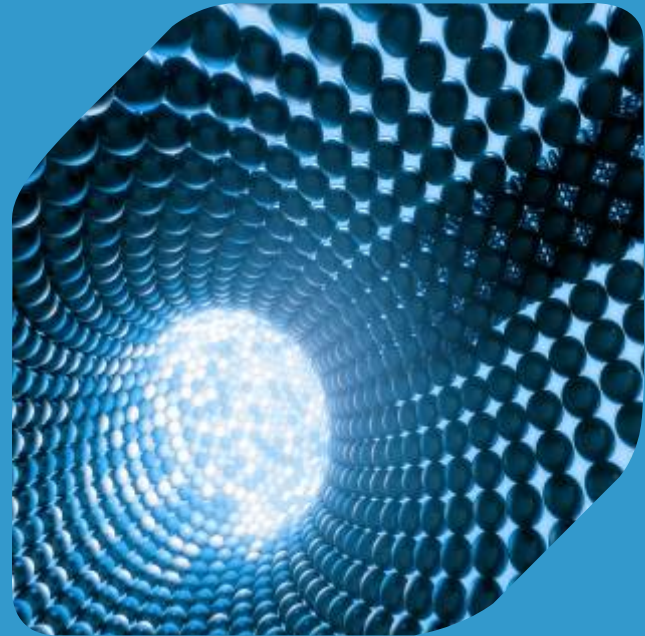


TNS EX·A·MINE[™]

BehaviourForecast

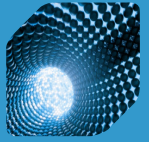
Predictive Analytics for CRM

- ProspectFinder
- AffinityTracer
- ChurnPredictor



TNS EX·A·MINE™ BehaviourForecast

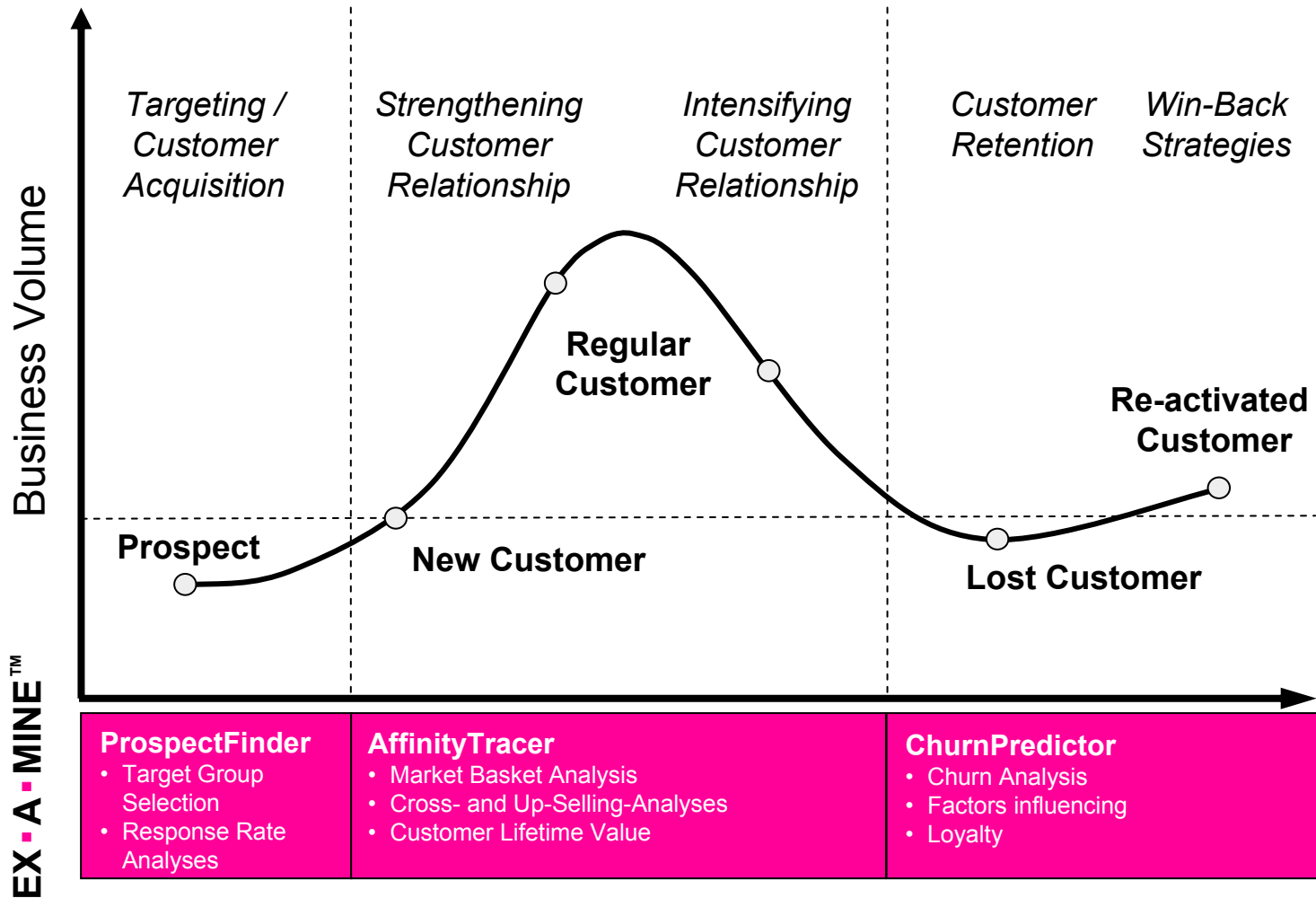
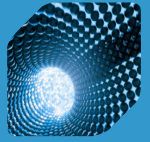
Why is BehaviourForecast relevant for you?

