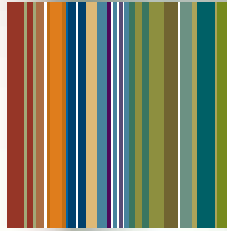


SUNGARD®

APEX COLLATERAL

Innovative solutions for enterprise-wide collateral
management and optimization



Post-crisis reform is driving a critical need for advanced collateral management. The parallel implementation of the Basel III capital adequacy and liquidity framework combined with the far reaching OTC derivatives markets reforms (Dodd-Frank, EMIR and others) create a substantial collateral squeeze.

Standardized derivatives should be cleared through central counterparties (CCP) and higher capital charges and onerous margin requirements will apply for non-cleared derivatives.

Apart from the massive increase in margin requirements, the demand for high quality securities is further fuelled by the drying up of unsecured money markets and that the Basel III liquidity standards require banks to hold a substantial liquid assets buffer to meet the Liquidity Coverage Ratio (LCR).



The post-crisis liquidity squeeze

* BIS, April 2012

** Risk Magazine, August 2012



SunGard's Apex Collateral solution helps us increase our effectiveness by providing a consolidated, big picture view of our collateral asset pool across OTC derivatives, reinsurance collateral, repo and securities lending. **This transparency helps us mitigate counterparty risk while getting maximum value from our collateral assets.**

Rich Hochreutiner

global head of collateral trading and management at Swiss Re



Adopting sophisticated tools to efficiently manage the collateral process on an enterprise-wide basis is an absolutely key requirement in today's highly competitive environment. **Being able to manage collateral in a more efficient and timely manner and within the trading process provides a significant competitive advantage.**

Andy Nybo

principal and head of derivatives research, TABB Group



THE COLLATERAL MANAGEMENT INDUSTRY CHALLENGE

Financial institutions must optimize the use of assets across business lines and transform their collateral management infrastructure to handle the increased volume and complexity of collateralized trading business.

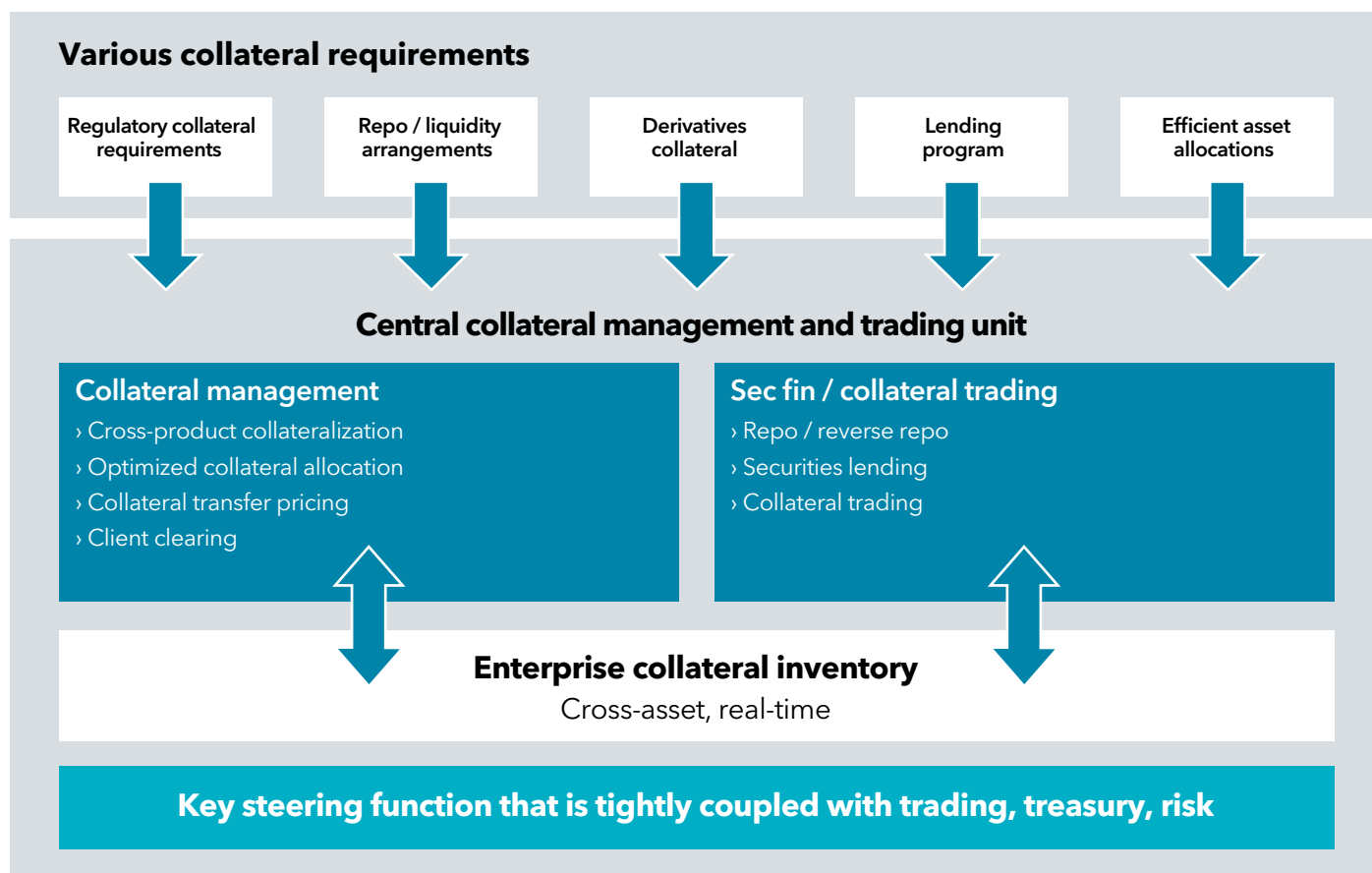
High quality collateral has become a scarce commodity and collateral management has transformed from a back-office operational function to a proactive, business critical discipline. Financial institutions on the sell and buy-side are challenged to establish sound collateralization operations and optimization processes in order to make most efficient use of collateral.

A tier one bank recently announced an expected 63% increase in the number of collateral calls, an 83% increase in collateral movements and a 1000% increase in the number of collateral substitutions as firms adapt to the new regulations and market conditions and move to proactive collateral asset management and optimization of the collateral portfolios.

