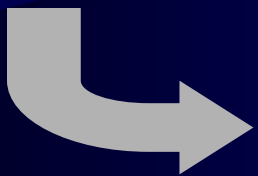# Basel II:
Risk Adjusted Performance Management

Presented by:-

Deepak Pareek

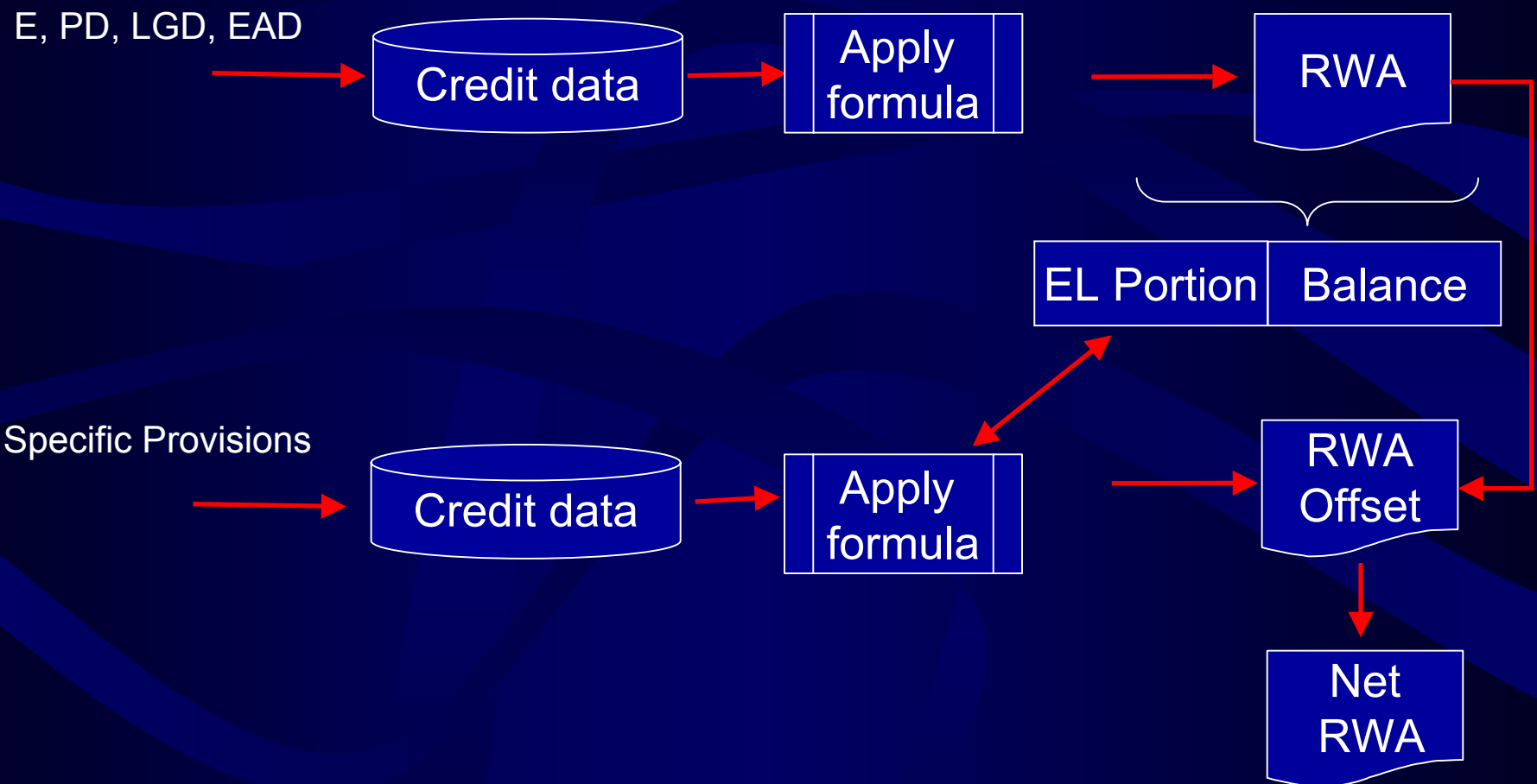# Three things we need for Basel II:

