VendorBid

BJIT Limited

Technical Documentation

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Module Overview

Welcome to the VendorBid module, a powerful tool designed to streamline the creation and management of supplier accounts directly from the portal. This module empowers suppliers to view published Requests for Proposals (RFPs), submit quotations, and effortlessly track the status of their submissions.

In addition to simplifying the process for suppliers, the module also provides internal users with the ability to create and manage RFPs efficiently. Featuring a two-step approval process, advanced analytics dashboards, and system-generated scoring, the Supplier Management module delivers a comprehensive solution for optimizing supplier interactions and enhancing the overall procurement process within your organization.

Core Features

1. **Vendor Onboarding**
    - Streamlined onboarding process with email validation via OTP
    - Vendor registration through a portal form
    - Two-step approval process for vendor registration
    - Vendors editing their profile information

2. **RFP (Request for Proposal) Management**
    - Creation of RFPs by both internal and portal users
    - Approval workflow for submitted RFPs
    - Publication of approved RFPs on the portal
    - Quotation submissions from vendors
    - In-depth analysis of submitted quotations
    - Two-step review process for quotations

3. **Dashboard, Analytics, and Reporting**
    - Built-in reporting tools to track key metrics and performance indicators
    - Advanced analytics dashboard providing real-time insights

4. **Dockerization Support**
    - Odoo Installation & Setup
    - Docker integration for seamless containerization
    - Flexible deployment options using Docker

Users Activity

User Group	User Type	Activity
Vendor	Portal	1. Email Verification Using OTP 2. Vendor Registration Form Submission 3. View and Request For Update Own Profile 4. View Published RFP 5. Submit Quotation against RFP 6. Track Quotation Status 7. Edit their profile information
Reviewer	Internal	1. Create a RFP (Draft, Submit) 2. Review Vendor Registration Form (Recommend / Reject / Blacklist Feedback) 3. Review Vendor Edit Profile Request (Approve / Reject) 4. Review Quotations from vendor (Recommend / Score) 5. Approve Profile Edit Request By Vendor
Approver	Internal	1. Review and (Approve / Reject) Vendor Registration 2. Approve / Reject RFP 3. Publish RFP to / Close RPF From Portal Review And Accept RFQ 4. Create PO
Requester	Portal	1. Register 2. Create RFP 3. Track RFP Status

Feature - 1: Vendor Onboarding

Step 1 → Streamlined onboarding process with email validation via OTP:

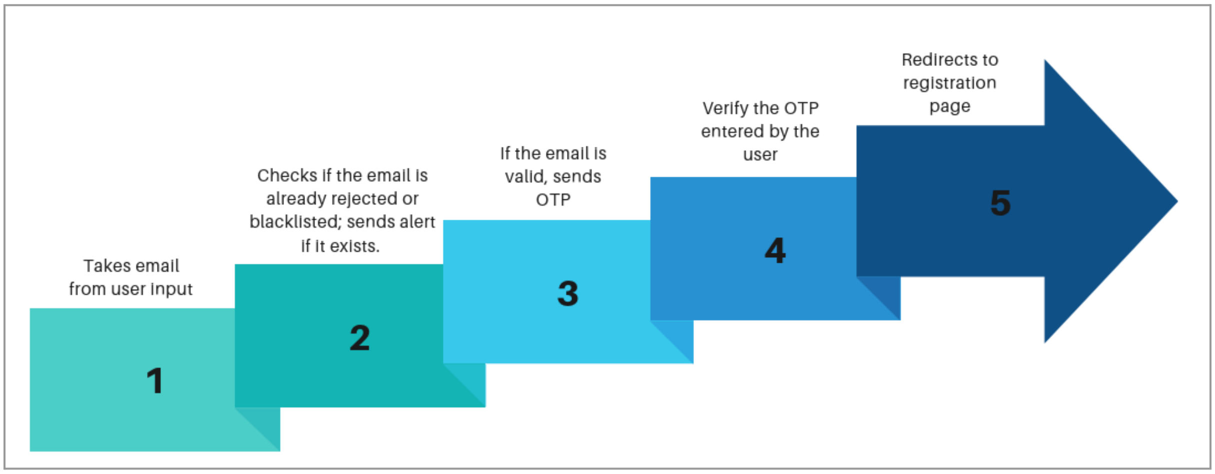

Figure 1.1.1 - Email sign-up and OTP validation

The email verification process starts when the user enters their email address. The system checks if the email is already registered or blacklisted, and alerts the user if either condition is true. If the email passes both checks, an OTP is sent with the message "OTP has been sent to your email." The user then enters the OTP, which is validated within a time limit. If it's invalid, an alert says, "Invalid OTP. Please try again." If valid, the user sees "OTP verified. Proceeding to registration" and is taken to the registration form.

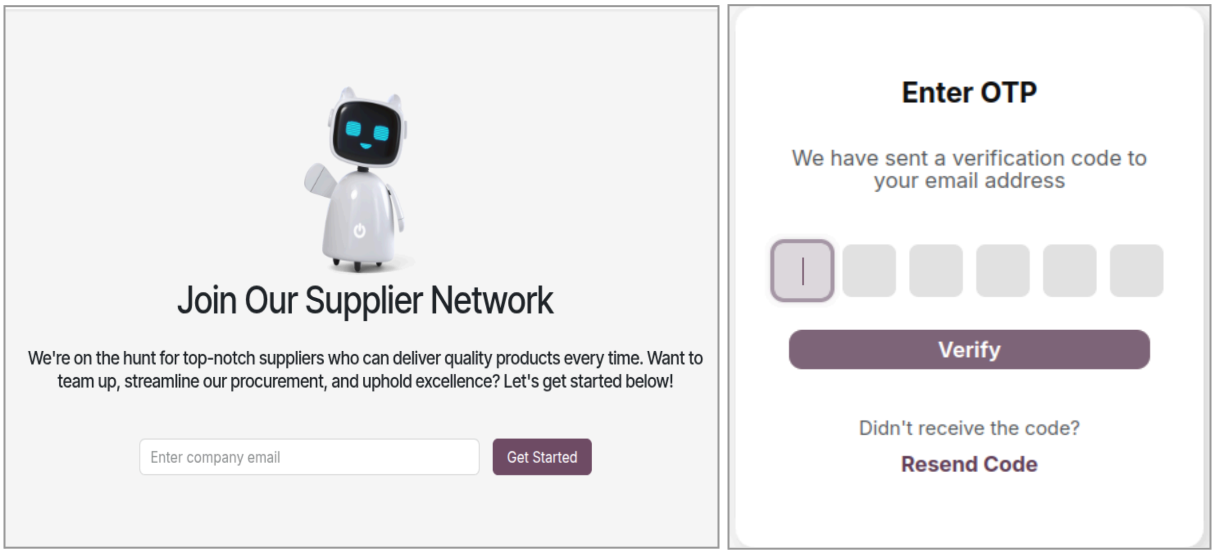

Figure 1.1.2 - Email sign-up and OTP validation from UI

Step 2 → Vendor registration through a portal form:

The vendor registration form is organized into five structured pages to streamline data collection and improve user experience. This design ensures comprehensive vendor profiling while maintaining clarity and simplicity. The registration form contains 5 different pages:

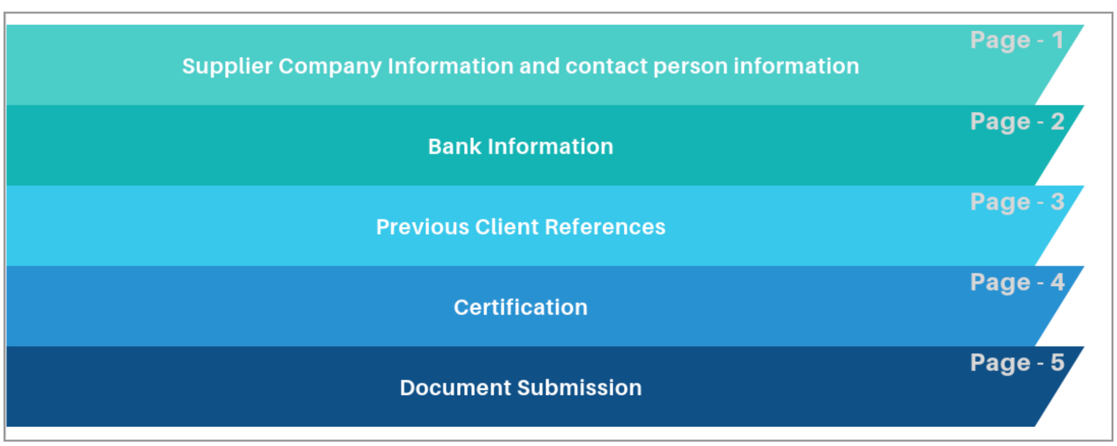

Figure 1.2.1 - Vendor registration through a portal form

Page - 1 of the registration form captures essential company details, including Company Name, Company Address, and Company Type, along with an option to upload the Company Logo. It also collects contact information for the Primary, Finance, and Authorized Contacts—each requiring Name, Email, Phone, and Address. Additional fields include Trade License Number, Commencement Date, Expiry Date, and Tax Identification Number (TIN).

