## Penggunaan Informasi Akuntansi Pertanggungjawaban

-Penyusunan Anggaran :


Strategic Plan



## Advantages of Budgeting

1. It forces managers to plan.
2. It provides information that can be used to improve decision making.
3. It provides a standard for performance evaluation.
4. It improves communication and coordination.

The master budget is the comprehensive financial plan for the organization as a whole.

Typically, the master budget is for a one-year period corresponding to the fiscal year.



## Preparing the Operating Budget

- Sales budget
- Production budget
- Direct materials purchases budget
- Direct labor budget
- Overhead budget
- Selling and administrative expenses budget
- Ending finished goods inventory budget
- Cost of goods sold budget


## Schedule 1 <br> Texas Rex, Inc. <br> Sales Budget

For the Year Ended December 31, 2004
Ouarter

|  | 1 | 2 | 3 | 4 | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Units | 1,000 | 1,200 | 1,500 | 2,000 | 5,700 |
| Unit selling price | $\mathrm{x} \quad \$ 10$ | $\mathrm{x} \quad \$ 10$ | $\mathrm{x} \quad \$ 10$ | x $\quad \$ 10$ | x $\quad \$ 10$ |
| Budgeted sales | \$10,000 | \$12,000 | \$15,000 | \$20,000 | \$57,000 |

## Computing Units to be Produced

Units to be produced $=$ Expected unit sales + Units in ending inventory - Units in beginning inventory

| $\begin{array}{c}\text { Schedule 2 } \\ \text { Texas Rex, Inc. } \\ \text { Production Budget }\end{array}$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| For the Year Ended December 31, 2004 |  |  |  |  |
| Ouarter |  |  |  |  |$]$

## Computing Units to be Purchased

Purchases = Direct materials needed for
 production + Desired direct materials in ending inventory - Direct materials in beginning inventory

| Schedule 3 <br> Texas Rex, Inc. |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |


|  | Quarter |  |  |  | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |  |
| Total needs | 1,186 | 1,420 | 1,780 | 1,906 | 5,826 |
| Less: beginning inventory | -58 | -126 | -160 | -180 | -58 |
| Direct materials to be purchased | 1,128 | 1,294 | 1,620 | 1,726 | 5,768 |
| Cost per pound | X X 3 | X \$3 | $\mathrm{x} \quad \$ 3$ | X \$3 | X $\quad \$ 3$ |
| Total purchase cost plain t-shirts | \$3,384 | \$3,882 | \$4,860 | \$5,178 | \$17,304 |



| Direct For the |  | edule Rex, s Purc ed Dec $\qquad$ | es Bu ber 31 <br> rter | $2004$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | Year |
| Units to be produced (Schedule 2) | 1,060 | 1,260 | 1,600 | 1,800 | 5,720 |
| Direct materials per unit | X 5 | X 5 | X 5 |  | X 5 |
| Production needs | 5,300 | 6,300 | 8,000 | 9,000 | 28,600 |
| Desired ending inventory | 630 | 800 | 900 | 530 | 530 |
| Total needs | 5,930 | 7,100 | 8,900 | 9,530 | 29,130 |

## Continued

|  | Quarter |  |  |  | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |  |
| Total needs | 5,930 | 7,100 | 8,900 | 9,530 | 29,130 |
| Less: beginning inventory | -390 | -630 | -800 | -900 | -390 |
| Direct materials to be purchased | 5,540 | 6,470 | 8,100 | 8,630 | 28,740 |
| Cost per ounce | X \$0.20 | x $\mathrm{\$} 0.20$ | X \$0.20 | X \$0.20 | x \$0.20 |
| Total purchase cost of ink | \$ 1,108 | \$ 1,294 | \$ 1,620 | \$ 1,726 | \$ 5,748 |

Total direct
materials purchases cost $\quad \$ 4,492 \quad \$ 5,176 \quad \$ 6,480 \quad \underline{\underline{\$ 6,904}} \underline{\underline{\$ 23,052}}$

$$
\begin{gathered}
\text { Schedule 4 } \\
\text { Texas Rex, Inc. } \\
\text { Direct Labor Budget } \\
\text { For the Year Ended December 31, } 2004 \\
\begin{array}{llll}
\text { Quarter } & \\
\hline 1 & 2 & 3 & 4
\end{array} \text { Year }
\end{gathered}
$$

