

GOVERNOR'S CHALLENGE
in Economics and
Personal Finance

2014 Personal Finance Case Study

Your team focuses on providing comprehensive financial planning for your clients. Mr. and Ms. Patel heard about your services from a neighbor, who stated that you are great at helping families think through various options so that they can develop a plan that will help them reach their goals and make intelligent financial choices along the way.

When you first met with the Patels, you learned the facts described below and were provided with both the attached balance sheet and budget. Use this information to help the Patel family improve their financial condition and reach their financial goals.

Personal Information:

Raj and Nikita Patel are a married couple living in Harrisonburg, VA. Originally high-school sweethearts, they are now a young, active and extremely healthy family with two children; their daughter, Priya (age 7) is in second grade, and their son, Aziz (age 5) is in kindergarten. Raj (age 34) did not attend college after high school and works in manufacturing. Nikita (age 31) attended community college and works as a receptionist at a local accounting firm.

Raj, and his family, had grown accustomed to him working 50 to 60 hours per week, but since the recession his hours have been strictly limited to 40 per week so he cannot request over-time or extra work shifts. Unfortunately, although his hours and subsequent income were reduced, the family did not reduce their monthly expenses. To earn a little extra money during tax season, Nikita has shown interest in becoming a Registered Tax Return Preparer but hasn't discussed this with her firm.

The Patels currently rent a three-level townhouse with a finished but unfurnished basement in a well-to-do neighborhood in Harrisonburg and feel social pressure to compete with the lifestyles of their more affluent neighbors. Many of their neighbors are members of the local golf and swim club and encouraged the Patels to join as well. Raj recently bought a set of custom golf clubs so he could golf and socialize with his neighbors, several of whom are avid players. Priya began taking violin lessons last month as part of her music curriculum at school. Nikita purchased her a new, expensive violin and used their credit card to finance the purchase. Aziz recently showed an interest in swimming, so Nikita signed him up for lessons at the golf and swim club aquatic center. The children's activities coupled with Raj's inconsistent work schedule means that the family doesn't have time to make a lot of meals (and neither parent enjoys cooking), so the family frequently eats out at local restaurants.

After the two expensive purchases and other spending, the family has reached the credit limit on one of their credit cards. In addition, the Patels replaced their living room sofa and chair with a nice leather sectional when the local furniture store was having a sale last June. They opted to finance the \$2,000 purchase through the furniture store to take advantage of 24-month, zero percent financing. Upon reading the financing agreement, the Patels realized that if they do not pay off the entire balance within the 24-month period then interest will be charged at an annual interest rate of 22% dating back to the original date of the loan contract. They have only paid a small portion of the loan since the purchase.

One last financial issue is that due to a two-week shutdown in November at the manufacturing plant where Raj works, the family had to take a payday advance loan to pay their car payments during that month. While they haven't had any trouble making the car payments since, they have not been able to repay the payday loan and it has been collecting extra interest at a very high rate.

Raj and Nikita have realized that they need assistance getting their financial lives in order. Therefore, they have **provided a current balance sheet and an estimated budget of their living expenses for 2014**. These statements show the Patel family's current financial situation and how they manage their personal finances.

Financial Goals and Life Objectives:

1. Strengthen their overall financial security. The family needs to create an emergency fund worth at least three months of their expenses and provide the family with adequate life insurance coverage.
2. Reduce debt by paying off major liabilities.
3. Fund Raj and Nikita's retirement accounts.
4. Establish an education fund for Aziz and Priya to attend college.

At a minimum your written plan should address the following:

- The main strengths and weaknesses of the Patel's current financial condition.
- Suggest changes to the Patels' lifestyle to pay-off high-interest liabilities and improve their financial situation
- Recommend an education saving account and increased contributions to their retirement accounts.

Current Cash flow Information

Using the information given, you need to calculate the monthly and annual car payments for both Nikita's and Raj's vehicles to compute the total living expenses and any remaining cash in the budget.

Current Insurance Information

Health

- Coverage is provided through Nikita's employer
- Insured persons are Raj, Nikita, and their dependent children
- Annual deductible is \$750 per person with a maximum of \$1,500 per year
- Co-insurance after deductible is 20%
- Annual stop-loss limit is 20% of the first \$8,000 per person per year with a maximum of \$5,000 per year
- Major medical coverage is unlimited

Auto

- Split limit coverage: 50k/100k/25k
- Collision deductible: \$500
- Comprehensive (other-than-collision) deductible is \$500
- Annual premium: \$3,000

Disability

- Short term policy
- No elimination period
- 90 day benefit coverage
- No long-term disability coverage is available through Raj's employer
- Nikita's employer doesn't provide any disability coverage
- Note: If they think that a disability would be considered permanent and total, Raj or Nikita would need to seek coverage under the Social Security Administration's definition of disabled.

