Gulf Islamic Bank

T24/Transact Transformation Program

Release 14 to Release 25 Upgrade

Payment Hub & Arrange Architecture Migration

Comprehensive Assessment, Roadmap & Implementation Strategy

November 2025

1.Executive Summary

Gulf ME Bank stands at a pivotal moment in its digital transformation journey. This comprehensive report presents a strategic roadmap for the bank's core banking transformation, encompassing three critical initiatives: upgrading from Temenos T24/Transact Release 14 to Release 25, migrating from the legacy Funds Transfer module to Temenos Payment Hub (TPH), and transitioning from the traditional lending module to the modern Arrange Architecture (AA) for Islamic loans.

Strategic Imperatives

The transformation program is driven by four key imperatives: (1) Enhanced operational efficiency through cloud-native, microservices-based architecture, (2) Regulatory compliance with evolving Islamic banking standards and international payment regulations including ISO 20022, (3) Customer experience excellence through real-time payment capabilities and flexible product offerings, and (4) Future-proof technology foundation supporting the bank's growth ambitions.

Program Scope

- **Core Banking Upgrade:** Migration from R14 to R25, leveraging 11 major releases of enhancements
- **Payments Modernization:** Implementation of Temenos Payment Hub for centralised, real-time payment processing
- **Islamic Lending Transformation:** Deployment of Arrange Architecture with Shariah-compliant product structures
- **Test Automation:** Implementation of AI-powered testing framework achieving 70-80% automation coverage
- **Data Warehouse:** Enterprise data platform for advanced analytics and regulatory reporting

Program Overview

Aspect	Details
Total Duration	18-24 months
Go-Live Approach	Phased (TPH → AA → Core)
Testing Coverage	70-80% automated
Key Milestones	7 major phases

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2. Current State Assessment

2.1 T24 Release 14 Landscape

Gulf ME Bank currently operates on Temenos T24/Transact Release 14, which was a significant release in the T24 evolution (circa 2013-2014). While R14 provided robust core banking functionality, the technology landscape has evolved substantially since its deployment, creating both opportunities and imperatives for modernization.

Current Technical Architecture

Component	Current State	Limitations
Core Platform	T24 R14 (Monolithic)	Limited scalability, complex upgrades
Payments	Funds Transfer (FT) Module	No real-time capabilities, limited ISO 20022 support
Lending	Traditional LD Module	Inflexible product structures, manual processes
Architecture	Integrated monolithic	Tight coupling, difficult to modernize
Cloud Support	Limited/On-premise	High infrastructure costs
API Layer	Basic/Limited	Restricted integration capabilities
Technology Stack	jBASE/Legacy	Skills scarcity, maintenance overhead

2.2 Business Drivers for Transformation

The transformation initiative is driven by multiple converging factors that create both challenges and opportunities for Gulf ME Bank:

Category	Driver	Impact
Regulatory	ISO 20022 Migration Mandate	Critical - Global SWIFT deadline November 2025
Regulatory	Enhanced AML/CFT Requirements	High - Real-time monitoring capabilities required
Regulatory	Shariah Compliance	Critical - Advanced profit distribution systems needed
Business	Customer Experience	High - Real-time payments and digital banking expectations
Business	Operational Efficiency	High - Reduce operational costs by 30-40%
Business	Time to Market	High - Launch new Islamic products in weeks vs months
Technology	Platform Obsolescence	Critical - R14 end-of-life approaching
Technology	Cloud Migration	High - Infrastructure cost reduction and scalability
Technology	Integration Complexity	Medium - Legacy APIs limiting ecosystem expansion

3. Target State Architecture

3.1 T24/Transact Release 25 Capabilities

Temenos Transact Release 25 represents a transformational leap from R14, spanning 11 major releases of continuous innovation. The platform has evolved from a monolithic architecture to a cloud-native, microservices-based solution that fundamentally changes how banks can operate and innovate.

