

Analytical Procedures

Q Why do we need Analytics?

Routine check \rightarrow can't disclose all mistakes / manipulation in A/cs
Toss (Sample)

↓
 certain procedures like **comparisons, trend & ratio analysis** also reqd.

Q What is An. Pro.? An. Pro. means

Evaluation of financial info. (P.S. Item) \rightarrow through analysis of **possible relationships** \rightarrow among both **financial & non-financial data**.
logical

Eg Total wages (₹) \Rightarrow Analyse $\left\{ \begin{array}{l} \text{wage per worker (₹)} \text{ [financial]} \\ \text{no. of workers} \text{ [non-financial]} \end{array} \right.$

Also, includes investigation of:

Identified fluctuations or relationships inconsistent or differ from expected values by sig. amt. with other info

Sales Revenue 50% \uparrow (v.o.y) \rightarrow Risk **fakesales**

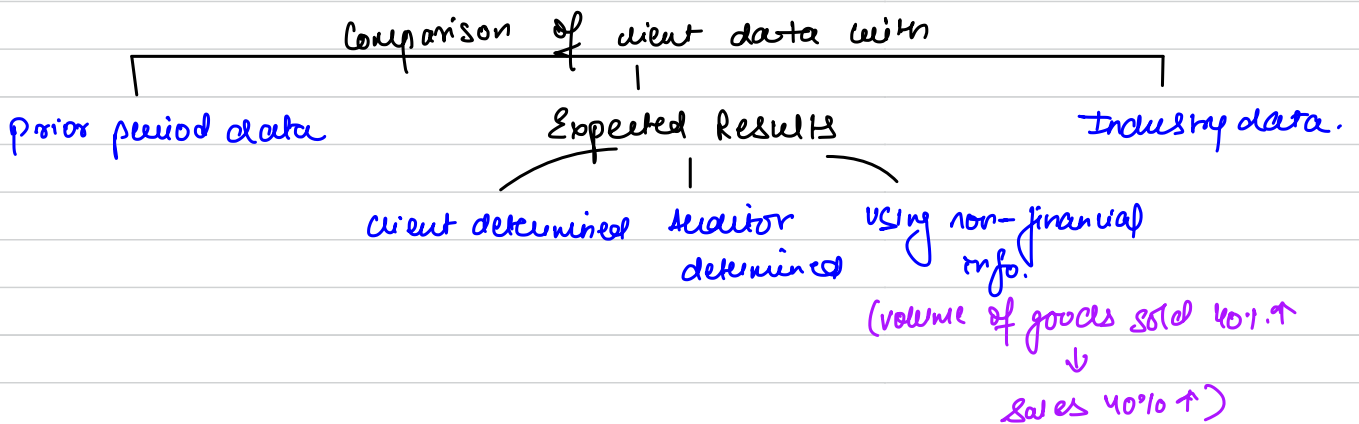
\Rightarrow No. of stores / customers "same"

Risk over (Sales 50% \uparrow) { generally sales \uparrow 40% \uparrow }
 under (Sales 20% \downarrow)

Hotel
 Exp. Revenue 1.5cr
 Actual Rev. (₹) 2.5cr

1 cr Diff

Major Types of An. Pro.



Q Auditor compares P&L items of C.Y. with P.Y.


↓
what's purpose?

Intro: An. fro. use comparisons & relationships to assess whether A/c Balance / data are reasonable.

- I
- If P&L Balances of C.Y. compared with P.Y., it'd be to find reasons for increase/decrease in profits.
 - Also, expense ratios of P&L can be compared with P.Y., to know increase/decrease in expense items in relation to sales & trading profit to sales. (G.P. margin)

- II
- If differences are material $\left\{ \begin{array}{l} \text{ascertain reasons} \\ \text{assess if a/c manipulated to} \\ \text{inflate/suppress profits.} \end{array} \right.$

⊕

maybe possible to identify unusual TAMTR  (Trans / Amts / Trends / Ratios) having audit implications. (Rom → Fraud)

G. Profit reduced by 30% (Y.O.Y)

Sales "Same"

Dr Cost (↑)

R.M. (Same)

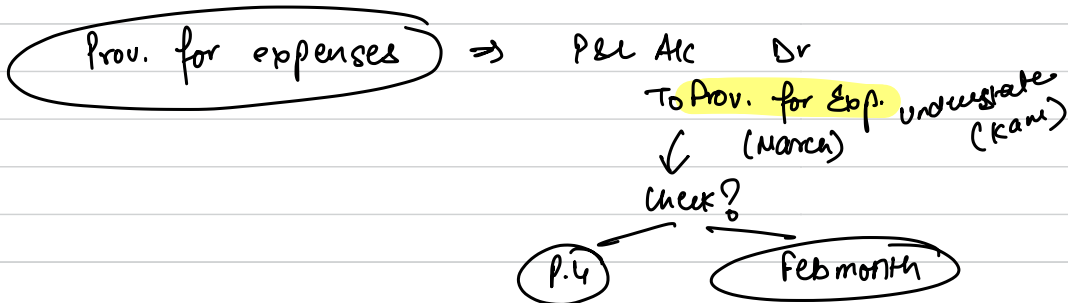
labour (↑)

wages (≠) (Same)