The status quo at many financial institutions is still a siloed architecture with segregated collateral pools for the various business lines. This leads to an inability to optimize the allocation of collateral assets centrally and makes collateral operations inefficient and hard to scale.

Key challenges for financial institutions:

- › Integrate the collateral silos.
- › Create the infrastructure to process cleared and bilateral OTC derivatives.
- › Optimize the allocation of assets to meet the various collateral requirements.
- › Handle increasing volume of collateralization and improve operational efficiency.
- › Incorporate the cost of collateral in deal pricing.
- › Comply with the risk and regulation driven reconciliation needs.



Centralized collateral management and trading - a necessary evolution

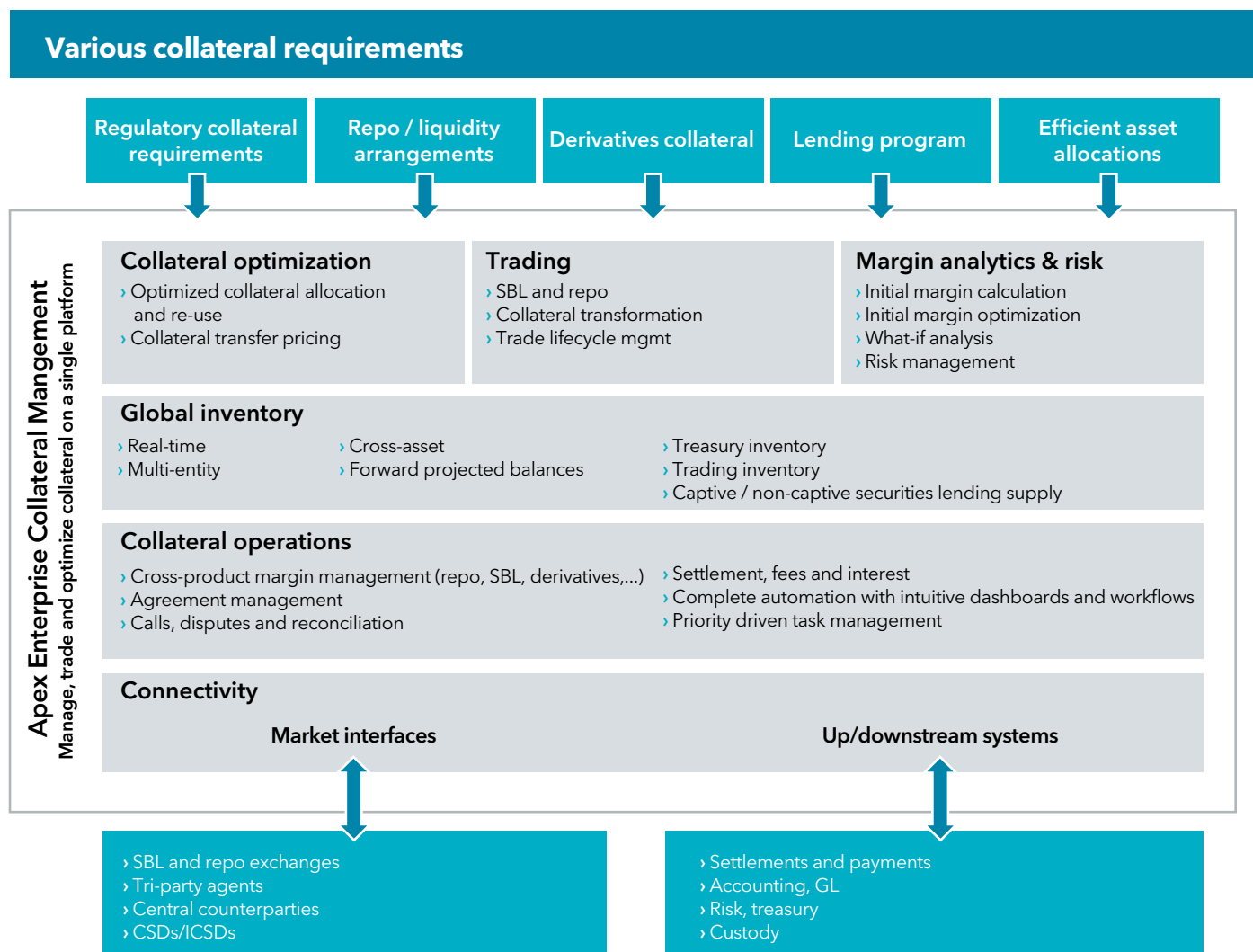
THE SOLUTION: APEX COLLATERAL

To address these time critical collateral management challenges, SunGard launched Apex Collateral in 2012, a unique and innovative solution that offers enterprise-wide collateral management, optimization and trading on a single platform. Apex Collateral helps financial institutions to make the best use of their collateral assets and to handle the fast increasing volume and complexity of collateralized trading activities.

Apex Collateral is structured in a modular way as we recognize that not all institutions will want to replace their collateral management infrastructure wholesale. This allows our customers to pick and choose the elements of the platform that best fit their specific requirements.

Apex Collateral is built around five key modules:

- › A global, real-time, cross-asset inventory.
- › Tools for collateral trading and securities finance.
- › Collateral optimization to minimize the cost of collateral posted.
- › Margin analytics and risk providing PFE based IM calculations, what-if scenario analysis and trading and concentration limits.
- › Lean operations platform that automates the collateral management processes across product silos.



Global collateral inventory

To make the most efficient use of collateral assets and to manage risk effectively, you need a consolidated view of your inventory. In the new collateral landscape traditional, business-level silos are a hindrance to an institution's performance and collateral optimization works best when you consider the broadest inventory.

Key features:

- > A single, global, cross-product and cross-asset view to optimize the use of collateral across business lines.
- > Current positions with drill downs to slice and dice by legal entity, beneficial owner, etc.
- > Forward projected balances over any time period.
- > Real-time updates based on trading activity inside or outside the system.
- > Real-time settlement updates to show contractual versus actual balances.

Securities finance and collateral trading

The shortage of high quality collateral will push market participants to source collateral in the repo and securities lending market. This may create significant potential to increase trading revenues from collateral trading. Apex Enterprise Collateral features front-to-back trading and trade management for Repo, Securities Borrowing and Lending, and Synthetics. This includes trade capture and full trade lifecycle management.

Key features:

- > Securities Borrowing and Lending: principal and agency, non-cash and cash, pool management.
- > Repo: bilateral and tri-party, Specials and GC, open and term, fixed and floating rate.
- > Synthetics: outright, OTC call/put options, Swaps TRS, etc.

