MANAGERIAL ACCOUNTING

LEARNING OBJECTIVES

At the end of the session students should be able to:

- Understand the purpose of managerial accounting
- Perform forecasting
- Create different budgets statements
- Perform standard cost and variance analysis

QUESTIONS ASKED BY INTERNAL USERS

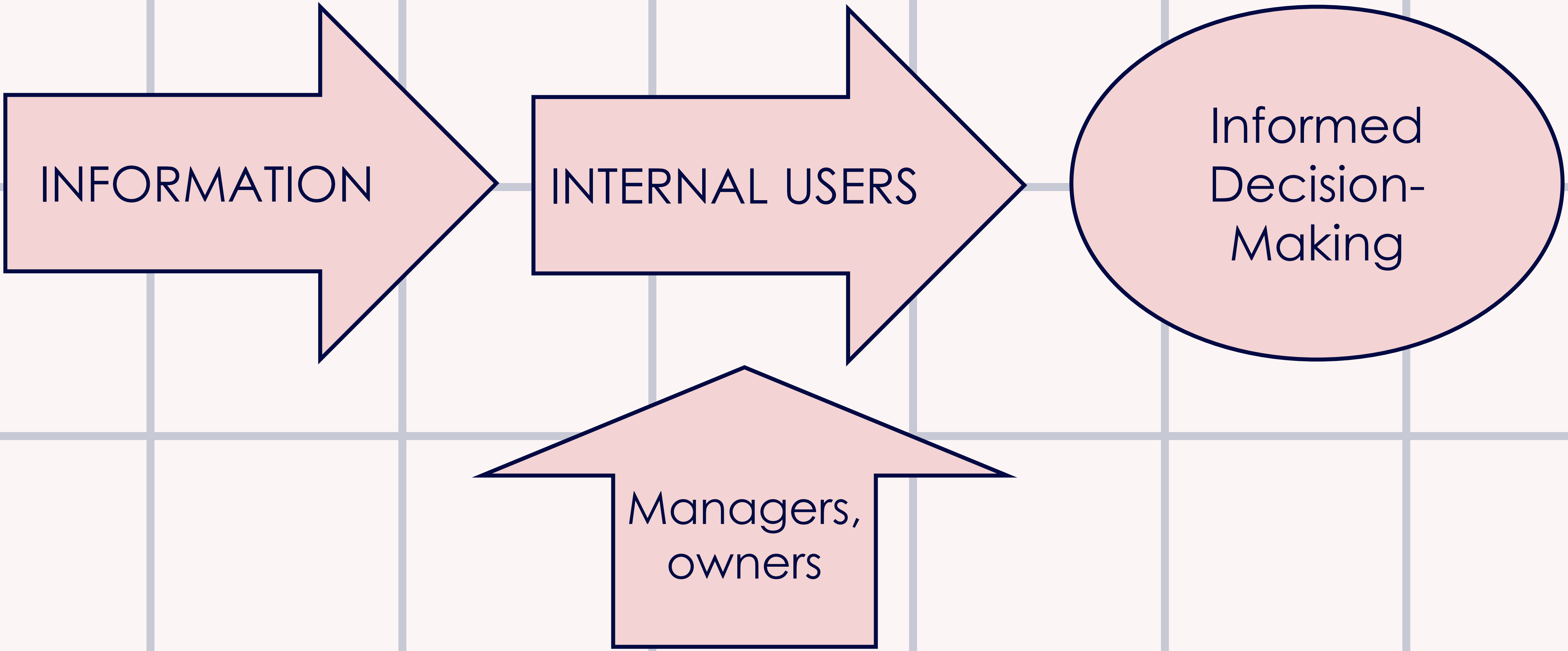
Finance
- Is cash sufficient to pay dividends to **wht Cosmetics** shareholders?

Marketing
- What price should **wht** charge for a lipstick to maximize the company's net income?

