



Odoo Construction Management System

Pragmatic's Odoo Construction Management system consists of following features:

Project Planning & Scheduling

- Work breakdown structure (tree structure)- hierarchical and incremental decomposition of the project into phases, deliverables and work packages.
- Critical path method (CPM) - List of project activities, duration for each activity, dependencies between the activities, milestones.
- Resource management - activity resource estimation, financials and project, human resource management.
- Resource leveling- smoothing the stock of resources on hand, reducing both excess inventories and shortages ???.
- Controlling - Multi Level approvals of each transaction and several control points whenever needed
- Budgetary control - to control the resources, motivate managers to strive to achieve budget goals, for better accountability

Project Execution

- Resource Indents - requisition/indent for material or services.
- Work inspection - monitoring of actual work completion at site and the payment linked tasks work completion???
- Change orders - Changes in scope of work.
- Review payments - Accounts payable, Accounts receivable of the stakeholders
- Quality control - workmanship, and the approval systems
- Daily reports - daily insights of the projects
- Petty cash management - Misc. Expenses on projects with budgetary control
- Inventory Management - schedule base delivery, PO based material receipts, inter site transfer

Vendor Management-

- Vendor Registrations - vendor information with status like Active / on trial / Suspended / etc.

- Request for quotations - Request vendors to raise the quotation against indent/requisition
- Quotation comparisons - Multi vendor quotation comparison and approval for Purchase Order
- Orders & Invoices - vendor wise order details, invoices and payment details.
- Tender Management - Raise tender, enquiry, estimation from vendor, bid management, rating, etc.

Advanced Reporting-

- Project Management - Category budget report, Gantt Chart report for project planning, Project Summary
- Purchase Management - Purchase order summary, Purchase bill summary, Short supply report (pending shipments from vendor), Unbilled GRN (material received but bill not prepared), Purchase analysis.
- Contracts Management - Work Order (WO) summary, RA bill summary, Incomplete work report (pending WO), Contractor payments report.
- Tender Management - Enquiry, vendor estimation, comparison of bidding, rating, etc.

Project Definition:

Record all the construction project related information on Project form. This information contains project specific details like Construction Area, Project sanction information, Sub-Project information, Project related document uploading

The screenshot shows the Odoo Project form for a project named 'Sunshine Plaza'. The form is divided into several tabs: Settings, Project Consultant Information, Sub Project Information, Site Information, Other Information, and Documents. The 'Sub Project Information' tab is currently active, showing details such as Stage (Draft), Company (My Company), Code (PR0012), and Address (Station Road, Pune, Maharashtra, 411001, India). The 'Project Name' is 'Sunshine Plaza'. The 'Upload Project Documents' button is visible in the top right. The 'Multilevel approval of project' is indicated by a red box around the 'Draft' stage. The 'Project Sub information like project area, project sanction details' is indicated by a red box around the 'Sub Project Information' tab. The 'Category' is 'Luxury Homes'. The 'Visible by all employees' checkbox is checked. The 'Date' is '06/01/2018 16:54:54', 'UserName' is 'Administrator', 'Stage' is 'Draft', and 'Remark' is 'Created by Administrator'.

Date	UserName	Stage	Remark
06/01/2018 16:54:54	Administrator	Draft	Created by Administrator

Project WBS:

Project WBS is Work Breakdown Structure. Here we can define required resources i.e. Material and labour for particular Project. Also we define actual and planned start and finish dates here.

The screenshot shows the Odoo Project WBS interface. The top navigation bar includes links for Discuss, Calendar, Contacts, CRM, Website, Tender, Contracting, Execution, Purchases, Inventory, Manufacturing, Invoicing, Project, Apps, and More. The user is logged in as Administrator. The main header shows 'Project Wbs / A Building Structural Work' with buttons for Edit, Create, Print, and Action. A 'Change Stage' button is also present. The left sidebar contains a menu with options like Dashboard, Search, Projects, Sub Projects, Project WBS (selected), WBS Budget, Category Budget, Project WBS Hierarchy, Gantt View, Next Activities, Reporting, Tasks Analysis, Configuration, Settings, Masters, and Activity Types. The main content area displays details for the WBS 'A Building Structural Work'. It includes fields for WBS Name, Project (Sunshine Plaza), Sub Project (Sunshine Phase-I), Actual Cost (0.00), Planned Start Date (01/01/2018), Planned Finish Date (12/31/2019), Actual Start Date (01/10/2018), and Actual Finish Date. Below this is a table with columns for WBS Task Group, Estimated Labour, Estimated Material, Task, and Group. The table lists three tasks: Excavation, Footing Work, and RCC Work, each with 1 record. Red arrows point from text boxes to specific elements: 'One project can have multiple WBS' points to the WBS Name field; 'WBS Sub groups' points to the 'RCC Work' task group; and 'Estimated Material & Labours for this WBS' points to the 'Estimated Labour' and 'Estimated Material' columns.

