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## Spreadsheet Case 4

### Pondfield Inn

Problem: Analyze cash flow of an inn hotel

Management skills: Planning  
Deciding

PC skills: Formulas  
Spreadsheet control  
Reporting

File: Pond\_q.xls

Pondfield Inn is a family-run inn in southern Vermont, situated near several major ski areas. After ten years of declining popularity, the inn was recently purchased by Steve and Hilary Waitkins, who are trying to make it a viable business again. The Waitkins have removed its 19 rooms and built up its culinary reputation by featuring innovative regional dishes.

It appears that the Waitkins' efforts are paying off, and the Inn's first year under their management was profitable. But there are many expenses involved in running an inn--expenditures for food, electricity, heat, insurance, and staff, to name a few. The Waitkins also took out a \$200,000 mortgage to purchase the inn, which must be repaid in monthly installments.

During their first year of operation, the Waitkins have found themselves at times short of cash for paying the bills. They need to develop a plan for managing their cash flow. In some respects, a business's cash flow is more important than its profit. If a firm can't pay its employees or suppliers or collect from its customers it may not survive long enough to generate a profit.

One way of analyzing and forecasting cash flow is to use a "cash receipts and disbursements" forecast, which estimates the amount of each category of cash receipts and disbursements. This enables businesses to track actual cash movements on a daily, weekly or monthly basis.

Essentially this type of cash flow forecast shows projected cash inflow and outflow and subtracts the outflow from the inflow. From your data diskette load the file Pond\_q.xls, showing the various categories of receipts and disbursements for Pondfield Inn each month and the Inn's beginning cash on hand. (Beginning cash on hand may be cash in the checking account or other bank accounts.)

Cash inflow or outflow can be determined by subtracting total disbursements from total receipts. This resulting amount (which may be positive or negative) must then be added to cash on hand at the beginning of the period to arrive at an ending cash figure. This ending cash figure in turn becomes the beginning cash figure for the next period.

From the past year's experience, the Waitkins have determined the Inn's average occupancy rate for various months of the year. The occupancy rate is highest during the ski season, summer months, and during September, when visitors flock to Vermont to witness the

changing fall foliage. The Waitkins can estimate monthly room receipts by multiplying the average rental rate per room by the number of rooms in the Inn, the number of days in the month, and the average occupancy rate for that month.

Waitkins has also come up with formulas for estimating other receipts and disbursements. Some of these are variable, and related to the occupancy rate at the Inn. Receipts from meals are usually 30% of room receipts; receipts from beverage, about 10% of room receipts; and receipts from telephone usage charges are approximately 5% of room receipts. Waitkins has figured that expenditures for room upkeep are approximately 21% of room receipts; expenditures for telephone usage are approximately 3% of room receipts; expenditures for food and beverage costs are approximately 17% and 3% of room receipts, respectively.

Other expenses are fixed and not related to occupancy rates. On an annual basis, Pondfield pays \$4500 for property tax; \$24,000 for debt service; \$3200 for insurance; \$89,000 in payroll for cleaning and restaurant staff; \$15,000 for marketing and advertising; \$18,000 for utilities; and \$7500 for general maintenance. The Waitkins also draw \$3500 per month for themselves to live on. Property taxes are payable in two installments every May and November. All other expenditures are paid on a monthly basis.

### **Tasks**

There are 3 tasks in this case:

1. Print out and review Pond\_q.xls.
2. Calculate the receipts and disbursements for each of the categories on the worksheet for 12 months. Calculate total room receipts, total other receipts, total receipts and total disbursements. Create an area in the upper left corner of your worksheet to identify assumptions about each of these categories. Make sure formulas reference cell numbers whenever possible so that changes can be made easily. The case has been simplified so that all revenue is collected in the month it is generated.
3. Complete the cash flow worksheet by calculating the ending cash for each month and print the results. Write an analysis of the cash flow situation for Pondfield Inn. What explains the negative cash flows in certain months? What steps can the Waitkins take to eliminate cash flow crises?

**Additional Problem**

What if Pondfield Inn increased its room rental rate 10%? What effect would this have on the Inn's cash flow?

**Time Estimates**

Expert: 45 minutes

Intermediate: 1.5 hours

Novice: 2 hours

There is no tutorial for this case because it uses spreadsheet software skills introduced in earlier chapters.