The Unified Banking Process Framework (UBPF)

Developed and Managed by
The School of Information Systems
Singapore Management University

Created in Collaboration with

Technology and Operations leaders across the Banking industry

• National Infocomm Comptency Framework (NICF), Financial Services Technical Committee
• Infocomm Development Authority of Singapore (IDA)
• Singapore Workforce Development Agency (WDA)

Updated on 20 Feb 09
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The SMU-Banking Industry initiative develops skills in Banking Technology across different levels.

- **Investment Banking, Capital Markets**
- **Unified Banking Process Framework**
- **Private Banking & Wealth Mgmt**
- **Corporate & Institutional Banking**

**Singapore Management University**
- **Banking Tech & Ops Programme**
  - **Masters Level**
  - **Professional Short Courses**
  - **Undergraduate Level**

**Joint effort to develop IT skills for the banking industry**

**ATTRACT**
**PREPARE**
**RETAIN**
# The 4 Major Business Segments of the Banking Industry

<table>
<thead>
<tr>
<th>Investment Banking &amp; Capital Markets</th>
<th>Corporate &amp; Institutional Banking</th>
<th>Private Banking &amp; Wealth Mgmt</th>
<th>Retail Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Managers</td>
<td>Trade Finance</td>
<td>Wealth Management Core Banking Service</td>
<td>Sales Staff</td>
</tr>
<tr>
<td>Fund Raising from Capital Market</td>
<td>Corporate Core Banking Services</td>
<td>Corporate FX</td>
<td>Consumer Loans</td>
</tr>
<tr>
<td>Proprietary Trading</td>
<td>Cash Management</td>
<td>Securities and Funds Administration</td>
<td>Consumer Core Banking Services</td>
</tr>
<tr>
<td>Sales (Institution)</td>
<td>Corporate Customer Account Trading</td>
<td>Investment Services</td>
<td>Retail Customer Account Trading</td>
</tr>
<tr>
<td>Sales (Retail)</td>
<td>High Net Worth Customer Account Trading</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Investment houses/ Fund managers**
Types of Banking Customers and Customer Needs

**Types of Customer**

- **Individuals**
  - Single/Joint Person
  - Consumer Banking
  - Priority Banking
  - Private Banking
    - Joint Accounts
    - Partnerships
    - Family Units
    - Family Businesses

- **Institutions**
  - Companies
    - Banking
    - Non Banking
      * Large
      * Medium
      * Small
  - Non Corporate bodies
    - Trusts
    - Associations

- **Government**
  - Local
  - National
  - Supranational

**Customer Needs**

- Investing/Savings/ Surplus Funds
- Financing Personal/ Business Needs
- Receiving/Paying for Services
- Managing Portfolio Risk
- Support for Cross Border Trade/Projects
# Customer Needs and Bank Management Needs

<table>
<thead>
<tr>
<th>Customer Needs</th>
<th>Bank Products and Services</th>
<th>Transaction Fulfillment Enablers</th>
<th>Bank Management Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investing Savings/ Surplus Funds</td>
<td>Deposits/ Investments/ Insurance</td>
<td>PROCESS</td>
<td>Financial Management</td>
</tr>
<tr>
<td>Financing Personal/ Business Needs</td>
<td>Loans/Advances Fund Raising</td>
<td>DATA</td>
<td>Risk Management</td>
</tr>
<tr>
<td>Receiving/Paying for Services</td>
<td>Remittance/ Cash Management/ Cards</td>
<td>TECHNOLOGY</td>
<td>Channel Management</td>
</tr>
<tr>
<td>Managing Portfolio Risk</td>
<td>Capital/Currency Commodities Market</td>
<td></td>
<td>Systems Design, Controls, Production</td>
</tr>
<tr>
<td>Support for Cross Border Trade/Projects</td>
<td>Trade/Project Finance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Processes, data and technology are the fulfillment enablers for customer needs and management needs.
Knowledge of end-to-end process life cycle based on institutional banking products.

Cross Product Services
- Cross product services supporting the life cycle –
  - Compliance
  - Risk Management
  - Product Control and Accounting

Systems and Technology
- Systems that support the trade life cycle and the cross product services

This type of knowledge map of banking captures the essential types of domain, process and systems knowledge that an IT Professional needs to support the banking business.

