

# GST – Data Analytics

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**Registration** Sec 22, 23,24  
 Check Definitions of  
 “aggregate turnover”  
 aggregate value of all taxable  
 supplies  
 “taxable supply” supply  
 leviable  
 “non-taxable supply” supply  
 not leviable to tax  
 Sec 9(1)(2) excludes levy on  
 the supply of alcoholic liquor  
 for human consumption, the  
 supply of petroleum crude,  
 high speed diesel, petrol,  
 natural gas and ATF  
 “exempt supply” Nil Rate

Is Transaction a Supply to attract GST, Verify  
 Section 7 of CGST & Schedule III Supply (8  
 forms of supply, consideration, furtherance of  
 business)

Exception to Supply - Sch III  
 No GST ( Ex, immovable  
 property, Salary)

Refer Sch II for Classification of  
 Goods or Services

Exception: Consideration  
 NIL, transaction not in Sch I  
 no GST (Ex : Intra state  
 Branch Transfer)

Refer Sec 9 of CGST / Sec 5 of IGST for Levy

Rate ( HSN/SAC) 0,5,12,18,28	Valuation Section 15 Valuation Rules	RCM – Supply RCM - URP
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**PoPs**

Goods Sec 10, 11 IGST	Services Sec 12, 13 IGST
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**Time of supply (ToS)**

Goods Sec 12 CGST	Services Sec 13 CGST
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**Nature of Supply  
(NoS)  
(Inter/Intra State)**

Sec 7 of IGST,  
 Sec 9 of CGST

**ITC  
Sec  
16,17,18,19,  
20,21**

**Transitional  
Provisions  
Chapter XX**

**Compliances**  
 Chpt VII – Tax invoice  
 VIII – Accounts & Records  
 IX – Returns  
 X – Payment of Tax  
 XI – Refund

Month	GSTIN	Liability (A)			ITC (B)			Payment/Refund		
		CGST	SGST	IGST	CGST	SGST	IGST	CGST	SGST	IGST
TOS	Registration	Levy, PoPs & NoS			Levy, PoPs & NoS			Chapter X, XI		

Department Work  
 Chpt XII Assessments  
 Chpt XIII Audit  
 Chpt XIV Inspection, search, seizure  
 and arrest

Chpt XV Demands & Recovery  
 Chpt XVII Advance Ruling  
 Chpt XVIII Appeals and Revision  
 Chpt XIX Offences and Penalties

# IN THIS SESSION

- Accounting process
- Traditional audit Vs Computerized audit
- Data Analytics - Spreadsheet



# Objective of this session:

*“To understand the IT tools & use it in order to render Effective & Efficient assessments, which leads to success & satisfaction”*





Elon Musk

In aerospace in order to create SpaceX

In automotive in order to create Tesla with self-driving features

In trains in order to envision the Hyperloop

In aviation in order to envision electric aircraft that take off and land vertically

In technology in order to envision a neural lace that interfaces your brain

In technology in order to help build PayPal

In technology in order to co-found OpenAI, a non-profit that limits the probability of negative artificial intelligence futures

# Can Audit Become Agile?

## Seven Keys To Thinking The Unthinkable

- 1<sup>st</sup> , active and broader involvement in disruption:
- 2<sup>nd</sup> , being prepared and adaptive
- 3<sup>rd</sup> , assessing the risk of future disruption
- 4<sup>th</sup> , proactive involvement in disruptive events
- 5<sup>th</sup> , flexible talent management
- 6<sup>th</sup> , flexible planning
- 7<sup>th</sup> , put new technologies to work.

# New & Emerging Technology – Impact on AUDITOR

- **Mobility**
- **Cloud**
- **Digital Service Delivery**
- **Big Data**
- **Social Collaboration**
- **Block Chain Technology**
- **Artificial Intelligence**
- **Machine Learning**
- **IOT**
- **Payment Systems**
- **Cyber Security**
- **Robotic**

Embrace and leverage new technologies in performing audit work. Auditors need to be at the forefront of adopting artificial intelligence, cognitive computing, and smart robots. Auditors need to understand how technologies such as blockchain work and how they can be used in their organizations. They must take advantage of machine learning and data analytics in their audit processes — real-time auditing should be a requirement as organizations implement new business processes.

# Audit under Computerization

- Automatic Markup Calculations
- Automatic reconciliations
- Easy examination of annual accounts
- Easy ledger scrutiny
- Comparison of periodical balances
- Reduction of cost and time.
- Decision on detailed search





# Why IT to Officers

<b>Officers Functions</b>	<b>IT Functions</b>
Collection of information	Input – Process – Output
Summarizing & Classification	Thru Arithmetic & Logical Operations
Analyzing	Uses Hardware and Software
Interpretation & Decision Making	For Interpretation & Decision Making
Reporting	Reporting

**Let us do what systems cannot do**

# Relevant Tools to Officers

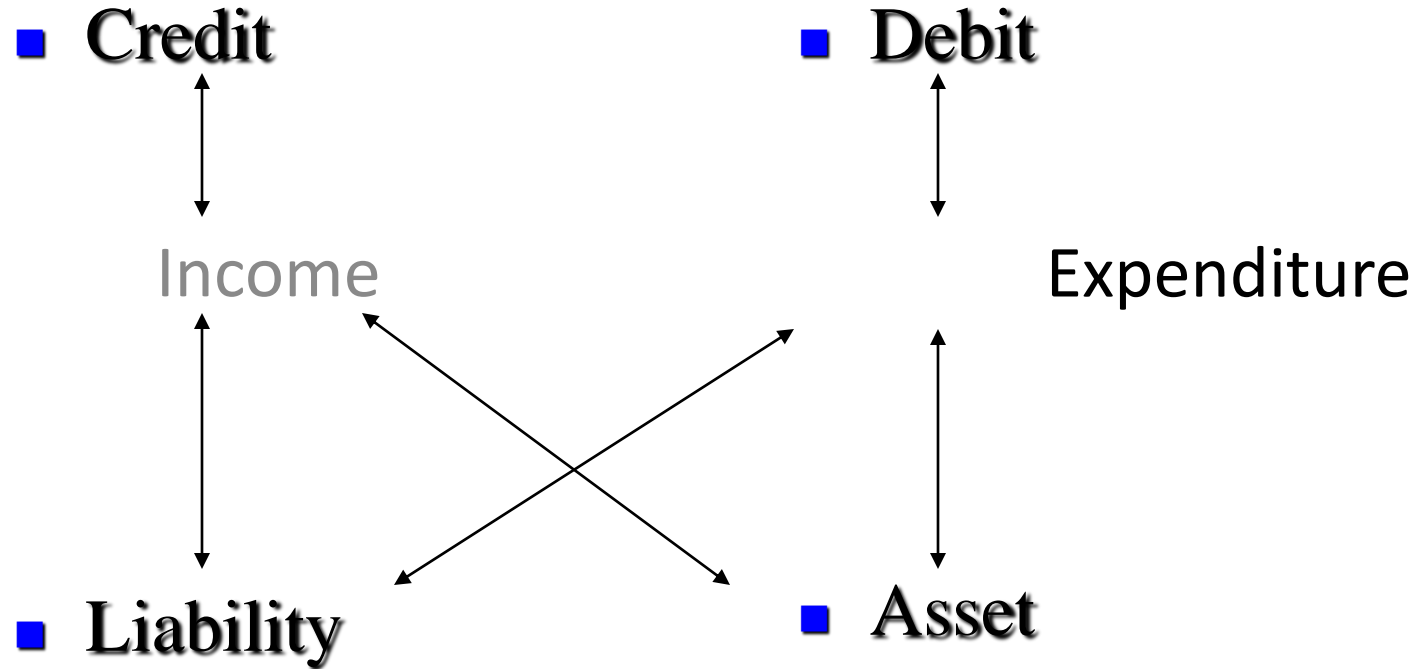
## IT Functions thru following tools

Software	Hardware
Word Processing	Computers
Spreadsheets	Printers
Database	Networking
ERPs & Accounting software	Communication devices
OS & Utilities	



Let us integrate Officer's functions with IT Tools

# Accounting for Software



# Rules of Accounting

<b>Type of Account</b>	<b>Debit</b>	<b>Credit</b>
<b>Personal</b>	<b>The Receiver</b>	<b>The Giver</b>
<b>Real</b>	<b>What Comes In</b>	<b>What goes out</b>
<b>Nominal</b>	<b>All Expenses &amp; Losses</b>	<b>All Incomes &amp; Gains</b>



