Customer Relationship Management in Financial Services Networks

Ph.D. Research Project

Malte Geib
Tuck School of Business, Dartmouth College, April 22, 2005
Agenda

- Research at the Institute of Information Management
  - The University of St. Gallen
  - The Institute of Information Management
  - Research in Competence Centers

- The Research Project
The University of St. Gallen (HSG)

- Largest business school in Switzerland
- One of the top business schools in Europe
- Founded in 1898
- Approx. 5000 students and over 140 professors
- Approx. 30 institutes and research centres
- EQUIS and AACSB accredited
The Institute of Information Management (IWI-HSG)

- Founded in 1988
- Largest German-speaking Institute of Information Management
  - 4 full professors
  - Ca. 8 research group leaders (assistant professors)
  - Ca. 30 Ph.D. candidates
- Application-oriented research, funded largely by corporate partners
  - Fortune 500 companies
  - High tech and industry leaders
- Research is conducted in ca. 8 competence centers
Research in Competence Centers (CC)

• Collaboration with corporate partners
  ▪ 4 - 8 corporate partners per CC
  ▪ Cooperation for 2 years (at least)
  ▪ Corporate partners define requirements and procedures and monitor achievements
  ▪ Cooperation through workshops and bilateral project guidance

• Research areas:
  ▪ Customer Management
  ▪ Business Networking
  ▪ Sourcing in the Financial Services Industry
  ▪ Application Integration Management
  ▪ Business Performance Management
  ▪ Integrated Information Management
Research process

- **Research framework**
  - Business Engineering [Österle 1995]
  - Positivist epistemology [Guba/Lincoln 1994]

- **Qualitative empirical research**
  - Case Study Research [Yin 1994]
  - Action Research [Checkland/Holwell 1998]

- **Quantitative empirical research**
  - Surveys
  - Benchmarking studies
Business Engineering Dimensions

- Business Strategy, Business Models
- Business Processes
- Information Systems

Leadership
Attitudes
Power
Research Elements of Business Engineering

Reference examples
- Applications
- Pioneer projects
- Cases

Business Concepts / Models

Concepts Models

Technologies and tools

Information and knowledge

Methods

Project management

Business Engineering Network

Corporate partner

Business model

Prototype

Solution

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Agenda

Research at the Institute of Information Management

The Research Project
- Challenges
- Research Goals
- Methodology
- Results
- Conclusion
• **Research area:**
  - Integrated Customer Relationship Management (CRM) processes and systems

• **Swiss and German research partners:**
  - **Financial services:**
    - PostFinance
    - CREDIT SUISSE
    - winterthur
    - Schwäbisch Hall
    - Union Investment
    - AGI-Kooperation
    - swisscom IT services
    - HELSANA
    - COMMERZBANK

  - **Pharma:**
    - ALTANA
      - ALTANA Pharma AG

  - **Automobile:**
    - Audi
Customer-orientation is critical to business, but rarely managed.

Survey of a cross-industry sample of more than 400 CEO’s and CFO’s
All respondent were asked to rate the assets and strengths that are most critical to the success of their business. 95 percent of all respondents indicated Customer as “very essential” to success, followed closely by Employee (94 percent), then Financial (75 percent), Organization (72 percent), Supplier (41 percent) and, lastly, Physical assets (33 percent)

Source: Andersen Global Research Program 2001
Customer Relationship Management helps to fill this management gap.

- Customer Relationship Management is a customer-oriented management concept for the improvement of
  - customer acquisition,
  - customer retention,
  - customer value
  - to increase company profitability.

- CRM employs information systems to
  - collect, analyze, integrate, and supply required information and data
  - support the customer-oriented processes in marketing, sales, and service.
Which activities does CRM comprise?

- CRM achieves an optimum balance between corporate investments and the satisfaction of customer needs to generate the maximum profit.

