TASSCUBO

Leading Practices in Treasury and Investments

October 31, 2016

Marc Monyek
Joon Song



Presenter introduction

Marc Monyek

Joined EY in 2014 and has provided leading advice to CFOs and treasurers of government agencies, universities and companies with revenues of \$1-105 billion. Assessments and implementations have included global cash management, cash collections and pooling, debt and investment management, financial risk management and currency risk management

Prior to joining EY was Senior Director Global Funding at McDonalds Corporation and deputy Chief Investment Officer and Secretary of the McDonald's Corporation Profit Sharing and Savings Plan and an advisor to the McDonald's Owner Insurance Trust Investment Board

Board member of the Williams School of Commerce, Economics and Politics at Washington and Lee University and the National Congressional Award

Joon Song

Joined EY in 2008. His experience includes providing treasury advisory services to a variety of global clients in private sector, consumer products, retail, automotive, and energy industries. His areas of experience include, but are not limited to, the following: treasury management assessments, financial risk management, treasury technology, treasury organizational design, cash & liquidity management, treasury operating models, cash flow forecasting, bank relations, corporate finance, treasury accounting and reporting, control framework, governance and financial statement assurance.



EY Global Treasury Services

The Global Treasury Services team comprises of practitioners with corporate treasury experience and treasury and finance consulting experience. We have strong knowledge and experience related to treasury's interaction and interdependencies.

Treasury experience – our team has extensive knowledge and experience working with treasury operations, structure, currency and interest rate risk management, regulatory expectations, operating models, functional requirements and industry leading practices. Our practitioners have often worked in 20-50 countries and may have been expats in leading treasury roles.

Treasury transformation experience – we have successfully supported the efforts of numerous organizations with strategic initiatives to redesign, standardize, centralize and automate their treasury processes to improve operating efficiency and enhance overall business controls.

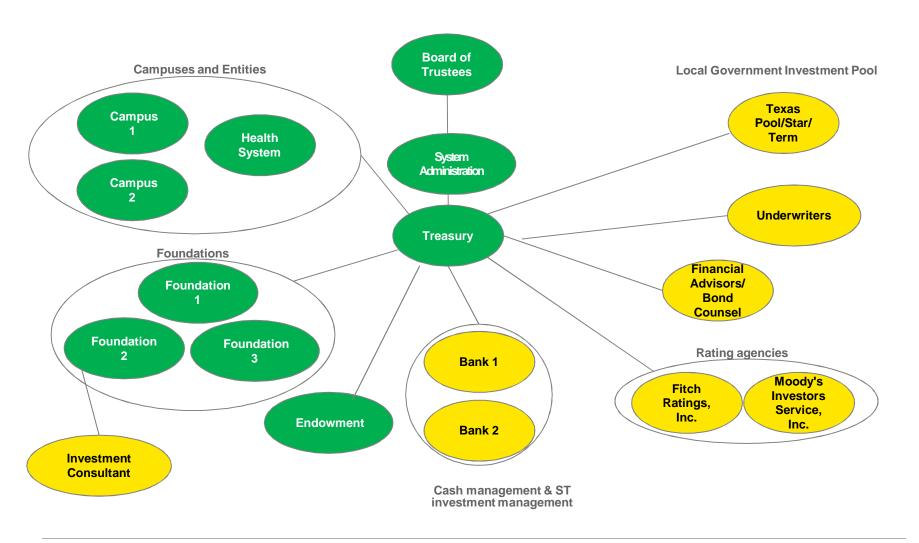
Objective and independent advice – our independence from technology vendors, financial institutions and outsourcing providers allows us to put your goals first and provide objective recommendations. Our global experience provides us with insight into vendor and financial provider solutions that fit an organization's business operations and footprint.



EY's Global Treasury Services has been recognized as the "Best Corporate Risk Advisor" by *Global Finance Magazine*.



