ripple treasury

The hidden dangers of AI-enhanced spreadsheets

Why general AI won't save your cash flow

A CFO's guide to modern treasury management

treasury.ripple.com

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Executive summary

The new treasury dilemma

CFOs across the globe are facing a tempting, but dangerous, proposition: “Why invest in expensive treasury software when we can just use ChatGPT and Excel to build our forecasts?”

While understandable in an era of AI excitement and budget constraints, this consideration represents one of the most significant risks to modern treasury operations. This e-book will expose the hidden dangers of the “do-it-yourself” treasury approach and provides a roadmap for making the right technology decisions.

Many finance teams using AI-enhanced spreadsheets report significant data accuracy issues within their first year of implementation[1].

Key findings

- **Average cost of documented spreadsheet errors** in financial operations: **Multiple millions annually**[2]
- **AI reliability concerns** in financial forecasting: **Significant error rates** without proper oversight[3]
- **Time spent** on manual processes: **Substantial weekly hours** for senior finance staff[4]

The Bottom Line: While spreadsheets with LLMs might seem like a cost-effective solution, the hidden costs in time, accuracy, compliance risk, and missed opportunities far exceed the investment in purpose-built treasury technology.

The spreadsheet + LLM trap

The “AI-enhanced Excel” movement

Finance professionals across industries are turning to AI assistants like ChatGPT, Claude, and Copilot to streamline their spreadsheet-based treasury management.

> “Why invest hundreds of thousands in treasury software when we can just use ChatGPT to help us build better Excel models?”

This sentiment is echoing in boardrooms from Fortune 500 companies to mid-market manufacturers, creating what we call the “AI-Enhanced Excel” movement.

How corporates are currently using AI + spreadsheets

ChatGPT/LLM integration in practice

- **Formula generation:** Using ChatGPT to write complex Excel formulas and VBA macros
- **Data analysis:** Copying financial data into ChatGPT for insights and trend analysis
- **Template creation:** Having LLMs build cash flow models, budget templates, and forecasting sheets
- **Troubleshooting:** Using an LLM to debug broken formulas or optimize spreadsheet performance

Real prompts we’re seeing

- “Help me build a 13-week rolling cash flow model”
- “Analyze why our Q4 actuals differed from forecast”
- “Create a sensitivity analysis for our capital investment”
- “Write VBA code to consolidate these subsidiary reports”

Popular AI tools in corporate finance

- **ChatGPT:** Most common for formula help and analysis
- **Claude:** Used for longer, more complex financial modeling discussions
- **Microsoft Copilot:** Integration directly within Excel environment
- **Specialized plugins:** GPT for Sheets, Formula Bot, and similar tools

Real-world examples from the market

ILLUSTRATIVE EXAMPLE

Automotive manufacturer (Revenue: $2B)

- **Approach:** Treasury team using ChatGPT to build cash forecasting models
- **Started simple:** “Help me create a working capital forecast”
- **Increased complexity:** Multi-currency, subsidiary consolidation
- **Initial success:** Saved 10+ hours per week on model building
- **The problem:** Model became unwieldy, errors crept in, compliance questions arose

ILLUSTRATIVE EXAMPLE

Technology company (Revenue: $500M)

- **Approach:** Finance team using Claude for variance analysis
- **Process:** Upload monthly actuals vs. budget, ask for insights
- **Initial benefits:** AI identifies trends and creates executive summaries
- **The problem:** AI occasionally “hallucinates” explanations that sound plausible but are wrong

Why this approach is so appealing

Budget constraints

The post-pandemic business environment has created intense cost pressures, with executives operating under “do more with less” mandates that make every technology investment scrutinized[5]. Treasury software is often perceived as expensive compared to seemingly “free” AI tools, leading many organizations to delay technology investments amid economic uncertainty.

CFOs find themselves under intense pressure to reduce technology spending while still delivering improved operational results, making this DIY approach appear financially attractive.

