

Costs and Cost Benefits of Exchanging Electronic Transcripts



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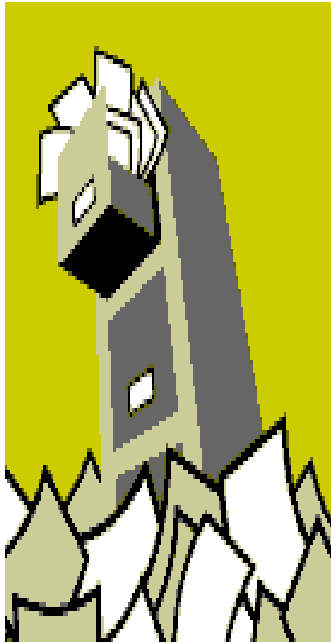
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Cost Factors - Send



- Paper Transcripts
 - Security paper
 - Printer and toner
 - School seal
 - Envelopes
 - Stuffing
 - Sorting
 - Matching (> 1 page)
 - Mailing
 - Postage
 - “Losing”
- Electronic Transcripts
 - Electronic data
 - Need access
 - Computer hardware
 - Computer software
 - Technical expertise
 - Programming
 - Networking
 - Functional expertise
 - “Mapping”
 - Staff training
 - same task: new way
 - Altered business process
 - Partners to send to
 - # can effect ROI

Cost Factors - Receive



- Paper Transcripts
 - Mail handling
 - Paper handling
 - Document matching
 - Sorting
 - Data entry & errors
 - GPA calculations
 - Pre-requisite checking
 - Imaging
 - Sorting & filing
 - Storage
 - Delays
- Electronic Transcripts
 - Computer hardware
 - Computer software
 - Technical expertise
 - Programming
 - Networking
 - Functional expertise
 - Mapping
 - Staff training
 - Altered business process
 - Partners to receive from
 - # can effect ROI
 - Printer / paper if you ... ☺

7 Points Effecting EDI/XML Costs

- Electronic Communications
 - VAN, Internet (ftp, e-mail, http), other
- Operational Integration
 - EDI or XML into existing business processes / systems / platforms
- Data Transformation
 - multiple standards (X12 EDI, XML, proprietary) and versions of
- Data Integration / Mapping
 - “receive” data into existing business processes / systems
- Content Management
 - “receive” data with *your* business rules (it was created with *theirs*)
- Audit / Reporting
 - the “paper trail”
- User Interface / Access
 - tools for users to monitor, review and mine “receive” and “send” data

What does it cost ... in \$\$\$\$?

University of Oklahoma numbers based on one-calendar year
Send 50,000 and Receive 30,000 (postsecondary transfer only)



	Paper	Electronic	Savings
Sending	\$87,850 \$1.76 each	\$63,150 \$1.26 each	28 %
Receiving	\$154,250 \$5.15 each	\$47,400 \$1.58 each	69 %

Costs to Send Paper Transcripts

Office Costs:

- \$20,000 Postage
- 6,500 Security Paper & Envelopes
- 1,400 Computers (2), prorated 3 yrs
- 2,000 Printers (2), prorated for 5 yrs
- 1,750 Printer maintenance
- 1,000 Miscellaneous office supplies
- \$32,650 Total Production Costs

Costs to Send Paper Transcripts

Labor Costs:

- \$55,000 Two full-time transcript clerks, with benefits

+

- \$32,650 Production Costs

\$87,650 **Total Costs**



- **\$1.76 per official transcript mailed**

Costs to Process Incoming Paper Transcripts

Office Costs:

- \$ 2,000 Computers (3), prorated 3 yrs
- 1,500 Paper
- 2,000 Printers (2), prorated for 5 yrs
- 1,750 Printer maintenance
- 1,000 Miscellaneous office supplies
- \$ 8,250 Total Production Costs

Costs to Process Incoming Paper Transcripts

Labor Costs:

- \$90,000 Three full-time data-entry clerks
- \$50,000 Two full-time mail/file clerks
- \$ 6,000 Workstudy student(s)
- \$146,000 Total Labor Costs
- +
• \$ 8,250 Total Production Costs
- \$154,250** **Total Costs**



- **\$5.15 per transfer transcript processed**

Costs to Send Electronic Transcripts

Office Costs:

• \$	0	Postage
•	0	Security Paper & Envelopes
•	1,400	Computers (2), prorated 3 yrs
•	5,000	Software, prorated over 5 yrs *
•	750	Software maintenance *
•	<u>1,000</u>	<u>Miscellaneous office supplies</u>
• \$	8,150	Total Production Costs

* Printer and maintenance becomes software

Costs to Send Electronic Transcripts

Labor Costs:

- \$55,000 Two full-time transcript clerks, with benefits

+

- \$ 8,150 Production Costs

\$63,150

Total Costs



- **\$1.26 per official transcript mailed**

Costs to Process Incoming Electronic Transcripts

Office Costs:

- \$ 1,400 Computers (2), prorated 3 yrs
- 0 Paper
- 0* Software, prorated over 5 yrs
- 0* Software maintenance
- 1,000 Miscellaneous office supplies
- \$ 2,400* Total Production Costs

* Software costs carried in sending process



Costs to Process Incoming Electronic Transcripts

Labor Costs:

• \$30,000	One full-time transcript clerk
• <u>\$15,000</u>	<u>One half-time transcript clerk</u>
\$ 45,000	Total Labor Costs
+	
• <u>\$ 2,400</u>	<u>Total Production Costs</u>
\$ 47,400	Total Costs

- **\$1.58 per transfer transcript processed**

Software Choices Available

Software Purchase Price Ranges

- | | |
|-------------|-------------|
| • P. C. | • Mainframe |
| • \$ 12,000 | • \$ 35,000 |
| • 5,000 | • 32,000 |
| • 4,000 | • 12,000 |
| • 2,500 | • 19,500 |
| • 2,000 | • 12,500 |



Less quantifiable benefits ...

- Improved document security
 - “Fraud-proof”
- Automate manual processes to free up staff for other work
 - “Tactical Implementation” : receive, print, re-key
 - “Strategic Implementation” : receive, upload, integrate
- Improved student service
 - Speed of delivery
 - Accuracy of transcript data
 - Integrity of transcript data





Helpful Hints

- Software tools much better than in past
 - Especially mapping tools → save time and money
- Build on experience of others in higher education
 - Networking from conference
- Some costs are “one-time” unless needs change
 - Mapping
 - Trading partner relationships
 - Infrastructure
- Some costs are recurring
 - Software licence fees and maintenance contracts



Helpful Hints

- Share costs
 - With other partner institutions
 - With other business areas in your own institution (Records, Admissions, Fin Aid)
- Think of what cost of not doing EDI /XML is:
 - Miss opportunity to improve student service
 - Miss opportunity to help staff workload
 - Miss opportunity to deal with late-arriving credentials

Time Commitments

- Variables

- Resources
 - time, money, people
- System design
 - formal analysis vs not
 - full automation vs not
- Experience / knowledge of staff
 - data & business
- Number of hardware and software components
 - Add or subtract \$\$
- SIS already EDI-enabled?
- Transcript complexity for mapping / sending / receiving





Time Commitments

- EDI specific examples:
- Estimates (EDI component only)
 - Registrar
 - 1 week work hours to attend mapping workshop and map own transcript to SPEEDE standard
 - Does not include thinking of “bells & whistles”
 - IT
 - 4 weeks work hours to familiarize with EDI concepts and then design, extract/import, program, test, implement
 - Does not include programming of “bells & whistles”

Time Commitments

- Case example



- Nipissing University (North Bay, Canada)
 - in-house legacy SIS
 - fully automated
 - send and receive
 - bells and whistles
 - automated pre-requisite checking
 - automated GPA calculations
 - automatic match to application
 - May, June and half-July
 - including student IT person & 2 week delay due to beta software glitches

Time Savings

- Case Example



- University of Windsor (Windsor, Canada)

- Receive

- Automatically receive, log, match to application, GPA calc (2-5 min alone), prerequisite checks, available on-line viewing/sorting

- Send

- None of the paper-related processes
 - Estimate savings of 1.5 hours per day (exceptions take even longer – financial hold, not found)

Whether EDI or XML...

- Not ALL transcripts will be sent or received electronically
 - Calculate and compare both processes
- Receiving transcripts produces biggest benefit
 - IF you import them into your existing/future systems
- Technology is not the major cost component, it's the labor
 - Look for ways to save on these costs and utilize your staff and their time more effectively
- Like most projects, there are both "costs" and "cost benefits"
 - Weigh short-term costs against long-term benefits
 - Thinking them through before you start, as they relate to your institution's situation, will be to your benefit!





Questions ?

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