- It entails:
  - measuring both inputs across all functions - including marketing, sales and service costs - and outputs in terms of customer revenue, profit and value,
  - acquiring and continuously updating knowledge on customer needs, motivations and behavior over the lifetime of the relationship,
  - applying customer knowledge to continuously improve performance through a process of learning from successes and failures,
  - integrating marketing, sales and service activities to achieve a common goal,
  - the implementation of appropriate systems to support customer knowledge acquisition, sharing and the measurement of CRM effectiveness,
  - constantly contrasting the balance between marketing, sales, and service inputs with changing customer needs in order to maximize profit.

Source: Shaw/Reed 1999
CRM affects customer-oriented processes

- CRM strategy development
- CRM process management
  - analytical CRM processes
    - customer scoring
    - lead management
    - customer profiling
    - customer segmentation
    - feedback & knowledge mgmt.
  - operational CRM processes
    - Campaign mgmt.
    - sales mgmt.
    - service mgmt.
    - complaint mgmt.
    - Loyalty mgmt.
- service innovation
- service production
- support processes
- multi-channel management
- customer
  - customer process
    - information
    - evaluation
    - contract conclusion
    - transaction
    - service
    - contract termination

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CRM systems support these processes

- **Analytical CRM**: Data Warehouse
  - Analytical Applications (Data Mining, OLAP, …)

- **Operational CRM**: Transaction Systems
  - Marketing Automation
  - Sales Automation
  - Service Automation

- **Collaborative CRM**: Product Provider
  - Product IS

- **Customer**: IS
  - ATM
  - Personal contact
  - Telephone
  - Mail / Fax
  - WWW
  - Email
  - Mobile Device
Integration across business units and enterprises will be crucial.

Which CRM challenges will be crucial in the future?

- Inter- and Intra-enterprise Integration: 63
- Customer Value Enhancement: 58
- Customer Data Management: 52
- Customer Segmentation: 46
- Performance Management: 40
- Systems Integration: 26

Source: Survey of 285 Swiss and German CRM officers in 2004.
Trends in the development of value chains in the financial services industry

**Trend 1:** Integration on customer side

**Trend 2:** Disintegration on supply side

**Trend 3:** Outsourcing of transaction processing

Consequences:
- Processes require collaboration of several partners.
- Systems and customer data are distributed across the network.
## Three types of business networks

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Internal network</th>
<th>Stable network</th>
<th>Dynamic network</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Introduction of market principles in enterprises</td>
<td>Flexibility by partial outsourcing of processes</td>
<td>Agility by massive outsourcing of processes</td>
</tr>
<tr>
<td><strong>Vertical integration</strong></td>
<td>High – production factors are kept centrally</td>
<td>Medium – a few companies apply their resources to create value</td>
<td>Low – resources of many partners are allocated by a broker company according to project demand</td>
</tr>
<tr>
<td><strong>Transactions</strong></td>
<td>Long timeframe, high repetition probability</td>
<td>Long timeframe, high repetition probability</td>
<td>Medium timeframe, medium repetition probability</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>Continuous, via (vertical) communication channels, 1:n or n:1</td>
<td>Continuous, direct, m:n</td>
<td>Demand-oriented, limited lifetime, direct, m:n</td>
</tr>
<tr>
<td><strong>Organization principles</strong></td>
<td>Shared service, profit center, fractal enterprise</td>
<td>Outsourcing, supply chain management, strategic alliances, Keiretsu</td>
<td>Virtual enterprises</td>
</tr>
</tbody>
</table>

Source: Fleisch 2001
Research goals

- How should financial services networks design their customer-oriented information systems?

  (1) Analysis of strategic conditions

  (2) Analysis of collaborative processes in marketing, sales, and service

  (3) Development of a reference information systems architecture

  ... based on case study research.
Methodology

Why case study research?

- Case study research can be used to examine socio-scientific phenomena, in which the unit of analysis cannot be separated from its environment [Yin 2002].

- Information systems architectures in enterprises
  - have a multitude of influencing factors (e.g., company strategy, business model, culture, history)
  - lack clear differentiability between solution and context.