# Flow of Accounting

Understanding the Transaction

↓  
**Voucher Entry**

↓  
**Posting**

↓  
**Balancing**

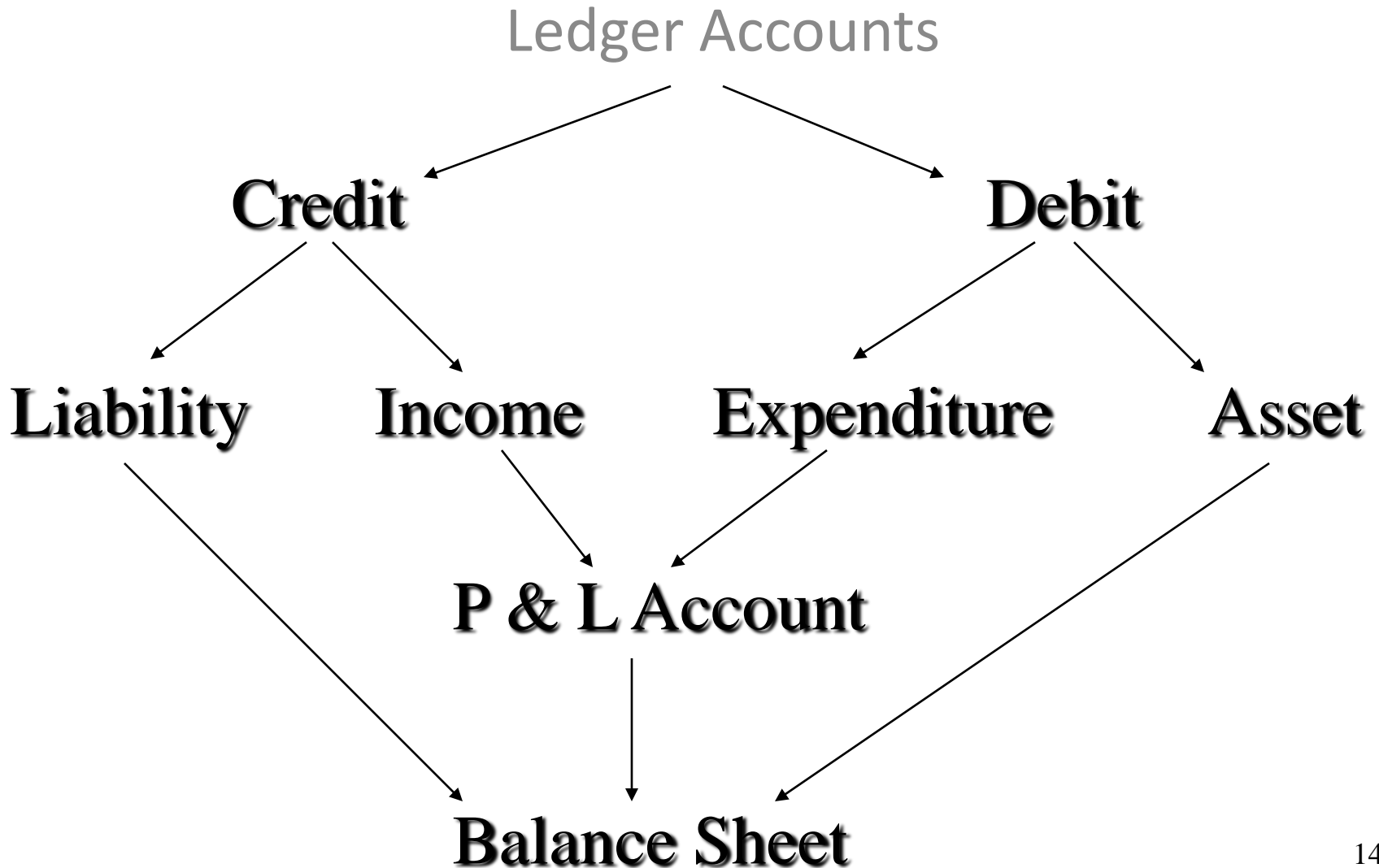
↓  
**Trial Balance**

↙  
**P & L Account**

↘  
**Balance Sheet**

→

# Structure of Accounting



# Ledger Grouping

Income Groups

- Expenditure Groups

Liability Group

- Asset Group

# Profit & Loss Account Group

## **Income :**

Direct Income

Indirect Income

Sales Accounts

## **• Expenditure :**

– Direct Expenses

– Indirect Expenses

– Purchase Accounts



# Balance Sheet Group

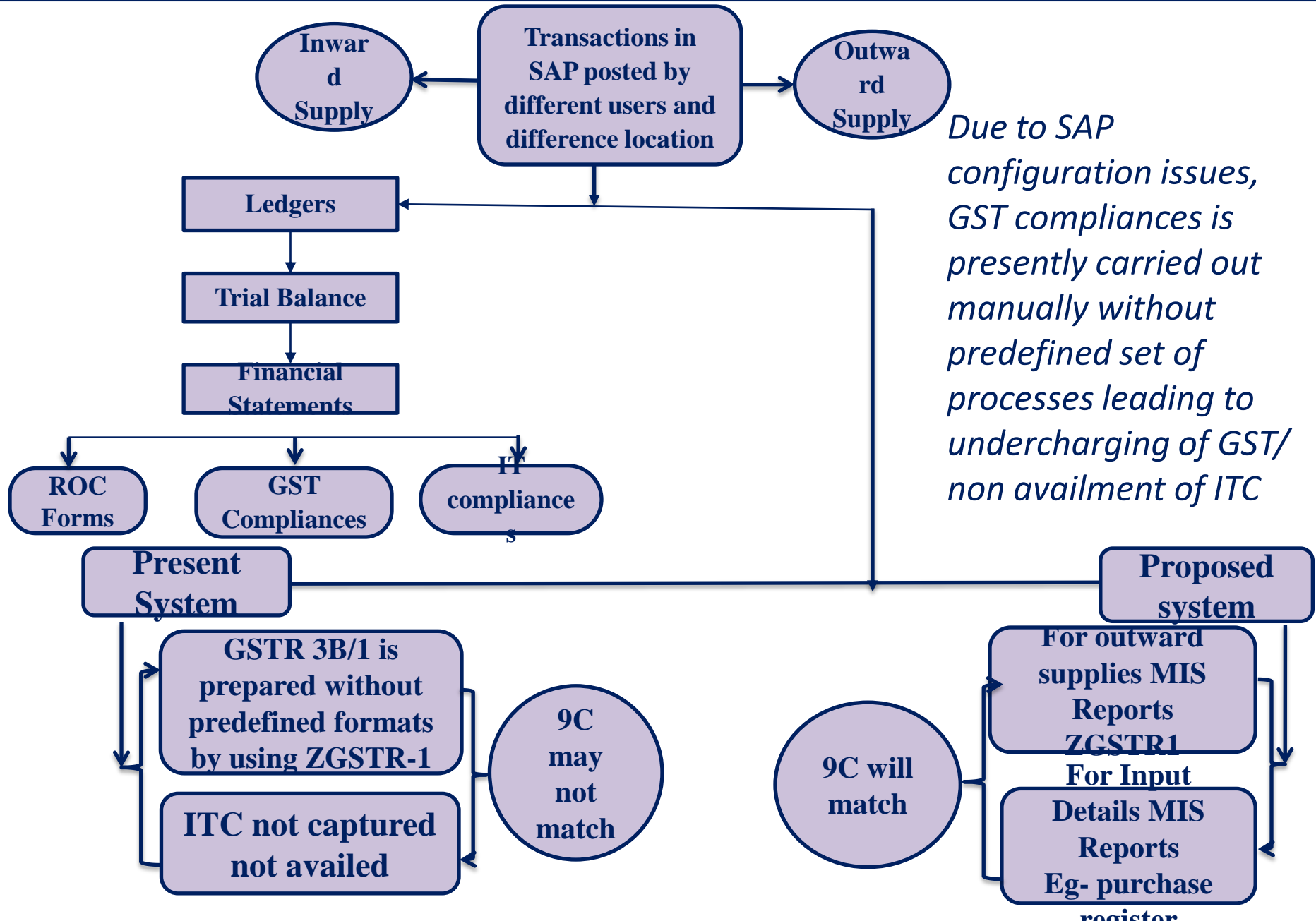
## **Liabilities :**

Capital  
Bank OCC/Bank OD  
Current Liabilities  
Duties & Taxes  
Loans (Liability)  
Provisions  
Reserves & Surplus  
Retained Earnings  
Secured Loans  
Sundry Creditors  
Suspense  
Unsecured Loans

