TREASURY & RISK MANAGEMENT SYSTEMS

ANALYST REPORT SERIES



PAUL GALLOWAY

Senior Advisor, Strategic Treasurer

CRAIG JEFFERY

Managing Partner, Strategic Treasurer



WHAT

Analysis, discussion and takeaways from the 2022 Treasury Technology Analyst Report.



WHEN

Thursday, January 12, 2023 2:00 – 3:00 PM EST



WHERE

Live online presentation Replays at StrategicTreasurer.com













ABOUT THE SPEAKERS

GET TO KNOW TODAY'S SUBJECT MATTER EXPERTS



PAUL GALLOWAY

Paul Galloway has extensive experience in investment research and decision making, complex modeling and risk management. He is known for leading teams of professionals, providing solutions to complex problems, building relationships with business leaders and coming alongside others to help them achieve their goals. Paul earned a BS in Family and Consumer Sciences/Human Sciences from Iowa State University, followed by an MBA, Finance from the University of Iowa. He is a Chartered Financial Analyst (CFA) and a Persian Gulf War veteran, United States Marine Corps.



CRAIG JEFFERY

Craig Jeffery formed Strategic Treasurer in 2004 to provide corporate, educational and government entities direct access to comprehensive and current assistance with their treasury and financial process needs.

His 30+ years of financial and treasury experience as a practitioner and as a consultant have uniquely qualified him to help organizations craft realistic goals and achieve significant benefits quickly.



TOPICS OF DISCUSSION

KEY AREAS OF FOCUS & ANALYSIS



TREASURY TECH

SITUATION & LANDSCAPE



TMS

OVERVIEW



PROBLEMS A TMS SOLVES

VISIBILITY, CONNECTIVITY, SECURITY, VOLATILITY



ELM

OVERVIEW & OPPORTUNITIES



LEADING PRACTICES

SELECTION & IMPLEMENTATION



NEXT STEPS

ADDITIONAL RESOURCES



TREASURY'S SITUATION

ENVIRONMENT & CHALLENGES



Rapidly increasing demands, adding staff slowly



Security in hybrid & remote era



Efficiency & scalability



Compliance burdens

- KYC
- PCI DSS
- FBAR



Big data

- Complexity
- Visibility
- Accessibility

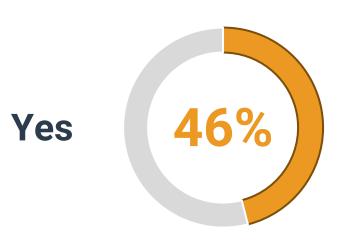


Geopolitical tensions & economic stress

- FX risk
- Market volatility
- Interest rate volatility
- Inflation
- Supply chain problems
- Fraud
- Lockdowns
- War in Ukraine

Are there currently any responsibilities that you don't have time to perform?

