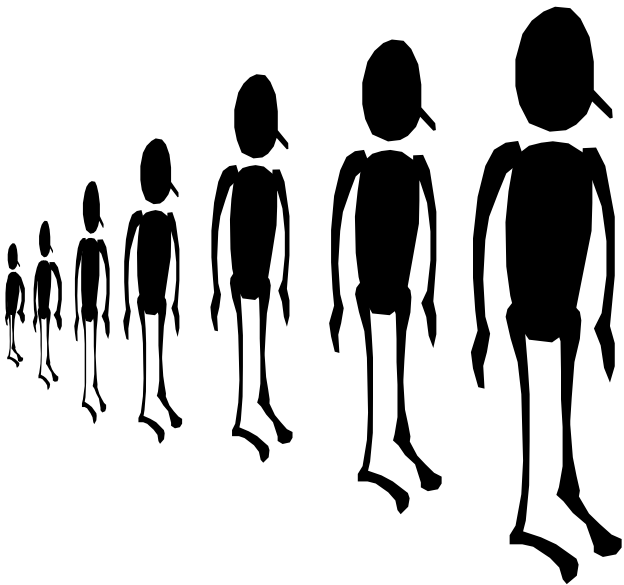# The Next Generation of EDI Standards
"Object Oriented EDI"

Timothy A. Rose
IBM Global Services

"It is not the strongest of the species that survives, nor the most intelligent; it is the one that is most adaptable to change"
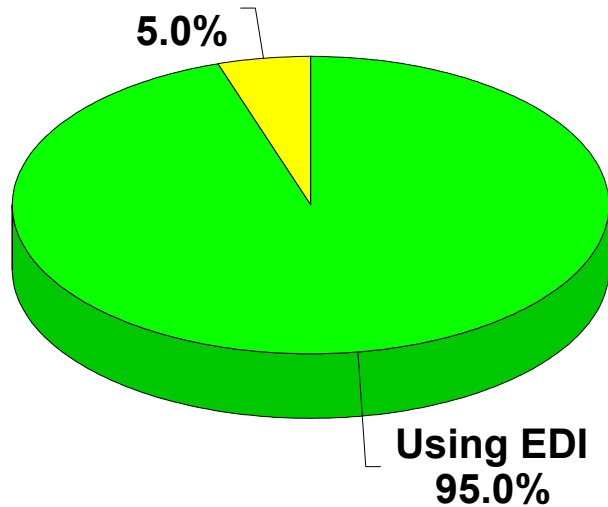
✦ Charles Darwin

Shaping the Future ... Today
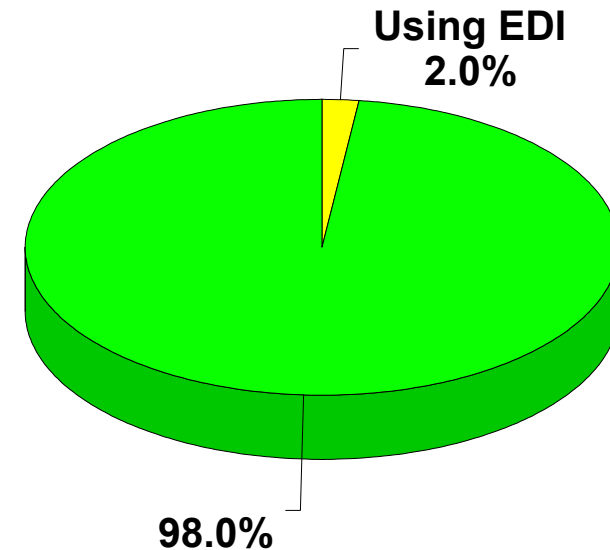
✓ ✦ Today's environment

✦ The "next generation"

✦ Status

Is There A Problem?

FORTUNE 1000

5.0%

Using EDI
95.0%

OTHER BUSINESSES

Using EDI
2.0%

98.0%

✦ *Too Expensive !*

✦ *Too Hard !*

✦ *Too Difficult to change standards !*

ASC X12'S SITG
Strategic Implementation Task Group

- Formed to move to next generation of EDI standards
- US voice in international arena
- Goals:
  - Cost effective to integrate (ISV)
  - Cost effective use
    - Off-the-shelf for SMB
    - Tools for Enterprise Wide
  - Automated EDI Interfaces
    - Minimum human intervention
  - Non-obtrusive to business practices
- Business Model and Object Tech.
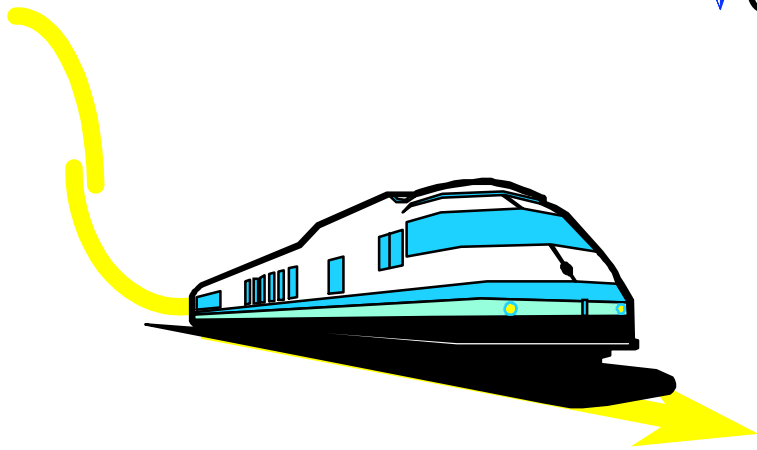
Dual Track