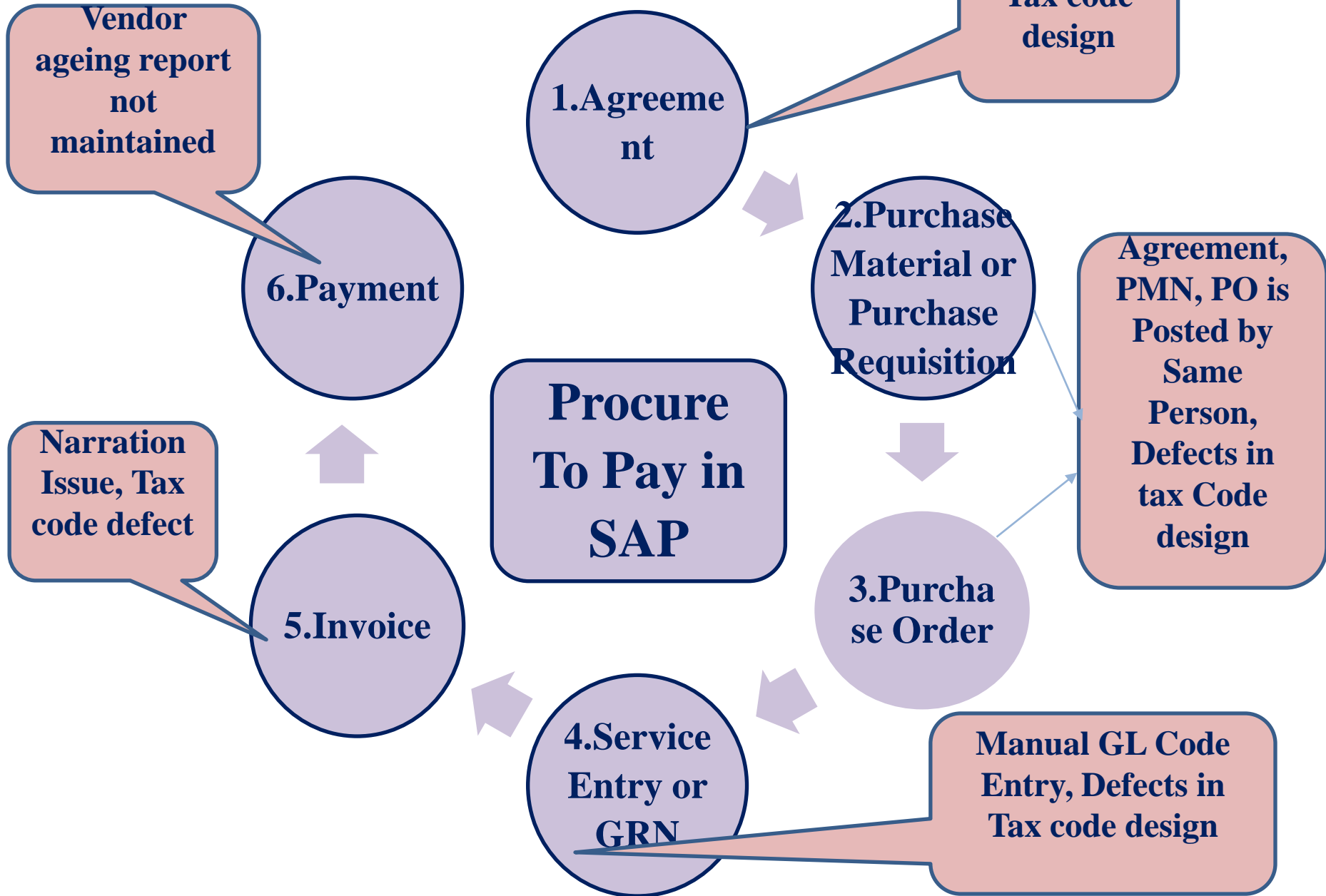
## **• Assets :**

- Bank Accounts
- Cash in Hand
- Current Assets
- Deposit (Assets)
- Fixed Assets
- Investments
- Loans & Advances (Asset)
- Misc. Expenses (Asset)
- Sundry Debtors

# Accounting System At XYZ COMPANY - Transaction Flow



# Accounting System At XYZ COMP



# Accounting System At XYZ COMPANY – Procure To Pay -

Stage	Present System	Process	Accounting Entry	Impact
1. Agreement	Agreement Number, Service Description, Tax code, Amount, Vendor details from agreement are captured into SAP		-	1. Cannot identify the eligible ITC & results in excess or short claiming of ITC. 2. There is No Maker Checker Concept, Involves skilled manpower and duplication of work. 3. Nature of transaction cannot be identified properly. 4. Since Service Code & Relevant GL
2. Purchase Material & Requisition	Nature of expenditure with the Material/Service codes and Quantity of the Goods will be posted in system and Purchase Material Number (PMN) is generated.		-	
3. Purchase Order	In ME21N, PMN will be entered and Purchase Order Number (PO) will be generated.		-	
4. Service Entry/GRN	In ML81N, PO number, other general details are entered and GL code will be assigned manually Concerned AO will release the order and GRN is generated		Expenditure Account Dr  To Service/Goods *Clrg A/c  (Clrg: Clearing)	
5. Invoice	In MIR7, enter invoice data, Narration. Payment terms. Business		Goods/Service Clrg A/c Dr	



# Present Accounting System At XYZ COMPANY - Agreement Level

The particulars in agreement will be entered in SAP by using the code ME31K. first, they will enter agreement number other particulars including service description, amount, tax code etc...

## Display Contract : Item 00001

Account Assignments

Agreement Item: 5300002593 1

Material: \_\_\_\_\_ Ma

Short Text: SERVICES

Quantity and Price

Target Quantity: 1 AU

Net Order Price: 147,120.00 INR / 1

Qty Conversion: 1 AU <-> 1 AU

Other Data

ConfContr. \_\_\_\_\_

Ackn. No. \_\_\_\_\_

Tracking No. 57/17-18

GR/IR Control

Underdel. Tol. 0.0 %

Overdeliv. Tol. 0.0

Tax code: **R2**

i. Defects in Tax code/HS N

ii. Withholding Tax not assigned



తెలంగాణ తేలంగానా TELANGANA N 715209

S.No. 623 Date: 11/06/2018 Rs. 100/-

Sold To: Sri. S. Maheshwara Raju

S/o. Dr. W/o. Rama Krishna Raju R/o. Kompally

For Whom: HOCS Fire & Security Systems Pvt. Ltd.

Md. Gulam Ahmed Aziz LICENCED STAMP VENDOR  
L.No.17-02-095, 1995 R.No.17-02-05/2017  
Gajwel, Siddipet-502 278. Cell:9440085172

LUMPSUM AGREEMENT NO. 06 OF 2018 - 19

This agreement made the 11th day of June 2018 between the Superintending Engineer/ Civil/Corporate Office/TSSPDCL, Mint Compound, Hyderabad (herein after called "the employer") M/s HOCS Fire & Security Systems Pvt. Ltd., Plot No.8, Survey No.22, Sai Nagar Colony, Picket, Secunderabad (herein after called "the contractor" of the other part.

Whereas the employer to desirous that the contractor executes Annual Servicing and Maintenance Non Comprehensive Fire Protection System available at Corporate Office, A-Block & B-Block buildings TSSPDCL located at Mint Compound, Hyderabad for the period from 01.04.2018 to 31.03.2019 (herein after called "the works") and the employer has accepted the contract by the contractor for the execution and completion of such works and the remedying of any defects therein at a cost of Rs.1,35,522/- (Rupees One Lakh Thirty Five Thousand Five Hundred and Twenty Two only) (Including of GST)

11/8/2018

Superintending Engineer/Civil, Corporate Office, TSSPDCL, Mint Compound, Hyderabad

# Accounting System At XYZ COMPANY - Issues

## ■ Issue

Tax Codes in case of Inward Supply

## ■ Present System & defects

Tax codes are designed only on consideration of Rate & Type of Tax (Without taking into consideration of Blocked /Ineligible or Eligible Input Tax Credit).

## ■ Implication

There is no Specific way to identify the eligible Input Tax Credit. Results in excess or short claiming of ITC

## ■ Proposed System & Advantages

Tax codes are to be designed in such a way that it shall specify whether the supply is Blocked, eligible, ineligible so that we can

Present	Tax Code	Description
	F1	FI-5% Input Tax SG,CG
	G1	5% State GST for Services
	GA	5% State GST for RCM Services
	H1	FI - Input Tax IGST 5%
	I1	5% Inter State GST for Services
	IA	5% Inter State GST for RCM Services
	OA	Advance on Output Tax SG,CG 5%
	ON	5% Output Tax SG,CG
	PA	Advance on Output Tax IGST 5%
	PN	Output Tax IGST 5%
	U1	5% UT GST for Services
	UA	5% UT GST for RCM Services
	V0	nil tax

Proposed	Tax codes	Description
	7A	IMP-IGST - 28% - Cr
	7E	IMP-IGST - 28% - Cr
	8A	SGST 14% + CGST 14% - Cr
	8E	IGST - 28% - Cr
	8J	IGST - 28% + Cess - Cr
	8K	SGST 14% + CGST 14% - Ncr
	8P	IGST - 28% - Ncr - RCM
	9U	IGST Import @ 7.5% Cr
	9W	IGST 5% + CESS INR/MT
	9Y	SGST 2.5% + CGST 2.5% - Cr+Cess-Ncr

refers credit available

Ncr refers credit unavailable

# Accounting System At XYZ COMPANY -Issues

## ■ Issue

With Holding Tax

## ■ Present System & defects

There is no Control regarding the with holding tax to be **No Withholding Tax Code** deducted

## ■ Implication

Mismatch of with holding deducted with actual amount has to be deducted as per law

## ■ Proposed System & Advantages

Specific codes has to designed in the SAP for deduction of with holding tax for specific Expenditure.

Present

Park Incoming Invoice: Company Code 1000

The screenshot shows the SAP interface for an incoming invoice. The transaction type is 'Invoice'. The 'Withholding tax' tab is active. A table lists withholding tax details, but the 'W/tax code' column is empty. A callout bubble points to this empty cell with the text 'No Withholding Tax Code'.

Name of w/hld.t. typ	W/tax code	W/tax base FC	With/tax amt FC

Proposed

The screenshot shows the SAP interface for an incoming invoice with the transaction ID '5105644871'. The 'Withholding tax' tab is active. A table lists withholding tax details, with the 'W/tax code' column containing 'C2'. A callout bubble points to this cell with the text 'Here C2 is Withholding Tax Code'.

