Unit 6 Discussion Example - First Response to a Classmate's Post

First response: Choose a classmate's post and review his or her decision analysis table. Add to this table by choosing a risk level for each state of nature (assign a probability value to each).

- 1. Calculate the EMV for each alternative.
- 2. Discuss which alternative is best based on the best (maximum) EMV.
- 3. Calculate the Expected Value with Perfect Information (EVwPI).
- 4. Calculate the EVPI.
- 5. Discuss how much money your classmate should pay for perfect information.

I will review "The New Green!" smoothie business. I will assume that the probability of an awesome nutritional demand is 50%, Moderate nutritional demand is 30% and Poor nutritional demand is %20.

Profit	Awesome Nutritional Demand	Moderate Nutritional Demand	Poor Nutritional Demand		EMV	Minimum	Maximum		
Probability	0.5	0.3	0.2						
3 New Carts	450	150	-150		240	-150	450		
1 New Cart	150	50	-50		80	-50	150		
0 New Carts	0	0	0		0	0	0		
				Maximum	240	0	450		
Expected Value of Per	fect Information								
Column best	450	150	0		270	O <-Expected value WITH perfect information			
					240	O <-Best expected value			
					30	<-Expected value OF perfect information			

1. The EMV for each alternative is:

	EMV
3 New Carts	240
1 New Cart	80
0 New Carts	0

2. The maximum EMV would be to build 3 new carts with an expected monetary value of \$240 per day.

3. The Expected Value with Perfect Information (EVwPI) = \$270.

4. The Expected value OF perfect information (EVPI) = \$30.

5. The above calculations then tell me that I should only spend about \$30 (a day!) to get additional information about the nutritional market. So, I guess if I wanted to pay someone to survey my clientele, I should only pay \$30 a day or about \$210 a week to get market information!