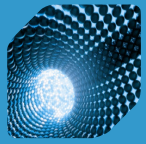


- The concept of **analytical Customer Relationship Management (aCRM)** becomes more and more important for most companies.
- The objective of CRM is to win long-term profitable customers, bind them to the company, increase their value and – if required – win back lost customers by a selective and **individual addressing**.
- The essential basis is the **identification of profitable customers** and the in-depth knowledge about their needs and behaviour in every phase of the customer life cycle.
- For this purpose TNS EX·A·MINE BehaviourForecast provides valuable information by analysing all available data sources and by extracting the relevant information for a specific problem via up-to-date **Data Mining Techniques**.

TNS EX·A·MINE™ BehaviourForecast

Analytical CRM along the customer life cycle





EX·A·MINE ProspectFinder

- **Objective:** cost-efficient new customer acquisition
- Which is the best **target segment** with the highest affinity to my offer and potentially profitable customers?

Lower cost of acquisition by targeting new customers well-directed

EX·A·MINE AffinityTracer

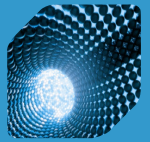
- **Objective:** increasing customer profitability
- What are my **most profitable customers** (Customer Lifetime Value)?
- Which **cross- / up-selling** actions are most promising?

Individually addressing customers, higher revenues

EX·A·MINE ChurnPredictor

- **Objective:** avoiding migration
- What are the crucial factors of **customer retention**?
- How can you identify “churners” early (**Churn Prediction**)?

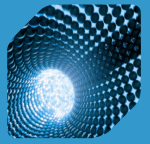
Increasing brand loyalty, cost-efficient realisation of loyalty programmes



EX·A·MINE ProspectFinder	EX·A·MINE AffinityTracer	EX·A·MINE ChurnPredictor
<ul style="list-style-type: none">→ Systematic selection of addresses with high purchase probability→ Limitation to potentially profitable customers	<ul style="list-style-type: none">→ Which products are often bought jointly?→ Which customers bought only parts of a common combination?	<ul style="list-style-type: none">→ Building typical “churn profiles”→ Derivation of churn probability→ Identification of most important factors of customer retention
<ul style="list-style-type: none">→ Marketing activities only to selected addresses→ Minimisation of acquisition cost	<ul style="list-style-type: none">→ Forwarding of customers with high cross-/up-selling potential to sales force	<ul style="list-style-type: none">→ Selection of “customers at risk” and forwarding to sales force→ Win-back activities