Units to be produced

| (Schedule 2) | 1,060 | 1,260 | 1,600 | 1,800 | 5,720 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Direct labor time $\begin{array}{lllllll}\text { per unit (hr.) } & \frac{\mathrm{x} 0.12}{} & \frac{\mathrm{x} 0.12}{151.2} & \frac{\mathrm{x} 0.12}{192} & \frac{\mathrm{x} 0.12}{216} & \frac{\mathrm{x} 0.12}{686.4}\end{array}$ Average wage per hour
Total direct labor cost $\underline{\underline{\$ 1,272}} \underline{\underline{\$ 1,512}} \underline{\underline{\$ 1,920}} \underline{\underline{\$ 2,160}} \underline{\underline{\$ 6,864}}$

| Schedule 5 <br> Texas Rex, Inc. Overhead Budget <br> For the Year Ended December 31, 2004 <br> Ouarter |  |  |  |  | Year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 |  | 4 |  |
| Budgeted direct lab hours (Schedule 4) | $127.2$ | 151.2 | 192 | 216 | 686.4 |
| Variable overhead rate | $\times \quad \$ 5$ | x \$5 | x \$5 |  | X $\quad \$ 5$ |
| Budgeted variable overhead | \$ 636 | \$ 756 | \$ 960 | \$1,080 | \$ 3,432 |
| Budgeted fixed overhead | 1,645 | 1,645 | 1,645 | 1,645 | 6,580 |
| Total overhead | \$2,281 | \$2,401 | \$2,605 | \$2,725 | \$10,012 |


| Schedule 6 <br> Texas Rex, Inc. |
| :---: | :---: |
| Ending Finished Goods Inventory Budget |
| For the Year Ended December 31, 2004 |

## Schedule 7 <br> Texas Rex, Inc. <br> Cost of Goods Sold Budget For the Year Ended December 31, 2004

Direct materials used (Schedule 3)
Direct labor used (Schedule 4)
Overhead (Schedule 5)
Budgeted manufacturing costs
Beginning finished goods
Goods available for sale
Less: Ending finished goods (Sched. 6) Budgeted cost of goods sold
\$22,880 6,864
10,012 \$39,756
1,251
\$41,007

- 1,390
$\$ 39,617$


## Schedule 8 Texas Rex, Inc.

## Selling and Administrative Expenses Budget

 For the Year Ended December 31, 2004Quarter

| 1 | 2 | 3 | 4 | Year |
| :--- | :--- | :--- | :--- | :--- |

Planned sales in units
$\begin{array}{llllll}\text { (Schedule 1) } & 1,000 & 1,200 & 1,500 & 2,000 & 5,700\end{array}$
Variable selling and administrative expenses per unit $\quad \underline{x} \$ 0.10 \times \$ 0.10 \times \$ 0.10 \times \$ 0.10 \times \$ 0.10$ Total variable expenses $\$ \quad 100 \$ 120 \$ 150 \$ 200 \$ 570$

## Ouarter

## $\begin{array}{lllll}1 & 2 & 3 & 4 & \text { Year }\end{array}$

Fixed selling and administrative expenses:
Salaries
Utilities
Advertising
Depreciation

Total selling and admin-
istrative expenses $\quad \underline{\underline{\$ 1,820}} \underline{\underline{\$ 1,940}} \underline{\underline{\$ 2,570}} \underline{\underline{\$ 2,320}} \underline{\underline{\$ 8,650}}$

## Schedule 9 <br> Texas Rex, Inc. <br> Budgeted Income Statement For the Year Ended December 31, 2004

Sales (Schedule 1)
Less: Cost of goods sold (Schedule 7)
\$57,000

Gross margin
Less: Selling and administrative expenses (Schedule 8)
Operating income
Less: Interest expense (Schedule 10)
Income before taxes
Less: Income taxes (Schedule 10)
Net income

## The Usual <br> Financial Budgets

$\checkmark$ The cash budget
$\checkmark$ The budgeted balance sheet
$\checkmark$ The budget for capital expenditures


## The Cash Budget

Beginning cash balance ..... XXX
Add: Cash receipts ..... XXX
Cash available ..... XXX
Less: Cash disbursements ..... XXX
Less: Minimum cash balance ..... XXX
Cash surplus (deficiency) ..... XXX
Add: Cash from loans ..... XXX
Less: Loan repayments ..... XXX
Add: Minimum cash balance ..... XXX
Ending cash balance ..... XXX

## The Cash Budget

## Texas Rex, Inc. $1^{\text {st }}$ Quarter



## Texas Rex, Inc.

## Cash Receipts Pattern for 2004

## Source Quarter 1 Quarter 2 Quarter 3 Quarter 4

Cash sales
\$ 2,500
\$ 3,000
\$ 3,750
\$ 5,000

Received on account from:
Quarter 4, $2003 \quad 1,350$
Quarter 1, 2004 6,750
Quarter 2, 2004
Quarter 3, 2004
Quarter 4, 2004
8,100
900
$\$ 10,600$
$\underline{\underline{\$ 11,850}}$
\$14,775
$\underline{\underline{\$ 19,625}}$

