

selected answers:



10

50

100

RISK: The hardware will be delivered 10 days late, leading to an overall project delay of 10 days in a project that is of minor-importance to customer. There is a 90% likeliness that the hardware will be delayed.

If the probability of the risk to happen is 1 and its risk impact scale is 50, calculate the corresponding risk factor using the risk matrix below.

Impact

10

50

100

Probability

1

Critical

High

Med

2

High

High

Med

3

Med

Med

Med

4

Med

Low

Low

Correct!

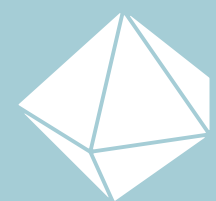


$Risk\ factor = Probability \times Impact$

= 1x50 = 50

NEXT >>





Your pizzeria restaurant has done well and is earning a gross profit (sales – cost of sales) of \$110 per year, and you have some earning saved up for extension. Current overhead is \$50/year. You have the choice between either putting up a new shop of your restaurant in a city far away or simply setting up a small shop in a nearby town.

If you set up a new shop, there's a 37% chance that the economy in the neighbouring city does well, a 29% the economy remains the same, and a 34% chance that city's economy does bad. If the neighbouring city's economy does well, there's a 71% chance your new shop will earn a huge gross profit of \$400 and a 29% chance it will earn a gross profit of \$207. If that city's economy stays the same, you'll probably earn a gross profit of \$85. If that city's economy goes bad, you'll probably earn a gross profit of \$25.

Or you may choose to just expand your current restaurant with a new small shop in a nearer city. There are equal probabilities that the economy will either do well, stay the same or be bad. If the economy does well, your new shop's gross profit will be 70% higher than your current shop. If economy stays the same, there's a 62% chance that gross profit will increase to \$166 and 38% chance it will increase to \$156. If economy does bad, your new small shop's gross profit will only be 50% of your current branch.

The cost of running the new shop in the far city is \$30 per year, and the overhead of a small new shop in the nearer city is 40% of your current shop.

Using Decision Tree Analysis, which is a better option?

Snap a photo of your decision tree + calculations and submit through ulearn.

END



Correct!

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If the probability of the risk to happen is 1 and its risk impact scale is 50, calculate the corresponding risk factor using the risk matrix below.

		Impact		
		10	50	100
Probability	1	Critical	High	Med
	2	High	High	Med
	3	Med	Med	Med
	4	Med	Low	Low

Select 1 answer:

- ☐ 10
- ☒ 50
- ☐ 100

$$\begin{aligned}\text{Risk factor} &= \text{Probability} \times \text{Impact} \\ &= 1 \times 50 = 50\end{aligned}$$

BMFG 4623

Engineering Economy & Management

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LEARNING RESOURCES

INTERACTIVE ACTIVITIES