Functional Configuration Document

Introduction

Purpose

This document defines how the Odoo system will be functionally configured to meet XMPS business needs. It bridges the gap between the business requirements and the actual setup of the ERP modules.

Assumptions & Constraints

- The system will not cover payroll or salary management, though it may be considered for future expansion.
- The training phase is excluded, as this implementation is part of a graduation project.
- Only standard Odoo features will be used; no custom development or third-party modules will be implemented.

Modules Configurations:

Purchase Module

The Purchase module will be configured to manage procurement processes related to printer assets, consumables, and spare parts. The key functional elements include:

- **Creating RFQs (Request for Quotations)** for:
  - Printer assets
  - Toner cartridges
  - Films
  - Spare parts
- **Monthly purchases** of master paper and consumables to maintain adequate stock levels.
- Purchase operations will follow standardized procurement procedures, supporting traceability and vendor communication through Odoo's built-in purchase workflow.

Inventory Module

The Inventory module will be set up to manage and monitor stock movements of assets and consumables across multiple locations with a high level of traceability. The configuration will include:

- **Two main warehouses**:
  - **Assiut (HQ Warehouse)**
  - **Cairo (Branch Warehouse)**
- **Each warehouse is divided into four internal zones**:
  - Printers (tracked by serial numbers)
  - Films
  - Toner Cartridges
  - Spare Parts
- In the **Assiut warehouse**, a dedicated internal zone will be established for the **Printer Renewal Center** to handle printer refurbishments and renewals.
- A separate **Customer Warehouse** will be created, containing individual locations for each customer to clearly track and manage printers assigned to them.

- **Putaway rules** will be used to automatically route incoming products to their respective storage zones.
- **Printer assets** will be tracked using **serial numbers**, ensuring traceability from receipt to customer site deployment.
- An additional **virtual warehouse will be created to represent customer locations**, where each location is named after the corresponding customer. This enables tracking of printer asset movement and current on-site location.
- A **virtual location linked to the expense account** will be used to manage the cost of dispensed spare parts and toners.
- A **dedicated virtual location in the Assiut warehouse** will be used for **printer asset reevaluation**. This location is linked to a contra account that adjusts the asset value in accounting.
- **Printer asset renewals** will only occur within the Assiut warehouse.

Employee Module

The **Employee** module will be used to manage profiles of technical staff involved in field operations. The configuration and usage will include:

- Creation of employee records for **technicians** responsible for:
  - Printer installation at client sites.
  - Ongoing maintenance and support visits.

- Employees will be **assigned tasks** within the **Project module**, facilitating task ownership and progress tracking.
- Employees will also be linked to **expenses** submitted through the **Expense module**, allowing for accurate cost allocation.
- The system will **not include payroll or salary management** as it is outside the scope of this graduation project.
- This setup ensures proper association of operational activities with the respective employees, supporting accountability and accurate cost reporting.

Expense Module

The **Expense** module will be configured to track costs related to **technician visits** for printer installation and maintenance at client locations. The setup includes:

- A dedicated **expense product** will be created to represent **"Technician Visit"**.
- Expenses will be recorded **directly from the Project module**, linked to the relevant task or operation.
- Each expense will be **automatically linked to the analytic account** associated with the client's project, enabling precise tracking of costs per client.
- This configuration allows for clear visibility into service costs and supports financial reporting and profitability analysis.

Sales Module

The **Sales** module will handle commercial transactions related to **films and papers** provided to clients. The configuration includes:

- **Sales Orders** will be created directly from the **Project module** to ensure seamless tracking of related revenue.
- All sales will be linked to the **analytic account** of the respective project, enabling accurate profit and loss analysis per client.
- **Price lists** will be configured to manage varying sales prices based on agreements or volume.
- This setup ensures that both the **revenue** and **cost of goods sold (COGS)** are accurately traced through the related analytic accounts, enhancing reporting and decision-making.

Accounting Module

The **Accounting** module will be configured to manage financial transactions, track costs, and support the financial analysis for XMPS. The configuration will include:

- **Analytic Accounting** will be enabled to track financial data at the project level, including revenue and expenses for each client.
- **Anglo-Saxon accounting** method will be used for accounting entries.
- **FIFO** (First-In-First-Out) will be configured for **inventory valuation**, ensuring that the oldest stock is consumed first for accurate costing.
- Two **cash journals** will be created:
  - **Assiut Cash Journal** for transactions related to the Assiut warehouse and operations.
  - **Cairo Cash Journal** for transactions related to the Cairo warehouse and operations.
- **No tax handling** will be implemented for products or assets in this configuration as per the project scope.
- A **miscellaneous ledger** will be established to track **printer assets**, ensuring accurate asset tracking and depreciation.
- **Asset models** will be created for **printers** to facilitate proper asset management and revaluation within the system.

Project Module

The **Project** module will be configured to manage tasks and activities related to each client. The key configurations include:

- **Project Creation**: A new **project** will be created for each client, ensuring that all activities (tasks, expenses, sales orders) are centralized under one project for accurate tracking.
- **Task Stages**: The project will include **four fixed task stages** to track the project's key activities:
  1. **Printer Installation**
  2. **Toners and Spare Parts Dispense**
  3. **Maintenance**
  4. **Printer Removal**
- Tasks will be listed under each stage, but the tasks will **not move** from one stage to another. This approach ensures that each stage remains fixed, providing clear tracking of project activities.
- **Sale Orders, Expenses, and Stock Moves** will be handled directly from within the project, linking all financial and inventory movements to the project's analytic account.
- This configuration will help ensure that all activities are tracked, and revenue and costs are correctly associated with the respective project.