✦ Any way of doing EDI must permit <u>current</u> & <u>new</u> EDI to exist in parallel

✦ Must define a migration path to assist user community in transition
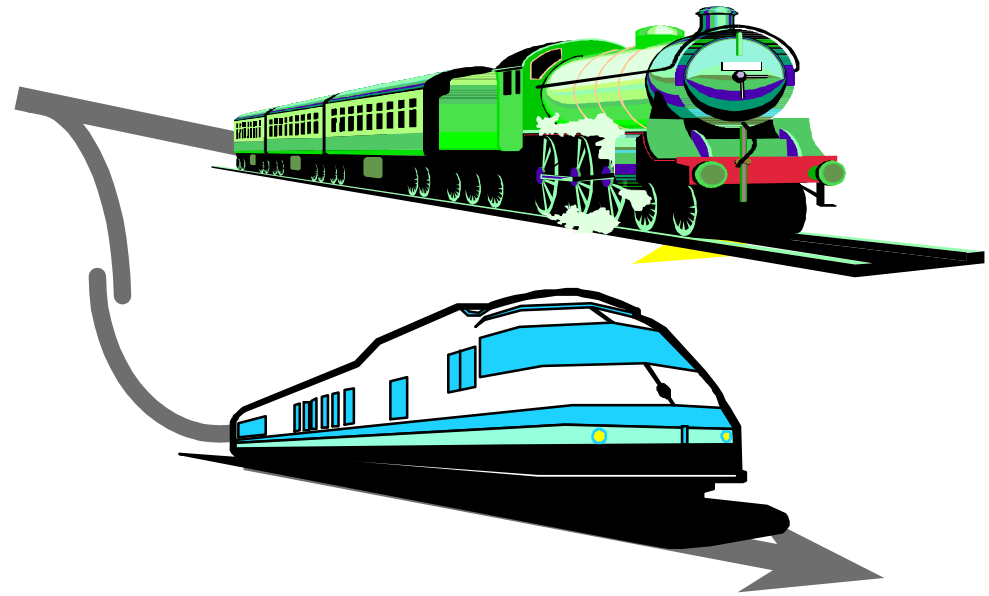
Shaping the Future ... Today
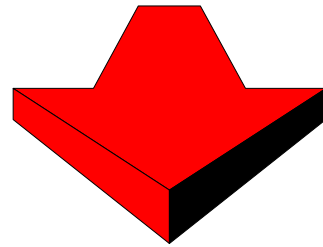
* Today's environment
* The "next generation"
* Status

