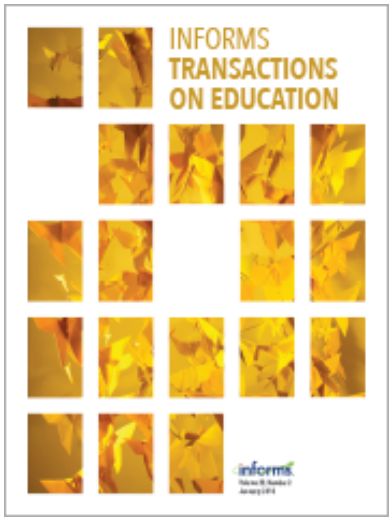


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Case

# Analysis of Call Center Data at Patelco Credit Union

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## Introduction

As Anthony picked up his backpack for his commute back home, he wondered if his data request had been successful. He was leaving his office early because he needed a block of uninterrupted time for the analysis that he had to do for his presentation next week. There was no way he would get that time at his office.[1]

Anthony Vitale was the vice president (VP) of information technology (IT) at Patelco Credit Union, one of the largest credit unions in California. He was responsible for implementing Patelco's IT strategy, including the IT infrastructure used at their call centers. Earlier in the morning, he participated in a meeting with the company's senior management and executive staff. The key issue on the agenda was a discussion of the rising number of customer complaints about the long delays they had to face when they called one of Patelco's four call centers. Customers were unhappy with how long they had to be on hold before speaking to an agent as well as, sometimes, the length of the call with the agents. The conversation seemed to jump abruptly from one issue to another. "The real issue is that our call center employees are not trained consistently. As a result, while we have some individuals who are very effective at handling such calls quickly, others take forever," said Brian, the VP of sales. Larry, VP of operations, added, "I am not sure that the issue is with specific individuals. I think that our performance varies significantly across the four call centers." Kate, assistant VP, who oversaw the Atwater call center, came to the defense of staff at these call centers, pointing out that the main reason was the significant variation of call volumes on different days and the poor systems infrastructure, which made it impossible for the staff to handle the diverse calls in a timely manner. The mention of systems infrastructure jolted Anthony. He had been listening patiently to this conversation, but it was now time for him to speak. Anthony turned to the group and asked "Do we have any objective evidence for the claims that we are making? Do we know the nature and the magnitude of the problems that we think we are facing?"

The silence that followed was deafening. Finally, Kent, the chief executive officer, cleared his throat and addressed the entire group. "Anthony has made a very important observation. We really have no idea of the nature of our problems. I think that we are all talking about symptoms of underlying root-causes. Unless we have a better understanding of the root causes, we cannot come up with meaningful solutions." Turning to Anthony, he asked, "Since you are most familiar with our IT capabilities, would you mind looking at the relevant data to help us objectively assess the various points that were raised today? I can assign Claire to you for any support you need. It would be great to have you present your findings to this group at our weekly meeting next Monday." Trained as a statistician, Claire had been recently hired to provide analytical support to the various new initiatives being considered at Patelco.

Confidently, Anthony nodded his head in the affirmative. He was a little slow to rise as everyone else got up to leave. He was reminded of a key insight he learnt in his class on operations management during his MBA program: long delays in service systems are

not the root cause of problems, rather an outcome of factors such as long service times, variability in service times or customer interarrival times, or insufficient service capacity. His mind turned to the daunting task of getting his hands on the data he needed for this analysis. "I need to learn to keep my mouth shut sometimes," he thought to himself, as he reached for his cell phone to call Claire.

## Credit Unions

A credit union is a member-owned financial cooperative, democratically controlled by its members, and operated for the purpose of promoting thrift, providing credit at competitive rates, and providing other financial services to its members. Many credit unions also provide services intended to support community development or sustainable international development on a local level and could be considered community development financial institutions. Based on data from the World Council of Credit Unions, in 2018 there were nearly 5,500 credit unions in the United States, with over $1.5 trillion in assets, serving over 118 million customers. [2]

Credit unions differ from banks and other financial institutions in that the members who have accounts in the credit union are also the owners of the credit union. They elect their board of directors in a democratic one-person-one-vote system regardless of the amount of money invested in the credit union. Members usually have a common connection among themselves, such as belonging to the same company or living in the same local geographic area. On the other hand, banks are for-profit financial institutions owned by private investors and serve the interests of their shareholders.

Banks and credit unions are both regulated and insured by the government. Credit unions receive several tax advantages but are only allowed to serve members with a common bond. Consequently, they offer a narrower range of services as compared with traditional banks. Common services offered by credit unions include share accounts (savings accounts), share draft accounts (checking accounts), credit cards, share term certificates (certificates of deposit), and online banking. Because normally, only a member of a credit union may deposit money with the credit union, or borrow money from it, credit unions have historically marketed themselves as providing superior member service and being committed to helping members improve their financial health. As a result, credit unions see themselves as of higher moral ground than banks; they feel that they are community-oriented and serve people, not profit. Indeed, surveys of customers at banks and credit unions have consistently shown a significantly higher customer satisfaction rate with the quality of service at credit unions.