Phase-specific Data in the Life Cycle

Holistic examination of available information



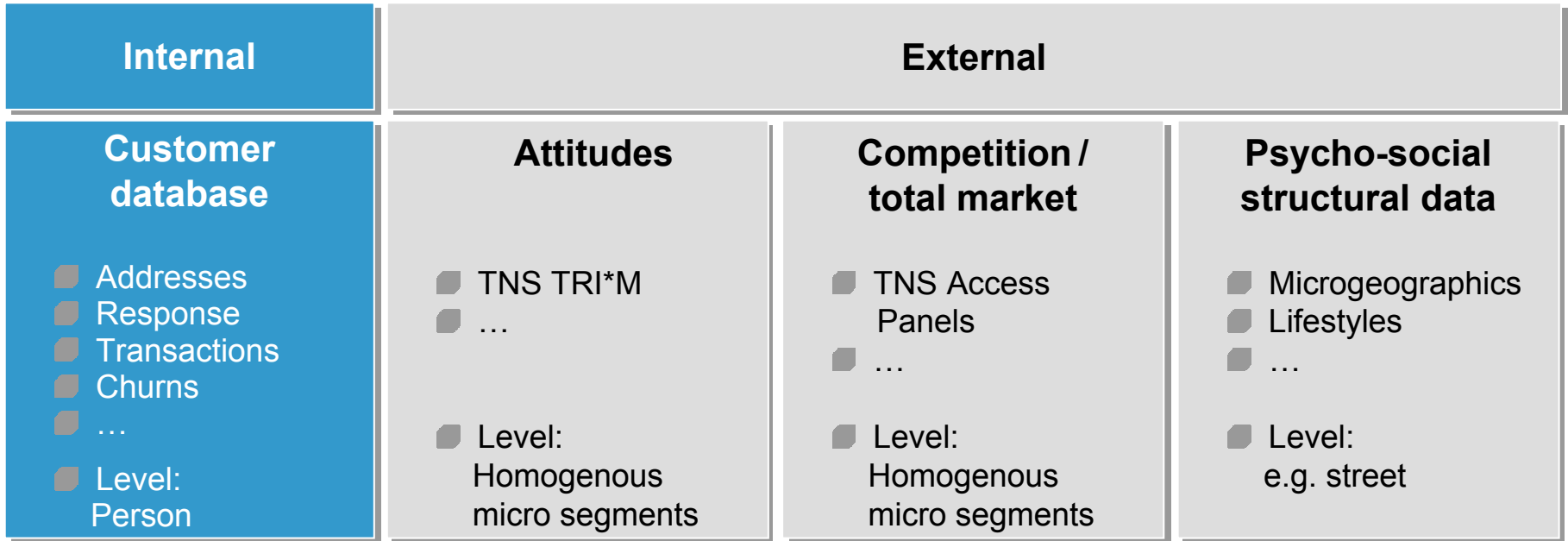
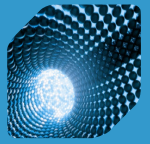
Master data	Potential customers	Active customers	Former customers
Master data <ul style="list-style-type: none"> ■ Address ■ Age ■ Sex / Gender ■ ... 	Response behaviour <ul style="list-style-type: none"> ■ Campaign affinity / history ■ Credit report ■ Self-disclosure ■ ... 	Transactions behaviour <ul style="list-style-type: none"> ■ Use of product ■ Payment behaviour ■ Channel preferences ■ ... 	Churn behaviour <ul style="list-style-type: none"> ■ Reason for termination (activ / passive?) ■ Reactivation ■ ...

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BehaviourForecast

CRM: Selection of target groups + individually addressing customers

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Holistic examination of internal and external data

