Solutions to End-of-Chapter Questions

# Chapter 2: Planning for Success: Budgeting

## Questions for Discussion

2-1. Planning helps the organization by causing its employees to think ahead and anticipate change. This is done by establishing specific goals and objectives, communicating those objectives to the individuals who must achieve them, forecasting future events, developing alternatives, selecting from among alternatives, and coordinating activities. The activities are summarized in a document called a budget. The budget describes what we hope to achieve and the resources that will be used to carry out the organization’s activities.

2-2. The organization’s mission represents its reason for existence. For public, health, and not-for-profit organizations, finances often become a means to an end, rather than the end itself. This mission cannot solely be making profits. Financial management must help balance the focus on profit with the public service elements of the organization’s mission.

2-3. Strategic plans translate the mission of the organization into an approach or set of approaches that will be used to accomplish the mission, and a broad set of goals that need to be attained to achieve the mission. Strategic plans set the organization’s long-term direction. They often do not have specific financial targets. However, they set the stage for the specific, detailed budgets that will be established to achieve the organization’s goals.

2-4. Whereas the strategic plan establishes goals, the long-range plan considers how to achieve those goals. Long-range plans establish the major activities that will have to be carried out in the coming 3 to 5 years. This process links the strategic plan to the day-to-day activities of the organization. Organizations that do not prepare a long-range plan are often condemned to only sustain current activities, at best.

2-5. Budgets establish the amount of resources that are available for specific activities. However, budgets do not merely limit the resources that can be spent. They represent the detailed plan that supports the organization’s efforts to achieve its mission, and help the organization determine and achieve its goals and objectives. The budgeting process is one of exploring possibilities. Organizations determine what things they can and cannot do. They examine alternatives and choose those that are likely to yield the best results. They become attuned to possible problems and can work to find solutions. Budgeting forces managers to think ahead, to have clear expectations against which to measure performance, and to coordinate the activities of the organization so that everyone is working toward a common purpose.

Budgets are also used to control results. That is, budgets not only create plans, but they are also used to help accomplish those plans. This is done by comparing actual results to the budget. Looking at results, we can assess what needs to be corrected. How good a job did the organization’s management do? How well did the organization itself do? In order to evaluate performance, one must have a standard or benchmark to compare with actual results. The budget establishes the organization’s expectations.

2-6. An organization may consider undertaking an activity that was not planned for when the annual budget was prepared. At any time an organization can prepare a special budget for a specific purpose. Appropriate approval should be obtained before implementing the budget.

2-7. An organization’s budgets are often organized into a strategic plan, long-range plan, master budget, and special purpose budgets.

2-8. Budgets present specific measurable goals. An individual is much more likely to work efficiently if there is a target to shoot for, assuming that the target is not unrealistic.

2-9. Most employees would prefer salaries that are substantially larger than the amounts they are currently receiving. Organizations lack the revenues to pay for those raises. Most managers would like more office space with new furniture and remodeled facilities. They would certainly like more staff to carry out existing functions. Organizations must make choices concerning how to spend their limited resources.

2-10. The manager should make sure that it is in the staff’s best interests to do the things that are in the organization’s best interests. The key is to establish a means of making the normally divergent desires of the organization and its employees become convergent, or congruent. Organizations often achieve congruence by setting up a system of incentives.

2-11. Financial incentives include retaining one’s job and receiving good raises and bonuses. Bonus systems have a variety of problems. Some bonus systems reward all employees if spending is reduced. This is good unless workers can restrict volume, thus reducing the number of units of service provided in order to save money. Such behavior would likely reduce revenues by a greater amount than it would save costs. Also, if everyone gets a bonus, then no one feels that individual actions have much impact, and each individual may feel that she or he does not have to work particularly hard to reap the benefits of the bonus. If bonuses are given only to some employees, it may create jealousy and discontent. It is also possible that it may create a competitive environment in a situation in which teamwork is needed to provide quality care.

There are incentive alternatives to bonuses; for example, a letter from supervisor to subordinate. In the real world, praise is both cheap and, in many cases, effective. On the other hand, criticism, especially in writing, can have a stinging effect that managers will work hard to avoid in the future.

2-12. If targets are placed out of reach, people probably will not stretch to their utmost limits to come as close to the target as possible. When people work extremely hard and then fail, they often question why they bothered to work so hard. If hard work results in failure to achieve the target, then why not ease off? If you are going to fail anyway, must it be so painful?

2-13. (1) The budget is first prepared. (2) After review by the body with adoption authority, it is adopted, either with or without changes. (3) Once approved, the budget is implemented. It is the responsibility of the management of the organization or the executive branch of the government to assure that the adopted budget is carried out. (4) Finally, the results must be evaluated. Accountability is an element of this evaluation.