University System Treasury Example stakeholders and external relationship map





Treasury issues and trends



Regulatory change



Treasury technology



Financial Risk management



Liquidity management



Treasury payments fraud



Cash flow forecasting



Treasury functional areas

Treasury organization and design

- Treasury objectives and philosophy
- Treasury roles and responsibilities

Cash and liquidity management

- Collections and disbursements
- Cash positioning
- Pooling, netting, and other related activities
- Short-term borrowing and investing
- Intercompany lending and investing
- Intercompany trade receivables

Cash flow forecasting

- Cash flow forecasting and budgeting methodology
- Processes and methodologies used to forecast short, medium, and long-term cash flows

Financial risk management

- Primary business activities that generate exposures
- Exposures currently being managed
- Instruments used to hedge exposures
- Hedge accounting process
- Hedging strategies
- Trade execution, confirmation, settlement, and accounting

(continued on next slide)



Treasury functional areas (continued)

Banking account and relationship management

- Bank account structure
- Bank account administration (e.g., opening/maintaining/closing, account reconciliation)
- Bank services utilized
- Fee Management
- Bank relationship management

Debt management

- Long-term debt management
- Debt covenant compliance
- Interest Rate Risk
- Diversification
- Intercompany Debt Management
- Debt tracking

Governance and control

- Governance and oversight structure
- Treasury policies and procedures
- Management reporting
- Performance measurement
- Regulatory impact on Treasury activities

Treasury technology

- Treasury systems used to support treasury activities
- Integration of internal treasury systems
- Integration of treasury systems with external technology (e.g., banks portals, market data sources)
- Integration of treasury systems with internal technology (e.g., ERP, GL)



Governance

Consistent with fiduciary responsibilities.

"(G)overning board members and officers hold fiduciary responsibility.

Fiduciary responsibility entails three particular duties to the institution,
commonly known as the fiduciary duties of care, loyalty, and obedience."

Association of Governing Boards

- Develop finance organization mission aligned with University mission and vision
- Create alignment of financial objectives between the Board of Trustees, administration, campuses and programs

"Governance enables us to establish our approach and have a process to make appropriate decisions. While we will still make incorrect decisions, the percent of correct decisions is significantly higher."

Deputy State Treasurer and Board Member of Major Retirement Programs



Provider vision and mission statements define the strategic position of the organization

Communicate to key stakeholders and the general public

OUR ROLE / PURPOSE - A better future for members

OUR VISION Proud and Trusted Partner

STRATEGIC INTENT TO DELIVER THE VISION

Leveraging our competitive advantages of scale and flexibility for to deliver a sustainable future

OUR VALUE PROPOSITION

LOWEST COST

Leveraging our processes and technology to provide a reliable service at the lowest cost to our Clients

CUSTOMIZED SERVICES

Leveraging our flexibility to deliver timely solutions for our Clients that create a quality member and employer experience

Leading Investment Performance

Leveraging our expertise to give our participants access to leading investment management platforms

STREAMS OF DELIVERY

RESOURCE

CAPABILITY

FUNDING

Simple and mutually agreed statements that manage stakeholder expectations and set the bar for decisions and trade offs

Sharing an agreed mission and vision early contributes to building "public confidence" and mobilising acceptance and retention



Recommended treasury policy outline

- Introduction / Scope / Organization needs / Purpose
 - Reason for policy
 - Policy statement
 - Objectives of treasury organization
- Cash and liquidity management
 - Liquidity targets
 - Cash concentration guidance
 - Cash disbursement guidance
 - Cash controls
 - Covenant liquidity monitoring expectation
- Debt Management
 - Rating agency requirements
 - Borrowing decision guidance
- Cash flow forecasting
 - Forecasting objectives, time horizons, and frequency
 - Forecast procedure
 - ▶ Types of forecasting utilized
 - Acceptable methodologies and technology
 - Variance analysis

