

## **Business Proposal Calculations Document:**

All financial calculations within this report were derived from documented sources:

- **Profit/Loss formula:** Revenue from retained True Positives minus the sum of retention costs (for True Positives and False Positives) and lost revenue from False Negatives.
- **Lost revenue without intervention:** €49,029.48, based on churn rate and average monthly revenue data  
Extracted from "Pricing Benchmark + CLV Modelling.xlsx".
- **Average revenue per customer:** €15.50 monthly  
Extracted from "Pricing Benchmark + CLV Modelling.xlsx".
- **Lost revenue per churned customer:** €186 annually, calculated as €15.50 average monthly revenue multiplied by 12 months.
- **Brute force intervention cost:** €10,000, calculated as 2,000 test customers multiplied by €5 per customer.
- **Brute force retained revenue:** Approximately €92,726.84, calculated assuming 80% success retention rate applied to 623 churners, retaining approximately 498 customers at €186 each annually.
- **Predictive model expected retained revenue:** €90,768, calculated as 488 customers (80% of 610 True Positives) multiplied by €186 annual revenue per customer.
- **Predictive model retention costs:** Total of €655, calculated as True Positives cost (€610), False Positives cost (€45), and False Negatives lost revenue (€2,418).
- **Predictive model net annual benefit:** €87,695, calculated as expected revenue (€90,768) minus retention costs and lost revenue (€655 + €2,418).
- **Incremental financial benefit (predictive model vs brute force):** €4,968.16, calculated as the difference between predictive model net benefit (€87,695) and brute force net benefit (€82,726.84).