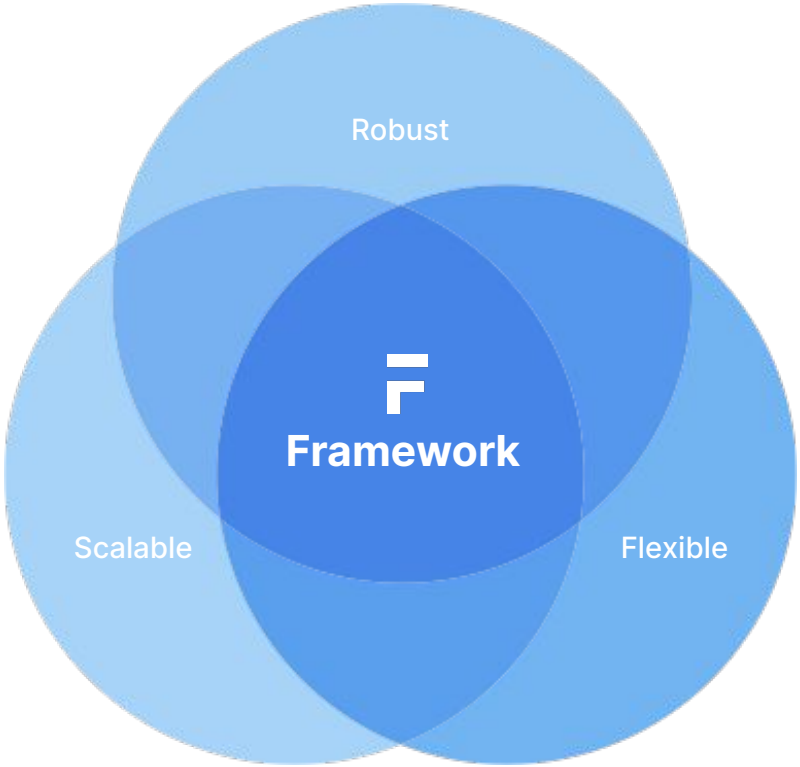
Frappe Certification

Training + Evaluation

Frappe Framework

Our **low code** application development platform

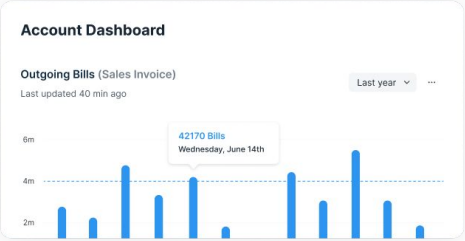


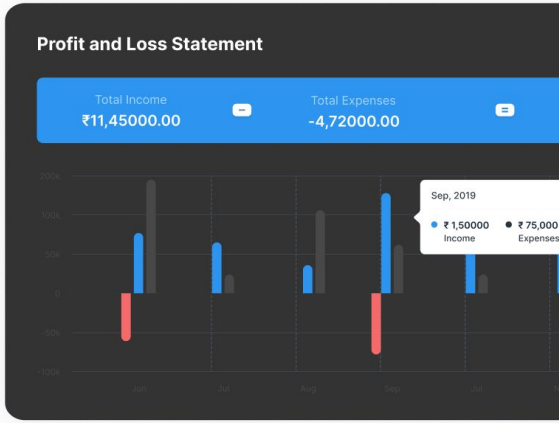
Frappe

Liberating the workplace since 2008

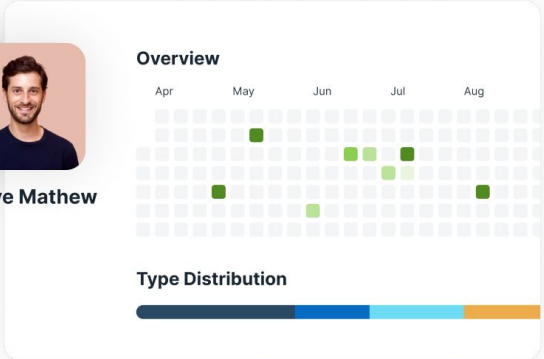
ERPNext

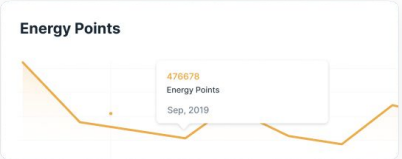
The **most agile ERP** on the planet





Steve Mathew





Frappe

Liberating the workplace since 2008

Why Certification?

- ERP is knowledge intensive
- Consulting is all about knowledge
- Customers want assurity that they are in safe hands
- For candidate, certification gives career path

ERPNext/Frappe Certification
is initiative
based on
organic demand

May 2022

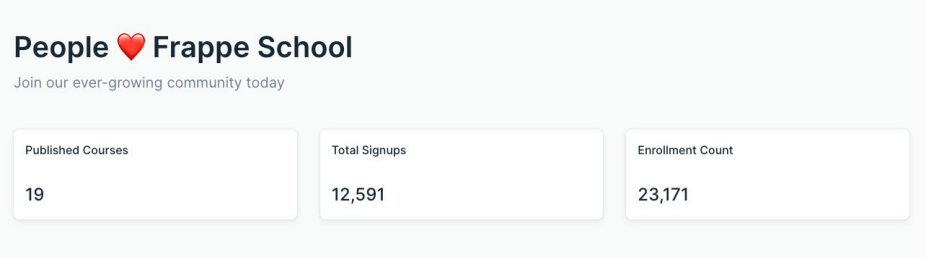
Started in

15 Batches

ERPNext + Frappe Developer Certification

5 Batches

with Frappe Partners



FSchool

ERPNext Certification

Become a Certified Consultant

New batch starts July 17, 2023

FSchool

KoreCent

Certification Process

Stage 1

Sign-up for the certification service from frappe.school/certification

Stage 2

Attend **trainings from Frappe team's** industry experts in domain : manufacturing, accounting and services

Stage 3

Appear for the **quizzes and in-person evaluations**. We will ensure you are hands-on ERPNext and able to process entries in ERPNext.

Stage 4

Get certified on ERPNext and proudly showcase on ERPNext.

Frappe today

- 60+ team (remote)
- 100+ partners in 15+ countries
- 20,000+ community members
- 15,000+ installations

CERTIFIED
Partner

E

- World's top 100% Open Source ERP
- Developed by Frappe Technologies
- Built on MariaDB database system using Frappe
- Licensed under GNU GPL 3.

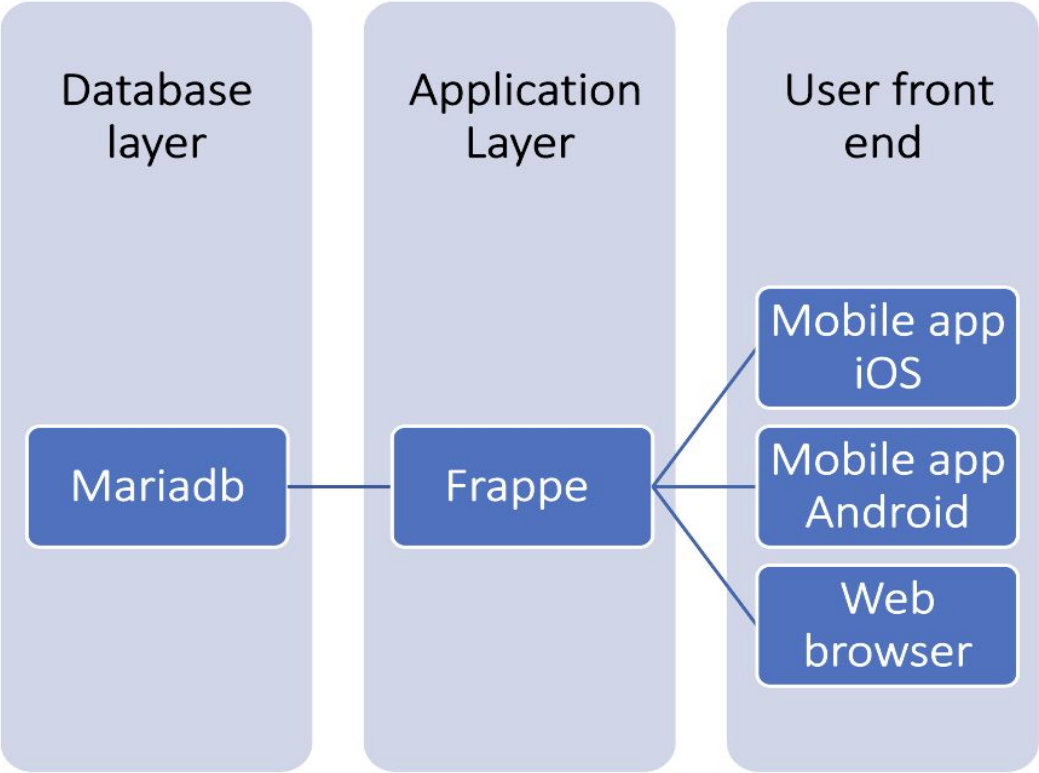
https://github.com/frappe/erpnext

Framework

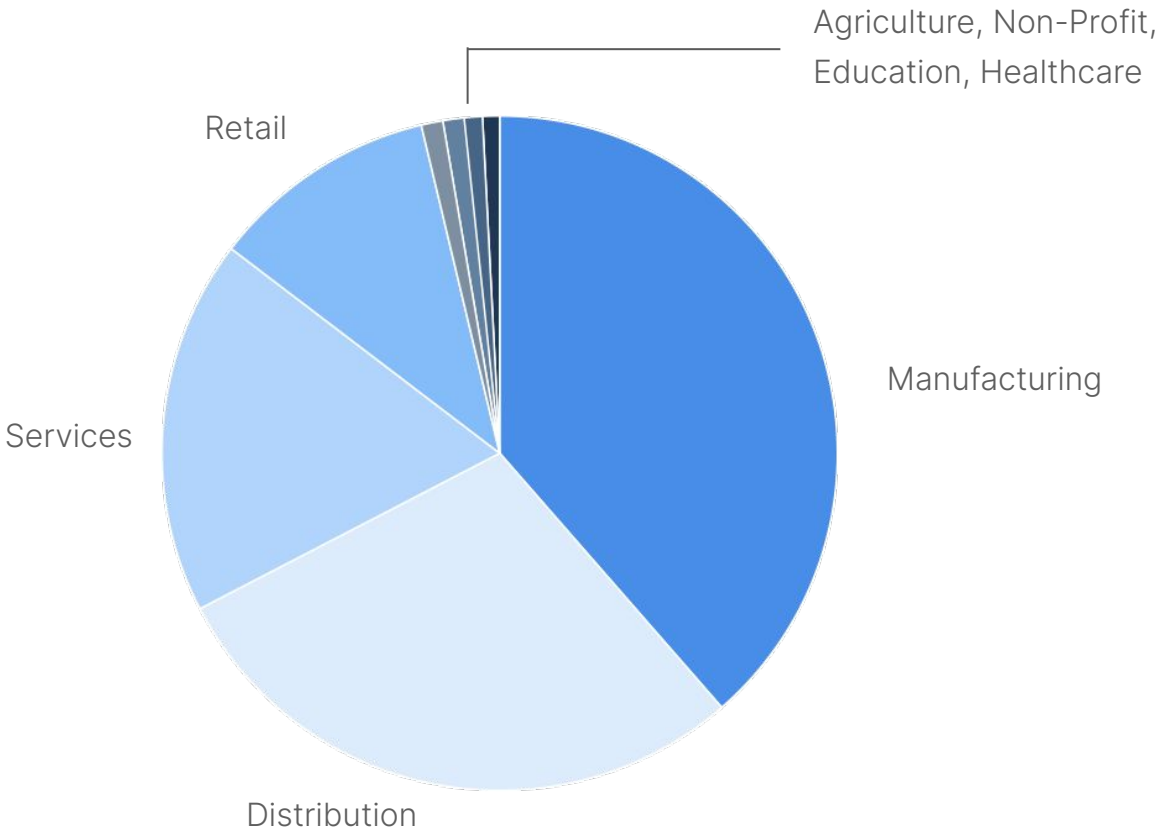
- Full stack web framework written in Python and Javascript with MariaDB as the database
- Comes with Admin UI, Roles and Permissions and much more
- Which powers ERPNext, is pretty generic and can be used to build database driven apps.

https://github.com/frappe/frappe

Interpretation of ERP system technically



Domains


Agriculture, Non-Profit, Education, Healthcare
Retail
Manufacturing
Services
Distribution

Modules

- CRM (Customer Relationship Management)
- Selling
- Buying
- Accounting
- Inventory
- Manufacturing
- Asset
- Support
- Project
- Website & E-commerce

Core Modules

- Accounting
- Manufacturing
- Selling
- CRM (Customer Relationship Management)
- Buying
- HR
- Inventory
- Payroll

ERPNext Certification

V13 → V14 → V15

1. ERPNext and Framework v14 features
2. Release Notes
3. Modules are separated from ERPNext >>>

- HR & Payroll
- Healthcare
- Education
- E-commerce Integration
- Non-profit
- Agriculture

V13 → V14 → V15

1. ERPNext and Framework v15 features
2. Release Notes
   a. Framework
   b. ERPNext
   c. FrappeHR
3. Modules are separated from ERPNext >>>

- HR & Payroll → FrappeHR
- E-commerce → Webshop
- Loan → Lending
- Healthcare
- Education
- Non-profit