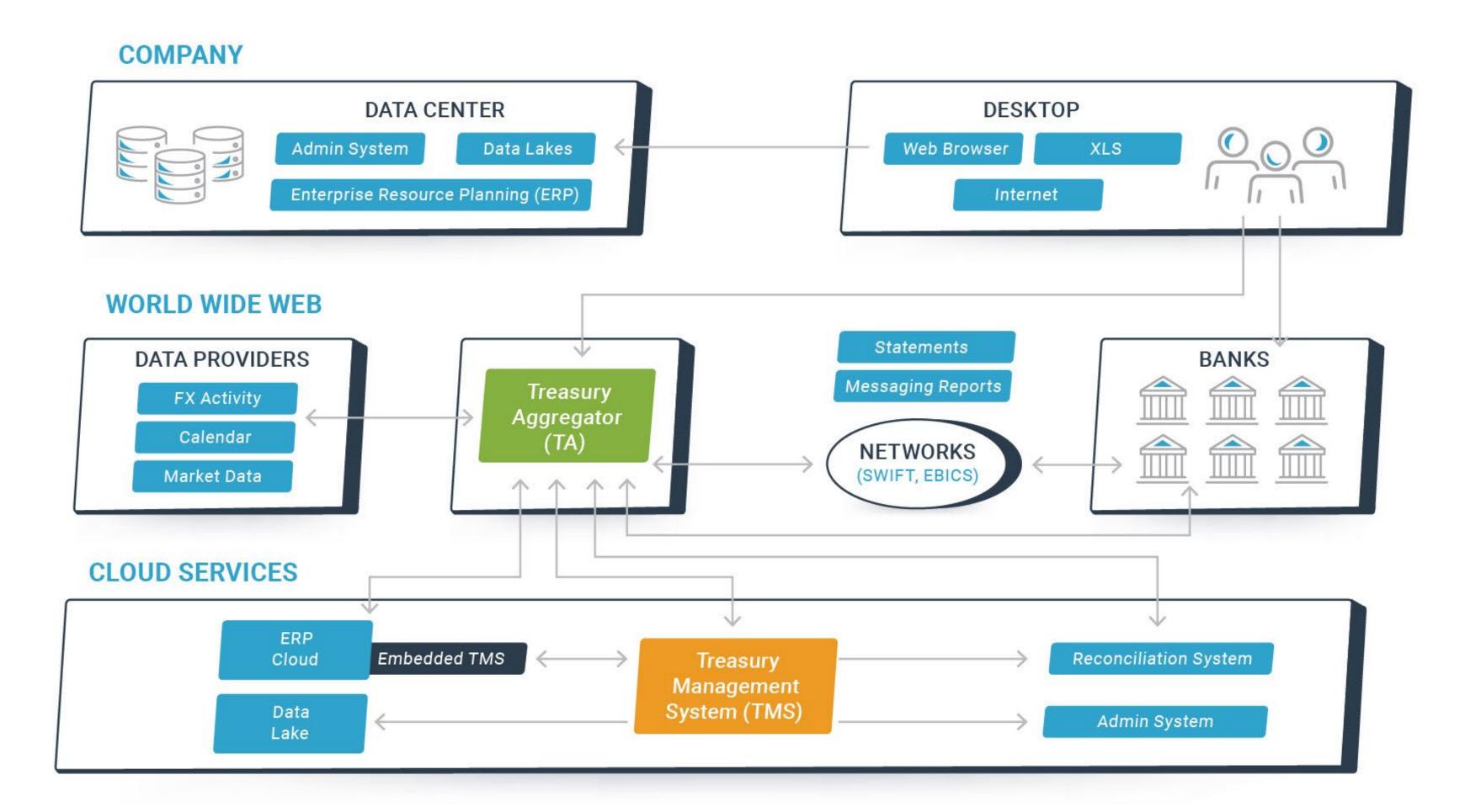






TREASURY TECH LANDSCAPE

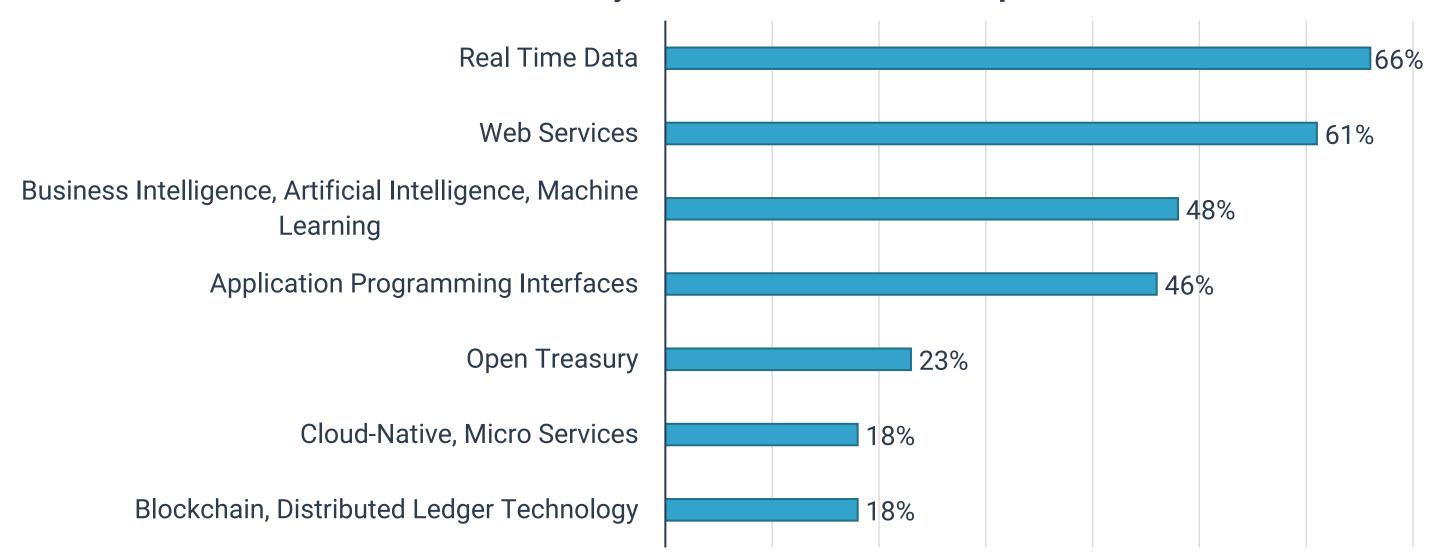
SAMPLE INFRASTRUCTURE





POLL QUESTION

Poll 1 - I am very familiar with these concepts:





FUTURE OF TREASURY TECH

TERMS, INNOVATIONS AND TRAJECTORIES TO BE FAMILIAR WITH



Platform-as-a-Service (PaaS)

- Microservices
- Cloud-native
- Low-code/no-code



Application Programming Interface (API)

API libraries



