Paradigm Shift: Radical Design improvement in How Payments are Received: A Case Study

Susan Albonetti
Assistant Treasurer
University of Cincinnati
Paradigm Shift: AGENDA

- University of Cincinnati
- Background
- Define the Problems
- Research & Gather Data
- Define Non-efficient/redundant processes
- Objectives
Paradigm Shift - AGENDA

• Design the solution/alternative solutions
• Convince/educate the colleges/departments
• Status :
  – What is working
  – What is not
  – What needs tweaking
• Lessons Learned
Paradigm Shift - Background

• University of Cincinnati
  – Urban public research university
  – 194 years old
  – Record enrollment up 2.5% from Autumn 2012
  – Top research funding > $443 million
  – Largest employer in Cincinnati
  – Temporary Investment Pool June 30, 2013
    $449M Market Value
Paradigm Shift - Background

• University Business Environment
  – Silos
  – Collaborative/open environment
  – Competing interests
  – Speed of change
Paradigm Shift - Background

• University Business Environment
  - Entity of the State of Ohio – Regulations
  - Receivable stream more than just than one thing
  - Examples:
    - Tuition, Research, Grants, Non-credit courses, Recreation Center, Parking, Vending, Building/room rental, Services, Conferencing services, Student Health
Paradigm Shift Basis

- Look to the basics of cash flow
- Components of Cash Flow Line
- Component of Working Capital
- Billing
- Receiving payments
- Posting payments
- Banking payments
- Number of touch points
- Streamlining
Paradigm Shift: Define the Problems

- Billing (other than Tuition) often initiated OUTSIDE of University Accounts Receivable System
  - Accounts Receivable not centralized
  - Shadow Aging system
  - No way to know exactly what UC is owed
  - Veracity of recorded accounts receivable amount
  - Defies management and analysis
  - Treasury doesn’t have complete picture
# Paradigm Shift – Outside Invoice Sample

**UC Health**

**UNIVERSITY OF CINCINNATI PHYSICIANS**

231 Albert Sabo Way ML, OS64
Cincinnati, OH 45267-0884
Phone 513-558-0459 Fax 513-558-2053

**DATE:** September 21, 2011

**INVOICE #:** 3CJune2011

**FOR:** Lab Animals

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**Bill To:**
Department of Veteran Affairs
Financial Services Center
P.O. Box 149971
Austin, TX 78714-9971

**Remit To:**
Ath: Vickie Kezete
University of Cincinnati Medical Center
Nephrology & Hypertension
P.O. Box 670581
Cincinnati, OH 45267-0581

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<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ref: P.O. #5398-D15029 for period 6/1/2011 to 6/30/2011</td>
<td>$ 392.40</td>
</tr>
</tbody>
</table>

**Service Period:** June 2011

This invoice is for research lab expenses incurred by the University of Cincinnati

**PI Name:** Dr. Prabir Roy Chaudhury

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**Terms:** Net 30
Make all checks payable to University of Cincinnati (Vendor Code 316000088)
If you have any questions concerning this invoice, contact Vickie Kezete @ 513-558-5484 or email:
vickie.kezete@uc.edu

THANK YOU FOR YOUR BUSINESS!
Paradigm Shift: Define the Problems

- Checks Received **ALL over Campus**
  - Invoiced checks mailed back to college or department
  - RISK of check sitting in the office
  - Checks are misplaced or lost
  - Internal control problem
  - Cash flow slowdown
University – Small City
University City – East Campus
Paradigm Shift: Define the Problems

- Too much TIME, Too many TOUCH POINTS
  - Check received by department
  - Department completes (sundry) form in ERP System
  - Department PARKS the form
  - Form includes General Ledger String for Recording
  - Form and check are sent via internal mail to cashiers
  - Form and checks handled by university postal service
  - Form POSTED by cashiers office
Paradigm Shift: Define the Problems

- EMPLOYEE Daily estimated time to Post a check payment

- Department fills out Sundry Form – 30 minutes

- Department PARKS the Sundry Form – 2 minutes

- Department mails the checks and sundry – 4 minutes
Too Much Time- Too Many Touch Points