10+

open-source apps

ERPNext

Framework

Helpdesk

HRMS

Cloud

Builder

Books

Wiki

Drive

CRM

School

Insights

LMS

Gameplan

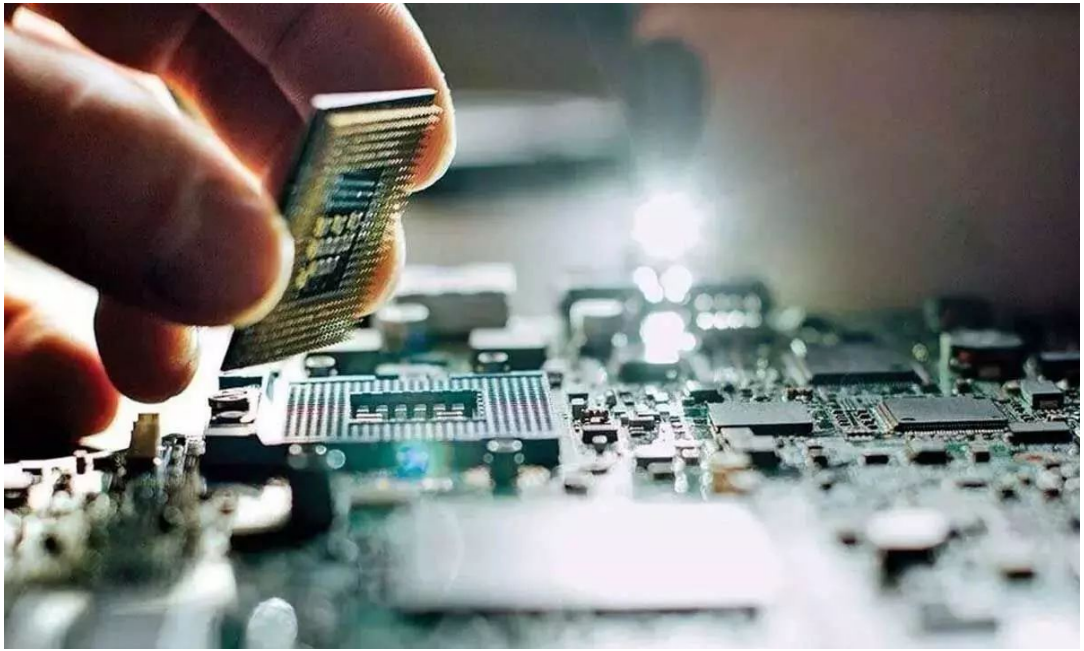
Frappe

Liberating the workplace since 2008

Instructions / Prerequisite

- Create an ERPNext site on Frappe Cloud
  - https://frappecloud.com/
  - https://erpnext.com/pricing - 14 days trial instance
- Have a laptop / PC, with internet connection
- In-person evaluations will be conducted after the training

Let’s begin……



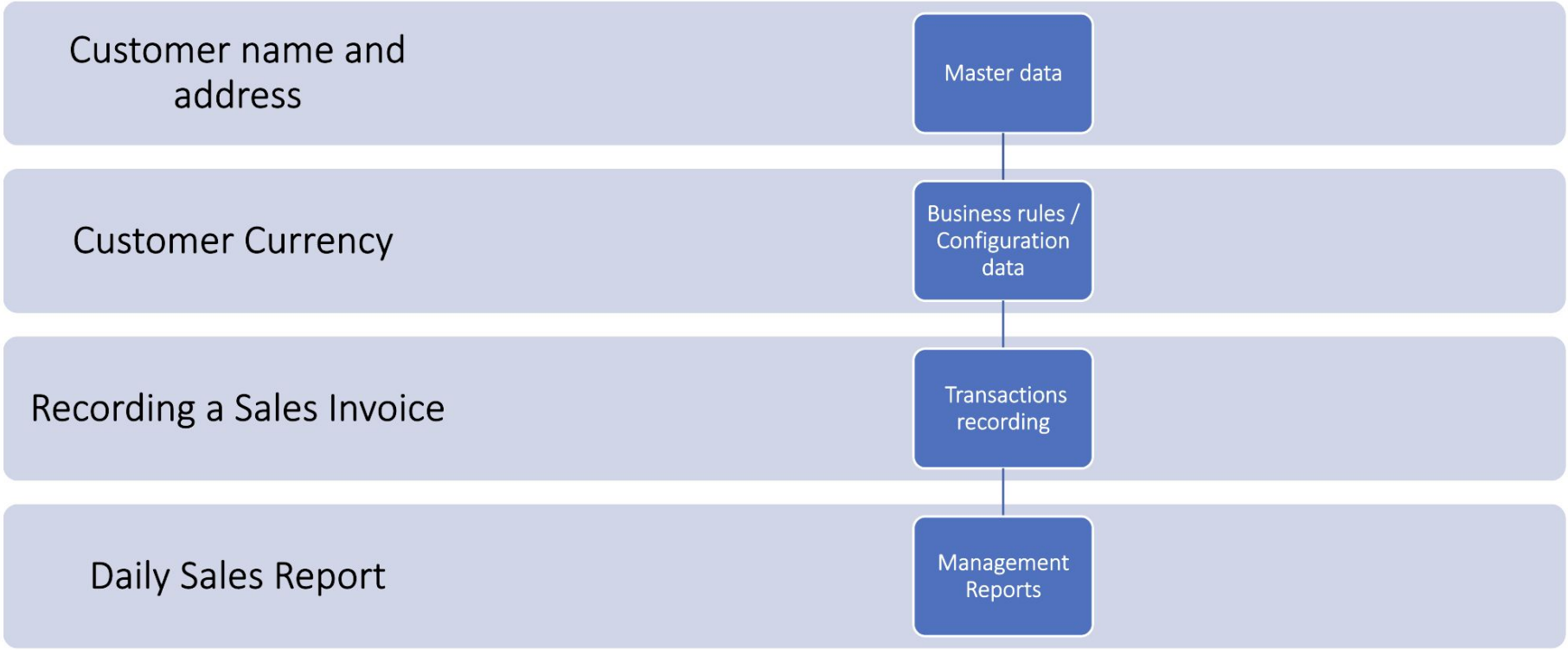
We are Frappe-Inc. Let’s start by setting up an account

ERPNext Setup & Configuration

- Setup an ERPNext account
- Complete Setup wizard
- Setup a company
- System Settings

Try some entries?

Interpretation of ERPNext Functionally



ERPNext Setup & Configuration

Setting up Masters

- Item
- Customer
  - Customer Group
  - Territory
  - Address & contact
- Supplier
  - Supplier Group
  - Territory
  - Address and Contacts

Try some entries?

ERPNext Setup & Configuration

Setting up Masters

- Customer
  - Customer Group
  - Territory
  - Address & contact
- Supplier
  - Supplier Group
  - Territory
  - Address and Contacts

Try some entries?

ERPNext Setup & Configuration

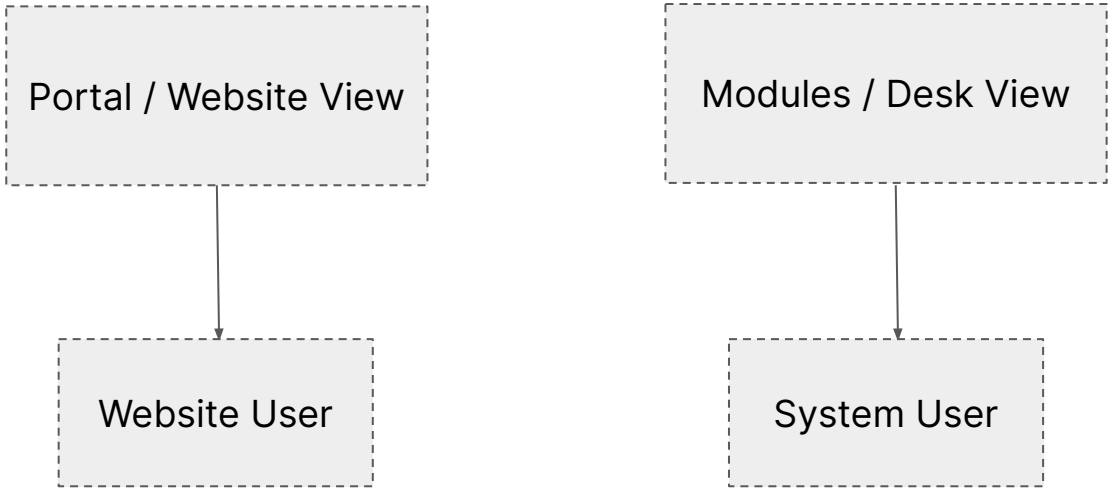
Pre-configurations

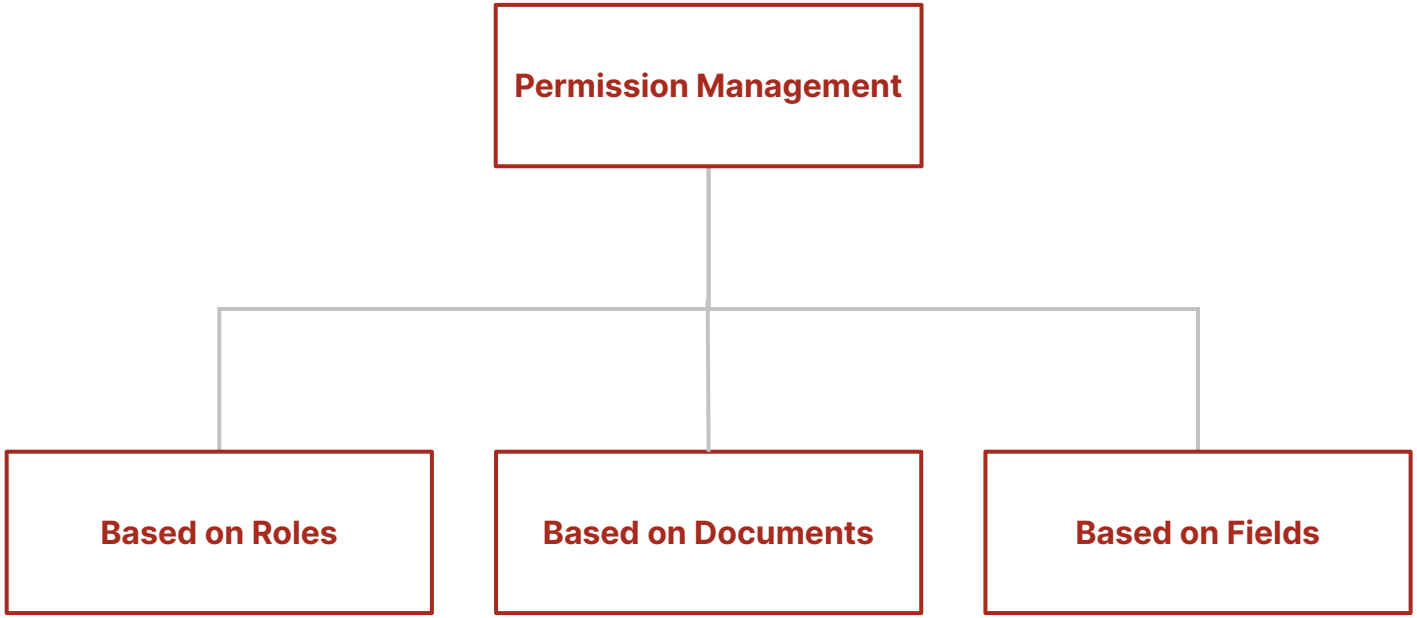
- Letterhead
- Email Account
  - Default Outgoing
  - Default Incoming

Try some entries?

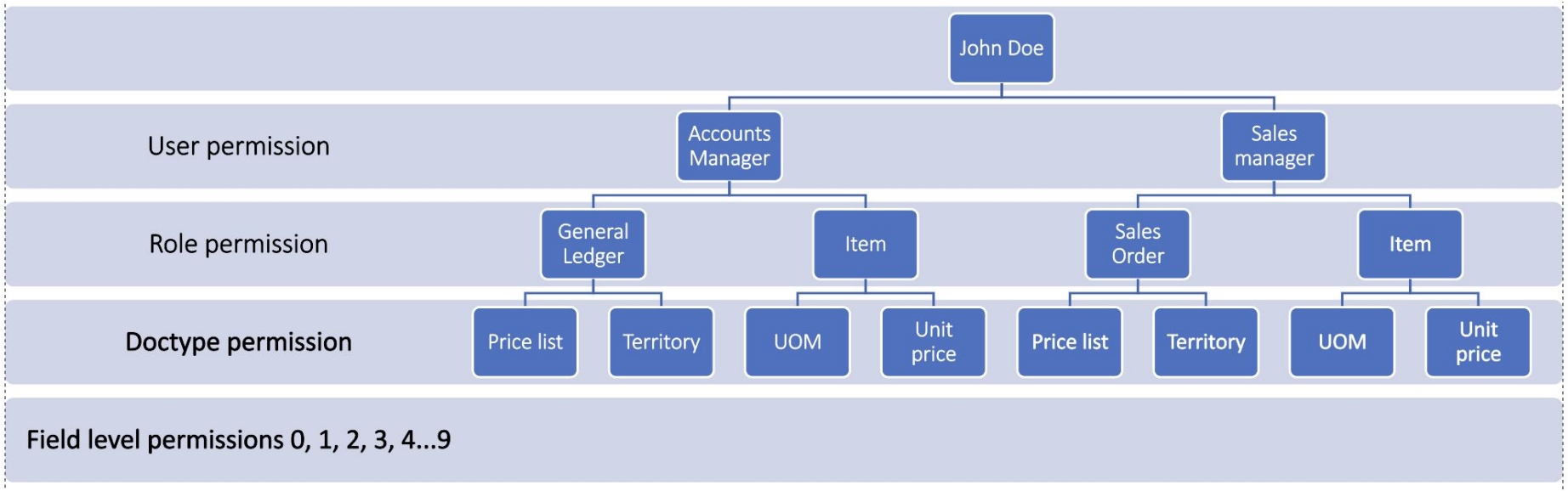
Users Roles and Permissions

- ERPNext implements permission control at the User and Role level
- Each user in the system can be assigned multiple roles and permissions




Permission Management
Based on Roles
Based on Documents
Based on Fields

Users Roles and Permissions



Data Import Tool

- Supports CSV/Excel file
- Helps to Upload New data and Update existing records
- Importing child records
- Import from the google sheets

Assignments

- Setup a masters - Company, item, customer and suppliers
- Create 5 accounting ledgers
- Create 5 items, with prices
- Create an invoice with 4 items and make payment
- Create the Letterhead
- Import 10 items
- Add user with restriction on few territories

ERPNext Accounting

Why Accounting?

