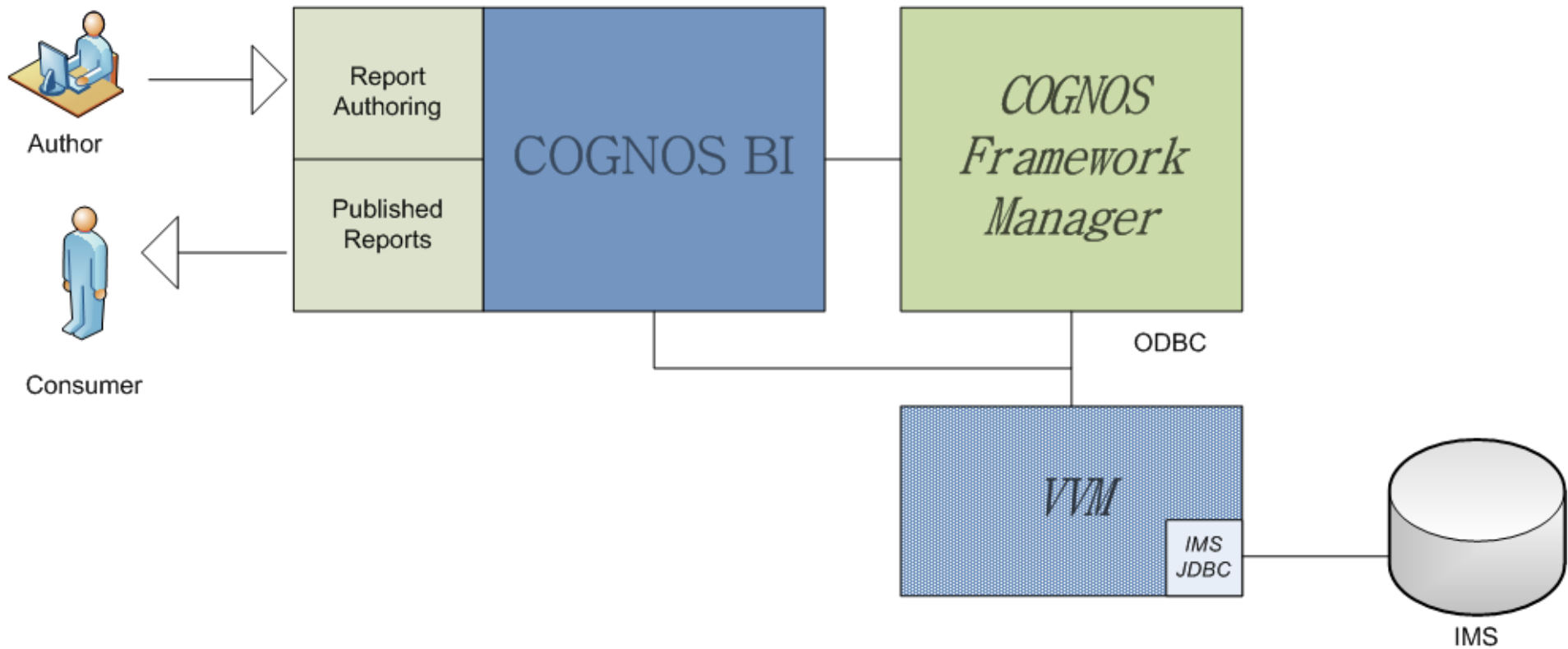
[Click to Analyze by Month](#)



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IMS Integration with Cognos

Topology





Cognos and IMS Examples

The Application:

- An insurance claims processing application written in a combination of different programming languages (COBOL, PL/I, JAVA).
- CRUD functions access IMS DBs using DLI calls

The IMS DB contains the following data:

- Customer Information
- Policy General Information
 - Motor Policy
 - Endowment Policy
 - House Policy
 - Policy Claim