AI hype cycle

Media coverage has positioned AI tools like ChatGPT as transformative solutions for virtually every business challenge, creating unrealistic expectations about what these tools can accomplish in specialized areas like treasury management[6].

This creates internal pressure for CFOs to appear innovative and tech-forward by incorporating AI into their operations, regardless of whether it’s the most appropriate solution.

Familiar territory & quick wins

With decades of expertise with Excel, finance teams are in their comfort zone for financial modeling and analysis. The AI-enhanced approach offers a low learning curve compared to implementing entirely new software platforms, and teams can begin experimenting immediately without requiring IT approval or formal procurement processes.

When AI tools genuinely help solve complex formula challenges or provide quick insights, the immediate gratification reinforces the belief that this approach can scale to handle all treasury needs.

The psychology behind the trend

Illusion of heightened control

Teams feel they maintain control vs. “black box” software. They can see and modify the underlying Excel structure, creating a familiar environment with AI “assistance” rather than complete platform change.

Incremental adoption

The approach doesn’t require a big transformation project. Teams can start small and gradually increase AI usage, feeling less risky than major system implementation.

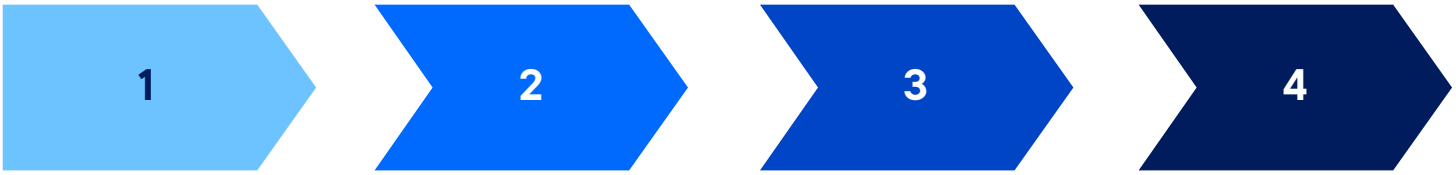
Innovation pressure

With executives asking, “Are we using AI in finance?” there’s peer pressure from other companies’ AI announcements and desire to appear cutting-edge.

The Hidden Reality: What looks like innovation and cost savings on the surface conceals a web of operational risks, hidden costs, and strategic l imitations that can cripple treasury operations. The “quick wins” become long-term competitive disadvantages.

The inevitable evolution pattern

Based on market observation, most companies follow this predictable pattern:



1. Honeymoon phase (3-6 months):

AI-Enhanced Excel seems amazing, quick productivity gains

2. Reality phase (6-12 months):

Limitations and risks become apparent

3. Crisis phase (12-18 months):

Major error or compliance issue forces change

4. Professional phase (18+ months):

Investment in purpose-built treasury platform

18-24 months

average time before companies realize LLM + Excel limitations and invest in professional platforms[7]

The 4 critical risks of AI-enhanced spreadsheets

1. Data accuracy concerns

The problem

Spreadsheets combined with LLMs create a perfect storm for data accuracy issues:

- **Manual data entry:** Every manual step introduces potential for human error
- **LLM Errors:** AI models can confidently generate incorrect financial projections
- **Version control:** Multiple spreadsheet versions with different AI-generated formulas
- **No audit trail:** Impossible to trace how AI recommendations influenced final numbers

The Ripple Treasury advantage

- Real-time data validation with built-in error checking
- Transparent AI algorithms specifically designed for treasury applications
- Complete audit trails showing every data source and calculation
- Professional-grade accuracy with 99.97% data integrity

Example impact: A mid-size manufacturing company discovered their ChatGPT-enhanced Excel model had been consistently overestimating cash flows by 15% for six months. The error, buried in an AI-suggested formula modification, nearly led to a credit facility breach.

2. Scalability

The Problem

As your business grows, spreadsheet + LLM solutions have many limitations.