The Direction

Implement Open-EDI

- ✦ Modeled approach
- ✦ Object oriented technology

The "shrink wrap" solution
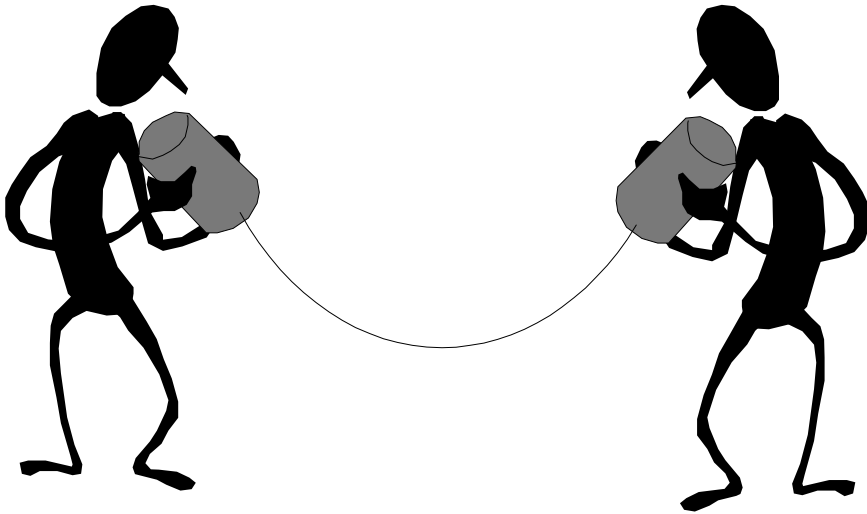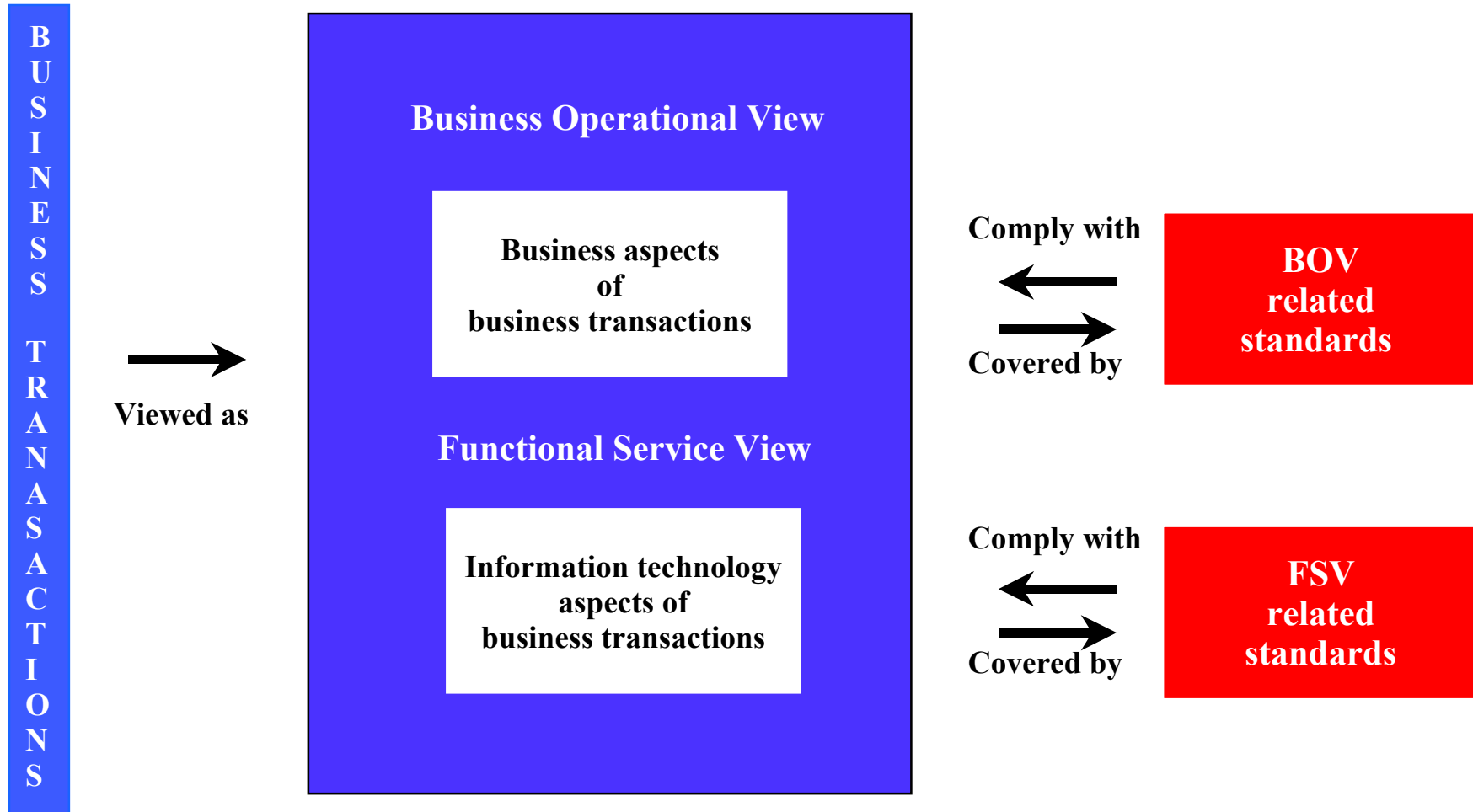
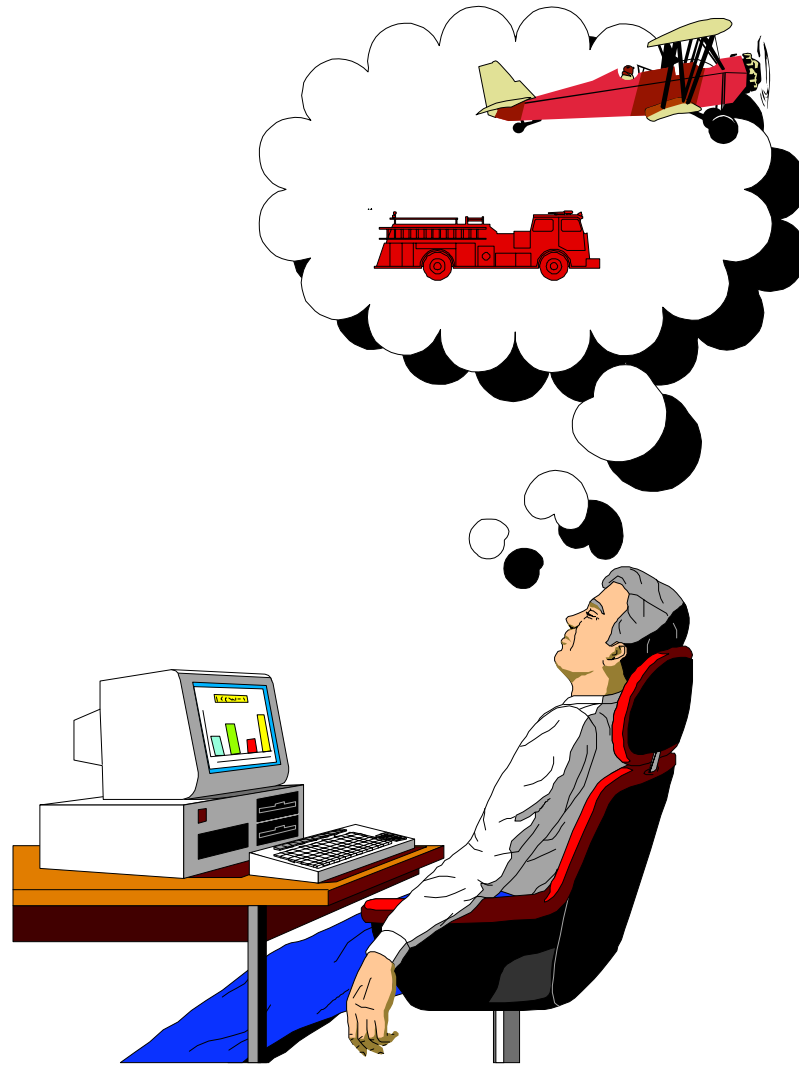# What is Open-EDI?

A vision of future EDI characterized by:

- Structured/predefined information
- No prior agreements
- No human intervention
- Independence from underlying IT systems
- Supports cross sectoral exchanges

Open-EDI Reference Model

BUSINESS TRANSACTIONS

Viewed as →

Business Operational View

Business aspects
of
business transactions

Functional Service View

Information technology
aspects of
business transactions

Comply with
←
Covered by →
BOV related standards

Comply with
←
Covered by →
FSV related standards

Business Information Modeling

What Is Modeling?

