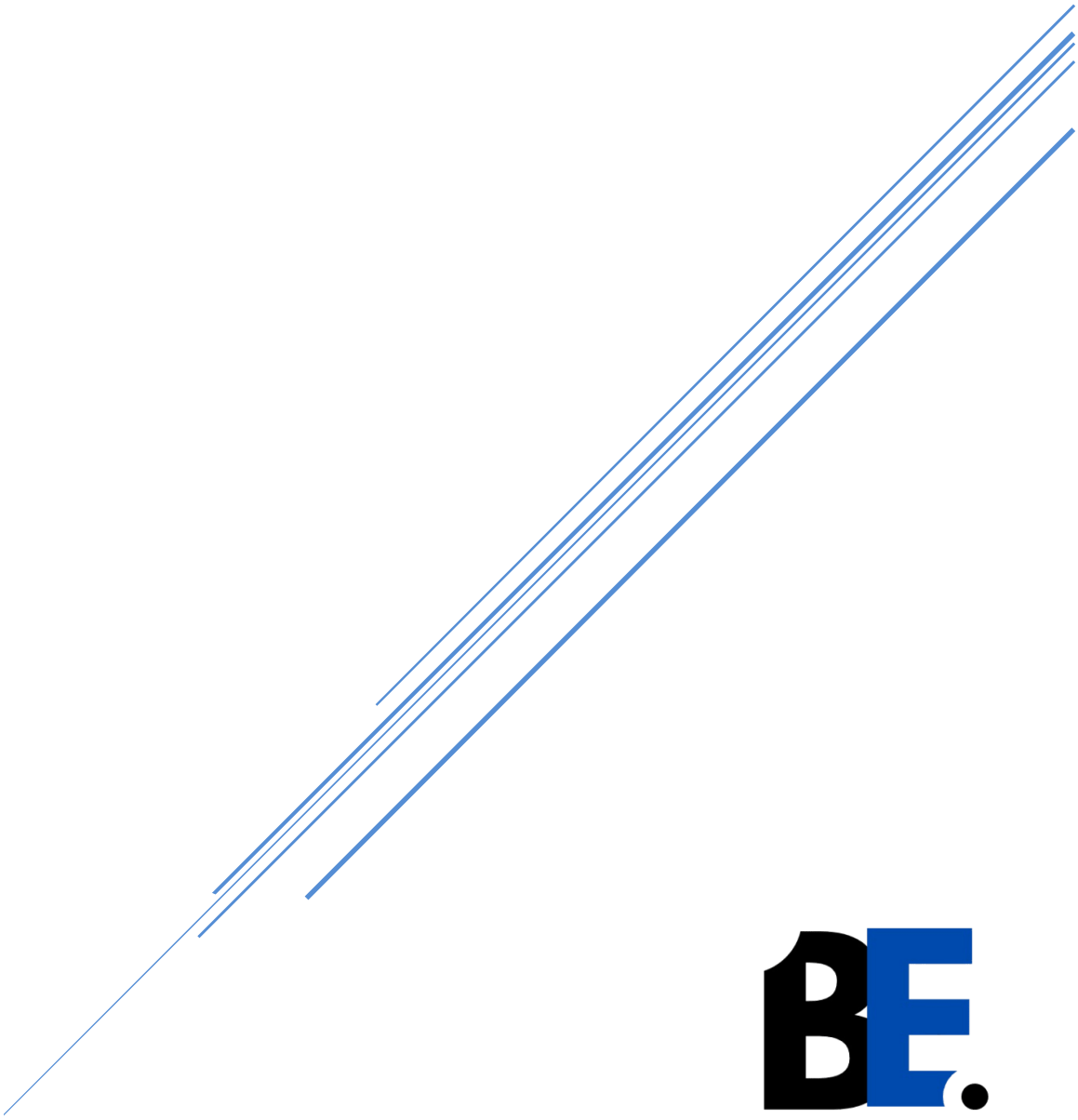
ENTERPRISE OPERATIONS, TICKETING & WORKFLOW MANAGEMENT PLATFORM

IMPLEMENTATION PROPOSAL



BETAEDGE

Proposal Reference: BE-LDU-D1-2026

Tadawul Tech

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1. Executive Summary

Tadawul Tech requires more than a basic ticketing application. Based on the reviewed business requirement documents and operational process documents, the business need is for a centralized **enterprise operations management platform** that digitizes, controls, tracks, and reports all service requests, operational procedures, client support activities, internal escalations, and interdepartmental workflows. The current requirement covers operational support, merchant operations, client inquiries, settlements, maintenance requests, POS service requests, returns, complaints, top-up requests, and internal follow-up across several departments.

