Chapter 4.12
Data Warehousing and Analytics in Banking: Concepts

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ABSTRACT

In an increasingly competitive market, banks are constantly searching for sustainable competitive advantage to help them maintain their edge against competition. Over the years, banks have tried various drivers for competitive advantage, none of which were sufficient barriers for competitors. Understanding the behavior of their customers and using this knowledge to drive the interaction with customers is the most sustainable competitive advantage banks can obtain. Data warehousing and analytics provide banks with the ability to obtain customer knowledge, and the same infrastructure can be used for multiple business applications.

INTRODUCTION

Conventionally, banks were product oriented. The customer was treated as a mere appendage to the product sold. In the 1990s this trend started changing, especially with the advent of the Internet age. Customers became savvier with the availability of abundant information on the Internet. Banks began looking at alternate options to gain competitive advantage.

Competitive Advantage

How different are banks from other businesses? Well, not really very different from the shareholder’s perspective. Like in any other business, it involves taking calculated risks to earn a return on investments made. However, the significant difference is that the key commodity the bank deals in is money. Additionally, banks are one of the most leveraged businesses in the world—the capital adequacy ratio (CAR) specified by Bank for International Settlements (BIS) or local monetary authorities is typically around 8-10%. The capital adequacy ratio is a measure of the amount of a bank’s capital expressed as a percentage of its risk-
is the introduction of mobile banking by all the local banks in Singapore in the late 1990s. With the high penetration of mobile phones among the population, every bank rushed to provide mobile banking as an alternative channel touting user-friendly conveniences like checking your balance while you are on a bus! What seemed obvious later, but not apparent at that time, was that in a small geography like Singapore with branches and ATMs emerging at every corner, mobile banking became a ‘nice-to-have’ rather than ‘must-have’ facility. In a short time, practically all the banks withdrew the mobile banking channel.

Service is another competitive differentiator banks employ to attract customers. Depending upon the customer relationship with the bank, one can find service offerings like chauffeuring to collecting and banking checks that are beyond the conventional realm of banking.

The common drawback for all these drivers of differentiation—products, services, and channels—is that they can all be replicated easily by another bank. Hence the competitive advantage a bank gets through any of these methods is temporary, until the competitor bank catches up.

Sustainable Competitive Advantage

What then can be considered as a sustainable competitive advantage? Any advantage that cannot be easily replicated by a competitor bank is the characteristic of sustainable competitive advantage. Knowledge and insight of its customers then is the true sustainable competitive advantage for any bank. Let us examine this concept in some detail. By analyzing customer behavior the bank can learn about their preferences and drivers for behavior. This knowledge can be used to customize products and services. For example, analyzing patterns in credit card transactions and matching them up with other interactions like customer complaints could exhibit leading behavioral indicators for credit card cancellations. This information can then be used to create an
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