No. of workers ↑

[Need to] Risk (Dummy workman)

Expenses understated



~~Rough~~

eg 1
 • Custom Duty (Rate) 10%

• Duty paid ₹1,00,000
 ↓
 • Import value (Net) ₹10,00,000
 [$\frac{100000}{10\%}$]

eg 2
 G.S.T. Rate 18%

G.S.T. Liab. pay 18,00,000
 ↓
 Net Sales (Ignore ITC)
 [$\frac{1800000}{18} \times 100$] ⇒ 10,00,000

eg 3
 Commission 5% of Sales Rate

Sales 100,00,000
 ↓
 Comm. ₹ 5,00,000

Independent Verification of P&L Items

① (Imports ⇒ custom Duty)

• Cost of Imports subject to ad valorem duty (Based on value) at uniform rate can be verified from duty paid.

② [GST paid ↘ Sales]

Qty of sugar sold, can be verified from GST paid.

③ [Profit / Sales → Bonus / Commission]

Am't of any Income/exp. which has direct relation with profit/sales.

eg mgr. commission on basis of N.P., agent's commission as % of sales etc.

⇒ An. Pro. may identify unusual TAMTR having audit implications.
 ⇒ May assist in identifying Romm due to fraud.

Analytical Procedure (Phases)

I. Risk Assessment Procedure (Planning)

II. Substantive A.Pro. (Testing)

III. At end of audit

form overall conclusion (Completion Phase)

P.4. C.4
 % change ↑ ↓ (High) Romm ↑

Reliable / Relevant A.E.

comfort

Planning phase

• Assist auditor in understanding client's business & identify areas of potential risk.

• This info. assists to decide NTE of other Audit Pro. (F.A.P. ^{ToCs} Sub. Pro. (S))

⇒ Auditor uses both financial & non-financial info.

eg no. of workers, volume of goods, etc. sold

eg. ① Suitability of An. Pro. (for given Assertion, Risk & Tests performed)

Yoyo Hotels (Revenue)
 $\frac{0 \text{ CACC}}{x \checkmark * * *}$

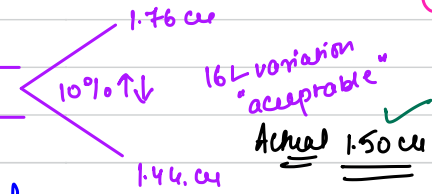
No. of Rooms	100
Rent / day	₹1000
No. of days occupancy	200
occupancy	80%

④ Determine the amt. of difference from expected value, that's acceptable w/o any investigation.

② Reliability of Data
 (from which auditor sets expectation)

- Source of data {IT system}
- Controls over preparation of data
- Comparability of data
- Relevance of data

Expected Revenue ₹1.6 cr



③ Develop an Expectation of recorded amt. / ratios

ensure it's precise to identify a m.m.

2 min
 00
 00

Suitability of Substantive An. Pro. (SAP)

1. SAP are more suitable for large volumes of transⁿ that are predictable over time

Application of PAPs (Planned An. Pro.)

Suitability depends on auditor's assessment

is based on expectation that relationships among data exists & continues unless contrary concern present

of its effectiveness to detect m.m.

eg Sales ↑ Cost ↓ → Costs (Material Cost ↓)

2. In some cases, unsophisticated predictive model, maybe effective.

eg Payroll cost [No. of employees × fixed rate of pay → Estimated payroll cost]

3. Different An. Pros. provide different level of assurance.

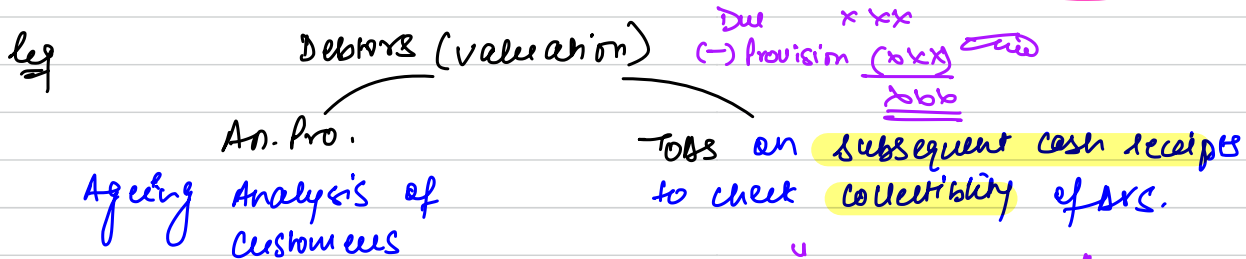
Predicting Rental Income using no. of appts, vacancy rate, etc.
 ↓
 provide persuasive AE.