The proposed solution is an integrated **ERP-based workflow and service management platform** that will unify operational requests into one controlled environment. It will provide structured ticket registration, SLA monitoring, departmental routing, approval workflows, audit trails, dashboards, analytics, staff accountability, and system integrations with Tadawul Tech's surrounding platforms. The project objective is to convert fragmented and manual operational handling into a measurable, trackable, scalable enterprise process. The BRD already identifies the key goals as facilitating business, following up procedures, solving problems with escalation, evaluating performance, improving operational control, and obtaining accurate statistics.

This proposal presents the business understanding, solution scope, target operating model, system modules, implementation approach, technical architecture, governance framework, and phased timeline for delivery.

2. Understanding of Business Need

2.1 Current Situation

The reviewed documents show that Tadawul Tech has multiple operational units handling client and merchant-related requests. These requests are operational in nature and not limited to IT support. They include merchant settlements, update of banking information, POS maintenance, new service activation, returned checks, client complaints, voucher issues, settlement reports, card replacement, location data updates, QR replacement, and other service scenarios. Each of these processes involves multiple departments, specific actors, action times, expected resolution times, and manual handoffs.

The Operational Support Team document explicitly describes the need to record and follow each issue from the official channels until it is resolved, with a ticket opened in an issue ticketing system and tracked through to closure. It also specifies the essential ticket elements such as ticket number, date, issue code, affected client, raised by, created by, owner unit, priority, handling scenario, status, estimated time, actual time, and notes.

2.2 Business Drivers

The reviewed BRD identifies the following business drivers:

- Time saving
- Clear follow-up of procedures
- Statistics for all procedures and transactions
- Performance evaluation

These drivers indicate that Tadawul Tech is not merely seeking a call logging tool, but a platform for operational governance and performance management.

2.3 Strategic Need

The organization needs a system that can:

- Centralize all operational requests in one platform
- Standardize issue handling across teams
- Route work automatically to responsible departments
- Track due dates and SLA obligations
- Provide traceability and accountability for each action

- Measure staff and team performance
- Reduce manual dependency on email, spreadsheets, and calls
- Generate statistics for management decisions
- Integrate with finance, customer service, call center, and existing business systems

3. Proposal Objective

The objective of this proposal is to implement a centralized ERP-based enterprise platform that will:

- Digitize and standardize Tadawul Tech's operational support and merchant service processes
- Establish a formal ticketing and workflow engine for all internal and client-related service requests
- Integrate operational workflows with surrounding business systems
- Introduce visibility, auditability, and accountability at every transaction stage
- Improve service turnaround, reduce follow-up effort, and strengthen management control
- Enable executive reporting through live dashboards and analytical metrics

4. Proposed Solution Overview

The proposed solution is an Enterprise Operations, Ticketing, and Workflow Management Platform built on an ERP framework with configurable modules, workflows, forms, approvals, dashboards, and integration services.
This platform will serve as the central operational backbone for:

- Operational Support Team
- Merchant Operations Unit
- Sales support channels
- CRM / account management channels
- Finance coordination
- Customer service
- IT coordination
- Call center integration
- HR involvement where needed

The platform will not act only as a helpdesk. It will operate as a structured enterprise transaction management system in which each business request becomes a trackable digital case with ownership, time commitment, dependencies, approvals, and measurable outcome.

5. Target Business Scope

5.1 Included Business Areas

Based on the source documents, the platform should cover at minimum:

A. Merchant Operations

- Merchant settlement handling
- Merchant banking information updates
- Settlement report requests
- Merchant card replacement
- Returned check management

- Missing transaction handling
- Merchant inquiry handling
- Merchant complaint handling
- Reverse transaction handling / money return to merchant card

B. Operations Support

- Damaged vouchers
- Expired vouchers
- POS maintenance
- New service requests
- New POS and QR requests
- POS returns
- SIM card replacement
- POS data updates
- POS location changes
- Merchant card top-up
- Merchant card replacement
- Cashier card replacement
- POS type changes
- QR replacement / phone number update

C. General Operational Ticketing

- Client complaint and inquiry logging
- Escalation management
- Interdepartmental coordination
- SLA tracking
- Management reporting
- Performance evaluation

6. Proposed ERP Modules

6.1 Core Platform Administration Module

This module manages the structure of the platform and provides the master controls for operation.

