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DAY 1

Introductions **09:00 - 09:30**

1. Model Structure - Linking Scores and Probabilities **09:30 - 12:00**

- # Non-Score Models - Decision Trees and Expert Systems
- # Where do scores come from?
- # Linear, Logit and Probit Models

Coffee break *10:45 - 11:00*

Lunch *12:00 - 13:00*

2. Population and Sample Design - Asking the Right Questions **13:00 - 15:00**

- # Business structure of a population
- # Exclusions and Inclusions
- # Lifecycles and Stability
- # Sample Structure
- # Sample Size

Coffee break *15:00 - 15:15*

3. Data Sources and Characteristics - Telling the Story **15:15 - 17:30**

- # Stories and Data
- # Customer demographics
- # Affordability
- # Credit bureau data
- # Customer behaviour
- # Geo-demographics

End of day 1 *17:30*

DAY 2

4. Discretizing Characteristics **09:00 - 10:00**

- # Getting to know the customers
- # One-dimensional Scores
- # Null hypothesis and statistical tests
- # Grouping criteria
- # Information value
- # Continuous variables

5. Logistic Regression - Expectations and Reality **10:00 - 11:00**

- # Maximum Likelihood Principle
- # Formulating the Problem
- # Actual vs. Expected
- # Solving the Equations
- # Variance of Scores

Coffee break *11:00 - 11:15*

6. Marginal Chi² Analysis **11:15 - 12:15**

- # Goodness of Fit
- # Score Corrections
- # Marginal Information
- # Bringing Characteristics in Model

Lunch *12:15 - 13:15*

7. Scorecard Building Strategies - Working with Logistic Regression **13:15 - 15:35**

- # Reading Model Estimation Output
- # Stepwise Approach
- # Automated Classing
- # Weight of Evidence Scorecards
- # Characteristic Selection Algorithm
- # Weighting Samples

Coffee break *15:35 - 15:50*

8. Measuring Scorecards - How good is my model? **15:50 - 17:50**

- # Measuring the Measures
- # Strategy Curves
- # Kolmogorov-Smirnoff Statistic
- # Gini Coefficients
- # Information Value

End of day 2 *17:50*



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DAY 3

9. Interactions and Splits - Multiple Scorecards **09:00-10:30**

- # Multiple Models – pros and cons
- # Interactions Mother-Child Scorecard Algorithm
- # Scorecard Scaling

10. Validation, Calibration and Adjustment **10:30-12:50**

- # Why validate?
- # Score Distributions
- # Model Calibration
- # Scorecard Adjustment
- # Qualitative Validation

Coffee break **11:00 - 11:15**

Lunch **12:50 - 13:35**

11. Risk Acquisition Models **13:35 - 14:55**

- # Strategies for Use
- # Score and Policy Rules
- # Population Flow and Performance
- # Reject Inference

Coffee break **14:55 - 15:10**

12. Reject Inference - Knowing what we don't Know **15:10 - 16:30**

- # Truncation and Swap-sets
- # Measuring Reject Inference
- # Parceling and its Problems
- # ... And Fixing Them
- # Reject Inference Diagnostics
- # Extensions

End of Seminar **16:30**

EXTRA SESSIONS

13. Behavioural Risk Models ... and Basel

- # Strategies - Collections Model
- # Strategies - Account Management
- # Population Definition and Exclusions
- # Basel Requirements
- # Customer Scoring

14. Continuous Outcome Models

- # Linear Regression
- # Outcome Variable Transformations
- # Actual = Expected
- # LGD Models

15. Frauds and Fraud Models

- # What drives Fraud?
- # Strategy Structure
- # Fraud Predictive Data
- # Buying Information
- # Adaptive Scorecards

16. Managing Scorecard Development

- # Project Organization
- # Project Design Document
- # Testing and Control
- In-house vs. External Development

17. Revenue Models – Measuring Value

- # Measuring Price Sensitivity
- # Multiple Outcome Variables
- # Revenue Streams
- # Early Closure and Cross-sell