Using Gross profit % to confirm Revenue
 ↓
 provides less persuasive AE.

4. Suitability is **Influenced** by
 { nature of Assertion
&
Romm.

leg If G.C.s are weak (Romm) ⇒ rely more on **Toss.**

5. SAP maybe suitable when **Toss** performed for same **assertion.**



"Bank statements"
Apr | May | June

<u>Debtors</u>	<u>Dis</u>	<u>provision</u>
upto 6m	xxx	x10%
6m - 1y	xxx	x25%
1-2y	xxx	x50%
2-3y	xxx	x75%
> 3y	xxx	x100%

2000
00
0

Reliability of Data

i) Source of info.

eg. Info. more reliable → when obtained from indep. sources of entity.

ii) Controls over preparation of info. to ensure its completeness & accuracy

eg. Controls over prep., review & maintenance of budgets.

iii) Comparability of info. available

eg. Broad Industry data → to be supplemented → to be comparable to entity that produces & sells specialised products.

Mobile Industry
N.P. Margins 20%

Apple N.P. Margin 30%
 {
 - Res. cost ↑
 • S. Price ↑
 }

iv) Nature & relevance of info. available

eg. whether budgets established as

(Reliable)
Results to be expected
 rather than
goals to be achieved.

Sales 10% ↑ 40%

Unrealistic
50% ↑ 40%

✓ non-fin. info.

Sales Invoice			
Comps			
Item	Qty	Price (£)	Total (£)
xx	xx	xx	xxx

✓ financial info.

Evaluation of whether → Expectation → Sufficiently precise to identify m.m.

"Matters"?

1. Availability of info. (Financial & Non financial)

whether fin. info. like budgets / forecasts & non-fin. info. like no. of goods sold
 available to design SAP.
 ⇒ Also consider reliability of info.

2. Degree to which info. can be Disaggregated

SAP maybe more effective when applied to

financial info. on individual sections of operation

than whole FS of entity.

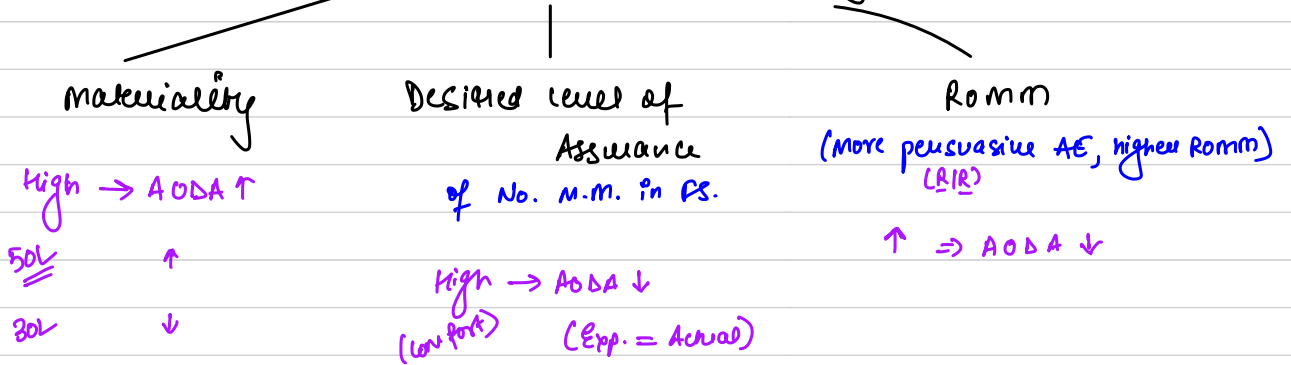
Jio • Telecom Revenue CY vs PY > NP CY vs PY
 • Broadband " CY vs PY

3. Accuracy with which expected results of SAP can be predicted

May expect **greater consistency** in comparing

Q.P margin of one period with another than **discretionary expenses** like Research/Advertisement.