• UC internal postal service picks up and delivers checks and sundry - 10 minutes

• Cashier Department employee receives/opens mail and stamps receipt of sundry - 8 minutes

• Cashier reviews/verifies checks and sundry – 10 minutes
• Cashier goes into ERP system and posts sundry – 4 minutes
• Total Employee time: 62 minutes (one department)
Paradigm Shift: Define the Problems

- Lockbox – Employee daily estimated time to post a check payment
- Check received in lockbox 0 minutes
- Check included in transmission file 0 minutes
- Transmission file uploaded to Accounts Receivable system 0 minutes
- Research / Clear exception in Lockbox System 5 – 10 minutes IF there is exception (average time)
- Total Daily Estimated employee time 10 minutes
- Total Savings of employee time = 83% (one department deposit)
Paradigm Shift – Cash Flow Timeline

Research Contract Signed
Day 1

Create Invoice
Day 2

Mail Invoice
Day 3
Paradigm Shift – Cash Flow Timeline

Invoice Received
Day 6

Payment Terms
Day 36

Mail Check Payment
Day 37
Paradigm Shift – Cash Flow Timeline

Check Payment Received
UC Research Business Office
Day 39

Prepare Sundry/Post Sundry
Day 43
Paradigm Shift – Cash Flow Timeline

Send check and sundry copy to Cashier Office Day 43

Cashier Receives Sundry and Check Day 44

Cashier posts sundry Day 44
Paradigm Shift – Cash Flow Timeline

Cashier prepares deposit Day 44

Bank picks up deposit Day 44

Deposit credited in bank account Day 44
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<th>Validation</th>
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<tr>
<td>GrappDesignDep/Reith652</td>
<td>04/26/2011</td>
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<tr>
<td>29</td>
<td>04000000</td>
</tr>
<tr>
<td>GENERAL RECEIPTS</td>
<td>9:30 AM J</td>
</tr>
<tr>
<td>$1856.40</td>
<td>00000001</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$1856.40</td>
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<tr>
<td>CHECK</td>
<td>$202.80</td>
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<tr>
<td>CHECK</td>
<td>$1263.60</td>
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<tr>
<td>CHANGE</td>
<td>$0.00</td>
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<table>
<thead>
<tr>
<th>Line No.</th>
<th>Fund Number</th>
<th>Cost Center</th>
<th>WBS/Project</th>
<th>Fct Area</th>
<th>G/L Account</th>
<th>Internal Order</th>
<th>Grant</th>
<th>Earmarked Funds</th>
<th>Asset</th>
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<tr>
<td>001</td>
<td>0600044</td>
<td>560040000</td>
<td>S</td>
<td>580400</td>
<td>NOT RELEVANT</td>
<td></td>
<td></td>
<td></td>
<td>1,856.40</td>
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<tr>
<td>Graphic design deposit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,856.40</td>
</tr>
</tbody>
</table>
## Sample Sundry – List of Checks

<table>
<thead>
<tr>
<th>Name</th>
<th>Check #</th>
<th>NPB#</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Univ Orthopaedic Research Edt</td>
<td>016125</td>
<td>4707, 4721</td>
<td>$390.00</td>
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<tr>
<td>Univ Orthopaedic Consultants</td>
<td>051525</td>
<td>4693</td>
<td>$202.80</td>
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<tr>
<td>UC Surgeons Inc.</td>
<td>080090</td>
<td>4493, 4540, 4638, 4748</td>
<td>$1,263.60</td>
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**Total:**

$1,856.40
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<tbody>
<tr>
<td>Pat Reitz</td>
<td>0141</td>
</tr>
<tr>
<td>Department</td>
<td>Phone Number</td>
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<tr>
<td>Univ. Relations</td>
<td>65229</td>
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</table>
Paradigm Shift: Define the Problems

- Electronic Payments Not Integrated
- Electronic Payments Not Identified
  - ACH/Wire Payments sent to Concentration Account
  - Treasury researches
  - If related to invoice information Treasury sends payment information to Cashiers office with invoice number (via e-mail)
Paradigm Shift: Define the Problems

