Automating the Procure-to-Pay Process

PolyOne Best Practice Case Study
Automating Procure-to-Pay Process

Ray Kling
IT Manager – Commercial Applications, PolyOne

Mike Gerrasch
Director – Process Industries, webMethods

This presentation was originally developed for and delivered at the 2006 webMethods user conference
Agenda

- Complexity of Procure-to-Pay Process
- Today’s Procure-to-Pay Pain Points
- Compliance and Procure-to-Pay
- PolyOne Case Study
Complexity of Procure-to-Pay Process

- Corporate wide
- Facilities
- Company Credit Cards
- Multiple Sites
- Global Distribution
- Outsourced Manufacturing
- Contract Manufacturers
Procure-to-Pay Pain Points

1. Inefficient, error-prone purchasing process
2. Minimal visibility of PO status
3. Suppliers don’t deliver the “perfect order”
4. Delays in payment processing
5. Ineffective SLA management with trading partners
Example of Procurement Control Points

Throughout the process, critical Control Information is captured to verify compliance.

<table>
<thead>
<tr>
<th>Trans-UID</th>
<th>Requestor</th>
<th>Approver</th>
<th>Procurer</th>
<th>Payer</th>
<th>Req Amount</th>
<th>App Amount</th>
<th>Paid Amount</th>
<th>Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO213094</td>
<td>Jbertelsen</td>
<td>Jbertelsen</td>
<td></td>
<td></td>
<td>26,089.00</td>
<td>26,089.00</td>
<td>28,000.00</td>
<td></td>
</tr>
</tbody>
</table>

If the “Approver” is the same as the “Requestor,” a violation has occurred (segregation of duties).

If the “Paid Amount” is greater than the “Approved Amount,” a violation has occurred (financial control).
Example of Procurement Control Points

Throughout the process, critical Control Information is captured to verify compliance.

Compliance Requirements:
- Real-time notification of non-compliance (inaccuracies, rule violations)
- Continuous monitoring for accurate sampling
- Validation that financial controls put in place are actually working
- Auditable records for compliance verification (humans make mistakes)

Business Objectives:
- Reduce costs of compliance
- Eliminate “human element” and associated audit error (auditors need to be smarter than the violators)
- Leverage existing IT systems and workflows to guarantee compliance
CASE STUDY: PolyOne

- Introduction to PolyOne
- Early B2B/Procure-to-Pay Automation
- Procure-to-Pay in 2006
- The Future
Introduction - PolyOne At A Glance

- $2.5 billion international polymer services company*
  - Vinyl Compounds
  - Color & Additive Master Batch
  - Distribution
  - Polymer Coating Systems
  - Engineered Materials
  - Specialty Resins
  - Producer Services
  - Vinyl Polymer & Chlor-Alkali Equity Investments

- More than 35,000 specialty and commodity products

- 51 manufacturing facilities & 13 warehouses in 20 countries

- More than 10,000 customers in 35 countries

* Total PolyOne revenues of $2.5 billion includes inter-company transfers which are excluded from individual business unit results.
Introduction to PolyOne

Sales by Geographic Region
2005 Sales Revenues
Dollars in Millions

- United States: $1,647
- Europe: $405
- Canada: $283
- Asia: $102
- Other: $14
PolyOne History

- **1922**: Hanna is incorporated – 1927 becomes a public company
- **1927**: BFGoodrich scientist Waldo Semon produces first usable vinyl polymer
- **1948**: BFG creates vinyl plastic division
- **1958**: BFG creates first compounds for piping applications
- **1960**: BFG develops rigid vinyl injection molding technology
- **1970**: Hanna exits coal mining to focus on iron ore
- **1980**: Hanna becomes world’s second-largest producer of iron ore
- **1982**: BFG spins Geon out through an IPO
- **1986**: Hanna purchases first polymer company
- **1988**: Elena becomes a public company
- **1989**: Begins to shed shipping and mining businesses
- **1993**: BFG spins Geon out through an IPO
- **1999**: Geon spins out its commodity PVC resins business into a joint venture with OxyChem
- **2000**: Geon completes 8th compounding acquisition
- **2000**: Hanna completes 26th polymer acquisition
PolyOne Business Model

How We Serve Customers

- PolyOne is the essential link between:

Large Chemical Producers

PolyOne

Proprietary Compounding
- Vinyl Compounds
- Engineered Materials
- Color & Additives Masterbatches
- Polymer Coatings Systems
- Geon® Specialty Resins

Distribution
Custom Compounding
- Producer Services

Designers, Assemblers, Processors
Early Procure-to-Pay Automation

Geon 1999:
The Challenge:
- Take two vertically integrated business units on a common ERP platform and split them on to separate systems.
- Integrate them back together as if they were on one system.
- Leverage the technology with other key suppliers.

Not just purchase orders, but true supply chain integration
Early Procure-to-Pay Automation

What is PolyOne B2B?

- A Strategic Business-driven eCommerce initiative
  - A “High Value Interactive” Solution
  - Targeted for a select group of Strategic Partners
- Business Process and Technical platform that:
  - Provides **seamless integration** between trading partners
  - Enables Business-to-Business (*machine to machine*) eCommerce with customers and suppliers
  - Leverages PolyOne’s investment in SAP
- Business initiative to make PolyOne’s activities simpler and more efficient
Integration Components

PolyOne SAP

webMethods Product Suite

R/3 Integration Module

Integration Modules
- Read PO
- Create Order Conf.