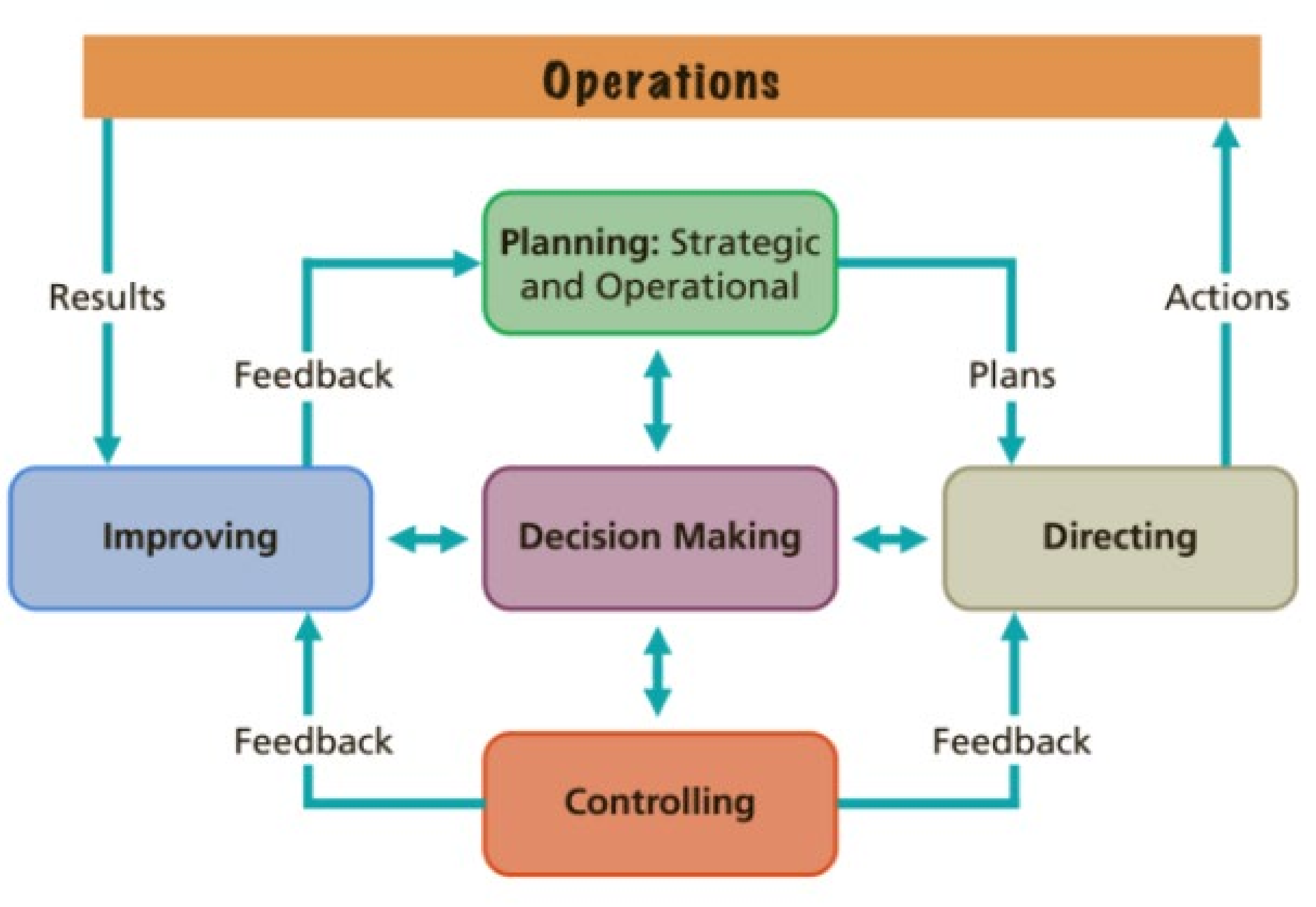
HR
- Can **wht** afford to give its employees pay raises this year?

Management
- Which **wht** product line is most profitable? Should any product lines be eliminated?