From Initial SMU SIS Banking Process Framework to Unified Banking Process Framework

- Singapore's National Infocomm Competency Framework - Financial Services working group (2008)
- SMU SIS Revised UNIFIED BANKING PROCESS FRAMEWORK (Late 2008 onward)
Process & Systems Knowledge Map for a Banking Business Segment

The overview map captures and covers the types of domain knowledge that IT professionals are supposed to demonstrate. The knowledge map highlights:

1) The key activities in the end-to-end process life cycle for the products of a specific Banking Business Segment;

2) The key activities in the internal management & controls (compliance, risk management, product control), and accounting systems that support:
   - Delivery of products across the entire Process Life Cycle, and
   - The cross product services

3) The specific technology systems that support the above functions.
 Unified Banking Process Framework

REGULATORY BODIES

Customers / Market Participants (internal, external)

BANK

1. Bank Lines of Business View: Customers, Products and Services for Investment, Corporate, Private, Retail

2. Product & Process Lifecycle View
   Knowledge of end-to-end process life cycle based on specific banking products.

3. Cross Product Support Services View (Middle Office)
   Cross product services supporting the life cycle –
   - Compliance
   - Risk Management
   - Product Control
   - Accounting

4. Systems View
   Application Systems that support the product through entire process

5. Channel Delivery & Infrastructure Technology View

6. Organization and Sourcing View

7. Process Performance View

8. Total Cost of Process Execution View

9. Change Scenario & Impact Tracing View
The ability to manage the linkages between business process AND the Banking Software Solutions…

1. Understand banking products for each major line-of-business in terms of
   a) End-to-end processes and work flows for each family of products
   b) Operations functions and jobs supporting the product families
   c) IT solutions (architecture, functionality, data management) used for front, middle and back office functions, corporate functions, and for external interactions
   d) Product-Process-Operations-Technology linkages and critical interdependencies
   e) How CHANGE events and scenarios (Δ Product, Δ Process, Δ Ops, Δ IT) will impact end-to-end work flow, service delivery and process performance

2. Able to lead and manage Design-Source-Implement-Operate projects
   • IT focused and/or
   • Process and operations focused

3. Able to collaborate effectively with senior management across the various business functions and units of the bank…to support integrated Business-Process-Technology analysis, decision making and execution
Viewing banking products in terms of their process life cycle

**Creation**
- Product Design & Setup
- Customer Engagement
- Customer Order Acquisition

**Execution**
- Transaction Fulfillment
- Maintenance
- Reviews
## Execution Process Life Cycle Summary for Major Banking Segments

<table>
<thead>
<tr>
<th>Generic Process Life Cycle</th>
<th>Investment Banking</th>
<th>Corporate &amp; Institutional Banking</th>
<th>Private Banking &amp; Wealth Management</th>
<th>Retail Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Engagement</strong></td>
<td>Fund Raising &amp; Issuance</td>
<td>Corporate Finance</td>
<td>Securities and Fund Administration</td>
<td>Individual Retail Customer</td>
</tr>
<tr>
<td>- Pre trade</td>
<td>- Sales</td>
<td>- Sales</td>
<td>- Sales</td>
<td>- Sales</td>
</tr>
<tr>
<td>- Credit Facility Setup</td>
<td>- Credit Facility Setup</td>
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<td>- Credit Facility Setup</td>
<td>- Credit Facility Setup</td>
</tr>
<tr>
<td><strong>Order Acquisition</strong></td>
<td>Capital Markets, Trading</td>
<td>Cash Management</td>
<td>Investment, Capital Market &amp; Corporate Services</td>
<td>Retail Merchant Customer</td>
</tr>
<tr>
<td>- Trade</td>
<td>- Sales</td>
<td>- Sales</td>
<td>- Sales</td>
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<tr>
<td><strong>Transaction Fulfilment</strong></td>
<td>- Sales</td>
<td>- Sales</td>
<td>- Sales</td>
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<td>- Credit Facility Setup</td>
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<tr>
<td><strong>Account Maintenance</strong></td>
<td>- Sales</td>
<td>- Sales</td>
<td>- Sales</td>
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<tr>
<td><strong>Reviews</strong></td>
<td>- Sales</td>
<td>- Sales</td>
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</table>

### Details:
- **Customer Engagement**:
  - Pre trade
  - Account & Product Setup
  - Credit Facility Setup

- **Order Acquisition**:
  - Trade
  - Contract initiation per contract

- **Transaction Fulfilment**:
  - Post trade
  - Contract life cycle tracking till maturity per contract

- **Account Maintenance**:
  - Account Maintenance
  - Contract life cycle tracking till maturity per contract

- **Reviews**:
  - Consolidated Customer Portfolio Statement
  - Customer Profiling and Buying Patterns
  - Customer Loyalty Programmes (Credit Card Issuance)
  - Third Party Joint Promotions
Key Support & Control Processes that are Common Building Blocks Across Multiple Segments of Banking

<table>
<thead>
<tr>
<th>Generic Process</th>
<th>Life Cycle</th>
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<th>Retail Banking</th>
</tr>
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<tbody>
<tr>
<td>Product Design &amp; Setup</td>
<td>Rate Setting</td>
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<td>Customer Engagement</td>
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<td>Order Acquisition</td>
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<td>Transaction Fulfilment</td>
<td>Confirmation Management</td>
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<td>NOSTRO Account Reconciliation</td>
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<td>Margin calculations</td>
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