> Full front-to-back support and trade lifecycle management: Trade amendments partial return/increase, rate change, recalls, allocation change, interest clean-ups, billing, substitutions, roll over, evergreen, etc.

> Automated short covering.

> Corporate actions processing.

> Global processing and multi-entity support.

> Trading (settlement, risk) and portfolio limits.

Collateral optimization

The key to truly efficient collateral management lies in how to determine the optimal way to allocate assets to collateral requirements.

Working across the bank's global set of requirements, our collateral optimization module uses linear programming techniques to find the cheapest overall combination of assets allocated to the collateral requirements. In so doing, it minimizes the overall funding cost of the pledged collateral assets, or in other words, maximizes the revenue from the overall collateral asset pool.

Key features:

> Optimize to inventory across all collateral requirements, not just cheapest to deliver.

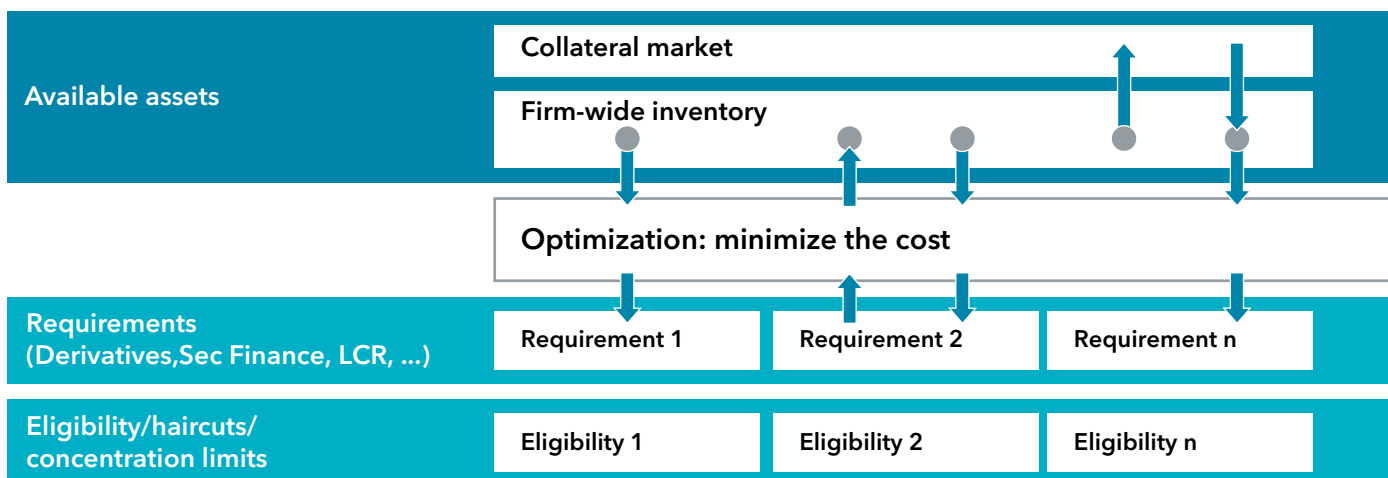
> Uses linear programming to identify the overall cheapest allocation.

> Propose substitutions and upgrade trades to optimize the collateral portfolio.

> Automated collateral trade generation based on optimization results.

> What-if scenarios to model the impacts of changing dynamics in the collateral asset pool and requirements.

> Internal collateral transfer pricing that create the right incentive for optimal collateral use.



The collateral optimization challenge: Minimize the total cost of all collateral allocations

Margin analytics and risk

The OTC market reforms impose central clearing of standardized OTC derivatives and higher capital charges and restrictive margin requirements for non-cleared derivatives. Financial institutions will need to post Variation Margin (VM) and also Initial Margin (IM) for bilateral and cleared OTC transactions. Apex Collateral calculates and validates Initial Margin for CCPs as well as for bilateral counterparties using advanced risk models.

With more CCPs entering the market, banks need to understand the cost of transacting at each one. Each CCP has its own margin terms and the amount of margin required will depend on its model. In many instances, there may also be the option of doing the trade with a bilateral counterparty. In that case, each of those will have their own specific rules. Apex Collateral helps to identify the optimal counterparty or settlement location in order to minimize the overall margin requirement, thus freeing up assets for other uses.

Apart from the margining capabilities, Apex Collateral offers a broad range of risk analytics that allows you to simulate the impact of credit rating or price factor changes on collateral requirements and to effectively monitor exposure concentrations.

Key features:

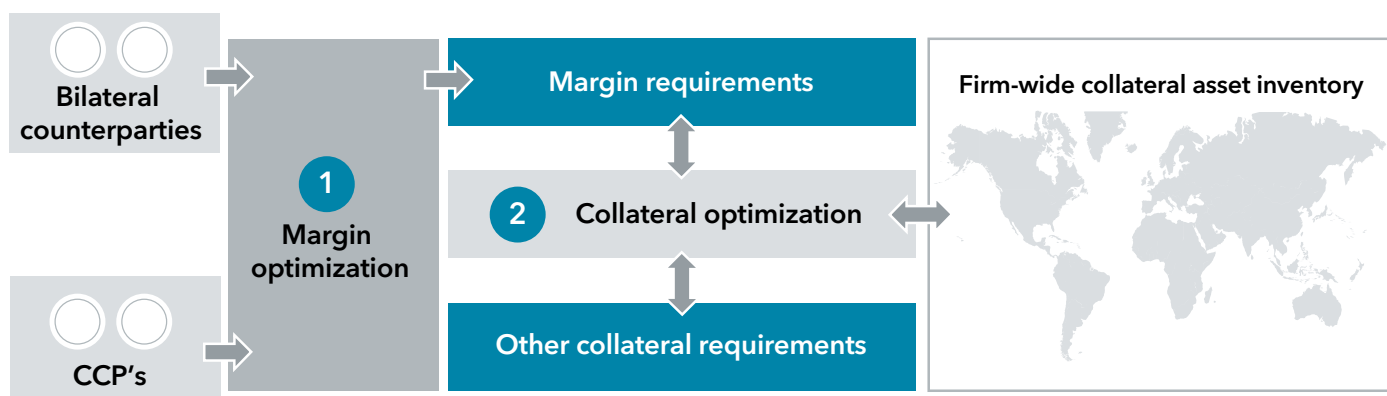
- › Calculate, validate and project Initial Margin from CCPs and bilateral counterparties.
- › Identify the optimal settlement location or counterparty for new trades.
- › Optimize the composition of SPAN and VaR portfolios held at a CCP.
- › Provide FVA calculations to support deal pricing.
- › Analyze collateral requirements and downgrade scenarios.
- › Manage counterparty and concentration limits.

