

Python for Analytics: Week 8

Self-Study Discussion 8.2: Decision Analysis Case Study

David's Decision Problem

• David Tan, a second-year MBA student at NUS, is in a very enviable position. He has three lucrative career paths:

Option 1:

An offer from a top management consulting firm (\$70,000 for the first year)

Option 2:

Startup idea to open his own restaurant, **Dallas**Restaurant and Bar

Option 3:

An unusual partnership opportunity with his aunt, a restaurateur

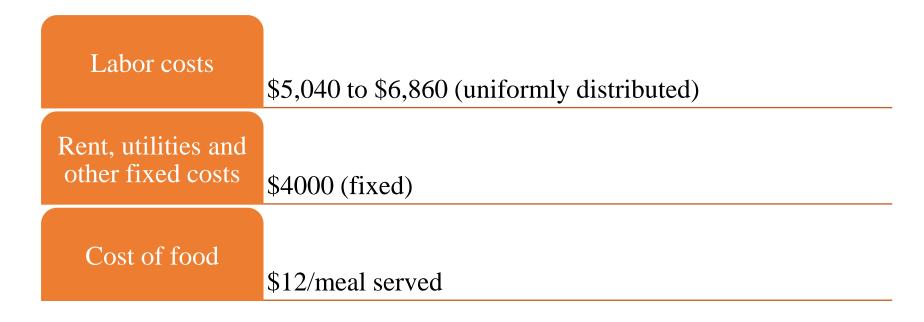


Option 1: Challenges

- The lifestyle of management consultant is taxing
- Much of the travel is rather routine to affect his family life
- While David is very energetic and motivated, enjoying hard work, he is also committed to maintaining a healthy personal life as well

Option 2: David's Estimates for Dallas Restaurant and Bar

• Cost of running the restaurant



Option 2: David's Estimates for Dallas Restaurant and Bar

• Restaurant revenue

- Number of meals sold per month obeys a normal distribution
- Price of prix fixe meal

Scenario	Prix Fixe Meal Price	Probability
Very healthy market	\$20.00	25%
Healthy market	\$18.50	35%
Not so healthy market	\$16.50	30%
Unhealthy market	\$15.00	10%

Option 3: Partnership Offer

• Terms of the partnership offer

- David's aunt would guarantee him a monthly salary of at least \$3,500
- All earnings between \$3,500 and \$9,000 would go to David
- 90% of all earnings in excess of \$9,000 would go to his aunt

Factor to be considered

• To maintain a reasonable lifestyle, David needs \$5,000 / month



Sensitivity Analysis

- Sensitivity Analysis
 - What if the SD of monthly demand can be reduced to 500?
 - What if <add other scenarios>...



BUSINESS SCHOOL