- Data (lots and lots of it!)
- Some models to manipulate the data, and
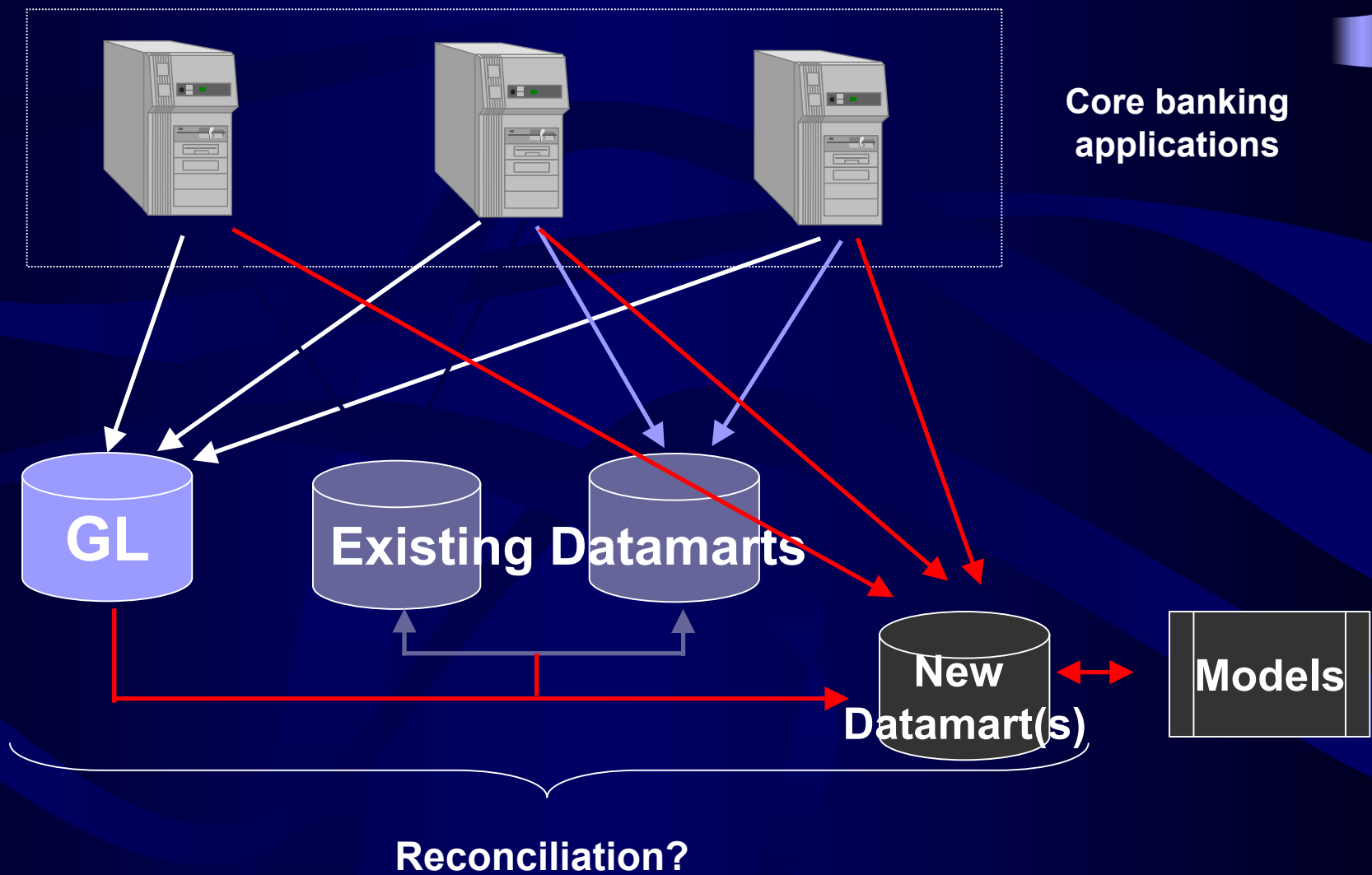- A way of reporting that data and the resulting calculations