Name of w/hld.t...	W/t...	W/tax base FC	With/tax amt FC	W/tax t...
TDS 194C - CONT...	C2	397,333.00	61.00	397,33
TDS 194C CONTR...				0.00

## 2.Accounting System At XYZ COMPANY - Purchase Material or

### Present System

### Purchase Requisition Level

- Company will post the nature of expenditure in conjunction with Material/Service codes and Quantity of the Goods etc.... In this process SAP will generate Purchase Material Number (PMN), this PMN and Agreement Number will be given to the another person for Approval.
- The Authorised person will cross check all the details and saves the data SAP will generate Purchase requisition Number (PRN)

**Issue :**Agreement, Purchase Material/ Purchase requisition Number & Purchase order is posted by same person in the SAP

Display Man Power Order 932000006923: Central Header

HeaderData Operations Components Costs Partner Objects Additional Data

Person responsible

PlannerGrp	901 / 1000	CGM/FINANCE	Notifctn	
Mn.wk.ctr	19300000 / 1000	CGM Finance	Costs	0.00 INR
Person res..	0		PMActType	
			SystCond.	<input type="checkbox"/>
			Address	

Dates

Bsc start	01.07.2018	Priority	
Basic fin.	31.03.2019	Revision	

Reference object

Func. Loc.	25	CGM/Finance/Corporate Office
Equipment	CLB2500000	Contract Labour @ CGM /Finance Wing

First operation

Operation	Allotment of Departmental Staff/Retired		CcKey				
WkCtr/Pint	19300000 / 1000	Ctrl key	EM03	Acty Type		<input type="checkbox"/> PRT	
Work durtn	9	MON	Number	0	Oprtn dur.	0.0	<input type="checkbox"/> Comp.
Person. no	0						

561200\* 00 0

MON	19300000	1000	CGM/FINANCE	0	0.00	<input type="checkbox"/> Comp.
MON	19300000	1000	CGM/FINANCE	0	0.00	<input type="checkbox"/> Comp.

CGM/FINANCE

# Accounting System At XYZ COMPANY - Issues

## ■ Issue

Agreement, Purchase Material Number, Purchase Requisition Number

## ■ Present System & defects

Agreement, Purchase Material/ Purchase requisition Number & Purchase order is posted by same person in the SAP. GST related fields not filled

## ■ Implication

There is No Maker Checker Concept, Results in short/excess claim of ITC, Involves skilled manpower and duplication of work

## ■ Proposed System & Advantages

Agreement, Purchase material / Purchase requisition Number & Purchase order is to be entered by different persons to identify the errors. Results in effective processing of GST returns



### 3.Accounting System At XYZ COMPANY – Purchase Order Level

#### Present System

- In this level the concerned person who generates the purchase order in ME21N will enter agreement number, PMN, PRN, saves the data and then purchase order number will be generated by the SAP.
- If any thing goes wrong PO will not accept the data.

The screenshot shows the 'Display Taxes' interface in SAP. At the top, there are navigation arrows and an 'Item' dropdown menu. Below this, a summary table displays the following values:

Net	27,181.15	INR
Tax	4,892.60	

Below the summary table is a 'Pricing Elements' table with the following columns: No..., CnTy, Name, Amount, Qty, per, UoM, and Condition. The table contains the following rows:

No...	CnTy	Name	Amount	Qty	per	UoM	Condition
	BASB	Base Amount					
		Calculated Cal		27,181.15	INR	1	
		Sub total		27,181.15	INR	1	
	J1SN	IN: State GST - ND	9,000				
	J1CN	Central GST - ND	9,000				

# 4.Accounting System At XYZ COMPANY - Service Entry or Goods

**Present  
System**

**receipt Level**

Steps Followed in GRN or SE Level	Implication
Go to T code ML81N	_____
Fill the Purchase order number	To get PO details
Enter Basic details like area/ location, period etc.....	To Know the Place where the supply from
Give the agreement number as reference number	Additional Data
Type of Bill (Part or Final Bill)	To Know the whether Agreement period completed or not.
Go to ---> service/goods--→ account assignment---→ GL code for the expenditure manually.	To Select the GL code for Expenditure.
The concerned AO will issue Release order then GRN will generate.	Accounting Entry

**The Accounting Entry  
will be**

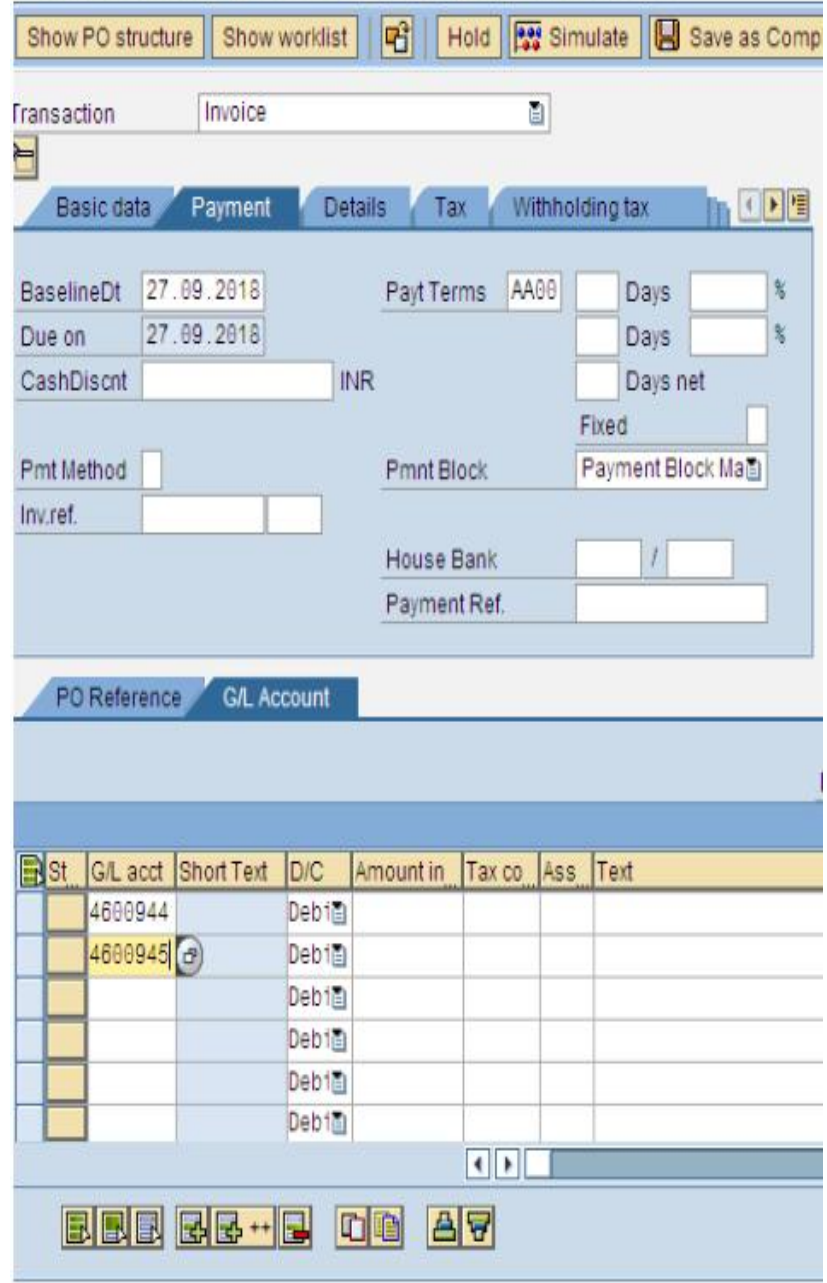
**Expenditure Account  
Dr  
To Service/Goods  
A/c Cr**

**Issue :** Manual posting of the GL code at Service entry/ Goods receipt note Level



# Accounting System At XYZ COMPANY - Issues

Transaction: Invoice Service: Company Code 1000



## ■ Issue

Manual posting in GL Account

## ■ Present System & defects

Manual posting of the GL code at Service entry/  
Goods receipt note Level

[List of Service codes annexed separately](#)

## ■ Implication

There may be possibility that Similar  
Expenditure will go to Different GL Accounts  
Results in short/excess claim of ITC, Involves  
skilled manpower and duplication of work

## ■ Proposed System & Advantages

Control has to be inserted in SAP that Specific  
Expenditure will be accounted to Specific GL  
Account Automatically.

For Example : We can link the service codes of  
Hire Charges being (SWR11215,16,17) entered  
at agreement stage with the GL for vehicle hire  
charges(Gl code :7600308) such that the

## 5.Accounting System At XYZ COMPANY - Invoice Level

<b>Steps Followed in GRN or SE Level</b>	<b>Implication</b>
Go to MIR7	_____
Enter Invoice Date	To Know date of Issue of Invoice
Enter Invoice Number in Ref.	Additional Data
Enter Narration	To get easy reference
Enter Payment Terms	To Know Credit period details
Enter Business Area/ GSTN	To Know whether Supply from Registered or Unregistered

**Issue :** Narrations are not properly entered while entering transactions.

**The Accounting Entry  
will be**

**Goods/Service Account  
Dr  
To Vendor A/c**

# Accounting System At XYZ COMPANY - Issues

## • Issue

Narrations are not properly entered while entering transactions.

