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Grand Valley Bank - Credit Card Profitability

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Case Proposal

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This is a case involving a bank with a current credit card that is proving to be unprofitable. Students will need to perform a basic customer profitability analysis. Then students will analyze the results of a survey on customer satisfaction with the current card benefits and potential benefits to add. Students finish by recommending a course of action to return the product to profitability.

Survey results of about 20,000 respondents (use randomization with specific parameters to generate these)
Students need to clean the data
Data issues to put in:

- Survey responses that vary, such as a participant saying Y or Yes
- Responses on numerical values larger than the bounds
- Incomplete responses
- Contradictory responses, such as asking about income level and then determining it to be different than bank records

Multiple databases to include

- Two different sets of survey results (to demonstrate difficulty of combining survey results, with potentially slight differences in the way some responses are recorded)
- One for features possible, with cost estimates
- One with demographic data of some kind

Students run statistics on the results, identifying which features are more important to which groups and integrating it with cost data on what the projected features cost to implement.
Students then make recommendations to what changes to make.

Possible tensions in the case
Survey responses that indicate a feature preference with one subgroup (maybe lower income respondents), enough to sway the average toward that feature, but it involves a feature they are less likely to benefit from (like travel services). Eliminating that subgroup swings the benefit preference to a different benefit.
Preferences for features are ranked. Two popular features that are both possible to add cost-wise, but are contradictory features (like low introductory rates on balance transfers and low permanent rates on balance transfers). Students might say to add both features but it is not logical to do so.

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Sarah Chang, vice president for consumer credit, was confused. She was looking over the reports from the most recent quarter on the profitability of the Grand Valley Bank Visa card, and didn't like what she saw. She was under the impression that the credit card was a big money maker for the bank. After all, enrollment has been growing and transactions numbers increasing for the past 12 quarters. Yet, the profitability of the card had been slowly decreasing each quarter. The last three quarters actually showed a loss, when all expenses had been considered.

Sarah called in Jose Rodriguez, senior credit analyst, to get a better understanding of the situation. She asked Jose to review the recent timeline with her to help identify why this was a problem. Jose recounted the recent developments with her.

Grand Valley Bank had been in business for about 50 years. About 25 years ago, it introduced its credit card as a new financial product, marketing it mostly to current customers at the bank, those with existing savings and checking accounts. The credit card product was viewed as an additional feature to offer potential customers who wanted more banking services than just savings and checking accounts. It was managed as a break-even service, not a significant revenue generator for the bank. No annual fee was charged for this additional service, as it was thought the card would pay for itself.

This changed as customers started using credit cards more, with online purchases and travel being more popular. Customers also wanted more benefits and perks from credit cards. About 10 years ago, Grand Valley Bank started by offering 1% cash back on all purchases. Jose reminded Sarah that when she came to the bank about 5 years ago, the thinking shifted from using the credit card as a secondary service, to being a primary product which could increase revenues significantly. In order to grow the business further, marketing started to focus on non-bank customers who would only sign up for the credit card product. To be competitive, more benefits and perks were added to the card. Five years ago, low-introductory-rate balance transfers were added. Four years ago, additional percentage off specialty spending categories were added, 2% cash back for gas and groceries, and 3% cash back for online purchases. See Table 1 for a summary.

The results were as desired in terms of customers. Growth in card enrollments increased every quarter since the start of the campaign 5 years ago. Purchase amounts were soaring as well.

Table 1

50 years ago	Grand Valley Bank opened for business
25 years ago	Grand Valley Bank Visa Card first offered to customers, with no annual fee
10 years ago	Offered 1% cash back on all purchases
5 years ago	Low introductory rate on balance transfers
4 years ago	Offered 2% back on gas and groceries and 3% back on travel services

Jose worked with Sarah to understand what the problem could be. To simplify the financial aspects, Jose used a point system to explain how credit cards worked. Banks earn a fee from each vender who accepts payment via the credit card. It can also earn interest from each customer who carries a balance on the card. The fees earned from vendors enable the bank to offer 2 points of benefits to customers. More services can increase the points available. The relative costs of the benefits are also assigned points. The points and benefits are summarized in Table 2.

Table 2

Initial points available for benefits	2 points
Charging an annual fee	Add 1 point
Combined checking/savings account with bank	Add 1 point
Carry a balance at a non-introductory APR	Add 1 point
Costs of card perks and benefits currently offered	
Percentage back on all purchases	1 point for each 1%
Higher % cash back on travel purchases	½ point for each 1%
Higher % cash back on gas and grocery purchases	½ point for each 1%
Low introductory rate on balance transfers	1 point
Costs of potential new card perks and benefits	
Concierge services	½ point
Reward perks for travel (free hotels and flights)	1 point
No translation fee on foreign currency purchases	½ point
Zero interest on large purchases for 12 months	1 point
Automatic insurance coverage for rental cars	½ point
Low permanent rate on balance transfers	2 points

With this better understanding, Sarah instructed Jose to do several tasks. First, the bank needed to determine the popularity of the current benefits to see which customers were using which services. Jose was to perform a customer profitability analysis to see if this was the reason for the declining margins.

Next, Jose needed to put together a survey for its customers to determine the satisfaction level of the current benefits. He should include the potential new benefits to see if any of those would be preferred to the current ones. They would meet again after Jose completed this analysis.

Jose started by examining the data he had available. After consulting with IT, he obtained a database with the following attributes:

First database with current customer data

- Customer number
- Current credit limit
- Average monthly balance
- Average balance of checking/savings accounts with bank
- Current credit score
- Account age (in months)
- Annual income
- Percentage of purchases for travel

- Percentage of transactions in a foreign currency

Jose then developed a survey, using the following questions:

Survey questions

Customer number (input number)

Annual income bracket
- Under $40,000
- Between $40,000 and $70,000
- Between $70,000 and $100,000
- Between $100,000 and $150,000
- Over $150,000

Do you currently have a savings and/or checking account with the bank
- Yes
- No

Satisfaction with current credit card features on a 1 to 7 scale
- No annual fee
- 1% back on all purchases
- 3% on travel purchases
- 2% on gas and groceries
- Low intro rate on balance transfers

Rank the following features that you would like to have in a new version of our credit card
- No annual fee
- Annual fee, but higher levels of benefits
- 1% back on all purchases
- Higher % back on travel
- Higher % back on gas and groceries
- Low intro rate on balance transfers
- Concierge services
- Rewards points for travel
- No fee on foreign currency purchases
- Zero-interest on large purchases for 12 months
- Automatic insurance on rental cars
- Low permanent rate on balance transfers