Reboot Your Treasury Workstation

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Prudential Financial, Inc.

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AGENDA

• Background
• Presenter/Company Information/Responsibilities
• University of Cincinnati Projects
• The Ohio State Projects
• Prudential Financial Inc. Projects
• Lessons Learned
• Questions/Follow-up
• Contact Information
REBOOT YOUR TREASURY WORKSTATION

Reboot Background

• Decision: Use a treasury workstation?
• How to RFP? How to implement?
• Our Strategy:
  – Test drive the system(s)
  – Understand capabilities
  – Determine enhancements needed
  – Process reengineering
  – Partner with your provider
  – Be creative/think outside the box
REBOOT YOUR TREASURY WORKSTATON

University of Cincinnati
Susan Albonetti
Assistant Treasurer

Functional Responsibilities Include:

- Management cash management/liquidity
- TIP (Temporary Investment Pool) Accounting
- Treasury systems – Remote deposit, lockbox, virtual vault, etc.
- Design improvements in treasury processes and procedures across campus
- Accounts Receivable
- PCI (Payment Card Industry) Compliance
REBOOT YOUR TREASURY WORKSTATON

University of Cincinnati

- Premier public urban research university
- 194 years old
- Annual Budget- $1.1B (2012-2013FY)
- Enrollment- 43,000 (2014FY)
- Largest employer in greater Cincinnati
- Research University
  - First oral polio vaccine – Albert Sabin
  - First antihistamine, Benadryl – George Rieveschl
  - First program of cooperative education
Reboot Your Treasury Workstation

• Several Portfolios comprise TIP
  (Temporary Investment Pool)
  – Outside managed #1
  – ADDED: Outside managed #2
  – ADDED: Treasury Managed
  – ADDED: Debt Proceeds
  – Money market sweep on each
Reboot Your Treasury Workstation

• Added Outside managed #2
  – Securities include CMOs (Collateralized Mortgage Obligations)
  – Greater number of purchases and sales
  – Increased number of transactions to track
  – 35% additional transactions
  – 3 Additional Portfolios
  – “Paydown” transactions
  – Other

• Result: unplanned/unknown cash flows
• Result: Added time spent on manual entries and reconciliation
Investment Accounting & Reconciliation of Transactions

Objectives:

- Reduce manual input of accounting transactions
- Improve workflow
- Increase productivity
- Increase automation of reconciliation of investment transactions
- Systems integration between custody bank and workstation
- Improve integrity of data/reduce errors
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Project Steps

• Plan to ensure smooth data transfer
• Meet with Vendor
• Lay out needs and document requirements
• Determine components required from file
• Determine file needed from custodian browser system
• Develop CSV file export from custodian browser system
• Review data at point in time and confirm veracity
• TEST
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| Trans Code | Unit Ref | Description | Trade Date | Price | Cost | Amount | Notional
|------------|----------|-------------|------------|-------|------|--------|---------|
| ZC          | 20130000 | CASH TRANSFER FROM 1000000 TO 1000000 | 6/20/2013 | 0.00000 | -2.021,627.34 | -2.021,627.34 | 0.00
| ZC          | 20130000 | CASH TRANSFER FROM 1000000 TO 1000000 | 6/20/2013 | 0.00000 | -2.021,627.34 | -2.021,627.34 | 0.00

**DISTRIBUTION TO PLAN ADMINISTRATOR**

| Trans Code | Unit Ref | Description | Trade Date | Price | Cost | Amount | Notional
|------------|----------|-------------|------------|-------|------|--------|---------|
| ZC          | 20130000 | CURRENCY MOVEMENT FROM 1000000 TO 1000000 | 7/8/2013 | 0.00000 | -12,609,609.00 | -12,609,609.00 | 0.00
| ZC          | 20130000 | CURRENCY MOVEMENT FROM 1000000 TO 1000000 | 7/8/2013 | 0.00000 | -12,609,609.00 | -12,609,609.00 | 0.00