**Can we do this in an integrated fashion?
- "Single source of truth"?**

Re-use of derived data – a Basel II example

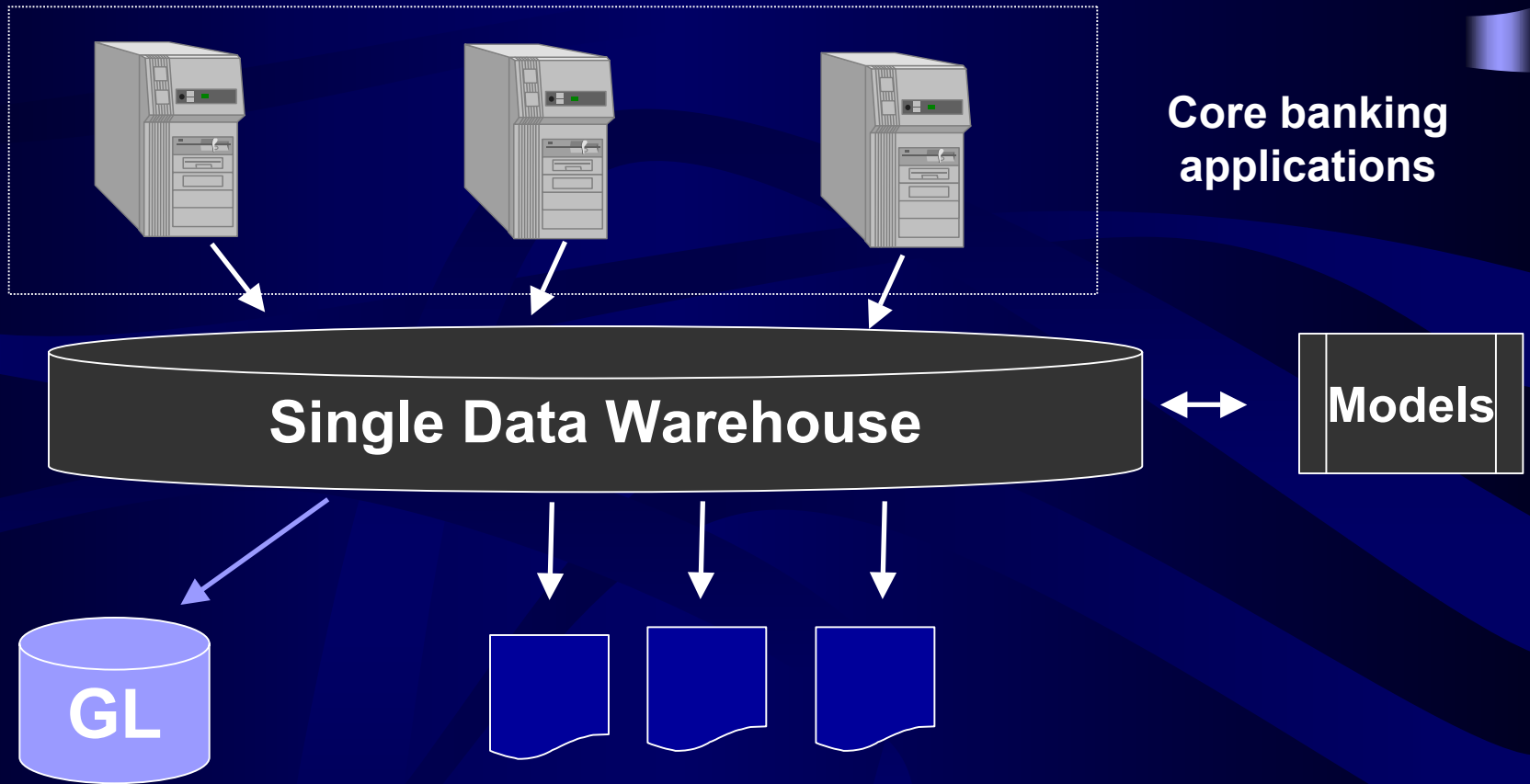## EG: Treatment of provisions under IRB approach

E, PD, LGD, EAD → Credit data → Apply formula → RWA

RWA → { EL Portion | Balance }

Specific Provisions → Credit data → Apply formula → RWA Offset

EL Portion ↔ Apply formula

Balance → RWA Offset

RWA Offset → Net RWA

Traditional approach to new MIS requirements

Core banking applications

GL

Existing Datamarts

New Datamart(s)