✦ **Clearly defines:**

+ Business process

+ Activities

+ Data

✦ **Decomposes business processes to the generic components**

+ Means of representing something

+ Includes essential capabilities, properties, or aspects

+ Excludes extraneous details

What Are The Deliverables?

✦ Modeling, through use case models, activity diagrams, class diagrams, sequence diagrams, and collaboration diagrams:

  + Documents what is done & how it is done clearly

  + Describes precedence & cause relationships between situations
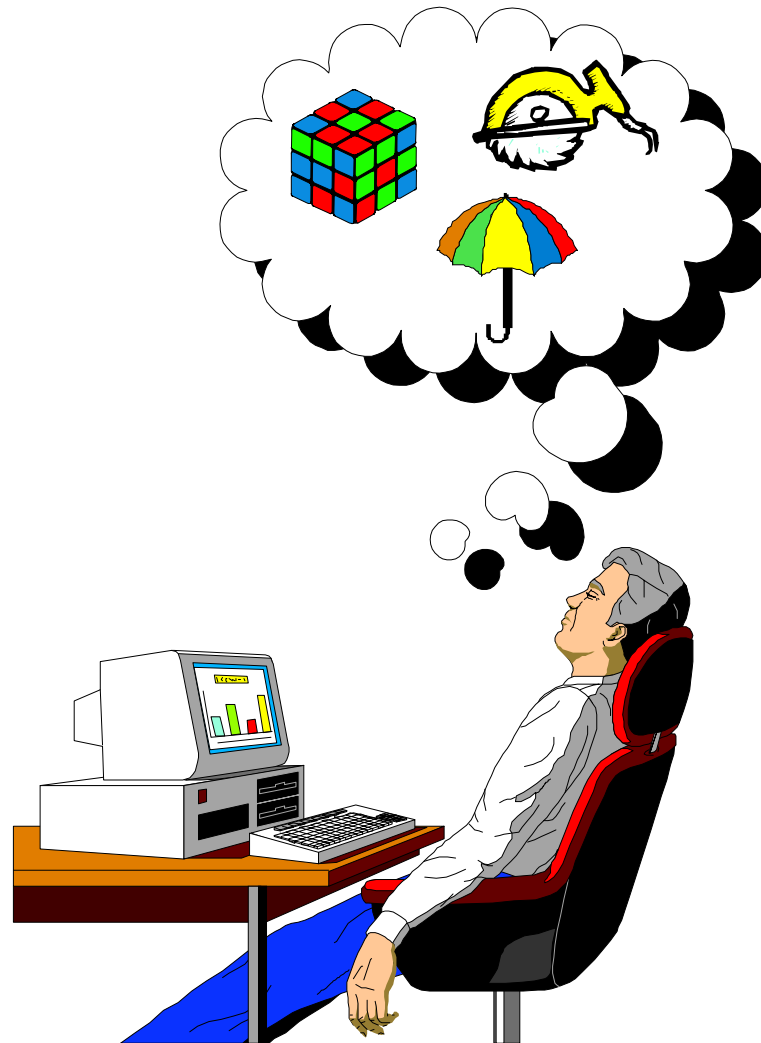
  + Provides description of information structures
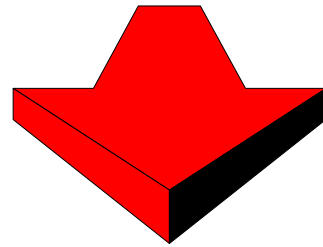
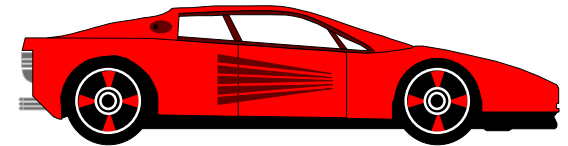## The <u>first</u> OO-edi Standards Component

Objects and Object Classes

What is an Object?

Object: A reusable, self-contained component of a business information model. (A person, place or thing.)

An Object Knows:

✦ Who it is

✦ What it does

✦ How it relates to other objects
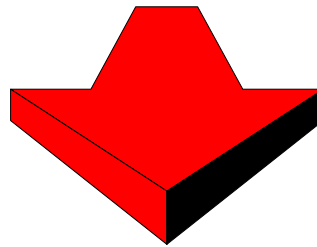
It knows everything we store in implementation guides

What Are The Deliverables?