## ■ Present System & defects

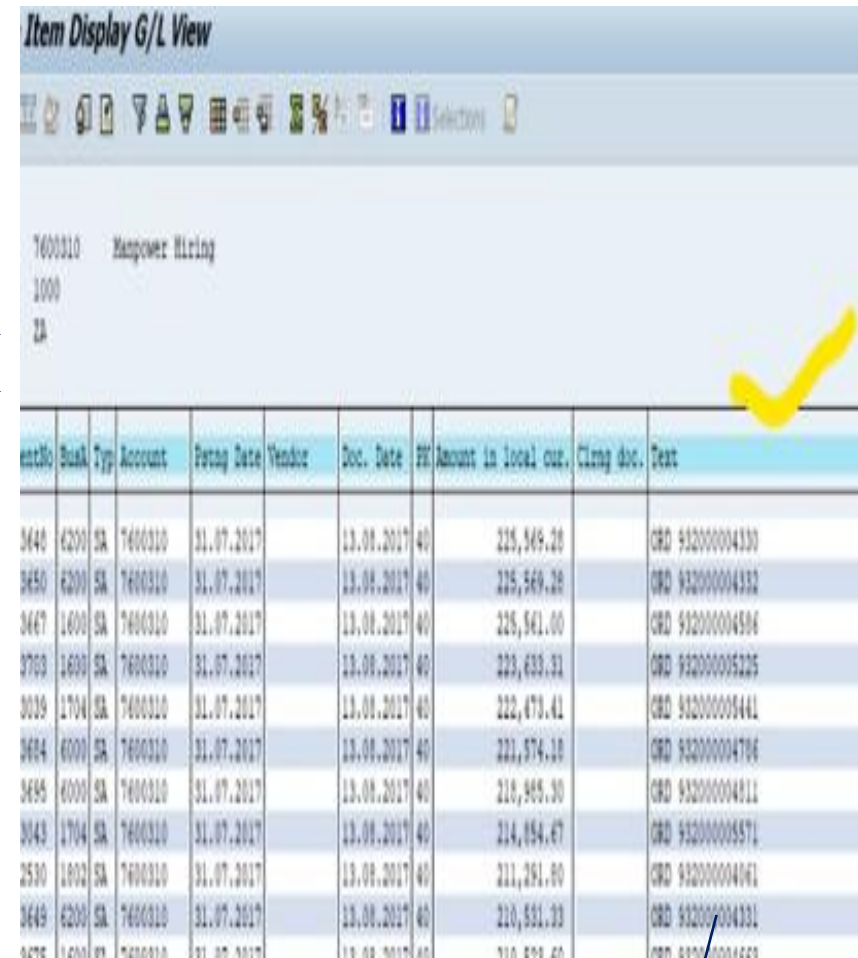
Tax code Narrations are not mentioned properly on the face of ledger. compliance for return filing is manually extracted from ledgers with out predefined formats.

## ■ Implication

Nature of transaction cannot be identified properly. Results in short/excess claim of ITC, Involves skilled manpower and duplication of work

## ■ Proposed System & Advantages

Narration shall be mentioned in such a way that it shall specify all the details like Vendor Code, Material description etc.,



The screenshot displays a ledger view for 'Manpower Hiring' with a yellow checkmark indicating a successful operation. The ledger table is as follows:

entNo	Busk Typ	Account	Perag Date	Vendor	Doc. Date	Dr	Amount in local cur.	Clmg doc.	Text
3640	4200	SA 7600310	31.07.2017		13.08.2017	40	225,569.20		GRD 932000004330
3650	4200	SA 7600310	31.07.2017		13.08.2017	40	225,569.20		GRD 932000004332
3667	1600	SA 7600310	31.07.2017		13.08.2017	40	225,561.00		GRD 932000004506
3703	1600	SA 7600310	31.07.2017		13.08.2017	40	203,433.31		GRD 932000005205
3039	1704	SA 7600310	31.07.2017		13.08.2017	40	222,478.41		GRD 932000005441
3604	6000	SA 7600310	31.07.2017		13.08.2017	40	201,574.10		GRD 932000004706
3695	6000	SA 7600310	31.07.2017		13.08.2017	40	210,965.30		GRD 932000004811
3043	1704	SA 7600310	31.07.2017		13.08.2017	40	214,854.67		GRD 932000005571
2530	1602	SA 7600310	31.07.2017		13.08.2017	40	211,261.80		GRD 932000004061
3649	4200	SA 7600310	31.07.2017		13.08.2017	40	210,551.33		GRD 932000004331

**Narrations given are improper**

# Accounting System At XYZ COMPANY - Issues

## ■ Issue

Non-Payment to Vendors within 180 days

## ■ Present System & defects

There is no control regarding the identification of Vendors for whom the credit period has been exceeded by 180 days

## ■ Implication

Non-Reversal of Input GST Claimed after the expiry of 180 days, Results in short/excess claim of ITC, Involves Waste of skilled manpower and duplication of work

## ■ Proposed System & Advantages

On Periodical basis Vendors ageing report has to be Cross verified to identify the vendors for whom credit period exceeded

Present

NO Report is maintained in the SAP

Company directly check the Vendor balances from Vendor Balances Account(FBL1N)

Present

**FI : Report On Vendors Ageing**

Penna Cement Industries Ltd.

Report: Creditors Ageing Analysis as on Baseline Date 02.01.2019  
 Report Type: Vendor Ageing  
 Report Date & Time: 02.01.2019 - 14:22:22  
 Segments: All

**Vendor's list more than 180 days**

Vendor	Vendor Name	Region	Description	Acct. Group	Account Group Name	Closing	From 0 To 90	From 91 To 180	From 181 To 360
005000009	A K TRANSPORT	01	Andhra Pradesh	2005	VENDOR SERVICES	9,649,367.90-	9,599,744.70-	1,840.00-	35,898.20-
005000016	A RAMESH			2005	VENDOR SERVICES	58,400.00	58,400.00		
005000017	A RANGANATH			2005	VENDOR SERVICES	31,010.00-			
005000034	A.KARUPPAIAH			2005	VENDOR SERVICES	275,000.00	275,000.00		
005000037	A.MUTHUPALANIAPPAN			2005	VENDOR SERVICES	275,000.00	275,000.00		
005000044	A.P. TRANSCO			2005	VENDOR SERVICES	157,579,498.00-	143,917,977.00-	13,661,521.00-	
005000046	A.P.DIESEL SPARES & SERVICES	36	Telangana	2005	VENDOR SERVICES	374,394.15-	150,699.15-	51,868.00-	171,827.00-
005000056	A.SURYANARAYANAN	22	Tamil Nadu	2005	VENDOR SERVICES	19,711,644.25-	13,937,775.57-	5,285,981.68-	
005000065	AARVEE ASSOCIATES ARCHITECTS ENGINE	01	Andhra Pradesh	2005	VENDOR SERVICES	72,095.00	72,095.00		
005000067	AARVEE PNEUMATIC SERVICES	36	Telangana	2005	VENDOR SERVICES	14,582.02-		14,582.02-	
005000100	ALAVALA RAMA RAO			2005	VENDOR SERVICES	9,003.00	9,003.00		
005000122	AMMAYAPPER ROADWAYS			2005	VENDOR SERVICES	34,622,247.09-	34,502,204.13-	120,042.96-	
005000134	ANANTHA KRISHNA			2005	VENDOR SERVICES	26,690.00	26,690.00		
005000141	ANDHRA ROAD CARRIER	36	Telangana	2005	VENDOR SERVICES	23,199,734.78-	23,049,639.78-		
005000163	APPGCL			2005	VENDOR SERVICES	26,000.00	26,000.00		
005000171	ARDEL CARS			2005	VENDOR SERVICES	9,655.00	9,655.00		

746,374,754.58 • 1,474,289,702.28 • 687,647,290.80 • 34,678,858.77



# Accounting System At XYZ COMPANY - Issues

## ■ Issue

Tax Codes in case of Outward Supply

## ■ Present System & defects

Tax codes are not defined for Revenue and present compliance for return filing is manually extracted from ledgers with out predefined formats.