Accounting is the process of recording financial transactions pertaining to a business

- To know financial health of organization
- Statutory compliances : Govt. want us to pay taxes
- Input: Sales, Purchase, Journal Entry
- Processing: GL Entry, Depreciation
- Output: Financial Statements

Sub-groups

Balance Sheet	
Asset (Debit)	**Liability (Credit)**
- **Fixed Assets** - Machines / IP / Building	- **Shareholder's Fund** - Equity / Reserves & Surplus
- **Current Assets** - Bank / Cash / Stock / Receivables	- **Current Liability** - Payables

Profit & Loss	
Income (Credit)	**Expense (Debit)**
- **Direct Income** - Direct Sales	- **Direct Expense** - COGS
- **Indirect Income** - Sales of Scrap	- **Indirect Expense** - Admin expenses

Accounting Masters

Essentials

- Company
- Chart of Accounts
- Cost Center
- Fiscal Year

Opening Balance

- Opening balances are balances of each ledger on the day you start using ERPNext
- How to import accounting information from your existing system into ERPNext
- How to import details of assets
- How to import opening stock

Types of Invoices

- Itemised taxation
- Normal invoice, without payment
- Service order / invoice
- Invoice with Stock
- Invoice with stock, with advance payment allocated
- Invoice with stock and payment (via POS)

Journal Entry Template

- Recurring Journal Entry
- Saves time and reduces errors

Accounting Period

- Provides control on transactions
- Preserves integrity of data shared via reports

Period Closing Voucher

- Nominal/Temporary vs Real/Permanent
- Closing entries transfer the balances from the temporary accounts to a permanent or real account at the end of the accounting year.
- Balance in income and expense account becomes zero.

Financial Reports

- Profit and Loss Report
- Balance Sheet
- Cash Flow
- Trial Balance

Period Closing Voucher

- Purpose
- Create period closing voucher
- Check Leger (GL Entry)

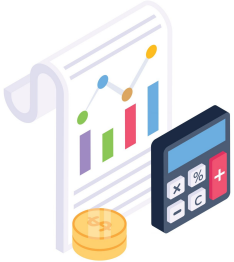
Assignments

- Create an accounting ledger for bank, cash, receivable, income and expense
- Create an opening account balance for one customer receivable
- Create an invoice, and process 50% payment against it
- Create an advance payment entry, and then allocate it in the invoice

Assignments

- Create a Credit Note against a Purchase invoice.
- Allocate Credit Note against another purchase invoice via Payment Entry.
- Create a Journal Entry for booking travel expense.

Advance Accounting



Advance Accounting

- Billing & Transaction in Multi-currency
- Accounting Dimension & Budgeting
- Deferred Revenue & Expenses
- Bank Reconciliation
- Closing Books
- Periodic & Perpetual Inventory
- GST Setup (India Compliance App)

Multi Currency

- What is multi currency transactions?
- Create Bank and Debtors Account in COA
- Create Customer
- Create Sales Invoice And Payment Entry
- See Reports (GL & Account Receivable)
- Exchange Rate Revaluation

Accounting Dimension & Budget

- Why accounting dimensions are used
- Create accounting dimension (Cost Center and one custom)
- Create Budget
- Create Item, Tag Cost Center (AD) and Expense Account in item
- Create Transactions Purchase Invoice, Sales Invoice
- Check Reports (Budget Variance, GL, P&L)

Deferred Revenue And Expense

- What is Deferred Accounting
- Account Settings
- Create Accounts In COA
- Create Item Master
- Create Sales Invoice
- Check Journal Entry

Periodic And Perpetual Inventory

- Difference between Periodic & Perpetual Inventory
- Create Company
- Tag expense/purchase ledger in item
- Create PR and PI and check GL
- Create DN and SI and check GL
- Check P&L Report

Bank Reconciliation

- What is bank reconciliation and why it is done
- Create Account in COA (Bank Account ledger)
- Create Bank Account (Master)
- Create Bank with data import configuration
- Create Journal Entry and Payment Entry
- Upload Template (Bank Statement) (Semi automatic)
- Do reconciliation
- Bank Clearance (Manual)

India Compliance App

- [Webinar] Setting up E-Invoicing and Migrating to India compliance app
- Key Features :
  - End-to-end GST e-Waybill management
  - Automated GST e-Invoice generation and cancellation
  - Autofill Party and Address details by entering their GSTIN
  - Documentation
- https://github.com/resilient-tech/india-compliance

Assignment

- Link currency and account with customer
- Create the dimensions and link with transactions
- Spilt yearly budget into months

Stock Module

Stock Module

- Item
- Stock Valuation Method
- Serialized and Batch item
- Item Variants
- Pricing Rule & Promotional Scheme
- Types Stock Entry
- Stock Transactions : Purchase Receipt, Delivery Note,Picking List, Packing Slip
- Landed Cost Voucher
- Stock Settings

Stock Valuation

Inventory valuation is the cost of unsold goods in a company’s inventory. It includes all costs incurred to get the item ready for sale, like material expenses, direct labour, freight, handling, import duties etc.

Item's stock valuation is updated on the creation of one of the following transaction.

- Purchase Receipt
- Stock Entry of type Material Receipt
- Stock Reconciliation made for updating stock opening balance

Note that once ledger entries are made for an item, this option will no longer be visible in the Item form.

Stock Valuation Method

- **FIFO - First In First Out :** Items that arrive first, are sold first

```
FIFO stock value = Qty1 * Rate1 + Qty2 * Rate2 + ...
```

- **LIFO - Last In First Out :** This will consume quantities from the latest transactions first

- **Moving Average :** Value of an item is, the average cost weighed by the quantities available in the warehouse. In this method the value of an item is recalculated every time when an item is acquired

[Let's Check the Eq]

```
Moving Average Rate = (
    (Available Qty in stock * Average Rate)
    + (Incoming Stock * Incoming Rate)) /
    (Available Qty in Stock + Incoming Stock)
```

Serialized and Batch Item

- **Serialized :** Serial numbers are given to an individual item. A serial number is a unique number given to identify a single item.
- **Batch :** Batch numbers are given to a group of items. For example juice bottles produced together. A batch number is associated with information about the items

Note: Once you mark an item as serialized or batched or neither, you cannot change it after you have made a Stock Entry.

Stock Entry

- **Material Issue:** If the material is being issued to someone in or outside the company (Outgoing Material). Source Warehouse **Stock (- -)**
- **Material Receipt:** If the material is being received , Target Warehouse **Stock (+ +).**
- **Material Transfer:** If the material moved from one internal Warehouse **Stock (- -)** to another Warehouse **Stock (+ +)**
- **Material Transfer for Manufacturing:** If raw materials are being transferred for manufacturing **Stock (- -)**

Stock Entry

- **Material Consumption for Manufacture:** There can be multiple consumption stock entries against a manufacturing Work Order **Stock (- -)**
- **Manufacture:** If the Material is being received from a Manufacturing/Production Operation **Stock (+ +)**
- **Repack:** If the Original item/items **Stock (- -)** are being repacked into new item/items **Stock (+ +)**
- **Subcontract:** If the Material is being issued for a subcontract activity. This entry is made from a Purchase Order **Stock (- -)**

Putaway Rule: Strategies

- Based on Space Availability:

  Direct or Indirect Putaway

  - Warehouse size
  - Number of warehouses at location
  - Quantity of items being received

- Based on Item :

  Fixed or Dynamic Location Putaway

  - Variety of materials in the warehouse
  - Storage conditions of the materials
  - Physical weight of materials

- Common Mistakes
  - Items putaway at the wrong location
  - Inaccurate tracking and quantity
  - Delays in putaway to location

Pricing Rule

- A Pricing Rule defines the discount/pricing rules that apply based on set conditions.
- A Pricing Rule has many options using which you can control the pricing of an Item. Filters like quantity, date, groups, and other conditions can be set.
- Pricing Rule is made to overwrite Price List / define discount percentage, based on some criteria.
- If selected Pricing Rule is made for 'Rate', it will overwrite Price List.

Landed Cost Voucher

- Landed Cost is the final total cost associated with a product for it to reach the buyer’s doorstep
- It include the original cost of the item, complete shipping costs, customs duties, taxes, insurance, currency conversion fees, etc.
- Prerequisites
  - Purchase Receipt
  - Purchase Invoice

Buying & Selling Module

Topics To Be Covered

Buying Module

- Pre-purchase Cycle
- Buying Cycle
- Buying Settings
- Reports

Common Topics

- Product Bundle
- Blanket Order
- Drop Shipping
- Quality Inspection

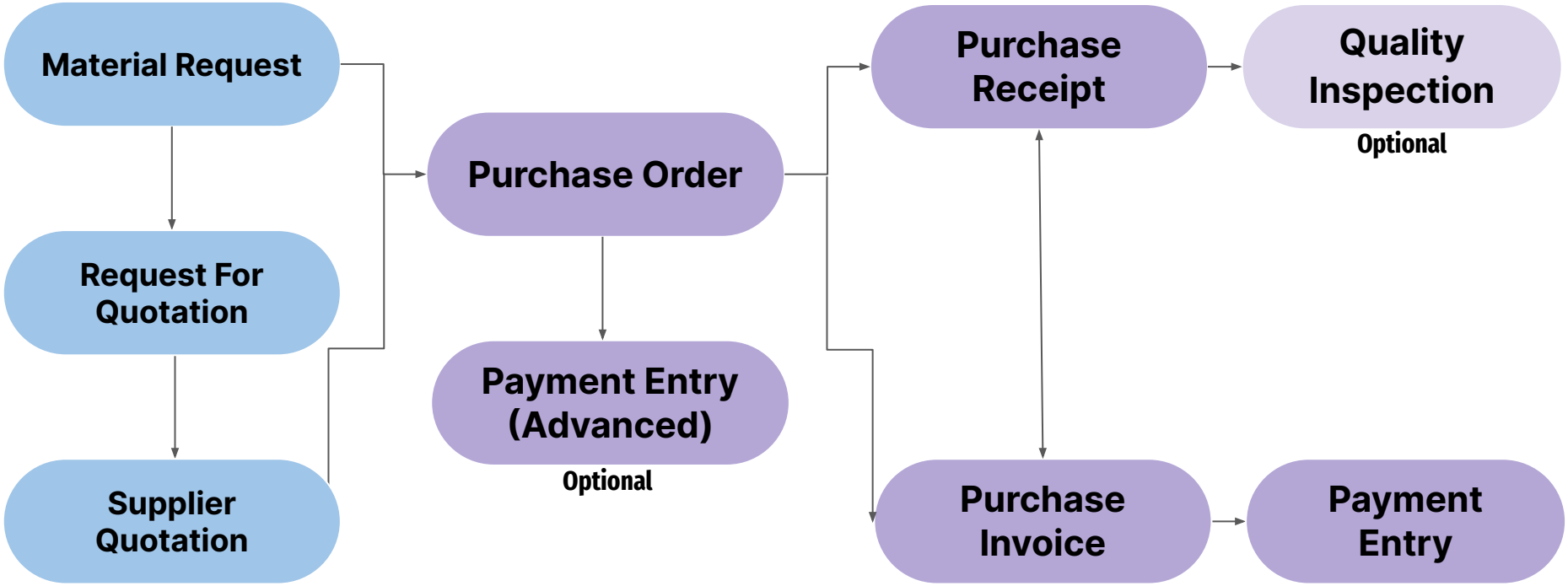
Selling Module

- Selling Settings
- Selling Cycle
- Salesperson and Sales Partner
- Sales Order / Maintenance Order
- Reports

Buying Module

Purchase Cycle

- Supplier → specific settings
- Buying & Selling Settings



Pre-purchase Cycle

1 Material Request

- MR based on reorder
- Internally required

2 Request for Quotation

- RFQ to multiple supplier
- Email them

3 Supplier Quotation

- Record Supplier Quotations
- Through Supplier Portal or Manually

4 Comparison

- Compare Quotations using Comparison Report

5 Purchase Order

- Purchase Taxes and Charges
- PI for Services

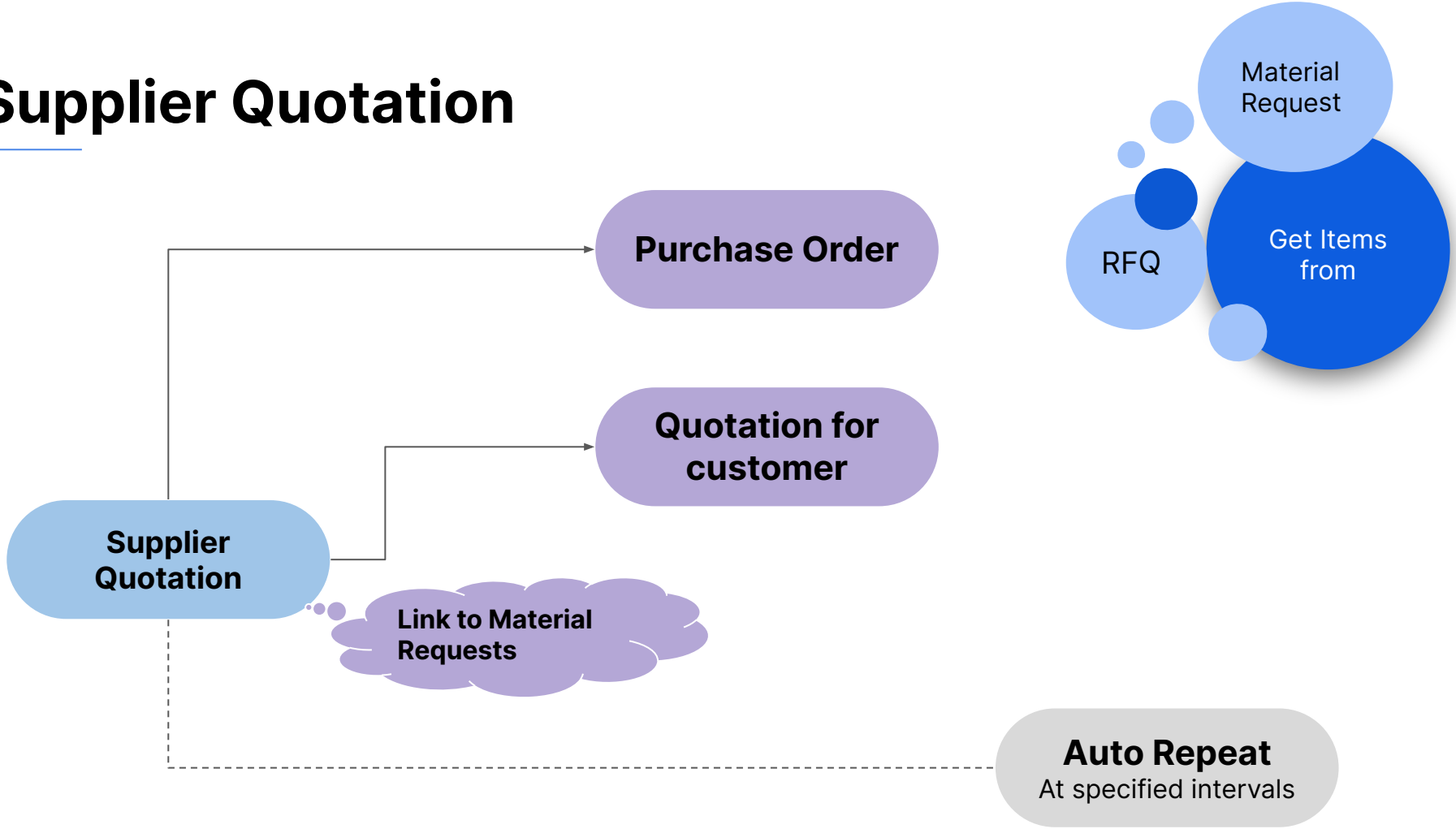
BUY

Request for Quotation

1. **Add Multiple Suppliers**
   Add Multiple suppliers by Group or Tag instead of adding them manually
2. **Link to Material Requests**
   Items should be same in MR as in RFQ and in case of similar MR, latest is linked
3. **Email Previews and T&C**
   Preview Email that would be sent and Add Incoterms and Named Locations