MANAGERIAL ACCOUNTING



MANAGERIAL PROCESS



PLANNING

- To develop the company's objectives
- Objectives -> action

DIRECTING

- Process how managers run daily operations

CONTROLLING

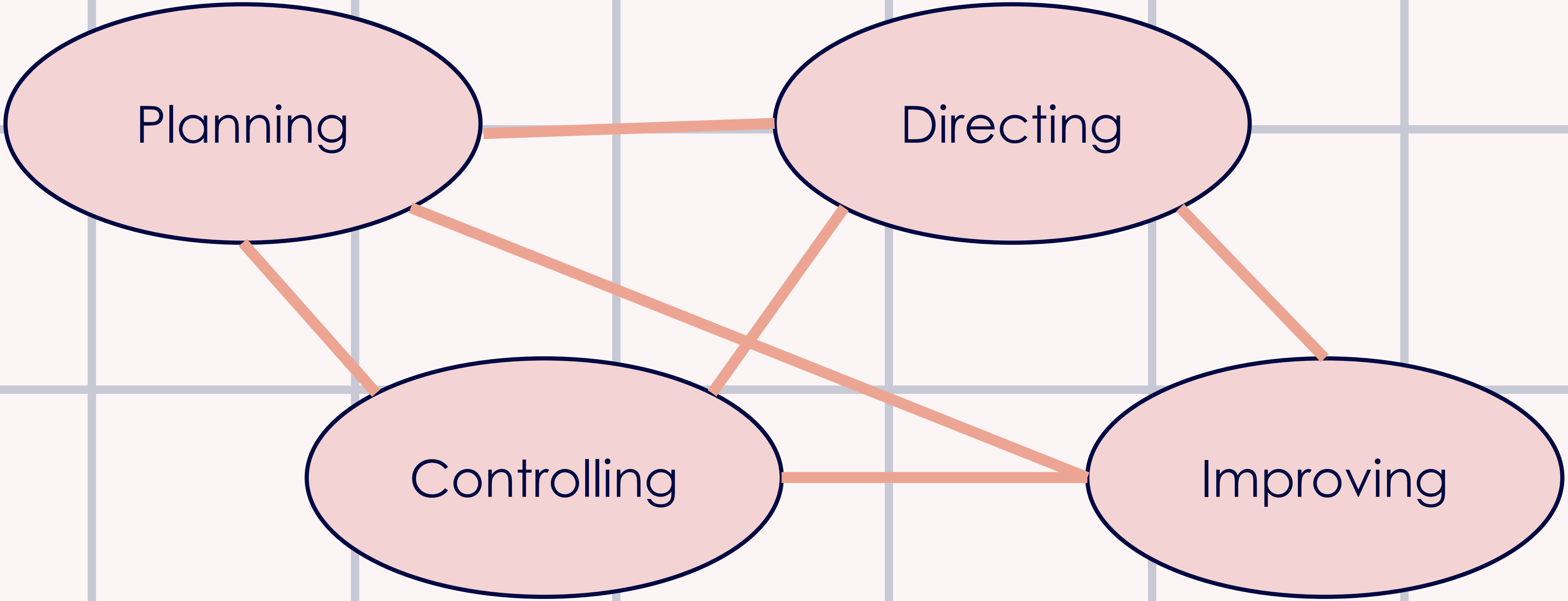
- Expected results vs. Actual operating results
- Feedback allows remedial action and revision of plans

IMPROVING

- Continual improvement of employees, business process, and products
- To eliminate the source of problems in a process