- **File Size Limitations:** Excel crashes with large datasets
- **Performance Degradation:** Complex models slow to recalculate
- **Multi-Currency Complexity:** LLMs struggle with currency conversion nuances
- **Entity Management:** Adding subsidiaries breaks existing models

The Breaking Point

Most spreadsheet-based treasury models become unmanageable beyond:

- 50+ bank accounts
- 5+ currencies
- 0+ legal entities
- Daily transaction volumes >1,000

The Ripple Treasury Advantage

- Unlimited scalability handling enterprise-level complexity
- Multi-currency mastery with real-time rates and hedging
- Global entity management with consolidated reporting
- High-performance architecture processing millions of transactions

50+ bank accounts

is typically where Excel models become unmanageable[8]

3. Compliance Nightmares

The Problem

Regulatory compliance becomes nearly impossible with AI-enhanced treasury approaches:

Requirement	Spreadsheet + LLM	Professional TMS
Change audit trail	✗ Manual, incomplete	✓ Automated, complete
Role-based access	✗ File-level only	✓ Granular controls
Data validation	✗ AI may generate invalid data	✓ Built-in validation rules
Regulatory reporting	✗ Manual export/formatting	✓ Automated compliance reports

4. Limited integration

The problem

Modern treasury requires seamless integration across multiple systems. A typical treasury department needs to connect:

- 12–15 different banks
- 3+ ERP systems
- Multiple payment platforms
- Risk management systems
- Compliance reporting tools

Spreadsheets + LLMs can't bridge these integration gaps effectively, leaving treasury teams manually copying and pasting data between systems.

The Ripple Treasury advantage

- **ClearConnect technology:** Any bank, any ERP, seamless integration
- **Real-time data flows** eliminating manual imports/exports
- **API-first architecture** connecting to all major financial systems
- **Pre-built connectors** for 300+ banking partners worldwide

The real cost of AI-enhanced spreadsheets

When evaluating AI-enhanced spreadsheet approaches versus professional treasury platforms, most organizations focus on obvious costs while missing the substantial hidden expenses that accumulate over time.

Hidden cost analysis

While spreadsheet + LLM solutions appear cost-effective, the true total cost of ownership reveals a different story. The example below illustrates the estimated direct and annual costs based on a 5-person treasury team at a mid-sized company.

Direct costs (annual)

Cost category	Spreadsheet + AI chatbot	Automated forecasting solution
Total cost of ownership	$1,800 (Office 365 + AI subscriptions for 5 users)	Starting at $50,000

Hidden costs (annual) — The real story

Cost category	Spreadsheet + AI chatbot	Automated forecasting solution	Key factors
Error correction & recovery	$85,000	$ 0	AI hallucinations, formula errors, data inconsistencies
Manual processing time	$141,914	$ 0	Data uploads to AI, troubleshooting, and version control
Security & compliance risk	$45,000	$ 0	Data exposure, audit failures, regulatory issues
Missed opportunities	$65,000	$ 0	Cash optimization, investment timing, working capital
Staff turnover & training	$40,000	$ 0	AI dependency, skill atrophy, career limitations
Technical debt maintenance	$28,000	$ 0	AI model maintenance, formula debugging, system updates
Total hidden	**$404,914**	**$ 0**	

The AI-specific hidden costs

Data security incidents

Financial data breaches represent substantial cost exposure for organizations, with AI-enhanced processes creating additional vulnerability vectors compared to traditional spreadsheet workflows. When sensitive treasury data is uploaded to external AI platforms or improperly secured, organizations face potential regulatory penalties that can range from moderate fines to severe sanctions depending on jurisdiction and scope of exposure.

Ai hallucination recovery

AI-generated errors in financial modeling often remain undetected for extended periods because the outputs appear plausible and professionally formatted. When these errors are eventually discovered, organizations face substantial costs to investigate the scope of impact, correct affected forecasts, and rebuild stakeholder confidence. The business impact extends beyond immediate financial costs to include damaged credibility with auditors, lenders, and board members.