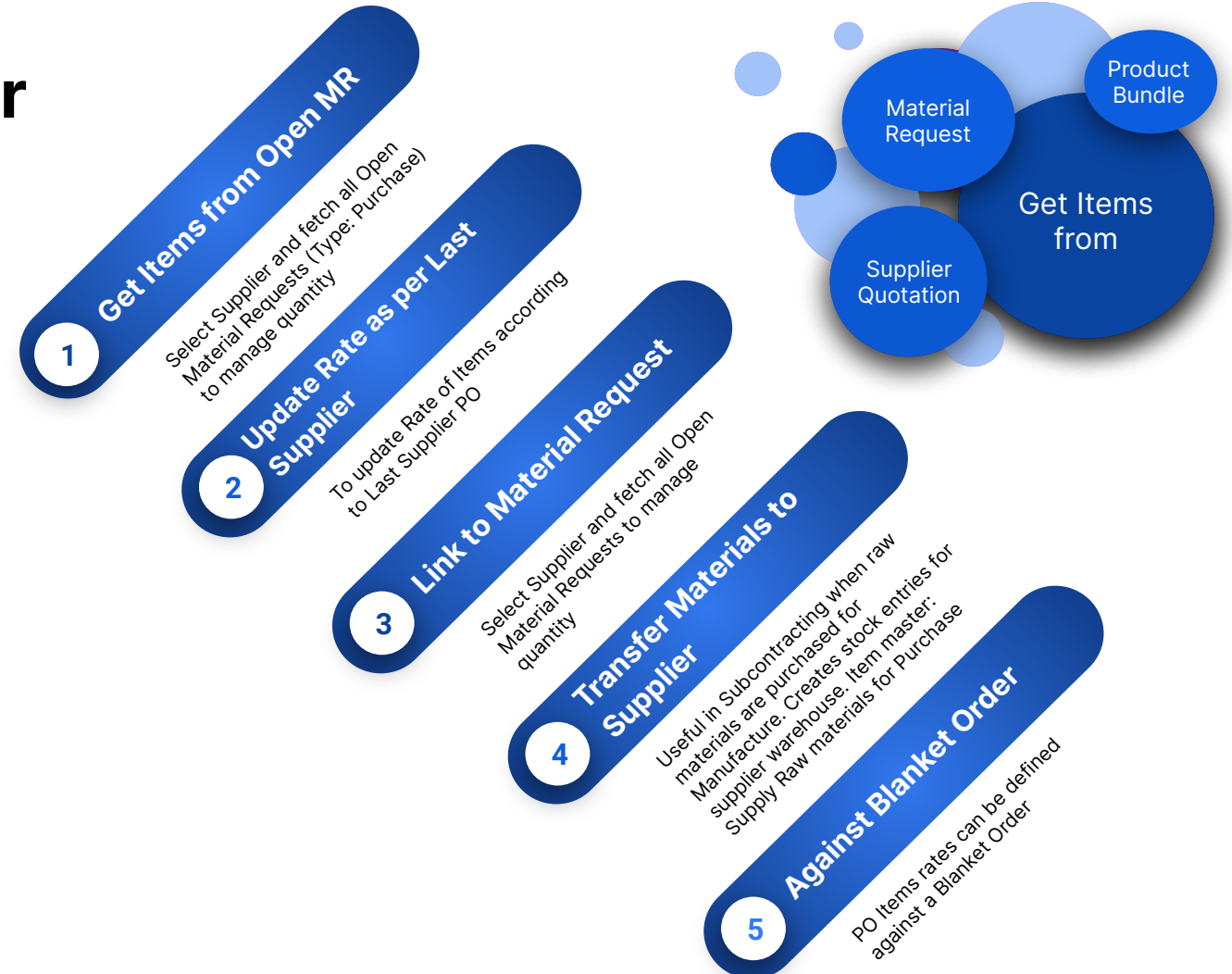
- Service Items → Warehouse left blank
- Supplier quotation status against RFQ supplier changes automatically.

Supplier Quotation



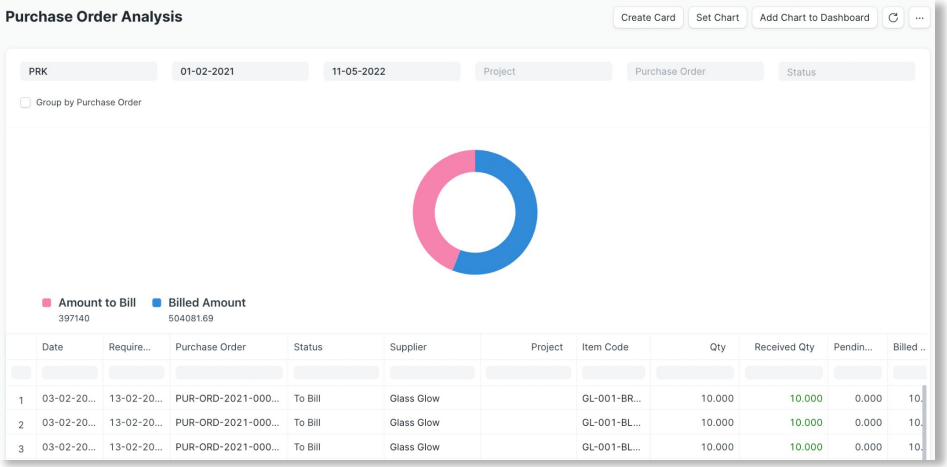
Purchase Order

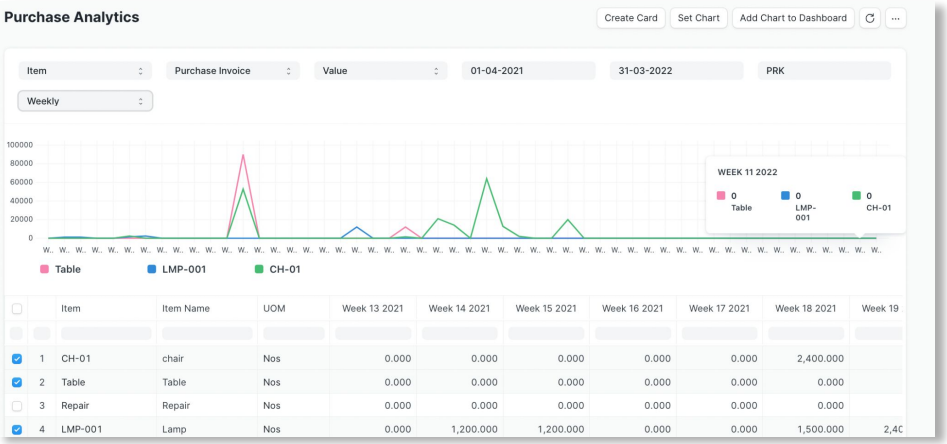
- Allow 0 valuation rate to allow PR submission
- UOM
- Stock UOM
- Shipping rule
  - Via weight
  - Via value
- Update Items
- Purchase Taxes & Charges: Previous Row# Ref



Key Reports

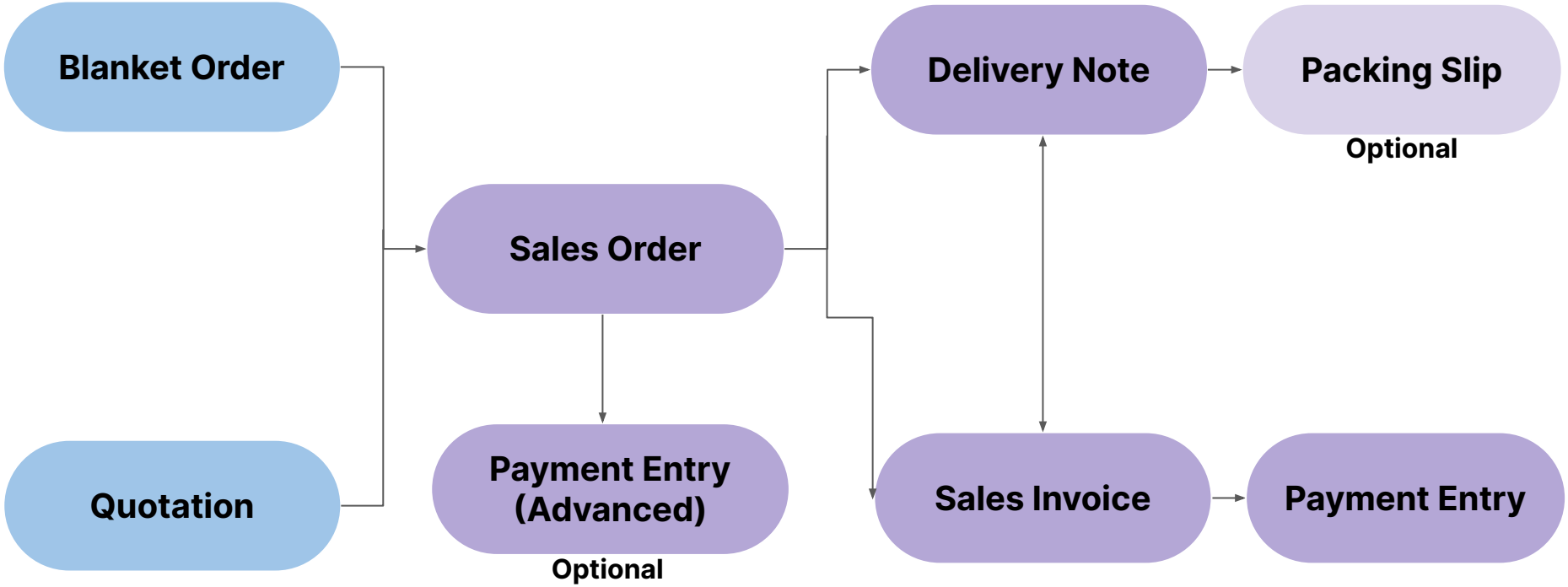
- Purchase Analytics
- Purchase Order Analysis
- Supplier-Wise Sales Analytics
- Items to Order and Receive
- Purchase Order Trends
- Procurement Tracker





Selling Module

Sales Cycle

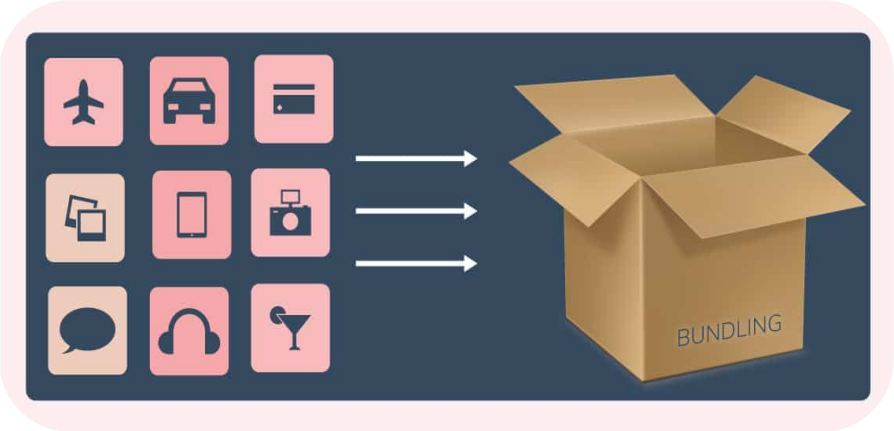

Blanket Order
Quotation
Sales Order
Payment Entry (Advanced)
Optional
Delivery Note
Packing Slip
Optional
Sales Invoice
Payment Entry

Blanket Order

- Blanket orders are a win-win as they're beneficial for both suppliers and customers
- An order from a customer to supply materials for specific items over a period of time at pre-negotiated rates
- It helps customers avoid storing materials in huge quantities while allowing them to take advantage of fixed rates by committing volumes within a specific time period
- More info - https://erpnext.com/blog/procurement/blanket-orders

Product Bundle

- Items which are bundled together and sold as a set / bundle
- iPhone Box (iphone with serial no, charger, and sim pin), Dinner Set, Medicine Packet
- It can be seen as a "Bill-of-Materials" on the Sales side.
- Parent Item must be a **non-stock item**
- Packing List in SO
- Manage Offers/Schemes

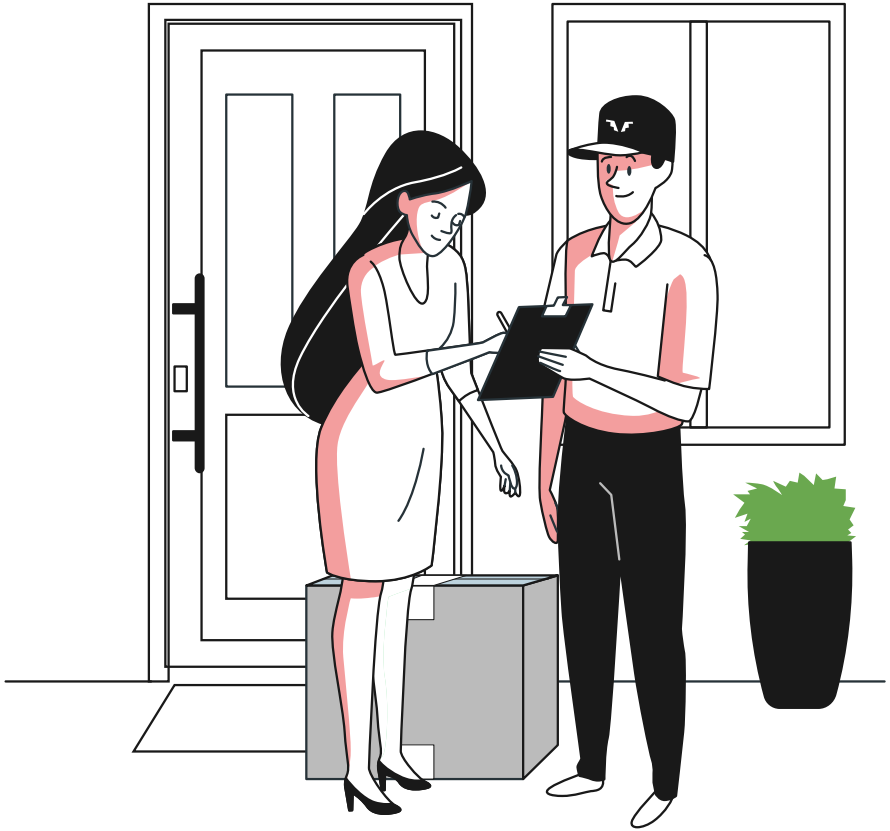


Drop Shipping

- It's a supply chain management technique in which the retailer does not keep goods in stock
- Instead they transfer customer orders and shipment details to either the manufacturer, another retailer, or a wholesaler, who then ships the goods directly to the customer
- https://frappe.school/courses/sales-management-course/learn/5.1

