AVI-SYS 1.0

Module 1: Financial Analytics & Cashflow

Purpose: To enable comprehensive tracking, analysis, and reporting of financial metrics and accounting ratios to understand the financial health of the company. To create a reliable dashboard that gives a complete cashflow analysis.

Business Requirements:

1. Financial Dashboard:

- Create an interactive dashboard with all the relevant accounting ratios and metrics pivotal to the health of the company.
- Companies' projections and goals can also be planned/tracked here and compared against actuals.

2. Accounts Restructure (Tally Prime):

- Restructure Accounts Bookkeeping (Tally Prime) with accounts team.
- Use TDL for Report generation and integrate Tally Prime with Odoo

3. Cash Flow Dashboard:

- Scheduling and tracking of all vendor payments and their terms. Prioritize the criticality of vendor payments.
- Tracking of customer payment schedules according to their terms from dispatch through to payment completion.
- Establish Dunning Systems (templated emails for both).
- Dashboards displaying real-time cash positions, with drill-down capabilities for detailed transaction analysis.
- Ability to run what-if scenarios to experiment cash positions in different situations.

Module 2: Product Development & Costing

Purpose: To document all product-related information in one place. To accurately determine the cost price of components and products, facilitating strategic pricing decisions and cost management.

Functional Requirements:

1. Product Master Data & synced BOM:

- Product master data to be aggregated and uploaded. Any deviation from the standard procedure or targets in the PMD will be highlighted.
- Track theoretical cost, actual cost, and quoted cost.
- Integration with commodity price indices to reflect market volatility in component pricing. Modify child part theoretical cost proportionate to its weighted commodity cost change.

2. BOM creation:

- Ability to easily propose and quote industrial designs to customers by choosing specs from existing child parts or creating new ones.
- New product development life cycle is to be followed.
- Scenario analysis features to project how changes in specs affects sales price and GP.
- Compatibility of the child parts should be guaranteed without conflicts.

3. Market Analysis & Product Category Placements

- Track specs of each product and place them in categorized segments (mid, premium, high).
- Report on competing markets, their sales and differentiating factors.

Module 4: Planning & Budgeting

Purpose: To create a comprehensive system that allows for detailed financial planning and budgeting across all departments, ensuring that resources are allocated efficiently, and strategic goals are financially supported.

Functional Requirements:

1. Budget Creation and Management:

- Tools for setting up and managing departmental budgets, with the ability to roll up into an overall corporate budget.
- Capability to handle multiple budget versions and scenarios for flexible planning.
- System for tracking actual expenses against budgeted amounts with real-time reporting. Alerts for budget overruns and tools to manage unbudgeted expenses.

2. Production Planner

- Maintain forecast, firm plan and PO.
- Build a tool to help planning team schedule monthly production plan by providing them stock and supply information. Publish the production plan to relevant teams.
- Ability to track and notify any change in production plans during the month.
- Automatic supply requirement analysis for the scheduled production plan
- Maintain production stoppage tracker.

3. Procurement Planner

- Takes supply requirements analysis and current stock as the input.
- Build a tool to help purchase team schedule monthly purchase plan.
- Ability to track supply status in real time and provide alerts when there is possible miss in delivery.

4. Sales/Dispatch Planner

- Interact with customer portals to manage dispatch schedules against raised PO.
- Manage any changes in dispatch schedules or PO.

5. Labor allocation Planner

• Planner for the labour allocation to work centres within the unit based on daily production plan of the work centre.

Module 5: Material Flow & Inventory

Purpose: To ensure precise tracking of material flow through each stage of production, optimizing cost centres, and improving overall manufacturing efficiency.

Functional Requirements:

1. Material Tracking and Traceability:

- Detailed tracking of materials from receipt through to finished goods, using bar code, batch, or serial numbers where applicable.
- Label locations in the unit: warehouses, work centres, etc.