Models
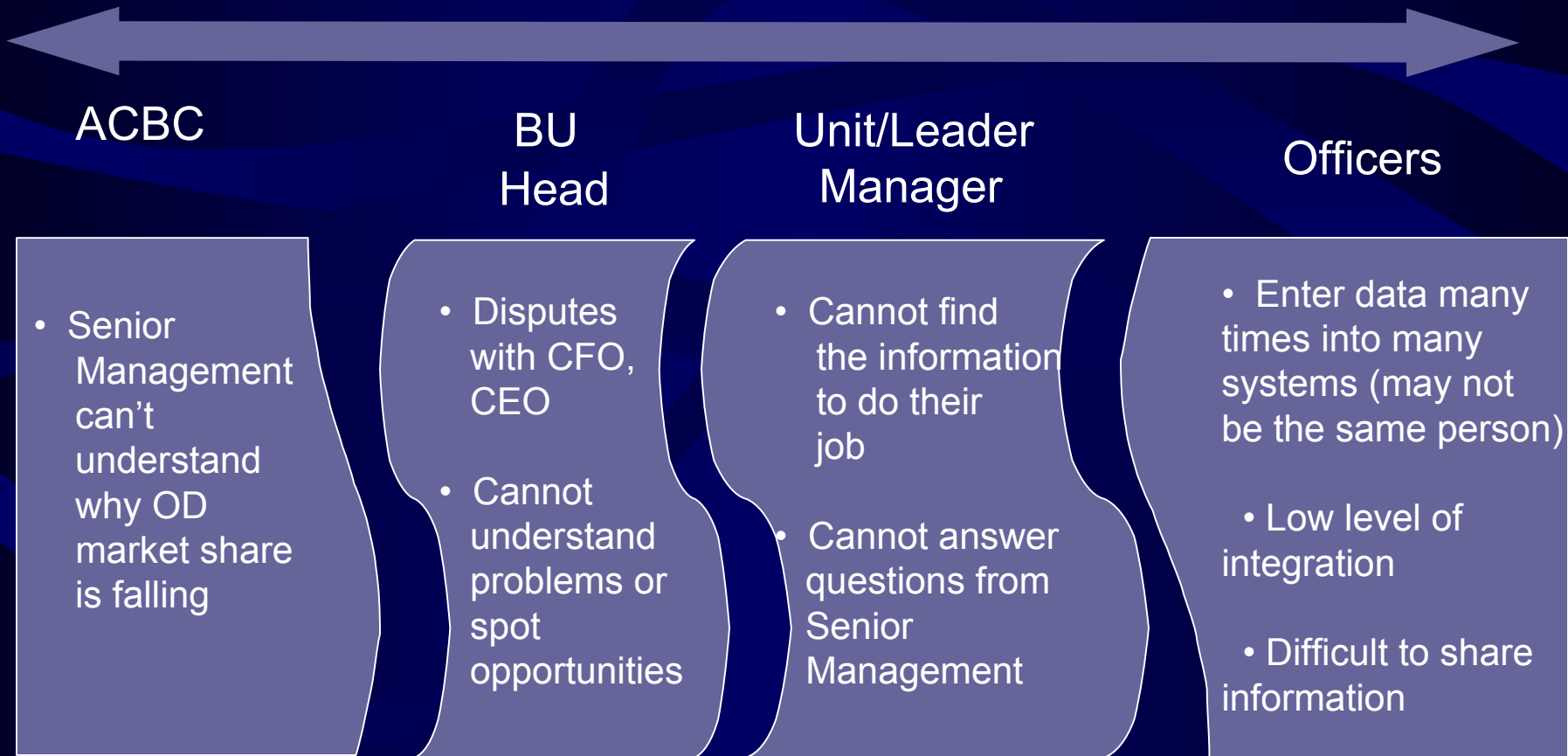
Reconciliation?

Ideal Approach

Principles

- Each piece of data is collected once, and only once
- Models to derive data attached to data warehouse, not elsewhere
  - E.g. Funds transfer pricing
  - Cost allocation
  - Risk capital calculations
- Derived data written back to the data warehouse

ACBC Case: Legacy Situation

- Historically data was an issue which limited the Bank's:
    - Operational Effectiveness
    - Organisational Effectiveness

EG: "Overdraft (OD) Market share falling"

ACBC
- Senior Management can't understand why OD market share is falling

BU Head
- Disputes with CFO, CEO
- Cannot understand problems or spot opportunities

Unit/Leader Manager
- Cannot find the information to do their job
- Cannot answer questions from Senior Management

Officers
- Enter data many times into many systems (may not be the same person)
- Low level of integration
- Difficult to share information

"What's in it for me?"

