

Management Accounting (P1) . CIMA Operational level . For revision use only

Cost Behaviour & Absorption Costing

High-low: $VC/unit = (High\ cost - Low\ cost) / (High\ units - Low\ units)$

Fixed cost = Total cost - (VC per unit x Units)

OAR = Budgeted overhead / Budgeted activity level

Under/over absorption = Absorbed OH - Actual OH

Material & Labour Variances

Mat. price = $(Std\ price - Actual\ price) \times Actual\ qty\ purchased$

Mat. usage = $(Std\ qty\ for\ AO - Actual\ qty\ used) \times Std\ price$

Labour rate = $(Std\ rate - Actual\ rate) \times Actual\ hours\ paid$

Labour eff. = $(Std\ hrs\ for\ AO - Actual\ hrs\ worked) \times Std\ rate$

AO = actual output

Mix & Yield Variances

Mix (per material) = $(Actual\ total\ input \times std\ mix\ \% - Actual\ qty) \times Std\ price$

Yield = $(Actual\ output - Std\ output\ for\ actual\ input) \times Std\ cost/unit\ output$

Mix + Yield = total usage/efficiency variance

Overhead Variances

Var OH exp. = $(Actual\ hrs \times Std\ rate) - Actual\ variable\ OH$

Var OH eff. = $(Std\ hrs\ for\ AO - Actual\ hrs) \times Std\ rate$

Fixed OH exp. = Budgeted FOH - Actual FOH

Fixed OH vol. = $(Actual\ output - Budgeted\ output) \times Std\ FOH/unit$

Fixed OH cap. = $(Actual\ hrs - Budgeted\ hrs) \times Std\ FOH\ rate$

Fixed OH eff. = $(Std\ hrs\ for\ AO - Actual\ hrs) \times Std\ FOH\ rate$

Sales Variances

Sales price = $(Actual\ price - Std\ price) \times Actual\ volume\ sold$

Sales volume (contribution) = $(Actual\ vol - Budgeted\ vol) \times Std\ contribution/unit$

Sales mix = $(Actual\ total\ sales \times std\ mix\ \% - Actual\ qty) \times Std\ margin/unit$

Sales quantity = $(Actual\ total\ sales\ at\ std\ mix - Budgeted\ qty) \times Std\ margin/unit$

Contribution & Break-even

Contribution = Selling price - Variable cost per unit

BEP (units) = Fixed costs / Contribution per unit

C/S ratio = Contribution / Sales revenue

MoS % = $(Budgeted - BEP\ sales) / Budgeted\ sales \times 100$

Inventory Management (EOQ)

$EOQ = \sqrt{2 \times Co \times D / Ch}$

Co = order cost, D = annual demand, Ch = holding cost/unit/year

Throughput Accounting

Throughput/unit = Selling price - Direct material cost/unit

TPAR = $(Throughput/unit / Bottleneck\ time/unit) / (Total\ factory\ cost / Total\ bottleneck\ time)$

TPAR > 1 = process profitable at current cost structure

Investment Appraisal

Payback = Initial investment / Annual cash inflow

NPV = S discounted cash flows - Initial investment

ARR = Average annual profit / Average investment x 100

IRR (interpolation) = $L + [NPV_L / (NPV_L - NPV_H)] \times (H - L)$