2-14. In some organizations, support and revenues are only acknowledged if they have been received in cash. In those cases, expenses are recognized when they have been paid. For organizations that record their revenues and expenses in that way, the cash budget would be identical to the operating budget. They are said to use a *cash basis of accounting*. In contrast, if revenue is recorded in the year the service is provided, whether cash has been received yet or not, then the organization is said to be using an *accrual basis of accounting*.

Cash accounting is easier, but does it enable us to understand how well our organization is doing? With accrual accounting we accrue, or anticipate, the eventual receipt of money for services provided, as well as recording expenses for resources consumed, even if they have not yet been paid for. When accrual accounting is used, the operating budget gives us a good idea of how profitable we expect the organization to be. However, it does not give an accurate idea of how much cash we will have.

2-15. Modified cash is a system that treats most revenues and expenses on a cash basis. However, capital acquisitions are depreciated over time, rather than all being treated as an expense in the year cash is paid for them.

2-16. The budget process can be quite complicated and time-consuming. The process may take 1 to 3 months in small organizations and 4 to 6 months or even longer in larger ones. In order to assure that the budget is ready for adoption sufficiently early to be implemented at the start of the coming year, many organizations prepare a budget calendar or *timeline*. Government timelines are often set by law or regulation.

## Problems

The exhibits below are embedded Excel objects. Double-clicking on them will open an Excel spreadsheet.

2-17



1. The first year cash profit is $(7,000).
2. The accrual basis profit is $2,000.
3. If Finn Fixes were to stop operations at the end of the first year, its second-year cash profit would be $9,000.
4. Finn’ second-year ending cash balance would be $2,000--exactly the same amount as the 1st-year’s accrual budget predicted.
5. Accrual better reflects the long-term stability of the organization.

2-18. 4. They will be consumed

3. They will be paid for

2-19

1. earns; uses

2. depreciation

3. cash or cash flows; or the full project life

2-20. Monroe Outpatient Surgery Center

Operating Budget

June 2021



2-21. (Capital Assets and Depreciation Expense)



2-22.



2-23. (Cash and Operating Budgets)





Note that operating budget and cash budget results are not the same, because of timing differences of when things are recorded under an accrual approach.

2-24. (Special Purpose Budget)

****

No, it is not necessarily financially bad. This program may discover patients with hypertension or other medical problems who will become patients of the hospital, generating additional revenues. Also it provides the hospital with a way to advertise their services, generating future patient volume and revenue.

2-25. (Cash Budget)

****

2-26



.

2-27

1. a. increase

2. b. decrease

3. b. decrease

2-28. Capital Budget



2-29. (Operating Budget) The zoo expects the following number of visitors per month:





2-30. (Cash Budget)

****

2-31.

#### March cash receipts

60% of $13,000 $ 7,800

40% of $12,500 5,000

Total cash receipts $12,800

2-32.





2-33.





2-34.

**A & B**







**C**. Monthly detail shown to illustrate the solution

****

2-35. Marquoya College

****

****

****

****

The Marquoya College problem and solution were written by Ken Milani and Jim Gaertner. Used with permission.



## EXTENDED PROBLEM: DENISON SPECIALTY HOSPITAL

SOLUTION

Part I

Section A

1. Calculation of patient revenue

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Payer** | **Program** | **Volume by** | **Net** | **Net** |
|  |  | **Mix** | **Volume** | **Payer** | **Price** | **Revenue** |
|  |  | **(A)** | **(B)** | **(C = A B)** | **(D)** | **(E = C D)** |
|  | Oncology |  |  |  |  |  |
|  | Private Insurance | 30% | 120 | 36 | $50,000 | $1,800,000 |
|  | Medicaid/Medicare | 50% | 120 | 60 | 40,000 | 2,400,000 |
|  | Self-Pay | 10% | 120 | 12 | 50,000 | 600,000 |
|  | Charity | 10% | 120 | 12 | 0 | 0 |
|  | Cardiac |  |  |  |  |  |
|  | Private Insurance | 20% | 80 | 16 | 40,000 | 640,000 |
|  | Medicaid/Medicare | 60% | 80 | 48 | 30,000 | 1,440,000 |
|  | Self-Pay | 10% | 80 | 8 | 40,000 | 320,000 |
|  | Charity | 10% | 80 | 8 | 0 | 0 |
|  | Rhinoplasty |  |  |  |  |  |
|  | Private Insurance | 10% | 40 | 4 | 25,000 | 100,000 |
|  | Medicaid/Medicare | 20% | 40 | 8 | 10,000 | 80,000 |
|  | Self-Pay | 60% | 40 | 24 | 25,000 | 600,000 |
|  | Charity | 10% | 40 | 4 | 0 | 0 |
|  |  |  |  | Total Patient Revenue | | $7,980,000 |
|  |  |  |  |  |  |  |

