

Crédit du Nord Case Study

This case study is old, but is interesting to demonstrate that a Foundation approach is a long term approach: make the good decisions on Foundation and benefits for the Enterprise will last 20 to 30 years.

1 The Enterprise in 1983

- French Bank
- 600.000 Customers: mainly private and small companies
- Organization
 - 600 Branches: 5000 employees
 - Headquarters and Administrative Centers: 5300 employees

2 The Problem in 1983

- bad image
- profitability decreased: announced losses for future
 - market share was decreasing:
 - very low productivity: -20% compared to average banking productivity
- New Goal:
 - N°1 objective = Better productivity
 - adapt organization
 - same user interface for all Business Domains
 - automate maximum Business Actions so that branch employees can do much more in front of the customer
 - Customer Service
 - Help to sell
 - Time to market

3 The Targeted Solution

To increase productivity, Crédit du Nord had to drastically change together its Organization, its Processes, and its Information System.

First decision was:

- “Do not try to specify and model all Processes: it will take 2 years, before starting to develop IT”
- But propose a new System where it is easy and fast to implement process improvements each time there is an optimization idea.

It meant that the new System required a strong Foundation, a new approach and strong Transformation teams.

It was decided to progressively rebuild all Solutions on the same Foundation, starting with solutions having large numbers of operations.

3.1 Foundation

- strict definition of **Business Entities**: Person, Customer (impossible to obtain a national customer first), keep branch customer in first version, Contract and Account instead of single Account
- Business Entity **access** rather than data access: Client, Contract, Account are accessed in a single request
- A single Customer file
- A single and simple **IT Infrastructure**: one Mainframe instead of 4, same workstation for each user
- **UI components** to offer a unique user interface
- **Standardized Customer forms**

- A single **security system** and a single sign-on
- Integration of **office automation**
- Reuse of business components: **50% reuse rate** (when a new Solution had to be delivered, 50% of the software was ready made through components)
- A unique component to deliver **information to customer** so that different documents are sent in same envelop, which saves stamp expenses
- A unique component to deliver **information to employees** via mailing system: allows to group all exceptions by Actor
- mail Solution: messages can be sent by Human Actors or Batch Solutions
- **Operation**: Preparation and Execution for any input; allows to track, to benefit from general Functions (like suspend the operation, abandon the operation, transfer the operation to other Actor, authorize the operation...)
- **Interface** components between the different Solutions
- **Multi enterprise** Solution
- **Multi channel** Solution
- **Multi currency** Solution

3.2 Approach

For each new Solution, the approach was based on:

- For each new Solution: a **single team** with Business and IT Transformers under. The project manager had to understand what is a good software.
- **Short specifications** but many prototypes with successive iterations: convergence was reached because everyone was using same Foundations.
- **Light reporting**, but frequent design committees with the top management
- **Tools** were chosen so that they can adapt to iterative approach

3.3 Organization of Operations

Thanks to standardization and automation, people on the field were able to execute many more operations than before: it allowed to transfer most of the work from administrative centers to branches. Administrative Centers moved towards a role of consulting and control.

As the security control was executed before execution, it allowed any employee to fill information and prepare work for another employee who had the right to execute the operation: it allowed to balance workload between people in a very open (but very secure) organization.

3.4 IT infrastructure

- a **unique WS for each Actor**
- a **single Computer Center** instead of 4: main data base, batch, external communications and Server for OMF
- 2 protocols only
 - asynchronous for
 - input from WS
 - output from Computer Center: update local files (software and data)
 - synchronous for inquiries
- Automatic Software update for 700 LAN servers: asynchronism because versioning

4 The Project

4.1 Project Constraints defined by CEO of the Bank

Timing: 3 years to obtain high productivity gains

4.2 Planning

- end 1983: decision and strategic orientations
- 84 + 85: Foundations + approach + IT infrastructure + first Solutions

- office automation
 - inquiries
 - 86 + 87 + 88: progressive Solutions for main processes
- There were a continuous delivery of new functionalities based on a unique Foundation.

4.3 Costs

4.3.1 IT teams

- IT teams from 1984 to 1992: **from 384p to 356p**
 - **Transformation** teams: from 145p to 199p
 - **IT operation** teams + editing/mailling teams: from 239 p to 157p
- Transformation team: 199p
 - **33p for Foundations**
 - 65p for transversal Solutions: CRM, accounting, business intelligence
 - 90p for product Solutions
- low integrator use: learning curve is higher

4.3.2 IT expenses

- First: high investments from **304MF** in 1984 to **444MF** in 1987: +46%
- Then stabilisation of expenses: **443MF** in 1991, 11,4% of bank expenses

4.4 Organization of Transformation projects

High skill engineers were recruited: they had to be able to understand user's requirements and translate them into good software.

An **isolated task force** team was created to Build Foundation and first Solutions.