- FinaTech offered an integrated application and data solution:
  Oracle e-Business suite + Global Data Warehouse (GDW)

| CFO, CEO	BU Head	Unit/Leader Manager	Officers
Integrated view of the whole organisation	The "big picture" for a business unit can be seen with the "drill down available for individual components	Managers can access key operational information about their units	Data automatically collected from the source system once and stored in the GDW
Strong correlation between management and financial information			Staff can extract the information they need from the GDW

"Plug and Play" architecture

New core banking applications

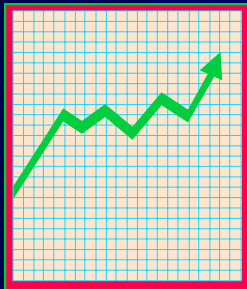**AMB banking applications**
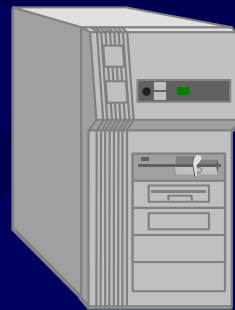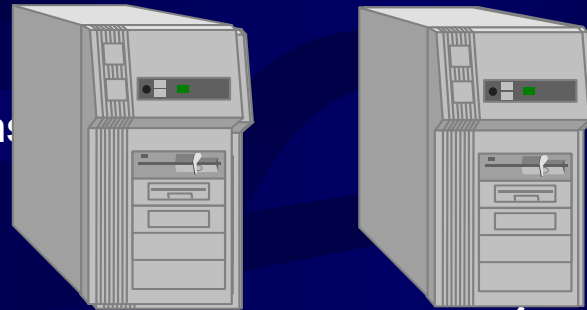
New GL, MIS etc

Scope

A program of work to deliver new functionality for ACBC in :

- ➢ General Ledger
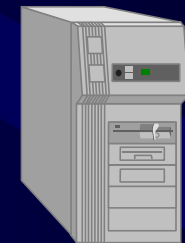- ➢ Management Information
- ➢ Human Resources
- ➢ Data Warehouse

General Ledger

Management Information

Human Resources

Data Warehouse

Management Approach

- Manage as a **Program** to reduce the overall risk and cost of the projects

- Cost reductions in Licence fees, consulting costs and Hardware realised

- Reduce risk and cost by pooling IT resources

- Single point of contact with Vendors

- Management of Project Interdependencies

Key Principles/Design Decisions

- Strong Business Sponsorship/Involvement

- Flexibility to manage interfaces through middleware

- Minimal development

- No customisation (alter core functionality)

- Use Oracle Integration wherever possible
  - Single E-business suite instance
  - Single E-business suite database
  - Shared server infrastructure

Program Objectives

- Deliver functionality for each system

- Manage synergies between projects

- Manage inter-dependencies

- Minimise business interruption

Selection Process

The Finance and HR departments assisted by **FinaTech**, independently considered a number of Application Vendors including:

- SAP
- Oracle
- Peoplesoft

The following Integrators were considered:

- Oracle
- IBM

The following Advisor & Consultants were considered:

- PWC
- **FinaTech**

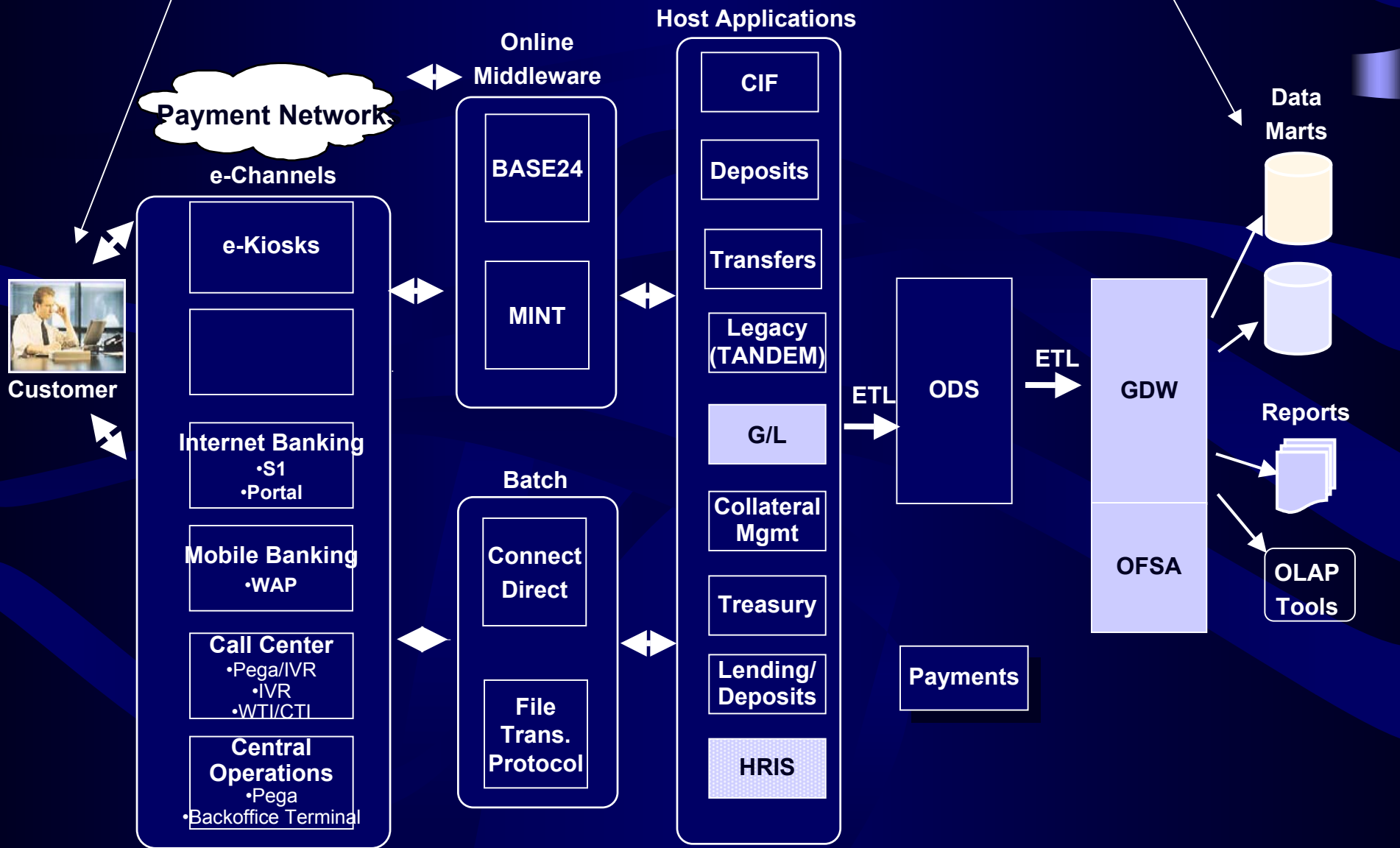FinaTech chosen to roll out strategy and blue print.