Key Enhancements from R14 to R25

Capability Area	R14 State	R25 State	Business Benefit
Architecture	Monolithic integrated	Cloud-native microservices	10x infrastructure savings, elastic scaling
Deployment	On-premise only	Cloud-agnostic (AWS, Azure, GCP)	Flexible deployment, reduced TCO
API Strategy	Basic/Limited	API-first with 1000+ APIs	Rapid innovation, ecosystem integration
Upgrades	Big-bang, 12-18 months	Modular, rolling upgrades	Minimal disruption, continuous innovation
Performance	Batch-oriented	Real-time processing	Enhanced customer experience
AI/ML	None	eXplainable AI embedded	Personalized banking, fraud detection
Islamic Banking	Basic modules	Comprehensive Shariah suite	Advanced profit distribution, full compliance
Payments	Limited real-time	Full instant payments support	SEPA Instant, FedNow, regional schemes
Resilience	Single point of failure	Multi-cloud resilience	Highest security and availability

3.2 Temenos Payment Hub Architecture

Temenos Payment Hub (TPH) represents a strategic move from the legacy Funds Transfer module to a universal, centralized payment processing platform. TPH provides the Bank with a future-proof architecture that supports all payment types, schemes, and channels through a single, unified infrastructure.

Strategic Benefits of Payment Hub Migration

Dimension	Funds Transfer (Current)	Payment Hub (Target)	Value Delivered
Processing Model	Batch-oriented	Real-time + batch hybrid	Instant payment processing
STP Rate	60-70%	90-95%	Reduced manual intervention, lower costs
ISO 20022	Limited support	Full native support	Regulatory compliance, rich data
Payment Schemes	Limited regional	Global + regional instant schemes	SEPA Instant, FedNow, SWIFT gpi
Centralization	Distributed	Centralized control	Single source of truth, unified reporting
Exception Handling	Manual	Automated repair	Intelligent routing, auto-correction
API Integration	Limited	RESTful API-first	Easy fintech integration
Scalability	Limited	Cloud-native elastic	Handle volume spikes, cost efficiency
Analytics	Basic	Real-time dashboards	Payment insights, fraud detection

TPH Implementation Scope

- **Payment Types:** Domestic, cross-border, SWIFT, ACH, instant payments, SEPA
- **Channels:** Branch, ATM, mobile, internet banking, corporate banking platforms
- **Clearing Integration:** Local clearing houses, SWIFT network, real-time payment schemes
- **Payment Repair:** Automated exception handling with AI-powered message enrichment
- **Reconciliation:** Real-time payment matching and automated reconciliation
- **Reporting:** Regulatory reporting, management dashboards, audit trails

3.3 Arrange Architecture for Islamic Lending

Arrange Architecture (AA) represents Temenos's next-generation lending platform, built on a component-based, highly flexible framework. For Islamic banking, AA provides unprecedented capability to model Shariah-compliant products with complex profit distribution, collateral management, and regulatory reporting requirements.

AA vs Traditional Lending Comparison

Aspect	Traditional LD Module	Arrange Architecture	Islamic Banking Impact
Product Design	Rigid, pre-defined products	Component-based, flexible assembly	Rapid Shariah product creation
Islamic Products	Basic Murabaha, Ijara	Full: Murabaha, Musharaka, Ijara, Istisna, Tawarruq	Comprehensive Islamic offering
Profit Distribution	Manual calculations	Automated profit pools	Accurate Shariah compliance
Product Bundling	Limited	Unlimited bundles	Cross-sell opportunities
Simulations	Basic	What-if scenario modeling	Customer transparency
Lifecycle Events	Manual processes	Automated event processing	Operational efficiency
Regulatory Reporting	Custom development	Built-in compliance reporting	Automated AAOIFI compliance
Collateral Management	Separate system	Integrated collateral engine	Unified view, reduced risk
Time to Market	6-12 months	2-4 weeks	Competitive advantage

Islamic Banking Product Coverage

The AA implementation will support the complete spectrum of Shariah-compliant financing products:

Financing Products:

- **Murabaha** (Cost-plus financing): Auto, Real Estate, Commodity, Stock
- **Ijara** (Leasing): Operating lease, financial lease
- **Musharaka** (Partnership): Diminishing, permanent
- **Mudaraba** (Profit-sharing investment)
- **Istisna** (Manufacturing finance)
- **Salam** (Forward purchase)

Investment Products:

- **Sukuk** (Islamic bonds) management
- **Wakala** (Agency) arrangements
- Investment pool management

Treasury Products:

- **Tawarruq** (Reverse Murabaha)
- Commodity trading platforms
- Interbank Islamic money market

4. Strategic Roadmap and Phasing

4.1 Program Timeline

The transformation program is structured across 18-24 months, organized into 7 distinct phases with clear milestones and deliverables. The phased approach enables parallel workstreams while managing risk and ensuring business continuity.

