

Budgeting for Cost Centers



How is it different from profit centers?

Budgeting for Cost Centers...

Much simpler than profit centers...

- No revenue
- No COGS
- No inventory

No need to calculate Overhead separately either...
because you are 100% Overhead!

It's mostly about people and what they do.

Cost Centers in Business



- R&D Depts.
- Engineering Depts.
- Marketing Depts.
- IT/HR/Legal Depts.

Budgeting for Cost Centers...

Ex. You run an R&D group of 25 people doing advanced materials research for your company. Your boss wants a budget asap because its budgeting season!

Let's start with the people, likely the most expensive part of your organization.

Then we'll add the costs related to what they do.



Personnel Costs...

Step 1: Determine your fully burdened personnel costs.

People get paid their salary.

And they get benefits.

Your group's personnel costs include both.

Salaries are easy to know. Benefits...not so much.

Benefits are often estimated as a % of salary.
(HR knows this number.)



Fully Burdened Personnel Costs = Salary + Benefits

Personnel Costs...

Advanced Materials Technology - Budget Forecast Annual Personnel Cost Estimate			
	Salary (\$/Year)	Benefits (@ 30%)	Fully Burdened Personnel Cost
Francine Marchaud: Eng. III	\$175,000	\$52,500	\$227,500
Raj Tandor: Eng. III	\$167,000	\$50,100	\$217,100
Jack Pardee: Eng. II	\$130,000	\$39,000	\$169,000
...			
Total Personnel Cost			\$3,750,000

Capturing Expenses...

Step 2: Estimate what they will spend...

Your staff works on funded projects (usually)...

They spend money on...

Equipment time...

Lab Supplies & Consumables...

Going to Conferences...

You just add up all those costs...

This can be a challenge because you have to get your highly paid R&D staff to provide detailed project budgets!



Project Cost Estimates...

Project Ceres Annual Project Costs Estimate	
	Project Cost
Raj Tandor – Eng III	1 FTE
Scott Simon – Lab Tech	0.5 FTE
Lab Supplies & Consumables	\$12,500
Microscope Expense (50 hours @ \$100 / hr)	\$5,000
Outside Lab Analyses	\$25,000
S/W Upgrade	\$1,000
Total Project Cost (Less Personnel Costs):	\$43,500

“Full-Time Equivalent”

- 1 FTE = 100%
- 0.5 FTE = 50%

Your staff may not know everyone’s fully-burdened labor costs.

Budgeting for Cost Centers...

Then combine the Project Costs...

Project Ceres: \$ 43,500

Project Nano: \$152,000

Project Jupiter: \$ 87,500

...

Total Project Costs: \$1,850,000

Often this is done by cost category, as you will be keeping track of things by category.

Now add in the Personnel Costs to create the Total R&D Budget...



Your Annual R&D Budget...

Advanced Materials Technology - Budget Forecast	
Annual Department Cost Estimate	
Personnel Costs	\$3,750,000
Project Costs	
Materials	\$255,000
Internal Services (Equipment Use, etc.)	\$1,125,000
Purchased Services (Outside Lab Analyses)	\$370,000
Other (Conferences, etc.)	\$100,000
Total Project Costs	\$1,850,000
Total Materials R&D Budget:	\$5,625,000

These will all be line items on monthly "actuals" reports.

Your Annual R&D Budget...

Advanced Materials Technology - Budget Forecast	
Annual Department Cost Estimate	
Labor & Related	\$2,750,000
Project	
Material	
Internal	
Purchase	
Other	
Total Project Costs	\$1,850,000
Total Materials R&D Budget:	\$5,625,000

You either estimate costs month by month, or assume the annual costs are uniformly distributed across each month.

In either case, it is easy to create a monthly plan to compare against the actuals when the new fiscal year begins!

*...will be line
monthly
reports.*

When Reality hits the Plan...

Cost Centers: Now compare actuals to the “plan”...

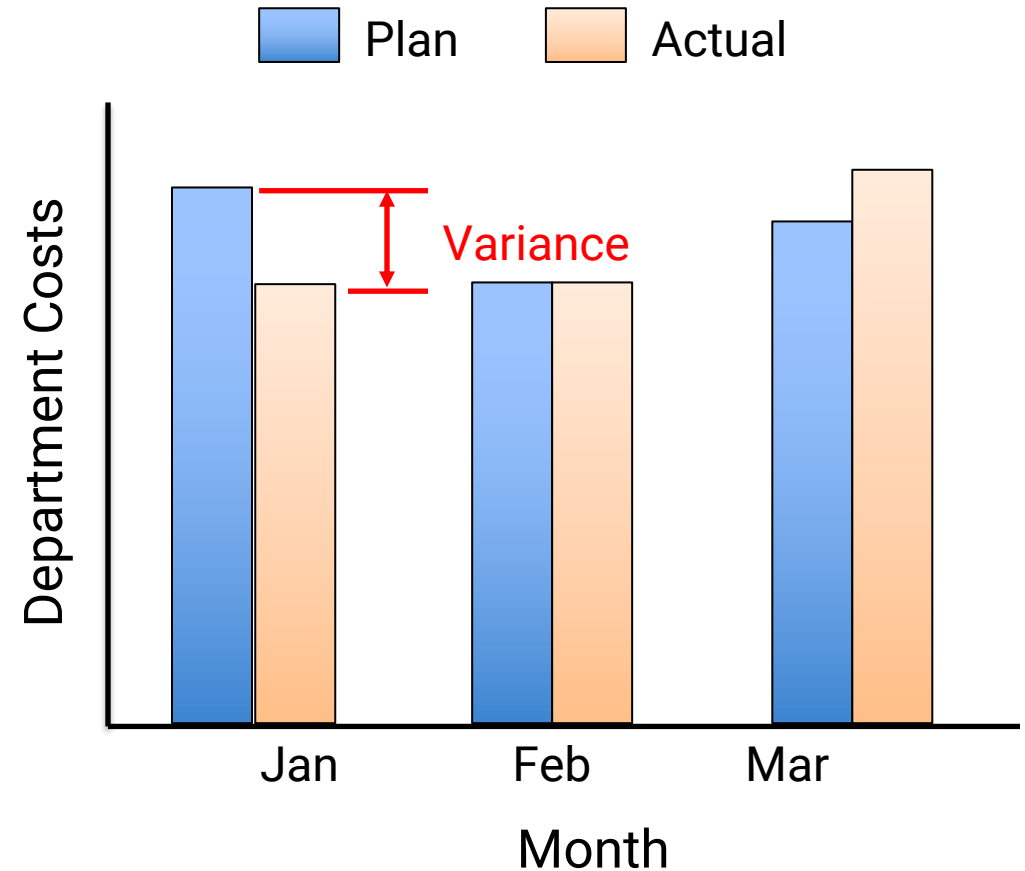
Each month and each quarter, actual results are compared to the “Plan”.