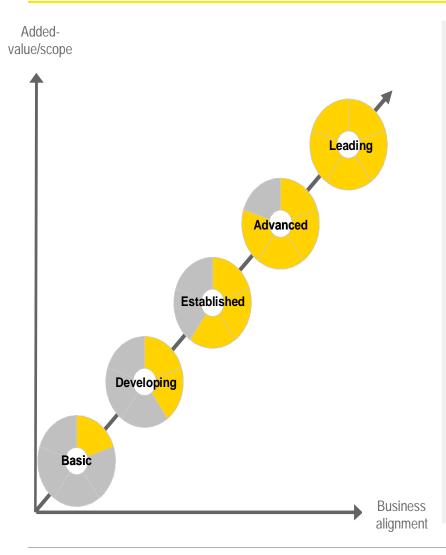
▶ Bank relationship management

- Overview, authorization, objectives
- Opening, closing, and maintenance of bank accounts
- Organization's bank account structure
- ► Bank relationship management protocols
- RFP process
- Delegation of authority
 - Approval limits
 - Delegation of authority update requirements
- ▶ Treasury technology use
 - Permitted technology
 - Automated control requirements
 - Maintenance requirements
- ► Risk management
 - ▶ Defined key risks for organization
 - High level mitigating guidance
 - Derivatives guidance
 - ► Key risk reports used for mitigation
- ► Treasury continuity plan



Value creation: Treasury Maturity

Improving treasury operating model



What are the drivers in the organization?

- ► Preserve cash flow
- ▶ Remediate control deficiencies
- ► Reduce operating costs
- ► Reduce cycle time in processes
- ► Appropriate staffing model

What are the key pain points?

- ► Redundant processes
- ► Manual and disparate processes
- ► Lack of treasury expertise in key areas
- ► Lack of treasury reporting and KPIs
- ► Limited visibility to regional and local country cash and banking activities
- ► Lack of integration with business units

Scope

- ► Treasury functions (cash management, financial risk management, funding, etc.)
- ► Treasury life cycle within each function
- ► Areas where treasury interfaces with business partners

Operational strategy

Process and policy

Technology and data

People and organization

Performance measurement



Evolution of treasury as a value creator

	Stage I	Stage II	Stage III	Stage IV
Operational characterization	"Information processor"	"Data flow manager"	"Business partner"	"Change agent"
Primary focus	Transaction flows	Policy and procedures	Concept integration	Value-added initiatives
Success measure	Accurate transaction settlement	Timely and cost effective execution	Supporting business objectives	Driver of shareholder value
Key challenge	Volume	Bureaucracy	Acceptance	Leadership



Potential areas of assessment





Treasury Maturity Modeling

Description

Treasury Maturity Model (TMM).
The TMM has a set of criteria for each treasury function that is assessed. It is developed based on EY GTS's experience working with global organizations across industries and covers treasury functional areas that are tailored to address each client's specific needs. This maturity self-assessment includes the seven treasury functional areas outlined at the right.

- Organizational Structure
- Cash Management
- Cash Flow Forecasting and Planning
- Debt Management
- Investment Management
- Technology
- Financial Controls & Compliance



A Maturity Model provides a means for quantifying and prioritizing the treasury transformation needs

The maturity overview defines five levels of rating:

- **Basic (rating of 1):** undocumented processes are in a state of dynamic change, tend to be driven in an ad-hoc, uncontrolled and reactive manner resulting in a chaotic or unstable environment.
- **Developing (rating of 2):** some processes are repeatable resulting in consistent results, process discipline (unlikely to be rigorous), helps to ensure that existing processes are maintained during times of stress.
- Established (rating of 3): sets of defined and documented standard processes are established, subject to improvement over time, and used to establish consistency of process performance.
- Advanced (rating of 4): existing process metrics allow treasury to effectively control each process and identify ways to adapt it to a particular project without measurable losses of quality or efficiency deviations from specifications.
- Leading (rating of 5): the focus is on continually improving process performance through both incremental and innovative technological changes and improvements.