# Schedule 11 <br> Texas Rex, Inc. <br> Budgeted Balance Sheet December 31, 2004 

## Assets

Current assets:
Cash $\quad \$ 7,503$
Accounts receivable 1,500
Materials inventory 424
Finished goods inventory 1,390
Total current assets
\$10,817
Property, plant, and equipment:
Land
\$ 1,100
Building and equipment 36,500
Accumulated depreciation
$-7,760$
Total property, plant, and equipment
Total assets

## Liabilities and Owners' Equity

Current liabilities:
Accounts payable \$ 1,381
Owners' equity:
Retained earnings \$39,276
Total owners' equity
Total liabilities and owners' equity

| 39,276 |
| ---: |
| $\$ 40,657$ |




Sales Budget

## Production Budget

| Direct Materials <br> Purchases Budget | Direct Labor <br> Budget | Overhead <br> Budget |
| :---: | :---: | :---: |


| Ending FG | (Unit |
| :---: | :---: |
| Inventory Budget | cost) |



The Master
Budget


Ending FG Inventory Budget

Selling and Administrative Expenses Budget'

Budgeted IS


## The Master <br> Budget

## Static Budgets versus Flexible Budgets

A static budget is a budget for a particular level of activity.

A flexible budget is a budget that provides a firm with the capability to compute expected costs for a range of activity.


## Fleksibel Budget

Anggaran fleksibel merupakan anggaran yang bersifat dinamis, dimana didalamnya memuat anggaran dari beberapa aktivitas. Lazimnya, penyusunan anggaran fleksibel selalu dikaitkan dengan overhead pabrik, dan biaya overhead pabrik itu sendiri meliputi overhead pabrik variabel dan overhead pabrik tetap. Mengapa anggaran fleksibel tidak banyak dikaitkan dengan biaya bahan langsung dan biaya tenaga kerja langsung, jawabannya karena biaya bahan langsung dan biaya tenaga kerja langsung adalah jenis biaya variabel dan tidak ada unsur biaya tetap apalagi semi variabel, jadi dalam perhitungannya sangat sederhana.

Beda dengan biaya overhead pabrik yang mempunyai perilaku biaya tetap, biaya variabel dan biaya campuran. Jangkauan aktivitas yang dihitung anggarannya dalam anggaran fleksibel untuk overhead pabrik variabel besarnya berubah dalam total, tetapi tetap dalam satuan aktivitas. Sedangkan jangkauan aktivitas untuk overhead pabrik tetap, besarnya tetap dalam total tetap variabel dalam satuan aktiva.

## Performance Report Quarterly Production Costs

|  | Actual | Budgeted | Variance |
| :--- | ---: | ---: | ---: |
| Units produced | $\underline{1,200}$ | $\underline{1,060}$ | $\underline{140} \mathrm{~F}$ |
| Direct materials cost <br> Direct labor costs | $\$ 4,830$ | $\$ 4,240$ | $\$ 590 \mathrm{U}$ |
| Fixed overhead: <br> Variable: | 1,440 | 1,272 | 168 U |
| Supplies <br> Power | 535 | 477 | 58 U |
| Fixed: <br> Supervision <br> Depreciation <br> Total | 170 | 159 | 11 U |
|  | $\underline{\underline{\$ 8,570}}$ | $\underline{\underline{57,793}}$ | $\underline{\underline{\$ 777}} \mathrm{U}$ |

## The Uses of Flexible Budget

- The flexible budget can be used to prepare the budget before the fact for the expected level of activity.
- Flexible budgeting can be used to compute what costs should have been for the actual level of activity.
- Flexible budgeting can help managers deal with uncertainty by allowing them to see the expected outcomes for a range of activities.


## Flexible Production Budget

| Production Costs | Variable Cost per Unit | Range of Production (units) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1,000 | 1,200 | 1,400 |
| Variable overhead: |  |  |  |  |
| Direct materials | \$4.00 | \$4,000 | \$4,800 | \$5,600 |
| Direct labor | 1.20 | 1,200 | 1,440 | 1,680 |
| Variable overhead: |  |  |  |  |
| Supplies | 0.45 | 450 | 540 | 630 |
| Power | 0.15 | 150 | 180 | 210 |
| Total variable costs | \$5.80 | \$5,800 | \$6,960 | \$8,120 |
| Fixed overhead: $\quad \underline{\text { cosen }}$ |  |  |  |  |
| Supervision |  | \$1,105 | \$1,105 | \$1,105 |
| Depreciation |  | 540 | 540 | 540 |
| Total fixed costs |  | \$1,645 | \$1,645 | \$1,645 |
| Total production costs |  | $\underline{\underline{\$ 7,445}}$ | \$8,605 | \$9,765 |