WBS Task Group	Estimated Labour	Estimated Material	Task	Group
Excavation	1 record	No records		
Footing Work	1 record	No records		
RCC Work	1 record	No records		

Task:

Resources like manpower, equipments and materials which can be added in task.

The screenshot shows the Odoo Tasks Library interface for 'Brick work'. The top navigation bar includes links for Discuss, Calendar, Contacts, CRM, Website, Tender, Contracting, Execution, Purchases, Inventory, Manufacturing, Invoicing, Project, Apps, and More. The user is logged in as Administrator. The main header shows 'Tasks Library / Brick work' with buttons for Save and Discard. The left sidebar contains a menu with options like Dashboard, Search, Projects, Sub Projects, Project WBS, WBS Budget, Category Budget, Project WBS Hierarchy, Gantt View, Next Activities, Reporting, Tasks Analysis, Configuration, Settings, Masters, and Activity Types. The main content area displays details for the task '6" Brick work'. It includes fields for Category (Brick work), Sub Category, Material Cost (250.00), Labour Cost (60.00), Minimum Qty (1), and Parent Group. Below this is a table with columns for Material, Unit of Measure, Quantity, and Rate. The table lists two materials: Cement and Sand, each with a quantity of 1.00 and a rate of 100.00 and 150.00 respectively. Red arrows point from text boxes to specific elements: 'Master Task Library, define once use anytime anywhere' points to the '6" Brick work' title; 'Resources required for unit quantity of task (Rate Analysis proportion)' points to the 'Quantity' and 'Rate' columns.

Material	Unit of Measure	Quantity	Rate
Cement	Unit(s)	1.00	100.00
Sand	Unit(s)	1.00	150.00

Project budget:-

User can define task category wise - budget, so while confirming work order it does not allow excess amount more than the budget allocated.

Category Budget / Sunshine Phase-I

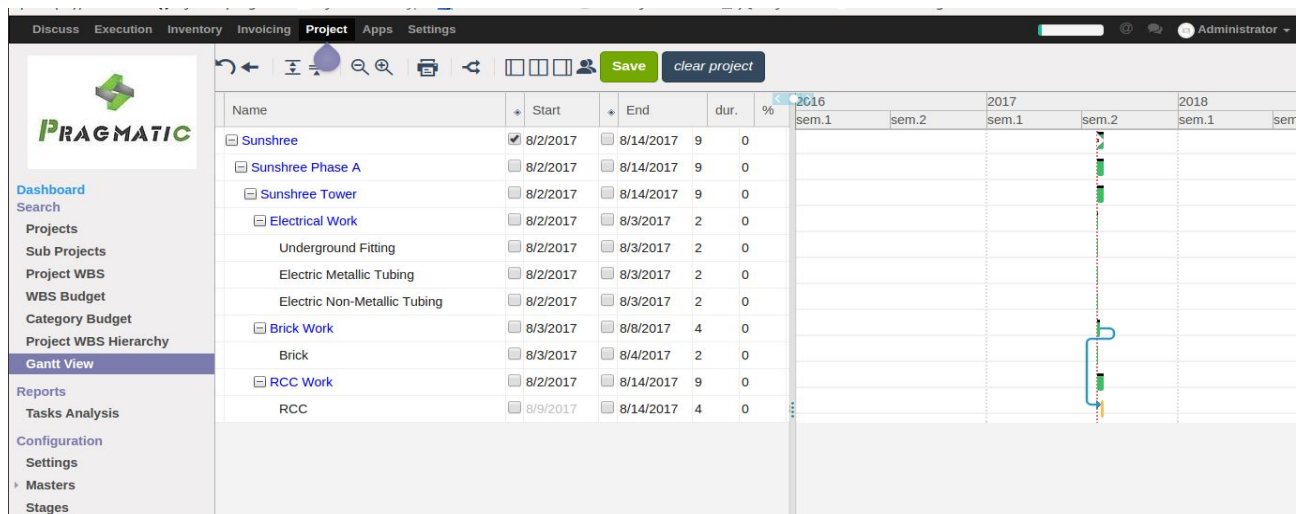
Project Name: Sunshine Plaza, Sub Project: Sunshine Phase-I, Project WBS: A Building Structural Work, Builtup Area: 0.00

