# CA - S3 - Techniques

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## Contents

## Customer Analytics Techniques

### Strategy and Type of Analysis

| Strategy | Type of analysis |
|---|---|
| Customer understanding | Homogeneous and heterogeneous **clustering**, Demographic (and others) profiling, trends and patterns,. . . |
| Customer acquisition | Propensity analysis, factor analysis, affinity models,. . . |
| Customer Loyalty and profitability | Propensity analysis, cross-selling and up-selling analysis, **affinity analysis**, Social Analytics, Sentiment Analytics, **RFM Modeling**, Price elasticity, **customer satisfaction analysis**,. . . |
| Customer retention | **Churn Analysis**, Response models, What-if Analysis,. . . |
| Efficiency | Marketing Mix models, customer journey analysis, customer location & device usage analysis,.. |

### Understanding your customer

What does it mean understanding your customer? There are different **perspectives**:

- **Behavioral perspective**: Punctuality (payment). Risk Index. Purchasing patterns. **Affinity analysis**. Propensity analysis. Punctuality profiling. Risk profiling. Event patterns.
- **Profitability perspective**: Current profitability. Future profitability. Wallet share. Profitability Profiling. Profitability Conversion.
- **Lifecycle perspective**: **CLV**. CLV profiling
- **Loyalty perspective**: **Recency. Frequency. Monetary value. Churn**. Acquisition. Retention. Increase. **RFM profiles**. Retention profiles. Growth profiles.
- **Interest perspective**: Response rate. Response modeling. Response analysis. Response profiles
- **Campaign perspective**: Response rate. ROI. Estimated value added. Lifting. Effectiveness of events. Profitability Cannibalization. Events Cannibalization. Event profitability. Cross-channel effectiveness.

# Types of analysis and Techniques

## Knowledge

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **Punctuality** | Querys, Reporting | Structured Procedures | Business Intelligence |
| **Risk index** | Querys, Reporting | Structured Procedures | Business Intelligence |
| **Purchasing patterns** | Querys, Reporting, Predictive Analysis | OLAP, Clustering | Business Intelligence, Analytics |
| **Affinity Analysis** | Descriptive Analysis | Basket Case Analysis | Business Analytics |
| **Propensivity Analysis** | Descriptive Analysis | Affinity Analysis | Business Analytics |
| **Punctuality Profiling** | Descriptive Analysis | Decision Trees, Induction Rules | Business Analytics |
| **Risk Profiling** | Predictive Analysis | Multi-regression | Business Analytics |
| **Events patterns** | Predictive Analysis | OLAP, Associacion Rules | Business Analytics |

## Profitability

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **Current Profitability** | Querys, Reporting | Structured Procedures | Business Intelligence |
| **Potential Profitability** | Predictive Analysis | Multi-regression | Business Analytics |
| **Future Profitability** | Predictive Analysis | Neural Networks | Business Analytics |
| **Profitability Profile** | Predictive Analysis | Decision Trees, Induction Rules | Business Analytics |
| **Profitability Conversion** | Predictive Analysis | Lineal regression, Logistic regression | Business Analytics |
| **Wallet share** | Predictive Analysis | Lineal regression, Logistic regression | Business Analytics |

## Lifecycle

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **CLV** | Predictive Analysis | Statistics | Business Analytics |
| **Potential CLV** | Predictive Analysis | Multi-regression | Business Analytics |
| **CLV Profiling** | Predictive Analysis | Supervised Clustering | Business Analytics |

## Loyalty

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **RFM** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Churn** | Predictive Analysis | Decision Trees, Clasificación | Business Analytics |

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **Acquisition** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Retention** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Growth** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **RFM profiling** | Predictive Analysis | Decision Trees, Induction Rules | Business Analytics |
| **Acquisition Modeling** | Predictive Analysis | Neural Networks | Business Analytics |
| **Retention profiling** | Predictive Analysis | Decision Trees, Induction Rules | Business Analytics |
| **Growth profiling** | Predictive Analysis | Decision Trees, Induction Rules | Business Analytics |
| **Loyalty convertion** | Predictive Analysis | Neural Networks | Business Analytics |

## Interest

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **Response** | Predictive Analysis | Neural Networks | Business Analytics |
| **Response Modeling** | Predictive Analysis | Neural Networks | Business Analytics |
| **Response Analysis** | Predictive Analysis | Neural Networks | Business Analytics |
| **Response Profiling** | Predictive Analysis | Decision Trees | Induction Rules |

## Campaigns

| Analysis | Method | Techniques | Capabilities |
|---|---|---|---|
| **Response Index** | Predictive Analysis | Statistics | Business Analytics |
| **ROI** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Expected Value-added** | Predictive Analysis | regression | Business Analytics |
| **Up-Selling** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Profitability Cannibalization** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Sales Canibalization** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Event Profitability** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Cross-Channel Effectivity** | Querys / Reporting | Structured Procedures | Business Intelligence |
| **Channel Effectivity** | Querys / Reporting | Structured Procedures | Business Intelligence |

# References

- Peter Verhoef, Edwin Kooge, Natasha Walk. (2016) Creating Value with Big Data Analytics. Routeledge
- Peter Fader. (2012) Customer Centricity. Wharton Executive Essentials