## Performance Report Quarterly Production Costs

|  | Actual | Budget | Variance |
| :--- | ---: | :---: | :---: |
| Units produced | $\underline{1,200}$ | $\underline{1,200}$ | $\underline{----}$ |
| Direct materials | $\$ 4,830$ | $\$ 4,800$ | $\$ 30 \mathrm{U}$ |
| Direct labor | 1,440 | 1,440 | ---- |
| Variable overhead: |  |  |  |
| $\quad$ Supplies | $\underline{170}$ | 540 | -5 F |
| Power | $\underline{\$ 6,975}$ | $\underline{\$ 6,960}$ | $\underline{\underline{-10}} \mathrm{~F}$ |
| Total variable costs |  |  |  |
|  |  |  |  |

## Continued

## Performance Report Quarterly Production Costs

## Actual Budget Variance

Units produced
1,200
1,200
---

Fixed overhead:
Supervision
Depreciation
Total fixed costs
Total production costs

| 1,055 |
| ---: |
| $\mathbf{5 4 0}$ |
| $\$ \underline{1,595}$ |
| $\underline{88,570}$ |


| 1,105 | -50 F |
| ---: | ---: |
| 540 <br> $\$ 1,645$ <br> $\$ 8,605$ <br> $\underline{-}$ | $\underline{\underline{-\$ 50} \mathrm{~F}}$ |

## Behavior Dimensions of Budgeting

- Goal congruence
- Dysfunctional behavior
- Frequent feedback on performance
- Monetary and nonmonetary incentives
- Participative budgeting
- Realistic standards
- Controllability of costs
- Multiple measures of performance


## Participative budgeting has three potential problems:

1. Setting standards that are either too high or too low.
2. Building slack into the budget.
3. Pseudoparticipation.


## Activity-Based Budgeting

Activity flexible
budgeting is the prediction of what activity costs will be as activity output changes.


## Flexible Budget: Direct Labor Hours

|  | Cost Formula |  | Direct Labor Hours |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fixed | Variable | 10,000 | 20,000 |
| Direct materials | --- | \$10 | \$100,000 | \$200,000 |
| Direct labor | --- | 8 | 80,000 | 160,000 |
| Maintenance | \$ 20,000 | 3 | 50,000 | 80,000 |
| Machining | 15,000 | 1 | 25,000 | 35,000 |
| Inspections | 120,000 | --- | 120,000 | 120,000 |
| Setups | 50,000 | --- | 50,000 | 50,000 |
| Purchasing | 220,000 | --- | 220,000 | 220,000 |
| Total | \$425,000 | \$22 | \$645,000 | \$865,000 |

## Activity Flexible Budget

Driver: Direct Labor Hours

|  | Formula |  | Level of Activity |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fixed | Variable | 10,000 | 20,000 |
| Direct materials | --- | \$10 | \$100,000 | \$200,000 |
| Direct labor | --- | 8 | 80,000 | 160,000 |
| Subtotal | \$0 | \$18 | \$180,000 | \$360,000 |

Driver: Machine Hours

|  | Fixed | Variable | 8,000 | 16,000 |
| :---: | :---: | :---: | :---: | :---: |
| Maintenance | \$20,000 | \$5.50 | \$64,000 | \$108,000 |
| Machining | 15,000 | 2.00 | 31,000 | 47,000 |
| Subtotal | \$35,000 | \$7.50 | \$95,000 | \$155,000 |

## Continued

## Activity Flexible Budget

Driver: Number of Setups

|  | Fixed | Variable | 25 | 30 |
| :---: | :---: | :---: | :---: | :---: |
| Inspections | \$80,000 | \$2,100 | \$132,500 | \$143,000 |
| Setups | --- | 1,800 | 45,000 | 54,000 |
| Subtotal | \$80,000 | \$3,900 | \$177,500 | \$197,000 |

Driver: Number of Orders

|  | Fixed | Variable |  | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{2 5 , 0 0 0}$ |
| :---: | ---: | ---: | ---: | ---: | ---: |
|  | $\underline{\$ 211,000}$ | $\underline{\$ 1} 1$ | $\underline{\$ 226,000}$ | $\underline{\$ 236,000}$ |  |
| Total |  | $\underline{\$ 678,500}$ | $\underline{\underline{\$ 948,000}}$ |  |  |

## Activity-Based Performance Report

Actual Costs Budgeted Costs
Direct materials
Direct labor
Maintenanc
Machining

Inspections
Setups
Purchasing
Total
\$101,000
80,000
55,000
29,000
125,500
46,500
220,000
$\underline{\$ 657,000}$
\$100,000
80,000
64,000
31,000
132,500
45,000
226,000
$\underline{\underline{\$ 678,500}}$

Budget Variance
\$ 1,000 U

9,000 F
2,000 F
7,000 F
1,500 U
6,000 F
$\$ 21,500 \mathrm{~F}$

## Variances for the Inspection Activity

Activity Actual Cost Budgeted Cost Variance
Inspection:


## The End