Phase	Duration	Key Activities	Deliverables
Phase 1: Discovery & Assessment	2 months	• Current state analysis • Gap identification • Blueprint design • Business case finalization	• As-is assessment • To-be architecture • Implementation roadmap • Business case
Phase 2: Detailed Requirements	3 months	• Process workshops • Requirements gathering • Solution design • Data mapping	• BRD documents • Functional specs • Technical design • Data migration plan
Phase 3: Design & Build	6 months	• System configuration • Custom development • Interface build • Integration testing	• Configured system • Custom code • Integrated interfaces • Unit test results
Phase 4: Testing & QA	4 months	• SIT, UAT, Performance • Regression testing • Security testing • Parallel runs	• Test results • Defect reports • Performance benchmarks • Sign-offs
Phase 5: Data Migration	2 months	• Data extraction • Transformation • Mock migrations • Reconciliation	• Migration scripts • Reconciliation reports • Data quality metrics
Phase 6: Cutover & Go-Live	1 month	• Final migration • Production cutover • Go-live support • Stabilization	• Production system • Cutover report • Go-live sign-off
Phase 7: Hypercare & Optimization	2 months	• Post-go-live support • Issue resolution • Performance tuning • Knowledge transfer	• Stabilized system • Support handover • Lessons learned

4.3 Critical Success Factors

Factor	Description	Mitigation Strategy
Executive Sponsorship	C-level commitment and visible support	Steering committee meetings, monthly executive dashboards
Business Engagement	Active participation from business units	Dedicated business SMEs, process ownership model
Change Management	User adoption and organizational readiness	Comprehensive training program, change champions network
Data Quality	Clean, accurate migration data	Early data profiling, cleansing workstreams, validation frameworks
Testing Rigor	Comprehensive test coverage	70-80% test automation, independent QA team, performance testing
Vendor Partnership	Strong Temenos and SI collaboration	Joint governance, co-located teams, shared KPIs
Risk Management	Proactive issue identification	Daily standups, weekly risk reviews, escalation protocols
Technical Skills	Adequate R25, TPH, AA expertise	Early skill building, Temenos certification program, SI augmentation

5. Implementation Methodology

The program will adopt the Temenos Implementation Methodology (TIM), enhanced with Agile principles and leading practices from global implementations. This hybrid approach combines the rigor of waterfall for infrastructure components with agile flexibility for application development.

5.1 Phase 1: Discovery and Initial Assessment (Weeks 1-8)

Objectives: Establish program foundation, validate scope, baseline current state, and develop detailed roadmap.

Key Activities

Workstream	Activities	Duration	Resources
Current State Assessment	• T24 R14 health check • Technical debt analysis • Interface inventory • Custom code review • Performance baseline	4 weeks	• 2 Technical Architects • 2 Functional Analysts • 1 DBA
Business Process Analysis	• Process mapping workshops • Pain point identification • Opportunity assessment • KPI definition	6 weeks	• 3 Business Analysts • Business SMEs • Process owners
Requirements Definition	• High-level requirements • Integration touchpoints • Data migration scope • Regulatory requirements	6 weeks	• 2 Business Analysts • 1 Solution Architect • Compliance SME
Technical Design	• Target architecture • Infrastructure design • Integration patterns • Security framework	8 weeks	• 2 Solution Architects • 1 Infrastructure Architect • 1 Security Architect
Program Planning	• Detailed project plan • Resource plan • Budget refinement • Risk register	4 weeks	• Program Manager • PMO Lead • Vendor engagement

Key Deliverables

- Current State Assessment Report
- Target Architecture Blueprint
- Gap Analysis Document
- Business Requirements Document (High-Level)
- Program Charter and Governance Framework
- Detailed Implementation Roadmap
- Risk and Issue Management Framework
- Budget and Resource Plan
- Stakeholder Communication Plan

5.2 Phase 2: Detailed Requirements and Analysis (Weeks 9-20)

This phase focuses on translating high-level requirements into detailed functional specifications, technical designs, and configuration blueprints. Process-led workshops with business stakeholders ensure alignment and buy-in.