Oracle was chosen Independently for HR and Finance departments

IBM & FinaTech chosen to integrate HR and General Ledger

Oracle consulting chosen to integrate OFSA and assist with the implementation of the Global Data Warehouse (GDW)
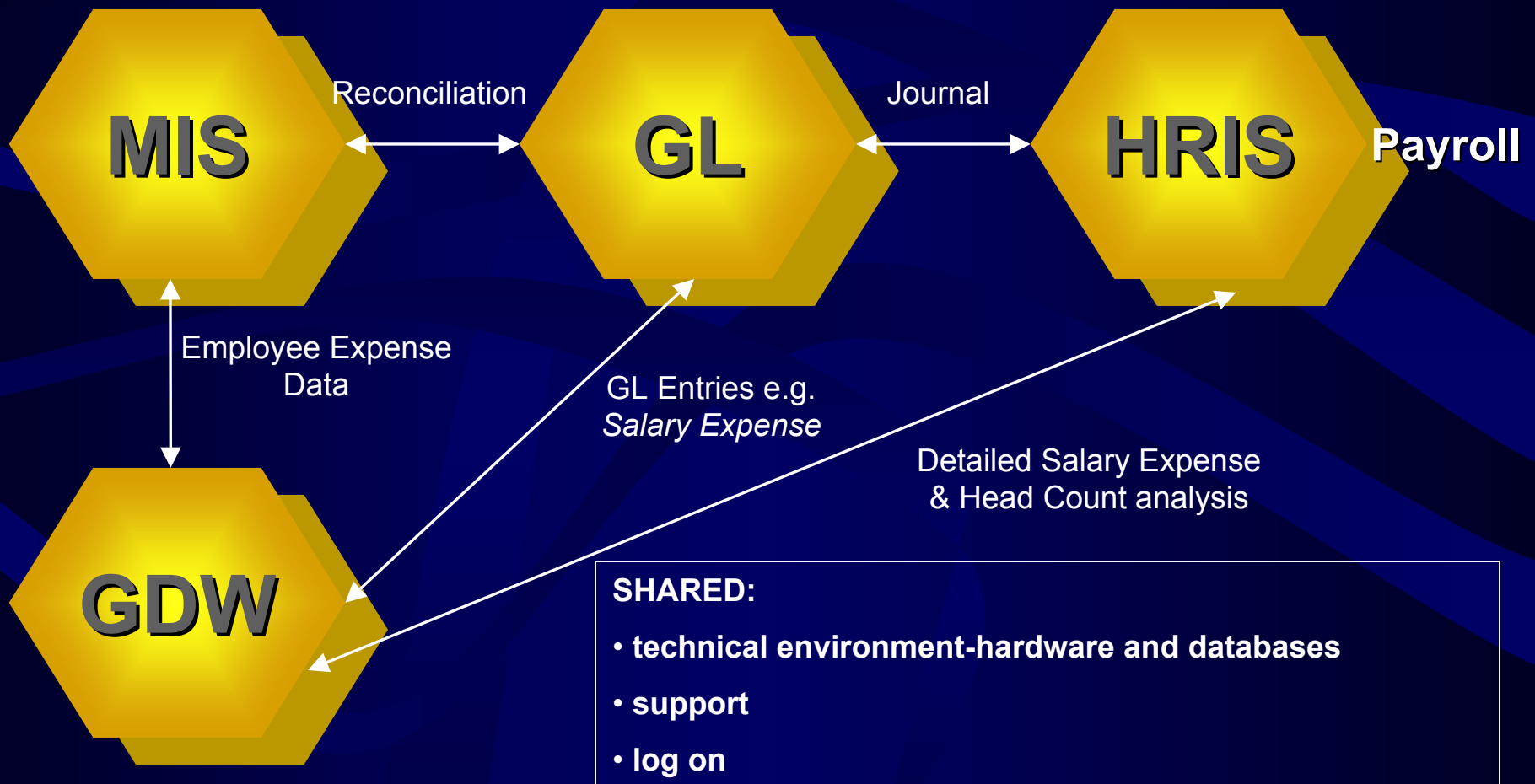
Applications Scope

ORACLE E-Business Suite & OFSA

- HR/GL use the Oracle e-business suite technology
  - Oracle Financials
  - Oracle HR

- MIS use Oracle Financial Services Application (OFSA)

Integrated Systems

Oracle provides integration across the different applications

MIS — Reconciliation — GL — Journal — HRIS Payroll

Employee Expense Data

GL Entries e.g. *Salary Expense*

Detailed Salary Expense & Head Count analysis

GDW

SHARED:

• **technical environment-hardware and databases**

• **support**

• **log on**

General Ledger

PBL General Ledger

• **Different chart of accounts are used within ACBC Group**

• **Dual-currency accounting in SGD and USD**

• **Business Units send journal vouchers to Group Accounts for processing**

• **Not possible to automatically consolidate and report in a Group wide basis**
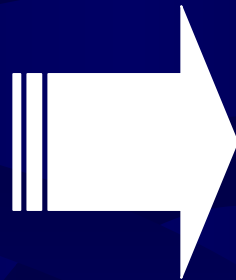
Oracle General Ledger

• Common chart of accounts across all books and entities in ACBC Group

• Multi-currency accounting including revaluation and translation

• Business Units enter journals into the system

• Self service reporting for Business Unit reports

• Automatic Group wide consolidation of Accounts

Human Resources

- Implemented new payroll system integrated with GL

- New Human resources Information system. Tracks staff details, leave etc.