DECISION MAKING

- Inherent in the preceding management process



BUDGETING

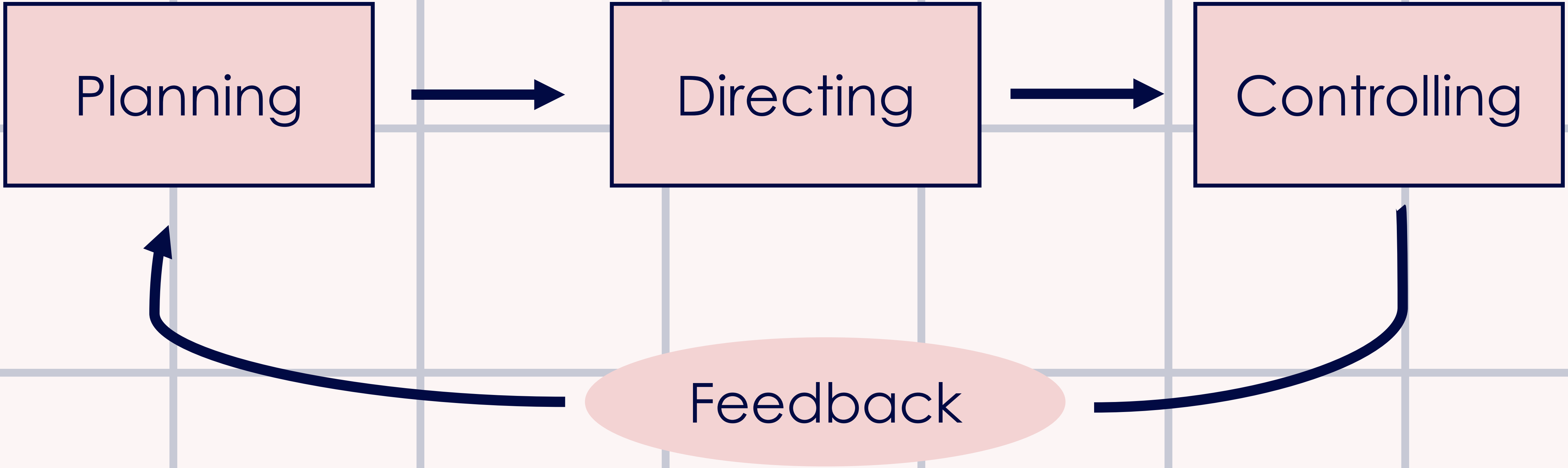
BUDGET

- An accounting device used to **plan and control resources** of operational departments and divisions
- A **formal written statement** of management's plan for a future time period, expressed in **financial terms**

BUDGETING AND ACCOUNTING

- Accounting information is necessary in the budgeting process

OBJECTIVES OF BUDGETING



USES OF BUDGET

1. Allocating of resources to different department
2. Forcing managers to think long term
3. Coordinating the activities of different departments
4. Evaluating managerial performance