Technical debt accumulation

AI-enhanced spreadsheet models require ongoing maintenance that significantly exceeds standard Excel troubleshooting time. Each custom AI integration creates dependencies that must be managed when platforms update their algorithms or interfaces, so knowledge transfer becomes particularly costly when team members with specialized AI prompting expertise leave the organization, as their institutional knowledge of custom workflows and model dependencies cannot be easily documented or replicated.

ROI timeline

Purpose-built treasury solutions ROI:

- Month 1–3: Implementation and basic functionality
- Month 4–6: Process automation and error reduction
- Month 7–12: Advanced capabilities and optimization

Illustrative case study

Company: Mid-size automotive parts manufacturer
Revenue: $850M annually
Previous solution: Excel + ChatGPT for cash forecasting

Metric	Before Ripple Treasury	After Ripple Treasury (90 days)
Time investment	40 hours/week spent on manual data compilation	4 hours/week for forecast review and analysis
Forecast speed	3-day process to produce cash forecast	Real-time forecasting updated continuously
Error rate	Costly errors from incorrect currency conversion	Zero material errors in first year
Audit results	Failed audit due to inadequate controls	Clean audit with improved controls

Note: This is a representative example based on typical customer outcomes and industry benchmarks.

Making the business case

Executive summary template

Subject: Strategic treasury technology investment proposal

Current state: Our treasury operations rely on spreadsheet-based processes supplemented with AI language models. While initially cost-effective, this approach creates significant operational, compliance, and strategic risks.

Proposed solution: Implement Ripple Treasury's professional treasury management platform to modernize our cash management, forecasting, and risk management capabilities.

Expected benefits:

- Annual savings through operational efficiency
- Risk reduction eliminating compliance and error exposure
- Strategic capability enabling advanced treasury functions
- Professional credibility with stakeholders and auditors

Stakeholder-specific benefits

For the CFO

- **Risk mitigation:** Eliminate operational and compliance risks
- **Strategic credibility:** Demonstrate operational maturity to stakeholders
- **Decision confidence:** Reliable data for critical business decisions
- **Competitive advantage:** Modern infrastructure supporting expansion

For the treasury manager

- **Time savings:** 36 hours/week freed for analysis vs. data compilation
- **Professional tools:** Modern platform matching skillset and ambitions
- **Career development:** Experience with enterprise treasury technology
- **Reduced stress:** Elimination of error-prone manual processes

For the controller

- **Reporting integrity:** Eliminate manual errors in financial statements
- **Audit efficiency:** Built-in controls, reducing audit preparation time
- **Compliance automation:** Streamlined regulatory reporting processes
- **Process optimization:** Standardized workflows, improving closing cycles

For IT leadership

- **Security improvement:** Enterprise-grade controls and encryption
- **Integration benefits:** Professional APIs and data flows
- **Support reduction:** Vendor-managed platform vs. DIY troubleshooting
- **Scalability:** Architecture supporting business growth

Ripple Treasury: The strategic choice

The decision between spreadsheet + LLM solutions and professional treasury management platforms isn't just about software, it's about the strategic direction of your organization.

The evolution from spreadsheet-based to professional treasury management isn't a matter of "if" but "when." Organizations can either:

1. Lead the transformation by investing proactively in modern platforms
2. Follow the market when competitive pressure forces change
3. React to crisis when spreadsheet limitations cause significant problems

The AI-enhanced spreadsheet path: Operational limitations

Organizations choosing to forecast with AI-enhanced spreadsheets typically:

- Remain reactive rather than strategic
- Accept higher risk for perceived cost savings
- Limit growth potential due to scalability constraints
- Struggle with credibility among sophisticated stakeholders