Note: Company Name and Address are mandatory. The TIN must be a 16-digit numeric string if provided otherwise it is optional. Trade License Number must be alphanumeric (8–20 characters) if provided otherwise it is also optional. Commencement Date must be before today, and Expiry Date must be a valid future date.

Moving on, **Page - 2** collects bank details including Bank Name, Bank Address, Bank SWIFT Code, Account Name, Account Number, and IBAN to facilitate secure financial transactions.

Note: Bank Name, Bank Address, and Account Number are mandatory. SWIFT Code and IBAN are essential for international payments.

Later, the **Page - 3** captures up to five previous client references, each including Name, Email, Phone, and Address to validate the vendor's past experience.

Note: If Email, Phone, or Address is provided for any client, the Name field becomes mandatory.

Then, in the **Page - 4**, fill out the Certification name, Certificate Number, and Certifying Body. Use the date pickers to select the Award Date and, if applicable, the Expiry Date. Note that expired certifications cannot be added.

Finally in the **Page - 5,** upload the necessary documents such as your Trade License, Certificate of Incorporation, Establishment Card, VAT/Tax Certificate, and other listed or additional certifications. Ensure each file is under 1 MB. Before submitting, confirm the declaration that all provided information is true and accurate.

Note: Name of Signatory, Authorized Signatory and Company Stamp & Date fields are mandatory.

After submission, the system checks for missing or incorrect data, providing feedback if corrections are needed. Once successfully submitted, you will receive a confirmation, and reviewers will be notified via email to evaluate your application.

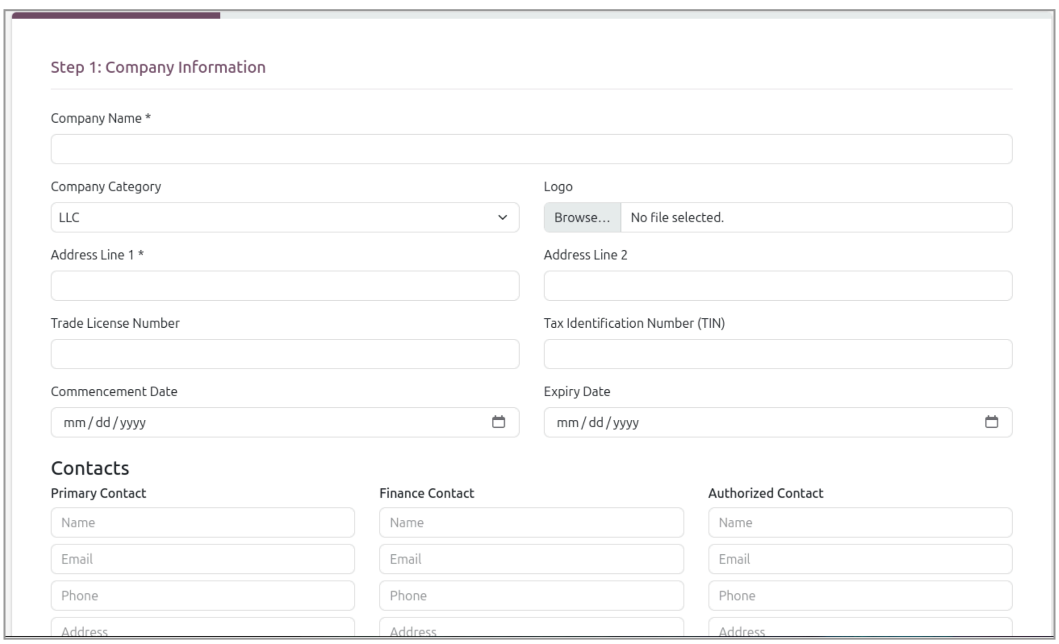

Figure 1.2.2 - Vendor registration through a portal form (Page - 1)

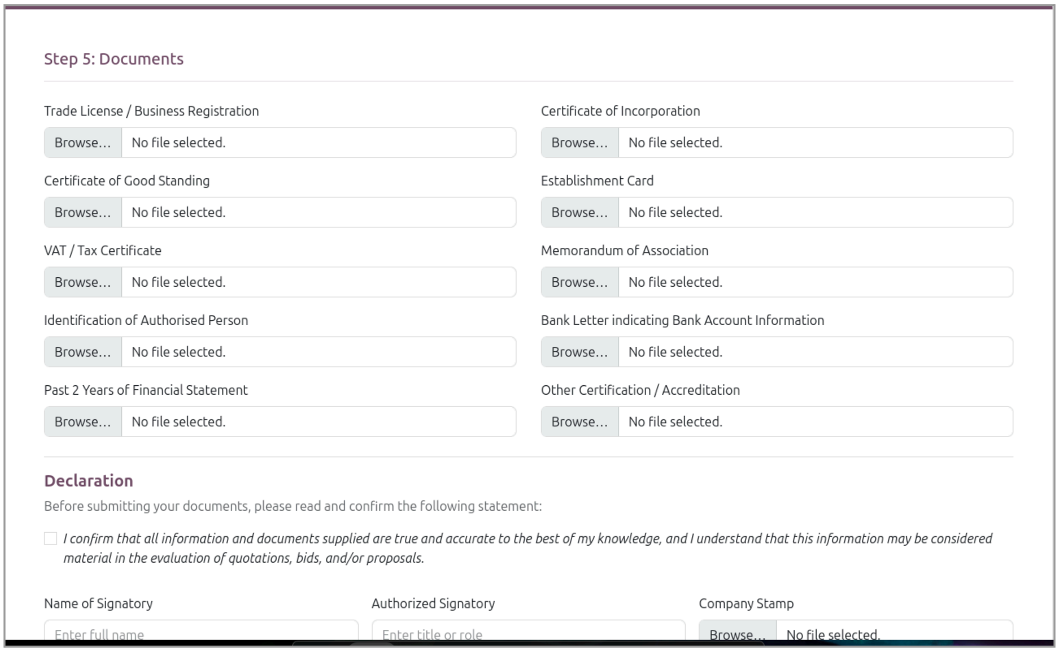

Figure 1.2.3 - Vendor registration through a portal form (Page - 5)

Step 3 → Two-step approval process for vendor registration:

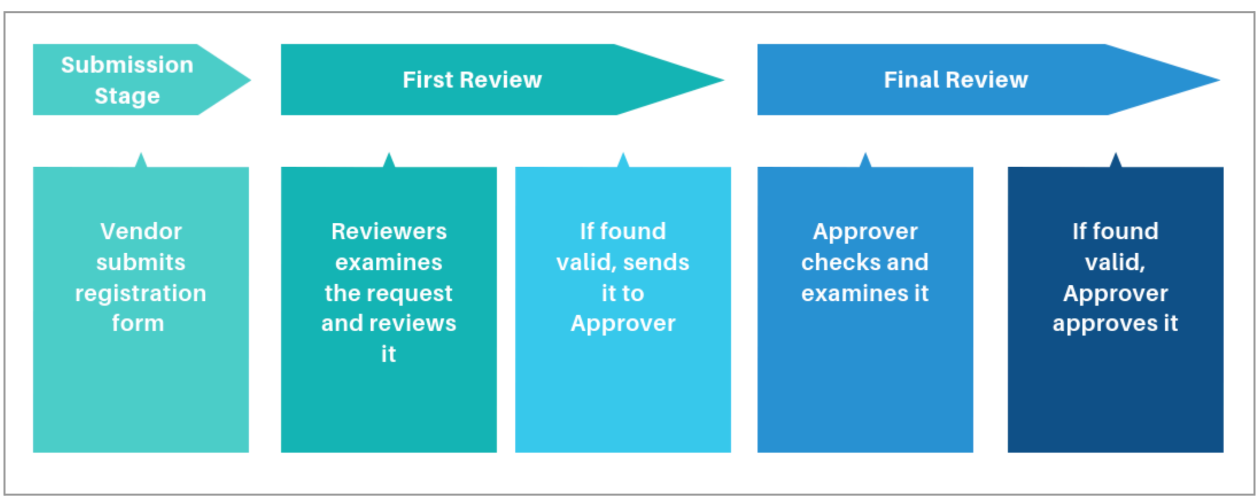

Figure 1.3 - Two-step approval process for vendor registration

In this phase, after the vendor submits the registration form, it has to go through a two step verification process. When the Initial Approval starts, reviewers can "Approve", "Reject" or "Blacklist" an application, with comments required for rejection or blacklisting. Approved applications proceed to the approver for Final Approval, the approver reviews decisions and comments from the reviewer before making the final call to approve or reject the vendor record creation. Upon approval, a vendor record and user account are automatically generated. The supplier receives an email confirmation with login credentials following successful vendor creation.