Faster to real time

- Data
- **Payments**
- Analysis



Power & value of networks

- Information
- Outsourcing
- Security



Big data & business intelligence (BI)



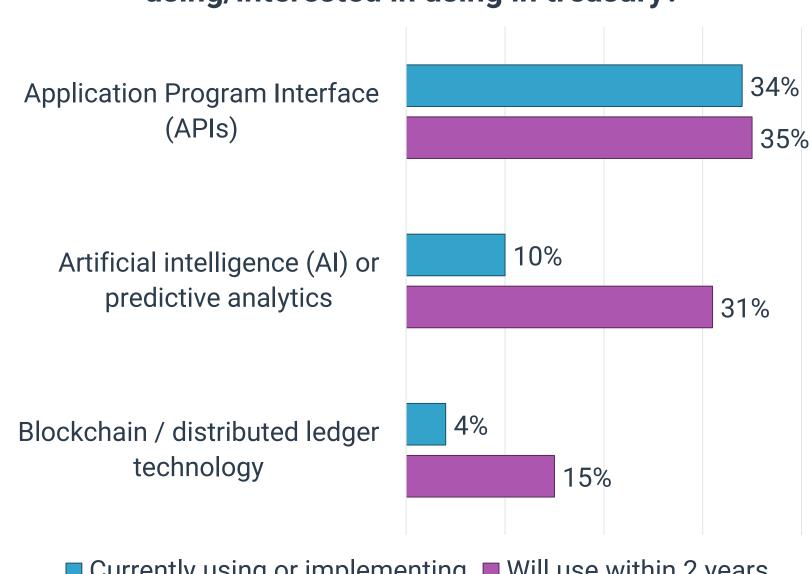
Artificial intelligence (AI) & machine learning (ML)

- Forecasting
- Security and fraud prevention



Blockchain & distributed ledger technology (DLT)

Which of the following technologies are you using/interested in using in treasury?