✦ Class Libraries tied to the modeled business requirements

✦ Reusable components

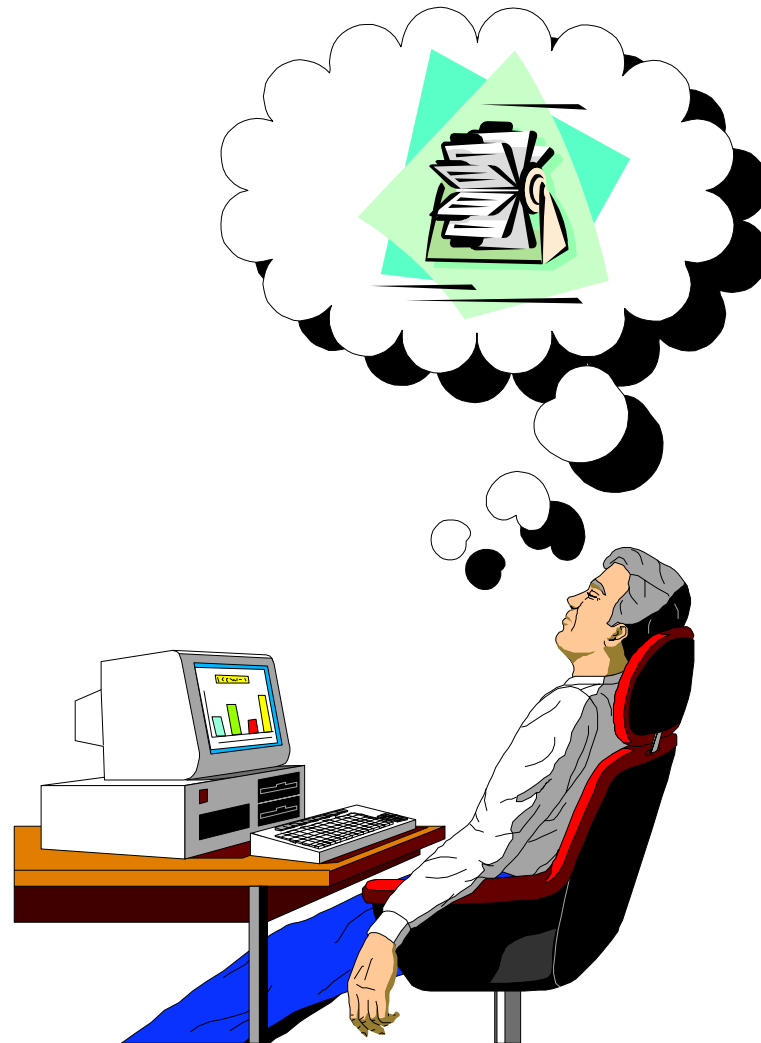✦ Support easy integration into business solutions

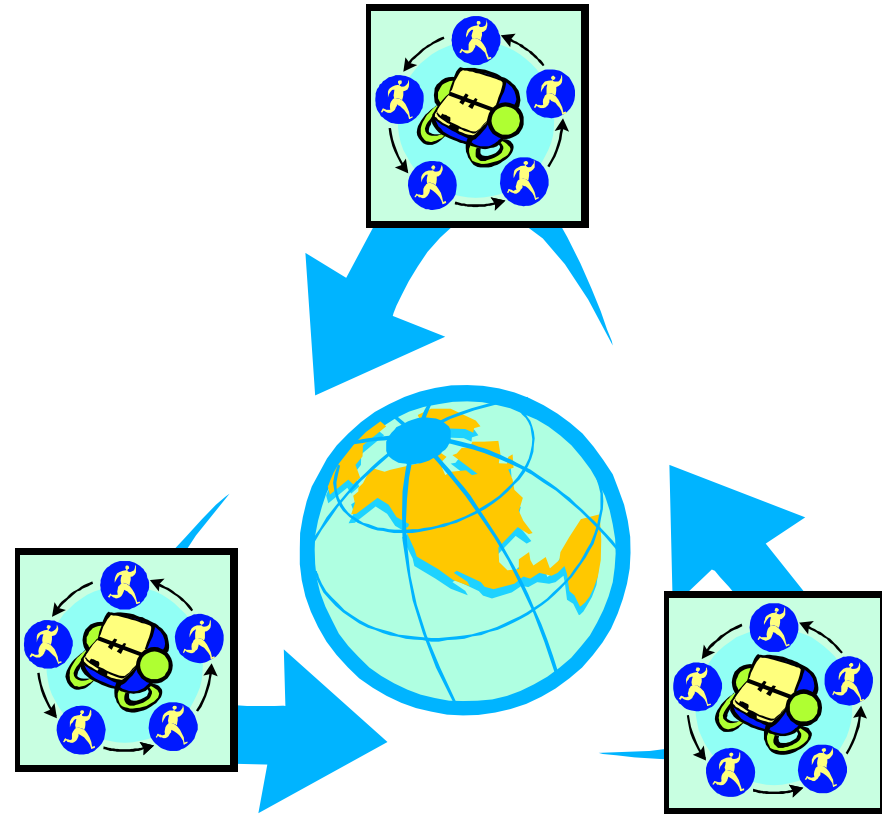**The <u>second</u> OO-edi Standards Component**

Standards Repositories

OO-edi Standards Repositories

- **Global Repository**
  - **+** Models, Class Libraries...
  - **+** Replicative & Distributed
- **Vendor Provided**
- **Sectoral**
  - **+** Industry
  - **+** Geographic
  - **+** EC Communities

Shaping the Future ... Today
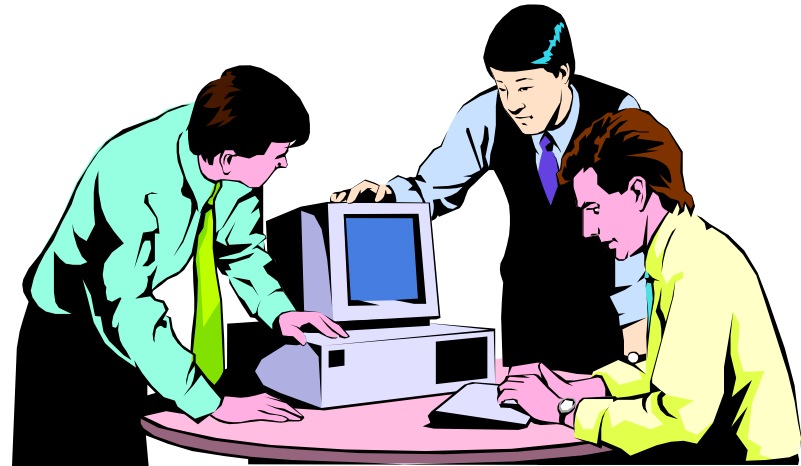
✦ Today's environment