Functions:

- Organization structure
- Departments and sub-units
- User management
- Roles and permissions
- Teams and assignment groups
- Escalation matrix
- Priority matrix
- SLA policies
- Ticket categories and issue codes
- Notification rules
- Workflow configurations
- Audit log settings

Outcome:

Ensures the platform is controlled, secure, scalable, and governed.

6.2 Enterprise Ticketing Management Module

This is the core service module through which all requests, cases, and operational incidents are created and tracked.

Main Features:

- Ticket creation from internal users
- Ticket creation from predefined request forms
- Ticket numbering logic
- Category, issue code, and subcategory mapping
- Client / merchant linking
- Priority assignment
- Assigned department and assigned user
- Due date / estimated resolution target
- Status transitions
- Attachments and evidence upload
- Internal notes and comments
- Resolution summary
- Closure confirmation
- Reopen logic
- Escalation and reassignment
- Parent-child ticket relationship
- Linked task or approval steps

Required Ticket Elements:

The OST document clearly defines ticket elements including ticket no, date, issue code/name, affected client, raised by, created by, operation unit, importance, issue handling scenario, ticket status, estimated time, actual time, and notes. These should be formalized in the ticket data model.

Outcome:

Provides full operational visibility and a single source of truth for all requests.

6.3 Workflow and Process Automation Module

This module transforms each request type into a structured digital process.

Functions:

- Workflow builder by issue type
- Multi-step routing logic
- Department handoff control
- Mandatory step enforcement
- Approval before next stage
- Auto-transition based on action completion
- Auto-escalation if overdue
- Branching logic based on request outcome
- Conditional workflows based on priority, merchant type, or service type
- Workflow templates for issue handling scenarios

Example:

A “New POS and QR Request” can automatically flow:
Sales/CRM request → Data entry validation → Configuration team preparation → Device/QR issuance → Handover confirmation → Merchant acknowledgment → Ticket closure.

Outcome:

Eliminates dependence on memory and manual coordination.

6.4 Merchant Master and Client Registry Module

All operational tickets should link to a structured client/merchant database.

Functions:

- Merchant profile
- Merchant ID / retailer ID
- Banking details
- Settlement method
- POS inventory linked to merchant
- QR association
- Contact persons
- Territory / region
- Status and classification
- Contract reference
- Transaction history summary
- Open cases summary
- Complaint history
- Service requests history

Outcome:

Allows a full operational view of each client and faster support handling.

6.5 Merchant Operations Module

Designed for merchant operations processes from the Merchant Operations Unit document.

Covered Scenarios:

- Merchant settlement
- Update banking information
- Settlement report request
- Connect replacement merchant card
- Returned checks
- Missing money transfer transaction
- Client inquiry
- Client complaint
- Reverse transaction / return money transfer amount to merchant card

Functional Depth:

Each scenario will have:

- Defined issue code
- Standard process steps
- Required fields
- Responsible actors
- Service target time
- Department dependencies
- Supporting form template
- Closure conditions

Outcome:

Standardized operations with strong control and reduced processing delays.

6.6 Operations Support Module

Designed for Operations Support Unit scenarios.

Covered Scenarios:

- Damaged top-up vouchers
- Expired top-up vouchers
- POS maintenance
- New services request
- New POS and QR request
- POS return
- Change SIM card
- POS data update
- POS location data update
- Merchant card top-up
- Merchant card replacement
- Cashier card replacement
- Change POS type
- Replace QR / change phone number

Functional Depth:

For every issue type, the system can support:

- Request form
- Required validation fields
- Ownership unit
- Action owner by stage
- Estimated resolution time
- Attachments
- Notes trail
- Departmental handoff tracking
- Final confirmation

Outcome:

Transforms repeated operational support activities into formalized digital processes.

6.7 SLA and Escalation Management Module

A critical module for performance monitoring and service governance.