2. Endowment revenue

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Investment** | **Rate** | **Income** |
|  | U.S. Bond | $500,000 | 6% | $30,000 |
|  | AT&T Div. | 250,000 | 8% | 20,000 |
|  | Growth Stock | 250,000 | 0% | 0 |
|  |  | $1,000,000 |  | $50,000 |
|  |  |  |  |  |

3. Gift shop revenue: $120,000 for current year. Will remain the same next year. Assume that gift shop revenue varies with the number of patients in the hospital.

|  |  |  |
| --- | --- | --- |
|  | **Denison Specialty Hospital**  **Revenue Budget**  **for Next Year** | |
|  | Net Patient Revenue | $7,980,000 |
|  | Gift Shop Revenue | 120,000 |
|  | Endowment Income | 50,000 |
|  | Total Budgeted Revenue | $8,150,000 |
|  |  |  |

Section B

1. Calculation of expected bad debts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Bad Debt** |  |
|  |  |  | **Revenue** | **Rate** | **Bad Debt** |
|  | Oncology Self-Pay | (from above) | $600,000 | 25% | $150,000 |
|  | Cardiac Self-Pay | (from above) | 320,000 | 25% | 80,000 |
|  | Rhinoplasty Self-Pay | (from above) | 600,000 | 25% | 150,000 |
|  | Budgeted Bad Debts |  |  |  | $380,000 |
|  |  |  |  |  |  |

2. Consider annual impact of capital budget

$500,000 5-year life: Annual Expense $100,000

|  |  |  |
| --- | --- | --- |
|  | **Denison Specialty Hospital**  **Expense Budget**  **for Next Year** | |
|  | Salaries | $6,900,000 |
|  | Supplies | 540,000 |
|  | Bad Debts | 380,000 |
|  | Rent | 300,000 |
|  | Depreciation Expense | 100,000 |
|  | Total Budgeted Expense | $8,220,000 |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 3. | **Denison Specialty Hospital**  **Operating Budget**  **For Year Ending Last Day of Next Year** | | |
|  | Revenues |  |  |
|  | Net Patient Revenue | $7,980,000 |  |
|  | Gift Shop | 120,000 |  |
|  | Endowment | 50,000 |  |
|  | Total Budgeted Revenue |  | $8,150,000 |
|  | Expenses |  |  |
|  | Salaries | $6,900,000 |  |
|  | Supplies | 540,000 |  |
|  | Bad Debts | 380,000 |  |
|  | Rent | 300,000 |  |
|  | Depreciation | 100,000 |  |
|  | Total Budgeted Expense |  | 8,220,000 |
|  | Budgeted Excess of Revenues over Expenses |  | $ (70,000) |
|  |  |  |  |

Instructor’s Notes



Denison Specialty Hospital

You may wish to distribute copies of the previous tables as you discuss the case and retain the notes below for your discussion preparation.

The numerical solution to the case appears above. Try to stress the importance and use of the information as much as possible. The hardest part of the process is gathering the data that was given in the case. Assembling that data into the actual budgets is the easier element. The solution is organized as follows:

Part I

Section A

1. Calculation of patient revenue--the payer mix is provided in the case, as is the volume of patients for each program. The volume by payer is calculated by multiplying those two factors.

The net price is the same as the charge for the private insurance. The net price is set by the government for Medicare and Medicaid in this example.

The net price is the same as the charge for the self-pay patient, even though we know there will be some bad debt. The full charge is the revenue, and bad debt will be subtracted later as an expense. This follows current accounting rules for hospitals.

The net price is 0 for charity care. This follows current accounting rules for hospitals. Multiply volume by net price to get net revenue.

2. Endowment income is based directly on information given in the case.

3. Revenue budget simply sums the different elements. Gift shop revenue is given in the case. We might want to discuss whether they have overlooked other revenue. Is there generally contribution revenue? Do we think we can raise our prices? Do we want to raise our prices? Are we happy with our endowment income? If we expect a deficit, are we willing to take a greater risk? Are we confident that we will get our expected volume and prices?

Section B

1. Calculation of Expected Bad Debts: The case says that 25% of self-pay is never collected. The revenue numbers come from Part I, Section A calculations above.

2. Expense Budget: The total salaries, supplies, and rent are all given in the case. The result is a line-item expense budget. This does not tell us much about the relative cost of different programs or of running different departments.

3. Combine the revenue and expense budgets into one table to yield the operating budget.