**TOTAL U.S. DOLLAR DISTRIBUTION TO PLAN ADMINISTRATOR:**

| | | | | | | | |
| | | | | | | | |

**TOTAL DISTRIBUTION TO PLAN ADMINISTRATOR RECEIPTS AND DISBURSEMENT**

| | | | | | | | |
| | | | | | | | |

**INVESTMENT MANAGEMENT FEES**

| Trans Code | Unit Ref | Description | Trade Date | Price | Cost | Amount | Notional
|------------|----------|-------------|------------|-------|------|--------|---------|
| ZC          | 20130000 | 2013 FEES | 7/15/2013 | 0.00000 | -12,609.88 | -12,609.88 | 0.00
| ZC          | 20130000 | 2013 FEES | 7/15/2013 | 0.00000 | -12,609.88 | -12,609.88 | 0.00

**TOTAL RECEIPTS AND DISBURSEMENT TRANSACTIONS:**

| | | | | | | | |
| | | | | | | | |
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Project challenges
• Changes in the department
• New employees
• Temporary professionals
• Time
• Competing priorities
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Planned procedures

• Import report into treasury workstation

• Run reconciliation daily

• Ensure all interest received

• Purchases, liquidations, interest, accruals are captured in the workstation.

• Agree to custody data? Use reconciliation tool in TWS
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Potential Planned Projects:

• 822 file import for bank analysis
  – Reduce manual work on review of bank fees
  – Assist in catching pricing errors

• Reconciliation of merchant account data
  – Eliminate manual reconciliation executed at each merchant department
  – Improve speed of reconciliation
  – Improve productivity

• Cash forecasts – operating cash data
Prudential Financial Inc.
Laura Delaney
Vice President & Assistant Treasurer

Functional Responsibilities Include:

- Liquidity Operations (includes cash management and capital markets operations)
- Bank Administration (includes admin., contracts, bank compensation, state deposits, etc.)
- Treasury Systems (banking, treasury workstation, capital markets, derivative, and bank relationship systems)
- Legal Entity Management Oversight

REBOOT YOUR TREASURY WORKSTATION
Prudential Financial is one of the world’s largest financial institutions.
Prudential had 48,498 employees and sales associates worldwide as of December 31, 2012.
Prudential Financial, through its subsidiaries, serves institutional and individual customers in more than 35 countries as of December 31, 2012.
Prudential Financial, Inc. Common Stock began trading on December 13, 2001 on the New York Stock Exchange under the symbol "PRU."
The Prudential Insurance Company of America traces its roots to the Prudential Friendly Society, founded by John Fairfield Dryden in Newark, New Jersey, in 1875.
Assets under management amounted to $1.044 trillion at June 30, 2013.
Prudential Financial has one of the largest distribution forces in the financial services industry, with 19,632 insurance sales people worldwide as of June 30, 2013
Approximately $3.6 trillion of gross life insurance in force worldwide as of December 31, 2012.
Prudential - background

• Department level business continuity
• Legal Entity Management Oversight
• Using a workstation for 20 years (domestic)
• Previously had separate systems for forecasting, positioning and wire transfer functions
• Single domestic solution implemented in 2010
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Prudential- TWS Functional Requirements

- Forecast Cash
- Reconcile & Position Cash
- Transfer Cash
- Maintain Bank Inventory
- What else ???
Prudential - Technology Strategy

- Consolidate systems and processes
- Enhance controls
- Enhance consistency of data
- Leverage automation and technology
- Eliminate redundant applications and processes
- Enhance user experience
- Improve cycle time
Prudential- Evolution of Product

Historical:
• Developed “worksheet” approach in Cash Positioning to address account roll-up (parent-child relationship)
• Enhanced controls around dual factor authentication utilizing Prudential’s token id infrastructure