✦ The "next generation"

✦ Status

Established the Organization
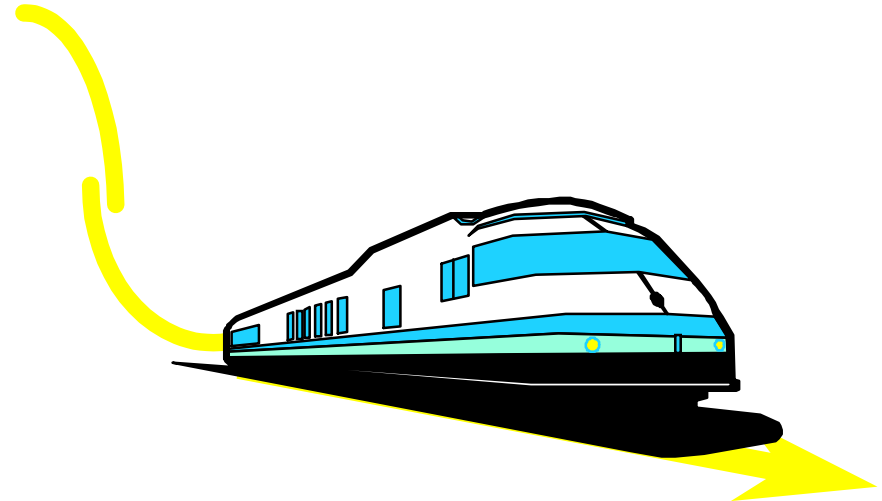
- Established SITG within ANSI ASC X12
- Aligned with UN/CEFACT
- Liasoned with similar organizations
  - CORBA, OMG, IETF,...
- Working with Technology Leaders
  - IBM, Microsoft, Oracle,Intuit,….

What's Active?

- Define "To Be" world
- OO-edi Pilot
- Repository
- Awareness

Who Are The Users?
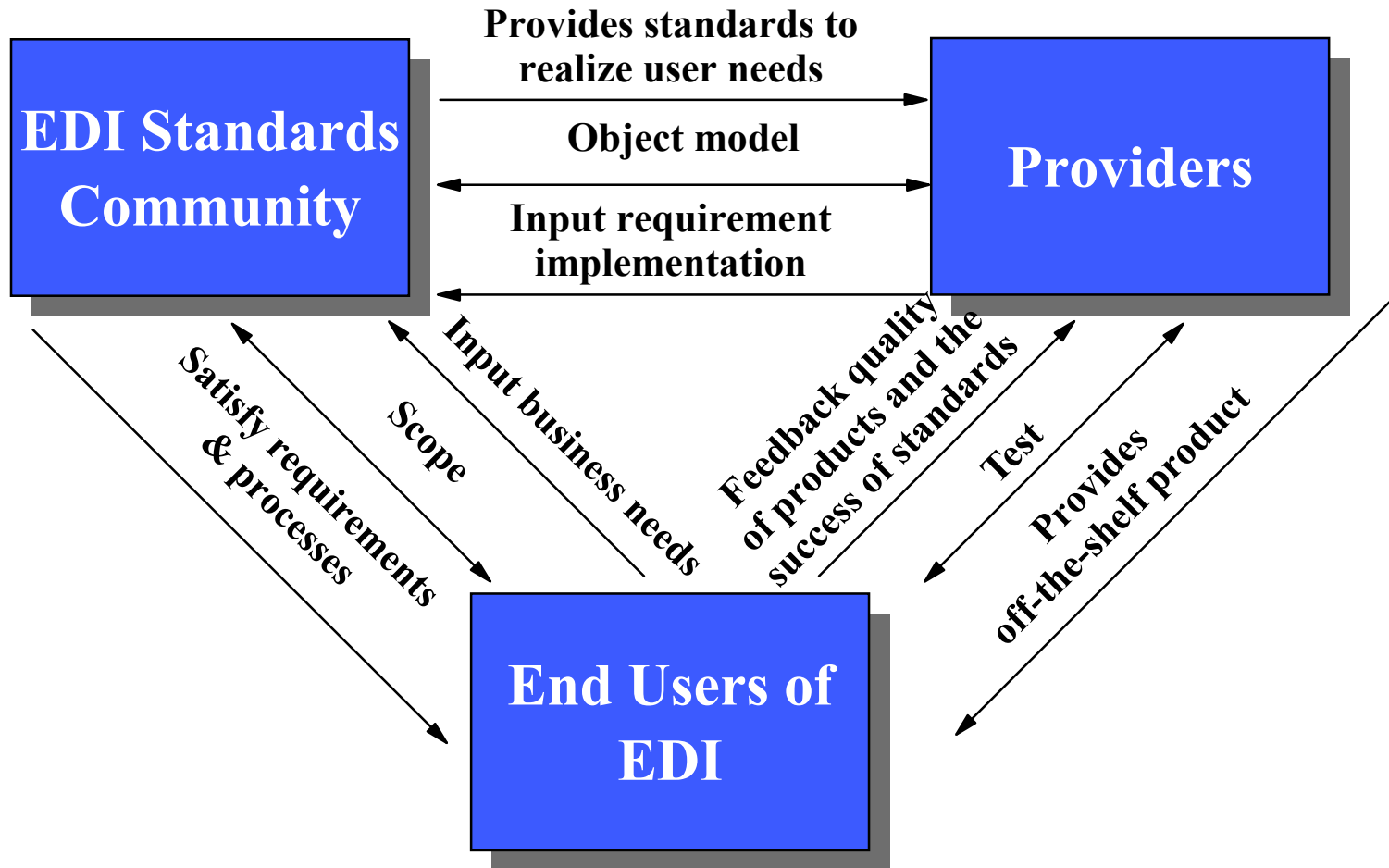
The different roles involved in developing EDI standards

