Title
EDIFACT Invoicing: An Introduction

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Peer reviewed
EDIFACT invoicing: an introduction

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SALALM LVI May 29 2011
What is EDIFACT?

Electronic Data Interchange For Administration Commerce and Transport

Industry standard for transmitting invoicing information electronically

Adopted by many library materials vendors and library automation vendors in 2003
EDIFACT “statements”

Standard language (usually in XML format) to transmit the following kinds of information:

Quotes

Purchase Order

Purchase Order Response

Purchase Order Change

Order Status Enquiry

Invoice

Most libraries use it for Purchase Orders and Invoice Processing
General workflow using EDIFACT invoicing

- Vendor ships material
- At about same time, vendor notifies library that the electronic invoice is ready to be “picked up”
- Libraries FTP the vendor site to get the invoice
- The invoice is “loaded” into our library system
- After reviewing shipment, we “receive” the materials in one key stroke. Normally keep paper “copy of record”
- In ILS, items are shown as received, with paid date, paid amount, invoice number, and number of copies
- Invoice register is created and electronically transmitted to Disbursements who writes check
For approval materials, it generates bibliographic records with author/title/publisher/order status
No need to key in or search OCLC to download records
Receiving is done in batches, little room for human error, status updated automatically
Invoice data does not have to be keyed in
Can use data to authorize payment
Why is it a savings to a vendor?

• Libraries can process invoices more quickly with less errors
• Can authorize payment more quickly
• Can often use invoice data to generate a “check-write” request

At UCSD – electronic invoices are processed within 24 hours of receipt,
“check cut” occurs within 48 hours
Manual invoices – 7 - 14 days at best
Essential Elements of an EDIFACT invoice

- **Invoice Header Section**
  - DTM 3 M 1 Date/time/period: Date of the invoice
  - NAD - M 1 - Name and address: Vendor name & Address/Buyer Name
    and Address
  - CUX 13 M 1 Currency: Currency being used in the invoice
  - PAT 14 M 1 Payment terms basis: Payment terms (e.g. “30 days net”)

- **Invoice Detail Section**
  - LIN 16 M 1 Line item: Each title is listed individually
  - QTY 19 M 1 Quantity: number of copies
  - PRI 21 M 1 Price details: List price
  - TAX 26 M 1 Duty/tax/fee detail: Tax
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How do I set it up?

1) Buy software or download free-ware and “do it yourself”
   example:  [www.softsia.com](http://www.softsia.com)
   Software parses invoice data and converts it to an XML file that can be read by libraries with EDIFACT invoicing capabilities.

2) Use a programming service and software provided by commercial company.
   example: Amosoft EDI can integrate with your accounting and inventory software with EDI software.
A short term solution for your customers...

Provide invoices in Excel format


Libraries can manipulate this data to allow batch loading of data into our ILS

Does not do all electronic invoicing does, but can create bibliographic/order records that don’t have to be keyed in
What the vendor needs to do:

Invoice needs to be broken into minimum of 3 columns and sent as an Excel file -

Title
Publisher
Price of each item

ISBN is very helpful – but not required
Author is helpful – though not required
Using Excel file of invoice provided by Vendor

- Add additional columns for the 1) invoice number  2) invoice date  3) quantity  4) fund code  and 5) location

Result is 8 columns, each of which will make up a MARC field or subfield

- **100** Author
- **245** Title
- **260|b** Publisher
- **980|a=Inv. date |b = USD price |f = invoice number |g = quantity
- **981 |a=fund |u=location**
Using MARCEdit to convert file to MARC

- free windows based *MARC editing* tool, that provides methods for converting Text to MARC
- maps the data in the invoice in Excel format to create MARC records
- batch loaded, the file creates bibliographic records and order records
- order records are populated with the invoice and payment information
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After loading in ILS
Shortcomings of Excel approach

Not really electronic invoicing – as full EDIFACT Data is not transmitted

Libraries need to “receive material” and adjust for tax and shipping

Does not support filing indicators. Diacritics don’t come across.
Very brief records – but enough to pay on it.
Firm orders will usually have order records in the system.

Invoice data less complete than order record (if it came from OCLC)

Need a match point (e.g. PO number) to overlay existing order records with invoice information.
Conclusions

• Libraries are under increasing pressure to reduce costs associated with acquisitions and cataloging
• Staff have been reduced or repurposed to other projects
• We are encouraged to use vendors who provide services – even if it means paying a little more for them
• Vendors with these services will get our business
QUESTIONS?