Example assessment criteria

Topic	Question(s)		
Cash and liquidity	To what extent does Treasury have a complete, accurate, and timely visibility into the		
management	organization's global cash balances and liquidity requirements?		
	How robust is the organization's ability to mobilize cash to meet its liquidity requirements?		
	To what extent is the payment processing optimized?		
Bank account and	How are banking relationships and bank accounts managed?		
relationship	How frequent are services and fees reviewed and negotiated?		
management			
Cash forecasting techniques	To what extent do cash forecasting techniques provide reliable outcomes?		
Funding and Investments	To what extent are funding and investment transactions centralized?		
Counterparty risk	Has management established a counterparty risk management mandate?		
Treasury Policies and	Has Treasury developed, documented, and deployed a comprehensive set of global		
Procedures	treasury policies procedures and guidelines that have been approved by management?		



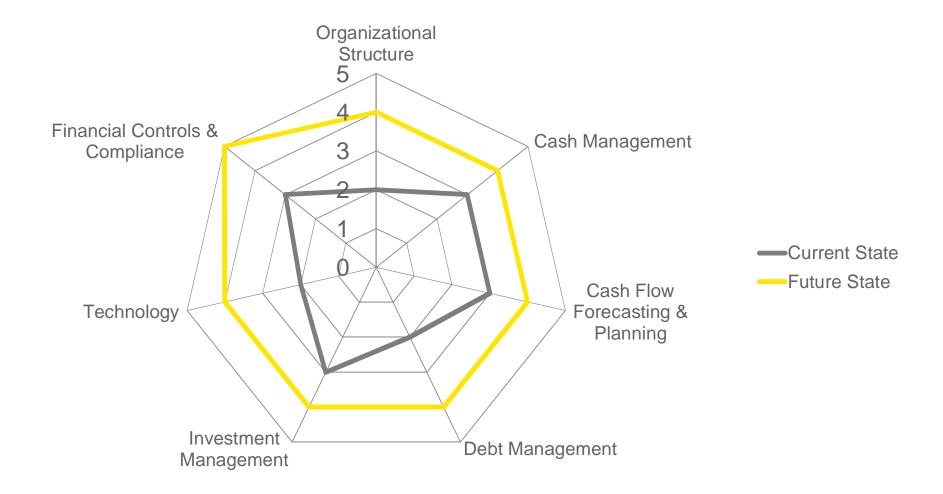
Example assessment criteria (continued)

Topic	Question(s)		
Process performance	For all treasury processes covered, how are the performance of the processes		
	measured?		
Management	For various financial processes, what is the quality and frequency of reports sent to		
Reporting	Management?		
Automation	Does your organization have the appropriate technology to effectively support		
	Treasury operations?		
Transaction	To what extent is the processing of transactions automated?		
processing			
Communication	To what extent are Treasury activities integrated with business operations? What		
	degree of communication exists between Treasury and rest of organization?		
Knowledge	To what extent are treasury employees familiar with the university mission and trends		
	and are able to describe how their work supports organization performance?		
Process ownership	To what extent is the treasury process owner role defined?		
Cash collection and	To what extent are the collection and application processes optimized?		
application			



Treasury Maturity Model

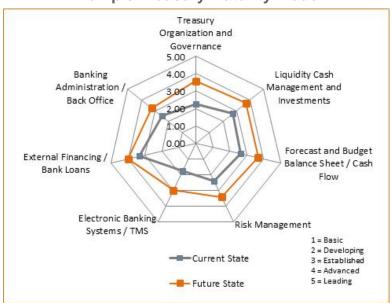
Sample output





Example outputs

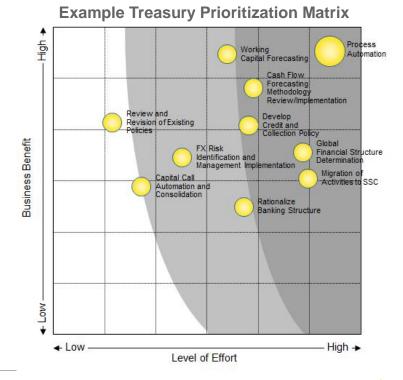
Example Treasury Maturity Model



Current state assessment will result in a maturity model providing means for quantifying and prioritizing treasury improvement needs based on pre-established rating criteria