New Organizational Structure

Businesses Collaborators Ind. Groups

Existing X12

OO-edi Standards Dev Org

ANSI X12 DISA Secretariat

DISA Supplied Resources

Rationalize

Strategic Review

Standards Development

Feedback

FSV

BOV

Solution Vendors
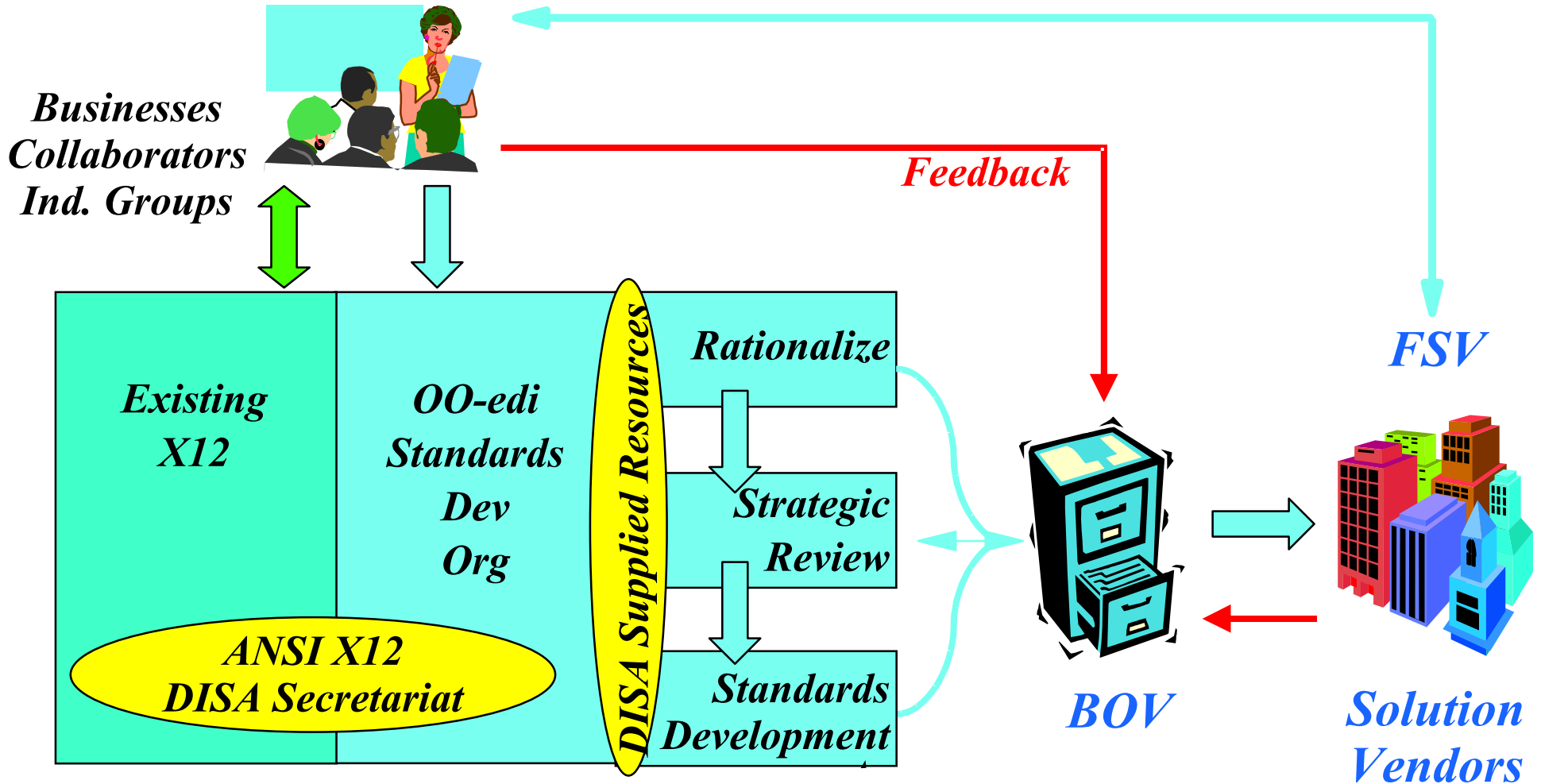
Demonstration Project Procurement

✦ Payment Using the Purchase Card (PCARD)