Lean collateral operations

The operations module of Apex Collateral is designed to streamline and automate the collateral processes to cope with the increased collateralization volume and complexity the operations team must handle. This frees the collateral management teams to focus on the exceptions and add value through mitigating risk and optimizing the use of collateral assets.

Key features:

- › Cross-product collateralization for repo, securities borrowing and lending, derivatives, and re-insurance agreements.
- › Support for central clearing (CCP).
- › Complete automation with intuitive dashboards and workflows.
- › Dispute resolution management and advanced reconciliation.
- › Agreement management.
- › Processing of settlements, fees and interest.
- › Electronic messaging.



Margin and collateral optimization

Connectivity

Apex Collateral offers out of the box interfaces with the established market infrastructure providers and tri-party agents, CCPs and brokers. Our connectivity module also enables easy integration with up- and downstream third party systems, such as custody platforms, accounting systems, settlement and payment hubs, risk management, and treasury solutions. The connectivity component features pre-configured out-of-the-box adapters (70+) to a large number of market participants and third party systems, including:

- › Market data providers.
- › Tri-Party collateral agents.
- › Central counterparties.
- › Reconciliation platforms (OTC, SBL).
- › SBL and repo exchanges.
- › Market data analytics services.
- › Exchanges, CSDs/ICSDs.

In the post crisis reality, collateral management has become a key steering function within the capital market business. Apex Collateral is a modular platform for financial institutions of all sizes seeking to improve their collateral management infrastructure and to create sustainable competitive advantage in the collateralized trading business by:

- › Overcoming silos and unlocking the potential of collateral management by centralizing the management, trading and optimization of collateral in a single profit centre, on a single platform.
- › Reducing the cost of funding collateral through a holistic optimization process that best allocates collateral to the various requirements.
- › Avoiding collateral sitting idle and improving revenues through proactive collateral trading.
- › Complying with the OTC market reform regulations and handling the margining processes for cleared and bilateral trades.
- › Achieving highest operational efficiency through automated cross-product collateral operations.

ABOUT APEX COLLATERAL

SunGard's Apex Collateral solution helps collateral traders, heads of trading desks, risk professionals, operations staff and senior management manage and optimize their collateral on an enterprise-wide basis. Apex Collateral offers a single platform for trading directly from a real-time, consolidated global inventory as well as supporting operational requirements for underlying securities lending, repo and derivative transactions. It uses numerical algorithms to automatically allocate collateral in the optimal way, helping firms minimize costs and maximize return on assets.

For more information, please visit www.sungard.com/enterprisecollateral

ABOUT SUNGARD

SunGard is one of the world's leading software and technology services companies. SunGard has more than 17,000 employees and serves approximately 25,000 customers in more than 70 countries. SunGard provides software and processing solutions for financial services, education and the public sector. SunGard also provides disaster recovery services, managed IT services, information availability consulting services and business continuity management software. With annual revenue of about \$4.5 billion, SunGard is the largest privately held software and services company and is ranked 480 on the Fortune 500.

For more information, please visit www.sungard.com

SUNGARD[®] CAPITAL MARKETS



SUNGARD'S CAPITAL MARKETS MANAGED SERVICES AN OVERVIEW

WHY MANAGED SERVICES
FOR CAPITAL MARKETS?

**OUR CUSTOMERS ARE FACED
WITH UNPRECEDENTED
CHALLENGES TO TOP-LINE
REVENUE GROWTH AND
RETENTION AS WELL AS
BOTTOM-LINE COST AND
PROFITABILITY.**



WE USE SUNGARD ECONOMIES OF SCALE TO CREATE GREATER EFFICIENCIES FOR OUR CUSTOMERS ACROSS CAPITAL MARKETS

SunGard leverages decades of experience to provide specialized managed services to capital markets firms around the world. Our flexible and customizable services for both technology and operations build upon the solid foundation of SunGard software. These services are consistently delivered using a proven, scalable methodology and help our customers free up resources to support their core businesses.

WHY MANAGED SERVICES FOR CAPITAL MARKETS?

INCREASE EFFICIENCY

- › Gain economies of scale from SunGard technology, people, process and expertise
- › Adapt to new market and regulatory requirements more easily and more quickly by leveraging SunGard's capabilities
- › Focus your effort and investments on generating revenue



DECREASE TOTAL COST OF OWNERSHIP (TCO)

- › Trust SunGard to operate and manage change for your SunGard environment and processes in alignment with your financial objectives
- › Reduce costs by leveraging SunGard's scale in infrastructure and expertise required to run your business
- › Confidently manage these decreased costs with a longer term, predictable TCO

REDUCE RISK

- › Minimize risk by leveraging best of breed operational processes, controls, security and technology to augment and complement your current model
- › Automate commoditized workflows, enabling you to focus on exception management and issue resolution
- › Benefit from SunGard's comprehensive service level agreements to guarantee performance, availability, and scalability

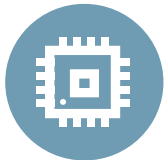
FROM INFRASTRUCTURE TO FULL MANAGED OPERATIONS

We work closely with our customers to identify managed services opportunities. A shared business case for technology and/or operations services followed by our standard phased implementation methodology ensures that every SunGard offering aligns with our customer requirements. We ensure consistent delivery across the onboarding, transition, transformation and steady state phases in each of our managed services relationships.