Task Category	Budgeted Qty	Budget Rate	Budget Amount	Labour Cost	Material Cost	Labour %	Material %	Labour Budget Used	Material Budget Used	Labour Budget Remaining	Material Budget Remaining	Remark	Stage
Excavation Work	120,000	350.00	42,000,000.00	0.00	0.00	80.00	20.00	0.00	0.00	33,600,000.00	8,400,000.00		Draft
Footing	5,000	200.00	1,000,000.00	0.00	0.00	30.00	70.00	0.00	0.00	300,000.00	700,000.00		Draft
RCC Work	200,000	450.00	90,000,000.00	0.00	0.00	30.00	70.00	0.00	0.00	27,000,000.00	63,000,000.00		Draft
Brick work	180,000	350.00	63,000,000.00	0.00	0.00	30.00	70.00	0.00	0.00	18,900,000.00	44,100,000.00		Draft
	505,000	1,350.00	196,000,000.00										

Project Gantt Chart:

Features Of Gantt Chart:

Every element is editable from gantt chart, Zooming option, Manage task status, Manage dependencies, Full undo-redo support, Supports N-levels.



Purchase Management:

In Odoo Material (products) requisition – Once user click on search button with all necessary filters requisition lines gets auto populate from estimated material in project WBS.

Allow to compare multiple quotations and approves particular vendor to raise purchase order.

Discuss Sales Contracting Execution **Purchases** Inventory Accounting Project Apps Settings Administrator

Quotation Comparison / Sunshine Plaza

Edit Create Action 3 / 4

Quotation Details

Use	Vendor	Quotation No	Date	Product	Quantity	Unit	Rate	Taxes	Total Tax	Negotiated Rate	Subtotal
<input checked="" type="checkbox"/>	Mark Davis	VQ002	07/26/2017	Driller	1.00	Unit(s)	200.00		0.00	0.00	200.00
<input checked="" type="checkbox"/>	Mark Davis	VQ002	07/26/2017	Steel	1.00	Unit(s)	500.00		0.00	0.00	500.00

+ Add Total Amount : 700.00

Particulars

Mark Davis				Mark Rose						
Select	Particular	Expected Rate	Quantity	Unit	Approve	Nego.Rate	Amount	Approve	Nego.Rate	Amount
<input checked="" type="checkbox"/>	Driller	50.00	1.00	Unit(s)	<input checked="" type="checkbox"/>	200.00	200.00	<input type="checkbox"/>	0.00	0.00
<input checked="" type="checkbox"/>	Steel	50.00	1.00	Unit(s)	<input checked="" type="checkbox"/>	500.00	500.00	<input type="checkbox"/>	0.00	0.00

Nego.Rate

Taxes	Tax	Taxes	Tax

User can create purchase order by selecting approved requisitions, validations to avoid order more material than specified in requisition

Discuss Sales Contracting Execution **Purchases** Inventory Accounting Project Apps Settings Administrator

Purchase Orders / PO00001,520.00 ₹

Edit Create Print Action 1 / 3

Vendor: Ayaan Agrawal
Project: Sunshine Plaza
Sub Project: Sunshine Plaza Phase-I
Project WBS Name: Row House - A
Currency: INR

Order Date: 07/26/2017 14:47:58
Type: Domestic
Vendor Reference Stage: Approve

+ Add Requisition

Requisition	Project	Sub Project	Project Wbs	Task Group	Task	Material	UOM	Estimated Quantity	Requisition Qty	Ordered Qty	Current Order Qty	Rate	Spe
REQ002	Sunshine Plaza	Sunshine Plaza Phase-I	Row House - A	BBM Group	6" BBM Work	Cement	Unit(s)	10	10.00	5.00	4.00	380.00	

Task Group

Products Deliveries & Invoices

Product	Description	Scheduled Date	Quantity	Received Qty	Billed Qty	Unit Price	Taxes	Subtotal	Specification
Cement	Cement	07/26/2017 14:48:50	4.000	0.00	0.00	380.00		1,520.00	

Auto populate purchase order lines from material requisition line

Creates vendor bills along with information of project,WBS,subproject

Discuss Sales Contracting Execution **Purchases** Inventory **Accounting** Project Apps Settings Administrator

Vendor Bills / BILL/2017/0002

Edit Create Print Action 1 / 2

Bill: BILL/2017/0002

Project	Sunshine Plaza	Project WBS Name	Row House - A
Vendor	Mark Rose	Source Document	PO00002
Vendor Reference Stage	Approve	Bill Date	07/26/2017
		Due Date	07/26/2017

You can see various analytical report like unbilled GRN (Material Received but Bill not Prepared)

Subcontracting Management:-

User can create Work order by selecting approved labour requisitions to avoid raising of work order beyond the available budget.