**Exhibit 1.** Largest 25 Credit Unions in the United States in 2019

| Rank | Credit union | Assets ($ billions) |
|---|---|---|
| 1 | NAVY FEDERAL | $ 106,036,956,091 |
| 2 | STATE EMPLOYEES | $ 40,621,857,729 |
| 3 | PENFED | $ 24,417,005,333 |
| 4 | BECU | $ 21,247,612,958 |
| 5 | SCHOOLS FIRST | $ 16,007,924,756 |
| 6 | THE GOLDEN 1 | $ 12,628,675,367 |
| 7 | FIRST TECHNOLOGY | $ 12,592,095,456 |
| 8 | ALLIANT | $ 11,794,234,962 |
| 9 | AMERICA FIRST | $ 11,229,050,496 |
| 10 | SUNCOAST | $ 10,318,422,598 |
| 11 | RANDOLPH-BROOKS | $ 9,675,538,089 |
| 12 | SECURITY SERVICE | $ 9,647,537,915 |
| 13 | MACU | $ 9,061,313,528 |
| 14 | DIGITAL | $ 8,971,867,468 |
| 15 | BETHPAGE | $ 8,897,034,649 |
| 16 | STAR ONE | $ 8,752,402,835 |
| 17 | VYSTAR | $ 8,728,243,620 |
| 18 | SAN DIEGO COUNTY | $ 8,398,314,321 |
| 19 | ALASKA USA | $ 7,956,856,655 |
| 20 | AMERICAN AIRLINES | $ 7,477,435,097 |
| 21 | TEACHERS | $ 7,373,282,097 |
| 22 | PATELCO | $ 7,104,465,460 |
| 23 | ESL | $ 6,664,669,176 |
| 24 | LAKE MICHIGAN | $ 6,513,282,092 |
| 25 | CITIZENS EQUITY FIRST | $ 6,199,374,763 |

*Source.* National Credit Union Administration. Available at https://www.ncua.gov/.

## Patelco

Founded in 1936 as a not-for-profit financial institution with initial assets totaling $500, Patelco originally served only the employees of the Pacific Telephone & Telegraph Company. By the end of 2019, Patelco was the 22nd largest credit union in the country and 6th largest in California, with about $7 billion in assets and over 360,000 members (Exhibit 1). They serve communities across Northern California, including the Bay Area, Sacramento, and San Jose as well as the employees of over 1,100 large and small businesses throughout the United States. Customers can access their accounts from 38 local branches, over 30,000 ATMs, and over 6,000 shared credit union service centers nationwide. In addition to the usual banking services, they also offer home loans, home equity loans, auto loans, personal loans, credit cards, and home equity lines of credit.

Patelco's performance over the last few years has mirrored that of most other financial institutions. With declining home sales in 2005, the recession took a toll on all financial institutions. The resulting high unemployment rate and low consumer confidence forced Patelco to lower interest rates to its customers. Operating margin shrank, as did Patelco's asset base. In 2010, its year-to-date loan growth was −7.47%. Because loans are the main revenue driver for the organization,

this trend was alarming. Operating performance stabilized in the following years. However, there were some concerns again by 2018. Year-on-year loan growth was 21% in 2017, 15% in 2018, and 11% by the end of 2018. The ratio of total member equity to total assets, which can be used as a simple measure of capitalization, dropped from 10.52 in 2016 to 10.33 in 2017 and to 10.32 in 2018.

Also alarming was the most recent report by the American Customer Satisfaction Index (ACSI),[3] which noted that for credit unions, a 10-year lead over banks had come to an end as customer satisfaction waned by 1.2% to an ACSI score of 81. Although the 2008 financial crisis was a boon for credit unions in terms of growing membership because credit unions offered better, more individually tailored service, with the economy much improved, there was less incentive to join credit unions—particularly if they no longer provided higher levels of satisfaction than banks do. Overall, in-person customer service was still slightly superior at credit unions compared with banks. However, smaller regional and community banks outperformed credit unions when it comes to mobile banking. Across the credit union member experience, most aspects were the same or worse than a year ago. According to their members, credit unions offered fewer financial services and account information was less clear. In addition, it was not as easy to open new accounts or make changes and interest rates were less competitive. Although call centers were improving, there was room for improvement because it was clear that exceptional customer service and experience were critical to the success of credit unions relative to banks.