■ Currently using or implementing
■ Will use within 2 years



DEFINING THE TMS

TREASURY MANAGEMENT SYSTEMS



TMS: A central tool that aids treasury in its daily tasks and forms the core of its technological ecosystem.



Digital assistance with the basic treasury tasks:



Forecasting

Accounting

Cash management and positioning



Additional advanced or extended features:

FX

Payments

Compliance

Debt/investments

Bank relationship management

Deeper risk management (treasury & risk management systems, or TRMS)

Liquidity management



PROBLEMS A TMS SOLVES I

EFFICIENCY, VISIBILITY, CONNECTIVITY



Efficiency for overwhelmed treasury departments

Timely data and ample bandwidth provided for higher-level tasks, such as strategic work



A single source of truth for data and analytics

Strong connectivity and centrality, offering the most current data in one place that's accessible to all areas that need it



Straight-through processing (STP)

Automation and digitization reduce manual handoffs, yielding higher efficiency and smoother workflows



External connectivity

External connectivity to banks, networks such as SWIFT, FX portals, and market data providers; increasing prevalence of API connections



PROBLEMS A TMS SOLVES II

SECURITY AND CONTROL



Built-in controls

More effective than manual controls



Reduced touchpoints

Reducing touchpoints reduces vulnerability



Single, secure environment

 A narrower attack surface is easier to defend



Visibility

 A faster, clearer view of accounts and activity prevents fraud from going unnoticed



Scalability

 Efficiency and margin allow staff to scale up or down quickly



PROBLEMS A TMS SOLVES III

ECONOMIC VOLATILITY



Managing the volatility that threatens liquidity

Lockdowns International conflict

Supply chain issues Recession

Interest rates Inflation



The margin and automation provided by a TMS offer time to analyze, strategize, and advise.



DO YOU NEED A TMS?

CONSIDER THE PAIN CAUSED BY CURRENT PROCESSES

Operational stressors



Escalating inflation



Rising interest rates



Food crisis

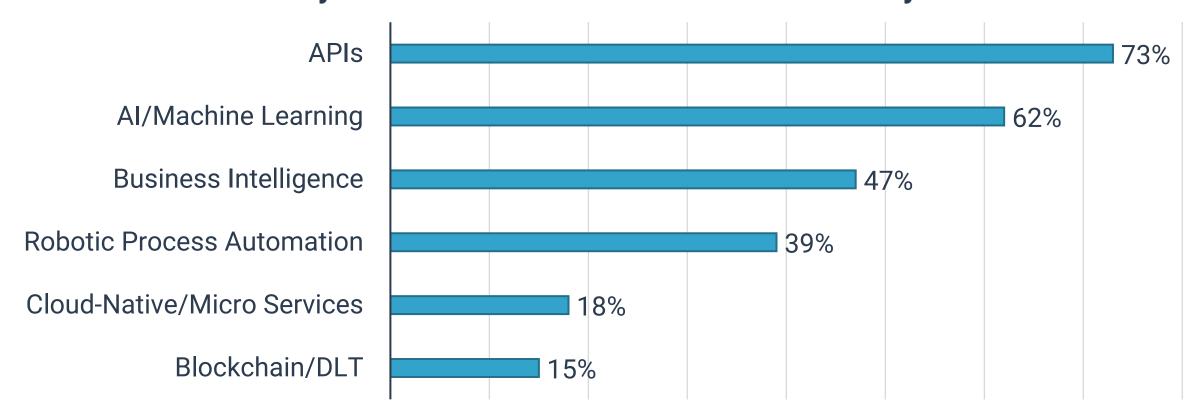


Supply chain issues



POLL QUESTION

Poll 2 - Which technologies do you think are highly promising for treasury and finance now or within the next two years?