When first Solutions were well stabilized and proved Foundation efficiency, then new Solutions were built by existing teams. Some people moved from the foundation team to Solution teams to transfer know how. The mix between old and new transformers was very successful.

Because of the strong Foundation, few Application Packages were used, except for commodity applications like payroll: reuse of components decreased the cost of specific Solutions, and standardization (unique user interface, unique security function, unique data base...) was difficult or impossible to achieve with external packages.

Management style was direct, unformal with fast decision making.

5 The Value

5.1 Business

- **profitable** bank after huge losses
- from 600.000 customers to **920.000 customers**
- **time to market**:
 - on new product based on new legal rules: implemented in 3 months, before competitors, and got 3 times its market share
- high **service quality**
 - ex: claim on stock order decreases by 95% 3 months after new solution
- ability to **integrate new regional banks** in one year: decreased global cost, and offered global service for customer
- **image** becomes positive: high tech bank; each of the last 10 years, Credit du Nord was classified as #1 Bank for service Quality

5.2 Organization

- Staff decreased from **10.329 people** in 1984 to **7.128** in 1991(-30%)
 - same numbers in Branches: about 5.000p

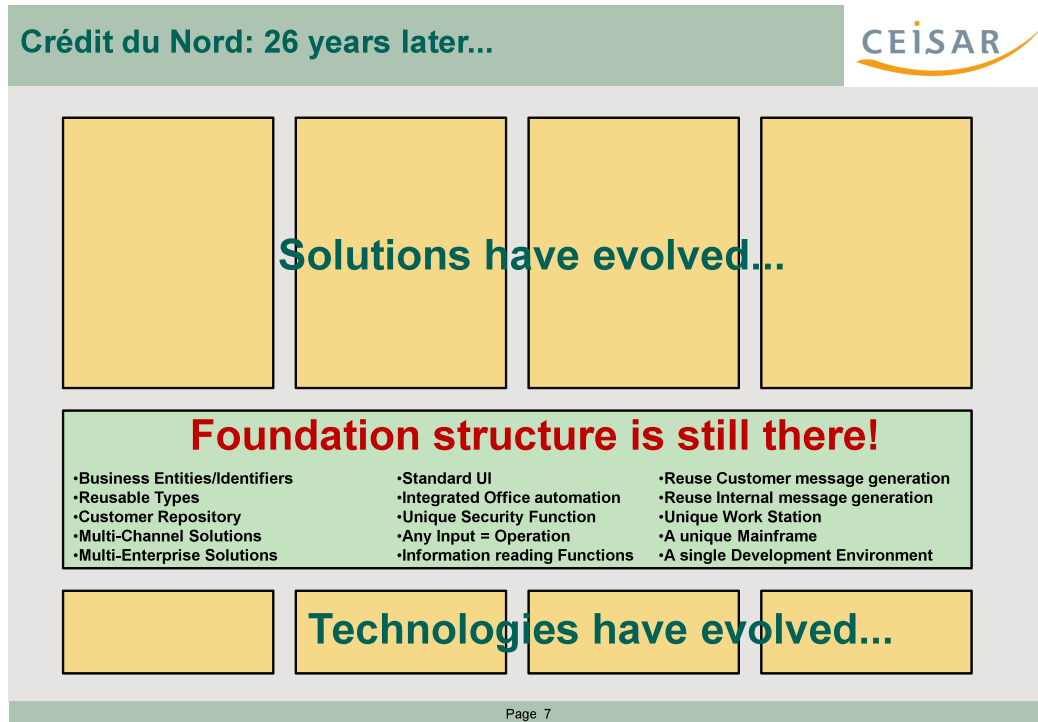
- but high decrease in Administrative Centers: from 5.300p to 2000p; was possible because main actions were executed inside branches thanks to
- Only 2 people on national hot line + 1 local hot line for about 100 users (not full time work: done with existing staff)

5.3 CDN To-day

Applications have evolved: distribution Solutions have been added to production solutions.

Technology has evolved.

But in between, the Foundation principle is respected.



6 Lessons

6.1 Management Rules

- Decision for a leap forward is taken by **Enterprise top management**, and not only by CIO
 - Top management was ready to invest on enterprise Architecture to react to the crisis
 - It was impossible to define a ROI at the beginning of the project
- **Foundation team was isolated**: high quality; with a very experienced Business Architect leader
 - first Solution Models were built by the Foundation team
- **low "bureaucracy"**: meetings more on Engineering than Management
- **Cooperative Approach** based on Iterations, prototyping...
- Because of Foundation, **IT expenses** do not increase much each time a new Solution is delivered to operations

6.2 Engineering Rules

- Global view rather than detailed specifications
- **Simplification** by Mutualization
- **Foundation is Key**: 50% reuse rate
- **Operation** Concept: Preparation (capture + check + authorize) + Execution (irreversible actions like Descriptor Updates or send message)
- 2 protocols : synchronous and asynchronous (for file transfer, software update, replicated file)