Process-Led Workshop Approach

Conduct 60+ workshops organized by functional domain:

Domain	Workshop Topics	Duration	Participants
Payments	• Payment types and routing • TPH configuration • Clearing integration • Exception handling	5 sessions (20 hours)	Treasury, Ops, Compliance, IT
Islamic Lending	• Shariah products design • AA components • Profit distribution • Collateral management	10 sessions (30 hours)	Islamic Banking, Credit, Risk, Shariah Board
Retail Banking	• Account types • Interest/profit calc • Charges and fees • Customer lifecycle	5 sessions (20 hours)	Retail, Ops, Finance, IT
Corporate Banking	• Trade finance • Guarantees • Facilities • Syndications	6 sessions (20 hours)	Corporate, Trade Finance, Credit
Channels	• Branch • ATM • Internet/Mobile • USSD	6 sessions (16 hours)	Channels, Digital, IT
Interfaces	• Core integrations • Third-party systems • APIs • Data feeds	5 sessions (20 hours)	IT, Vendors, Business teams

Phase 2 Deliverables

- Detailed Business Requirements Documents (by module)
- Functional Specification Documents
- Technical Design Documents
- Interface Specifications
- Data Migration Strategy and Mapping Documents
- Test Strategy and Test Plan
- Configuration Workbooks (Initial Build)
- Custom Development Specifications
- Training Strategy and Plan

5.3 Phase 3: Design and Build (Weeks 21-44)

The build phase brings the design to life through system configuration, custom development, interface construction, and integration. This is the most resource-intensive phase requiring close coordination across multiple workstreams.

Parallel Build Workstreams

Workstream	Scope	Team Size	Key Activities
Core Configuration	T24 R25 base setup	6	• Environment setup • Base parameterization • Product definitions • GL mapping
Payment Hub	TPH implementation	6	• TPH configuration • Clearing integration • Payment routing • Exception handling
Arrange Architecture	AA Islamic products	6	• Property classes • Product builder • Islamic products • Profit distribution
Custom Development	Local customizations	4 – 6	• Local developments • Regulatory reports • Custom interfaces • Workflow automation
Interfaces	System integrations	4 – 6	• API development • Legacy integrations • Channel connections • Third-party links
Data Migration	ETL development	8	• Extraction scripts • Transformation logic • Load programs • Reconciliation tools
Infrastructure	Cloud setup	4 – 6	• Cloud infrastructure • Security config • Network setup • Monitoring tools

Quality Gates and Code Review Process

- Weekly code reviews and peer reviews
- Configuration validation against standards
- Unit testing (minimum 80% code coverage)
- Integration testing within workstreams
- Quality checkpoints at 25%, 50%, 75%, 100% completion
- Temenos Technical Validation Service engagement

5.4 Phase 4: Testing and Quality Assurance (Weeks 37-52)

Comprehensive testing is mission-critical for a successful go-live. The testing strategy incorporates multiple levels of testing with heavy emphasis on automation to enable continuous testing and rapid defect identification.

Multi-Level Testing Approach

Test Level	Scope	Duration	Automation	Team Size	Key Focus
Unit Testing	Individual components	6 weeks	80%	8	Code quality, standards compliance
System Integration Testing (SIT)	Module integration	8 weeks	70%	8	End-to-end scenarios, interface validation
User Acceptance Testing (UAT)	Business validation	6 weeks	50%	12 – 15 (Business + IT)	Business process confirmation, usability
Performance Testing	Load, stress, volume	4 weeks	80%	8	Transaction volumes, response times, COB
Security Testing	Penetration, vulnerability	3 weeks	60%	4	Data security, access controls, compliance
Regression Testing	Impact of changes	Ongoing	85%	8	Ensure no defects introduced
Parallel Testing	R14 vs R25 comparison	4 weeks	N/A	8	Output validation, reconciliation
Production Readiness	Pre-go-live validation	2 weeks	70%	8	All systems ready for cutover

Defect Management Framework

- Severity classification: Critical, High, Medium, Low
- Critical defects: Immediate resolution, 24-hour turnaround
- Daily defect triage meetings during testing phases
- Root cause analysis for all critical and high defects
- Go-live criteria: Zero critical, <5 high, managed medium/low backlog
- Defect tracking in Jira with real-time dashboards

5.5 Phase 5: Data Migration (Weeks 45-52)

Data migration is one of the highest risk activities in any core banking transformation. A robust, well-tested migration strategy with multiple mock runs ensures data integrity and minimizes cutover risk.