EMERGING TECHNOLOGIES

IMPACTING THE TMS

AI/ML



- Anomaly detection
- Cash forecasting

BI Tools & Dashboarding



- Strong data management
- Reporting

APIs



- Facilitating open treasury
- More integration within tech stack

Cloud-Native & Miniaturization

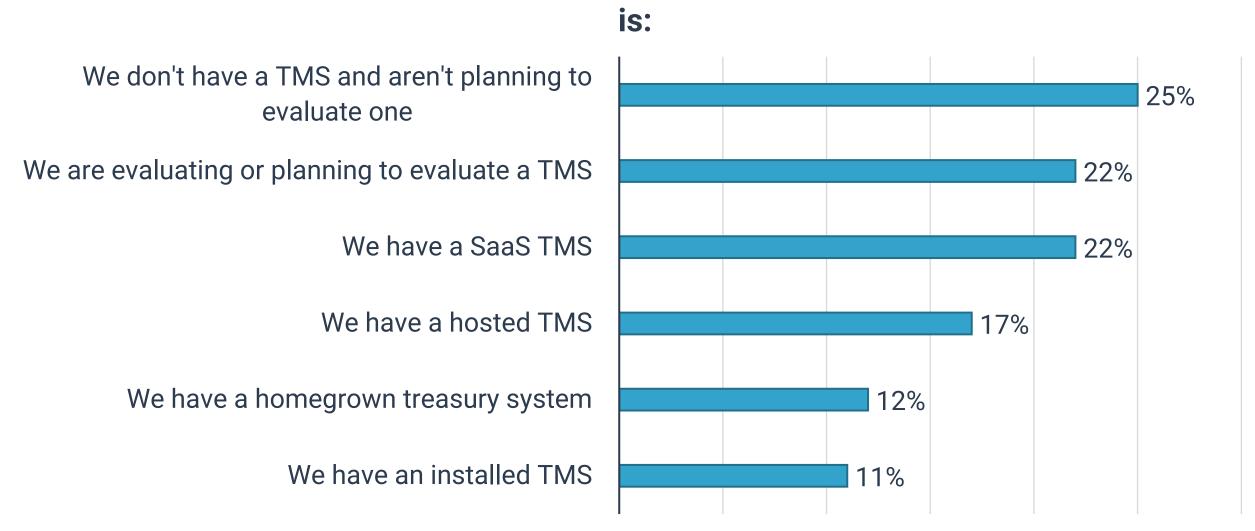


 Solutions can rapidly scale and adapt without interrupting customer use



POLL QUESTION

Poll 4 - Our position with regard to treasury management systems





DEFINING ELM

ENTERPRISE LIQUIDITY MANAGEMENT



ELM: Integrative, seamless functionality providing all-encompassing visibility into liquidity factors.



Foundational functionality (common to TMSs as well):



Accounting

Debt and S/T investments

Bank account management

Treasury payments



Advanced functionality (capabilities that distinguish ELM from a TMS):

Advanced forecasting

Capital access and working capital management

Visibility and payment support (treasury aggregator)

Foreign exchange (FX)

