

LLM-Powered Banking Modernization

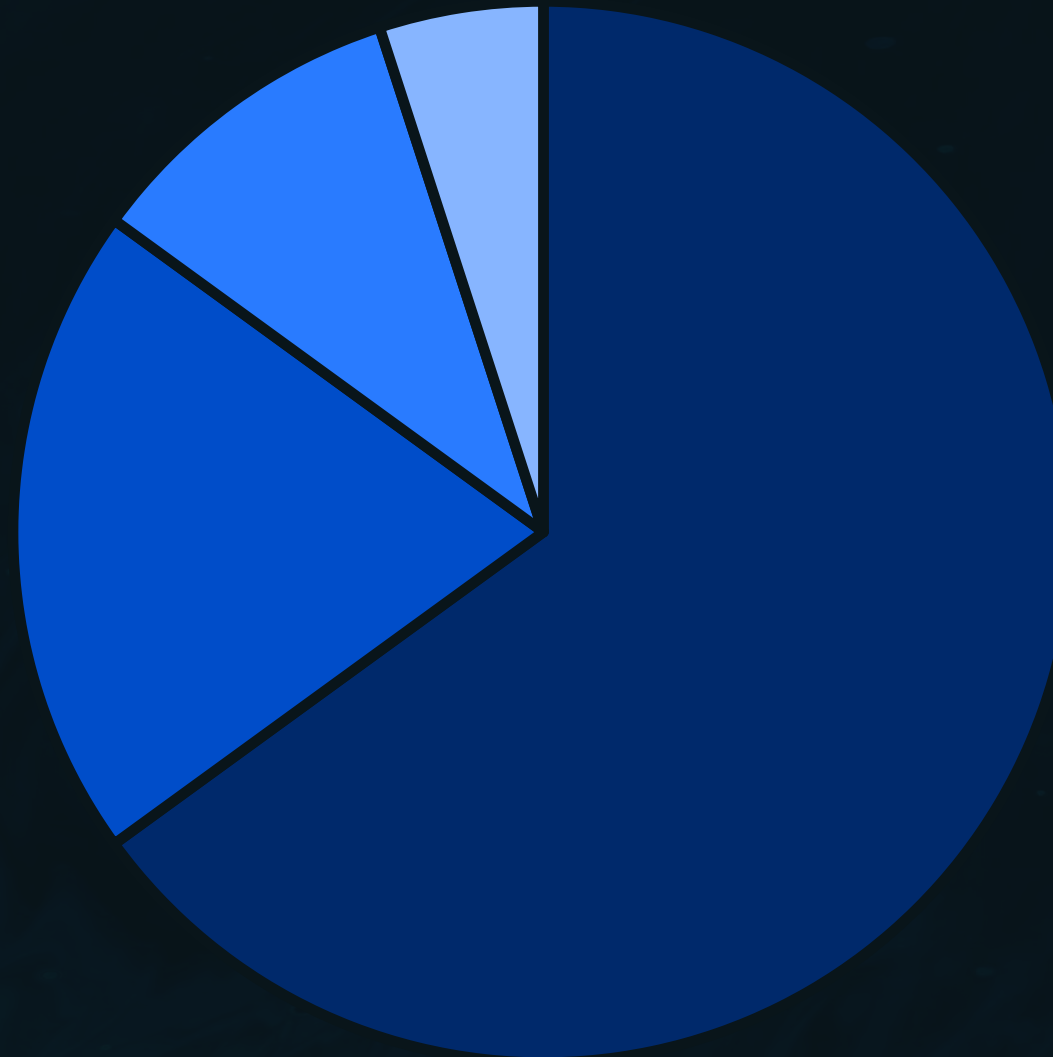
A human-centric approach to legacy code transformation for financial institutions facing critical infrastructure challenges.

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The Legacy Challenge



■ Legacy Maintenance ■ New Development ■ Innovation ■ Other IT Costs

Most banking systems still run on COBOL. Legacy infrastructure consumes up to 65% of IT budgets. Traditional modernization approaches have high failure rates.