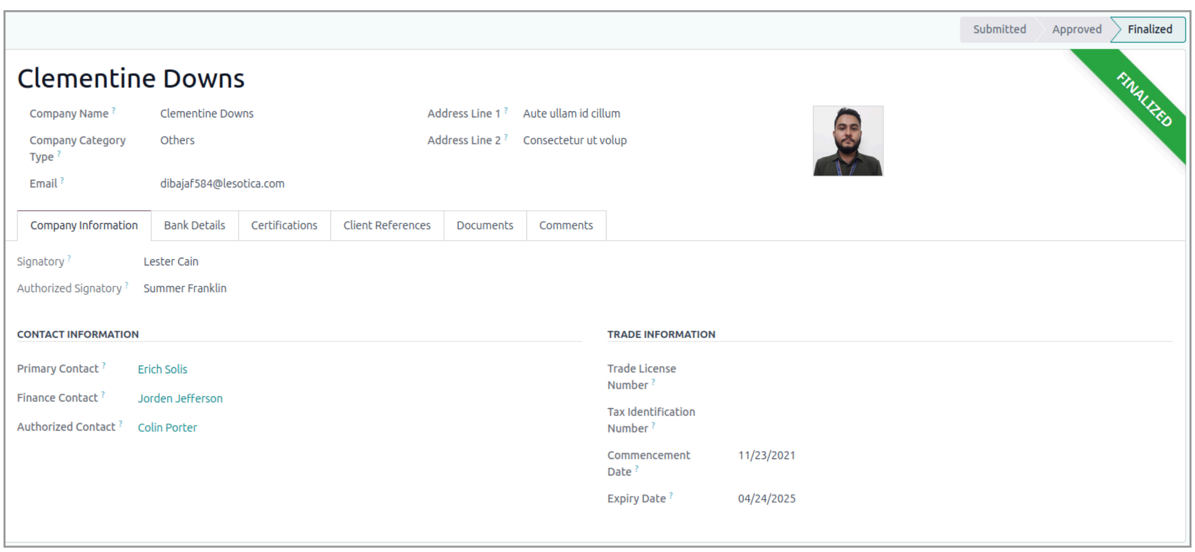

Figure 1.3 - Two-step approval process for vendor registration from UI after Finalized

Step 4 → Vendors can edit their profile information

Besides creating a vendor profile, the system also allows vendors to request changes to their profile information, but any updates must be approved by a reviewer. To make an edit request, a vendor must first log into the system. After logging in, the vendor will see a "View and Edit Profile" link on the right side below their profile information, which they can click to update their personal details.

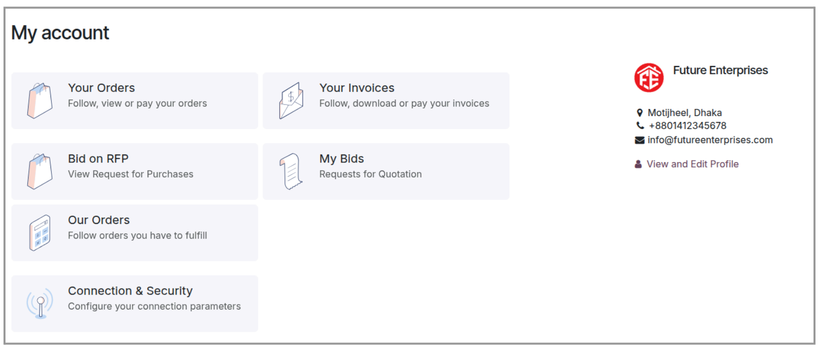

Figure 1.4.1 - Hyperlink for View and Edit Profile

After clicking the hyperlink, the vendor will see a button labeled Edit Profile. By clicking this button, the vendor will be taken to a page where they can view and update their profile information.

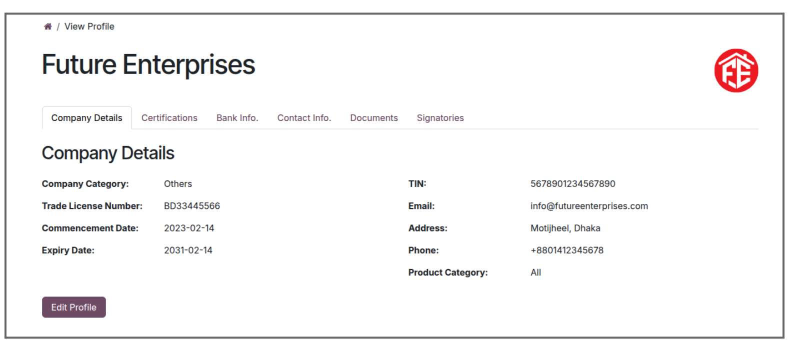

Figure 1.4.2 - Edit Button to make changes in vendor profile

After clicking the button, an edit form will open where the vendor can update any information they want to change. Once finished, the vendor can click the button named Submit Edit Request. If the request is submitted successfully, a message saying "Your edit request has been submitted successfully" will appear with a green background.

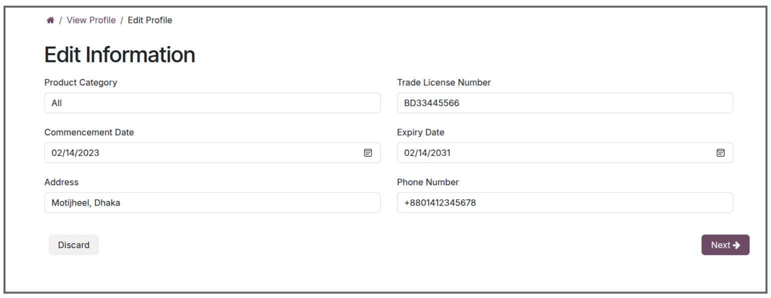

Figure 1.4.2 - Edit Button to make changes in vendor profile

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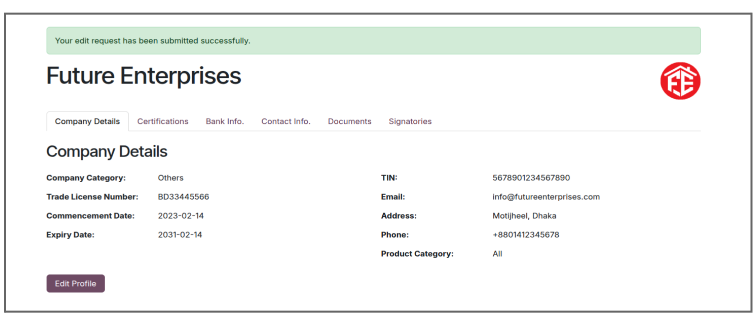

Figure 1.4.2 - Edit Button to make changes in vendor profile

After the vendor submits their edit request, its status changes to Pending and waits for the reviewer's approval. The reviewer can either approve or reject the request by clicking the appropriate button. If the reviewer rejects it, no changes are made. But if the reviewer clicks the Approve button, the status changes to Approved, and a notification is sent to the vendor confirming the approval of their edit request.

