DAT 520 Problem Set Seven

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You are hired as a consultant for the University of Awesome (UA); the Chief Finance Officer (CFO) would like a sensitivity analysis conducted so that UA can try to capture the BEST number of students based upon revenue. UA has an enrollment (this is what UA SOLD) of 800,000 students. The price per course is $1500. The university has a campus even though it is an online university, and this costs $50,000,000. The cost per student is $250, while payroll costs are $20,000,000.

1. Update the Sensitivity Analysis Example spreadsheet’s Assumptions field based on the scenario above. Add your name to cell B1. Paste a screenshot below.

Table

Description automatically generated

Produce the following values within the spreadsheet in cell A21, and type your last name and section number in cell B21. Take a screenshot of the completed values.

1. What is the Revenue of UA?

$1,200,000,000

1. What is the Cost of enrolling students at UA?

$200,000,000

1. What is the Gross Profit at UA?

$1,000,000,000

1. What are the Other Costs at UA?

$70,000,000

1. What is the Operating Profit at UA?

$930,000,000

The CFO is also looking for a what-if sensitivity analysis. UA is thinking about changing the price of a course. The CFO would like a data table constructed with the following prices: $1,000; $1,250; $1,500; $1,750; $2,000; $2,250. As price changes, so does enrollment. The CFO advised you to use the following ranges on enrollment: 600,000; 700,000; 800,000; 900,000; 1,000,000.

1. Construct a data table from the information above.
2. Produce a what-if analysis, using the data table feature. Place your favorite food item in cell G4.

Table

Description automatically generated

1. As tuition is lowered, the CFO is thinking that enrollment will increase. If the CFO lowers tuition to $1,250 and 900,000 students enroll, what is the profit?

If tuition is lowered to $1,250 and 900,000 students enroll, operating profit decreases to $830,000,000

1. The CFO found an error in the cost per student; it is actually $500. In order to make the same profit at the cost per student of $250, what would the CFO need to raise the price per course to?

If the cost per student is actually $500, the CFO would need to raise the tuition to $1,750 in order to make the same operating profit as original $930,000,000 when 800,000 students enrolled with a $1,500 tuition at a cost per student of $250.