- Training Administration

- Tax reporting

MIS

Oracle MIS

- **3 dimension reporting - organization, customer & product**
- **Customer level profitability**
- **Improved transfer pricing, eg cash flow**
- **Risk adjustment at customer level**
- **More self-service**
- **Improve efficiency**
- **Support implementation of EVA**

'Live' → Sep 02

Interface with Oracle GL → Jun 02

Mar 02

Main ACBC Bank Products → Dec 01

Sep 01

Oracle contract signed → Jun 01

Past MIS System

- **1 dimension reporting- organization only**
- **Limited individual customer profitability reporting**
- **Issues:**
  - **Manual processes**
  - **Insufficient granularity**

Data Warehouse Strategy

- **A Global Data Warehouse provides accurate, complete, consistent and timely data based on a set of data definitions and business rules (in a corporate data directory)**

- **ACBC Global Data warehouse strategy**
  - **Builds a GDW from proven OFDM and TCA data models**
  - **Provides for different data dimensions, timeliness and details that will meet the data analysis requirements of the business units**
  - **Ensures consistency via data reconciliation within the source systems**

- **Delivery strategy**
  - **Decommissioning of the data marts are phased out**
    - **To manage risks**
    - **To synchronise with the implementation schedule of the source systems**
    - **To give users time to switch to the new GDW**

- **Investment to build capability staged with business need and business case**

Road Map

Feb 2003 -

Enhanced performance Metrics. E.g.. Balanced score card EVA RAROC

Sept 2002 - Feb 2003

- •Integrate Procurement
- •Global MIS

W **i Procurement**
W **MIS Malaysia**
W **GDW Phase Four**

Apr 2002 - Oct 2002

- •Integrate Global GL
- •Integrated Financial and HR functions

W **GL Malaysia + OS Branches**
W **AP/FA**
W **Budget & Planning**
W **GDW Phase Three**

Jan 2001 - June 2002

- •MIS for ACBC Group
- •HR Self service for ACBC staff (including KTB)
- •Enhanced GDW

- MIS ACBC (scope 3 & 4)
- HRIS self service
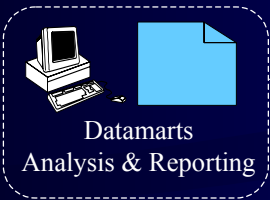- HRIS/Payroll AMB staff
- GDW Phase Two

- •Integrated HR/Payroll Database
- •Multi currency GL
- •Distributed Journal entry

- •MIS for ACBC H.O
- •Integrate MIS with GL
- •Base GDW

- ✓ GL BOS/ACBC
- ✓ MIS ACBC (scope 1 & 2)
- ✓ HRIS/Payroll ACBC
- ✓ GDW Phase One

Operational Effectiveness

Organisational Effectiveness

Integrated Management & Control

Sourcing/Decommissioning Roadmap

ONE SINGLE SOURCE OF TRUTH

Sourced From

Decommission

Datamarts Analysis & Reporting

SUN F6800

GDW

(Phase 4) Risk (ALMR)

SUN F6800

GDW

ALMR
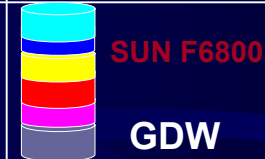
(Phase 3) Credit Risk Activity Based Costing

SUN F6800

GDW

ABC & CDB

(Phase 2) Marketing

SUN F6800

GDW

CKDB

(Phase 1) MIS

SUN F6800

GDW

SUN ULTRA

Mktg

Profit

EDW   CKDB

"LEGACY"

ODS   GDW

ALMR   CDB   ABC   CKDB   EDW

ODS
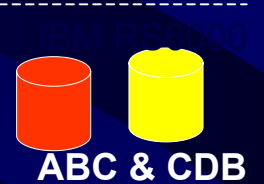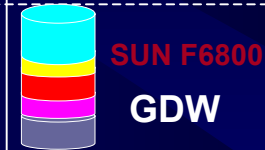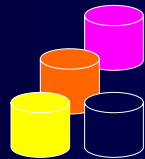
Critical Success Factors

- Executive commitment

- Change Management

- Integrated Approach

- Vendor Independence

- Phased implementation with a focus on intermediate deadlines

- FinaTech bridging the gap between Business Goals and Technical Implementation

Summary

- **Organised as a multi-project program**
- **Flexibility to change interfaces as inter-linked systems changed**
- **Implementation of broad business functionality across a consistent technology platform**
- **High level of integration between applications in the platform**
- **"evolutionary" vs "revolutionary" replacement of legacy systems**

Lessons for Basel II

- Build a "plug and play" architecture
- Integrate all data into data warehouse
  - "single source of truth"
  - Data is collected once, and only once
- Incremental approach to implementation
  - Standalone Datamarts to cover current/immediate needs
  - Gradual backfill of Datamarts into GDW
- Models and calculations not hard-coded into applications
  - Store and share derived data in the GDW