

MM305M4 Competency Assessment – Part 2 Guidance

These responses are meant to be a guide on how to address part 2 of the competency assessment and do not include all possible responses.

1. I am the business owner for my personal juice/smoothie business, “The New Green!” I have smoothie carts in various locations around town. Business has been going very well and I am considering expanding my business to our neighboring town.

2. Three alternatives would be:

1. Expand fully to neighboring town with 3 new smoothie carts
2. Pilot the expansion with just 1 new smoothie cart
3. Stay status quo – do not expand (Make the customers come to me!)

Three states of nature would be:

1. Serious demand for good nutrition
2. Moderate demand for good nutrition
3. Nobody cares about good nutrition

3 & 4. On a typical “awesome” day, I sell about \$250 in smoothies per cart and it costs about \$100 for electricity and staffing. So, a net income of about \$150 per day.

On a typical “moderate” day, I sell about \$150 in smoothies per cart and it still costs about \$100 for electricity and staffing. So, a net income of about \$50 per day.

On a typical “poor” day, I sell about \$50 in smoothies per cart and it still costs about \$100 for electricity and staffing. So, a net loss of about \$50 per day.

I will set up my decision table based on the above profit/losses per smoothie cart.

Color Key:		States of Nature and Alternatives			
Cells that require student input		should only be used as needed. Not all rows and columns need input for every situation.			
Excel Calculated Results					
Information from Question	High demand	Medium demand	Low demand	State of Nature 4	
	3 new carts	450	150	-150	
	1 new cart	150	50	-50	
	No change	0	0	0	
	Alternative 4				

5. I will choose to use the Criteria of Realism strategy.

For the Criteria of Realism (Hurwicz), I will use a coefficient of realism of $\alpha = 0.75$. As a reminder, this means that I will be 75% optimistic and 25% pessimistic – a compromise between the optimistic and pessimistic strategies. The Criteria of Realism decision is to build 3 new carts, based upon the decision strategy's alternative value of 300.

States of Nature and Alternatives should only be used as needed. Not all rows and columns need input for every situation.				Maximum value for each alternative	Minimum value for each alternative	Expected Monetary Value (EMV) Decisions	Expected Values with and of Perfect Information	Hurwicz Criteria Percent Optimistic	Hurwicz Criteria Values
High demand	Medium demand	Low demand	State of Nature 4						
450	150	-150		450	-150	210	EVwPI	α	300
150	50	-50		150	-50	70	255	0.75	100
0	0	0		0	0	0			0
							EVPI		
				Maximax	Maximin	EMV	45		Hurwicz Criteria
450	150	0		450	0	210			300

Essay:

I am the business owner for my personal juice/smoothie business, "The New Green!" I have smoothie carts in various locations around town. Business has been going very well and I am considering expanding my business to our neighboring town.

Before making my decision I am going to examine my alternatives

Because of how my business operates I choose to use the strategy ...

Here is an examination of a table that has the potential payoffs/losses. This table is indicating to ...

My final recommendation is ...