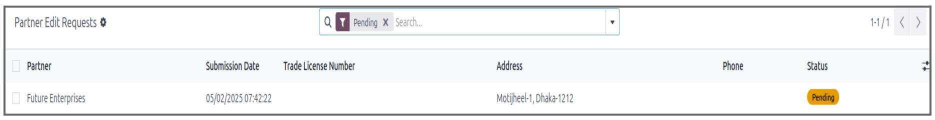

Figure 1.4.2 - Edit Button to make changes in vendor profile

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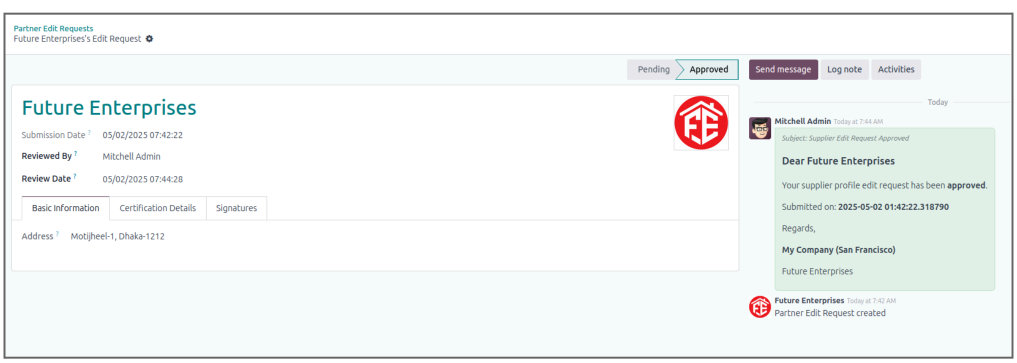


Figure 1.4.2 - Edit Button to make changes in vendor profile

Feature - 2: RFP (Request for Proposal) Management

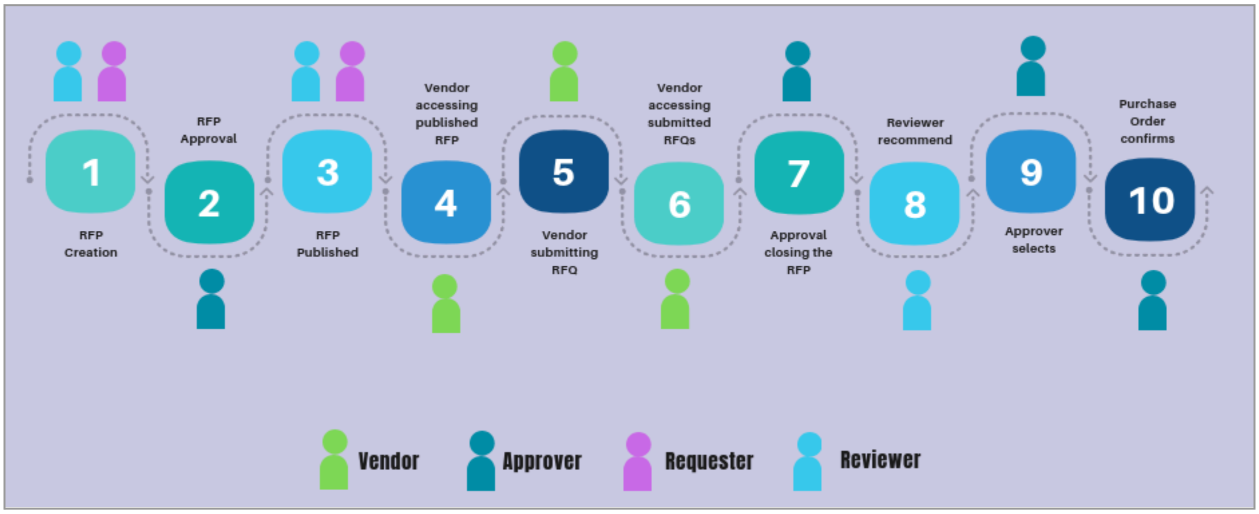


Figure 2 - RFP (Request for Proposal) Management Walkthrough

The diagram above illustrates the process and detailed workflow of RFP (Request for Proposal) creation, publication, and quotation submission. It begins with either a Reviewer or a Requester (after approval of any reviewer) creating an RFP, which then moves to the Approver for approval. Once approved, the RFP is published and made accessible to Vendors who can review it. Vendors then submit their RFQs (Request for Quotations), which are subsequently accessed for review. After vendors submit their proposals, a reviewer can recommend the RFQs they think is the best for their RFPs, but before that approvers need to close the RFP. When the RFP is closed it disappears from the portal so it no longer accepts quotations from vendors. The Approver selects the best proposal, leading to the final confirmation of the purchase order, thereby completing the process. Each step involves different stakeholders, including Vendors, Approvers, Requesters, and Reviewers, ensuring a thorough and collaborative approach.

Step 1 → Creation of RFPs by both internal and portal users

Being part of a system where the Request for Purchase (RFP) process is streamlined for efficiency. As members of the Reviewer group, they can create RFPs, and interestingly, each reviewer has access only to their own RFPs. If they are in the Requester group, they can submit RFP requests as well, but they need approval from a reviewer before they go live. Moreover, the RFP itself contains various fields, starting with an auto-generated RFP number and status indicators like Draft, Submit, Approved, and more. Furthermore, the required date defaults to seven days from now, and there's a computed total amount based on accepted RFQs. It can also have sections for approved suppliers, product lines, and RFQ lines, capturing essential details about products and supplier information.

An RFP includes the following key fields: RFP Number (auto-generated), Status (default: Draft; options include Draft, Submit, Approved, Rejected, Closed, Recommendation, Accepted), Required Date (defaults to 7 days from the current date), and Total Amount (computed from accepted RFQ line costs). It also includes log access fields, an Approved Supplier (Many2one, editable only by the approver, limited to recommended suppliers), and Product Lines (One2many) containing Product, Description, Quantity, Unit Price, Subtotal Price, and Delivery Charges—where monetary fields are hidden from the RFP tab view.

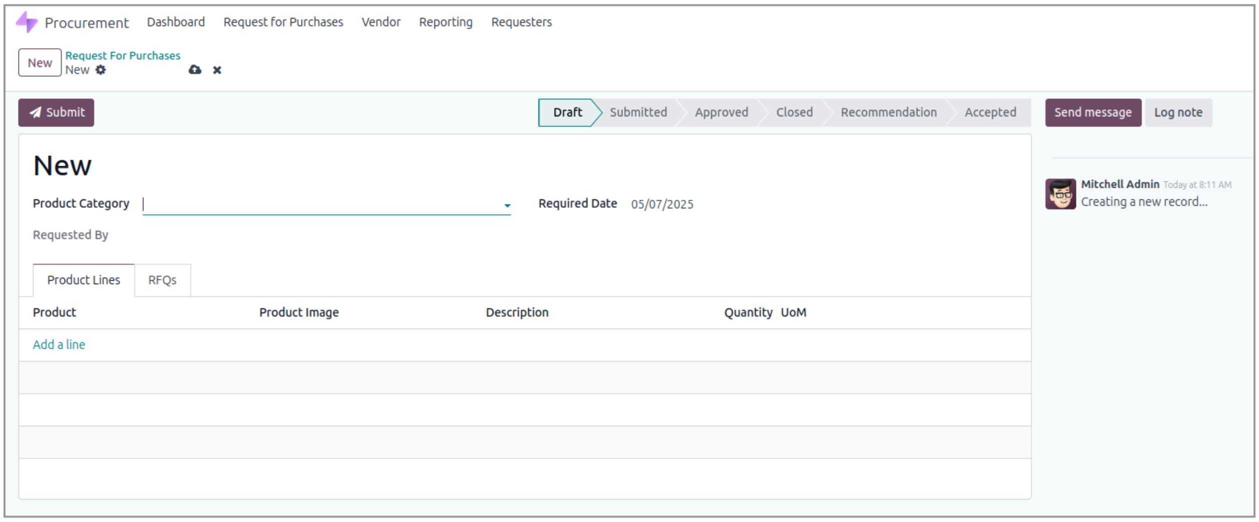


Figure 2.1.1 - RFP creation form view

The permission to create and manage RFPs are not limited to the internal users only. For example, like the internal users like Reviewer group, portal users like Requester Group can also create and manage RFPs but before that they have to go through a requester registration process. The process of registering as a requester is pretty much simple, unlike the vendor registration.

In order to do that they had to fill out a form consisting of several mandatory fields such as the Name, Email, and Phone for contact details. Specify the Reason for joining, and upload an image in JPG, JPEG, or PNG format. All fields are mandatory to complete your registration. After clicking the submit button, the process of becoming a requester is similar to the two step verification process of vendor registration.