Functions:

- SLA definition by issue type
- SLA definition by priority
- Working hours calendar
- Escalation levels
- Breach alerts
- Auto-reminders
- Overdue flags
- Pending approval alerts
- Reassignment after non-response
- Time spent measurement
- Target vs actual reporting

Example:

Urgent POS maintenance should trigger immediate response workflow and notify management when near or beyond deadline.

Outcome:
Service quality becomes measurable and enforceable.

6.8 Approval Management Module

Several processes in the documents imply approval dependencies across units. The system should include structured approvals.

Functions:

- Single-level approval
- Multi-level approval
- Conditional approval matrix
- Finance approval
- Operations manager approval
- Sales head approval
- Exception approval
- Rejection with reason
- Approval history
- Delegation / substitute approver
- Approval SLA tracking

Outcome:
Improves governance and prevents informal approvals.

6.9 Forms and Document Management Module

The documents reference several supporting forms and attachments for issue processing. The platform should digitize these forms.

Functions:

- Digital issue request forms
- Required field validation
- Attachment upload
- Standard templates by issue code
- Acknowledgment forms
- Check handover references
- Voucher forms
- POS request forms
- Merchant banking update forms
- Complaint supporting files
- Closure documentation archive
- Searchable document repository

Outcome:
Creates structured documentation and reduces paper-based tracking.

6.10 Communication and Notification Module

A request cannot succeed without timely communication between teams.

Functions:

- Email alerts
- In-system notifications
- Escalation alerts

- Assignment alerts
- Reminder notifications
- Closure notifications
- Approval request notifications
- Department queue notifications
- Audit of notifications sent

Outcome:
Improves responsiveness and reduces follow-up calls.

6.11 Reporting and Dashboard Module

The BRD emphasizes statistics, performance evaluation, and accurate follow-up.

Executive Dashboards:

- Total tickets by period
- Open vs closed tickets
- Tickets by department
- Tickets by issue type
- SLA compliance %
- Average first response time
- Average resolution time
- Escalated tickets
- Reopened tickets
- Workload by staff
- Resolution trend
- High-priority backlog
- Complaint trends
- Merchant service performance

Operational Dashboards:

- My tickets
- Team queue
- Due today
- Overdue today
- Awaiting approval
- Awaiting external action
- Returned for clarification
- Ticket aging analysis

Outcome:
Management gains real-time visibility and operational control.

6.12 Integration Module

The BRD identifies integration with external systems such as Sage X3, Select System, Yeastar Call Center, and priority mentions integration of Select System, Sage X3, and Zoho One via API.

Integration Scope:

- Finance / ERP data sync
- Merchant master sync
- Settlement or transaction reference sync
- Customer details sync
- Call reference linking from call center

- User synchronization where applicable
- API-based status exchange
- Triggered case creation from source systems
- Reference data import / export

Likely Integration Roles:

- Sage X3: financial and settlement data support
- Select System: operational/merchant transaction references
- Call Center platform: call-related issue initiation and follow-up trace
- Zoho One or CRM environment: requester and client coordination

Outcome:
Eliminates duplicate entry and creates a connected operational environment.

7. Proposed Process Design Approach

7.1 Process Standardization

Each business scenario will be transformed into:

- Request type
- Required data fields
- Responsible owner
- Workflow stages
- Target resolution time
- Approval logic
- Closure evidence

7.2 Example Process Architecture

Each workflow will generally follow:
Request Raised → Ticket Registered → Validation → Assignment → Department Processing → Internal Handover(s) → Approval / Verification → Resolution → Confirmation → Closure → Reporting

7.3 Benefits

- No request gets lost
- Every ticket has an owner
- Every delay is visible
- Management can identify bottlenecks
- Historical analytics become available

8. Roles and Security Model

8.1 Proposed User Roles

- System Administrator
- Operations Manager
- Merchant Operations Manager
- Operations Support Supervisor
- Data Entry Officer

- Configuration Officer
- Front Office User
- Back Office User
- Finance User
- Sales / CRM User
- Call Center User
- IT Support User
- Approver / Department Head
- Executive Viewer / Dashboard User

8.2 Security Principles

- Role-based access
- Department-based visibility
- Ticket privacy controls
- Approval segregation
- Immutable audit trail
- Attachment access security
- Sensitive financial field restrictions
- Activity log on all major actions

9. Proposed Technical Architecture

9.1 Architecture Model

A three-layer enterprise architecture is recommended:

A. Presentation Layer

The user interface for staff, managers, and administrators.