MANAGED INFRASTRUCTURE SERVICES BENEFIT FROM THE EFFICIENCIES OF MANAGED SERVICES

- › Comprehensive support for your entire infrastructure, including hardware, data storage, network connectivity, and market connectivity
- › Hosted SunGard infrastructure or remote management of your infrastructure
- › 24/7 global support with robust disaster recovery and business continuity for the mission-critical ecosystems that support global and regional businesses



MANAGED APPLICATION SERVICES LEVERAGE SUNGARD'S EXPERTISE IN OUR OWN TECHNOLOGY

- › Development, testing, deployment and monitoring of the entire SunGard application ecosystem, and for interfaces with related internal and external systems
- › SunGard's operational agility for new releases and upgrades and all other application life cycle requirements
- › Comprehensive project-based services to address mandatory and discretionary change within your environment



MANAGED OPERATIONS SERVICES TRANSITION TO AN OPERATING MODEL THAT EMPLOYS SUNGARD'S YEARS OF OPERATIONAL BEST PRACTICES AND CONTROLS

- › Achieve the benefits of typical business process outsourcing with the efficiency of SunGard's technology, market and regulatory presence
- › Leverage best of breed operational processes, SunGard's intellectual property and expertise, and seamless integration with your existing operations and technology environments
- › Benefit from the confidence in SunGard's stringent service levels and scalability to support current volumes and future business growth

OUR MANAGED SERVICES DELIVER VALUE WITHIN ALL CRITICAL CAPITAL MARKETS FUNCTIONS



MARKETS

- › Market data
 - › Market connectivity
-



TRADING

- › Trade execution
 - › Order management
 - › Sales and trading compliance
-



POST-TRADE OPERATIONS

- › Post-trade securities operations
 - › Post-trade derivatives operations
 - › Clearing and settlement
-



FINANCING

- › Prime brokerage
 - › Stock loan
 - › Securities finance
 - › Collateral management
 - › Treasury management
-



RISK

- › Trading book risk management and analytics
 - › Banking book risk management and analytics
 - › Capital management
-



SHARED SERVICES

- › Corporate actions
 - › Tax processing
 - › Tax reporting
 - › Reconciliation
-

ABOUT SUNGARD'S CAPITAL MARKETS SERVICES

SunGard's capital markets services team has detailed knowledge and experience when it comes to helping financial services firms address these challenges, combined with years of experience with the range of SunGard solutions that can be applied to these problems to help you realize your goals. We offer the full range of consulting, professional, managed and hosting services, with a global reach.



For more information visit:
www.sungard.com/capitalmarkets



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SUNGARD[®] FINANCIAL SYSTEMS



SOLUTIONS AND SERVICES
AN OVERVIEW

WHY HAVE **15,000**
FIRMS IN MORE THAN
70 COUNTRIES
CHOSEN SUNGARD?

WE HELP OUR CUSTOMERS SUCCEED ACROSS THE FINANCIAL SERVICES INDUSTRY

Our Experience

SunGard has more than 30 years' experience in serving institutions in virtually every segment of the financial services industry, from bankers to asset managers, and from advisors to treasurers.

Our Breadth and Depth

Our solutions cover the gamut of financial services activity, from market data and analytics to reconciliation and trade processing.

Our Presence

We offer both global scale and local resources. We have employees in more than 35 countries.

Our Track Record

Financial services firms are responsible for managing billions of dollars in global financial transactions every day. Our customers rely on us to provide and operate mission-critical systems - and we deliver.

