Chapter XV

Data Mining in Franchise Organizations

Ye-Sho Chen
Louisiana State University, USA

Robert Justis
Louisiana State University, USA

P. Pete Chong
University of Houston-Downtown, USA

ABSTRACT

Franchising has been used by businesses as a growth strategy. Based on the authors’ cumulative research and experience in the industry, this paper describes a comprehensive framework that describes both the franchise environment — from customer services to internal operations — and the pertinent data items in the system. The authors identify the most important aspects of a franchising business, the role of online analytical processing (OLAP) and data mining play and the data items that data mining should focus on to ensure its success.

INTRODUCTION

Franchising has been popular as a growth strategy for businesses (Justis & Judd, 2002), and its popularity continues to increase in today’s e-commerce-centered global economy. Take Entrepreneur.com, for example. In early 2001, the company included a category called Tech Businesses into its Franchise Zone that contains subcategories of Internet Businesses, Tech Training and Miscellaneous Tech Businesses. At the time of the writing, 27 companies are on the list of the Web site of Entrepreneur.com.
A recent Jupiter Report (2001) recommends using strategic partnerships, such as joint ventures and franchises, to enter e-commerce. A good demonstration of this type of strategic partnership is the online bank, where Juniper’s customers may deposit checks at the franchise chain Mail Boxes Etc. (Porter, 2001). Leaders of other industries also recognize the benefits of such cooperation or symbiosis. For instance, Gates (1999) believes that information technology and business are becoming inextricably interwoven. This nature of integration/interaction among businesses and technologies is especially pertinent in franchise organizations. For example, McDonald’s real moneymaking engine is its little-known real estate business, Franchise Realty Corp. (Love, 1995). This ability to leverage the assets, real estate in this case, of franchise operations, into profitable products or services is at the heart of a successful franchise. Thus, any effort to obtain “meaningful” information in franchise organizations must take this lesson to heart, and a tool for recognizing these meaningful patterns from both internal and external data source can give those in charge the ability to see the big picture without being sidetracked by the tedious process of sifting through mountains of data.

Leveraging franchise assets must be built upon sound fundamental practices. Among the many fundamental practices for franchise growth, developing a good relationship between the franchisor and the franchisee is believed to be the most important one (Justis & Judd, 2002). This relationship is developed during the time when a franchisee learns how the business operates. Since all of these elements are learned from working knowledge, thus working knowledge becomes the base of the franchise “family” relationship; and, through the learning process, working knowledge is disseminated throughout the system.

The working knowledge is generally accumulated from information that is deciphered from data analyses. In this paper, based on the concept of Digital Nervous system (DNS) suggested by Gates (1999), we propose a framework for leveraging franchise organizational data, information and knowledge assets to acquire and maintain a competitive advantage. This framework is the culmination of the authors’ years of research and experience in the franchising industry.

MANAGING FRANCHISE ORGANIZATIONAL DATA

According to Gates (1999, p. xviii), a DNS is the digital equivalent of the human nervous system and in corporation that provides information to the right part of the organization at the right time. A DNS “consists of the digital processes that enable a company to perceive and react to its environment, to sense competitor challenges and customer needs, and to organize timely responses,” and “it’s distinguished from a mere network of computers by the accuracy, immediacy, and richness of the information it brings to knowledge workers and the insight and collaboration made possible by the information.” The development of a DNS goes through three phases: (1) Empowerment and Collaboration Phase, (2) Business Intelligence and Knowledge Management Phase, and (3) High Business Value Creation and Implementation Phase. Specifically, the following questions need to be addressed in the franchise industry:

1. How is franchise organizational data being collected, used, renewed, stored, retrieved, transmitted and shared in the Empowerment and Collaboration Phase?
Related Content

Security of Wireless Devices using Biological-Inspired RF Fingerprinting Technique
Saeed ur Rehman, Shafiq Alam and Iman T. Ardekani (2014). *Biologically-Inspired Techniques for Knowledge Discovery and Data Mining* (pp. 311-330).

Optimization of Mean and Standard Deviation of Multiple Responses Using Patient Rule Induction Method

Making Decisions with Data: Using Computational Intelligence Within a Business Environment
[www.irma-international.org/chapter/making-decisions-data/7544/](http://www.irma-international.org/chapter/making-decisions-data/7544/)

A Graph-Based Biomedical Literature Clustering Approach Utilizing Term's Global and Local Importance Information
[www.irma-international.org/chapter/graph-based-biomedical-literature-clustering/40402/](http://www.irma-international.org/chapter/graph-based-biomedical-literature-clustering/40402/)

Navigation Rules for Exploring Large Multidimensional Data Cubes
[www.irma-international.org/article/navigation-rules-exploring-large-multidimensional/1773/](http://www.irma-international.org/article/navigation-rules-exploring-large-multidimensional/1773/)