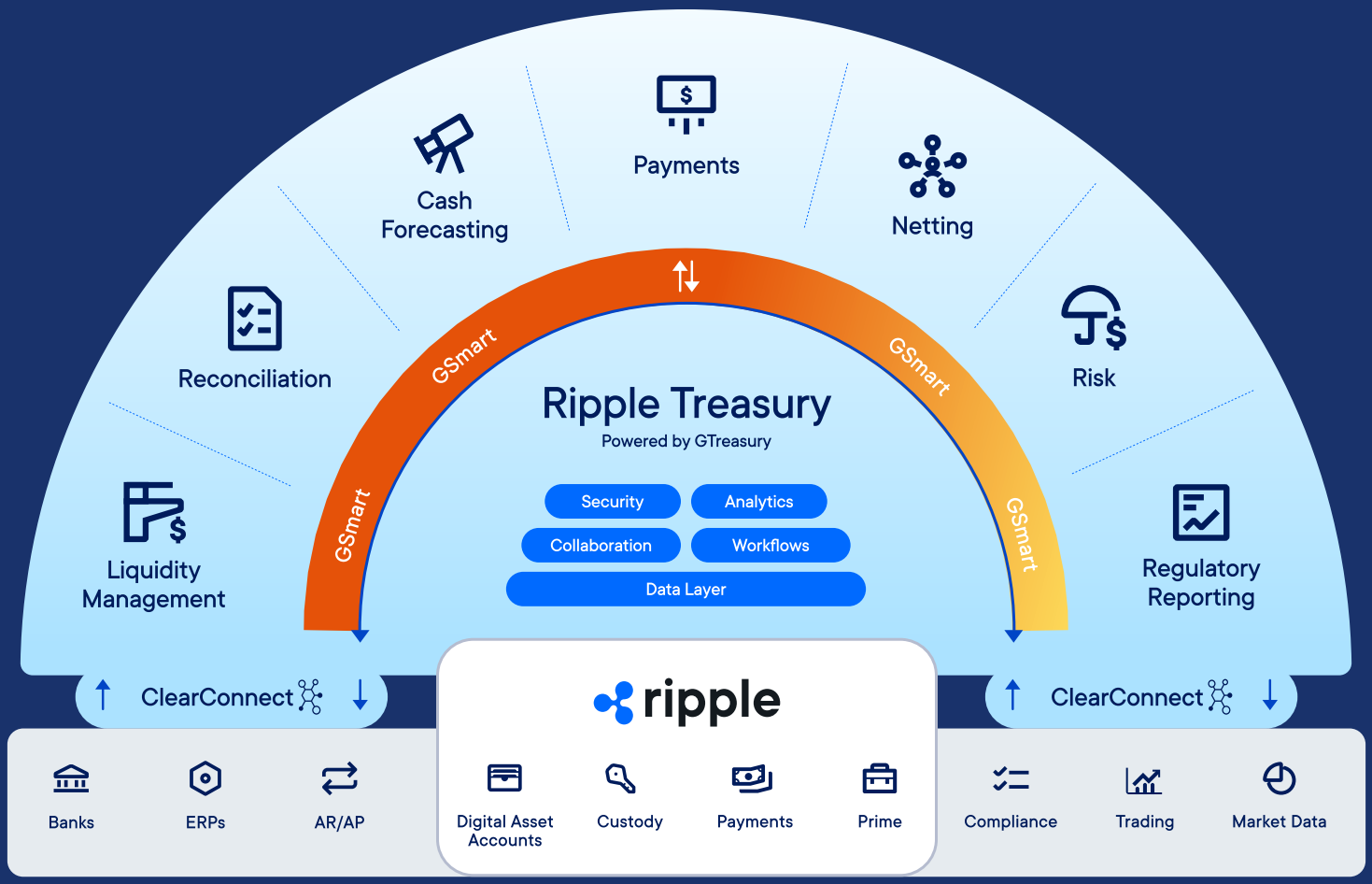
The professional path: Strategic transformation

Organizations investing in purpose-built, AI-amplified treasury platforms:

- Become proactive with real-time insights and automation
- Mitigate risk through professional controls and processes
- Enable growth with scalable, flexible infrastructure
- Build credibility demonstrating operational excellence

