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# Bilateral to Multilateral Data Exchange

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# Northwest Airlines – overview

## ➤ NWA Key Statistics

- Annual Revenue in excess of \$12 billion.
- Approximately 31,000 employees
- NWA services 900 cities in 160 countries on six continents.
- Accounts payable department
  - 26 people
  - IATA Invoice Works, EDI, AeroXchange, Infor
  - Currently have 15,600 active vendors and process approximately 1 million invoices a year.
- Implemented IATA InvoiceWorks in 2004



## NWA Case Study

- NWA Objective: Move from a paper and labor intensive environment to a focus on Electronic Invoice Presentment (EIP)
  
- Options for this included:
  - Expanding IATA IW offering
  - Expanding EDI & FTP
  - Founding and development of Aero-Exchange
  - Developing means to convert paper invoices to EIP (Scanning)
  
- In 2003 NWA obtained invoices via EDI, FTP and Paper
  - EDI comprised 45% of volume and 60% of value
  - FTP comprised 20% of volume and 5% of value
  - Paper comprised the remaining 35% of volume and 35% of value



# Expand Bilateral Data Exchange

## ➤ Expansion of in-house EDI

### ➤ Advantages include;

- Existing hardware
- Software
- Human expertise

### ➤ Disadvantages include;

- Expanding a declining technology is effort better spent elsewhere
- Many vendors do not have the infrastructure to support EDI
- Not a lot of room for expansion since vendors were not expanding EDI (see XML)
- Every new vendor requires programming and human resource for mapping & testing the new data feeds
- XML is becoming the new EDI of the future so further investment is unlikely



# Expand Bilateral Data Exchange continued

## ➤ Expansion of in-house FTP

### ➤ Advantages include;

- Existing hardware
- Software
- Human expertise

### ➤ Disadvantages include;

- Expanding in a declining technology
- More customization and point to point in-house development
- Difficult to manage the many vendors who chose to send files via FTP
- XML is becoming the new FTP of the future



# Expand Bilateral Data Exchange continued

## ➤ Investment in AeroXchange (AEX)

### ➤ Advantages include;

- NWA was one of the founding airlines
- NWA sits on the Board of Directors
- Is another example of an industry solution much like IATA Invoice Works
- Provides a tool for both electronic purchasing and invoicing

### ➤ Disadvantages include;

- Invoicing module of AEX is restrictive
- AEX has a focused and narrower reach in terms of vendors



## Expand Bilateral Data Exchange continued

### ➤ NWA Chose a Hybrid Approach

A Combination of IATA IW, EDI, FTP, AEX, XML, and Scanning

#### ➤ Advantages include:

- Allows NWA to offer solutions that best fit each vendors needs
- Provides a faster path to complete Electronic Invoice Presentment
  - Quicker elimination of paper
  - Quicker realization of FTE reductions due to improved processing

#### ➤ Disadvantages include:

- Support and maintenance of several systems
  - Drives more hardware and software costs
  - Drives more human resource cost
  - AEX has a focused and narrower reach in terms of vendors



## Expand Bilateral Data Exchange continued

### ➤ NWA Results

Monthly Processing:	<u>2003</u>	<u>2007</u>
Electronic Invoices	35,362*	87,829
Paper Invoices	18,881	12,300
Total Invoice	54,243	100,129
Staffing (FTE's) Full Time Equivalents	33 Clerks 6 Managers	21 Clerks ** 5 Managers
* EDI, FTP, etc		
**Reduction of employees \$ 12 FTE's Captured      \$ 1 Manager captured per plan		



# Expand Bilateral Data Exchange continued

## ➤ NWA Plan Going Forward

- Continue glide path of eliminating paper
  - Reduce the final 10-12% of invoices that still arrive in paper form
    - Primarily these are Purchase Orders and Service Orders
    - Connie and her team are working to move these into IATA Invoice Works or AeroXchange
- Reduce the entry points and varieties of EIP
  - Work to eliminate FTP and EDI
    - Move EDI or FTP feeds to XML where appropriate
    - Convert FTP or EDI to IATA Invoice Works where appropriate



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➤ Thank you! Any questions?



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