THE MASTER BUDGET

MASTER BUDGET

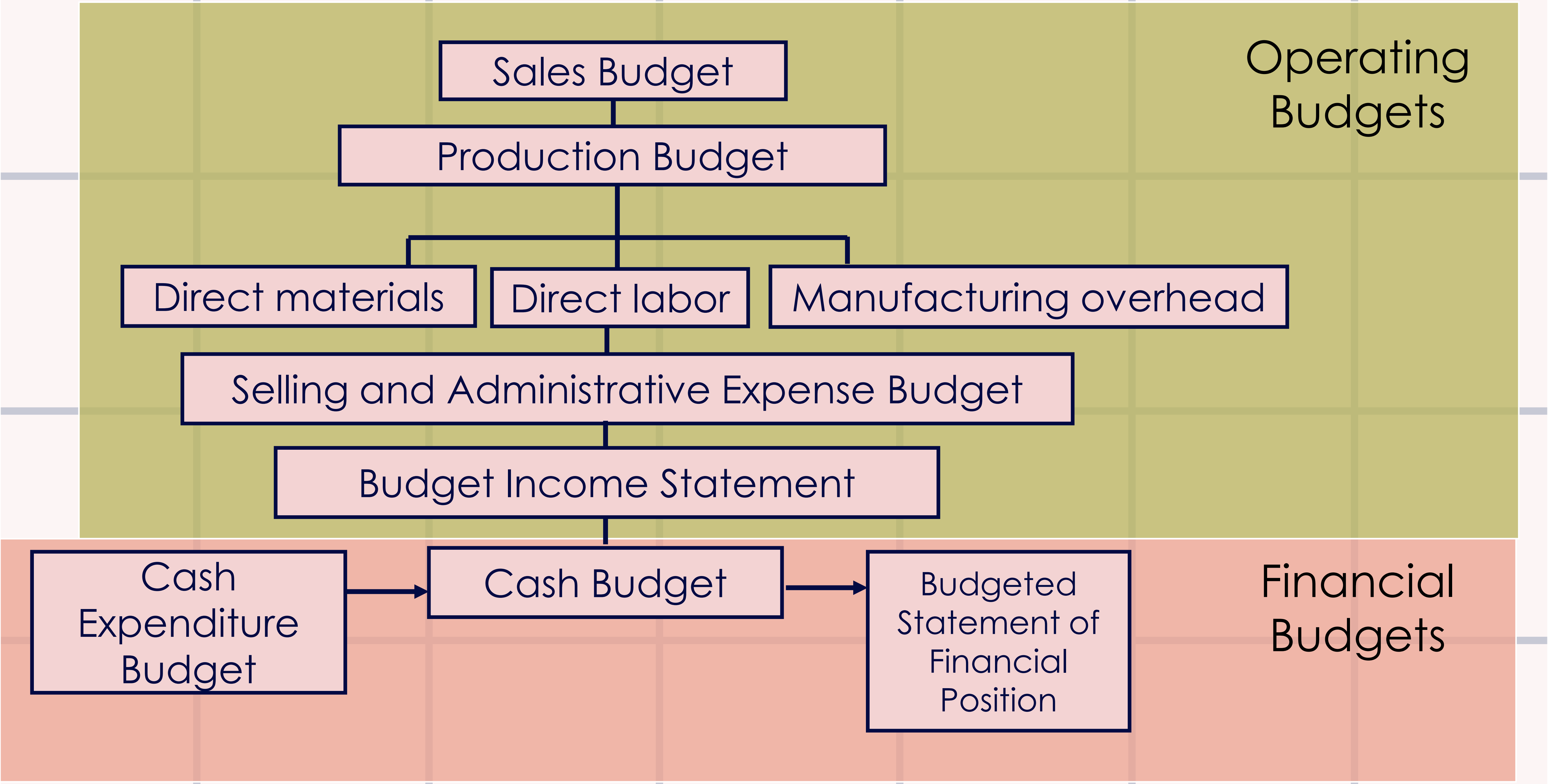
- Series of inter-related budget towards organization goal

A. Operating Budget

- For goals for the company's sales and production personnel

B. Financial Budget

- Cash resources for funding of expected operations and planned capital expenditures


Operating
Budgets
Sales Budget
Production Budget
Direct materials
Direct labor
Manufacturing overhead
Selling and Administrative Expense Budget
Budget Income Statement
Financial
Budgets
Cash
Expenditure
Budget
Cash Budget
Budgeted
Statement of
Financial
Position

SALES BUDGET

- Foundational budget
- Indicates for each product the quantity of estimated sales and the expected unit selling price
- Past sales volumes are often used as a starting point (sales forecast)

SALES FORECASTING

- Process of estimating what the business's sales are going to be in the future
- Easier for established business
- Estimate of how much of the company's output can be sold in a particular time frame

FORECASTING PROCESS

Qualitative Methods	Quantitative Methods
Rely on opinions of experts and predictions of the future	If environment is predictable and past data are available

QUALITATIVE FORECASTING

- A method of drawing from past experiences and perceptions to form expectations of future behavior
- Opinions of experts, decision makers or customers
  - Collect applicable recollections of the query
  - Weigh their pertinence and apply value
  - Derive expectations of what lies ahead

QUALITATIVE FORECASTING METHODS

1. Executive Opinion
2. Sales Force Estimates
3. Consumer surveys
4. Delphi Method

DELPHI METHOD

Consensus Panel	Delphi Method
To bring the experts together in a room and let them discuss an event until a consensus emerges.	Confronts the problem of obtaining a combined forecast from a group of experts.

Due to group dynamics, one person with a strong personality can have an enormous effect on the forecast.