- Electronic Payments Not Integrated
- Electronic Payments Not Identified

- Cashier posts manually to accounts receivable system
- If not invoice related/invoice not identified Treasury researches
- Treasury spends great deal of time on unidentified payments
- Manual process
- Approximately 60 hours a month
Sundry for EFT payment with No Invoice

UNIVERSITY OF CINCINNATI

NON-GIFT REMITTANCE
FORM A-151

Cash - Bills $ .
Cash - Coin $ .
Checks $ .
Credit Cards $ .
Direct Deposit $ 16,550.00
Total $ 16,550.00

Description Validation
July PPR

Line No. Fund Number Cost Center WBS/ Project Fct Area G/L Account Internal Order Grant Barmarked Funds Asset Line Amount
001 J100003 6262411000 X 451205 NOT RELEVANT $ 6,000.00
002 J100104 6262414000 X 451205 NOT RELEVANT $ 1,350.00
003 J100205 6262412000 X 451205 NOT RELEVANT $ 1,500.00
004 J100005 6262418000 X 451205 NOT RELEVANT $ 1,200.00
005 J100206 6262415000 X 451205 NOT RELEVANT $ 500.00
<table>
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<tr>
<th>Amount</th>
<th>Reference</th>
<th>Date</th>
<th>ACH Credit Description</th>
<th>Comp Name</th>
<th>EDI Message Details</th>
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<td>$22,314.33</td>
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<td>MISC PAY</td>
<td></td>
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</tbody>
</table>
Paradigm Shift: Define the Problems
Paradigm Shift: Define the Problems

- Redundant Processes and Touch Points
  - Department recording in ERP
  - Cashiers recording in ERP
  - Department receiving check
  - Cashiers receiving check
  - Treasury reporting electronic payment
  - Treasury recording electronic payment
  - Department recording electronic payment
  - Cashiers recording electronic payment
Paradigm Shift: Define the Problems

- EMPLOYEE Daily estimated time to Post an EFT payment (one day)

- Treasury researches incoming EFTs and finds several with invoices – 8 minutes

- Treasury prepares notification document and emails to cashier department – 5 minutes

- Cashier department posts the invoice payments sent to them by treasury department - 8 minutes
Paradigm Shift: Define the Problems

• EMPLOYEE Daily estimated time to Post an EFT payment (one day)
  - Treasury researches incoming EFTs – 8 minutes
  - Treasury researches EFTs W/O invoice numbers – 30 minutes
  - Treasury notifies cashier of results of research – 5 minutes
  - Treasury notifies department of funds receipt – 3 minutes
  - Department completes/parks sundry for EFT funds – 5 minutes
  - Cashier Posts sundry for EFT – 5 minutes

• Total employee time to post EFT payments – 77 minutes
Paradigm Shift: Define the Problems

- Lockbox - EMPLOYEE Daily estimated time to Post an EFT payment (one day)
  - EFT sent to Lockbox bank account – 0 minutes
  - Department preparing sundry – 0 minutes
  - Cashier Posts sundry for EFT – 0 minutes
  - Treasury research EFT (timing) – 4 minutes
- Lockbox:
  - Total employee time to post EFT payments – 4 minutes
  - Total Savings employee time: 94%
Paradigm Shift – Research/Gather Data

- Results - Data Gathering of incoming checks
- Average # of days for check to get posted
- Assumption: Received by UC on campus
- Over the counter deposits
- 5.5 days
- Worst case scenario:
  - $500,000 check not posted for 14 days
  - $7,000,000 opportunity cost
- Detroit example
ACH received

Treasury researches and marks invoice numbers on balance report

Treasury e-mails balance report to Cashiers
Flow Chart Processes - Before

Cashiers Posts the EFTS to the AR system

Treasury researches other unidentified EFT payments
Paradigm Shift

• Convince/Educate Colleges/Departments
  – Meet with larger departments first with most volume
  – Demonstrate bank browser system
  – Show check images / history/ envelopes/check stubs
  – Show tools available for them
  – Explain benefits of invoicing through ERP system
  – Explain time saved with checks going to lockbox
Paradigm Shift - Objectives