A TRUSTED PARTNER



PREDICTABLE
& DIVERSIFIED
REVENUE



INVESTMENT
IN ORGANIC
GROWTH



DEDICATED
SERVICES
& SUPPORT
PERSONNEL



DOMAIN
EXPERTISE

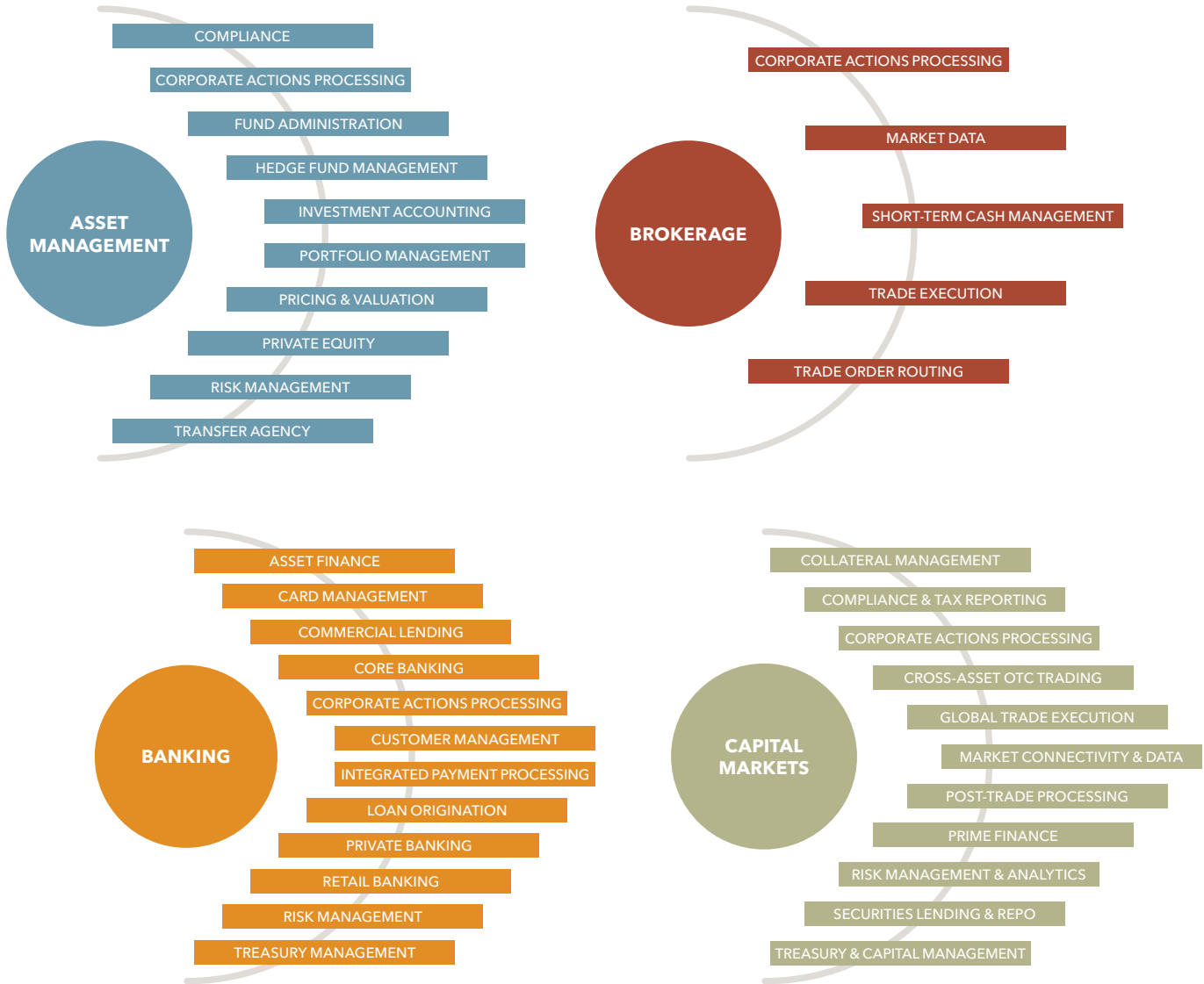


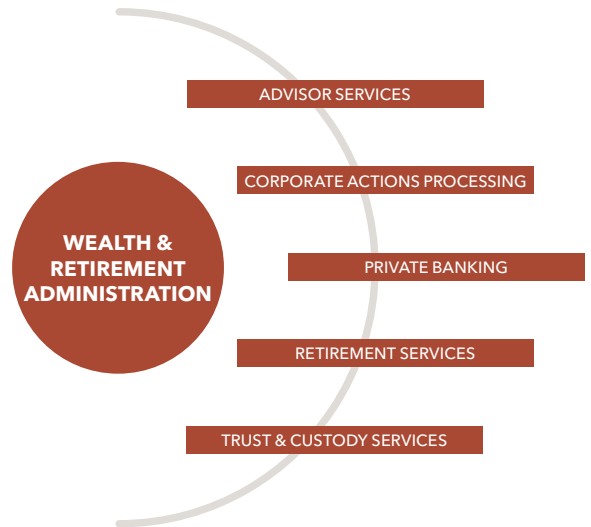
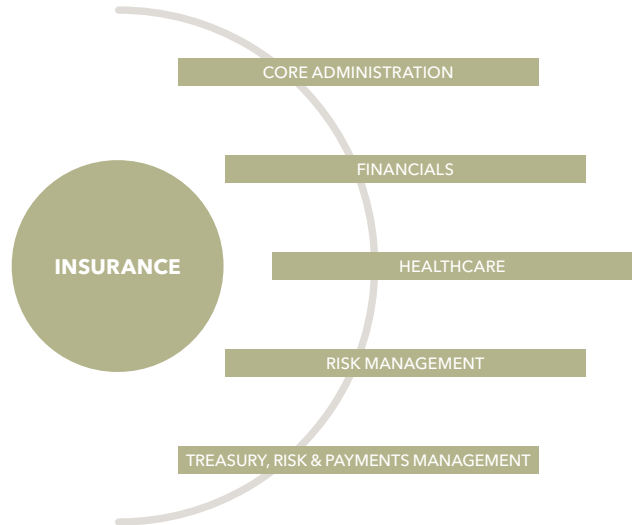
RECORD OF
OPERATIONAL
EXCELLENCE



ATTRACTIVE
BUSINESS
MODEL

WE SERVE A BROAD RANGE OF SECTORS...





OUR APPROACH

It's not one size fits all. We've found that our customers can achieve the greatest ROI by partnering with a single vendor that supports their enterprise-wide requirements and can offer customized solutions through a choice of ownership and deployment options.

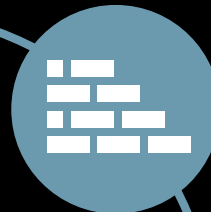
PARTNER

INDEPENDENT
CONSULTING SERVICES
PROGRAM & PROJECT
MANAGEMENT



BUILD

APPLICATION DEVELOPMENT
INTEGRATION SERVICES



OPERATE

MANAGED SERVICES &
HOSTED OPERATIONS
BUSINESS PROCESS
OUTSOURCING



BUY

CUSTOMER SERVICE
& SUPPORT
IMPLEMENTATION SERVICES



Choose the model that best fits your needs, whether that's to:

- Partner with our independent consulting services
- Work with us to build custom applications
- Buy software off the shelf
- Ask us to operate your systems and processes for you

OUR SOLUTIONS

Our solutions support the entire financial services ecosystem, and we have deep domain expertise in all areas of financial services.

RETAIL & CORPORATE
BANKING
WEALTH & PRIVATE
BANKING
RETIREMENT SERVICES
CORPORATE LIQUIDITY



TRADING & CONNECTIVITY
RISK MANAGEMENT
& ANALYTICS
ENERGY TRADING
& OPERATIONS
MARKET DATA

SECURITIES FINANCE
RECONCILIATIONS
COMPLIANCE & TAX
POST-TRADE OPERATIONS

ALTERNATIVE
INVESTMENTS
ASSET FINANCE
INSURANCE

OUR SOLUTIONS SPAN...



SunGard's Adaptiv Analytics solution can process more than **90 million risk valuations** per second.

More than \$20 trillion in assets are managed with SunGard's Asset Arena InvestOne investment accounting and reporting solution.



DATA &
ANALYTICS

DATA MANAGEMENT

INDEPENDENT VALUATIONS

MARKET DATA

PRICING & DATA VALIDATION

The SunGard Global Network delivers normalized, real-time price data from more than **110 venues** globally.

SunGard's Protegent solution uses market data from more than **160 trading venues** globally to help customers distinguish market anomalies from potential acts of manipulation.



SERVICES

HOSTING & MANAGED SERVICES

INDEPENDENT CONSULTING

PROFESSIONAL SERVICES

SunGard's managed service retirement solutions administer **more than \$575 billion in assets.**

OUR SOLUTIONS AND SERVICES: FROM A TO Z

Adaptiv: an enterprise-wide credit and market risk management and operations solution

AddVantage: a web-based asset management and trust accounting system for the operations of banks and trust organizations

Align: a multi-commodity solution that integrates trading, risk and control, credit, asset optimization, fuels management, power operations, gas operations, emissions compliance, back office, and treasury and finance into a single platform with sophisticated data analytics

Ambit Asset Finance: a front-to-back-office solution for asset finance software and lease accounting

Ambit Card Management: a solution suite that helps banks quickly offer innovative card products while serving clients more efficiently, securely and profitably

Ambit Commercial Lender: an end-to-end, highly automated platform for all aspects of the commercial lending life cycle

Ambit Core Banking: a universal banking system that effectively manages core banking transaction processing for retail banks, lending and balance sheet management, while optimizing client relationships and reducing the cost of operations

Ambit Corporate Banking: a front-to-back, straight-through processing solution for cash and liquidity management

Ambit Customer Management: a retail banking solution suite that helps banks manage client relationships, enhance the client experience and analyze the profitability of clients