Current:
• Develop robust Account Administrative functionality leveraging account tables enabling us to maintain a single set of account records
• Develop flexibility to accept account administration records from external workflow tool in addition to direct input and approval
• Develop eBAM capabilities to deliver Bank Administrative SWIFT messages to banks

Future:
• Digitized signatures for authorized signature updates
• eBAM
• Bank Agreement archive
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The Ohio State University

Carole Fallon

Senior Treasury Associate

Functional Responsibilities Include:

- Investment Team $2B Short and Intermediate Fixed Income
- Cash Management
- PCI Compliance and Merchant Processing
- Treasury and Banking Systems
- Treasury Workstations – 15+ years
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The Ohio State University

- Annual Budget $5.7 billion
- Employees – 32,091
- Enrollment - 63,058
- Monetized Parking Operations– 50 year lease $483 million
- Century Bonds – 1st public university to issue 100 year Bonds
- 16th best public university - *U.S. News & World Report*
- 10 “Top 10” Graduate programs - *U.S. News & World Report*
- Wexner Medical Center - one of the country’s best for 20 years *U.S. News & World Report*
- TBDBITL
Purpose of Long Term Cash Forecast?
• Is there enough cash to pay bills?

• If “No” then borrow money or withdraw funds from investments

• If “Yes” then how long can funds be invested? (Longer term investments yield higher returns)

• Rating agencies – want to know company can pay interest and principal on borrowed funds
Building a Long Term Cash Forecast

Forecast Methods

- **Judgemental**
  - Bottom Up – known daily cash flows
  - Top Down – converting monthly/yearly totals into daily
  - Analogous – use patterns and seasonality

- **Statistical**
  - Monte Carlo – simulate various outcomes
  - Regression – identify relationships between various cash flows
  - Distribution Analysis
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Determine Forecast Categories

Examples:

• Tuition
• Medical Center
• Payroll
• Retirement Benefits

Key Players in Determining Categories

• Treasurer and CFO
• AP
• AR
• Controller’s office
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Mapping Bank Accounts and Daily Bank Transactions

Howdy Podner from Las Vegas, Nevada
The World's Largest Gambling and Casino Area

AFP® Annual Conference
REBOOT YOUR TREASURY WORKSTATION

If…Then Mapping Rules

Bank Accounts

JPMXXX  ➔  Tuition
JPMYYY  ➔  Medical Center Deposits
HUNXXX  ➔  Payroll
JPMZZZ  ➔  Medical Benefits

Bank Transactions

Example:
$32,000; ACH IN; 6/27/12 ORIG CO NAME=TICKETMASTER LLC, ORIG ID=ENTRY
DESCR=1028 IRE, ENTRYCLASS=CCDTHE OHIO STATE UNIVERS

Ticketmaster  ➔  Athletics
REBOOT YOUR TREASURY WORKSTATION

Issues to Consider when Determining Forecast Categories

• **Separate Bank Accounts?**
  – Are the categories processed in a separate bank account?
  – Should separate accounts be opened?
  – **Solution** – New Tuition, New Development, and new Payroll bank account.

• **Inflows?**
  – How are deposits made to your company?
  – Check deposits have no unique bank description in BAI file.
  – **Solution** – Monthly query in PeopleSoft for Tuition, Athletics, and Medical Center and reclassify these items in TWS.

• **Outflows?**
  – How are payments made from your company?
  – Example, AP payments are made in PeopleSoft and TWS cannot identify these transactions.
  – **Solution** – ACH payments through the bank portal to separately identify payments for Payroll Taxes, Medical Benefits and Retirement Payments.
  – **Solution** – notification to Treasury and “split a record”
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Treasury Workstation + Excel

- **Treasury Workstation** – hard coded
  - Less error prone
  - Accuracy
  - Changes are difficult
  - Note: Split a bank record!