- Increase use of technology
- Reduce manual touch points
- Increase integration of payment to posting
- Increase throughput
Paradigm Shift - Objectives

- Eliminate/reduce redundant processes
- Reduce risk and increase internal control
- Increase the speed of cash application
- Decrease the amount of time to deposit funds
Paradigm Shift Objectives

- Decrease manual processing
- Increase Throughput
- Develop and implement policies
- Reduce the number of checks coming into campus and “floating” around campus
A department creates an invoice in UC Flex which includes the lockbox remittance advice. Day 1

The customer receives the invoice. Day 3

The customer makes a payment to the lockbox remittance location via check or EFT. Day 30

The PNC lockbox account receives the payment. Day 33

For payments with invoice references, PNC transmits a single BAI2 file (containing data for all new lockbox accounts) to the secure UCIT landing zone.

For payments without invoice information, departments must access their lockbox via the PNC Website to add the correct invoice reference to the payment.

From the secure landing zone, an automatic process imports and posts the BAI2 file to UC Flex.

The Treasurer’s Office corrects and posts any items in error status. Day 33
Paradigm Shift – Possible Solutions

• Wholesale lockboxes with transmission for larger departments
  – Provide visibility
  – Accountability from departments

• Exception process in bank browser system
  – A procedure to manage / edit exceptions before transmission file is created.

• Scanner in certain departments linked to lockbox
Paradigm Shift – Possible Solutions

• Electronic lockbox – electronic payments posted to invoice automatically through the account receivable system

• Requirement: departments use ERP system for invoicing

• Requirement: invoiced payments MUST be sent to lockbox
Paradigm Shift – Possible Solutions

• Electronic check at Point of Sale (POS)
  – For counter payments
  – Parking, student health, Blue Ash Campus

• Electronic check Online

• Remote Deposit

• ATM deposits via card

• Payment portal
Paradigm Shift

- Convince/Educate Colleges/Departments
  - Meet with larger departments first with most volume
  - Demonstrate bank browser system
  - Show check images / history/ envelopes/check stubs
  - Show tools available for them
  - Explain benefits of invoicing through ERP system
  - Explain time saved with checks going to lockbox
  - Talk to cashiers and Clermont about Remote Deposit
Status: What’s Working

• Status
  – Transmission lockboxes open
  – ERP AR system configured / working
  – Increased use of ERP for invoicing
  – 141 cost centers added / ERP AR training
Status: What’s Working

• Wire transfers being posted automatically to ERP system

• Reduced use of e-mail notifications of received funds or to record payments

• Remote deposit machines for cashiers and Clermont College
Status: What’s Working

• Departments using ERP system for invoicing
• New customer setups
  – 3rd QTR 2012 – 41 new customers
  – 3rd QTR 2013 – 119 new customers
    • 82% increase

• Invoices created in ERP system
  – 3rd QTR 2012 – 41 invoices
  – 3rd QTR 2013 – 119 invoices
Paradigm: Status

• Status
  – Transmission lockboxes open
  – Departments happy with lockboxes
  – Wire transfers being posted to Accounts Receivable automatically
  – Still moving some departments to use ERP system for invoicing
  – Remote deposit machines for cashiers and Clermont College
Status: What is Not Working Yet

- **Status**
  - Wholesale box (no transmission) for athletic tickets
    - Just received General Ledger account this week
  - Still moving EFT payments from concentration account to lockbox account
  - Still moving just a few departments to use ERP system for invoicing
  - POS Electronic Check at counters – RFP being issued
  - ATM deposits via card – first 4 accounts just opened
Status: What Needs Tweaking

- Still moving some EFT payments from our concentration account to lockbox account
  - Government payments
- Issuing RFP for Electronic Check at POS, Electronic check online, and payment portal
Paradigm Shift – Lessons Learned

- Educate and train departments and PEOPLE
  - Importance and meaning of “getting the check in the bank”
  - Treasury Operations website provide information, education on the importance of depositing cash/checks on a timely basis

- Develop and publish policies covering accounts receivable for entire organization
Questions

• Contact Information
• susan.albonetti@uc.edu
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