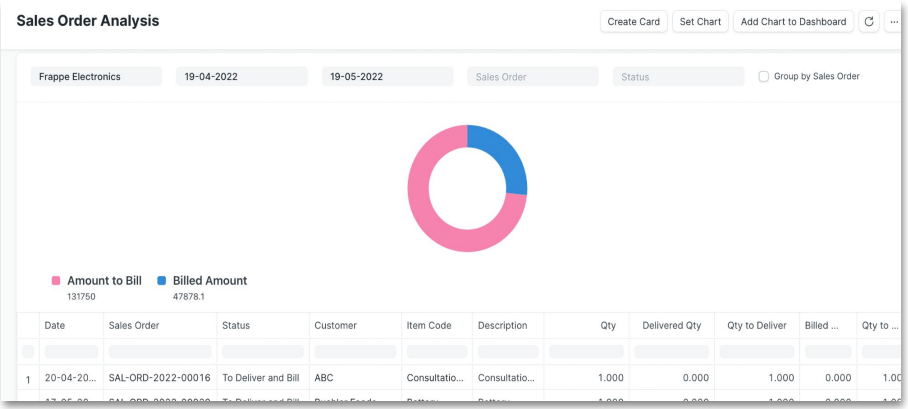
Maintenance Order

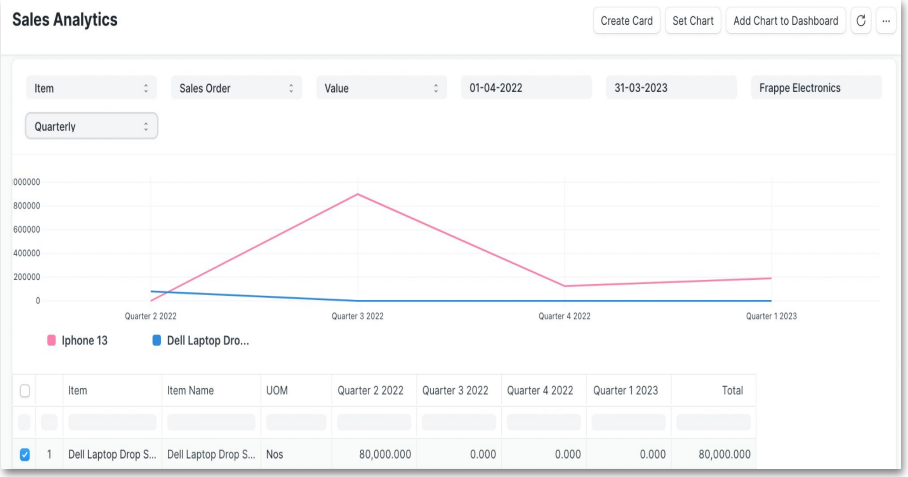
- Mainly use for Service Organization
- Maintenance Visit
- Maintenance Schedule



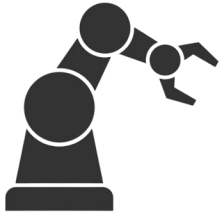
Selling Reports

- Sales Analytics
- Sales Order Trends
- Item-wise Sales History



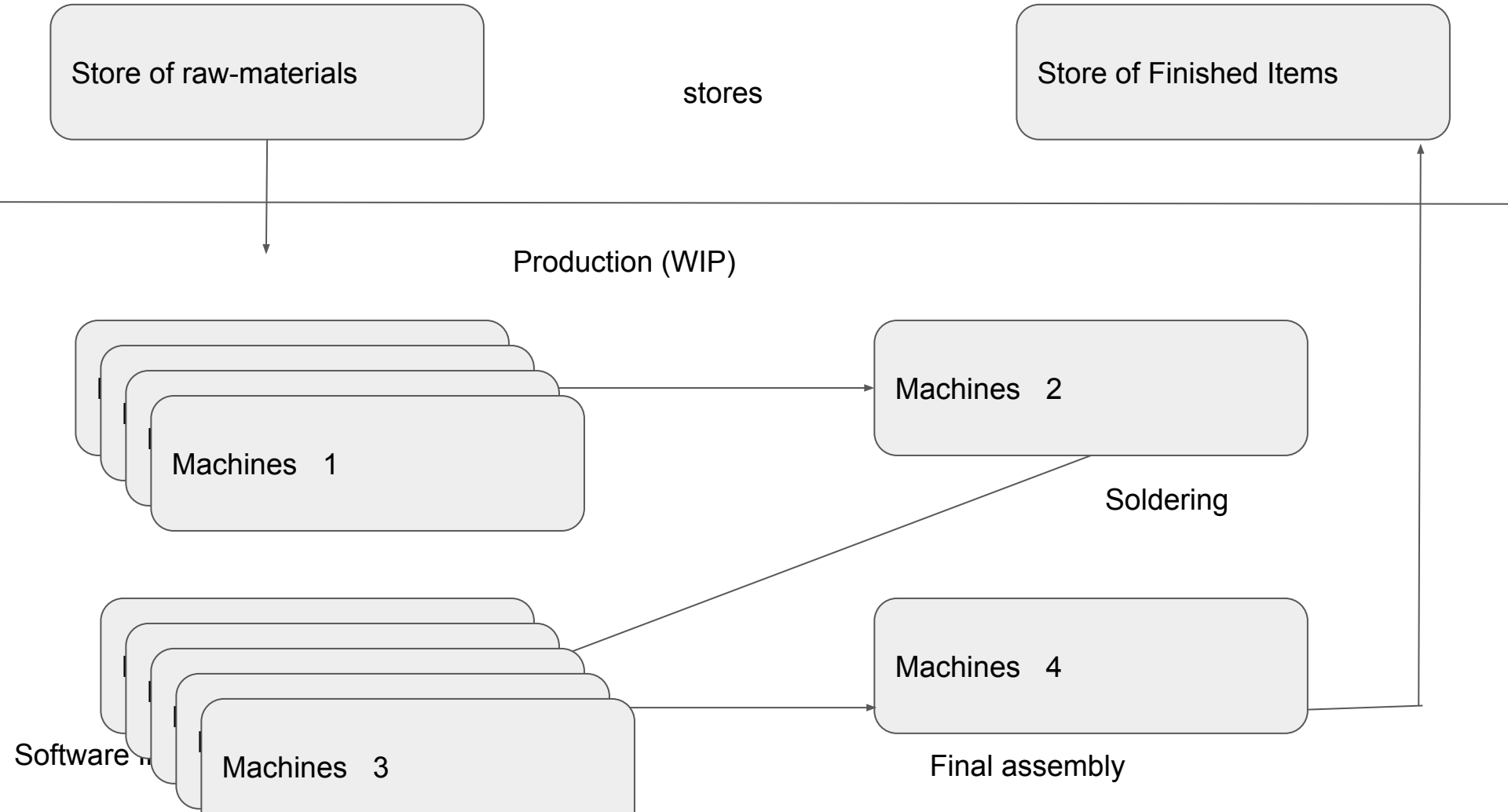


Manufacturing



Manufacturing Module

- Master Data and Settings
  - Items, Warehouses, Operations, Routing & Workstations
- BOM
  - Single level BOM
  - Multi-Level BOM
- Work Order
  - Work order without operations
  - Work Order with operations
- Production Planning
- Subcontracting
- Reports


Store of raw-materials
stores
Store of Finished Items
Production (WIP)
Machines 1
Machines 2
Soldering
Machines 3
Machines 4
Final assembly

Master Data

- Items and Warehouses
- Workstation and Operations
- Bill of Materials (BOM)
- Setup ERPNext Manufacturing

BOM Operation

No.	Operation	Workstation	Operation Time	Fixed Ti...	Operating Cost	
1	**Drilling**	Drilling Workstation 1 (B...	**15**		₹ 41.25	Edit
2	**Drilling**	Drilling Workstation 1 (...	**15**		₹ 22.50	Edit
3	**Drilling**	Drilling Workstation 1 (T...	**15**		₹ 26.25	Edit
4	**Cutting**	Cutting	**15**		₹ 15.00	Edit
5	**Assembly**	Assembly	**15**		₹ 17.50	Edit

Add Row

	A	B	C	D	E	F	G	H	I	J	
1							Routing				
2			per hour	per hour	per hour	per hour	per hour				
3	Workstation	Operation	Electricity	Rent	Consumable	Wages	Total	Work Timings	2nd Shift	Operation Time(in Minutes)	Operat
4	Drilling Workstation 1 (Deep Drilling)		20	30	10	30	90	9am-1pm	1:30pm-8pm	15	
5	Drilling Workstation 1 (Boring)	Drilling	10	15	60	80	165			15	
6	Drilling Workstation 1 (Tapping)		0	10	45	50	105			15	
7	Cutting Workstation	Cutting	10	25	5	20	60			15	
8	Assembly	Assembly	10	25	15	20	70			15	
9											
10											

Master Data

- Workstation
  - Stores information regarding the place where the workstation operations are carried out
  - Production Capacity is the total number of jobs can be executed at the same time in the respective workstation.
  - Workstation Type
    - If users have the same types of multiple Workstations (Machines) and users want to auto-assign jobs to the available workstation based on workstation type then this feature is the good option for them

Master Data

- Operations
  - any manufacturing operation performed on the raw materials to process it further in the manufacturing path
- The Operation master stores a single manufacturing operation, its description and the Default Workstation for the Operation

Manufacturing methods

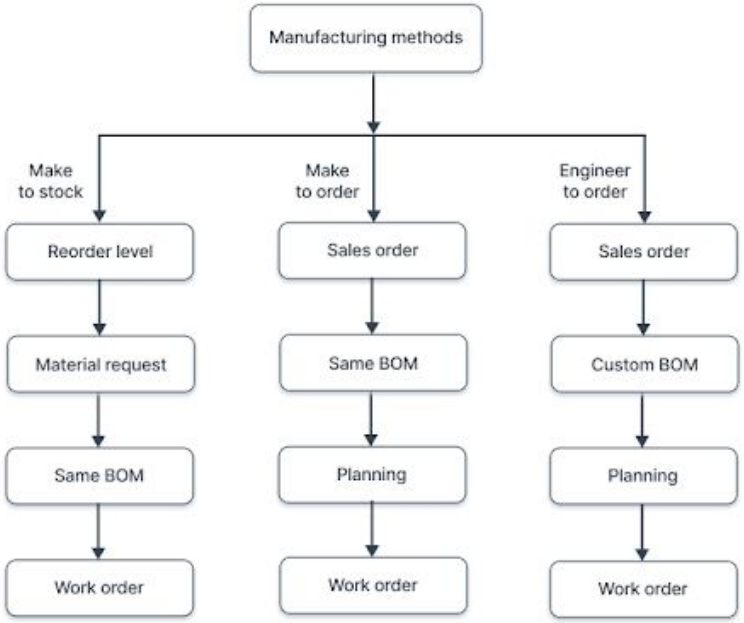
- Make to Stock (mass-produced and stored to meet market demand). Subject to-
  - Forecasting
  - Seasonality
  - Market demand
  - Product expiry dates
  - Available warehouse space
  - Example: FMCG goods etc.

- Make to Order (production begins only on receiving a customer order)
  - Example: Vehicles etc

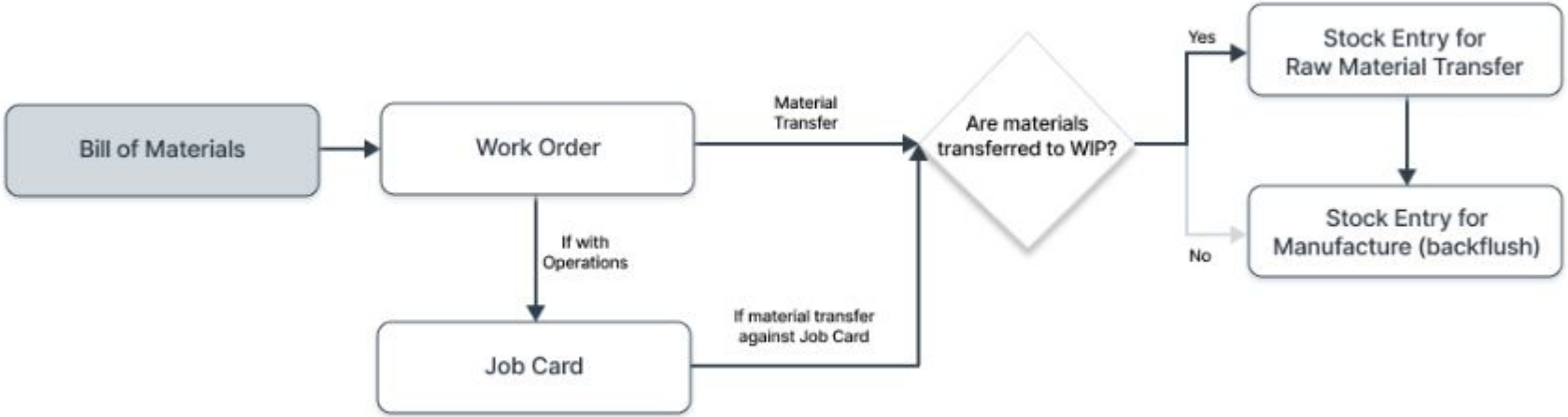
- Engineer to Order (produced only after receiving a customer order; product specifications are customized for each order)

  Example: HVAC equipment, Industrial cranes etc.