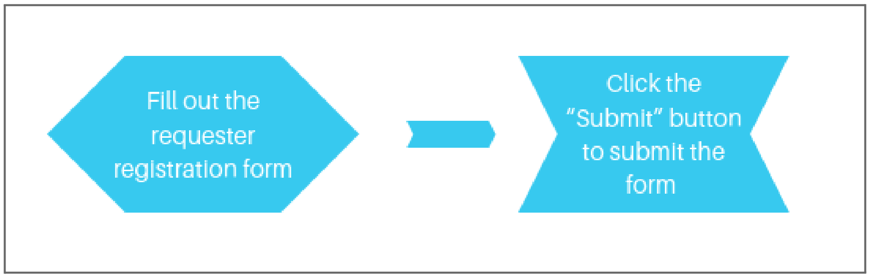


Figure 2.1.2 - Requester registration process

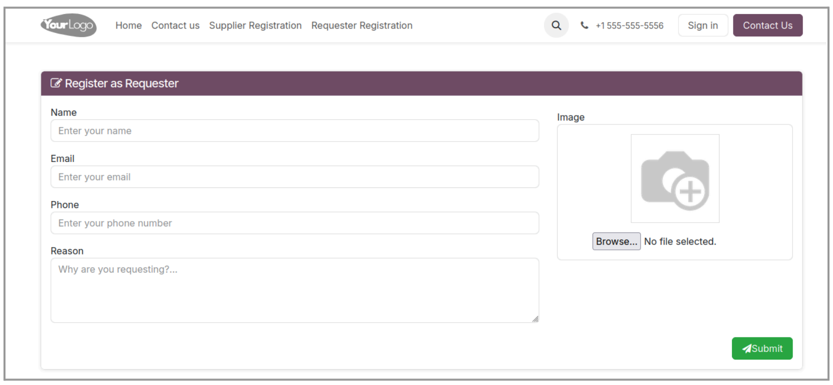


Figure 2.1.3 - Requester registration form in UI

Step 2 → Approval workflow for submitted RFPs

Once a Request for Proposal (RFP) is created by a reviewer or requester, its status initially remains in Draft. If the reviewer clicks the Submit button, the status changes to Submitted, signaling that the RFP is ready for the next step. Upon submission, an automated email notification is sent to the designated Approver group. Only members within this group have the authority to review and approve the RFP, allowing it to proceed further in the process.

If not submitted, the RFP will remain in the Draft stage until a reviewer initiates submission. Reviewers can return to the Draft stage if they want to make any changes by clicking the Return to Draft button.

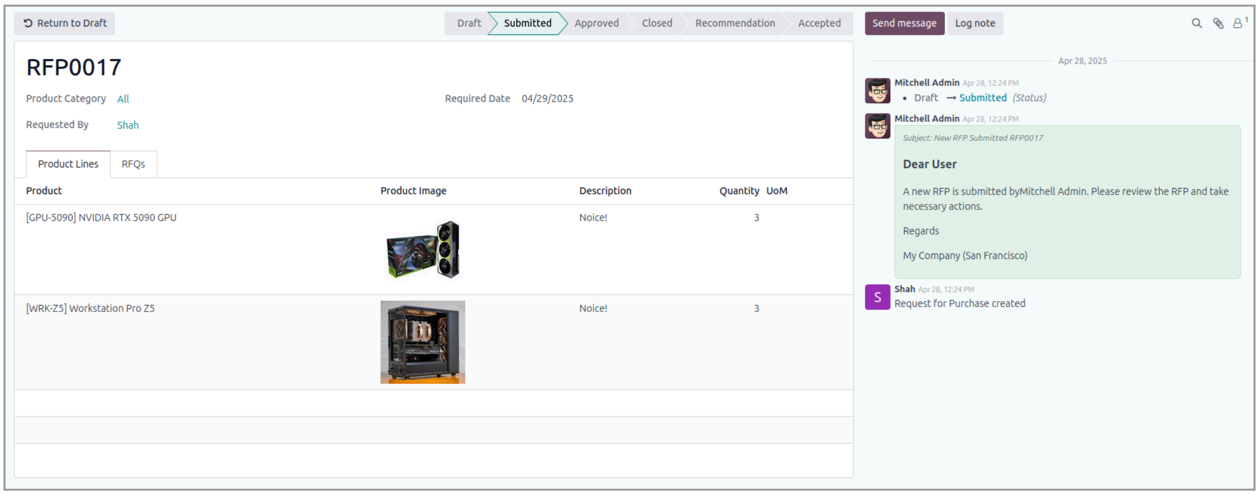


Figure 2.2.1 - Reviewer submitting the RFP

When a reviewer submits a Request for Proposal (RFP), its status changes to Submitted and it is forwarded to the Approver for verification and approval. The approver receives an automated email notification prompting them to review the RFP. At this stage, the approver has two options: approve or reject the RFP. If the approver clicks the Approve button, the RFP is published on the portal, making it visible and accessible to all registered vendors.

These vendors can then review the RFP and submit bids based on their eligibility and terms. However, if the approver selects the Reject button, the RFP is marked as rejected and will not be published on the portal. In such cases, the system automatically notifies the reviewer about the rejection, ensuring clear communication throughout the process.

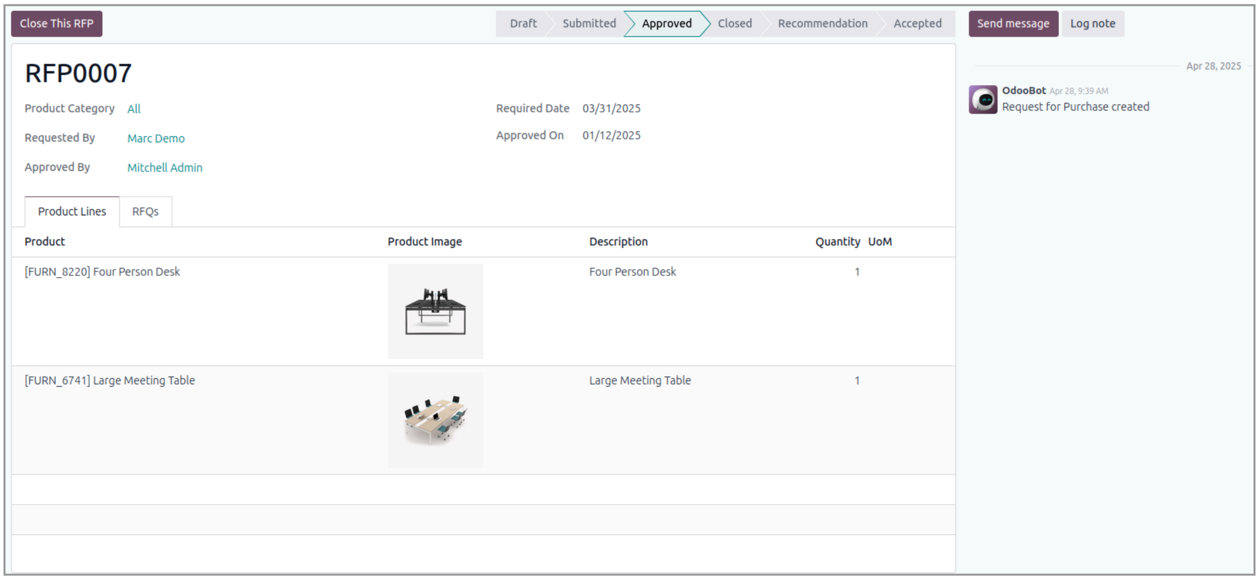


Figure 2.2.2 - Approver approving the RFP

Step 3 → Publication of approved RFPs on the portal

Once an RFP is approved by the Approver, it becomes publicly accessible on the portal, allowing all registered vendors to view and place bids. To participate, a vendor must first log in to the system using their credentials. Upon login, two primary menus are available: "Bid on RFP" and "My Bids". The Bid on RFP menu displays all active RFPs that vendors can access and bid on. The My Bids menu provides vendors with a view of all the bids they have previously submitted.

To place a new bid, the vendor navigates to the Bid on RFP menu, where a list view of available RFPs is presented. By selecting a specific RFP, the vendor is directed to a form view containing the RFP details. Here, they can review the requirements and submit their preferred bid accordingly.

