Application Servers
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Session 11 - Sub-Topic 3
The STP and T+1 Application

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Today's Legacy Issues
Today's technology issues directly impacts financial firms' ability to meet T+1 requirements and realize STP benefits

The problems of legacy systems are not new
- Lack of capacity, embedded point solutions, point-to-point spaghetti
- Non integrated, multiple silo based systems supporting multiple product lines or multiple customer information databases
- Saturated and lengthy batch processing windows cannot currently support a T+1 environment
- Industry standards not yet de facto
- Manual and paper intensive processes
- Other distractions - volumes breaking systems, internet pursuits, industry changes, etc.

Legacy Technology

T+1 Issues
- High Latency Batch Processes
- Client Connectivity
STP and T+1 Issues
- Multiple Technologies
- Global Data Aggregation
New Solutions Must Deliver Lasting Results

- Cost reductions are possible across all phases of the trade process (execution, pre-settlement and settlement)
- Operational efficiency improvements can be quickly realized
- Properly architected solutions with STP best practices reduce both daily operating risk and processing costs
- STP = B2B - tight coupling is critical between the asset managers, broker dealers, custodians and industry utilities
- Technology solutions insulate and connect legacy systems to remove latency

Solutions Should Rely on a Plan/Build/Operate Approach that Helps Address Legacy Problems and Guarantees T+1 Readyness

- Plan
  - T+1/STP Assessment
  - Legacy Systems Transformation
  - Business Process Redesign
- Build
  - Connectivity/eAI
  - Data Aggregation
  - Performance Engineering
- Operate
  - Security
  - Infrastructure/ASP/BPO
  - Program Management
- Methodology
- STP Best Practices
Costs and benefits will of course differ depending on the current environment. However, ongoing operations cost savings should be in the 10-30% range for most companies.

### Core Benefits

**Benefits independent of T+1 readiness**
- Elimination of some manual and paper intensive processes creates opportunity for FTE reduction or redeployment
- Non value added activities reduced
- Reduced daily operating risks
- IT support costs reduced under new architecture and reduction of legacy/multiple technologies

**Efficiency Gains**
- Increased capacity due to new architecture designed for increasing volumes and volatility
- Data aggregation leading to improved cash management and mining capability
- Real time access to all account information 24/7
- Client connectivity

### T+1 Benefits

**Benefits after industry-wide T+1 readiness**
- Further processing cost reductions from activities no longer required because of virtual and real-time process among firms
- Reduction of outstanding settlement exposure
- Reduction of the size of clearing fund
- Increased capacity to support trade volume increases across industry
- Seamless communication between industry players

### Key T+1 Questions That a Solution Should Address

- What are the drivers of exception processing? What are the operating metrics used to measure T+1 readiness?
- Where should the business and technology resources focus be in a T+1 program?
- How are benefits from T+1 investments defined?
- What are the implications if business partners are not T+1 ready? How does this affect operating and business risks?
- How are T+1 demands balanced with other priorities within current budgetary constraints?
- What is the fastest, most expedient path to results? Which problems are suppressed? Which problems are corrected?

- How is the entire organization getting aligned with the need to implement next day trade completion?
The New T+1 Business Model Requires Highly Reliable, Industrial Strength Business Processes and Supporting Technology

A T+1 Assessment Phase Should Identify Where Business and Technology Resources are Focused in a T+1 Program
Future State Application Architectures Needs to be Designed From a Business Process Perspective

During the Assessment, all of the business processes pertinent to a T+1 initiative must be catalogued and analyzed. The key business processes/steps must then be classified as:

- Internal to silo systems providing core functionality to the systems, Core Level Business Processes (CLBP)
- External business primitives contributing to the enterprise level business processes, Enterprise Level Business Processes (ELBP)

Legacy Systems Transformation Issues at the Root of Many T+1 Processing Problems

Using a Legacy transformation framework and data collected during the assessment, it is possible to focus on the following areas: Batch Cycle, Core Business Processes, and Connectivity. Legacy transformation strategies to either suppress or eliminate the deficiencies are then identified.
This type of connectivity results in multiple business protocols and many to many connections which make it difficult to support the new dynamic T+1 business model.

Business Intelligence is Often Hard-wired in a Web of Many-to-many Connected Internal and External Silo Systems

A Connectivity Future-State Solution Should Enables Anyone, Anywhere, Anytime Capability

In a T+1 Environment The Global Aggregation of Data Is Key to Successfully Managing Risk and Costs

- Multiple security and customer account masters make it difficult to aggregate data in a timely fashion
- Firms must be able to globally aggregate security positions and currency balances for trading, risk and cash management purposes as well as customer information for margin calculations and consolidated statements
- Real-time margin and customer account opening and modification capabilities are requirements for operating in a T+1 environment

Applying eAI architectural patterns, operational data store techniques, and personalization makes it possible to aggregate multiple product and account information in a way that provides real business intelligence for the buyer and seller in near real time.

A Complete T+1 Program Approach Should Leverage Best Practices, Highly Skilled Resources and High Performance Program Design Techniques to Get Results Quickly

- Focuses on high impact business process/product areas to ensure an end-to-end view and solutions that deliver business results
- Core issues serve as foundational assessment subject areas - Conducting program baseline determines level of effort to be T+1 ready
- Responsive to the SIA Vision and timetable
- Modular: Program addresses an entire T+1 program or any subset of the T+1 problem space
- Uses program acceleration management techniques to get to results sooner
  - Allows for iterative phases and concurrent efforts
- Leverages seasoned industry and technology professionals to design and implement pragmatic solutions
  - Leverages T+1 business models and productivity tools
  - Should be based on a proven software development methodology