+ Identified, documented "Buyer" viewpoint & models

+ Identifying, documenting "Seller" viewpoint & models

✦ Vendors

+ IBM using Internet technologies

+ OMG coordinating CORBA technologies

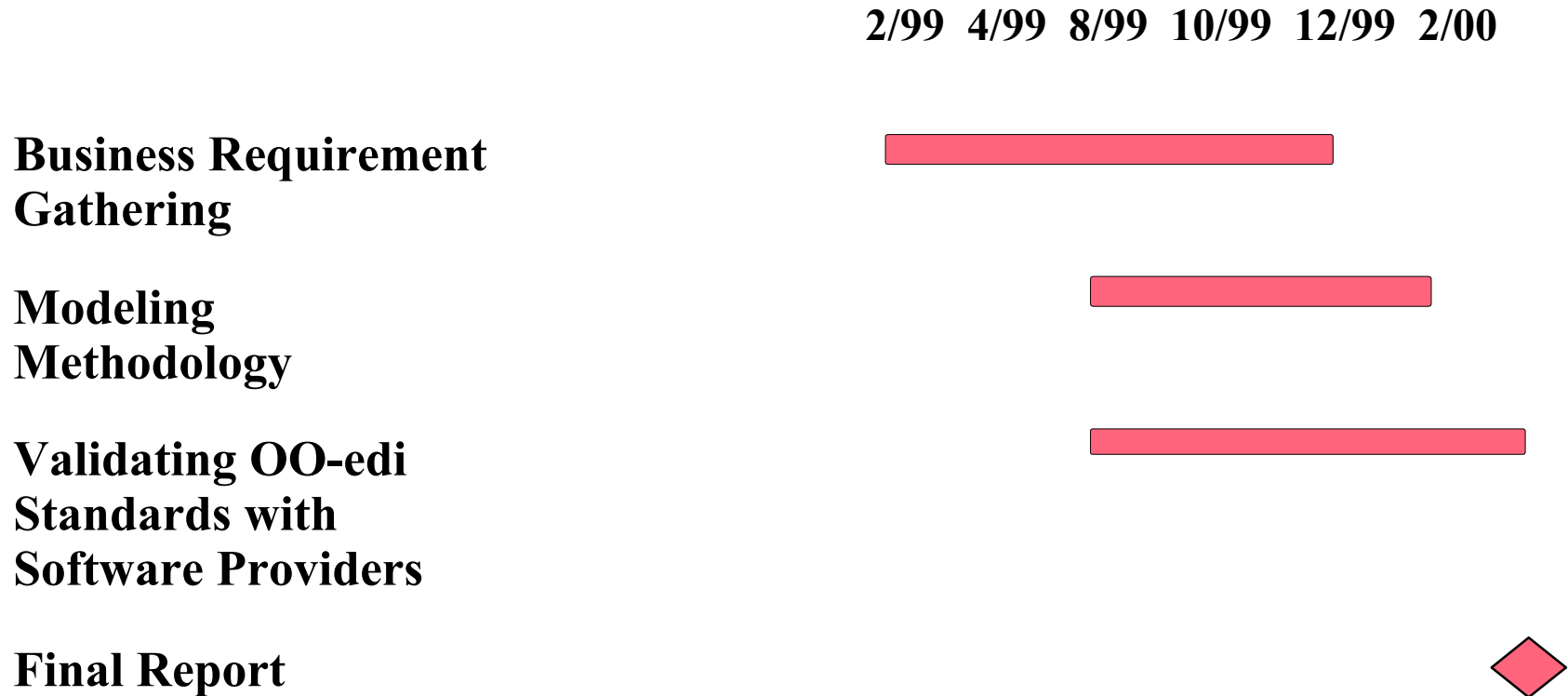# Demonstration Project Major Events

2/99 4/99 8/99 10/99 12/99 2/00

Business Requirement Gathering

Modeling Methodology

Validating OO-edi Standards with Software Providers

Final Report

Repository

✦ Pilot with subset

✦ RFI for Repository produced

  + International

  + Limited response

✦ Decision Point

  + New RFI or

  + Proceed with existing

✦ Implementation begins 4Q99
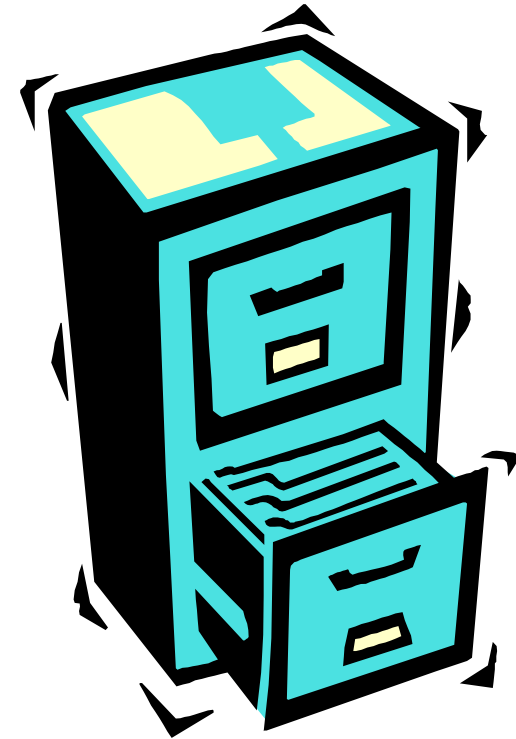
Bringing It All Together

✦ Established Direction

✦ Mobilized Resources

+ **SITG:** Mr. Harry Featherstone

   ★ **WG2: TO BE Model:** Mr. Ravi Kacker

   ★ **WG3: Methodologies:** Mr. Paul Levine

   ★ **WG4: OO-edi Demonstration Project:**

      – Ms. Rachel Foerster and Mr. Michael McFarren

   ★ **WG5: Customer Requirements:** Ms. Clare Shemeta

   ★ **WG6 - Education and Awareness:** Ms. Sandra K. Paul

   ★ **WG7 - Repository:** Mr. Scott Nieman

Bringing It All Together

Standards Bodies for:
Business process models
Class libraries

Software Providers for:
Application development
expertise

Win - Win

Affordable "plug and play" business solutions for the user community

THANK YOU!

For more details and ongoing status:
WWW.X12.ORG and select
Next Generation Standards Development!

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Fort Wayne, IN 46802
email: timrose@us.ibm.com

Hang Ten with DI - A Decade of Innovation

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