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.

1. **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.

1. **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 company-wide 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…