Manufacturing Methods



Manufacturing Process



Work Order

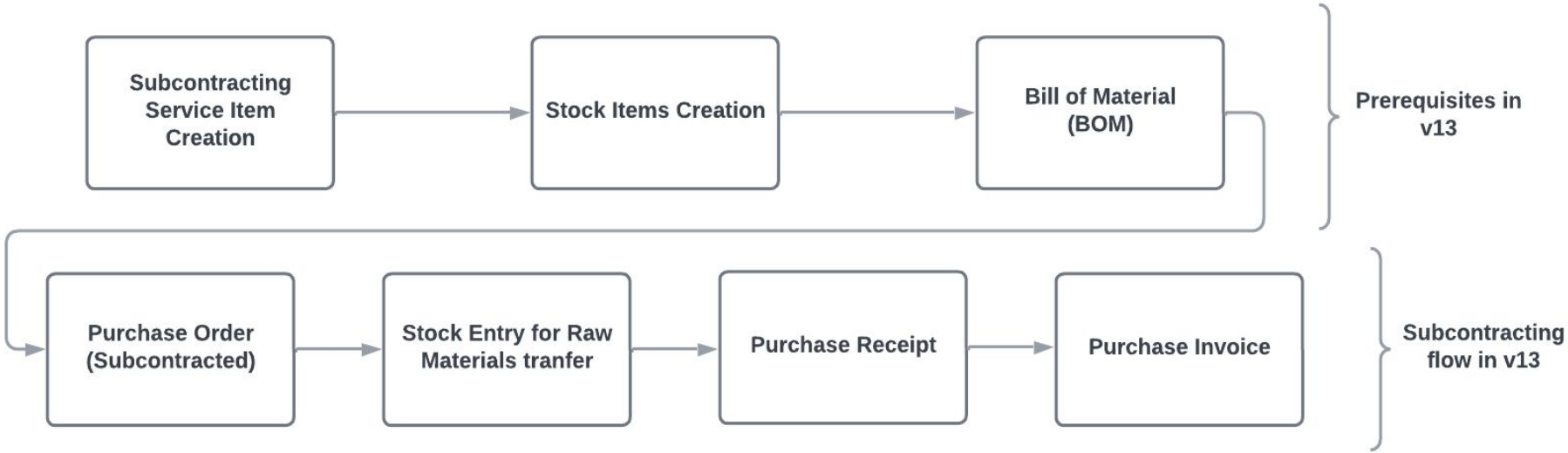
- How to create and execute Work Order
  - Item to Manufacture
  - Quantity to Manufacture
  - BOM
  - Quantity of Raw Materials / Subassemblies
- Material Movement
- Its a document given to the manufacturing shop floor by the Production Planner as a signal to manufacture a certain quantity of a certain Item.

Work Order with Operations

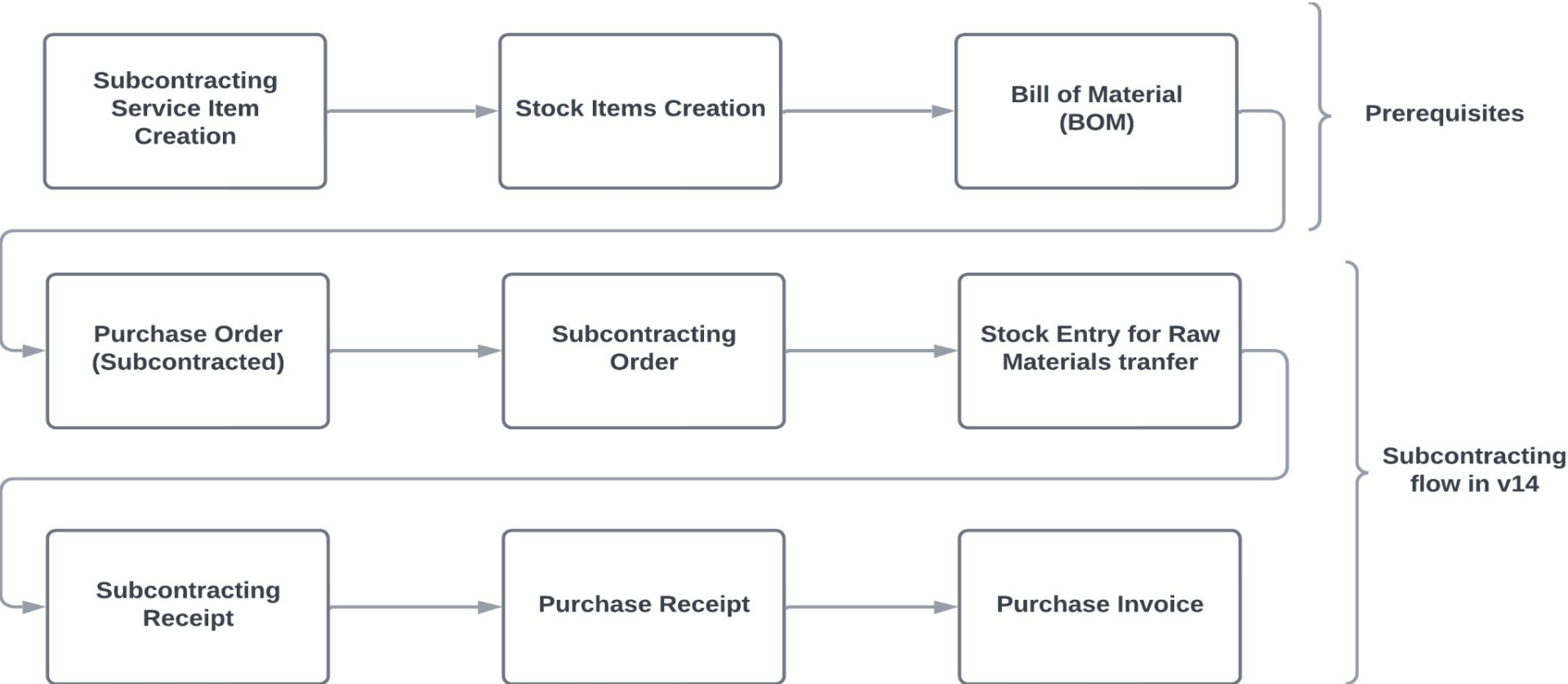
- BOM with Operations
- Job Cards
- Work Stations
- Accounting Impact of a Backflush Entry

Subcontracting in V13

- Subcontracting is a type of job contract that seeks to outsource certain types of work to other companies



Subcontracting in V14



Subcontracting in V14

Sweatshirt
Subcontracted Item

Cotton Fabric
Subcontracted Item

Metal Rivets
Subcontracted Item

Elastics
Subcontracted Item

Cotton Thread
Subcontracted Item

Needle
Subcontracted Item

Stitching and Dyeing Proc...
Subcontracted Item

1 x Sweatshirt

- 2 x Cotton Fabric
- 4 x Metal Rivets
- 2 x Elastics
- 15 x Needles
- 5 x Threads

Reports

- Key Reports on Production Planning
  - Production Planning
  - BOM Stock
- Reports on Status of Manufacturing Processes
  - Work Order Summary
  - Job Card Summary
  - Production Analytics
- Reports on Inventory

Frappe HR : HR + Payroll

Content

- Employee Master Data Management
- Recruitment
- Employee Lifecycle Management
- Attendance
- Leave Management

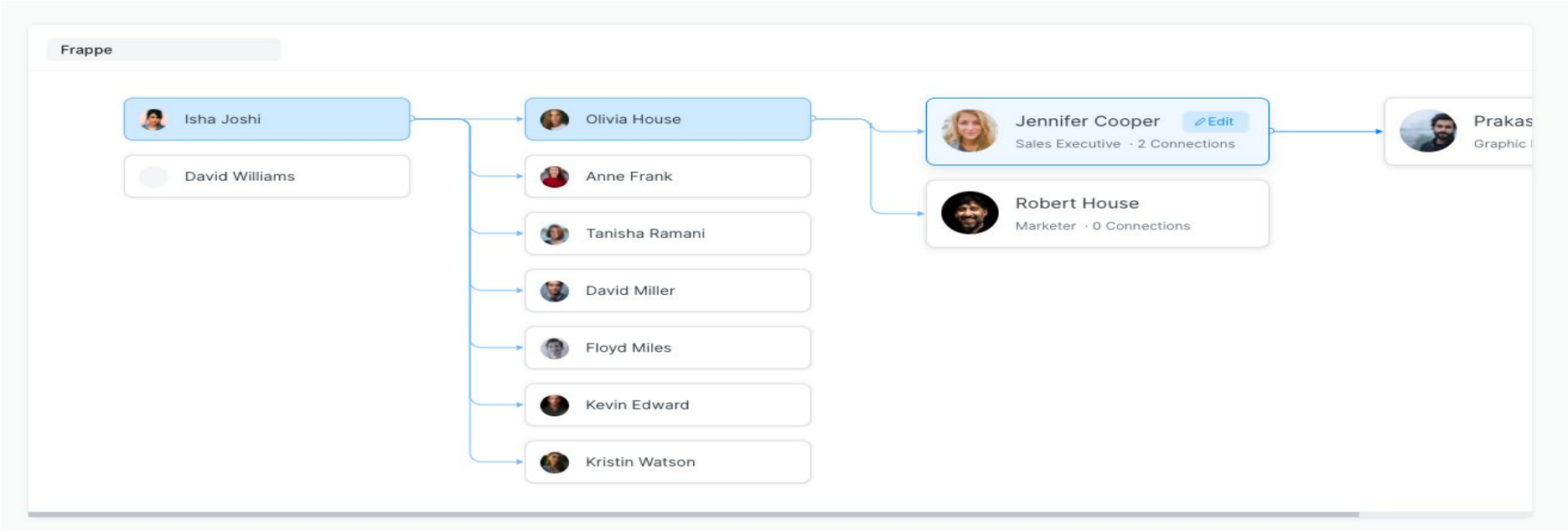
Resources

- Introducing Frappe HR V15
- Frappe HR Mobile App
  - Live Release and Demo
  - Installation Guide
  - Introducing Mobile App
- Configure, customize and Automate your people operations with Frappe HR
- Appraisals and Performance

Employee Master Data Management

- Master Data Management
- Adding New Employees
- Grades, Designations
- Branches and Departments

Organizational Chart



Staffing Plan

It helps you to plan manpower requirements for your Company.

- ERPNext allows you to do this at a company level helping you efficiently plan and budget new hirings for a period.
- Job Openings can only be created as per the number of vacancies and budget as per the active Staffing Plan.

Recruitment

- Staffing Plan
- Job Opening
- Job Applicant
- Job Offer
- Appointment Letter

Employee Lifecycle Management

1. Employee Onboarding
2. Employee Promotion
3. Employee Separation
4. Employee Transfer
5. Employee Skill Map

Employee Onboarding

It is created for a Job Application, who is approved for the hiring.

Use Case: Let's assume that following are the activities which need to be performed as soon as a job applicant is approved to be hired.

- Perform a legal and professional background check
- Create an Employee master
- Create an Email Account
- Create an identity card
- Allocate leaves

Employee Separation

It is created for an Employee who has resigned or terminated from the organization.

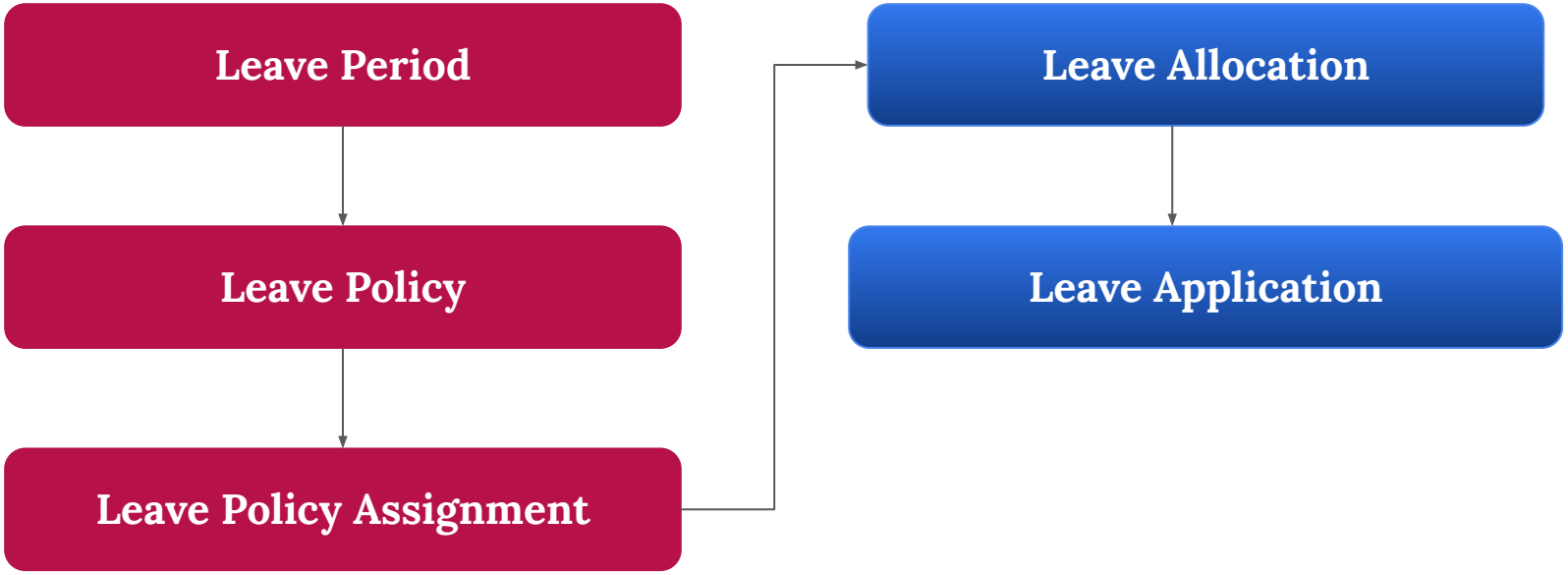
Use Case: Let's assume that following are the activities which need to be performed as soon as an Employee needs to be separated from the organization.

- Collect laptop
- Clear dues
- Delete Employee Email Account
- Collect identity card

Attendance

- Attendance Record
- Attendance Request
- Employee Attendance Tool
- Uploading Attendance
- Attendance Import via API

Leave Management



Leave Policy

The amount of entitled leaves in a Company for an Employee in a Leave Period is known as Leave Policy.