DELPHI METHOD

Iterative group process allows experts to make forecasts without meeting face-to-face

Participants are typically 5-10 experts who make the forecast

Staff personnel assist by preparing, distributing, collecting, and summarizing a series of questionnaires and survey results

After three or four passes through this process, a consensus forecast typically emerges.

QUANTITATIVE FORECASTING

- A method of using known data to construct a formula that can be used to estimate a future scenario.
- Historical data from time series or correlation information
- More scientific
  - Collect pertinent historical data
  - Weigh the value of each variable
  - Mathematically derived expectation

QUANTITATIVE FORECASTING METHODS

1. Naive Approach
2. Moving Averages
3. Exponential Smoothing
4. Trend Projection
5. Excel Forecast Sheet

NAÏVE APPROACH

- Use of last period's actual sales to forecast this period's sales
- $\text{Forecast}_{\text{today}} = \text{Sales}_{\text{last period}}$

MOVING AVERAGES

- Average of a subset of numbers to get an overall idea of trends in a data set
- For long-term trends forecasting

EXPONENTIAL SMOOTHING

- A time-series forecasting method using the weighted sum of recent past observations

Exponential Smoothing Formula:

$$F_t = \alpha A_{t-1} + (1 - \alpha)F_{t-1}$$

Where:

- F_t is the forecast demand for week t
- α is the smoothing constant
- A_{t-1} is the previous period's actual demand
- F_{t-1} is the previous period's forecast demand

TREND PROJECTION

- Assumes that the factors that affected past trends will be the same in the future
- One method is the Fitting Trend Equation

$$\text{Sales} = (b)(\text{Time in yrs}) + a$$

COMPARISON OF ERRORS FOR SEPTEMBER 2019 FORECAST

Naïve Method	Moving Averages	Exponential Smoothing	Trend method
32.01%	24.01%	24.59%	19.56%

SALES BUDGET

2 Important Data from Marketing:

1. Units to be sold
2. Selling price per unit

SALES BUDGET

- Prepared by multiplying the expected unit sales volume for each product by its anticipated unit selling price

PRODUCTION BUDGET

- Number of units of a product to produce to meet anticipated sales demand

2 Important Data from Sales:

1. Sales need
2. Desired ending inventory

PRODUCTION BUDGET

Required Production Units = Budgeted Sales Units + Desired Ending Finished Goods Units - Beginning Finished Goods Units

CASH BUDGET

- Shows anticipated cash flows

3 sections:

1. Cash receipts
2. Cash disbursements
3. Financing

CASH BUDGET

Cash Receipts

- Expected receipts from the company's principal source/s of revenue

Cash Disbursement

- Expected cash payments

Financing

- Expected borrowings and repayment of borrowed funds plus interest

STANDARD COSTS & VARIANCE

STANDARD COSTS

- Pre-determined unit costs, which companies use as measures of performance

Advantages of Standard Costs

1. Facilitate management planning
2. Make employees more cost-conscious
3. Useful in setting selling prices
4. Provide basis for evaluation of cost control
5. Simplify costing and reduce clerical costs
6. Useful in highlighting variances in management

