Banking Data Warehouse
Developing Strategy in ICBC

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Topics

• Background: Why ICBC wants to build its Banking Data Warehouse (BDW).

• Strategy: How ICBC will start its BDW.

• Achievements: What ICBC has done on BDW.
Background: Why ICBC wants to build its Banking Data Warehouse.

- Huge amount customers.
- Comparative advanced IT infrastructures.
- Lacking integrated information analysis system.
- Experiments of international world-class commercial banks on BDW.
Huge Amount of Customers

- ICBC ranks No. 7 according to *The Banker’s Top 1000 Banks* (tier one capital) in 2000.
- more than 100 million personal customers, over 450 m personal accounts.
- more than 9 m company customers, over 500 m thousand.
- more 30 thousand operational units (branches, sub-branches, saving offices).
- more than 420 thousand employees.
Comparative Advanced IT Infrastructures

- Network facility:
  -- Has built nationwide intranet connecting to every operating unit.

- Business operation system:
  -- Has adopted CB2000 system (built by its own technicians) to process every kind of business all over the bank.
  -- Has built DCC engineering, business processing and business data are centralized to Beijing and Shanghai.

- Management information system:
  -- There only several report systems scattered in different business departments.
Lacking Integrated Backstage Information System

Decision and Management
Backstage Management
Frontstage Business Processing

Vacancy

Frontstage Business Processing System (CB2000)

Credit  Card  Account  Others

Customer
Problems in Backstage and Decision Support

- The present data management depends on RDB, which can’t deal with large amount of data information sufficiently.

- The present reporting system can’t integrate information from different platform.

- Information inquiry and feedback time can’t satisfy business and management needs.
Experiments: World-class Commercial Banks on BDW.

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<th>Developing Trends of International Commercial Bank</th>
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<td><strong>Traditional Bank Strategy</strong></td>
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<td>Resource</td>
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<td>Focus: Employee, facility</td>
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<td>Direction</td>
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<td>Product-oriented</td>
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<td>Channels</td>
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<td>More branches</td>
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<td>Compete</td>
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<tr>
<td>Traditional, local</td>
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<tr>
<td>Customer</td>
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<tr>
<td>All Cust., no difference</td>
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# Global Commercial Bank IT Developing Trends

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<tr>
<td><strong>New Banking Strategy</strong></td>
<td>Diversification, M&amp;A, Globalizing, Electronizing …</td>
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<td><strong>Bank Mgt Tech.</strong></td>
<td>RAROC</td>
<td>ABC</td>
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<td><strong>Information Mgt Tech.</strong></td>
<td>RDM</td>
<td>MIS</td>
<td>BDW/DSS</td>
<td>BI</td>
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<td><strong>Information Integration Method</strong></td>
<td>X-time, X-space, X-departments, X-Products</td>
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<td><strong>Information System Build Method</strong></td>
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<td>Progress Step by Step</td>
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Strategy: How ICBC will start its BDW

- Business target is to promote ICBC:
  - To understand its customers’ demand better (by CRM).
  - To comprehend its business operation procedure more accurately (by activity-based costing, ABC).
  - To arrange its assets and liabilities more optimally (by assets and liabilities management, ALM).
  - To manage and control its risk more effectively (by risk management, RM).
### BDW Application Subjects Classification

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<th>Subjects:</th>
<th>Contents:</th>
<th>Targets:</th>
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<tr>
<td>CRM</td>
<td>Cust. classification, Profitability valuation…</td>
<td>Cust. targeting, Marketing…</td>
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<tr>
<td>ABC</td>
<td>Cost &amp; profit division Fund transfer pricing.</td>
<td>Prod., depart., business, Institution Analyzing…</td>
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<tr>
<td>ALM</td>
<td>Assets &amp; Liabilities’ quantity and duration analyzing…</td>
<td>Assets and liabilities arrangement optimizing…</td>
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<tr>
<td>RM</td>
<td>Analysis on Credit risk, operational risk, Syst. risk…</td>
<td>Managing and control risk</td>
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Importance Degree and Construction Order

- 1. CRM
- 2. ABC
- 3. ALM
- 4. RM

Construction order

Importance Degree

Difficulty Degree
Physical Structure of BDW in ICBC

Nationwide BDW

- External System
- Backstage Biz Sys.
- Front Oper. Sys.
- System Mgmt. Workstation
- Application Workstation

Data Mart

Local Data Mart

- External System
- Backstage Biz Sys.
- System Mgmt. Workstation
- Application Workstation

Application Workstation
Achievements:
What ICBC has done on BDW.

• Personal customer relationship management (PCRM): beginning in Oct. 2001, and it will be put to use all over ICBC very soon.

• Company customer relationship management (CCRM): business requirement has been finished, and it is arranged to develop soon.
Our Consideration on PCRM

- Basic targets:
  --Building an integrated personal customer information platform.
  --Building an analysis method system on individual personal customer information.
  --Building an analysis theory on aggregated personal customers.
Data Sources and Information Flow
Chart on Personal CRM

Frontstage Business System
- Saving Account System
- Credit Card System
- Mortgage System

Credit Management System
- Customer Information
- Customer Information
- Mortgage Information

Credit Card System

ETL Purification

BDW

Mart 1

Mart 2

Mart n

Common user: Reporting

Advanced User: OLAP Analyzing

Sophisticated user: Data Mining
Hardware Structure on PCRM
Our Consideration on CCRM

- Basic targets:
  --Building an integrated company customer information platform.
  --Building methodology on customer profitability valuation, loan pricing, fund transfer pricing, etc.
  --Building an analysis theory on individual and aggregated company customers.
Thanks