Example work products based on management's input/prioritization

- Treasury maturity model
- Cash flow forecasting methodology considerations
- Investment management considerations
- ▶ Bank relationship management framework
- Interest rate risk management approach
- ► Treasury technology assessment and recommendations





Leading cash flow forecasting schematic

Cash culture

Shared responsibility

Continuous improvement

Methodology

Reporting

Cash flow forecasting goals

Financial planning

Liquidity management

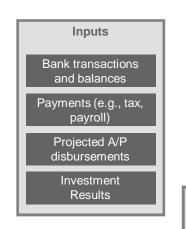
Third party communication

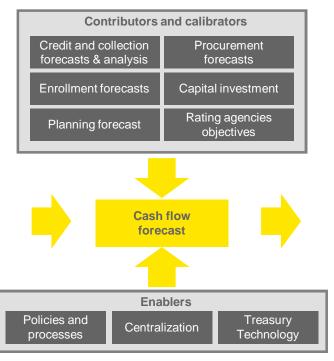
Leading indicator

Investment planning and objectives



Leading cash flow forecasting schematic









Investment management structure



- Organization, policies, and procedures:
 Committee and board structure including charter,
 oversight, regulatory compliance responsibilities and policy documentation
- Program objectives: Risk and return profile for the organization. Portfolio risk exposure and metrics. Liquidity profile.
- Portfolio construction: Determination of investment sectors, including fixed income and equity classes.
 Consideration of managed accounts

- Investment managers: Selection and review of portfolio managers, including index, hedge funds, private equity and actively managed funds
- Performance benchmarks: Selection of appropriate market benchmarks and periodic reviews
- Investment committee reporting: Reporting systems, benchmarks and agendas for investment performance reviews



Investment management strategy

Meeting the requirements of your organization

Investment Objectives and Risk Philosophy

- University mission (potential examples)
 - ▶ Funding requirements
 - Scholarships and financial aid
 - Research
- Risk appetite
- ▶ Performance objectives
- Time horizon

Key Considerations

- Actively managed vs. passive index funds
- Liquidity and ability to absorb market volatility
- Manager fee structure
- Internal vs. external staffing and consultants
- Liquidity evaluation

Portfolio Construction

- ▶ Identify mix of fixed income, equities and alternative investments (if applicable)
- Maintain liquidity and income requirements
- Streamline, standardize and automate treasury processes to shift scarce resources from administrative and operational tasks to value-add activities



Recommended approach for investment manager selection and review

Step 2

Step 1 Identify investment sector

requirement

- Perform portfolio analysis to determine potential enhancement (e.g. equities, small cap value manager)
- Or, identify need to replace manager following review

Manager qualifications

Review the following:

- Assets under management and stability
- Ownership structure
- Experience of portfolio managers, manager turnover
- Long term performance relative to benchmarks and peer managers

Step 3 Manager Interviews and selection

- Evaluate key investment professionals, including portfolio manager
- Have on-site visit to review overall firm structure and stability
- Assess specific holdings within portfolio and adherence to methodology

Step 4 On-going reviews

- Quarterly process for investment committee on manager performance relative to peers
- Have a rotating manager present on performance and outlook at each meeting
- Update committee on any key changes in personnel or ownership

Step 5 Manager replacement

- Identify key changes in managers or multi-period performance lagging peers and indexes
- Discuss at committee level and determine watch list
- ► Initiate search process
- Note: It is recommended to perform reviews on all managers every 5-10 yrs

Step 6 Implementation plan

- Inform manager of potential selection
- Negotiate fee structure for separate accounts or fee classification for mutual funds
- Create transition plan for asset changes including transfer of assets to mitigate pricing risk