Work Order / WO001

Contractor: Ahuja Constructions
Project: Sunshine Plaza
Sub Project: Sunshine Plaza Phase-I
Project WBS Name: Row House - A

Stage: Approve
Order Date: 07/26/2017 11:54:30
Latest Revision: 0

+ Add Requisition

Requisition	Project	Project Wbs	Task Group	Task	Labour	UOM	Estimated Quantity	Requisition Qty	Ordered Qty	Current Order Qty	Rate	Specification
REQ001	Sunshine Plaza	Row House - A	BBM Group	6 " BBM Work	James Miller	Day(s)	5	2.00	0.00	2.00	200.00	
REQ002	Sunshine Plaza	Row House - A	BBM Group	6 " BBM Work	Julia Rivero	Day(s)	5	2.00	0.00	2.00	500.00	

Auto populate work order lines from labour requisition lines

SR.No	Category	Labour	Task	Quantity	Rate	Taxes	Subtotal	Material Amount	Specification
	Plumber	James Miller	6 " BBM Work	2	200.00		400.00		0.00
	Electrician	Julia Rivero	6 " BBM Work	2	500.00		1,000.00		0.00

Task Completion - Allow to do Completion of tasks specified in WO's payment schedule.

RA Bill- Allow to create running account bill i.e.RA bill if there is task completions by considering debit,credit,advance transactions and recovery of same
Advance, credit, debit recovery can be done in RA bill which user can see as balanced recovery, total amount of transaction etc.

RA Bill / False

Advance Recovery

Advance Note No	Advance Amount	Balance Recovery	This Bill Recovery
ADV0001	20.00	20.00	10.00

Debit Recovery

Debit Note Number	Debit Note Amount	Recovered Till Date	Balance Recovery	This Bill Recovery
DEBIT0002	100.00	0.00	100.00	50.00
DEBIT0003	200.00	0.00	200.00	100.00

Credit Recovery

Credit Note Number	Credit Note Amount	Recovered Till Date	Balance Recovery	This Bill Recovery
CREDIT0001	10.00	0.00 False	10.00	10.00

Advance, credit, debit recovery can be done in RA bill also

Tender Management System :

Pragmatic's Tender management allows user to create tenders, tender enquiries, set eligible criteria for bidders, bidder rating, tender estimation and computes top bidder from their rating.

The screenshot displays the Odoo Tender Management System interface. The main form is for a tender titled "Express Highway Construction" with the auto-generated code "NIT0001". The form includes fields for Address, Department, Opening Date, Bid From, Bid To, and Active status. A table lists financial details: Total Budget (500,000.00), Earnest Money (100,000.00), Deposit (50,000.00), Liquidated Damage (1,000.00), and Unliquidated Damage (2,000.00). Below the form, there is a section for "Tender documents" with a table listing Document A (191.63 Kb) and Document B (77.51 Kb). The interface also shows a sidebar with navigation options like Tender, Enquiry, Contractor, and Estimation, and a top menu with various system modules.

Field	Value
Tender Code	NIT0001
Tender Name	Express Highway Construction
Address	Senapati Bapat Road Pune Beja 021011 Åland Islands
Department	Construction
Opening Date	06/22/2018 14:49:12
Bid From	06/24/2018 14:49:12
Bid To	08/21/2018 14:49:12
Active	<input checked="" type="checkbox"/>
Total Budget	500,000.00
Earnest Money	100,000.00
Deposit	50,000.00
Liquidated Damage	1,000.00
Unliquidated Damage	2,000.00

Document	File Name	Size
Document A	Document A	191.63 Kb
Document B	Document B	77.51 Kb

Bidder can create enquiry against tender and system allows to put technical, financial eligible criteria, related questions and rating.

Tender estimation -

The screenshot displays the Odoo Tender Estimation System interface. The main form is for an estimation titled "EST001" with the auto-generated code "EST001". The form includes fields for Enq Number, Contractor, Estimator, Reviewer, Currency, Job Type, Reference, and Distance. A table lists materials and labor with their respective quantities, units, rates, and estimations. The interface also shows a sidebar with navigation options like Tender, Enquiry, Contractor, and Estimation, and a top menu with various system modules.

Field	Value
Enq Number	ENQ001
Contractor	Jobs V.
Estimator	John Hamdian
Reviewer	John Hamdian
Currency	USD
Job Type	Construction
Reference	
Distance	0.00
Total Estimation	\$ 10,000.00

Cost Code	Description	Partner	BOM	Remarks	Qty	Unit	Rate	Estimation
Material A	MAT 001	John Hamdian		Material A RCC Product	10.00	Unit(s)	500.00	5,000.00

Cost Code	Description	Partner	Time Sheet Product	Remarks	Qty	Unit	Rate	Estimation
Labour A	Labour A	Arjon		RCC worker	10.00	Day(s)	500.00	5,000.00