**Customized & Configured Odoo ERP Modules**

**Project:** Odoo ERP Integration for Safaricom Telecom  
**Version:** 1.0  
**Date:** [Insert Date]

**A. Purpose**

To outline the customization and configuration of key Odoo ERP modules that align with telecom-specific processes, enabling seamless operations, accurate billing, customer relationship management, financial control, and inventory management.

**B. Customized Modules Overview**

| **Module** | **Key Customizations & Configurations** | **Business Benefits** |
| --- | --- | --- |
| **Billing** | - Integration with mobile money platforms (e.g., M-PESA API) for payment processing and reconciliation. |  |

* Telecom-specific billing cycles, discounts, and bundles management.
* Automated invoicing and real-time usage tracking integration from OSS/BSS systems.
* Support for prepaid and postpaid plans with dynamic tariff configurations.
* Taxation compliance configured as per Kenyan regulations. | Accurate, timely billing, improved revenue assurance, reduced manual errors. |  
  | **CRM** | - Customized customer lifecycle workflows specific to telecom services.
* Integration with call centers and support ticketing systems.
* Customer segmentation for targeted marketing and retention campaigns.
* Automated lead scoring based on usage and payment behavior.
* Real-time synchronization with mobile apps and portals. | Enhanced customer engagement, improved lead conversion, and support efficiency. |  
  | **Finance** | - Chart of Accounts aligned with telecom financial reporting standards.
* Integration with billing and procurement modules for automatic ledger updates.
* Multi-currency and multi-entity consolidation support.
* Automated financial reporting and compliance with local tax laws.
* Budgeting and forecasting tailored to telecom operational cycles. | Streamlined financial operations, accurate reporting, regulatory compliance. |  
  | **Inventory**| - Configuration for telecom assets tracking (SIM cards, devices, network equipment).
* Automated reorder points and vendor management integration.
* Integration with procurement and finance for cost tracking.
* Real-time inventory visibility across multiple locations.
* Support for warranty and lifecycle management of telecom hardware. | Optimized inventory levels, reduced stock-outs, and improved asset management. |

**C. Configuration & Customization Approach**

| **Step** | **Description** | **Deliverable** |
| --- | --- | --- |
| Requirements Gathering | Document telecom-specific process requirements. | Functional Specification Documents |
| Module Customization | Develop custom modules or extend standard Odoo apps. | Customized Odoo Modules |
| Integration Setup | Configure APIs and middleware for external systems. | Integration Connectors and APIs |
| Workflow Automation | Design automated workflows and triggers. | Workflow Configurations |
| Security Configuration | Define user roles, access rights, and data segregation. | Role-Based Access Control (RBAC) Setup |
| Testing | Unit, integration, and UAT for all customizations. | Test Cases and Test Reports |
| User Training | Develop training materials tailored to telecom users. | Training Manuals and Sessions |
| Deployment | Deploy customizations into production environment. | Production Deployment Package |
| Post-Deployment Support | Provide hypercare support and issue resolution. | Support Tickets and Resolution Logs |

**D. Key Integration Points**

| **Integration Interface** | **Description** | **Frequency** | **Security** |
| --- | --- | --- | --- |
| OSS/BSS System | Real-time usage data for billing and service management | Real-time | OAuth2, TLS |
| Mobile Money Platform (M-PESA) | Payment processing and reconciliation | Real-time | OAuth2, Mutual TLS |
| Procurement System | Inventory replenishment and purchase approvals | Batch / On-demand | API keys, TLS |
| Financial Systems | Ledger posting and reporting | Batch | Encrypted channels |
| Customer Support Portal | CRM case and ticket synchronization | Real-time | Role-based Access Control (RBAC) |

**E. Compliance & Localization**

* Taxation configured as per Kenya Revenue Authority (KRA) standards.
* Data privacy compliance aligned with Kenya Data Protection Act (KDPA).
* Language localization (English/Kiswahili) for UI where applicable.
* Currency and regional formats set for Kenyan Shilling (KES).

**F. Performance Optimization**

* Database indexing for large transaction volumes.
* Load testing for billing batch processing.
* Caching frequently accessed customer and inventory data.
* Monitoring and alerting on critical module performance metrics.