## ■ Implication

There is no Specific way to identify the Applicable rate on Outward Supply, Results in short collection and payment of applicable GST. Involves skilled manpower and duplication of work

## ■ Proposed System & Advantages

Tax codes are to be designed in such a way that it shall specify the applicable rates. Return filing can be automated. Manpower can be used effectively

Present

**G/L Account Line Item Display G/L View**

G/L Account 6200918 Registration  
Company Code 1000  
Ledger ZA

**Tax code not assigned**

Year/month	St	Pstng Date	PK	Amount in local cur.	Customer	Year	Tx
<input type="checkbox"/> 2017/09	✓	20.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	
<input type="checkbox"/> 2017/09	✓	15.12.2017	50	15.00-		2017	

Proposed

**G/L Account Line Item Display**

G/L Account 400000 CE CTORY  
Company Code 9999

**Tax code's assigned**

Reference	Documen...	Billing Doc.	BusA	Doc. Type	Doc..Date	PK	Amount in local cur.	Ln	Tx
SL3600008323	47107089			RV	01.08.2017	50	94,757.82-	INR	A0
SL3600008323	47107089			RV	01.08.2017	50	13,266.09-	INR	A0
SL3600008323	47107089			RV	01.08.2017	50	13,266.09-	INR	A0
SL3600008324	47107090			RV	01.08.2017	50	54,782.82-	INR	A0
SL3600008324	47107090			RV	01.08.2017	50	7,669.59-	INR	A0
SL3600008324	47107090			RV	01.08.2017	50	7,669.59-	INR	A0
SL3600008325	47107091			RV	01.08.2017	50	21,632.82-	INR	A0

# Accounting System At XYZ COMPANY – Summary

S. No.	Issue On	Present System & defects	Implication	Proposed System & Advantages
1	Tax Codes in case of Inward Supply.	Tax codes are designed only on consideration of Rate & Type of Tax (Without taking into consideration of Blocked / Ineligible or Eligible Input Tax Credit).	There is no Specific way to identify the eligible Input Tax Credit. Results in excess or short claiming of ITC	Tax codes are to be designed in such a way that it shall specify whether the supply is Blocked, eligible, ineligible so that we can easily identify the eligible ITC.
2	Tax Codes in case of Outward Supply.	Tax code are not defined for Revenue and present compliance for return filing is manually extracted from ledgers with out predefined formats.	There is no Specific way to identify the Applicable rate on Outward Supply, Results in short collection and payment of applicable GST. Involves skilled manpower and duplication of work leads to penalty as per Section 122(2) of CGST Act, 2017.	Tax codes are to be designed in such a way that it shall specify the applicable rates. Return filing can be automated. Manpower can be used effectively
3	Narrations	Narrations are not mentioned properly on the face of ledger. compliance for return filing is manually extracted from ledgers with out predefined formats.	Nature of transaction cannot be identified properly. Results in short/excess claim of ITC, Involves skilled manpower and duplication of work	Narration shall be mentioned in such a way that it shall specify all the details like Vendor Code, Material description etc....
4	Non-Payment to Vendors	There is no control regarding the identification of Vendors for	Non-Reversal of GST, Results in short/excess claim of ITC,	On Periodical basis Vendors ageing report has to be Cross

# Accounting System At XYZ COMPANY –

S. No	Issue On	Present System & defects	Implication	Proposed System & Advantages
5	GL Account	Manual posting of the GL code at Service entry/ Goods receipt note Level	There may be possibility that Similar Expenditure will go to Different GL Accounts Results in short/excess claim of ITC, Involves skilled manpower and duplication of work	One control has to be inserted in SAP that Specific Expenditure will to Specific GL Account Automatically.
6	Agreement, PMN, PRN	Agreement, Purchase Material/ Purchase requisition Number & Purchase order is posted by same person in the SAP. GST related fields not filled	No Maker Checker Concept, Results in short/excess claim of ITC, Involves skilled manpower and duplication of work	Agreement, Purchase material / Purchase requisition Number & Purchase order is to be entered by different persons to identify the errors. Results in effective processing of GST returns
7	With Holding Tax	There is no Control regarding the with holding tax to be deducted	Fails to deduct the tax in accordance with the provisions of sub-section (1) of section 51, or deducts an amount which is less than the amount required to be deducted under the said sub-section leads to Penalty as per section 122(1) of CGST Act, 2017.	Specific codes has to designed in the SAP for deduction of with holding tax for specific Expenditure.

# Accounting System At XYZ COMPANY – Issues in ZGSTR -1

## ZGSTR-1

G/L Account	6200902	Rental from Contractors
Company Code	1000	
Ledger	ZA	

Year/month	St	DocumentNo	BusA	Typ	Account	Pstng Date	Vendor	Doc. Date	PK	Amount in local cur.
<input type="checkbox"/>		2017/07	✓	5100021939	1800	RE	6200902	22.10.2017		26,764.00-
<input type="checkbox"/>		2017/09	✓	5100030120	2300	RE	6200902	13.12.2017		27,950.00-
<input type="checkbox"/>		2017/12	✓	5100049052	2300	RE	6200902	16.03.2018		28,986.00-
<input type="checkbox"/>		2017/11	✓	5100042770	2000	RE	6200902	17.02.2018		30,100.00-
<input type="checkbox"/>		2017/10	✓	5100035739	1600	RE	6200902	11.01.2018		30,375.00-
<input type="checkbox"/>		2017/11	✓	5100044935	1800	RE	6200902	28.02.2018		31,095.00-
<input type="checkbox"/>		2017/09	✓	5100031040	1800	RE	6200902	17.12.2017		31,600.00-
<input type="checkbox"/>		2017/06	✓	5100018658	1800	RE	6200902	27.09.2017		32,374.00-
<input type="checkbox"/>		2017/10	✓	5100032002	6200	RE	6200902	04.01.2018		32,400.00-
<input type="checkbox"/>		2017/11	✓	5100042654	1200	RE	6200902	16.02.2018		32,445.00-
<input type="checkbox"/>		2017/09	✓	5100033085	1800	RE	6200902	29.12.2017		33,262.00-
<input type="checkbox"/>		2017/11	✓	5100044935	1800	RE	6200902	28.02.2018		35,775.00-
<input type="checkbox"/>		2017/08	✓	5100025288	1700	RE	6200902	09.11.2017		36,000.00-
<input type="checkbox"/>		2017/08	✓	100280662	2800	SA	6200902	06.11.2017		40,935.00-
<input type="checkbox"/>		2017/10	✓	2201250553	2800	FB	6200902	12.01.2018		42,000.00-
<input type="checkbox"/>		2017/08	✓	5100025636	2000	RE	6200902	13.11.2017		54,880.00-
<input type="checkbox"/>		2017/12	✓	5100051419	6100	RE	6200902	21.03.2018		75,000.00-
<input type="checkbox"/>		2017/09	✓	5100030771	2000	RE	6200902	15.12.2017		77,296.00-
<input type="checkbox"/>		2017/09	✓	5100031469	2300	RE	6200902	19.12.2017		82,092.00-
<input type="checkbox"/>		2017/10	✓	5100033183	6200	RE	6200902	04.01.2018		96,750.00-
<input type="checkbox"/>		2017/09	✓	5100030177	6100	RE	6200902	14.12.2017		120,000.00-
<input type="checkbox"/>		2017/10	✓	5100034199	6000	RE	6200902	19.01.2018		207,920.00-
										<b>2,162,663.80-</b>

Ledger No	Taxable Value
6100970	600000.00
10	200000.00
11	400000.00
6200902	<b>650479.56</b>
01	39108.33
02	153281.89
03	208083.67
11	64427.78
12	185577.89
6200918	<b>1602555.56</b>
01	516877.78
02	560694.44
03	524983.33
6200923	<b>1120873.44</b>
01	2684.00
02	138453.00
03	925739.00
11	41477.78
12	12519.67

We can observe that Values are not matching when we compare values as per GL A/c and the ZGSTR-1 Value



# Reconciliation

Accounting Sys	Checks & Process	Audit Procedure	Risks
ERP configuration	Mapping GST to Accounting	O/w supply – Least Reconciliation Except Discounts  I/w supply – Supplier data validation	KYC Validation, NOS/TOS/POPS  Ex: SAP/Tally files
ERP without Proper Config	Mapping Issues Excel Recon	I/w & O/w supply Rate, HSN, B2B, validation, Recon	Mapping & Config, NOS/POPS/TOS
Partly Computerised Sales in one app Rest in Tally Tally ineffective config	Excel Recon	I/w & O/w supply Rate, HSN, B2B, validation, Recon	Mapping & Config, NOS/POPS/TOS  Ex: GSI/XI
Manual	Excel Recon	I/w & O/w supply Rate, HSN, B2B, validation, Recon	Mapping & Config, NOS/POPS/TOS

NOS; Nature of supply,  
POPs; Place of Provision of Supply,  
TOS: Time of Supply

# IT controls - GST

1. Determination of invoice-wise eligibility;
2. Aging track for:
  - i. For reversal of ITC after 180 days if Payment is not made
  - ii. Re-claim of ITC if payment is made subsequently
3. Linkage of advance receipt with invoice
  - i. For internal control and future reference
4. Tracking & monitoring of Mis-matched ITC;
  - i. Reversal of provisional ITC availed
  - ii. Calculation of Interest payable on reversal of ITC
  - iii. Reclaim of ITC after rectification

# IT controls - GST

## 5. Mapping of

- i. DN/CN with original invoice.
- ii. Revised DN/CN with original DN/CN

## 6.HSN Classification:

a) Master Creation

b) Alert for Mis-match of classification (Trading)

7.Determination of Place of supply at invoice level;

# IT controls - GST

8. Maintenance of Shipping bill details;

9. Mis-match tracking

10. Aging analysis

11. Adjustment of advance received in earlier tax period;

12. Identifying, Maintaining & Monitoring the supplies (inward & outward) subject to RCM

# Accounting Standards

AS No.	AS	What is it about? And its Relevance for GST
1	Disclosure for Accounting Policies Ind AS- 1, 8	Compliance with Ind-AS, Revenue recognition, Assets inclusions, impairment of assets, Employee benefits, investment in subsidiaries, contingencies, related party transactions,
2	Valuation of inventories Ind as 2	Whether GST to be included ? RM, WIP, FG
3	Cash flow statements Ind as 7	Operating activities, Financing activities, investing activities- ITC reversals
5	Prior period items, extra ordinary items	ITC impact considered? E.g. sale of a business, building, etc.
6	Depreciation accounting	Any impact on ITC? u/s 16(3) Depreciation under income tax
7 & 9	Construction contracts, revenue recognition Ind AS 11, 18	Advances, branch transfers, schedule 1 and revenue recognition
11	Forex fluctuation Ind As 21	GST/Customs for goods, for services
15	Employee benefits Ind as 19	Reversal of ITC