The Modernization Paradox

85%

Failure Rate

Traditional legacy transformation projects that exceed budget or timeline

24mo+

Timeline

Average duration for conventional modernization efforts

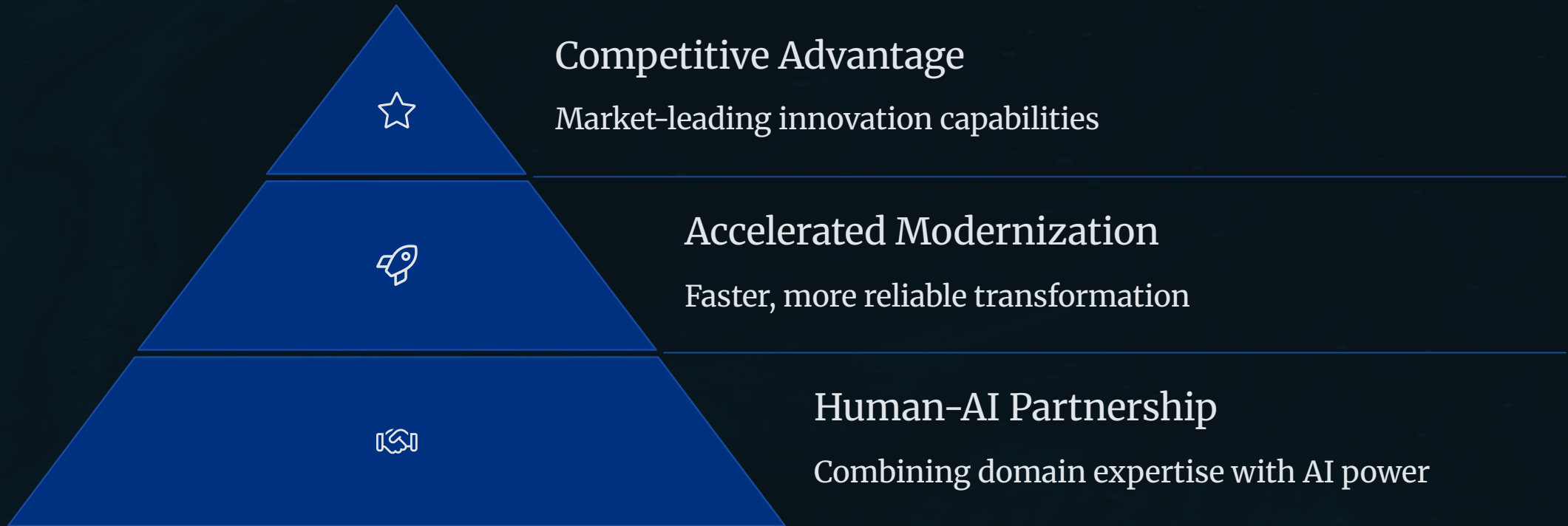
3-5x

Budget Overruns

Typical cost inflation for large-scale transformation

Financial institutions need new approaches. Old methods simply cannot scale to meet modern demands.

A New Paradigm



Our framework combines LLMs with human expertise. This maintains regulatory compliance while transforming legacy systems.

Proven Results

80% Reduction
Human effort for code
translation

35% Lower
Total cost of ownership



60% Faster
Testing and verification cycles

75% Fewer
Regression defects post-
implementation

Our approach delivers remarkable outcomes. Early adopters are already seeing substantial benefits.

Technical Architecture



Legacy Code Ingestion

COBOL parsing and domain mapping



LLM Translation

Banking-specialized model processing



Verification

Behavioral equivalence testing



Human Review

Expert validation and refinement

Our framework overcomes key challenges. It maintains behavioral equivalence while handling banking-specific complexities.

LLM Innovation

Extended Context Windows

Models can process entire banking modules at once. This preserves relationships between functions and improves translation accuracy.

Financial Domain Fine-Tuning

Specialized training on banking systems. Models understand accounting principles, transaction processing, and regulatory requirements.

Multi-Language Proficiency

Seamless translation between COBOL, Java, Python, and other modern languages. This maintains semantic equivalence across platforms.

Our approach uses cutting-edge LLM capabilities. These are specifically enhanced for banking applications.

Human Oversight System



Role-Based Reviews

Engineers, compliance officers, and domain experts validate different aspects.



Automated Compliance Flagging

AI identifies potential regulatory issues for human review.



Performance Verification

Side-by-side runtime comparisons ensure equivalent behavior.



Feedback Loop Integration

Human corrections continuously improve the AI model.