TOTAL STANDARD COST PER UNIT

- Pre-determined unit costs, which companies use as measures of performance

Standard Cost	=	Standard Quantity	x	Standard Price

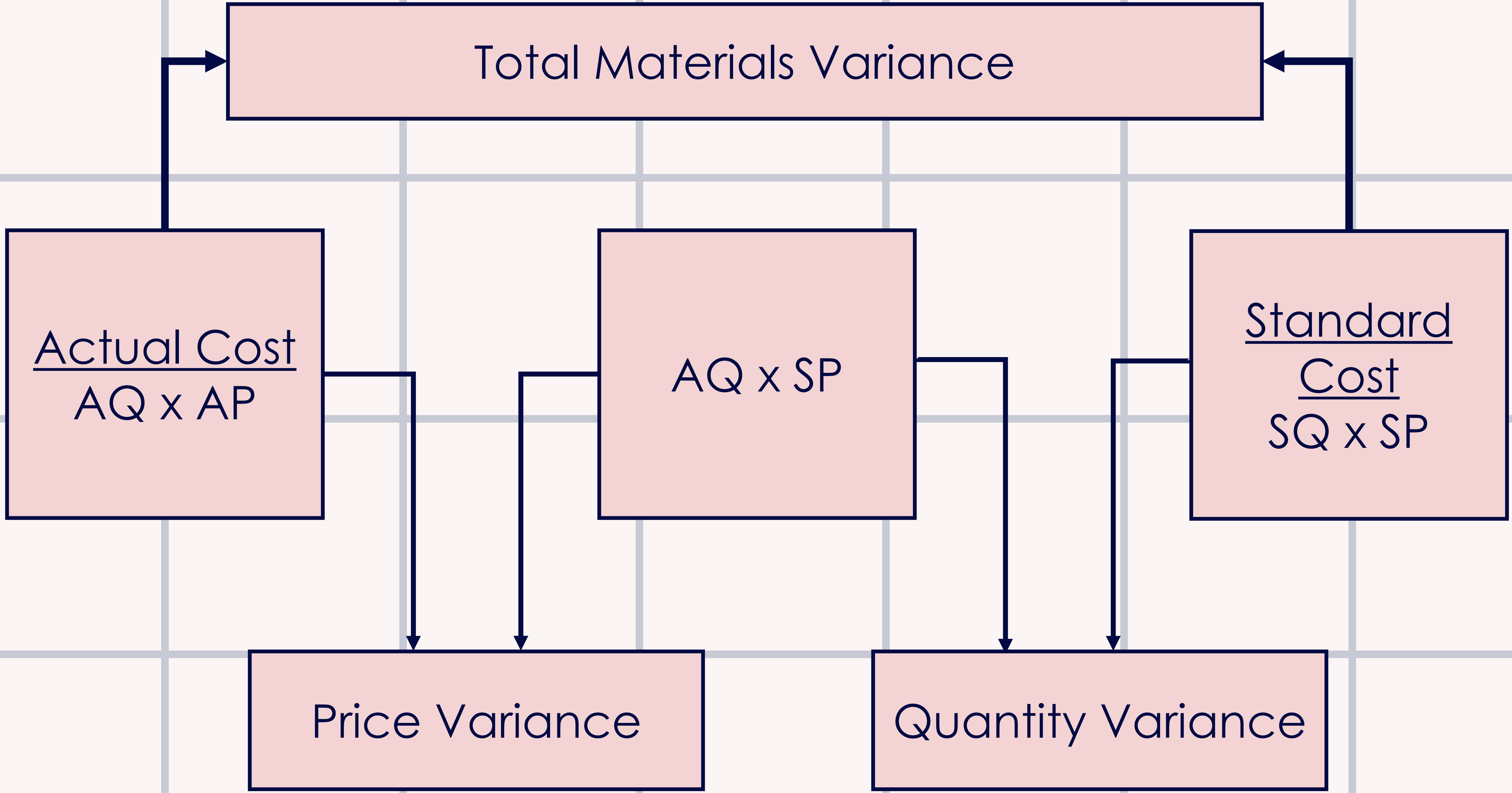
VARIANCE

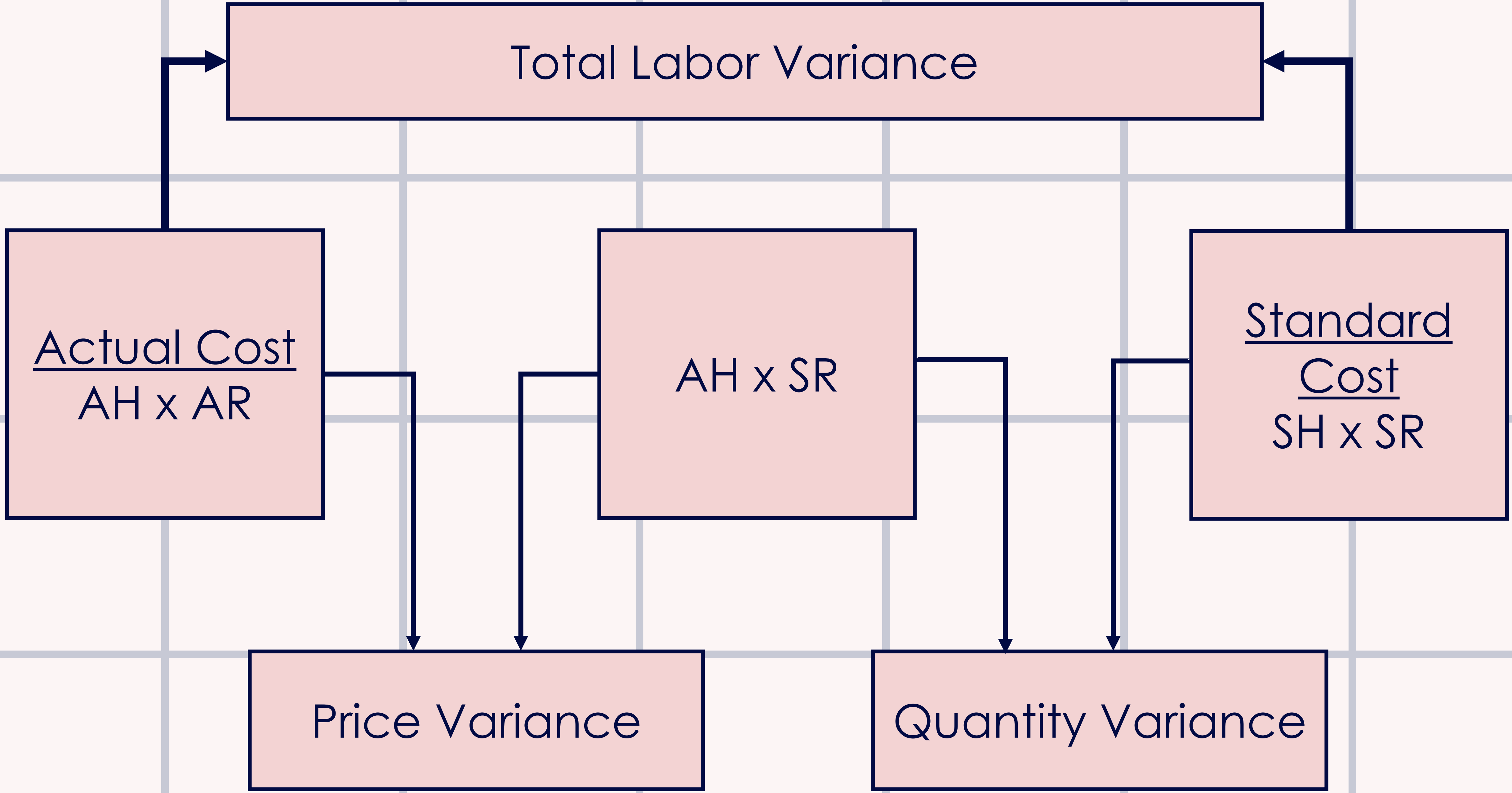
- Differences between total actual costs and total standard costs
- Also, differences between total budgeted and total actual costs

Unfavorable

Favorable

Total Variance = Materials Variance + Labor Variance + Overhead Variance


Total Materials Variance
Actual Cost
AQ x AP
AQ x SP
Standard Cost
SQ x SP
Price Variance
Quantity Variance


Total Labor Variance
Actual Cost
AH x AR
AH x SR
Standard Cost
SH x SR
Price Variance
Quantity Variance

REFERENCES

Warren, et al. ( ). *Financial & Managerial Accounting*.

Weygandt, J. J., Kimmel, P. D., & Kieso, D. E. (2019). *Accounting Principles with International Financing Reporting Standards GE*. John Wiley & Sons, Inc.: Singapore.