4-Step Migration Methodology

Step	Activities	Timeline	Success Criteria
1. Data Profiling & Cleansing	• Source data analysis • Data quality assessment • Cleansing rules definition • Master data harmonization • Historical data rationalization	Weeks 1-4	• <0.1% error rate • 100% critical data mapped • Data dictionary complete • Cleansing rules approved
2. ETL Development	• Extraction scripts • Transformation logic • Business rules implementation • Target load programs • Reconciliation utilities	Weeks 3-8	• All programs developed • Unit tested • Performance optimized • Error handling robust
3. Mock Migrations	• Mock 1: Initial test (50% data) • Mock 2: Full volume • Mock 3: Dress rehearsal • Reconciliation • Issue resolution	Weeks 6-10	• 99.9% data accuracy • Reconciliation clean • <2 hour load time • Zero critical issues
4. Final Migration	• Production data freeze • Final extraction • Transformation • Load to production • Reconciliation • Sign-off	Cutover weekend	• 100% data migrated • Full reconciliation • Business sign-off • System ready

Data Migration Scope

- Customer master data (500,000+ customers)
- Account data (1,000,000+ accounts)
- Loan portfolios (Islamic and conventional products)
- Transaction history (2-5 years retention)
- GL balances and hierarchies
- Security and collateral data
- Standing orders and mandates
- User profiles and access rights
- Accounting entries and reconciliation data
- Limit and credit information

5.6 Phase 6: Cutover Planning and Execution (Weeks 53-56)

Cutover is the most critical 72-hour period of the entire program. A meticulously planned cutover with clear responsibilities, detailed runbooks, and robust rollback procedures ensures a smooth transition to production.

Typical Cutover Timeline (Extended Weekend)

Day/Time	Activity	Owner	Duration	Go/No-Go
Thursday 6PM	Business freeze - No new transactions	Business	1 hour	
Thursday 7PM	Final R14 EOD processing	IT Operations	3 hours	✓
Thursday 10PM	R14 final backup and reconciliation	IT/Finance	2 hours	✓
Friday 12AM	Data extraction from R14	Migration Team	4 hours	✓
Friday 4AM	Data transformation and validation	Migration Team	6 hours	✓
Friday 10AM	Data load to R25 production	Migration Team	4 hours	✓
Friday 2PM	TPH configuration activation	TPH Team	2 hours	✓
Friday 4PM	AA products activation	AA Team	2 hours	✓
Friday 6PM	Full reconciliation check	Finance/IT	4 hours	✓
Friday 10PM	Interface testing and activation	Interface Team	4 hours	✓
Saturday 2AM	Smoke testing all modules	QA Team	6 hours	✓
Saturday 8AM	Business validation	Business SMEs	4 hours	✓
Saturday 12PM	Final Go-Live decision	Steering Committee	1 hour	✓ GO-LIVE
Sunday 8AM	Branch operations commence	Branch Network	Ongoing	
Monday 8AM	Full production operations	All Users	Ongoing	

Rollback Strategy

- **Decision point:** Saturday 12PM - Final Go/No-Go
- **Rollback window:** If critical issues identified before Saturday 12PM
- **Rollback procedure:** Restore R14 from backup, revert interfaces, re-open business on R14
- **Communication plan:** Pre-prepared stakeholder communications
- **Retry:** Assess root cause, fix issues, schedule new cutover date

5.7 Phase 7: Post-Implementation Hypercare (Weeks 57-64)

The hyper-care period provides intensive support during the critical stabilization phase, ensuring rapid issue resolution and building confidence in the new platform.