Differences are either positive variances or negative variances.

Management digs in to uncover what led to the variance...

Depending on the size of the variance, you must adjust your plan for the rest of the year:

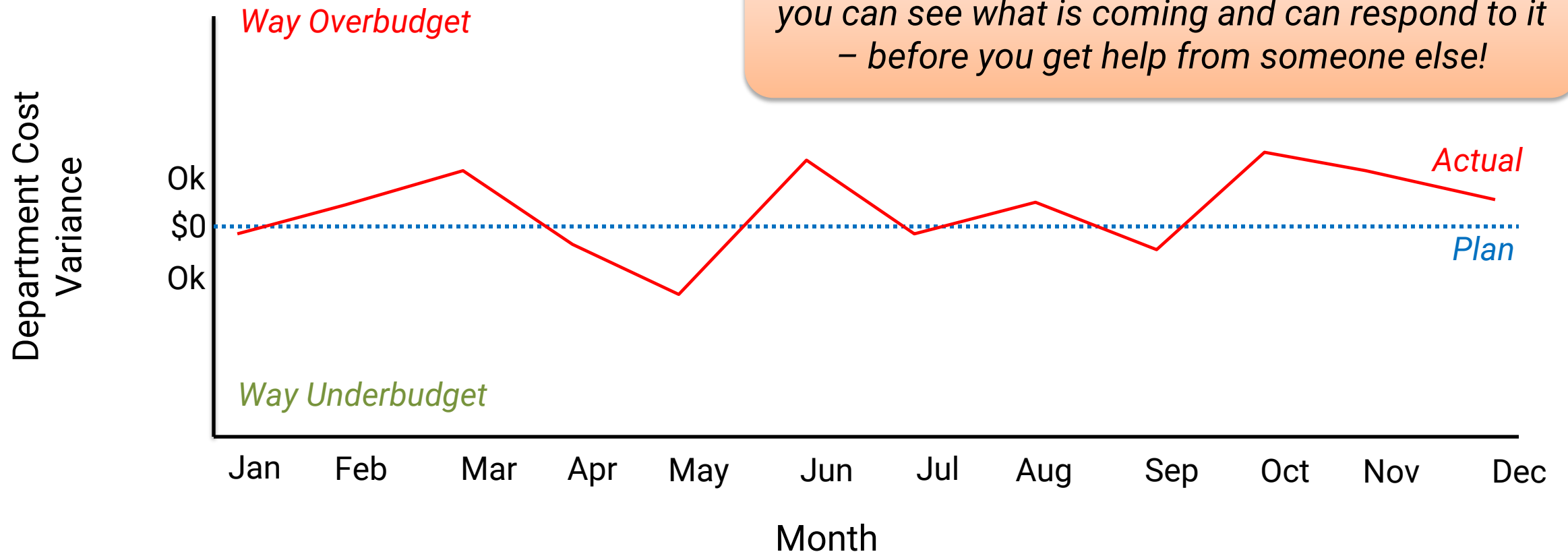
- which of course never goes up
- you’ll likely have to reduce costs in some projects



When Reality hits the Plan...

Your goal...get as close to plan as possible

It is better to understand your budget in detail, so you can see what is coming and can respond to it – before you get help from someone else!



Main Takeaways...

Budgeting for cost centers consists of primarily personnel costs and expenses associated with what they do.

Fully burdened personnel costs include employee salaries and their benefits.

Engineering and R&D groups often work on funded projects, which themselves typically have detailed budgets.

The role of the technical manager is to roll up project budgets into a comprehensive departmental budget plan for the year.

And then manage your monthly budget, making any mid-course corrections necessary to ensure you're never too far away from the plan.

Next Time...

Financial Forecasting Techniques



Credits & References

Slide 1: Group Of Technicians Working In Laboratory by micromonkey, Adobe Stock (61324881.jpeg).

Slide 2: Female scientist looking through microscope during experiment in chemical laboratory by LIGHTFIELD STUDIOS, Adobe Stock (251994505.jpeg).

Slide 3: A middle aged man scientist smiling happily with his arms crossed posing at her laboratory colleagues by kajonsakt, Adobe Stock (239694610.jpeg).

Slide 4: Smiling Group Of Scientists In Modern Laboratory by mast3r, Adobe Stock (171492042.jpeg).

Slide 6: Scientist works at a electron microscope control panel with two monitors in front of him by galitskaya, Adobe Stock (165314035.jpeg). Presenter getting applause after a great presentation by Jacob Lund, Adobe Stock (373507248.jpeg).

Slide 14: Financial plan by utah51, Adobe Stock (220595478.jpeg).