Ambit Loan Origination: a solution that provides high levels of automation throughout the loan origination cycle to improve efficiency and productivity and reduce costs

Ambit Private Banking: a solution suite that helps private banks increase operational efficiency, improve client service and achieve regulatory compliance

Ambit Risk & Performance: modular solutions that help banks manage their balance sheet risks and business performance as well as comply with regulations

Ambit Treasury Management: a front-to-back-office platform for cash, liquidity and risk management

Apex Collateral: a single platform for enterprise-wide collateral management, trading and optimization across multiple trading book products

Apex Securities Finance: a consolidated platform that supports principal, agency or hybrid securities finance models for the entire range of repo and securities borrowing and lending requirements

APT: a solution that helps investment professionals make full use of risk information on a pre-trade basis

Asset Arena 360: an investment management solution for boutique asset managers

Asset Arena Investment Accounting: a solution for mutual, institutional and hedge fund administration

Asset Arena Manager: a suite of tools that helps buy-side management firms to streamline and simplify the investment process

Asset Arena Pricing Services: data validation and pricing services

Asset Arena Transfer Agency: a comprehensive solution for high-volume, growth-minded transfer agency environments

Astec Analytics: market information and benchmarking tools for securities borrowing, lending and short selling

AvantGard: holistic applications designed to drive the stringent treatment of trade receivables, sophisticated treasury and cash management, and coordinated execution of payment processing

Charlotte: a trust accounting and investment management solution for banks and trust companies

Data Exchange: a SaaS communication portal and virtual data room for secure investor communications

FastVal: an independent derivatives valuation service

Fox River: solutions that help improve execution quality, minimize information leakage and decrease overall costs

Front Arena: an integrated cross-asset electronic trading and position management solution for the buy side and the sell side

Global One: a proven, quick to deploy, integrated solution for international securities lending that supports both borrowers and lenders

Global Plus: a web-based asset management and custody solution

Hedge360: a solution suite that supports the full investment life cycle for hedge funds across front-, middle- and back-office processes

IntelliMatch Operational Control: an enterprise matching and reconciliation solution suite that helps banks, asset managers, brokers and other financial institutions reduce operational risk and minimize costs

InTrader: an integrated solution for bank treasury and portfolio management, clearance and settlement

InvesTier: a solution for hedge fund investor, fund-of-funds and partnership accounting

Investor'sView: a web-based portfolio management and performance reporting solution that integrates with regional bank, community bank and trust accounting systems

Investran: a fully integrated application suite that automates front-, middle- and back-office processes for private equity and alternative investment firms

iWorks: a suite of solutions for global life and health insurance companies that supports policy administration, financial and investment management, risk management, and business process and content management

Kingstar: a customized solution suite that provides trading, clearance, risk management and data management to banks, exchanges, securities firms, futures firms and funds companies in China

Kiodex: a commodities trading and risk management solution for banks, brokers, corporate hedgers, hedge funds and FCMs

Loanet: an equity finance solution serving broker-dealers, custodian banks, agent lenders and other participants in securities lending

MarketMap: market data solutions and services that help organizations manage cost, regulation and risk with flexible access to high-quality global market data

Monis: a suite of convertible bond pricing, analysis, modeling, trading, valuation and portfolio management tools

Omni: a suite of retirement plan administration solutions that includes recordkeeping, trading and reconciliation, check writing and benefit disbursement processes for domestic and international plans

Protegent: a suite of regulatory compliance, surveillance and supervision solutions that helps protect financial services firms from regulatory and reputational risk

Relius: an integrated retirement plan recordkeeping solution used by third-party administrators, banks, insurance companies and corporations

Stream Central: a suite of solutions that helps firms create holistic, real-time views of their activity; monitor their risk and exposure across the enterprise; manage credit, trade fails and intraday margin; and support internal and regulatory reporting

Stream Derivatives: a suite of solutions that helps automate downstream derivatives operations, increase efficiency and support straight-through processing

Stream Securities: a suite of solutions that helps firms manage downstream securities operations in an efficient and scalable manner, reduce errors and onboard new clients more easily

SunGard Consulting Services: independent business and technology consulting and managed services that help financial services and energy companies capitalize on the consequences of business, technology and regulatory change

SunGard Global Network: a network that supports global, multi-asset class, institutional trading by connecting buy-side and sell-side firms, as well as exchanges and ECNs

Valdi: a suite of global multi-asset trade order and execution solutions for equities, futures, fixed income and options traders

VPM: a comprehensive, multi-currency back-office solution and transaction repository for hedge funds

Wall Street Concepts: tax information reporting services for the U.S. financial industry

WealthStation: an integrated wealth management platform for client management, data aggregation, financial planning, investment management, asset allocation, trading, rebalancing and reporting

XSP: solutions and services that help automate end-to-end global corporate actions processing

ABOUT SUNGARD FINANCIAL SYSTEMS

SunGard Financial Systems provides mission-critical software and IT services to institutions in virtually every segment of the financial services industry. The primary purpose of these systems is to automate the many detailed processes associated with trading, managing investment portfolios and accounting for investment assets. These solutions address the processing requirements of a broad range of users within financial services, including asset managers, traders, custodians, compliance officers, treasurers, insurers, risk managers, hedge fund managers, plan administrators and clearing agents. In addition, we also provide professional services that focus on application implementation and integration of these solutions and on custom software development.



For more information visit:

www.sungard.com/financialsystems

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ACHIEVE MORE

WHITE PAPER

A NEW VISION FOR MANAGED SERVICES

John Avery

head of managed services solutions
SunGard's capital markets business
Americas

The new normal has arrived. Revenue and cost pressures are here to stay. Managed services are a useful answer to many of the challenges our industry faces today, but is there an opportunity to achieve more?

Revenue and cost, both under pressure

Today's capital markets firms are facing tremendous business and financial pressure from both sides of the ledger. In this rapidly changing economic and business landscape, top-line revenue growth is limited. Market changes including increased capital and collateral requirements have forced the re-pricing of many markets, leading some firms to shrink or even shut down certain lines of business. Other markets, such as OTC derivatives, are in the midst of fundamental restructuring that is also reducing revenue potential.

The bottom line is also under unceasing pressure. Firms must cut any and all costs wherever possible. This is even more difficult than it was in years past due to the endless regulatory change. The cost of maintaining compliance is non-negotiable, so compliance budgets continue to rise.

