ANALYTICAL CRM

Analytical CRM is the part of Customer Relationship Management that aims at storing, analyzing and applying the knowledge about customers and about ways to approach customers, typically using databases, statistical tools, data mining, machine learning, Business Intelligence and reporting methodologies.

Customer knowledge consists out of:

Basic personal data such as: customer name, company name, business unit, business department, address, email, phone, fax, gender, nationality, etc

More sophisticated client knowledge such as:

- Client value (annual revenue, profitability)
- Transactions (product description, revenue, profit, payment method, payment behavior)
- Internet communication (IP-address, entry page, click stream, visit length)
- Telephone communication (call center report data, sales calls)
- Other communications (mailings, response)
- Customer satisfaction (with product, service, company)

This client information can be captured from the processes (sales, services, finance, marketing) and channels (Multi Channel Marketing) of the organization. Certain data can also be acquired from external sources, such as market research data or address databases. It is often advisable to store all client data centrally for the organization to avoid 'multiple versions of the truth'. Client data should be actual, complete, correct, unique (each client should be in the database only 1 time) and accessible for those who need it when they need it. This is true a fortiori for companies with a strategic Customer Relationship Management philosophy.

USAGE OF ANALYTICAL CRM.
APPLICATIONS
Optimize marketing effectiveness.
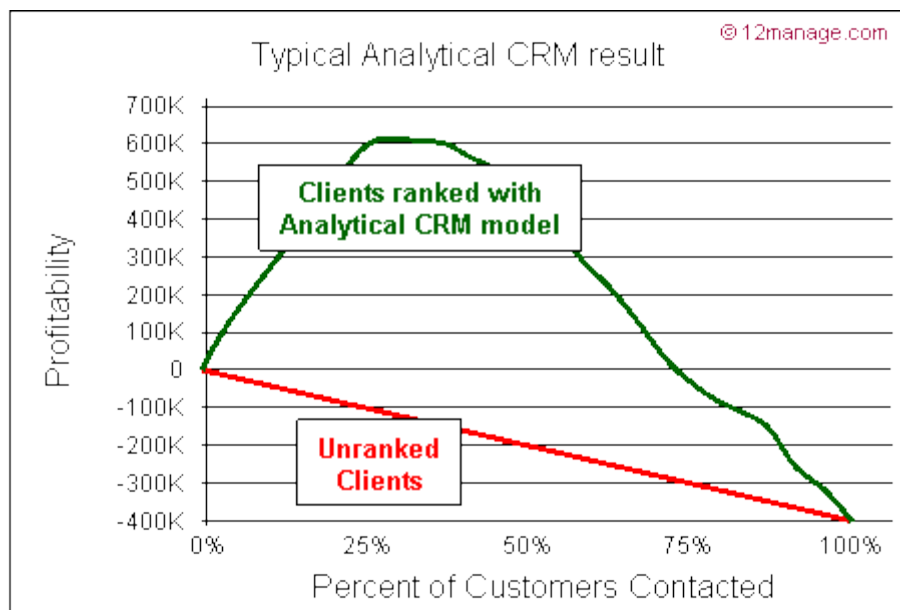
- Customer acquisition, cross-selling, up-selling, retention, etc.
- Analysis of customer behavior to aid product and service decision making (e.g. pricing, new product development). Compare: Quality Function Deployment.
- Management decisions, e.g. financial forecasting and customer profitability analysis.
- Prediction of the probability of customer defection (churn).

STEPS IN ANALYTICAL CRM PROCESS

After the client data is collected and stored, the actual analysis can take place. The analysis process is roughly made of the following steps:

Problem formulation. What do we want to know, is answering the question relevant and possible (technically, financially and organizationally). Typical a CRM analysis question is about:

Segmentation of clients

- Acquisition analysis (what is the quality of various lists or databases)

- Relation analysis (expected retention, opportunities for cross-selling, deep-selling, up-selling)

- Channel or approach analysis (which channel or approach gives the best results)

- Preparation (random sample survey, relevant variables, cases, spread in scores, prepare definitive dataset)

- Definitive analysis, using:

- Statistical techniques (Regression Analysis, Dynamic Regression, Exploratory Factor Analysis, Exponential Smoothing, ARIMA)

- Datamining, typically aimed at discovering non-obvious or non-linear patterns in the data.

- Machine learning (Artificial Intelligence) techniques, such as: neural networks, genetic algorithms, association rules and case-based reasoning.

Visualizing the results in such a way that it is understandable for the users

STRENGTHS OF ANALYTICAL CRM

Can help to find and explore useful knowledge in large customer databases.

Classify customers, predict customer behavior, select market approach or channel.