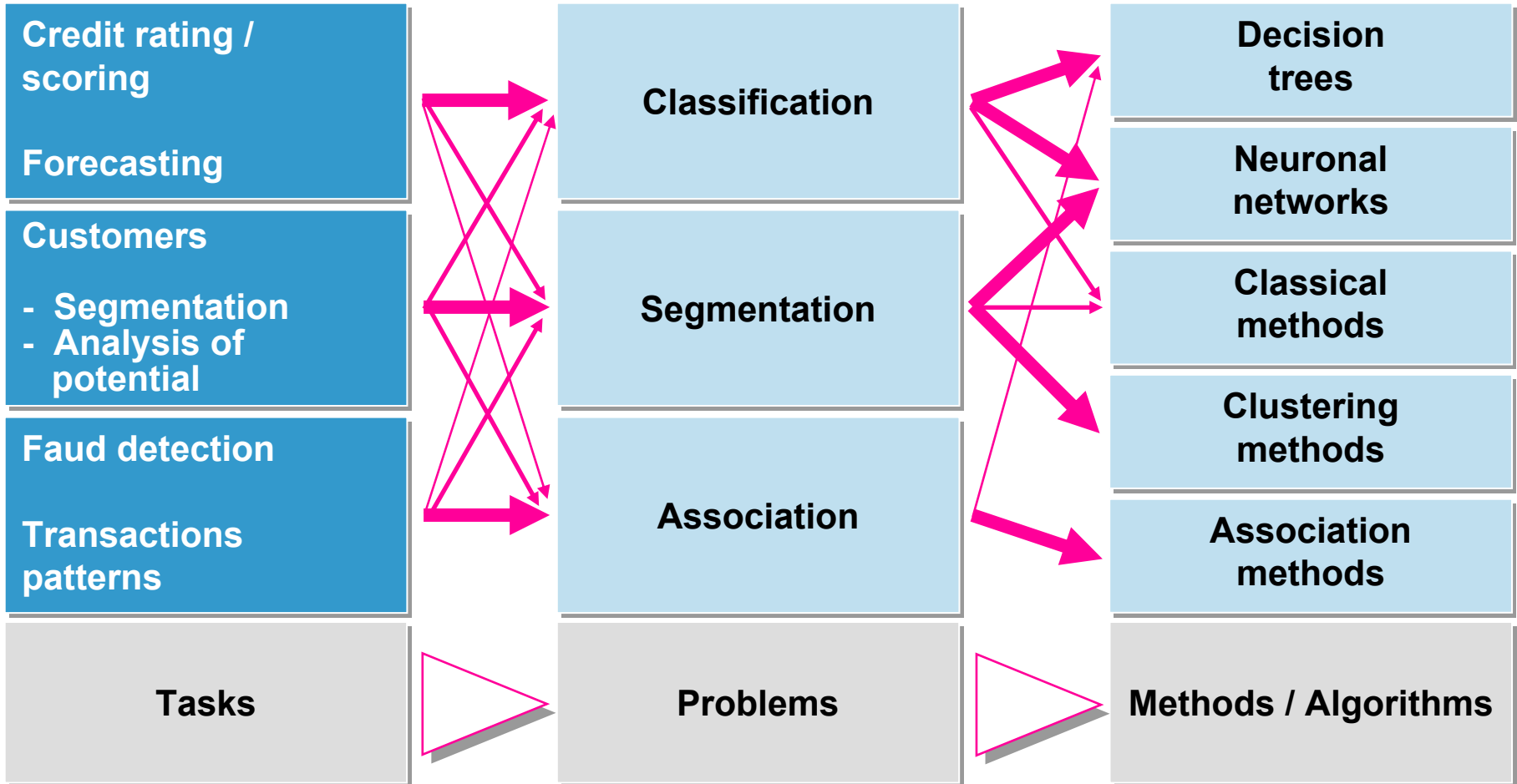
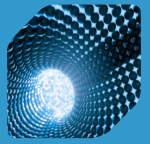


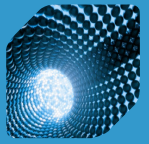
TNS EX·A·MINE
DataFusion + BehaviourForecast

CRM: Selection of target groups + individually addressing customers

Tasks and Problems of Data Mining

Broad spectrum of methods for specific analyses





■ **Multivariate statistics**

- Logistic, Categorical, Linear Regression, EM Algorithm
- Multivariate Adaptive Regression Splines (MARS)
- Ridge Regression, Robust Regression
- Cluster Analysis, Latent Class Analysis

■ **Decision Trees / Decision Rules, Automatic Learning**

- C&RT, C5.0, QUEST, CHAID, Association rules
- MART – Multiple Additive Regression Trees, Random Forest
- Nearest Neighbours / Instance based learning EX·A·MINE Profiler

■ **Artificial Neural Networks**

- Cascade Correlation Learning Architecture, MLP, SOM

■ **Hybrid Methods**

- Automatic OLAP Navigation and Search
- Genetic Algorithms for variable selection
- Neuro Fuzzy Algorithms, interactive visualisation of data