A CFOs guide to different types of AI

	PUBLIC AI ChatGPT, Claude, Gemini	ENTERPRISE AI ChatGPT Enterprise	TREASURY AI GSmart
What is it?	Public AI	Enterprise version of public AI	AI embedded in your TMS
What is it for?	• Useful for general business tasks and research ✗ Not suitable for treasury operations	• Useful for general business tasks and research • Better access to data, but still not suitable for treasury operations	• Purpose-built for treasury and finance use
Data usage	✗ No access to treasury data ⚠ Treasury data leaves your organization and may be used to improve the vendor's model	✗ Limited access to treasury data ⚠ Treasury data leaves your organization with contractual protections	✓ Full access to treasury data ✓ Purpose-built for treasury, it works with your actual treasury data where it already lives
Data compliance and security	✗ Data used for training AI models ✗ Data shared externally ✗ No financial controls	✓ Data is not used for training AI models ✗ Data shared externally ✗ No financial controls	✓ Never shared externally or used for external model training ✓ Built for Financial compliance
Treasury knowledge	Basic financial concepts only	Basic financial concepts only	✓ Deep treasury expertise ✓ Trained on treasury-specific data, financial patterns, and domain expertise
System integration	✗ Limited system integration	✗ Limited system integration	✓ Direct integration with TMS, including data from ERPs, banks, and treasury systems
Use cases for Treasury	• Productivity enhancement for general tasks • Generic responses requiring manual interpretation • Limited workflow integration • Use cases: General research, document review, removing toil from day-to-day tasks where data sharing is appropriate		• Productivity enhancement for treasury tasks • Treasury-specific responses • Actionable insights • Fully integrated into Treasury workflows • Use cases: Cash forecasting, exposure management, reconciliation, payments validation
Bottom line for CFOs	Public AI is convenient, but usage for treasury operations creates **unacceptable compliance** and data **security risks**	Enterprise AI offers **better security** than public versions, but is still generic, predominantly standalone, and **lacks treasury domain expertise**	Purpose-built Treasury **AI works with your actual data** where it already lives, **fully integrates with treasury workflows**, and provides **actionable insights** specific to your team's needs



The Ripple Treasury advantage

As the market leader in adaptable treasury solutions, Ripple Treasury offers:

1,000+ customers across **160 countries** trust Ripple Treasury with their treasury operations[9]

Proven track record

- 40+ years of treasury management expertise
- 1,000+ customers across 160 countries
- $2.5 trillion in transactions processed annually
- 99.97% uptime with enterprise-grade reliability

Comprehensive solution

- AI-powered forecasting with GSmart technology
- Liquidity management with real-time visibility across global accounts
- Universal connectivity through ClearConnect platform
- Intelligent solutions for risk management, payments, and intercompany netting

Strategic partnership

- Rapid implementation with 90-day cash visibility and forecasting
- Ongoing innovation with continuous platform development
- Expert support from treasury experts
- Growth enablement with modular, scalable architecture

Taking action

The cost of inaction continues to rise as organizations struggle with:

- Increasing complexity in global cash management
- Rising compliance requirements across jurisdictions
- Growing competition from digitally enabled companies
- Talent challenges as professionals expect modern tool

The question isn't whether your organization will eventually move beyond spreadsheets for treasury management. The question is whether you'll lead this transformation or be forced into it by circumstance.

Organizations that act proactively gain competitive advantage, operational excellence, and strategic capability. Those that delay face increasing risk, rising costs, and eventual crisis-driven change.