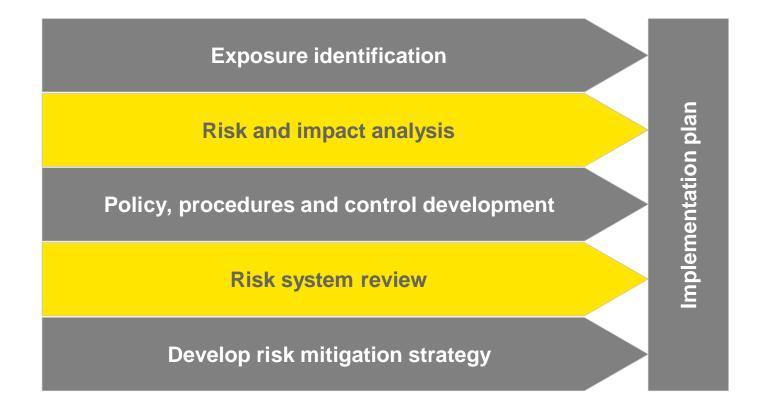
Bank relationship management approach

- ► Bank relationship management approach objectives:
 - Develop a clear, consistent and rational manner to evaluate existing banking relationships and accounts
 - Continue mutually beneficial long term relationships with your financial partners
 - Remove redundancy and inefficiency of your current operations
 - Review bank fees and returns to enable bank providers to earn a fair and appropriate return
- ► Three step approach to bank relationship management:





Interest rate risk management approach

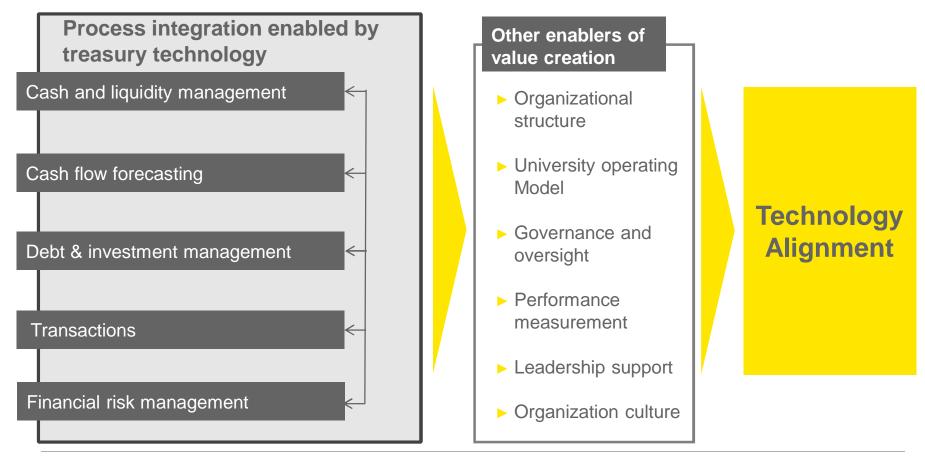




Treasury technology

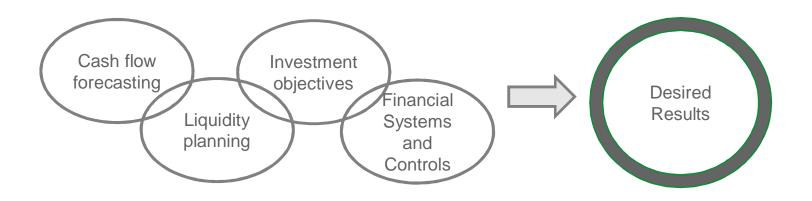
Unlocking treasury value through automation

- Well-designed treasury processes create value for the organization through higher effectiveness
- The value of well-designed treasury processes increases dramatically when they are integrated and automated through the use of treasury technology





Linked objectives and enablers lead to results



Enablers						
Policies	Treasury technology	Organization alignment	Treasury and Finance talent			