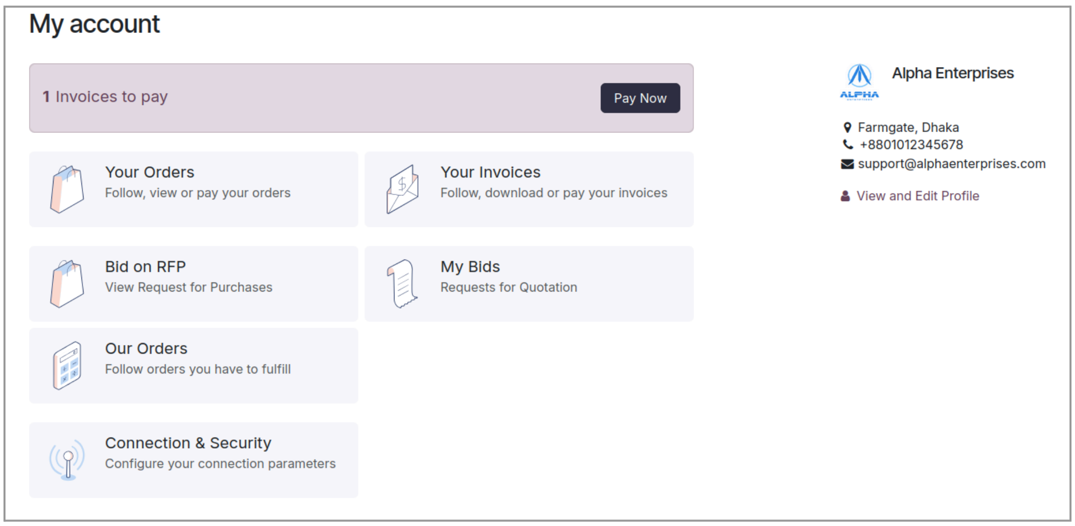


Figure 2.3 - Vendor's Portal Menu

Step 4 → Quotation submissions from vendors

To place a bid on an RFP, vendors are required to complete specific fields within the bid form. The form is pre-filled with essential details such as the required date, product name, product quantity, and product image. Vendors must then enter additional mandatory information, including the warranty period, delivery date, unit price, delivery charge, and tax percentage for each product listed.

As vendors input the unit price, delivery charge, and tax rate, the system automatically calculates the subtotal price for each product. Once all required fields are filled out, the vendor can submit the bid by clicking the Submit button. After submission, the bid enters the evaluation phase, and the vendor must wait for further updates to determine whether their bid has been accepted.

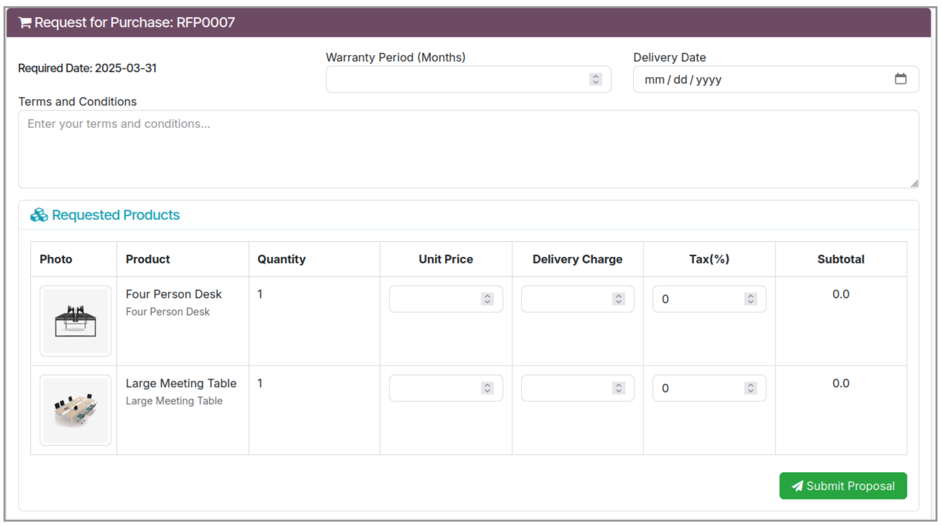


Figure 2.4 - RFP Bidding from Vendor’s Portal Menu

Step 5 → In-depth analysis of submitted quotations

After vendors submit their bids from the portal, the bids can be seen by the internal users in the RFQs tab by the reviewer. The quotation is basically The RFQs tab , defined as a One2many field using the purchase.order model, representing vendor responses to an RFP and include key fields for evaluation. Each line contains the vendor (Many2one), Expected Delivery Date, Terms and Conditions, Warranty Period in Months and description which is optional. A Score field allows reviewers to rate the bid while the System Score presents a system generated score based on parameters like price, delivery charge and warranty period. Moreover, the Recommended Boolean indicates the preferred vendor—only one RFQ per vendor can be marked as recommended. Product Lines (One2many) are submitted by the vendor through the portal and are shown only in the inline form view. The Total Price is computed as: **Total = Sum of all Subtotals + (Subtotal × Tax Rate)**, where each Subtotal = (Quantity × Unit Price) + Delivery Charge.

Step 6 → Two-step review process for quotations

At the end of the bidding period, the Approver clicks the Close button to officially stop accepting bids on the RFP. The RFP then enters a two-stage review process. First, the Reviewer evaluates all submitted quotations and marks one or more as Recommended, based on their suitability. This recommendation phase allows for multiple quotations to be flagged for consideration.

Next, the RFP moves to the final decision stage, where the Approver reviews only the recommended quotations. After careful assessment, the approver selects the most suitable one for the company, opens its form view, and clicks the Accept button to finalize and approve the winning quotation.

After this two step process and two approval from Reviewers and Approvers the quotation will finally be accepted and converted as a purchase order.

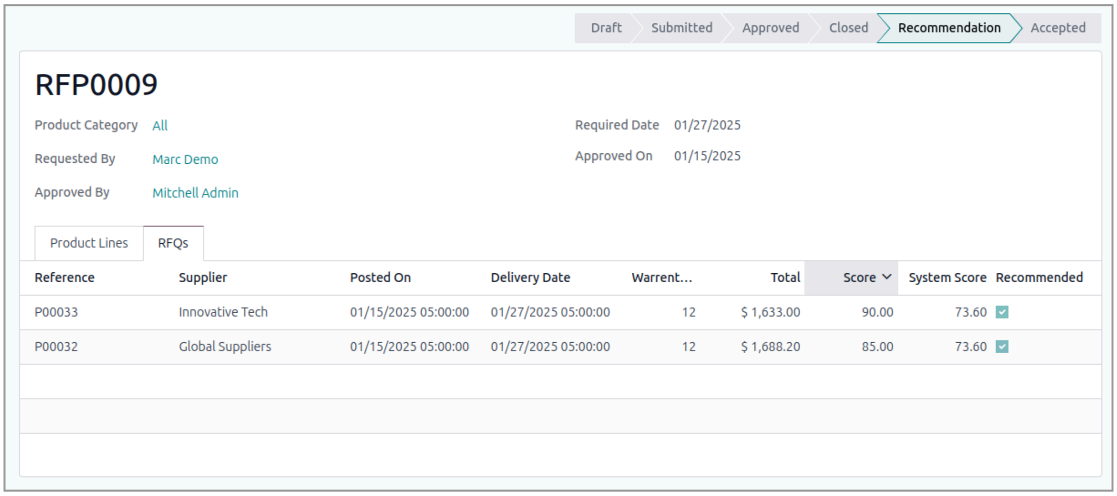


Figure 2.6.1 - RFQ Quotation in Recommended Stage

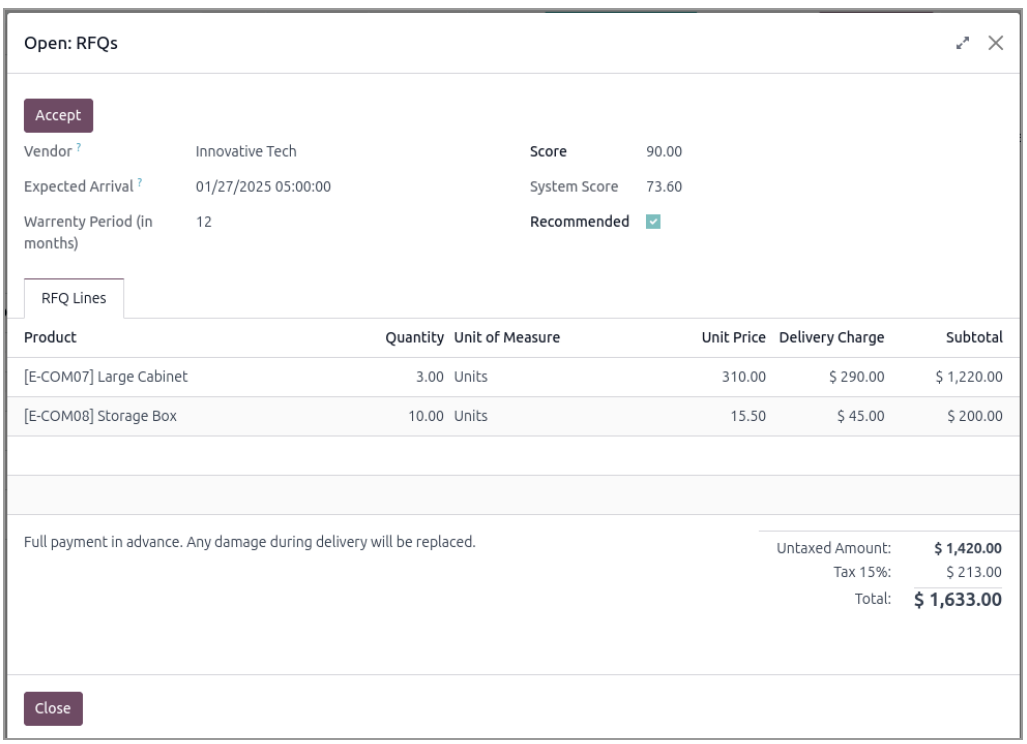


Figure 2.4 - RFQ in Accepted Stage

Feature - 3: Dashboard, Analytics, and Reporting

Step 1 → Built-in reporting tools to track key metrics and performance indicators