- The benefit of CRM systems is difficult to measure because
  - implementation projects are never carried out isolated, and
  - Success (in terms of increased revenues and decreased costs) is dependent on many other factors.
Methodology

Case selection criteria

• Company is part of a financial services network
• Company is willing to cooperate
• Maximum variety sampling [Patton 1990]
  ▪ Successful and unsuccessful companies
  ▪ Different roles in the value chain (relationship manager, product provider, transaction processor)
  ▪ Internal networks and stable networks
## Methodology

### Overview of case sites

<table>
<thead>
<tr>
<th>Purpose</th>
<th>(1) Key Issues Identification</th>
<th>(2) Good Practices Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value chain role</td>
<td>Product provider and relationship manager, Product provider and relationship manager, Product provider, Product provider, Relationship manager (and product provider)</td>
<td>Relationship manager (and product provider), Transaction processor</td>
</tr>
<tr>
<td>Business segments</td>
<td>Asset management, Corporate, retail, and private banking, insurance, Home loan funding, Investment funds, asset management, Corporate, retail, and private banking, Pension provision, asset management, risk management</td>
<td>Corporate, retail, and private banking, IT services for financial services companies</td>
</tr>
<tr>
<td>Total assets under mgmt.</td>
<td>€ 340 billion, € 640 billion, € 30 billion, € 100 billion, € 11 billion, € 3.5 billion, € 30 billion</td>
<td>€ 446 million (assets)</td>
</tr>
<tr>
<td>Employees</td>
<td>3,000, 75,000, 3,000, 2,000, 1,000, 1,800 (and 2,700 consultants), 3100</td>
<td>940 banks (with 30 million customers)</td>
</tr>
<tr>
<td>Customers</td>
<td>1,000 corporate clients, 3 million consumers and corporate clients, 6 million consumers and corporate clients, 4 million consumers and corporate clients, 590,000 consumers and corporate clients, 560,000 consumers</td>
<td>940 banks (with 30 million customers)</td>
</tr>
</tbody>
</table>
Methodology

Data gathering

1. Semi-structured interviews with key informants (CRM officer, marketing/sales/service director, CIO)
   - 2 interviewers, posing questions and taking notes

2. Document analysis
   - Annual reports
   - Project documentation
   - Organizational charts
   - Process and systems documentation

3. Case study write-up
   - Reconciliation between both interviewers
   - Reconciliation with interview partners (further interviews and review cycles may be necessary)
Methodology

Data analysis

1. Within-case analysis
   - Build explanation of the case
   - Carried out by the 2 interviewers

2. Cross-case analysis
   - Examine similarities and differences across the cases
   - Determine influence factors
## Results
### Key issues in financial services networks

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Redundant competencies</strong></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>⊗</td>
</tr>
<tr>
<td><strong>Privacy constraints</strong></td>
<td>✗</td>
<td>⊘</td>
<td>⊘</td>
<td>⊘</td>
<td>&amp;†</td>
</tr>
<tr>
<td><strong>CRM process integration</strong></td>
<td>⊘</td>
<td>⊘</td>
<td>⊘</td>
<td>⊘</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Customer information exchange</strong></td>
<td>⊙</td>
<td>⊘</td>
<td>⊘</td>
<td>⊘</td>
<td>&amp;†</td>
</tr>
<tr>
<td><strong>CRM systems integration</strong></td>
<td>&amp;†</td>
<td>⊗</td>
<td>⊙</td>
<td>⊙</td>
<td>&amp;†</td>
</tr>
</tbody>
</table>

**Legend:** ☐ no  ✗ minor  &† major  ⊘ big  ◆ critical  (according to the researchers’ assessment of the case studies)
Privacy constraints

• Strict data privacy protection laws in the E.U.