Amnt. of Difference acceptable w/o Investigation

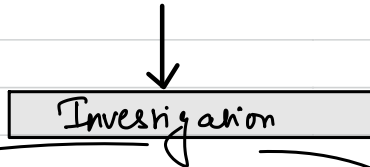


Case Expected Rental revenue ⇒ ₹1.60 cr
AODA w/o Investigation ⇒ ₹16 lakhs

Actual Rent (FS) = ₹2 cr

Difference = 40 lakhs
 (1.60 - 2 cr)

generally 200 days
 this time 250 days



① Inquiring mgt & obtaining AE relevant to mgt's response.

② Performing other Audit Pro. when

mgt unable to provide expln

or expln with AE not adequate.

Rough ① mgt Response × (SAAE's) ⇒ Alt. Audit Pro.

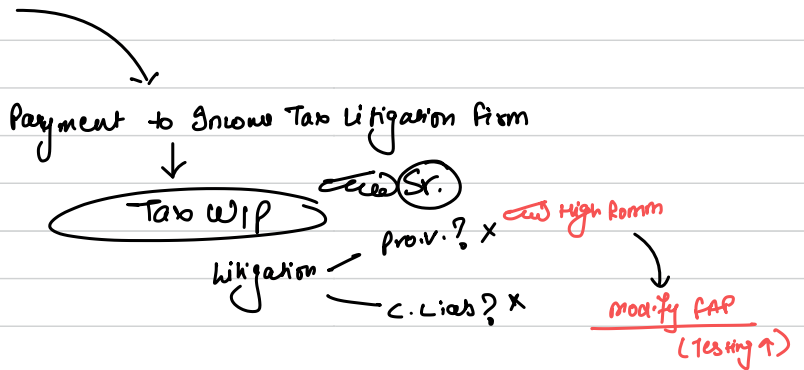
② mgt Response + A.E. ⇒ Adequate × ⇒ Addⁿ Audit Pro.

Other Audit Pro.

(Audit Completion)
Overall Analytical Review (OAR)

	P&L				Remarks		B.S.				Remarks.
	C.Y.	P.Y.	Variance	%			C.Y.	P.Y.	Variance	%	
Revenue						Equity					
⋮						Liab.					
⋮						⋮					
Expenses						Assets.					

Legal & Prof Exp. x0 x0 x0 30%↑ Refer L.P. Exp
WIP.



Factors → considered for SAP

• Availability of data: Relevant | Reliable data

• Disaggregation: If its high disaggregation than its useful.

• A/c Type $\left\{ \begin{array}{l} \text{Income Statement A/c's (accumulated transⁿ over period)} \\ \text{(P&L)} \\ \text{B.S. A/c's (Net effect of Transⁿ at point in time).} \end{array} \right.$

more predictable? Income St. A/c's

• Source → C/OTs $\left\{ \begin{array}{l} \text{more predictable} \rightarrow \text{Numerous / similar transⁿ (Eg routine processes)} \\ \text{Difficult to predict} \rightarrow \text{Non-routine / Elimination SCOTs} \\ \text{subject to mgt judgment.} \end{array} \right.$

Sales/purchases / power exp.
Provision for penalty

• Predictability: SAP are more appt. when → A/c Balance / Relation b/w Data

eg. $\begin{array}{l} \uparrow \\ \bullet \text{ Sales \& cost of sales} \\ \bullet \text{ Debtors \& cash receipts.} \\ \uparrow \end{array}$

predictable

• Nature of Assertion $\left\{ \begin{array}{l} \text{more effective} \rightarrow \text{Completeness / valuation} \\ \text{than} \text{ Rights \& Obligations} \end{array} \right.$

Rental Revenue *Dr's*

Assertions

PAs used to test completeness / valuation / occurrence.

customer duties ✓
Payments occur ✓

• Inherent Risk / Romm → Romm ↑ → Design TOs.
(Sig. Risk)

eg if side agreements wrt R/R is sig. / fraud risk then analysis of cash receipts / cost of sales not appt.

Rough Entry sell 1000 units (Phone) → Dealer [Side Agreement: If dealer can't sell, he can return goods]
₹50Lakh

Risk is fr? NO → Revenue Recognise x

X
Analysis
• Cost of sales?

TOs
• Agreement → Detail study → "clause" → S.A.
• Side Ag. ✓

• Cash receive ?

Techniques of An. Pro.

Trend Analysis

Comparison of current data with prior period(s).



• whether C.Y. Bal. move in line with Trend
• Analyse fluctuations.

Ratio Analysis

- Useful to analyse B.S. & P&L items.
- Compare → other Cos. Industry, Group entities
↓
Over time

Reasonableness Test

Rely on non-financial data of period

- More applicable for Income Statement Accs
- ⊕ Accrual / prepayment Accs.

Structural Model

Statistical model
↓
uses Fin. / Non fin. data of P.Y.
↓
Predict C.Y. Balances.

eg.

