Chapter 13
Preparing for New Competition in the Retail Industry

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ABSTRACT

A business case presents a retail company facing new competitors and consequently preparing a customer retention strategy. The business environment in which the company was operating prior to the arrival of new competitors can be described as a stable market. Bearing in mind the plans and marketing activities of a competitor retail chain and making use of the data mining methods a system is being devised for the purpose of preventing or at least buffering the churn trend. Development of an early warning indicator system based on data mining methods is also being described as a support to the management in early detection of both market opportunities and threats. Research in data mining could also be concentrated on applying existing data mining techniques to find the best solution regarding practical business problems in the public or private sector. Knowledge regarding how some business cases were solved using data mining techniques could contribute in a better understanding of the nature or data mining nature and help solve specific business issues.

INTRODUCTION

In a turbulent business environment with fierce competition, getting new customers on board and selling a product or a service is more than a challenge (Berry 1997, Berry 2000, Giudici 2003). Companies usually resort to intense campaigns, which along with campaign costs sometimes include price reduc-

tions below the current market prices and/or quality improvements Klepac (2006).

Once the sales goals have been achieved and marketing and product development costs covered, a new battle geared towards keeping existing users of products and services starts. Reasons for customer churn are diverse. They range from the unexpected moves of competitors trying to gain a bigger piece of market share by using swift campaigns (possibly directly endangering your company's market

position) to unsatisfied clients suddenly starting to churn (Berry,2000). High initial costs of new products development as well as campaign expenses are seen as investments with the aim of gaining bigger market share. In some cases, the success can be measured by the time-span of usage of the advertised product by the customer, which eventually decreases the unit investment cost per product Berry (2000).

BACKGROUND

There are numerous case studies regarding how to recognise and reduce churn in retail business (Berry 2000, Berry 2003, Giudici 2003). Data mining methods which could be of use for this purpose could be logistic regression (Larose, 2005; Larose, 2006), survival models Berry (2003), Neural networks Alexander (1995), and self-organizing maps by Kohonen (2001).

If we review case studies for churn recognition (Berry 2000, Berry 2003, Giudici 2003, Namid 2004) there are numerous different solutions regarding business environment, market conditions, industry, dominant customer segments etc. Sometimes the source of data or data organization has an influence on the final data mining solution Agosta (2000). The business case presented in this chapter gives a potential solution of a business case related to wholesale and retail business in the situation where incoming competitors enter into a relatively peaceful market environment. In such a case, the following temporal market chapter provides a solution applied in practice which demonstrates good results after implementation.

How to Fight Competition

Trgovina is a wholesale and retail business, owning approximately thirty retail stores (supermarkets) across Croatia, as well as three wholesale stores whose main purpose is to provide goods to the retail stores, but also to sell goods to other legal persons in the retail and wholesale business.

Trgovina deals in consumer goods and it owns a central transactional database (Oracle) system, integrating all stores. The main transactional data stored in the information system consist of data sets from each filled out invoice related to codes of goods sold (categorised in the system), quantities bought, time of issuing the invoice and all other legally relevant elements necessary for creating a turnover book. Two years ago, the aforementioned company started a loyalty cards program. Within the program, customers collected points and, having collected a certain number of points, they earned the right to buy products at discount prices and periodically they were awarded gifts depending on the number of points collected.

The customers were obliged to provide the following data into the loyalty card application form:

- Name and surname
- Full address
- Year of birth
- Family status (married or not)
- Number of children
- Education level
- Categorised hobbies (sport, arts, etc.).

As a response to one competitor's plans to increase the number of its retail stores in a substantial number of regions where Trgovina's retail stores are present, the company has to increase the loyalty of existing customers and acquire new ones with the tendency of keeping them even in conditions when competition starts operating in the neighbourhood of some of the existing Trgovina retail stores.

The company is well aware of the fact that the initial strategy of its competitors to acquire business in a certain region involves attracting as many customers as possible and ensuring their long-term loyalty. It is expected that, in order to achieve this goal, the competition will be willing to invest a certain amount of money, resulting in

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