2. Storage and Inventory Management:

- Real-time visibility into inventory levels across various stages of production and storage locations.
- Implementation of First-In-First-Out (FIFO) and ageing inventory management practices.

3. Cost Centre Management:

- Definition and management of individual cost centres, such as fabrication, assembly, and finishing.
- Tracking of performance against profitability targets and efficiency benchmarks.

Module 6: Quality Inspection

Purpose: To manage and maintain the highest standards of quality control at every stage of the production process, from supplier quality checks to final pre-dispatch inspections.

Functional Requirements:

1. Inspection Planning and Scheduling:

- Capability to set inspection schedules, sampling rates, and inspection criteria for each stage of production.
- Tools for planning and tracking regular and random inspections as per quality standards.

2. Data Collection and Analysis:

- Digital collection of inspection data to minimize errors and streamline the quality control process.
- Analytical tools to assess inspection results and identify trends or recurring issues.

3. Non-Conformance and Deviation Management:

- Workflow management for non-conforming products, including segregation, root cause analysis, and corrective actions.
- Tracking of deviations, rework, and scrap rates to measure against quality objectives.

4. Automation

• To employ computer vision or equivalent systems to automate quality testing. To move from samplings to fast 100% testing and segregations.

5. Supplier Scorecard

- Maintain a vendor list with segregation based on their current status primary source, legacy, on-hold, prospective, alternate source, etc.
- Track their delivery and quality records.
- Maintain a comprehensive scorecard to each vendor.

Module 7: HR, IT & Admin

Purpose: To enhance the productivity and effectiveness of meetings and task management within the company, ensuring that strategic decisions are followed by actionable tasks and consistent follow-ups.

Functional Requirements:

1. Approval Workflow Configuration:

- Tools to define and configure approval workflows for various processes including procurement, expense management, and capital expenditure.
- Flexibility to customize workflows based on project complexity, cost, or departmental requirements.

2. Asset Management:

- All assets from electronics to Molds and dies data will be record through its lifetime from purchase to scrap/sell.
- All relevant information about the asset is stored in one spot (ex: invoice, warranty, spec sheet or user manual)
- Service and maintenance tracker to be well maintained.

3. Payroll Processing:

- Integration with biometric systems to accurately track employee hours, overtime, and leave.
- Capability to reconcile time records of Contract labourer's data with payroll processing for accurate salary calculations.
- Automated calculation of gross pay, deductions, taxes, and net pay based on company policies and statutory regulations.
- Support for various pay components such as bonuses, commissions, and reimbursements.
- Maintain payroll and other records for each employee, including pay slips, tax forms, and historical data.
- Salary Disbursement: 1st of each month!

4. Org structure:

- Build a tool which tracks the organization structure detailing employee's roles and responsibilities, their KPIs and KRAs.
- Maintain employee contact information and their performance scorecards.

- A system to establish and maintain the organizational hierarchy and authority levels for approval processes.
- Features to update and manage changes in personnel or authority levels.
- Automated alerts and reminders to approvers for pending actions to ensure timely decision-making.
- Escalation procedures for overdue approvals to maintain process flow.

5. Meeting Management & Task Management:

- Prepare SOPs to follow standard meeting etiquettes. Avoid unnecessary meetings. Determine the real goals of each meeting and measure it by value per minute metric.
- Scheduling tools for setting up meetings, including integration with companywide calendars.
- Features to distribute agendas, track attendance, and record meeting minutes.. Real-time tracking of task progress and completion status.
- Automated reminders for upcoming deadlines and overdue tasks. Escalation procedures for tasks that are not progressing as planned.

6. Documentation and Storage:

- Server housekeeping and maintenance
- Manage Product drawings and their version control management.

7. Collaboration and Communication:

- Communication tools integrated into the task management system to facilitate discussion and updates.
- Collaboration features to allow team members to work together and share information efficiently.

DevOPS:

- User Based Access Restriction.
- Log of data changes.
- Data Security and recovery.
- Data integrity with Test scripts
- External API?
- Documentation
- GDPR...