# Accounting Standards

AS No.	AS	What is it about? And its Relevance for GST
18	Related party disclosures (Ind-AS 24)	Valuation
24	Discontinuing operations	ITC reversal
26	Intangible assets (Ind-AS 38)	Tax impact
27	Joint Venture (Ind-AS 111)	Tax impacts
28	Impairment of assets (Ind-AS 36)	ITC
29	Provisions, contingent liabilities (Ind-AS 37)	RCM

# Manufacturing Account – Calculate Total Cost of Production

	Manufacturing A/c			Manufacturing A/c	
<b>1.</b>	<b>Direct Material Cost</b>	<b>XX</b>	<b>4</b>	<b>Factory Overheads</b>	<b>XX</b>
	Opening Stock of Raw Material			Factory Rents and Rates	
Add	Purchase of Raw Material			Factory Power and Fuel	
Add	Carriage Inwards			Factory Insurance	
Less	Purchase Returns			Factory Maintenance	
Less	Closing Stock of Raw Material			Factory Indirect Wages and Salaries	
<b>2</b>	<b>Direct Labour Cost</b>	<b>XX</b>		Depreciation	
<b>3</b>	<b>Direct Expenses Cost</b>	<b>XX</b>	<b>5</b>	<b>Opening WIP Less Closing WIP</b>	<b>XX</b>

# Focus on Financial Statements

- Manufacturing Account
  - It gives you the cost of production.
  - Important guideline while determining the value of stock transfer items from Factory to Warehouse under Rule 27 of the CGST Rules.
  - Important guideline in determining reversal of ITC in case of goods lost, stolen, destroyed, written off or disposed off by way of gift or free samples

(For the purpose of Reversal of ITC, Average rate of ITC availed on Cost of Production can be worked out and such rate can be applied on above goods lost/stolen/ destroyed etc)
- Purchase/ Expense Side –
  - To determine eligibility of ITC.
  - To determine applicability of RCM
  - Reimbursement of Expenses – Items credit to Expense A/c



## Ineligible ITC & RCM

- Renting of motor vehicle – Lease Rental Accounts
- Staff Welfare Expenses – Provision of Food Facilities, Fringe Benefit provided to employee, LTA, Gifts
- Marketing Expenses – Gifts, Sponsorship
- Hotel Accommodation Expenses/ Renting – Place of Supply and Eligibility.
- Import of Services Payments
- Freight Expenses
- Legal Services from Advocates
- Directors Sitting Fees.
- Ocean Freight Paid to Foreign Shipping Line in case of import of goods.

# Focus on Financial Statements - Income

- Supply of Goods and Services
  - Taxable
  - Exempt
  - Export
  - SEZ supplies
  - Other Income
  - Reimbursements
- Non-Taxable items
  - Interest income
  - Profit/ Loss on sale of Asset
  - Foreign Exchange Loss/Gain
  - Expenses Written Back.

# Balance sheet items impacting GST

- Capital Account
  - Withdrawal of assets
  - Debits/credits in nature of supplies
- Loans
  - Figures in odd amounts
  - Standing for long
  - No interest
  - No movement
- Current liabilities
  - Advances
  - RCM
- Reversal of ITC
- Reclaim of ITC
- Branch accounts
- Assets
  - Additions
    - Depreciation- IT
    - ITC disallowance
      - Motor car
      - Immovable property
    - ITC 100%
  - Deletions
    - GST
    - ITC reversal



# Balance sheet items impacting GST

- Agents accounts
  - Stock
  - Transactions
- Current assets
  - ITC
  - Cash
    - Cash ledger
  - Mismatched Credits
  - Other credits in dispute
  - Duty Paid on Exports
- Input Tax Credit
  - Transitional credits
    - Subjective
      - Approval



## Notes to Accounts

- Helps in understanding the business of the entity
- Revenue recognition Policy – Revenue stream and related tax implications can be analysed.
- Leasing Transactions – Capital Lease / Revenue Lease
- Notes relating to Taxes / Contingent Liabilities
- Valuation of Inventory – Cost or Net realisable Value ( Assistance in valuation provision under GST)
- Information about related parties & Payments made to Related Party / Key Managerial Personnel.
- Payments made to Foreign subsidiaries/ Associated concerns
- Helps in Identification of extra-ordinary items
- Prior Period Items

# Audit of Extra Ordinary Items

- Audit of All Credit Notes issued during the year.
- Provision for Expenses – Eligibility of ITC
- Difference between GSTR-2A and Purchase Register
- Verification of Invoices uploaded by the Service Receiver in GSTR-1A
- Ledger Balance Confirmations
- Audit of Intra-State supplies – Whether Invoices properly indicate the Address and GSTIN of the distinct entity whether the ITC has been claimed.
- Mergers and Acquisitions during the year. (Provisions relating to transfer of ITC)
- Additions under Income Tax Laws due to Bogus Purchases etc.
- Loans Written Off
- Treatment of R&D Expenses.



# Year end adjustments

- Closing stock
- Depreciation
- Provisions
  - Bad debts
  - Non moving stocks
  - Demands
  - Unbilled revenue
  - Import of services
    - 60 days
  - Import of goods
    - 30 days
  - RCM
    - Legal fees
    - Sponsorship
    - GTA
    - Recovery agent
    - Arbitral Tribunal



- Directors
  - Government services
  - Insurance agent
  - Author, music composer-copy right
- Write offs
  - Write backs
  - Interest provisions on Loans
    - Not advances
  - GST ITC reversals
    - Exempt supply
    - Goods lost
    - Non business
  - Closure of branch accounts
  - Principal-agent accounts

## Why Excel ?

- It is the most simplest tool that you have on any PC.
- It is extremely versatile

Its good to know many things, but it is always better to make best use of whatever little you know



# 8 Checks

1	Check Missing
2	Check Duplicates
3	Round Numbers
4	Repetitive Odd – Numbers
5	Classification
6	Stratification
7	Single Transaction
8	Isolated Outliners

# Analysis

- Dump Customer Database
- Analyze – Address, Phone, Name etc
- Sales Analysis
- Financial Statement Analysis

# Related Party Transactions

Company Database

VAT Database

Customs Database

Linking of Banks LCs – Company Nature of  
Business – Customs Import Database

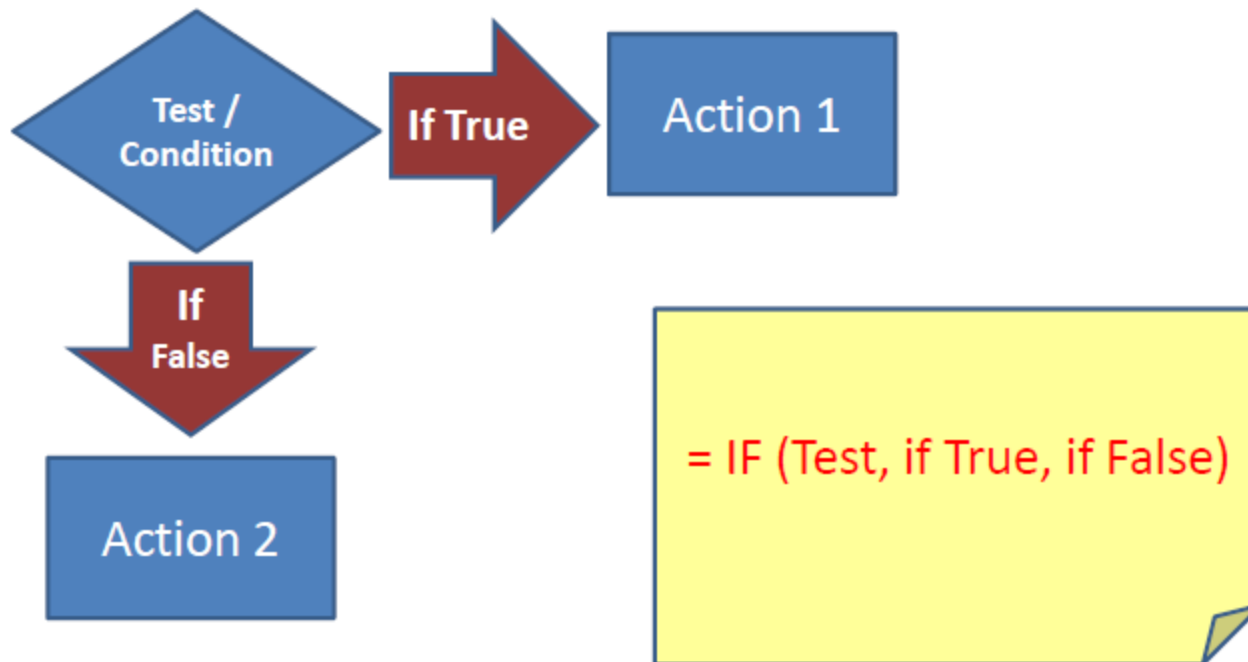
# Database Functions

- 'IF'
- 'IF' in Combination with 'AND' & 'OR'
- 'CountIF' and 'SUMIF'
- 'SUMIFS'
- 'VLOOKUP'
- Pivot Table Function
- Setting Filters,
- Conditional Formatting
- Formula Auditing