Banking structure, investment execution

Advanced accounting



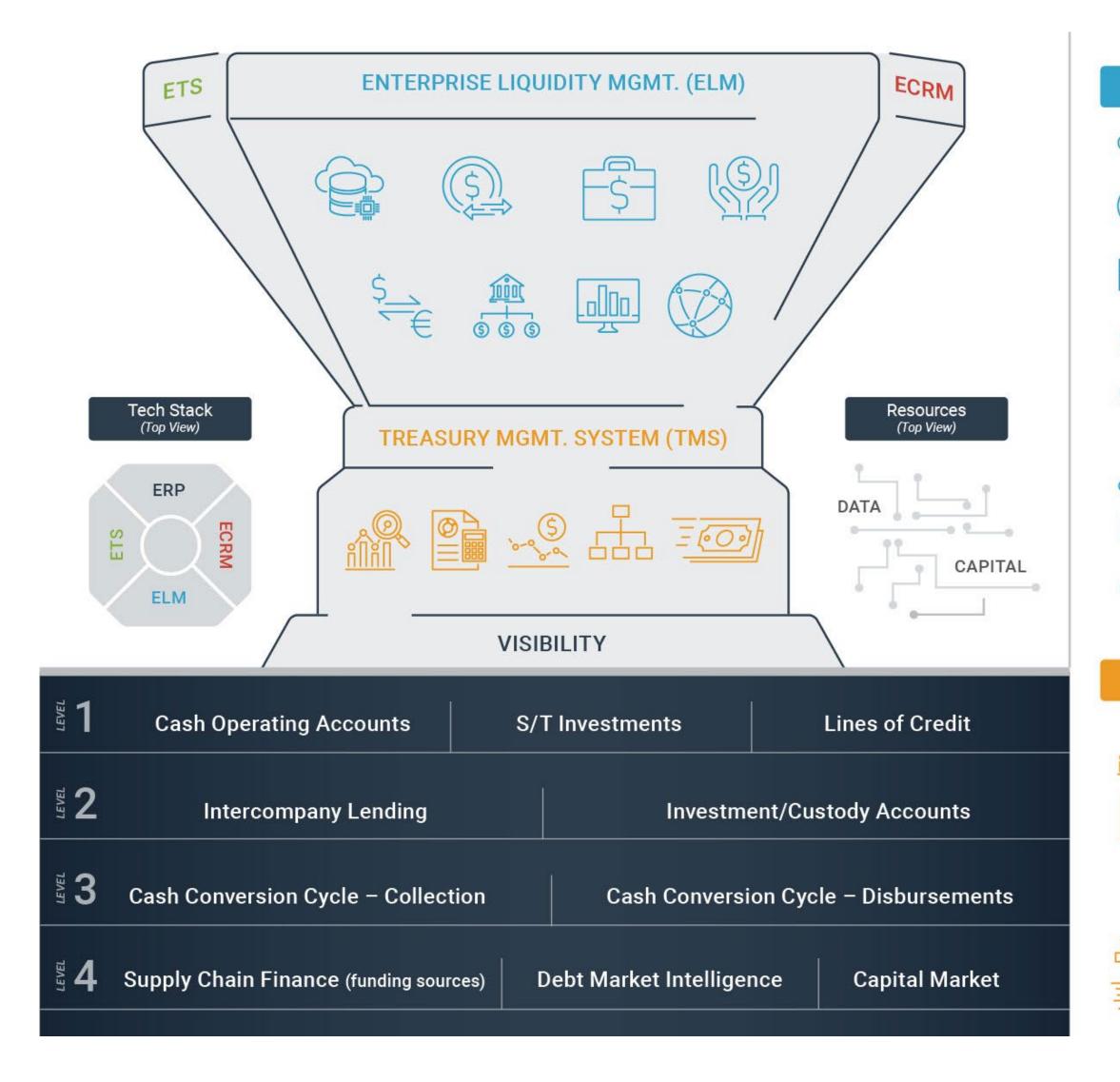
Other features:

Global support and network effect

Technology use: SaaS-based and potentially PaaS or cloud-native



ELMIN RELATION TO A TMS



Enterprise Liquidity Management (ELM)	
	Technology Use
	Forecasting: Advanced
- \$-	Capital Access & Working Capital Mgmt.
	Visibility & Payment Support (Treasury Aggregator)
\$	Foreign Exchange (FX)
999	Banking Structure, Investment Execution
	Advanced Accounting
	Global Support & Network Effect
Treasury Management System (TMS)	
	Cash Positioning/Forecasting

Accounting

Debt & S/T Investment

Bank Account Mgmt.