Therefore, for the next year, Patelco's management was focused on three objectives: increase customer's total outstanding balance, increase the number of its active members, and improve its score for customer satisfaction. The third goal was particularly noteworthy because Patelco's internal research has shown low customer satisfaction to be a prime cause of customer defection.

The member-owner focused mission and the need for financial sustainability in the face of market trends provided a very clear mandate for Patelco's executive team: efficient customer service and lean operations. Because on an ongoing basis customer call centers are the main point of contact with members, performance of these call centers is critical in defining customer satisfaction.

## Call Center Operations

Patelco operates four main call centers: Collection, Mortgage Services, Credit Card Services, and General.

The primary function of the Collection Department is to provide guidance and counseling to assist members in resolving their account delinquency and to protect the credit union's assets through effective loss mitigation efforts. The Collection Department is staffed with qualified individuals specializing in collection and loss mitigation of unsecured loans, consumer obligations, and first and second mortgages. The principal collection strategy emphasizes early intervention and event-driven escalation of collection efforts. Collection intensity varies depending on account status and is as persistent as is cost justifiable and reasonable with respect to the impact on the member relationship. Based in San Francisco, California, and employing 12 agents, the Collection call center is a major unit within the Collection Department responsible for generating outbound collection attempts through telephone and providing service on inbound calls.

The Mortgage call center is located in Sacramento, California, and focuses on the sale and servicing of mortgage products, such as first and second home mortgages and home equity lines of credit. There are three groups of agents at this location. The first group of agents handles all calls from customers associated with questions and details regarding the mortgage products. Once a sale is made, the call is handed over to the second group of processors. This group manages all the required paper work, processing due diligence and back-office operations to close the sale. Once a customer is on Patelco's books, the servicing of these mortgages is handled by the third group of loan service agents.

The Credit Card call center located in Atwater, California, has the fewest employees with four full-time employees and a few part-time agents, reporting to a manager and a VP. Agents in this call center tend to be generalists and are operationally focused on the servicing of credit card products.

Based in Pleasanton, California, the General call center has 10 agents, all managed by a supervisory staff of four, who reported to a manager and a director. Nine out of the 10 agents were full-time employees. These agents were all qualified individuals trained to answer general account inquiry calls. They handled a variety of calls ranging from simple queries about their account balances or hours of operation to detailed queries about individual accounts. During nonbusy times, the staff performs basic filing (signature cards) and work on returned mail.

With the exceptions noted above, the majority of the call center agents tend to be generalists at each location. Calls requiring product-specific information get escalated to specialists, though this happens infrequently. Senior staff members at these call centers often tend to be Patelco lifers, with tenures upwards of 15 years, although the majority of the

employees have been there for more than 5 years. Full-time employees are mostly college graduates, whereas many of the part-time employees are current students. Most call centers operate from 8:00 a.m. to 7:00 p.m. on week days, with a limited operation on Saturdays. Sundays are closed. Average wages for employees are $13.00/hour, though the fully loaded cost is $22.00/hour.

## The Analysis

Anthony realized that he needed to perform an analysis of data about their call center operations to describe the current situation before they could start diagnosing their problems.

Remembering the lesson from his MBA classes, Anthony decided to begin by focusing his attention on call duration times, or service times, at the General call center. This was almost entirely an inbound call center; all of its agents were generalists, so Anthony felt that it would be the least complex to analyze. He wanted to start simple, so he created a template to request sample data from their system call logs (Exhibit 2). For each call, he wanted to know the name of the agent who handled the call, the time when the call commenced (following the period when the customer might be on hold), and the duration of the call. He decided to limit his analysis to the month of December, so that he could give the data to Claire in an Excel spreadsheet. Barely 30 minutes after he had emailed the template to Rick, the data center supervisor, he got a frantic call from him. The number of records was too large to fit on one spreadsheet. "What a great start!" Anthony muttered. "Give me data for just the first two weeks then," he said.

**Exhibit 2.** Template for Data Request

| Agent assigned to the call | Date and time of call[a] | Call duration |
|---|---|---|

*Note.* The Excel spreadsheet General.xlsx has the call log data for this call center.

[a]This corresponds to the time when the conversation with the customer commenced.

## Endnotes

[1] This case was prepared by Professor Narendra Agrawal as the basis for class discussion. Anthony Vitale (Santa Clara University, MBA, 2011) provided invaluable assistance in the development of this case. Cases are not intended to illustrate either effective or ineffective management. Certain data have been disguised.

[2] The source is http://en.wikipedia.org/wiki/Credit_union, 2/11/2020.

[3] The American Customer Satisfaction Index is a national economic indicator of customer evaluations of the quality of products and services available to household consumers in the United States. See https://www.theacsi.org/images/stories/images/reports/18nov_financial-insurance-report.pdf.