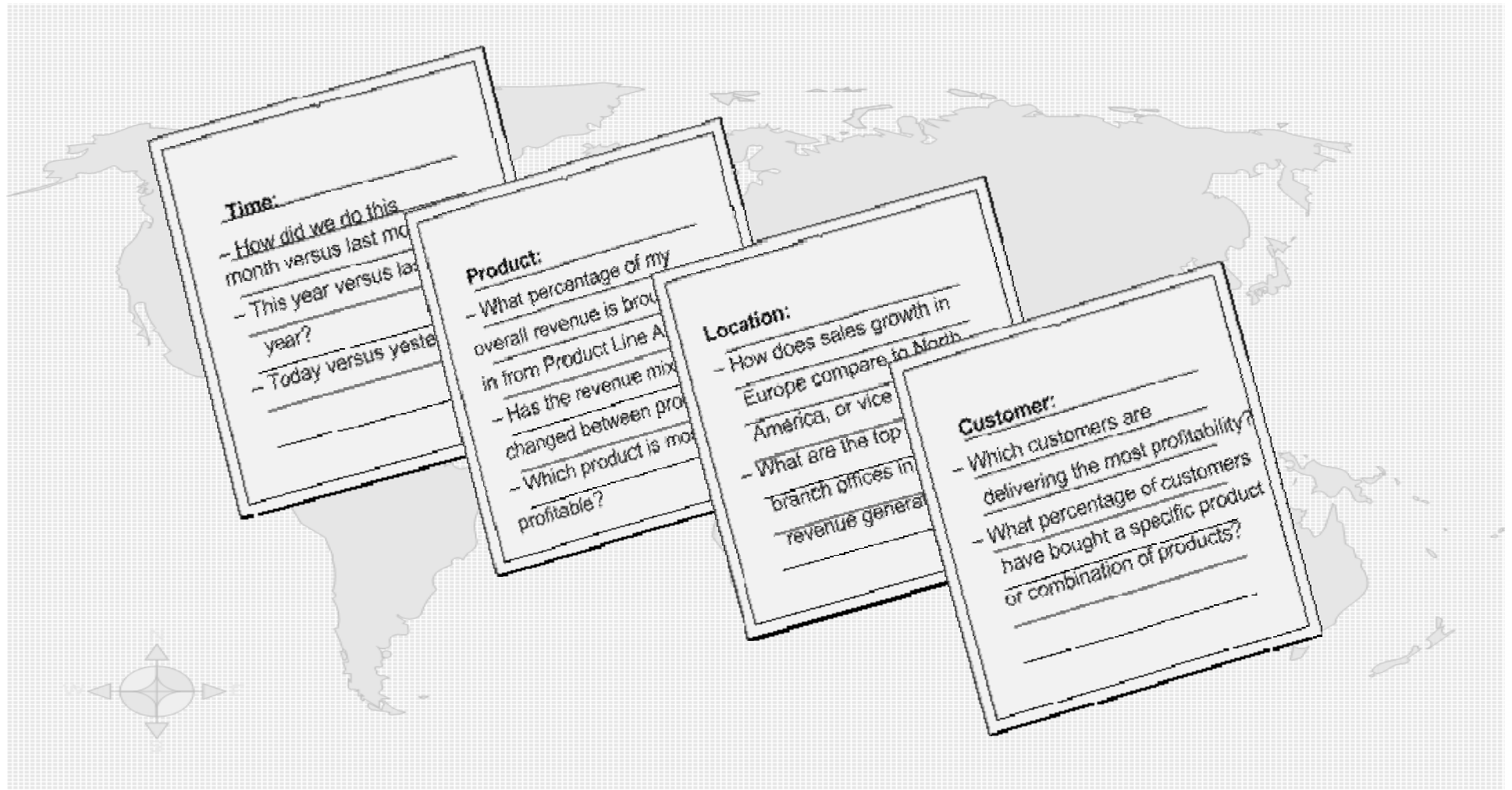
Customer No	Customer Name	Date of Birth	Address
000000001	Good Irvin	1975-08-10	127 Home Sweet Home, 90123
000000002	Diane Davies	1958-09-02	61 Dun Roamin 41239
000000003	Chris Evans	1967-09-26	46 Rose Cottage 92111
.....

Customer No	Policy No	Policy Type
000000001	000000001	Endowment

Policy No	Fund Name	Sum Assured	Term
000000001	LOADSADOSH	\$15000	10

Using Cognos with IMS

Provides answers to commonly asked business questions



Cognos and IMS Examples

Scenario 1:

Accessing detailed information regarding customer accounts

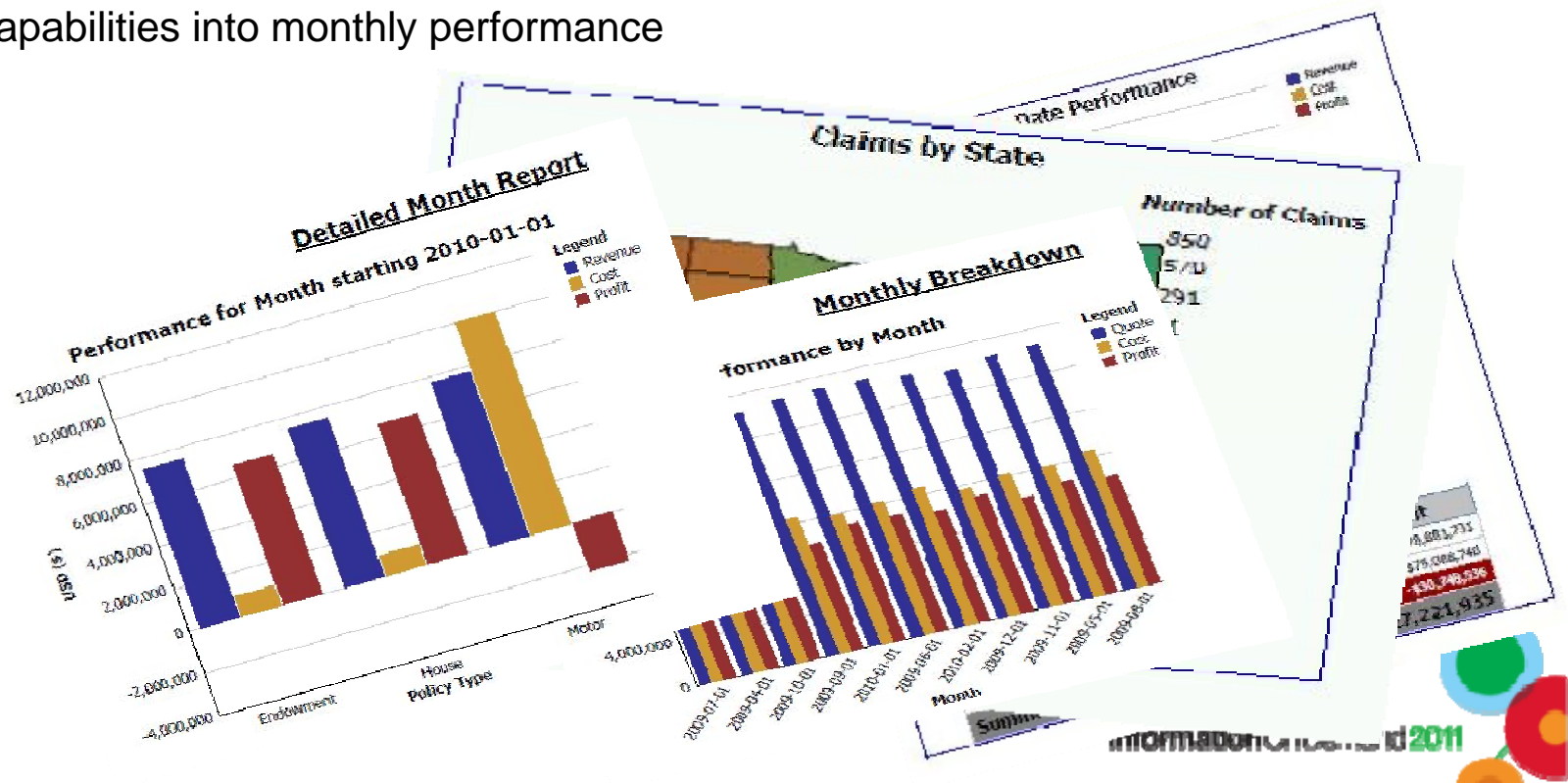
- View basic account information regarding policies with the company
- Drill down capabilities into policies and claims

Cognos and IMS Examples

Scenario 2:

Obtaining a high level overview of key performance measures essential to the organization

- Year to date performance of the insurance firm based on revenue, costs, and profit
- A nation map that displays the number of claims files by state during the current fiscal year
- Drill down capabilities into monthly performance



Cognos and IMS – Summary

Extending your Reporting and BI capabilities to IMS provides:

- *Real-time access to IMS data for report generating*
- *Advantages of creating and managing business-related metadata and translating it into visual presentations*
- *Knowledge to help decision makers know sooner, understand faster, and react more quickly than competition*
- *Ability to compare performance across dimensions to spot trends and anomalies over time*

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from your IBM System z team.

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on the casino level across from the Mandalay Bay Hotel.

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and Z pin
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