Mandatory compliance spend still constraining discretionary budgets

This need to invest in mandatory compliance is drawing resources away from typical discretionary "change the bank" budgets. This is limiting firms' ability to invest in discretionary projects to increase revenue and improve efficiency.

The operations and technology departments within these firms are feeling particular pressure because they bear nearly the entire compliance burden - and their discretionary budgets are being hit the hardest. Quite simply, the more budget gets spent on regulatory compliance, the less money there is for unique discretionary projects that can drive revenue growth or operational efficiency.

The end goal for these firms, of course, is to increase profitability. This is not a pipe dream. It is achievable if firms can reduce their total cost of ownership (TCO) and create additional efficiency in their operations and technology organizations. If firms can spend less on compliance, less on "run the bank", and increase their capacity to support more business, they not only create a path to increased profitability but free up budget to spend on revenue generating projects once again.

The traditional labor arbitrage approach to managed services

Many firms have already turned to outsourcing and partnering with vendors as a quick way to cut costs. Much of this outsourcing has been simple labor arbitrage - shifting from more costly local resources to less expensive labor pools in other parts of the world. Many firms have had success with this approach, in hindsight though, not all have achieved the economic gains expected. For example, if a firm moves a headcount that costs \$1,000 to one that costs \$200 - and does that for enough resources - it can achieve significant economic savings. But what if the promise was \$200 and the TCO is really \$400 or more?

Additional costs like this in pure labor arbitrage can come from the "hidden" cost of control. Firms typically have to build in extra communication and control support for labor arbitrated operations, which means extra people - and extra cost. These additional controls are necessary though. They ensure that the business continues to operate at desired service levels and that compliance requirements are met.

A pure labor arbitrage approach may also fail to address inefficiencies in technology or operations. For example, outsourcing vendors typically have little to no proprietary assets they can use to create economies of scale. Instead, these vendors often simply replicate effort in lower cost locations, which limits efficiency and may not create the savings needed either by individual customers or the overall market.

The economic constraints of legacy proprietary technology

If a firm uses a proprietary platform, then it owns it and pays to support it. The firm can't share those costs with other market participants. A similar challenge exists with legacy systems - they have to be maintained, and this expense can't be spread across multiple firms.

Not only do firms need to bear the full cost of maintaining these systems, but they must also pay to update them to comply with regulatory or market changes. Even if an institution finds a way to use this technology to create efficiencies, this firm alone is still the one bearing all of the cost.

In nearly all cases, firms have also built significant operational processes around this proprietary and legacy technology, so they also have to bear the full cost of change to their operations and processes supported by these systems.

This also makes regulatory change more difficult because the cost and effort can't be spread across the industry or mutualized; each firm has to bear the full cost to modify its technology and its operations. Each firm must also replicate the work of its peers to understand each regulation and its impacts on processes and systems - yet another cost.

A new vision for managed services that builds upon a common technology foundation

A new managed services model that leverages technology as a key foundation for driving efficiencies can help firms not only reduce costs but achieve the economies of scale and increased profitability that are required in today's market.

The ideal target managed services solution in capital markets consists of three pillars:

- › Shared technology that integrates with third-party and proprietary technology
 - › Shared operational capabilities supported by the same core technology
 - › Support for unique customer requirements that differentiate against the competition
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Leveraging shared technology and intellectual property across customers can help create scale, reduce risk and increase profitability. A common technology foundation can reduce the significant cost that firms face by employing their own technology. A common platform ensures that costs can be mutualized or spread across the widest range of market participants possible. The cost to maintain this technology can be reduced by sharing infrastructure or even just the resources managing the infrastructure. Additional benefits can come in the form of managed application services, where customers leverage the technology vendor's scale and expertise to manage releases, upgrades and integration with other systems.

A new vision for managed services that limits operations replication across the industry

Of course, firms will always need the ability to differentiate themselves and their services. However, there are significant commoditized processes that are replicated over and over again across the industry. Does it make sense for every person's house to have their own power plant?

Leveraging a managed services solution that scales commoditized operations across the industry - by reusing people, processes and technology wherever possible - helps firms reduce TCO and achieve economies of scale that are needed in today's environment. Many firms are using managed services like these for reconciliation, tax processing, corporate actions, market data management and market connectivity. All of these functions provide little to no competitive advantage to firms, yet they remain a critical cost of doing business. Firms that leverage managed service providers to deliver these services achieve benefits their peers will likely not.

Taking advantage of the ideal managed services offerings described requires a clear delineation between what is commoditized and what is unique to a firm's business. The ideal managed services value proposition is to use a vendor for common capabilities and use the firm's unique retained assets. A managed technology and operations solution that supports both common shared functions and these firm-specific capabilities is critical to avoid too rigid an approach that falls short of expectations.

The benefits of managed services with a solid, mutualized foundation

The managed services approach described creates economic benefits that are not being delivered by the pure labor arbitrage model. By leveraging a vendor's common technology and operations but retaining unique competitive advantage, firms reduce their TCO, reduce their risk and increase efficiency. These benefits are delivered by vendor managed services solutions that incorporate industry and regulatory best practices, embed these best practices in technology and make ongoing investments in regulatory compliance. Managed services vendor investments also benefit the overall industry as well, as all customers reap the benefits from the changes the vendor makes.

Firms can also reduce risk by working with a vendor that can offer a blended location strategy that combines the use of offshore resources with nearshore and onshore capacity to satisfy unique capital markets requirements. A strong technology foundation is a critical requirement to support this type of location strategy and create efficiencies that ensure TCO benefits can be delivered.

As you evaluate managed services solutions to address your business objectives, be sure to remember the three pillars:

- › Shared technology that integrates with third-party and proprietary technology
 - › Shared operational capabilities supported by the same core technology
 - › Support for unique customer requirements that differentiate against the competition
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Managed services solutions that offer these three pillars are the answer to increasing efficiency, reducing risk and decreasing TCO in the capital markets.

SunGard's Managed Services for Capital Markets

SunGard leverages decades of experience to provide specialized managed services to capital markets firms around the world. Our flexible and customizable services for both technology and operations build upon the solid foundation of SunGard software. These services are consistently delivered using a proven, scalable methodology and help our customers free up resources to support their core business.

About SunGard

SunGard is one of the world's leading software and technology services companies, with annual revenue of about \$2.8 billion. SunGard provides software and processing solutions for financial services, education and the public sector. SunGard serves approximately 16,000 customers in more than 70 countries and has more than 13,000 employees. For more information, please visit www.sungard.com.



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