# Missing

## 'IF' function

- Very powerful function in decision making



# Duplicates

## Duplicates

1. Duplicated items  
in serial control  
mechanism  
(discussed earlier)

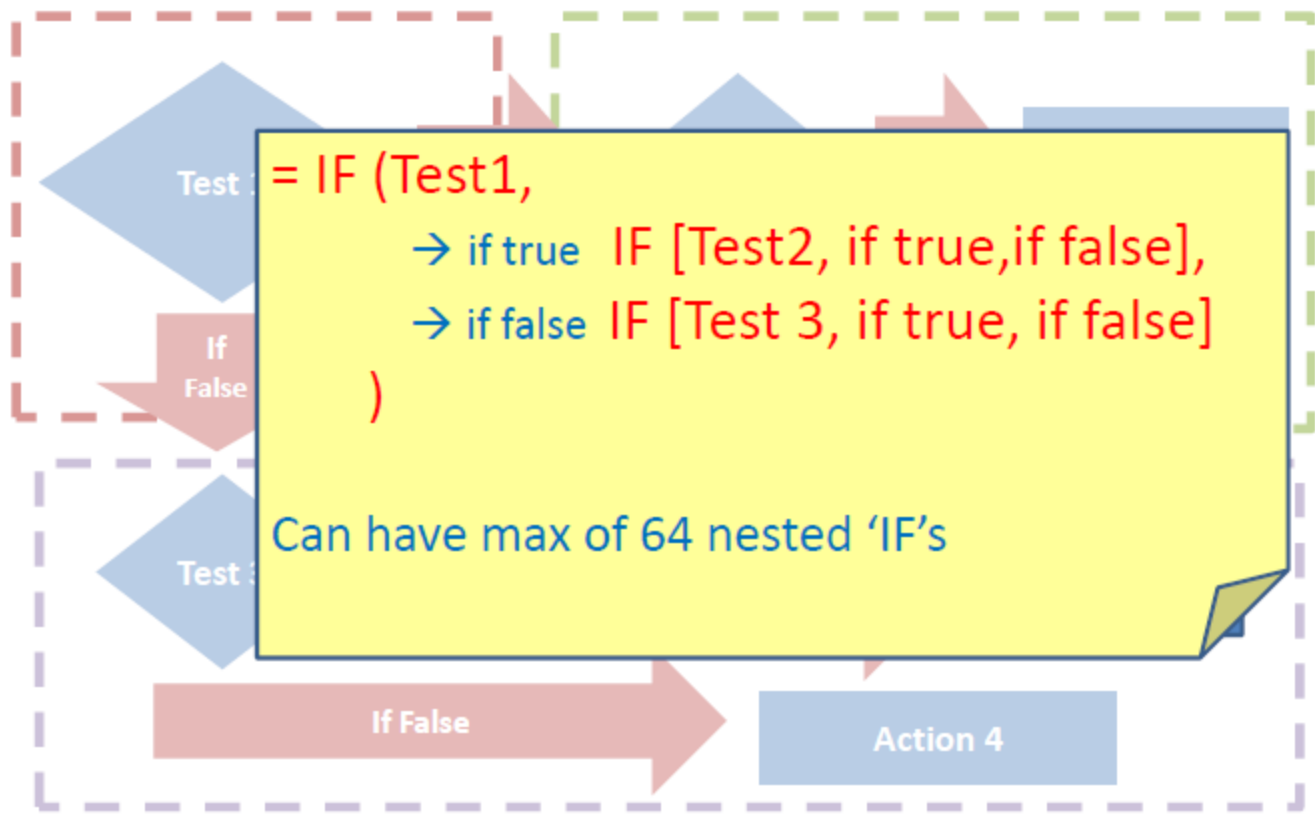
← test of compliance....

If these are generated by a good  
application system, chances of  
duplication are very low

E.g. One vendor\_bill  
paid in installments

2. Duplicated  
Transactions  
Combination Fields

# Nested 'IF' function





# Applications of 'IF'

- Detecting Gaps
- Finding Duplicate
- Locating Multiple Records
- Flagging Records
- Ageing Analysis or Advance Analysis
- Extracting Records meeting certain criteria  
(Combination with filter commands or with  
Pivot Table commands)

## Round Numbers

- Are there transactions of round nos.?
- Examples - monthly rentals, professional fees, audit remuneration, repairs & maintenance, hire charges, etc.
- Round Nos. most often used for estimations
- Sometimes Round-No. transactions are symptomatic of casualness / mysterious deals or settlements or frauds.

# Repetitive Odd Nos.

- This is converse of Round-numbers.
- Unlike the round numbers, repetition of odd numbers (particularly repetitions at decimals levels) are very rare coincident.
- Unless of course there is apparent reasons say, like for telco having promotional offer of Rs 199/- pre-paid packs – but in that case, the repetitions will be by volumes and not a few stray incidences here and there.
- Repeated odd-number transactions can be filtered for detailed verification and most often these will throw up some irregularities.

# Repetitive Odd-Nos.

1. Use 'Count IF' function to take counts of the numeric value field
2. Use the 'Right' Function to get the right most digit
3. Apply Filter On Step 1 : Count > 1
4. Apply Filter On Step 3 : Non-Zero's

# 'CountIF' Function

- Counts records satisfying given criteria
- Extremely useful in analysis of tel nos / fax nos/ email\_ids etc.

**= COUNTIF(criteria\_range, criteria,)**

# Single Transaction

- What is the problem with Single Transaction?
- Generally anyone would be interested to regularly do business with an organisation. Therefore stray transactions could be symptomatic of some errors, disputes, advantages of opportunity or frauds

# 'VLOOKUP' FUNCTION

- Useful in fetching value from another database
- Useful for linking two databases

```
=VLOOKUP ( lookup_value , table_array ,  
Col_Index, range_lookup)
```



## 'SUMIF' Function

- Aggregates records satisfying given criteria.
- Useful for Summarizing, Grouping, etc.

**= SUMIF(criteria\_range, criteria, sum\_range)**

# Pivot Tables

A Kaleidoscopic peek at Data

# Classification

The process of arranging data into homogenous group or classes according to some common characteristics present in the data

## Classification :

- Party-wise, account-wise, stock-wise, period-wise.....
- Attributes : Sum of Values, Counts, Max /Min, Average.....

# Stratification

Strata : levels, bands, groups

The process dividing large data  
and rearranging it into Strata

# Isolated Outliers

An Isolated outlier is an observation in a data set which is far extreme in value from the others in the data set. It is an unusually large or an unusually small value compared to the others.

## Spotting Techniques :

- Very simply by using Charts
- Limits Overrun (e.g Financial powers, authority levels, etc.)
- Mathematical Tools (RSF, Bendford's Law, etc.)

# Relative Size Factor

## What is RSF ?

- RSF is the ratio of Largest Number to the Second Largest Number of a relevant set.

$$\text{RSF} = \frac{\text{Largest Number}}{\text{Second Largest Number}}$$

## Relevance Of RSF

- Scrutiny of individual parties account is humanly ineffective/ impracticable.
- Therefore, RSF could be conveniently applied on full database
- It highlights all unusual fluctuations which may be stemming from frauds or errors



# How RSF Works ?

<b><i>bank payments voucher no.</i></b>	<b><i>Rs.</i></b>
<b><i>SB-211</i></b>	<b><i>50,000</i></b>
<b><i>SB-642</i></b>	<b><i>5,00,000</i></b>
<b><i>SB-547</i></b>	<b><i>5,00,000</i></b>
<b><i>SB-1864</i></b>	<b><i>20,000</i></b>
<b><i>SB-4755</i></b>	<b><i>23,000</i></b>
<b><i>SB-8347</i></b>	<b><i>8,500</i></b>

- Any set of transactions take place in certain range. E.g. A vendor XYZ may have normal pattern of bill value range of Rs. 13k to 50k.
- If there is any stray instance of single transaction which is way beyond the normal range than that ought to be looked into. E.g. in above case, if there is bill of Rs. 5 lacs.
- RSF in above case will give a ratio of 10 (i.e. ratio of Rs. 5lac to Rs. 0.50 lacs)
- These single instances could be cases where there is some foul play.

# Analytical Tests

Horizontal Analysis

Vertical Analysis

Ratios

Trend analysis

Performance Measures

Stratifications

Aging

Benford's Law

Regression

# Data Management/Analysis Reports

Append/Merge

Calculated Fields/Functions

Cross Tabulate

Duplicates

Extract/Filter

Export

Gaps

Index / Sort

Join / Relate

# Benefits of audit thru computers

- Chunk Data is placed in comfortable rows and columns
- Usage of tools like, If functions, sort, filter, Pivot, Lookup cut, copy, transpose, mail & merge, strata, statistics, sampling, etc
- Compliance of Tax Laws & Procedures

# Save Data



As the Chandokya Upanishad says:

If we apply knowledge with faith, dedication and deep analysis, our actions become stronger. This will lead to success.

*Yadaiva Vidyaya Karoti  
Shradhaya Upanishada  
Tadeva Viryavattaram Bhavati!*

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