Partial budgets

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Abstract
Utilizing partial budgets can assist veterinarians in making business decisions. It is important for the financial health of a veterinary practice to look at expanding services and thinking critically when purchasing equipment.

This presentation aims to equip veterinarians with the knowledge on how to create a partial budget, calculate a break-even point, develop a timeline for implementing a new service, and how to conduct a sensitivity analysis to assess risk.

**Key words:** budget, revenue, costs, risk

Introduction
A partial budget can be extremely beneficial when adding a new service to a veterinary practice, or when considering the return on investment when investing into the business. Examples of investments into a veterinary practice include purchasing equipment, remodeling existing structures, or building a new structure such as a haul-in facility. As a veterinarian it is vital to not only work in a business, but to work on a business through improving existing services and consider adding new services that would bring value to the clinic’s client base. For a clinic to remain relevant, it is essential to remain open-minded and progressive. If a business is not moving forward, then it is moving backward. Utilizing a partial budget as a tool can assist in assessing the profitability of potential ideas for new services and investments into the business.

Baseline assumptions
When creating a partial budget, baseline values are needed to incorporate into the partial budget. Baseline values needed in a partial budget include fixed costs, variable costs, revenue per unit, and number of units. Fixed costs are expenses that remain constant for a period of time irrespective of the level of outputs. Examples of fixed costs are overhead expenses like a brick-and-mortar building for a veterinary clinic or a veterinary truck for an ambulatory practice. Variable costs are expenses that change directly and proportionally to the changes in business activity, level, or volume. Examples of variable costs include supplies that are volume related such as syringes, catheters or medications. Labor would also be a variable cost because the more procedures or services performed, the more labor required to perform those procedures or services. An example of revenue per unit is the cost charged to the client for a specific surgical procedure. An example of number of units would be how many of those specific surgical procedures are performed.

Principle of partial budgeting
The main principle of partial budgeting is both revenue and expenses are affected by changes in the business. A partial budget looks at 4 sections of variables that will calculate the overall net impact of a business decision. The 4 variables are increased revenue, decreased revenue, decreased expenses and increased expenses. The main goal of a partial budget is to calculate the net impact. Microsoft Excel is an excellent program to build a partial budget. Net impact = (increased revenue + decreased expenses) - (decreased revenue + increased expenses). If the net impact is a positive number, the partial budget predicts a profitable outcome from the baseline assumptions. If the net impact is a negative number, the partial budget predicts a non-profitable outcome from the baseline assumptions. An example of a partial budget template can be seen in Figure 1.

Break-even analysis
A break-even analysis is used to calculate the break-even point, which is when total revenue equals total costs. It is advantageous to calculate the break-even point, to find out how much revenue must be generated to at least not have a net loss on a new service or investment. The equation to calculate the break-even point is: \( N = \frac{TFC}{P - VC} \). \( N \) is the break-even point, TFC is the total fixed costs, P is the revenue per unit, and VC is the variable costs per unit.

Timetable
With the busy schedule of a veterinarian, working on the business instead of working in the business often gets put on the bottom of the to-do list. A timetable is a tool that can be used to implement a new service or stay on schedule for a project. If due dates are not set for action points to be completed by, then no progress will be made. A timetable includes the numbers of tasks in sequential order, the title and description of each task, the duration needed to complete each task, a start date for each task, and an end date for each task. The timetable utilizes critical thinking to plan out the process of adding a new service or completion of a project. The probability of a successful implementation of a new service or completion of a project is much greater with a guide such as a timetable to keep the end goal in front of everyone involved in the process; and to easily gauge if the process is on schedule or falling behind.

Sensitivity analysis
A partial budget is just an estimate of the net financial impact of a service. A partial budget does not consider risk, and it does not guarantee the results predicted. To mitigate risk, it is prudent to compare variables with multiple partial budget baseline assumptions. A sensitivity analysis demonstrates the risk involved in making the proposed change in a partial budget, by comparing the baseline assumptions used in the partial budget with multiple possible outcomes. A sensitivity analysis can be performed using Microsoft Excel. To perform a sensitivity analysis in Microsoft Excel, a table can be created by putting the number of units (procedures performed) on the horizontal axis at the top of the table, and the revenue (price per procedure) on the vertical axis on the left side of the table. In the cell in the middle of the horizontal axis input the number of units (number of procedures performed) used to complete the partial budget. In the cell in the middle of the vertical axis input
the price per unit used to complete the partial budget. On the horizontal axis enter values in the cells to the left of the actual number of units used in the partial budget that decrease in value. Then on the horizontal axis, enter values in the cells to the right of the actual number of units used in the partial budget that increase in value. In the same fashion on the vertical axis, input values for revenue that are more expensive per unit price in cells above the actual price per unit used in the partial budget. Then input values for revenue that are less expensive per unit price in cells below the actual price per unit used in the partial budget. In the cell in the upper left-hand corner of the table where the 2 rows meet, input the net impact value predicted by the partial budget. Then highlight the entire table, by starting in the cell in the upper left-hand corner that contains the net impact value. After the table is highlighted in Microsoft Excel, go to the data tab and select “what if analysis.” In the “what if analysis” drop-down menu, select “data table”. For the row input option, enter in the cell that contains the actual number of units (procedures performed) used in the partial budget. For the column input option, enter in the cell that contains the actual price per unit used in the partial budget. Then click “OK”. The table will then be populated with various net impact outcomes based upon the different unit numbers (procedures performed) and price per unit options in the axis options used to generate the table. The completed sensitivity analysis table shows at which combination of baseline assumptions (units and price per unit) will have a net profitable impact or a net loss impact. The sensitivity analysis table is a useful visual aid for risk mitigation to comprehend the net impact of potential outcomes that could differ from the original predictions when constructing a partial budget.

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References
