Developing Churn Models Using Data Mining Techniques and Social Network Analysis

Goran Klepac
Raiffeisenbank Austria Zagreb, Croatia

Robert Kopal
University College for Law and Finance Effectus Zagreb, Croatia & University College for Applied Computer Engineering Algebra Zagreb, Croatia

Leo Mršić
University College for Law and Finance Effectus Zagreb, Croatia & University College for Applied Computer Engineering Algebra Zagreb, Croatia
# Table of Contents

Foreword by Gino Yu ................................................................. vii

Foreword by Sachit Murthy ......................................................... ix

Preface ....................................................................................... xi

Introduction ............................................................................... xvi

## Chapter 1
Churn Problem in Everyday Business ........................................... 1
  1.1 INTRODUCTION ........................................................................ 1
  1.2 WHAT IS CHURN AND HOW TO RECOGNIZE IT? ......................... 7
  1.3 SOFT CHURN, SILENT BUSINESS KILLER .................................... 14
  1.4 WHEN NUMBERS CAMOUFLAGE REAL BUSINESS PICTURE .......... 18
  1.5 HOW TO RECOGNIZE SPARKLE WHICH HAS POTENTIAL TO BECOME A FLAME? ................................................................. 20

## Chapter 2
Setting (Realistic) Business Aims .................................................... 26
  2.1 INTRODUCTION ........................................................................ 26
  2.2 WHEN CHURN BECAME OBVIOUS IT IS TOO LATE FOR DATA MINING .... 27
  2.3 100% CHURN REDUCTION IS IMPOSSIBLE TO ACHIEVE .................. 29
  2.4 WHEN IS THE APPROPRIATE TIME FOR APPLYING DATA MINING METHODS? ................................................................. 31
  2.5 CHURN MONITORING AS A LONG TERM STRATEGY ...................... 35
  2.6 SETTING EARLY WARNING CHURN SYSTEMS .................................. 39