- Web-based responsive interface
- Department-specific dashboards
- Ticket queue views
- Mobile-friendly access for supervisors if required
- Search and filter engine
- Report views and exports

B. Application Layer

The business logic and ERP workflow engine.

- Ticket engine
- Workflow engine
- Approval engine
- SLA engine
- Notification service
- Reporting service
- Integration service
- Audit and logging service

C. Data Layer

Centralized database and file repository.

- Master data storage
- Ticket transactions
- Workflow history
- Attachments
- Logs
- Dashboard datasets
- Reporting warehouse if needed for advanced analytics

9.2 Deployment Architecture

Recommended hosting approach:

- Central application server
- Database server
- File storage for attachments
- Backup server / snapshot backup
- Optional staging environment
- Reverse proxy / load balancer if scaling needed
- Secure VPN or controlled remote access for admin functions

Recommended environments:

- Development
- UAT / Testing
- Production

9.3 Integration Architecture

Integration layer should be service-based:

- REST API connectors
- Scheduled synchronization jobs
- Event-driven triggers where available
- Middleware logic for mapping external data to ERP objects
- Retry and error logging mechanism
- Reconciliation report for failed syncs

9.4 Audit and Compliance Architecture

All critical activities should be logged:

- Ticket creation
- Ticket assignment
- Priority changes
- Status changes
- Approvals
- Rejections
- Field modifications
- Attachment uploads
- SLA breaches
- Closure action

10. Reporting and Analytics Architecture

10.1 Data Sources

- Tickets
- Status history
- Workflow steps
- Assignments
- Resolution times
- Priority mapping
- Client/merchant records
- Integration references

10.2 Reporting Views

- Executive summary dashboard
- Department performance dashboard
- Staff productivity dashboard
- Aging and SLA dashboard
- Merchant issue trend dashboard
- Root cause distribution dashboard
- Monthly operations report
- Exception and breach report

10.3 Analytical Outcomes

The platform will allow Tadawul Tech to identify:

- Which process causes most delays
- Which issue type occurs most frequently
- Which teams are overloaded
- Which merchants raise most cases
- Which stages require redesign
- Which services need automation first

11. Implementation Methodology

The project should be delivered through structured phases rather than a one-time build.

Phase 1 – Discovery and Detailed Analysis

Duration: 2 to 3 weeks

Activities:

- Stakeholder workshops
- Process walkthroughs
- Issue code mapping
- Department responsibility mapping
- Form review
- SLA definition workshops
- Integration requirement gathering
- Approval matrix design
- To-be process blueprint
- Functional specification sign-off

Deliverables:

- Requirement validation document
- Process mapping document
- Functional design document
- Data model draft
- Integration mapping sheet
- Implementation roadmap

Phase 2 – Solution Design and Architecture

Duration: 2 weeks

Activities:

- Platform architecture design
- Module structure design
- Security and role design
- Workflow blueprint creation
- Dashboard specification
- Notification matrix design
- Master data design
- Integration architecture design

Deliverables:

- Solution architecture document
- Module design pack
- Workflow catalogue
- Role matrix
- Report catalogue
- Integration design document

Phase 3 – Core Platform Configuration

Duration: 3 to 4 weeks

Activities:

- Set up base ERP environment
- Configure company structure
- Users and permission setup
- Issue code master setup
- Priority and status master setup
- Ticket numbering rules
- SLA engine setup
- Notification engine setup
- Approval framework setup

Deliverables:

- Base configured platform
- User and role setup
- Ticketing foundation
- Administration module ready

Phase 4 – Module Build: Operations Support

Duration: 3 to 4 weeks

Activities:

- Configure operations support request types
- Build issue forms
- Define workflows
- Configure role-based queues
- Set stage routing
- Define closure conditions
- Test issue scenarios

Deliverables:

- Operations Support module deployed
- Scenario workflows ready
- User acceptance prototype

Phase 5 – Module Build: Merchant Operations

Duration: 3 to 4 weeks

Activities:

- Configure merchant operations issue types
- Build merchant-related forms
- Define finance and operation handoffs
- Configure settlement workflows
- Configure complaint and inquiry routing
- Configure reverse transaction and check handling processes

Deliverables:

- Merchant Operations module deployed
- Process workflows operational
- Scenario-level test cases ready

Phase 6 – Integrations

Duration: 4 to 6 weeks

Activities:

- API review with connected systems
- Data mapping
- Integration development
- Reference sync
- Error handling and reconciliation design
- Testing of inbound and outbound flows

Deliverables:

- Connected external systems
- Sync logs and exception handling
- Integration test results

Phase 7 – Dashboards, Reports, and Analytics

Duration: 2 to 3 weeks

Activities:

- Executive dashboard creation
- Department operational dashboards
- SLA dashboards
- Export reports

- Management KPIs
- Productivity reporting

Deliverables:

- Management dashboard pack
- Operational dashboards
- Standard reports set

Phase 8 – UAT, Training, and Go-Live Preparation

Duration: 2 to 3 weeks

Activities:

- UAT execution
- Defect fixing
- User training sessions
- Role-based training materials
- SOP creation
- Go-live cutover plan
- Hypercare readiness

Deliverables:

- UAT sign-off
- Training materials
- Go-live readiness checklist
- SOP documentation

Phase 9 – Go-Live and Hypercare

Duration: 2 weeks

Activities:

- Production deployment
- User support
- Issue monitoring
- Daily stabilization review
- Priority fixes
- Performance validation

Deliverables:

- Live production platform
- Hypercare support report
- Stabilization sign-off

12. High-Level Project Timeline

Estimated Total Duration

18 to 26 weeks

depending on:

- number of workflows
- complexity of integrations
- speed of business sign-off
- depth of reporting required
- change requests during implementation

Illustrative Timeline

- Discovery: 2–3 weeks

- Design: 2 weeks
- Core setup: 3–4 weeks
- Operations Support module: 3–4 weeks
- Merchant Operations module: 3–4 weeks
- Integrations: 4–6 weeks
- Dashboards/reporting: 2–3 weeks
- UAT/training: 2–3 weeks
- Go-live/hypercare: 2 weeks

13. Key Deliverables

At project completion, Tadawul Tech will receive:

- Centralized ERP-based operations platform
- Digital ticketing and workflow engine
- Configured issue catalog and service request catalog
- Department-based queues and assignment logic
- SLA and escalation framework
- Approval workflows
- Merchant and client linked records
- Operations Support workflows
- Merchant Operations workflows
- Document and attachment repository
- Dashboard and analytics framework
- User role and security structure
- Integration framework with external systems
- SOP and user training materials
- UAT sign-off documentation
- Go-live support and stabilization

14. Expected Business Benefits

Operational Benefits

- Faster ticket resolution
- Reduced manual follow-up
- Centralized issue tracking
- Better interdepartmental coordination
- Reduced service delays
- Consistent handling process

Management Benefits

- Live visibility into operations
- Better performance measurement
- SLA compliance monitoring
- Reliable operational statistics
- Stronger accountability
- Better workload balancing

Strategic Benefits

- Scalable digital operating model
- Foundation for future automation
- Better customer/merchant experience

- Improved auditability and governance
- Readiness for future expansion into broader enterprise functions

15. Risks and Mitigation

Potential Risks

- Incomplete requirement clarity
- Delays in business sign-offs
- Variation in process practices across departments
- External system integration limitations
- Change resistance by users
- Missing master data or inconsistent merchant records

Mitigation

- Detailed discovery workshops
- Early sign-off checkpoints
- Standardization before build
- Phased implementation
- Pilot testing with selected users
- Strong user training and hypercare support

16. Recommendations

To ensure project success, the following approach is recommended:

- Treat this as an enterprise transformation project, not only a ticketing project
- Begin with the highest-volume and highest-impact operational scenarios
- Standardize processes before automation
- Build dashboards from day one
- Implement SLA and escalation rules early
- Introduce integrations in structured phases
- Keep master data quality under governance
- Assign business process owners from each department

The reviewed Tadawul Tech documents clearly show a need for a robust enterprise operations platform that centralizes client and merchant service processes, tracks operational requests, controls departmental handoffs, and provides measurable performance data. The need extends far beyond simple issue registration; it requires structured workflow management, integration with surrounding business systems, reporting, and accountability.
The proposed ERP-based solution will provide Tadawul Tech with a scalable, secure, auditable, and efficient operational backbone capable of supporting current service needs and future growth. By implementing the proposed modules, workflows, architecture, and timeline, Tadawul Tech will move from manual fragmented operations into a controlled enterprise service management model.