It is a practice for many enterprises to enforce a general Leave Policy to effectively track and manage Employee leaves.

Frappe HR allows you to create and manage multiple Leave Policies and allocate leaves to Employees as defined by the policy.

Leave Type

Create different types of leaves.

- Casual Leave
- Compensatory Leave
- Sick Leave
- Privilege Leave
- Leave without Pay

Leave Encashment

Unused leaves can be encashed to an employee using leave encashment.

- Encashment Threshold Days -> Non-Encashable Leaves(it indicates the number of leaves that cannot be encashed)
  - Total Leaves : 6
  - Unused Leaves : 3
  - Encashment Threshold : 2
  - Encashable Leaves : 3 - 2 = 1
  - Leave Encashment Enhancements

Department wise Leave Approval in ERPNext

Common Use Case : Any user with role, "Leave Approver" should be only able to access leave applications of those employees that belong in their department.

Department wise Leave Approval in ERPNext

In company "Frappe-Inc", let's consider Sydel as the Leave Approver for department, "Research And Development". With this configuration, Sydel will only be able to view Leave Applications raised by his department.

1. Under Role Permissions Manager, provide this role with access of Department DocType
2. Create the user in ERPNext with Role as “Leave Approver”, and Employee In our example, is Sydel

Department wise Leave Approval in ERPNext

3. Now, create the necessary user permissions as per Company, Department, and Employee.

    a. While adding the "Employee" permission for Sydel, just keep Leave Application unchecked, so that Sydel has access to only view other employees

4. Department: Set a “Leave Approver” in the Department master

Leave allocation after Compensatory Leave Request

Use case: If an employee works on a Holiday and wants to apply for a compensatory off, the following process is important in ERPNext:

1) Create an Employee with the mandatory details and assign a Holiday List and a Leave Policy to it.

2) Attendance should be marked for the Employee, it is mandatory for the employee to be marked as present on the Holiday [this Holiday should be in the Holiday List.]

Leave allocation after Compensatory Leave Request

3) Create a Leave allocation for the Employee.

4) In the Leave Type list, for all the types that allow Compensatory off, tick the checkbox.

5) Now, create a Compensatory Leave Request for the employee.

Performance Management

- Appraisal Template
  - KRA
  - Employee feedback criteria
- Appraisal
  - Add Feedback
- Appraisal Cycle
  - Stats
  - Fetch employees
  - Auto create Appraisals
  - Goal per employee
- Employee Performance Feedback

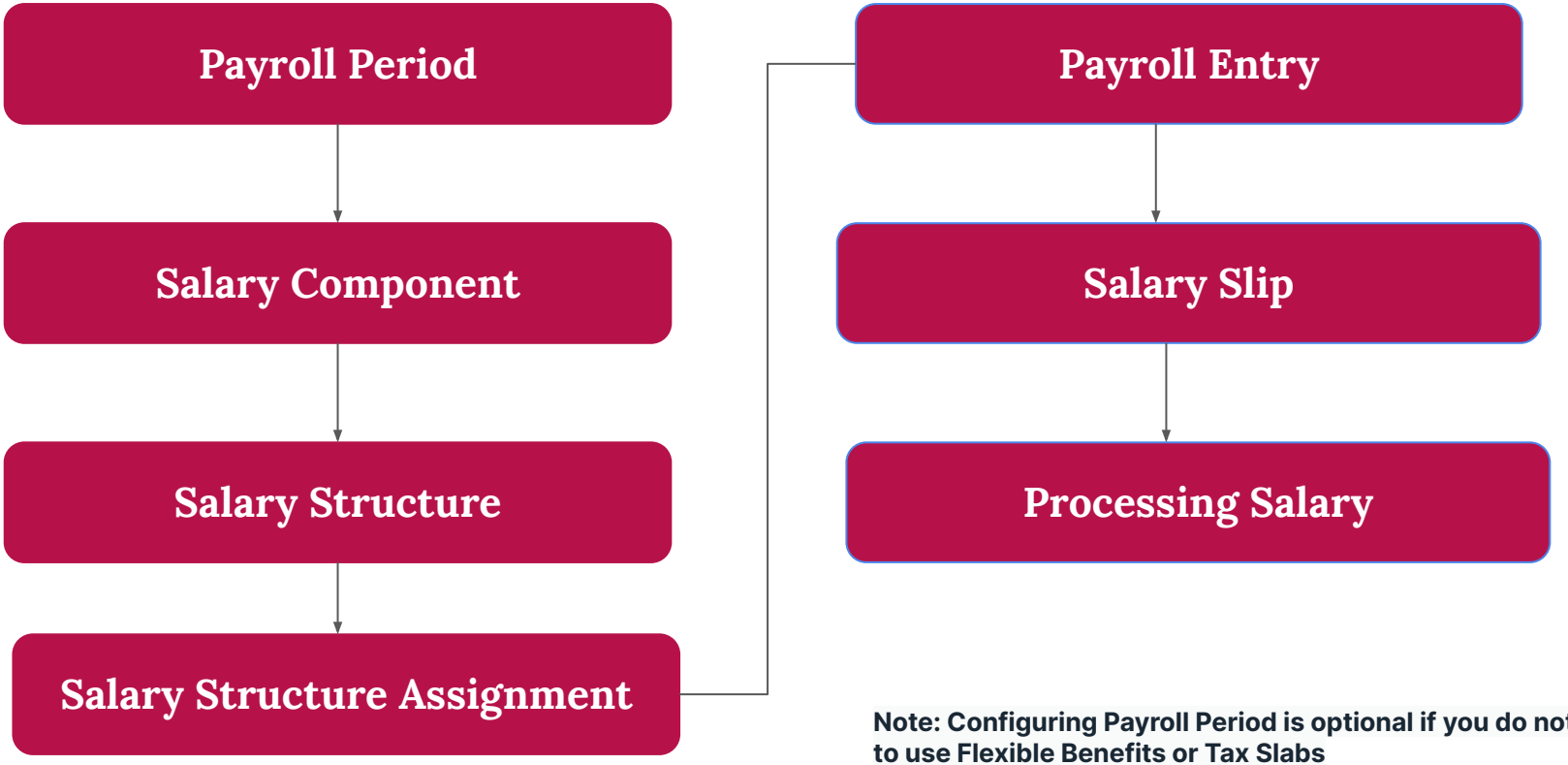
https://frappehr.com/blog/updates/updates-for-march-2023

Expense Claim

- Expense Claim Type
- Expense Claim
- Employee Advance
- Travel Request
- Unpaid Expense Claim Report

Payroll

Payroll Process



Note: Configuring Payroll Period is optional if you do not intend to use Flexible Benefits or Tax Slabs

Salary Slip for Time Sheet based Salary Structure

- Contract based work
- Hourly Pay

Steps to create - Salary Structure, Assign Salary Structure, Create Timesheet, Salary Slip

Encashment of unused leaves into an Employee's Salary Slip

- Enable 'Allow Encashment' for the Leave Type which will be of Encashment type.
- Add it in the Leave Policy and assign it to the Employee you want to create this.
- Make sure that a Salary Structure is assigned to the Employee and you have added the 'Leave Encashment Amount Per Day (INR)' for the same Salary Structure.
- Create a Leave Encashment and make sure that the date you create the Leave Encashment falls between the 'From Date' and 'To Date' in the Leave Allocation.

Encashment of unused leaves into an Employee's Salary Slip

- The 'Encashment Amount' will be automatically pulled in when you save the Leave Encashment DocType.

- An Additional Salary will be automatically created once the 'Encashment Leave' is Submitted.

- On creation of the Salary Slip the Leave Encashment amount will be added along with other Earnings into the Salary Slip as shown below.

Additional Salary

- Use Cases - Performance Bonus, Retention Bonus, Incentive
- Recurring Additional Salary

Income Tax

- Income tax is to calculate taxable amounts automatically, then you must define the taxable salary slabs. You can also declare the maximum tax exemption amount applicable in this period.
- Display tax break up on salary slip: v15

Project Management

Course Overview

1. Projects
2. Task Management
3. Timesheet Management
4. Project Accounting
5. Reports

Projects

- Create Projects and Tasks
- Project Template
- Project Completion Calculation
- Project Update
- Visualize Project Status

Project Completion Calculations

Some examples of how Percentage Completion is calculated based on Tasks:

Project	Activity	% Progress	Weight	Status
SC001	Build	100	0.4	Completed
SC001	Operate	100	0.2	Completed
SC001	Transfer	50	0.2	Open

Method	Formula	Calculation	% Task Completed
Manual	-	-	Manual
Task Completion	Task Completed / Total no. of Tasks	2/3	66.66
Task Progress	Sum of % Progress of all Tasks / Total No. of Tasks	(100+100+50)/3	83.33
Task Weight	Sum of (Task weight + % Progress)	[(0.4*100) + (0.2*100) + (0.2*50)]	70

Task Management

- Create Tasks
- Update Tasks
- Manage Task Dependency
- Visualize Task Status

Timesheet Management

- Activity Types
- Activity Costs
- Timesheets
- Billing Based on Timesheets
- Salary Payouts

Project Accounting

- Project Budget
  - Expense A/c
  - Fiscal year
- Track Project Expenses
- Track Project Revenues
- Analyze Project Profitability

Reports

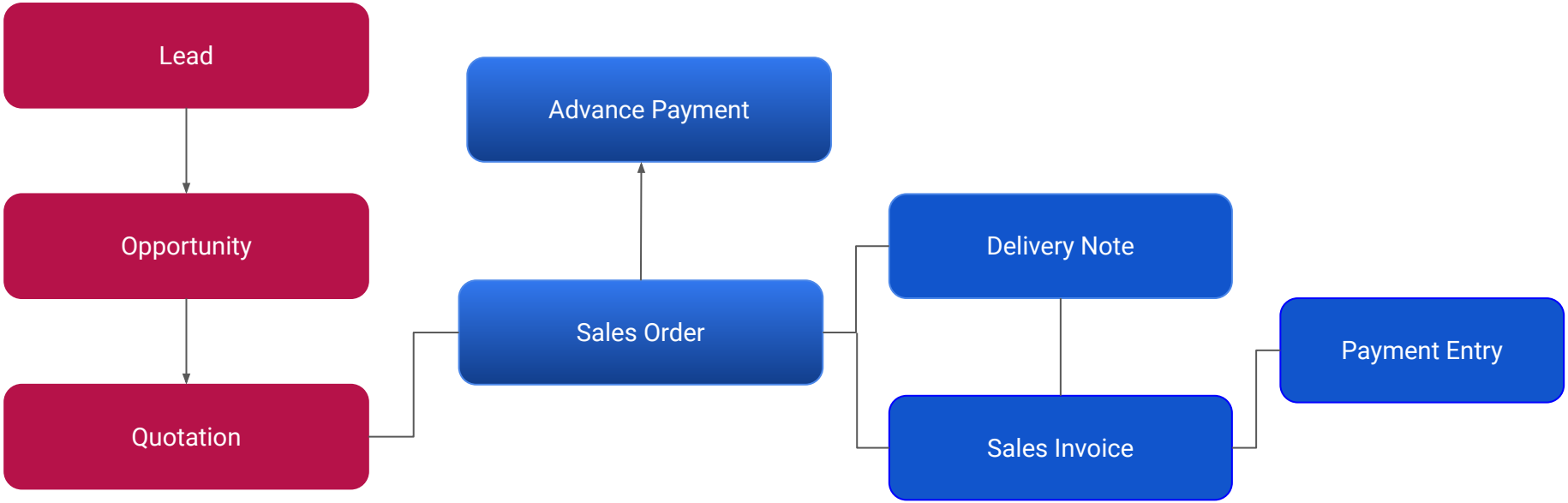
- Monitor Project Progress
- Project Billing Summary
- Project Reports
  - Daily Timesheet Summary
  - Project Profitability
  - Projectwise Stock Tracking

Customer Relationship Management

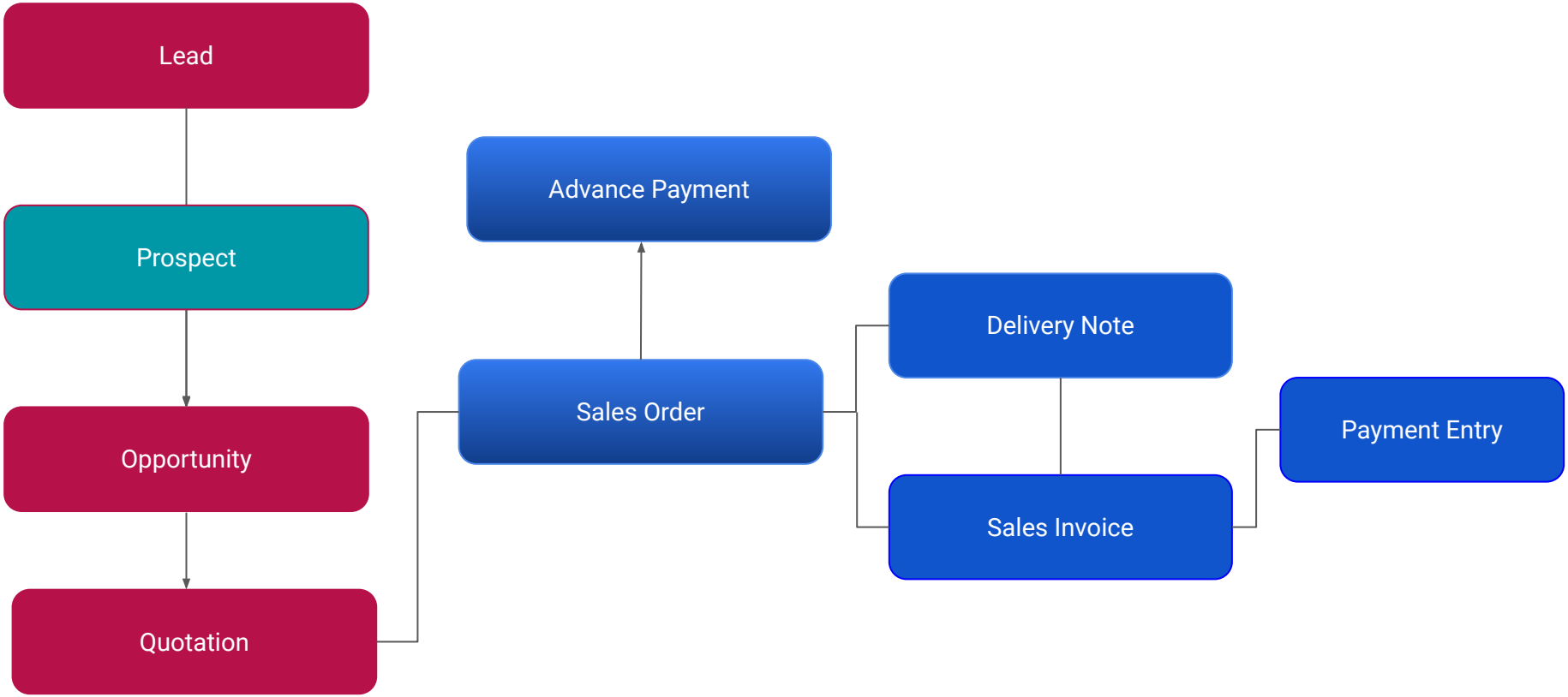
Customer Relationship Management

- Lead Qualification
- Nurturing Opportunities
- Sharing Quotation
- Marketing Campaigns
- Reports