- **Excel**
  - More error prone
  - More nimble – make changes easily
  - Unbundle Transactions
## TWS Report

<table>
<thead>
<tr>
<th></th>
<th>8/1/2013 to 8/30/2013 Forecast</th>
<th>8/1/2013 to 8/30/2013 Actual</th>
<th>8/1/2013 to 8/30/2013 Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Inflows</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATHLETIC</td>
<td>$0</td>
<td>$415,800,000</td>
<td>$415,800,000</td>
</tr>
<tr>
<td>DEBT_IN</td>
<td>$0</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>DEPOSITS</td>
<td>$0</td>
<td>$50,000,000</td>
<td>$50,000,000</td>
</tr>
<tr>
<td>DEVELOPM</td>
<td>$0</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>MEDC_DEP</td>
<td>$0</td>
<td>$150,000,000</td>
<td>$150,000,000</td>
</tr>
<tr>
<td>SUBSIDY</td>
<td>$0</td>
<td>$25,000,000</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>TUITION</td>
<td>$0</td>
<td>$180,000,000</td>
<td>$180,000,000</td>
</tr>
<tr>
<td><strong>2. Outflows</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP_MAIN</td>
<td>$0</td>
<td>($90,000,000)</td>
<td>($90,000,000)</td>
</tr>
<tr>
<td>AP_MED</td>
<td>$0</td>
<td>($45,000,000)</td>
<td>($45,000,000)</td>
</tr>
<tr>
<td>DEBT_OUT</td>
<td>$0</td>
<td>($80,000)</td>
<td>($80,000)</td>
</tr>
<tr>
<td>MED_BENF</td>
<td>$0</td>
<td>($15,000,000)</td>
<td>($15,000,000)</td>
</tr>
<tr>
<td>OTH_DISB</td>
<td>$0</td>
<td>($20,000,000)</td>
<td>($20,000,000)</td>
</tr>
<tr>
<td>PAYROLL</td>
<td>$0</td>
<td>($100,000,000)</td>
<td>($100,000,000)</td>
</tr>
<tr>
<td>PER_STRS</td>
<td>$0</td>
<td>($40,000,000)</td>
<td>($40,000,000)</td>
</tr>
<tr>
<td>STU_DISB</td>
<td>$0</td>
<td>($50,000,000)</td>
<td>($50,000,000)</td>
</tr>
<tr>
<td><strong>NetCashFlow</strong></td>
<td>$0</td>
<td>$55,720,000</td>
<td>$55,720,000</td>
</tr>
</tbody>
</table>
## Operating Fund Cash Flow for FY-2014

<table>
<thead>
<tr>
<th>(in Millions)</th>
<th>Current Month</th>
<th>Current Fiscal Year-to-Date</th>
<th>Prior Y-T-D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Forecast</td>
<td>Variance</td>
</tr>
<tr>
<td>Athletics</td>
<td>10.00</td>
<td>10.00</td>
<td>-</td>
</tr>
<tr>
<td>General Deposits (1)</td>
<td>20.00</td>
<td>25.00</td>
<td>(5.00)</td>
</tr>
<tr>
<td>Development &amp; Donations</td>
<td>30.00</td>
<td>31.00</td>
<td>(1.00)</td>
</tr>
<tr>
<td>Medical Center</td>
<td>100.00</td>
<td>110.00</td>
<td>(10.00)</td>
</tr>
<tr>
<td>Research Found Transfers</td>
<td>20.00</td>
<td>25.00</td>
<td>(5.00)</td>
</tr>
<tr>
<td>State Subsidy</td>
<td>30.00</td>
<td>29.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Tuition</td>
<td>175.00</td>
<td>150.00</td>
<td>25.00</td>
</tr>
<tr>
<td><strong>Total Inflows</strong></td>
<td>$385.00</td>
<td>$380.00</td>
<td>$5.00</td>
</tr>
<tr>
<td>Accounts Payable Main</td>
<td>(100.00)</td>
<td>(95.00)</td>
<td>(5.00)</td>
</tr>
<tr>
<td>A/P Medical Center</td>
<td>(150.00)</td>
<td>(140.00)</td>
<td>(10.00)</td>
</tr>
<tr>
<td>Debt Prin/Int Payments</td>
<td>(10.00)</td>
<td>(5.00)</td>
<td>(5.00)</td>
</tr>
<tr>
<td>Medical Benefit</td>
<td>(10.00)</td>
<td>(15.00)</td>
<td>5.00</td>
</tr>
<tr>
<td>Payroll</td>
<td>(80.00)</td>
<td>(75.00)</td>
<td>(5.00)</td>
</tr>
<tr>
<td>Employee Retirement Ben</td>
<td>(40.00)</td>
<td>(35.00)</td>
<td>(5.00)</td>
</tr>
<tr>
<td>Payroll Taxes Paid</td>
<td>(30.00)</td>
<td>(25.00)</td>
<td>(5.00)</td>
</tr>
<tr>
<td><strong>Total Outflows</strong></td>
<td>$(420.00)</td>
<td>$(390.00)</td>
<td>$(30.00)</td>
</tr>
<tr>
<td>Net Operating Fund Cash Flow (JPMC, Hunt, Fifth Third)</td>
<td>$(35.00)</td>
<td>$(10.00)</td>
<td>$(25.00)</td>
</tr>
</tbody>
</table>