Life Insurance

- Term life policy with a value of \$44,000 (one year of Raj's salary) provided through Raj's employer
- Nikita's employer does not provide her with any life insurance coverage.

Homeowner's Insurance

- HO-4 policy (Renter's insurance)
- \$4,000 of personal property coverage (Coverage C)
- 30% of Coverage C limit
- Annual premium: \$155

Pay Day Loan

- Pay day loans are used when people do not want to borrow money from friends and family or their bank. The loans are short-term with very high interest rates. Initial loan = \$600
- The payment for this loan is \$150 per month for 4 months. However, there is a monthly service fee of \$24. This increases the actual monthly payment to \$174. This results in an effective annual interest rate of nearly 75%.

Retirement

Raj wants to retire at age 67, and Nikita wants to retire at age 65. The couple was originally from Charlottesville, VA and would like to return there after they retire. After retirement, they aim to replace 75% of their pre-retirement income to maintain a similar standard of living (approximately \$51,000 in today's dollars). Because the family isn't confident of the amount of Social Security that will be available when they retire, no Social Security benefits are included in their retirement planning and they would consider any such benefits an unexpected bonus.

The factory where Raj works offers a 401(k) contribution plan with employer matching. While he used to be able to defer much more because of his overtime pay, Raj has currently elected to defer 2% of his salary annually into his 401(k). This equates to roughly \$880 a year. His employer matches 50% of Raj's contributions, up to 5% of his total salary. In this case, the employer will match 50% of Raj's contributions, or 1%, as this is under the 5% limit. The total amount contributed by both employer and employee is \$1,320. He also has an IRA into which he used to invest \$100 a month, but after the recession he has not been able to continue adding to his account. The account is currently invested in a no-load, S&P 500 index fund.

Nikita currently has a traditional rollover IRA, which she rolled-over 5 years ago when she left her previous employer to give birth to Aziz, and is considering converting it into a Roth IRA. The balance in her IRA account was rolled over from her previous employer's plan. She has not made any additional contributions to the IRA since she left that previous employer. The IRA is earning 1.5% at their local bank.

Neither Nikita nor Raj know the annual contribution limits for an IRA or a 401(k), and therefore are unsure how to continue saving.

Estate

They do not currently have any estate planning documents in place.

Case study provided by students Daria Victorov, Brittany Clifton, Eric Siss and David Klepeisz, members of the Student Financial Planning Association at Virginia Tech, under the guidance of Mr. Derek Klock and Dr. Ruth Lytton.

If your team is one of the top scoring teams in the online Personal Finance Division of the Governor’s Challenge and invited to participate in the statewide Championship on April 9, 2014, below are some additional directions.

- **By Monday, April 7, 2014 at NOON**, provide a written report in any format you believe appropriate that sets forth your recommendations and includes any assumptions and calculations you believe would be helpful for the Patel family/judges. The report cover should include the names of your financial planning team and your sponsoring teacher, school and school division. E-mail the report to Sarah Hopkins Finley at shfinley@vcu.edu. If you do not receive an e-mail acknowledging receipt within 30 minutes, please call Page Ritter to confirm receipt of the report (804-828-1628.) **MAXIMUM page limit: the report with recommendations may not exceed 10 pages, not including the cover page. An appendix may also be added with any supporting documentation and calculations deemed appropriate.**
- Visit www.vcee.org for **additional details** regarding the Championship Challenge on April 9, 2014. (Look under Governor’s Challenge under Programs/Awards.)

Judging at the Governor’s Challenge will be as follows:

Written Project Evaluation

- Methodology - 20 points
 - Appropriate methods (10)
 - Creativity (5)
 - Citations/References as appropriate (5)
- Accuracy of Calculations - 25 points
 - Clearly stated assumptions (5)
 - Correctness of calculations (20)
- Recommendations – 40 points
 - Clearly stated recommendations (10)
 - “5 Ws” Who, What, When, Where and Why (10)
 - Realistic nature of recommendations (10)
 - Recommendations help client work towards stated goals (10)
- Professionalism – 15 points
 - Organized (5)
 - Formatting/Appearance (5)
 - Appropriate tone of project – relates to client, grammar (5)

Oral Presentation at the Challenge

- Clarity of Presentation and Content – 50 points

- Introduction of team members (5)
- Clearly state the specifics problem/goal addressed (10)
- Appropriate use of visuals/presentation aids (10)
- Appropriate methodology/tools (10)
- Clear-recommendations (with “5 Ws”) (10)
- Realistic nature of recommendations (5)
- Involvement of all members – 20 points
 - Oral presentations (10)
 - Answering questions (10)
- Professionalism – 30 points
 - Organized presentation (10)
 - Appearance & demeanor of team (10)
 - Creativity (10)

January 30, 2014