Create a menu under Reporting that opens a form view. This form uses a transient model, so it won't save records. It will have three required fields: Supplier (Many2one), Start Date, and End Date. There will be two buttons: one for showing a QWeb HTML preview, and another for generating an Excel report using **xlsxwriter**. Before generating the report, validate that start date ≤ end date. Also, check that the supplier has accepted RFPs in the date range. Raise an exception if either check fails. The Excel report includes four sections.

- Section 1: Show the current company logo top-left. If missing, raise an exception. Beside it, show the supplier name (title style) and a table with email, phone, address, TIN, bank name, account name, account number, IBAN, and SWIFT.

	A	B	C	D	E	F	G
1	Your logo						
2						Global Suppliers	
3							
4					**Email**	contact@globalsuppliers.com	
5					**Phone**	+8801912345678	
6					**Address**	Dhanmondi, Dhaka	
7					**TIN**	2345678901234567	
8					**Bank**	Standard Chartered Bank	
9					**IBAN No.**	IBAN0000000003	
10					**Swift Code**	SCBLBDH	
11					**Account name**	Mehedi Hasan	
12					**Account number**	0000000003	

Figure 3.1.1 - Section 1 of Excel Report - Contact Information

- Section 2: Show a table of accepted RFPs with columns: number, date, required date, and total amount. Show net total at the bottom.

Accepted RFPs			
RFP Number	Date	Required Date	Total Amount
RFP0001	02-01-2025	08-01-2025	2270
RFP0002	03-01-2025	10-01-2025	3680
RFP0004	05-01-2025	14-01-2025	2540
RFP0005	07-01-2025	17-01-2025	6880
Net Amount			15370

Figure 3.1.2 - Section 2 of Excel Report - Accepted RFPs Information

- Section 3: Group product lines by product. Show columns: product name, total quantity, total unit price, delivery charge, and subtotal. Show the final total, which must match the net amount from Section 2.

Product Lines					
RFP	Product	Quantity	Unit Price	Delivery Charge	Subtotal
RFP0001	Corner Desk Right Sit	5	145	170	895
	Large Cabinet	3	310	250	1180
	Storage Box	10	15.5	40	195
RFP0002	Large Desk	2	1100	90	2290
	Pedal Bin	15	90	40	1390
RFP0004	Corner Desk Left Sit	5	140	160	860
	Flipover	1	1500	180	1680
RFP0005	Desk Stand with Scree	2	2050	95	4195
	Individual Workplace	3	880	45	2685
Net Amount					15370

Figure 3.1.2 - Section 3 of Excel Report - Product Lines Information

- Section 4: Show the company’s email, phone, and address, each on a new line. In the HTML preview, the layout is similar. The header shows only the company logo with a horizontal line. Supplier info is placed below it.

Moreover, For visual analysis, add a Graph View that defaults to a line chart. The x-axis should display the required date broken down monthly, while the y-axis shows the total amount. The legend must include the RFP number, vendor, and status. Both bar and line graphs should load with data in an unpacked state, and clicking on any graph element must not redirect to another view.

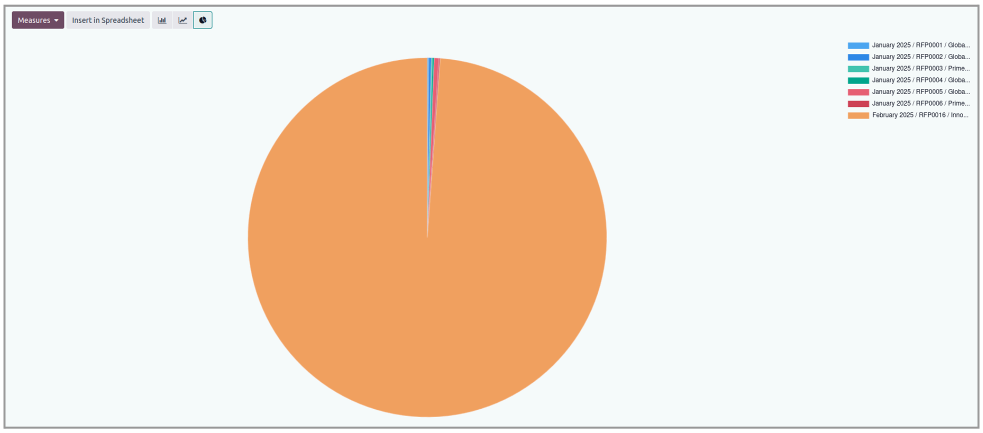


Figure 3.1.3 - Graph view of RFP Menu for Internal Users

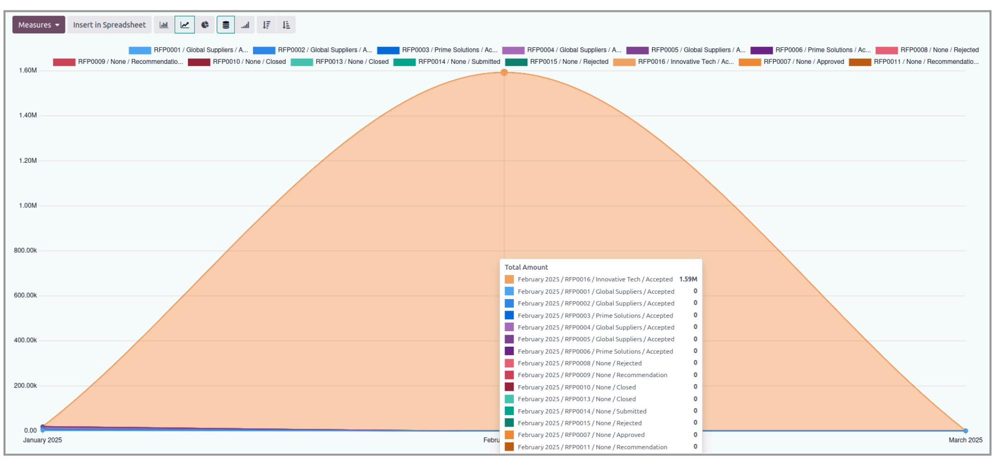
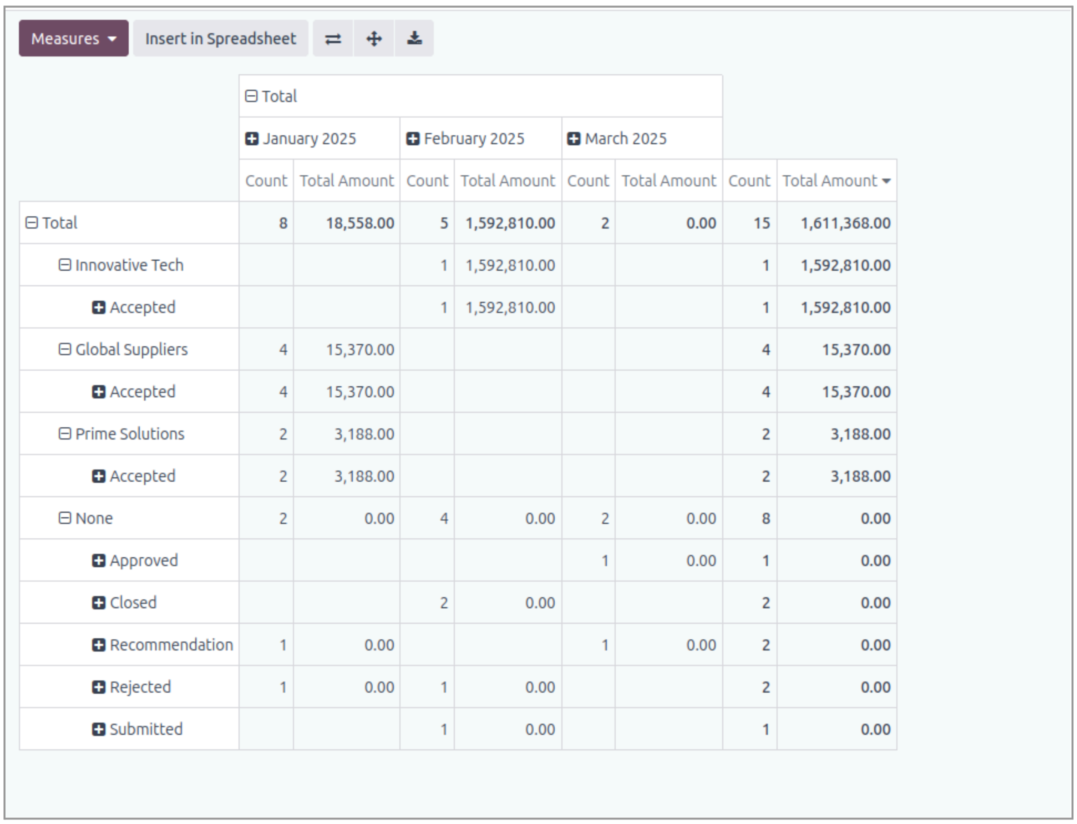