  ▪ Product providers require a customer’s consent to share data with relationship managers

  ▪ Relationship managers (banks) cannot share customer data with product providers
Customer information exchange

- Different business units deal with a customer
- Who knows what about the customer?
- Sales initiation phase requires consolidation of information
CRM systems integration

- Operational systems integration
  - Customer consultants of banks have to deal with up to 30 different operational CRM systems

- Customer data integration
  - Manual consolidation of customer data is often necessary

- Integration of transactional and relational data
# Results

## Patterns of successful CRM collaboration

<table>
<thead>
<tr>
<th>Company</th>
<th>MLP AG</th>
<th>FIDUCIA IT AG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribution of competencies</strong></td>
<td>Partnering companies have discrete competencies&lt;br&gt;High degree of outsourcing</td>
<td>Partnering companies have partially overlapping competencies&lt;br&gt;Low degree of outsourcing</td>
</tr>
<tr>
<td><strong>Approach to privacy</strong></td>
<td>Customer consent in general terms and conditions&lt;br&gt;Only personal customer consultant has access to all customer information</td>
<td>Customer consent in general terms and conditions&lt;br&gt;Only banks have access to all customer information</td>
</tr>
<tr>
<td><strong>CRM process integration</strong></td>
<td>Automated and seamless processes</td>
<td>Automated and seamless processes</td>
</tr>
<tr>
<td><strong>Consulting workplace</strong></td>
<td>Several modular applications</td>
<td>One application (&quot;portal&quot;)</td>
</tr>
<tr>
<td><strong>Customer data integration</strong></td>
<td>Joint data model&lt;br&gt;Unique customer ID&lt;br&gt;Federated customer data storage</td>
<td>Joint data model&lt;br&gt;Master data matching algorithm&lt;br&gt;Federated customer data storage</td>
</tr>
<tr>
<td><strong>Systems integration architecture</strong></td>
<td>Web-services standards and EAI&lt;br&gt;Some open source technology (Apache)</td>
<td>Web-services standards and EAI&lt;br&gt;Some open source technology (Apache)</td>
</tr>
</tbody>
</table>
Approach to privacy

• Customer consent to personal data exchange in general terms and conditions

• Only relationship managers have all customer data

• „commissioned data processing“
  ▪ Data analysts of product providers work on customer data of relationship managers
CRM process integration
Collaborative consulting and sales process

Legend: Activity  Sequential process flow  Concurrent activities
Customer data integration

- **Joint data model**
  - Explicates a specific view of relationships between business entities

- **Federated data storage**
  - Partly centralized
  - Without redundancy

- **Mapping of customer data**
  - unique customer ID
  - or matching algorithm
Conclusion

➢ The financial value chain is disintegrating

➢ Three different roles are emerging: relationship managers, product providers, and transaction processors

➢ Companies have to re-integrate their processes and systems using flexible technologies

➢ Successful implementations in leading financial services networks can provide a reference model
Questions?

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## Comparison of data privacy approaches in the E.U. and the U.S.

<table>
<thead>
<tr>
<th></th>
<th>EU and Switzerland</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td>Personal data protection</td>
<td>Privacy protection</td>
</tr>
<tr>
<td><strong>General principle</strong></td>
<td>Personal data protection is a fundamental human right, which cannot be given away. Right of &quot;informational self-determination&quot;</td>
<td>Privacy is a personal asset, which can be given away or can be sold.</td>
</tr>
<tr>
<td><strong>Primary implementation</strong></td>
<td>Government laws and control</td>
<td>Self-regulation of the market</td>
</tr>
<tr>
<td><strong>Legislation</strong></td>
<td>Proactive</td>
<td>Reactive (crisis management)</td>
</tr>
<tr>
<td><strong>Legal approach</strong></td>
<td>All-encompassing (&quot;omnibus approach&quot;)</td>
<td>Industry-specific (&quot;sectoral approach&quot;)</td>
</tr>
<tr>
<td><strong>Relevant laws in the financial services industry</strong></td>
<td>European Data Protection Directive, National Data Protection Laws of individual countries</td>
<td>Gramm-Leach-Bliley Act, Fair Credit Reporting Act, Safe Harbor Agreement</td>
</tr>
<tr>
<td><strong>Control of personal data by customers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of secondary use in a company</td>
<td>opt-in</td>
<td>No control [opt-out in California]</td>
</tr>
<tr>
<td>Control of data transfer to affiliated companies</td>
<td>opt-in</td>
<td>opt-out</td>
</tr>
<tr>
<td>Control of data transfer to third-party companies</td>
<td>opt-in</td>
<td>opt-out [opt-in in California]</td>
</tr>
</tbody>
</table>