### Management Comments:

Current Month:
- Annual:

(1) General Deposits - $XXXM Received 07/03/13 for the Signing Contract
REBOOT YOUR TREASURY WORKSTATION

Final Step
Reconcile to other Financial Reports
• Financial Statements – FASB, GASB
• Financial Models
• Controller’s office
• Department Budgets
Consolidated Statement of Cash Flows

CONSOLIDATED STATEMENTS OF CASH FLOWS
Cash Flows from Operating Activities:
Tuition and fee receipts
Grant and contract receipts
Receipts for sales and services
Payments to or on behalf of employees
University employee benefit payments
Payments to vendors for supplies and services
Student loans issued
Student loans collected
Student loan interest and fees collected
Other receipts (payments)

Net cash provided (used) by operating activities
Cash Flows from Noncapital Financing Activities:
State share of instruction and line-item appropriations
Additions to permanent endowments
Drawdowns of federal direct loan proceeds
Disbursements of federal direct loans to students
Disbursement of loan proceeds to related organization
Repayment of loans to related organization

Net cash provided (used) by noncapital financing activities
Cash Flows from Capital Financing Activities:
Proceeds from capital debt
State capital appropriations
Gift receipts for capital projects
Payments for purchase or construction of capital assets
Principal payments on capital debt and leases
Interest payments on capital debt and leases

Net cash provided (used) by capital financing activities
Cash Flows from Investing Activities:
Net (purchases) sales of temporary investments
Proceeds from sales and maturities of long-term investments
Investment income, net of related fees
Purchases of long-term investments

Net cash provided (used) by investing activities
The Ohio State University Lessons Learned

• Before “hard coding” the TWS categories, determine the forecast categories
• Meet with key management to determine categories
• Meet with departments to determine the best categories
• Review bank structure – change it
• Review bank transactions – are deposits or payments bundled? Can they be unbundled?
• Hard coded or Flexible Reports - presentation of information or additional information needed on reports.
University of Cincinnati
Lessons Learned

- Management changes – Be aware
- Time allotment for project work
- Resources for project work
- Have a clear plan
- Plan should be as detailed as possible
Prudential Lessons Learned

- Develop very clear business requirements
- “Test Drive” the system(s)
- Collaborate with vendor on enhancements
- Participate in User Groups
- Utilize references during RFP/RFI processes
- Require release notes
- Create a detailed project plan
- Be flexible if something doesn’t
REBOOT YOUR TREASURY WORKSTATION

Questions?

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• Laura Delaney  laura.delaney@prudential.com

• Carole Fallon  fallon.82@osu.edu