24/7 Hypercare Support Model

Support Tier	Team	Availability	Response Time	Focus Areas
Command Centre	• Program Manager • Business Lead • Technical Lead	24/7	Immediate	Overall coordination, escalations, decisions
L1 Support	• 3 Business SMEs • 2 Technical SMEs	24/7	<15 minutes	User queries, first-line troubleshooting, workarounds
L2 Support	• 3 Functional experts • 3 Technical experts	16/7	<1 hour	Defect analysis, configuration fixes, code corrections
L3 Support	• Temenos support • SI architects	Business hours	<4 hours	Complex technical issues, platform defects
Business Validation	• 5 Business users	Business hours	Ongoing	Reconciliation, process validation, reporting

Transition to BAU (Business As Usual)

- **Week 1-2:** Full hypercare team deployed
- **Week 3-4:** Gradual team size reduction, issue stabilization
- **Week 5-6:** Transition to normal support model
- **Week 7-8:** Knowledge transfer, documentation completion
- **Week 8:** Formal hypercare closure, BAU handover
- **Post-hypercare:** Ongoing warranty support (typically 3-6 months)

6. Testing Strategy and Automation

6.1 Test Automation Framework

Given the scale and complexity of this transformation, test automation is not optional—it is mission-critical. The program will leverage AI-powered test automation platform, recognized as the industry leader for Temenos implementations, targeting 70-80% automation coverage across all testing levels.

Strategic Benefits of Test Automation

Benefit Category	Manual Testing	With Validata Automation	Impact
Test Execution Speed	100 test cases = 200 hours	100 test cases = 10 hours	20x faster execution
Regression Testing	Not feasible at scale	Full regression every sprint	Continuous quality assurance
Defect Detection	Late-stage discovery	Early detection	70% cost savings on fixes
Coverage	30-40% of scenarios	70-80% of scenarios	Comprehensive coverage
Consistency	Variable quality	Consistent, repeatable	Predictable outcomes
Resource Efficiency	12 - 15 testers	4 - 6 testers + automation	Resource optimization
Maintenance	High documentation overhead	Self-documenting tests	Reduced documentation burden

6.2 Testing Coverage and Approach

The testing strategy ensures comprehensive coverage across all functional domains, integration points, and quality attributes:

Test Category	Automation %	Total Test Cases	Automated	Manual	Key Tools
Unit Testing	90%	2,500	2,250	250	JUnit, Jenkins, Validata
Functional Testing	75%	5,000	3,750	1,250	Validata, Selenium
Integration Testing	70%	3,000	2,100	900	Validata, SoapUI, Postman
TPH Payment Testing	80%	1,500	1,200	300	Validata, Payment simulators
AA Lending Testing	75%	2,000	1,500	500	Validata, Custom calculators
Regression Testing	85%	4,000	3,400	600	Validata (automated suite)
Performance Testing	80%	500	400	100	JMeter, LoadRunner, Validata
Security Testing	60%	300	180	120	OWASP ZAP, Burp Suite
UAT (Business)	50%	3,000	1,500	1,500	Validata + Business users

Test Data Management Strategy

- Synthetic data generation for privacy compliance
- Production-like data volumes for performance testing
- Masked production data for selected scenarios
- Automated test data refresh between test cycles
- Data subset creation for specific test scenarios
- Negative testing data for error handling validation

7. Data Warehouse Implementation

7.1 Strategic Rationale

While not strictly part of the core banking transformation, implementing an Enterprise Data Warehouse (EDW) in parallel provides substantial strategic value and addresses critical business intelligence and regulatory reporting requirements.

Business Drivers for Data Warehouse

- **Regulatory Reporting:** QFCRA, QCB, AAOIFI reporting with single source of truth
- **Management Information:** Real-time executive dashboards and KPI tracking
- **Risk Analytics:** Credit risk, market risk, operational risk analytics
- **Customer Analytics:** 360-degree customer view, behavior analysis, segmentation
- **Profitability Analysis:** Product profitability, customer profitability, branch profitability
- **Islamic Banking Analytics:** Profit distribution, Shariah compliance reporting
- **Predictive Analytics:** ML models for fraud detection, churn prediction, cross-sell
- **Data Quality:** Master data management and data governance

7.2 Architecture and Integration

Recommended Architecture

The data warehouse will follow a modern lakehouse architecture combining the best of data lakes and data warehouses:

Layer	Technology	Purpose	Integration
Data Sources	T24 R25, TPH, AA, Channels, External	Source systems	CDC, batch ETL, APIs
Data Ingestion	Apache Kafka, Azure Data Factory	Real-time + batch ingestion	Temenos DFE framework
Data Lake (Bronze)	Azure Data Lake Gen2	Raw data storage	Landing zone, all formats
Data Processing	Azure Databricks, Spark	ETL/ELT, transformations	PySpark, SQL
Data Warehouse (Silver)	Azure Synapse Analytics	Curated data, dimensional model	Star schema, slowly changing dimensions
Data Marts (Gold)	Azure Synapse, Power BI	Subject-specific marts	Finance, Risk, Islamic Banking, Customer
Analytics Layer	Power BI, Azure ML	Reporting & analytics	Self-service BI, AI/ML models
Data Governance	Azure Purview	Metadata, lineage, quality	Data catalog, compliance

