**ACCOUNTING MODULES FOR ENTERPRISE SYSTEMS:**

Accounting modules should be designed to ensure reliable interactions and as much as possible automatic updates of account ledgers as transactions reach a critical state, such as a completed invoice, a payment, goods received etc. This is desirable to reduce the need for manual, error-prone inputs of bulk accounting data.

**SYSTEM DESIGN:**

**Account Setup and Modules**

The accounting settings should encapsulate the standards of accounting and allow easy setup, reliable mapping and uniform experience.

**The following key features are recommended:**

1. Chart of accounts

2. Journal and payment processing

3. Reports, Ledgers and Summaries – Receivables, payables, P&L etc

4. Entities: Vendors and Customers

5. Invoice and other document insights

**CRITICAL AUTOMATIC ACCOUNTING AND RELEVANT JOURNALS:**

Certain accounting journals should be posted by the system automatically on after a transaction document is completed. The following are the required automatic posting types to be designed.

**1. Sales Invoice:**

After a sales invoice, the system must be able to capture accounts receivable for the transaction if unpaid, so relevant entries should be made, eg: **credit income account and debit a receivables asset account. On payment, an asset account representing cash or bank should be debited while receivable account is credited.**

**2. Purchase Invoices and Receipts:**

On making a purchase entry, relevant entries should be posted as follows: **debit an expense account and credit a liability account, this is an account payable entry. On making payment to vendor, debit liability and credit asset account from which payment is taken.**

**3. Office expenses:**

Chart of accounts should allow for te basics: creating accounts. Expenses should be entered by crediting an asset account and debiting the expense account

**4. Salary Payments:**

Depending on availability of a dedicated HR and payroll module; the system should allow for making journals and posting salary expenditure as follows: Credit asset account and debit the salary account (expense)

**5. Inventory purchases:**

As a complimentary to item 2 above; Inventory purchases of assets or operational equipment, project equipment should post relevant entries.

**6. Allow for mapping entities to transactions in all cases.** Entities are customers and vendors. All transactions related to an entity should be accessible from the entity’s account; ie there should be and easily accessible summary that shows totals for month, year, etc and all outstanding items for the entity.

7. Tax setup: The system should allow for tax setups, so that taxes can be selected as a predefined setting in documents, and allow for different tax types – inclusive and exclusive taxes.

8. Make relevant asset valuation entries whenever assets are purchased or received. **This type of entry will debit an asset account for the expense on the asset > debit the expense account, then proceed to credit the earlier debited asset account, then debit the account representing the asset type (fixed asset)**

9. Journal Ledgers and reports: A detailed ledger should be available to show every accounting entry and result of automatic entries made as a result of transactions.

10. Ensure reports are queryable using different criteria as well as user remarks and references.

**CHART OF ACCOUNTS**

**DESIGN RECOMMENDATIONS**

1. User should be able to create accounts and group them

2. User should have the option of making an account a group or node at time of creating the accounting

3. Group accounts can hold node accounts

4. Accounts should have classification/Type to allow the system provide as much guidance to the user. Example: Type: Asset, Bank accounting

5. Setup should have default accounting chart top level root group node; ie Assets, Liabilites, Equity etc.

6. Account names must be unique

7. It may be desirable to create an option to allow user created account prefixes that allow for easy recognition alongside the grouping. This should be alphanumeric.

8. Chart should display balances in its default view (tree or table)

9. User should be able to select a group head account for each accounting

10. A single node account type should not allow child accounts

11. A group account can have other groups and single nodes within it.

12. Categories should guide the display of balances using tags, for example an asset account positive balance should bear a Dr. tag.

13. Account listings should allow user search for accounts as ledger grows.

**[PREPARE MODULE FOR ROLE AND PERMISSION ASSIGNMENTS]**

**JOURNAL PROCESSING**

**DESIGN RECOMMENDATIONS**

Journals should be flexible enough to be used across all transactions requiring payments, transfers and financial adjustments.

1. Journals should enforce the Credit = Debit rule and never allow a difference during a journal posting

2. Journals should enforce correct entry when a document is referenced, eg: a sales invoice payment received journal should ensure an asset account is Debited and an income account credited.

3. Journals should follow the standard accounting rules

4. Remarks should be searchable in journal entry grids and reports

5. Reports and summaries should have features to allow the user search by all criteria within the transactions they were made for; eg: a payment journal for a sale should be searchable by customer, totals, date, items.

6. Reports should allow searching by all fields in the journal processing forms as well as by account head etc.

7. Journals should be used seamlessly to make expense, income entries for core business transactions as well as miscellaneous payments, use purpose/type drop-downs and map accounts appropriately

8. Journals should allow references and remarks, with proper titles for easy use

9. Journal types may be helpful to guide the user. Eg: Type: Invoice Payment, on selecting this type, system should retrieve accounts valid for this type of transaction (Income and Asset accounts in this case) as defined by their type in the Chart of Accounts.

10.

**[PREPARE MODULE FOR ROLE AND PERMISSION ASSIGNMENTS]**

**SALARY PAYMENTS PROCESSING - OPTIONAL**

If a dedicated HR system is not available, a simple salary module should be designed that intuitively guides the making of salary entries and ensures tracking. The following can be used as a guidelines:

1. Allow accountant to create simple departments, employees and map these employees to the departments. On posting a salary schedule, this mapping may be referenced.

2. The purpose selection should have salary payment and when selected; the option to select a setting as above should be presented with a field to select salary month, ie, a drop down containing month names.

3. The above with the transaction date forms a small but reliable salary payment module as a sub module under accounts.

**TYPICAL JOURNAL ENTRY LOGIC**

1. INCOME WITH PAYMENT: Credit Income Account, Debit Asset Accounting

2. INCOME WITH PENDING PAYMENT (RECEIVABLE): Credit Income Account, Debit Receivable Asset Account.

3. From 2 above; on payment of outstanding by customer; Credit Receivable account,(type = asset) Debit Asset account (Cash or bank)

4. PURCHASES WITH PAYMENT: Debit Expense Account (type = asset), Credit Asset account (source of funds)

5. PURCHASES WITH PENDING PAYMENTS: Debit Expense account, Credit Payable Account (type = liability).

**6. On payment of 5 above: Debit Payable account, Credit Asset account (Bank or Cash)**

7**. Opening entries: Allow creating of temporary accounts and ensure the logic allows them hold transient funds and distribute to required accounts**

**MINIMUM REQUIRED FIELDS FOR JOURNALS:**

**1. Purpose**

**2. Jornal Ref. - system generated**

**3. Date – auto date from server**

**4. Accounts for journals**

**5. Remarks, allow a remark for each account and a general remark**

**6. Payment Reference**

**7. Entity and document ref (payments)**

**8. Totals**

**DESIRED REPORTS:**

**1. General Ledger**

**2. Trial Balance**

**3. Profit and Loss Report**

**4. Balance Sheet**

**5. Income Statement**

**Accounts should allow aggregation, exclusion of accounts (like zero balance accounts. Etc.)**