Flow Services

System Services

HTTP RESPONDER

Internet

BAPI

Create

Order

Conf.

ConfirmSO#

BAPI

PO

Read

BAPI

SO

Confirm

PO Document

BAPI Trigger

Sales Order Document

Sales Order Data

BAPI SO Create

BAPI Order Conf. Read

Vendor SAP

PolyOne SAP
Procure-to-Pay Overview

- Planned Requirements: Demand Plan
- Independent Requirements: Sales Order
- PolyOne: Purchase Order
- Supplier: Supplier Shipment
- Customer Invoice Entry: Invoice
- Supplier Invoice: EFT
- Payment: Bank

Sequence:
1. Demand Plan
2. Order Create
3. Order Change
4. Order Response
5. Delivery Notice
6. Ship Notice
7. Invoice
8. EFT
webMethods Modeler Example: Outbound Order
Procure-to-Pay Overview

Mantra for success: 
“Simplify, Integrate, Automate”

**Simplify**
- Before starting Procure-to-Pay Automation you must drive complexity out of your processes and business relationships.

**Integrate**
- Link processes together so that information flows seamlessly.

**Automate**
- Remove manual steps that slow process and add cost not value.
Procure-to-Pay Overview

Questions to ask: What is the scope and how will it translate into value?
- Demand Forecast
- Orders
- Confirmations
- Ship Notice
- Invoice or ERS
- Check or EFT
- Which products & locations
Questions to ask: What is an Order?
- How many items, dates, locations per order
- Quantity limits
- Pricing policy
- Cancellation policy
- Text instructions
- Split or partial confirmations
- Lead time
- Logistics instructions
- Blanket orders
- Consignment
- Credit or other blocks
- Returns
Procure-to-Pay Overview

Questions to ask:

How is a material defined?
- 1-to-1 definition between supplier and customer
- Package size
- Test specifications
- Labels

How to handle support after go-live?
- Contacts
- Error handling
- New products or locations
- Upgrades
Benefits in the First Year

- $300 Million annual extensible electronic channel created
  - 8 week implementation - minimal system changes
  - Focus on Business Process Simplification
- 7X24 “Lights out” procurement/inventory mgmt process
- Increased Data integrity - Timeliness/Accuracy
- Increased Productivity - Simplification
  - Reduced number of steps in the procurement process
  - Eliminated 3-4 FTE’s - Corporate, .5 Manufacturing
- Cost Reduction
  - Decreased Working Capital PVC by 12%, Non-resin by 3%
  - Reduced inventory in pipeline
  - Transaction costs - $45,000/month
  - Reduced Storage Cost - Demurrage and Warehouse
Intangible B2B Benefits

¬ People directed away from repetitive, minimal “business” impact tasks
  ¬ Order generators to process managers
  ¬ Data verification to decision makers
  ¬ Exception based management
¬ Increase productivity
  ¬ ability to take on a much wider scope of responsibilities
¬ Operational Excellence in Supply Chain
  ¬ Develop the “ultimate schedule”
  ¬ Increase manufacturing efficiency and utilization
  ¬ Continuous improvement
A method for enhancing a commercial transaction via a communications network includes maintaining synchronized updates to databases at different business entities to facilitate accurate transactions between the business entities. A change in configuration data stored in a first configuration database is detected in accordance with a real-time detection procedure. Revision data is transmitted to a second configuration database within a maximum time interval after detection of the change in the configuration data. A second configuration database is updated in accordance with the revision data, such that the configuration data of the first configuration database mirrors configuration data of the second configuration database with respect to at least one commercial transaction.

Inventors: Chinchar; Robert S., Francis; Kirk, Grimm; Doug, Huffman; Arnold Z.; Kling; Ray, Krahn; Richard R., Miller; Kirk A., Schwarzinger; Todd D., Smiach; Barry, Sweeney; Michael S.
Also 6,684,222 and 6,687,700
Procure-to-Pay in 2006

webMethods powered: upgrade & consolidation

Number of EDI/B2B Systems

- wM
- Non-wM
- PC systems

2004 2005 2006 Today Q3 2007
Procure-to-Pay in 2006

- Breath of Supply Chain
  - Beyond large partners
  - Beyond suppliers
- Multiple industry standards
  - ChemXML-CIDX: Chemicals
  - EDI: Automotive/Appliances/Packaging
- webMethods Product Suite helps bring them together
Enterprise Can Communicate in Multiple Ways

PolyOne B2B Integrations

Legend

- PCDM
- CIDX
- EDI
- Suppliers
- Customers
- Logistics Partner

Procure-to-Pay in 2006
Regardless of the connection type (Hub / P2P)

PolyOne Integrations

- Vendors
- Customers
- VMI
- Schneider

Standardize by Format/Version (not partner)

- CIDX
  - V2.0
  - V2.01
  - V2.02
  - V3.0

- EDI
  - Version controlled

- PCDM
  - Varies by partner

- Translator standard processes

- Recognize Partner and inbound format

- Map into PolyOne format

- webMethods B2B

Standard JDE Format

Standard SAP Format

JDE

SAP

BAPI / RFC

IDOC
Outbound PO: Order-to-Canonical
Outbound PO: Canonical-to-CIDX
Outbound PO: Canonical-to-EDI
The Future of Procure-to-Pay

- New partners: 8 days not 8 weeks
- Leverage more functionality & volume through existing connections
- Share new types of information
- New types of partners
Thank You