Implementation Timeline

- **Months 1-3:** Architecture design, platform setup, Temenos integration framework
- **Months 4-8:** Core data models, ETL development, Finance/Risk data marts
- **Months 9-12:** Islamic Banking mart, Customer analytics, regulatory reporting
- **Months 13-15:** Advanced analytics, ML models, self-service BI
- **Month 16+:** Continuous enhancement, new use cases, optimization

Estimated Investment: $1.2M (platform, licenses, implementation, training)

Team Size: 8 – 12 resources (Data Engineers, BI Developers, Data Scientists)

8. Governance and Program Structure

8.1 Organization Structure

A robust governance structure with clear roles, responsibilities, and decision-making authority is essential for program success. The organization follows a three-tier model:

Level	Body	Members	Frequency	Key Responsibilities
Strategic	Steering Committee	• CEO • CIO • CFO • COO • Head of Islamic Banking • Program Sponsor	Monthly	• Strategic direction • Budget approval • Major decisions • Escalation resolution • Go-live approval
Tactical	Program Board	• Program Director • IT Director • Business Leads • Temenos Lead • SI Lead • Change Manager	Bi-weekly	• Program monitoring • Resource allocation • Risk management • Scope management • Issue escalation
Operational	PMO & Workstream Leads	• Program Manager • PMO Team • Workstream Leads • Technical Leads • Business SMEs	Daily/Weekly	• Day-to-day execution • Issue management • Progress tracking • Quality assurance • Coordination

8.2 Governance Framework

Key Governance Processes

- **Weekly Status Reporting:** Consolidated program dashboard, RAG status, KPIs
- **Monthly Steering Committee:** Executive review, decision-making, strategic alignment
- **Issue & Risk Management:** Centralized register, escalation matrix, mitigation tracking
- **Change Control:** Formal change request process, impact analysis, approval workflow
- **Quality Assurance:** Independent QA reviews, quality gates, audit checkpoints
- **Budget Management:** Monthly budget tracking, variance analysis, forecast updates
- **Stakeholder Communication:** Communication plan, regular updates, townhalls
- **Vendor Management:** Performance scorecards, SLA monitoring, commercial governance

8.3 Risk Management

Proactive risk management is critical for navigating the complexity and scale of this transformation. Key risks and mitigation strategies:

Risk	Impact	Likelihood	Mitigation Strategy
Scope Creep	High	Medium	• Robust change control • Clear scope baseline • Regular scope reviews
Data Migration Issues	High	High	• Multiple mock migrations • Early data profiling • Dedicated DM team • Automated reconciliation
Resource Constraints	Medium	Medium	• Early resource commitment • SI augmentation • Cross-training • Succession planning
Business Resistance	High	Medium	• Change management program • Executive sponsorship • Early wins communication
Integration Challenges	High	Medium	• Early integration testing • API-first approach • Dedicated integration team
Technical Complexity	High	Low	• Experienced architects • Temenos best practices • Prototype early • Technical spikes
Performance Issues	High	Medium	• Performance testing early • Volume testing • COB optimization • Capacity planning
Cutover Failure	Critical	Low	• Rigorous cutover planning • Multiple rehearsals • Rollback plan • Extended weekend cutover

9. Conclusion and Recommendations

Gulf ME Bank's transformation journey from T24 Release 14 to Release 25, coupled with the migration to Payment Hub and Arrange Architecture, represents a strategic inflection point that will define the bank's competitive position for the next decade.

Key Takeaways

1. Strategic Imperative

This is not merely a technology upgrade—it is a fundamental business transformation that will enable the Bank to compete effectively in an increasingly digital, customer-centric banking landscape while maintaining full Shariah compliance.

2. Phased Approach De-Risks Delivery

The recommended three-wave implementation strategy (TPH → AA → Core) minimizes business disruption, enables early value realization, and provides natural break points for course correction if needed.