CRM Workflow V13



CRM Workflow V14



Setup

- Lead Source - website, campaign, events, social media post, cold calling etc
- Opportunity Type - broad category of opportunity Sales, Support, Maintenance, Partnership etc
- Market Segment in Lead- Lower Income, upper income
- Sales Stage in Opportunity- indicates the level at which an opportunity is in the sales cycle.
- Customer Group
- Email Groups

Different way of capturing leads

- Contact Us
- Webform

Sales Pipeline

- Lead - potential customer who might be interested in your products or services.
- Prospect
- Opportunity - qualified lead
- Customer - client, buyer, or purchaser
- Contact - contact represents a person
- Appointment - pre-arranged meeting between a Lead and an Employee

Marketing

- Communication
- Setup - Email Group
- Campaign
- Email Campaign
- Newsletter
- Social Media Post

Lead

- Lead
- Status
- Reminders
- Lead Assignment
- Automate lead capturing
  - Contact Us
  - Email Account
  - Webform
  - Incomplete orders
- Events

Opportunity

- Creating Customers
- Lost Opportunities
  - Helps to analyse trends over a long period of time
  - Identify insights needed for improvements at various areas of the business
- Auto Closing
- Minutes to First Response
  - When you send the first reply(email) to an Opportunity
  - Reports - First Response Time for Opportunity

Quotation

- Prerequisite - Customer, Lead, Item
- Print Formats
- Additional Discount
- Currency and Price List
    - set the currency in which the quotation/sales order is to be sent
    - multiple prices based on customer, currency, region, shipping cost, etc

Sales Person and Sales Partner

- Sales Person - who sells your products/services
  - Contribution calculation based on Net Total + Contribution %
- Sales Partner - people or companies that assist you in getting business
  - Channel Partner, Distributor, Agent, Retailer, Reseller, Implementation Partner etc.
  - Commission calculated over Net Total of Sales Order/Invoice or Delivery Note

Email Group Setup

- Manage subscribers by grouping them into different groups
  - existing and potential customers based on their territory or products
  - employee group
- Import Subscribers
  - import email IDs from existing transactions
- Email Templates
  - Confirmation Email Template
  - Welcome Email Template

Campaign

A Campaign is a full-scale implementation of a sales strategy to promote a product or service.

- Use for promoting product or service
- Tag Campaign in Lead, Opportunity, and Quotation
- View leads generated by campaign
- Setup email schedules for email campaigns
    - Prerequisite - email template

Email Campaign

If you want to carry out a campaign using emails for your leads or contacts, Email Campaign serves the purpose.

- Set of emails sent to leads or contact
  - Introducing your product or Revealing an interesting feature of your product
- Prerequisites - Campaign, Lead or Contact or Email Group
- Features -
  - Linked Communication
  - Unsubscribe from Email Campaign
  - Status indication - Scheduled, In Progress, Completed, Unsubscribe

Email Campaign

- Use Lead or Contact fields in Email Template
  - If you want to display the fields from your Lead or Contact document in Email Template
  - use doc.fieldname - For example, if 'Email Campaign For' is 'Contact', you can mention the 'first name' of your Contact as doc.first_name
  - CRM Module Introduction for {{doc.first_name}}

Newsletter

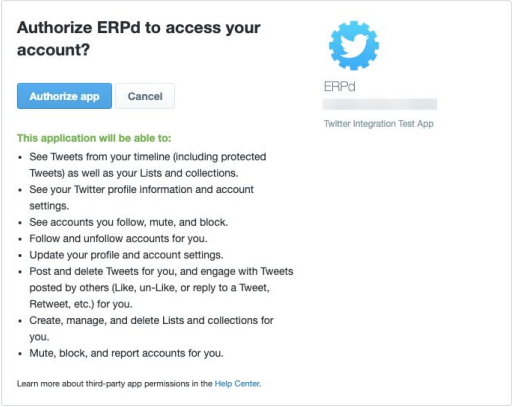
- Email sent to a specific group of subscribers periodically
- Informational and product-focused email
- Prerequisites - Email Groups
- Features -
    - Select multiple email groups
    - Schedule send
    - Test newsletter

Social Media Post

- Used to create and schedule the post for LinkedIn and Twitter
- Introduced in version 13
- Prerequisite - LinkedIn and Twitter settings
- Features-
  - Link with campaign
  - Immediate post
  - Reschedule the post

Linkedin and Twitter Settings

- For Twitter and Linkedin
  - Developer App -
    - https://www.linkedin.com/developers
    - https://developer.twitter.com/
  - Company or Individual page / account
  - OAuth 2.0 Authentication Protocol
- LinkedIn Specific
  - Company Id - from your LinkedIn Company URL
  - Consumer Key and Consumer Secret - from Linkedin Developer Account
- API Key and API Key Secret from twitter developer app



Reports

- Lead Details
- Sales Funnel
- Prospects Engaged But Not Converted
- Minutes to First Response for Opportunity
- Lost Opportunity

Customer Support

Content

- Issue Management
- Service Level Agreements
- Warranty Claims
- Maintenance Management

Issue Management

- Issue Type
- Issue Creation
- Resolution Process and Calculation Time
- Assignment Rule
- Automating Issue Creation *[via email]*

Service Level Agreements

- What is SLA?
  - *SLAs are output-based, their purpose is specifically to define the timeline in which the Customer will receive the service.*
- Configuration
  - Applies to Entity Type: Customer, Customer Group, Territory
- Resolution and Response Timing
  - The time to respond to an Issue and the time to resolve is Shown
  - Pause SLA
  - Reset Time frame of an SLA is possible from Issue creation until the time it does not fail
- Prerequisite
  - Link the Holiday List
  - Enable Track Service Level Agreement in Support Settings

Time to Resolution Calculation

Workday	Start Time	End Time
Monday	9 AM	6 PM
Tuesday	9 AM	6 PM
Wednesday	9 AM	6 PM

Issue#	Status	Created on	SLA Resolution Time	Resolution BY (Within working hours)
ISS-1	High	22-03-23 4 PM	4 hours	23-03-23 11 AM (4PM - 6PM = **2h**) + (6PM - 9AM = **15h**) + (9AM - 11AM = **2h**)
ISS-2	Medium	22-03-23 12 PM	8 hours	23-03-23 11 AM
ISS-3	Low	21-03-23 10 AM	16 hours	23-03-23 5 PM

Note: When “Pause SLA”, Hold time is added and SLA timers restart

Warranty Claims

- Prerequisite
  - *Customer*
  - *Serial Number with stock*
- What is a Warranty Claim?
  - *A Warranty Claim is when a Customer claims free repairs within the Warranty Period of the item/service you're providing. It can be assigned to any engineer/technician.*
- Warranty Period
- Warranty Updates - in serial numbers
- Create of Claim in ERPNext
- Status Tracking

Maintenance Management

- Maintenance Schedule
- Maintenance Visit
  - Also from Warranty Claim
- Installation Note - via DN or customized PI
- Maintenance via Sales order/invoices

Exploring Website & E-Commerce

Website & E-Commerce Module

- Setting up a website for your company
- Creating web pages and themes
- Building web forms
- Product/Item Listing on homepage
- Enabling Shopping Cart
- Place an Order
- Sign-up as Customer
- Publishing blogs

Website Settings

- Landing Page
  - home, about, contact, login, all-products, and blog / webpage
- Title Prefix - browser title on every page
- Website Theme - standard / personalized theme
- Brand Logo
- Navbar - customize menu items in navbar and call to action
- Banner - persistent text/image above navbar on all webpages
- Footer - add address information / categories links

Homepage

- Default landing page
- Homepage configuration
- Hero Section
  - Tag Line and Description (Default)
  - Homepage Slideshow
  - Custom Hero Section
- Featured Products
- Custom Homepage

Web Page

- Static content like Home page, Contact Us, About Us, Terms pages can be created using the Web Page
- Features
  - Slideshow
  - Scheduled Publishing
  - Javascript and CSS
  - Sidebar
  - Comments
  - Header
  - Breadcrumbs
  - Meta tags

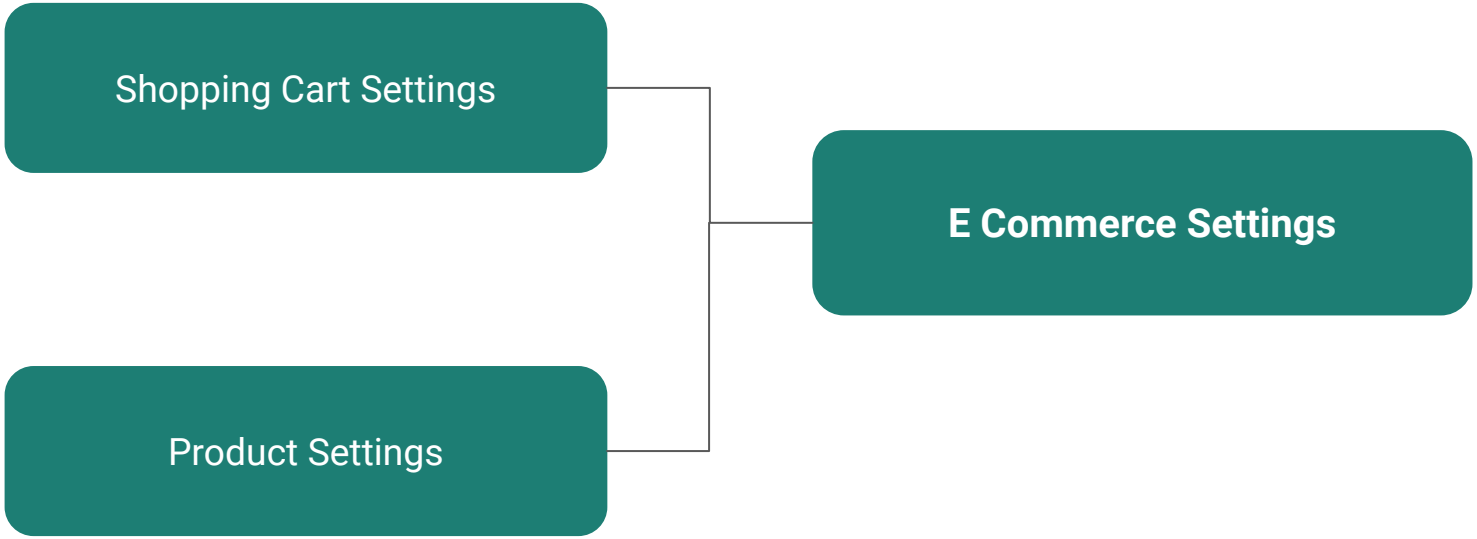
Web Form

- A web form is a form on a website that collects a visitor's contact information
  - Name, email id, address etc
- Stakeholders who are not part of your organization may need to interact with your ERPNext instance
- Website / guest users, customers, suppliers, job applicants, students and guardians
- Features:
  - Web form with child table
  - Payment gateway interaction
  - Portal User

E-Commerce Module

- E-Commerce Settings
- Publish and update an Item
- Shopping Cart Settings
- Place an order and Signup as Customer
- Sales order creation in backend

Unified Settings



Publishing Items

Item

Desk Info

Item group
Sales info
Purchase Info
UOM
Variants

Website Info

Website Name
Route
Image
Ranking
Specs
Website Desc

Website Item

Website Info

Website Name
Route
Image
Ranking
Specs
Website Desc

E-Commerce Settings

- Display Settings
- Shopping Cart Settings
- Checkout Settings
- Filters and Categories
- Guest Display Settings

Features

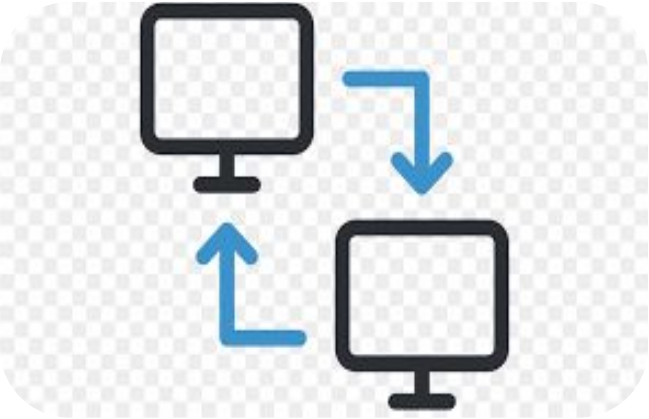
- Product Listing
- Item Group-wise product listing
- Coupon Code
- Wishlist
- Reviews and Rating
- Product Discount - Pricing Rule
- Item variant listing
- Shop by Category

Website Item

- Publishing an item
- Update an item
- Stock information
- Display Images
- Recommended Items
- Offers
- Display additional information

E-Commerce Integrations

- Shopify
- WooCommerce
- Amazon MWS
- Zenoti
- Unicommerce



App Installation

- All apps are available on **Frappe Cloud Marketplace**
- Frappe hosted - Raise a support ticket
- Self hosted - using Frappe Bench :
  - bench get-app ecommerce_integrations --branch main

Blog

- Blog post is an article on your website
- Features:
  - Blogger
  - Blog Category
  - Meta tags
  - Preview

Assignment

Create simple website

- Add Navbar, create Homepage using Hero Section and Page builder
- Try adding CSS
- Create a Contact Sales Team Webform
- Create a user who can add and published the blog on website
- Publish product on your website and try adding discount

Thank You!