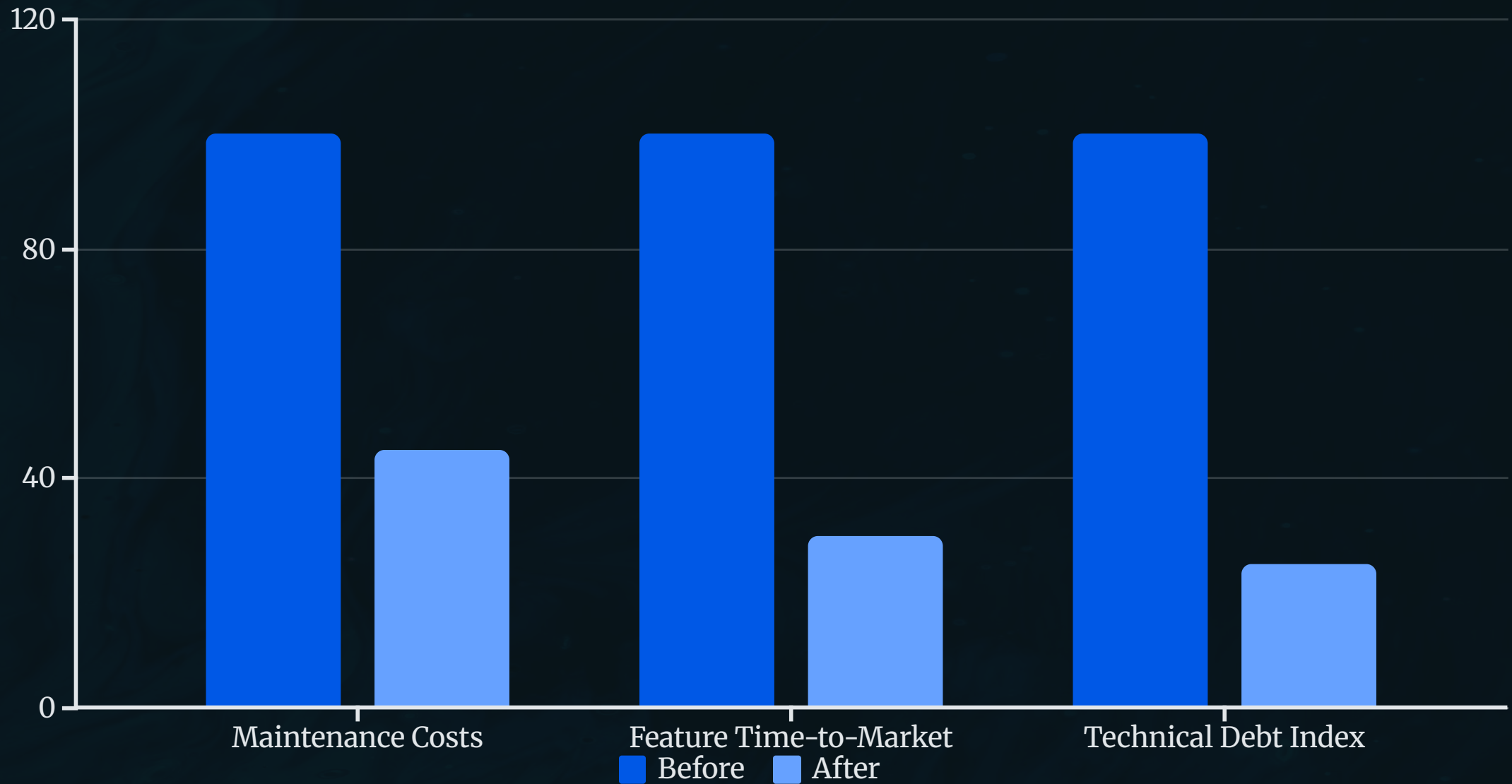
Human expertise remains essential. Our system combines AI efficiency with human judgment.

SecureFuture Banking



Innovation. Secured.

ROI Impact



Real-world implementations show compelling returns. Reduced costs and accelerated innovation create lasting competitive advantage.

Case Study: Transaction System



Legacy Assessment

10M lines of COBOL, 30+ years old, 3B daily transactions



Preparation Phase

Domain mapping, test harness creation, LLM fine-tuning



Iterative Translation

Module-by-module transformation with parallel operations



Successful Migration

Containerized microservices with improved performance and scalability

A major bank successfully migrated its core transaction system. This proves viability for even the most complex infrastructure.



ACCELERATING

DANITNIO'S FUTURE

Implementation Roadmap

Assessment & Preparation

Evaluate legacy systems. Build domain knowledge base. Create test frameworks. Set up monitoring.

Pilot Transformation

Select non-critical module. Apply LLM translation. Conduct extensive validation. Refine approach based on results.

Scaled Implementation

Expand to larger systems. Deploy parallel operations. Monitor performance. Gradually phase out legacy systems.

Continuous Improvement

Enhance models with feedback. Optimize new architecture. Add features impossible in legacy systems.

This actionable roadmap provides a clear path forward. It minimizes risk while maximizing the benefits of AI-powered modernization.

Transform Your Banking Future

Reduce Technical Debt

Transform legacy systems from liability to advantage. Free up budget for innovation rather than maintenance.

Accelerate Innovation

Deliver new features in days instead of months. Respond rapidly to market changes and customer needs.

Enhance Compliance

Improve regulatory reporting with modern systems. Automated checks reduce risk of non-compliance.

The time for AI-powered banking modernization is now. Transform your legacy systems while preserving business logic and minimizing risk.