3. Test Automation is Non-Negotiable

Achieving 70-80% test automation through vendor platform is critical for managing the complexity, ensuring quality, and enabling continuous testing throughout the program lifecycle.

4. Data Warehouse Adds Strategic Value

While optional, implementing the Enterprise Data Warehouse in parallel provides immediate value for regulatory reporting, risk management, and advanced analytics—capabilities increasingly vital for Islamic banking operations.

5. Change Management Determines Success

Technology implementation is the easier part; organizational change management and user adoption will ultimately determine program success. Early and sustained investment in change management is essential.

Recommendations

Immediate Actions (Next 30 Days)

- Secure executive sponsorship and establish Steering Committee
- Allocate initial discovery phase budget and resources
- Initiate System Integrator selection process (if not yet started)
- Begin internal stakeholder communication and change readiness assessment
- Establish core program team and PMO structure

Near-Term Actions (Next 90 Days)

- Complete current state assessment and detailed gap analysis
- Finalize implementation roadmap and business case
- Execute System Integrator contracts
- Initiate Temenos partnership discussions for R25, TPH, and AA
- Establish governance framework and reporting cadence
- Launch change management and communication program
- Begin critical skills assessment and training planning

Implementation Approach

- Leverage Temenos Implementation Methodology (TIM) with Agile principles
- Invest in test automation from Day 1 with Validata platform
- Include Data Warehouse in scope (can be parallel or slightly delayed)
- Plan for 18-24 month program timeline with appropriate contingency
- Allocate adequate budget with strong executive support

Final Thoughts

The path forward is challenging but achievable. With the right partner ecosystem, disciplined execution, and unwavering executive support, Gulf ME Bank will emerge from this transformation with a world-class, cloud-native banking platform that positions the organization for sustainable growth, operational excellence, and continued leadership in Islamic banking.

The future of banking is digital, real-time, and AI-powered. Temenos Transact Release 25, Payment Hub, and Arrange Architecture provide the foundation for Gulf ME Bank to not just meet that future—but to help define it.

Appendices

Appendix A: Glossary of Terms

Term	Definition
AA	Arrange Architecture - Temenos's component-based lending platform
AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
API	Application Programming Interface
BAU	Business As Usual
CDC	Change Data Capture
COB	Close of Business
DFE	Data Framework Environment (Temenos)
EDW	Enterprise Data Warehouse
ETL	Extract, Transform, Load
FT	Funds Transfer (legacy T24 module)
ISB	Initial System Build
ISO 20022	International standard for financial messaging
Ijara	Islamic leasing arrangement
Murabaha	Islamic cost-plus financing
Musharaka	Islamic partnership financing
QCB	Qatar Central Bank
QFCRA	Qatar Financial Centre Regulatory Authority
R14/R25	Release 14 / Release 25 of Temenos T24/Transact
SI	System Integrator
SIT	System Integration Testing
STP	Straight Through Processing
TCO	Total Cost of Ownership
TIM	Temenos Implementation Methodology
TPH	Temenos Payment Hub
UAT	User Acceptance Testing

Appendix B: References and Sources

This report draws on extensive research and industry best practices from the following sources:

Temenos Documentation and Resources

- Temenos Transact product documentation and release notes
- Temenos Payment Hub implementation guides
- Arrange Architecture technical documentation
- Temenos Islamic Banking product specifications
- Temenos Implementation Methodology (TIM) framework

System Integrator Best Practices

- Deloitte Temenos Center of Excellence methodologies
- Cognizant Temenos implementation frameworks
- Capgemini UDIM methodology for Temenos
- Luxoft upgrade and migration approaches
- ITSS Global Payment Hub migration expertise

Testing and Quality Assurance

- Validata AI-powered test automation platform documentation
- Validata ISB validation and test accelerators
- Maveric Systems testing best practices
- Frugal Testing Temenos QA frameworks

Islamic Banking Implementations

- Masaref Islamic banking implementation case studies
- Arab Energy Fund AA lending implementation
- Libyan Islamic Bank AA migration experience
- Dubai Islamic Bank transformation program

Industry Analysis

- Everest Group Temenos IT Services PEAK Matrix Assessment
- Gartner Magic Quadrant for Core Banking
- Celent core banking modernization research
- IDC Financial Services Technology research