Treasury Payments

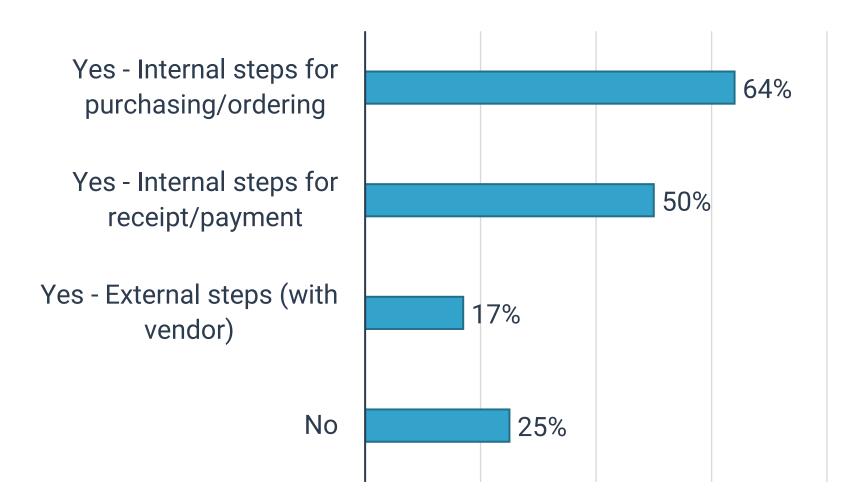


VISIBILITY ELM AND OPEN TREASURY

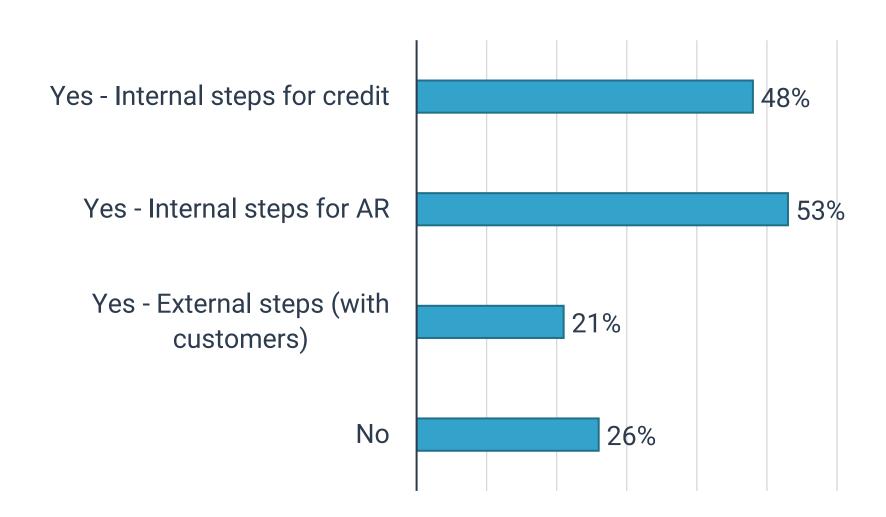


ELM helps achieve open treasury and an "end-to-end to end-to-end" view

Do you have an end-to-end view of your Accounts Payable processes? (Select all that apply)



Do you have an end-to-end view of your Credit and Accounts Receivable processes? (Select all that apply)





LEADING PRACTICES

SELECTION & IMPLEMENTATION



SELECTION

Take into account probable organizational changes and shifts in needs over the next several years

Consider the changing landscape and innovations revolutionizing how tools are developed, distributed and integrated

Consider all the options and narrow down to a short list based on business requirements



IMPLEMENTATION

Ensure adequate resources

 Support from vendor, IT team, third party

Ensure adequate time

- Phase implementation in banded timeframes
- Test each component before moving to next phase

Adjust the process to the system

 Avoid forcing an old process into a new solution



ANALYST REPORT

TREASURY'S GO-TO SOURCE FOR DEVELOPMENTS, TRENDS AND SOLUTIONS



VENDOR ANALYSIS SECTION
TMS PROVIDERS















VENDOR ANALYSIS SECTIONTREASURY ECOSYSTEM PROVIDER