Figure 3.1.4 - Graph view of RFP Menu for Internal Users

The Pivot View should display Suppliers as rows and Required Dates as columns, grouped by month. Each supplier row should expand into a status-based sub-row. By default, the pivot should measure and display both the count and total amount of RFPs, and this measured data must appear in descending order for quick insights.



	Total							
	January 2025		February 2025		March 2025			
	Count	Total Amount	Count	Total Amount	Count	Total Amount	Count	Total Amount
Total	8	18,558.00	5	1,592,810.00	2	0.00	15	1,611,368.00
Innovative Tech			1	1,592,810.00			1	1,592,810.00
Accepted			1	1,592,810.00			1	1,592,810.00
Global Suppliers	4	15,370.00					4	15,370.00
Accepted	4	15,370.00					4	15,370.00
Prime Solutions	2	3,188.00					2	3,188.00
Accepted	2	3,188.00					2	3,188.00
None	2	0.00	4	0.00	2	0.00	8	0.00
Approved					1	0.00	1	0.00
Closed			2	0.00			2	0.00
Recommendation	1	0.00			1	0.00	2	0.00
Rejected	1	0.00	1	0.00			2	0.00
Submitted			1	0.00			1	0.00

Figure 3.1.5 - Pivot view of RFP Menu for Internal Users

Step 2 → Advanced analytics dashboard providing real-time insights

The system provides a dynamic dashboard where users can choose a supplier from a dropdown and filter data by date ranges like this week, last month, or last year. Based on the selection, the dashboard will display the total number of approved RFQs, the total approved amount, and a product-wise summary showing each product's name and quantity linked to the supplier within the selected period.

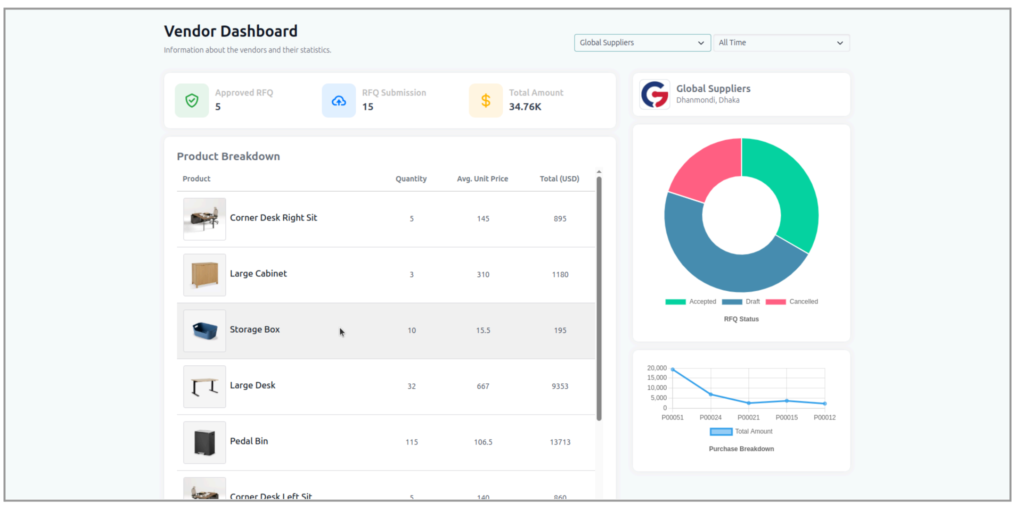


Figure 3.2 - Advanced Dashboard with Analytical Charts

Feature - 4: Dockerization Support

Step 1 → Odoo Installation & Setup

1. **Install necessary dependencies:**
    - Download the source code via Odoo Apps Store.
    - Open the module source code into an IDE.
    - Then cd into the module directory and run `pip install -r requirements.txt`.

2. **Create a New Database:**
    - Open your web browser and navigate to your Odoo instance (usually at http://localhost:80).
    - On the database management screen, click "Create Database".
    - Fill in the required details such as the master password, database name, email, password, and company information.
    - Click "Create Database" to proceed.

3. **Install the 'VendorBid' Module:**
    - Once logged into Odoo, navigate to the Apps menu.
    - If you don't see the **VendorBid** module, click on "Update Apps List" to refresh the available modules (Also, cut the Apps filter by clicking the cross button after it).
    - Search for "**VendorBid**".

- Click "Install" next to the **VendorBid** module.

4. **User Management:**
    - Navigate to Settings > Users & Companies > Users.
    - Create new user accounts as needed.
    - Assign appropriate groups to each user:
        - **Reviewer:** For users responsible for reviewing supplier registrations and quotations. For example → For a demo reviewer Morgan Demo, Login: **morgan** & Password: **morgan**.
        - **Approver:** For users with final approval rights over supplier registrations and RFPs. For example → For a demo approver Mitchell Admin, Login: **admin** & Password: **admin**.
    - Configure additional user settings and access rights as required.

5. **Outgoing Mail Server:**
    - Set a Name for the mail server.
    - In FROM Filtering, enter gmail.com.
    - In the Connection tab:
        - Choose SSL/TLS for encryption.
        - Set SMTP Server to smtp.gmail.com.
        - Enter the correct Username and Password.
    - Click Test Connection.
    - If successful, the setup is complete.
    - If it fails, check all inputs and try again.

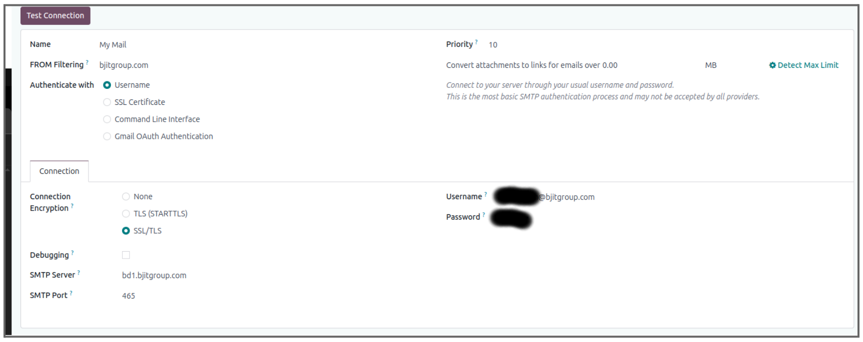


Figure 4.1 - Setting up Outgoing Mail Server

Step 2 → Docker integration for seamless containerization

The project comes with built-in Docker support, enabling developers to easily containerize the application. Docker Compose handles dependencies and service orchestration, ensuring a consistent environment across development, staging, and production. This simplifies the setup process and minimizes compatibility issues. Detailed instructions for Dockerizing the application are provided in the README.md file, along with the necessary docker-compose.yaml and odoodocker.conf files in the source code.

Step 3 → Flexible deployment options using Docker

Thanks to Docker, deployment is highly adaptable. You can either use a prebuilt image for quick launches or build a custom image suited to your environment. Configuration files like nginx.conf, odoodocker.conf, and docker-compose.yml are available for customization, giving full control over performance tuning, network setup, and service behavior based on your deployment needs.