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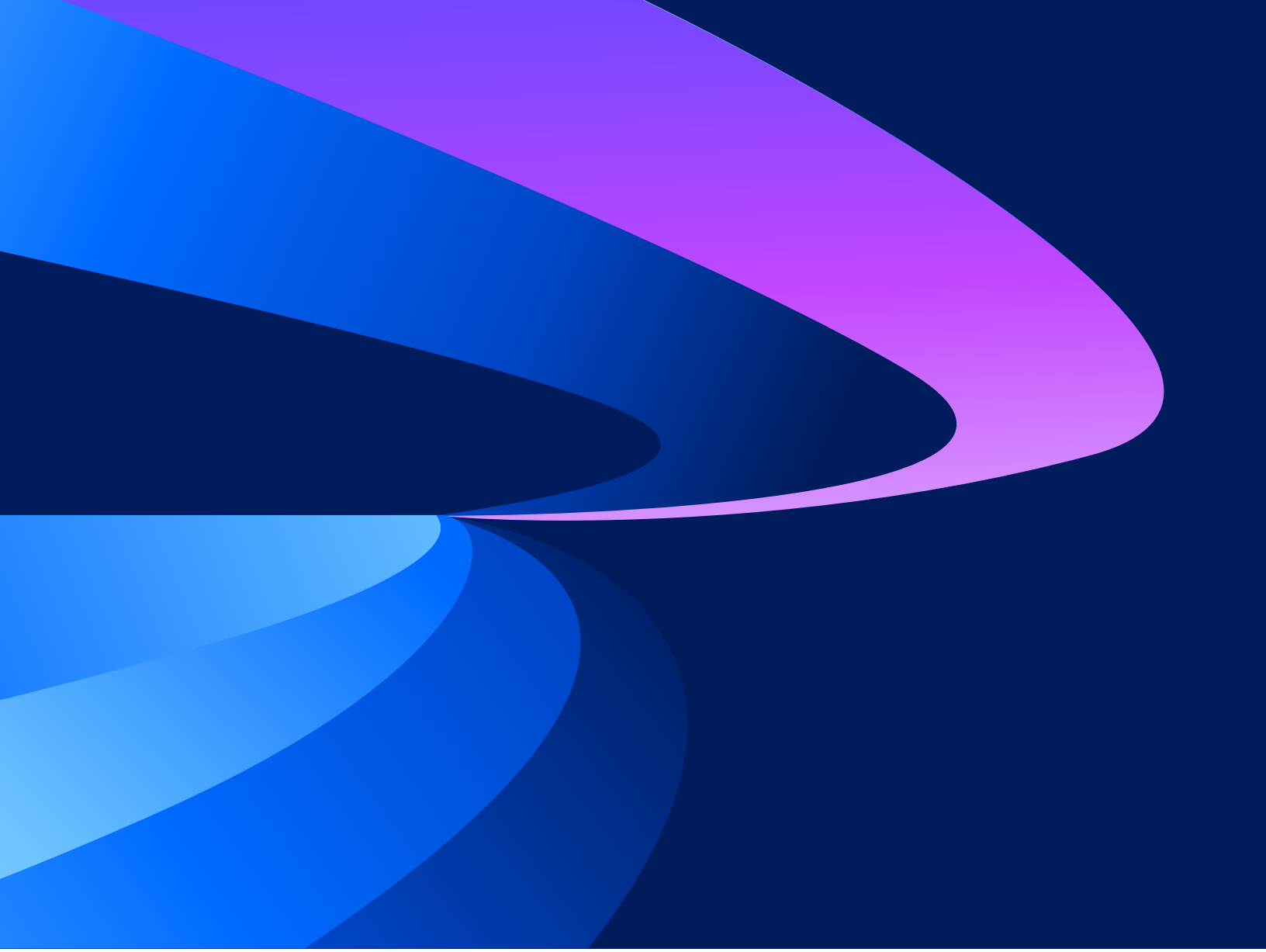
Methodology Note: This eBook synthesizes data from multiple industry sources, customer research, and academic studies. All statistics have been verified through peer review and industry validation processes. Where specific vendor data is cited, independent third-party verification has been obtained where possible.

Examples and Case Studies: Company examples and case studies presented in this document are illustrative and representative of typical customer experiences based on aggregated data and industry benchmarks. Specific company details, revenue figures, and outcomes are used for educational purposes to demonstrate common scenarios and potential benefits.



About Ripple Treasury

Founded in 2012, Ripple is the leading provider of blockchain-based enterprise solutions across traditional and digital finance. Its solutions span global payments, custody, liquidity, and treasury management, serving as a one-stop shop for moving, storing, exchanging, and managing value. Ripple's stablecoin, RLUSD, and the cryptocurrency XRP underpinning these solutions allow Ripple and its customers to shape the modern financial system.

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