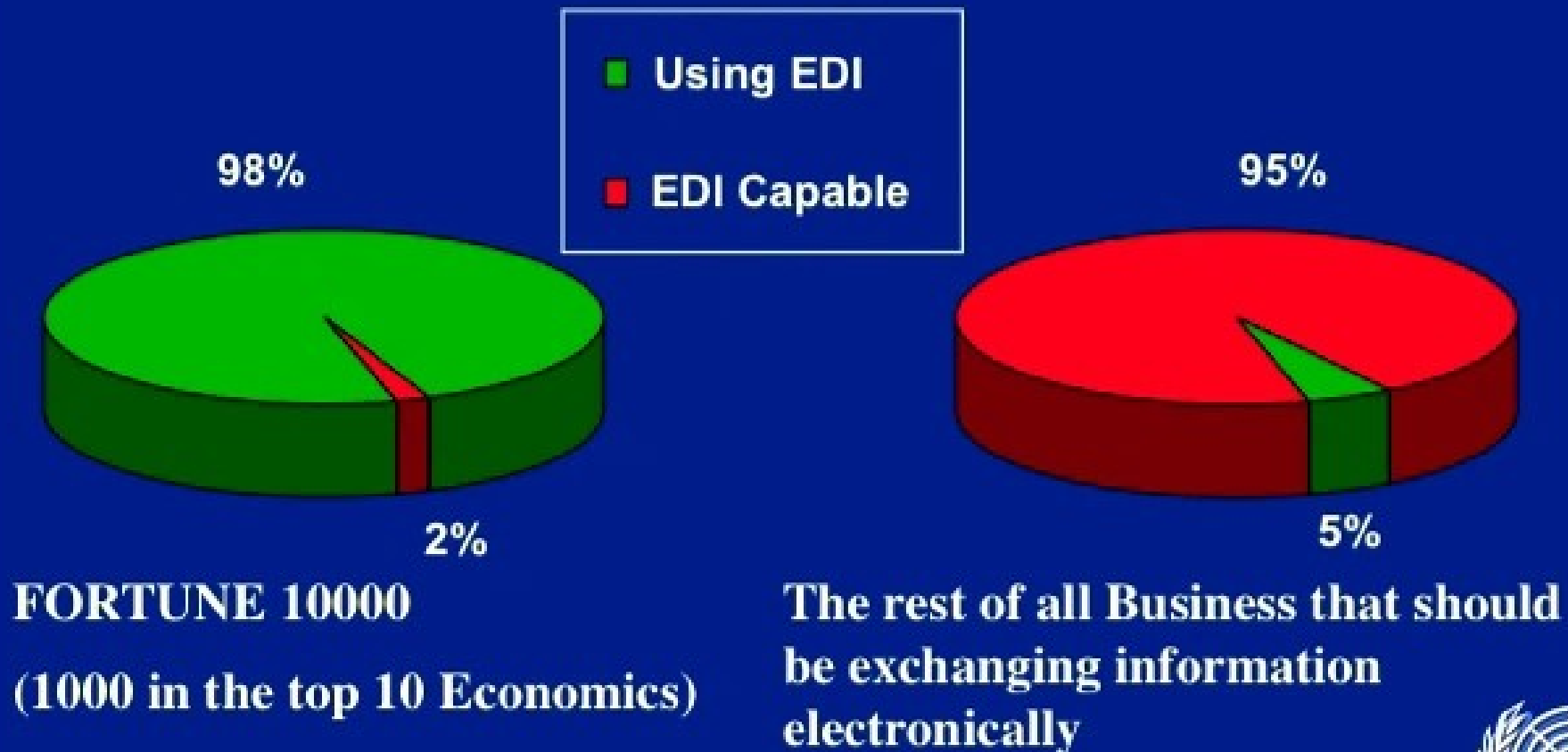**UN/CEFACT**

Overview
of UN/CEFACT's new Approach

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UNITED NATIONS CENTRE FOR TRADE FACILITATION AND ELECTRONIC BUSINESS
Under the auspices of United Nations Economic Commission for Europe

Success or Failure?

Did EDI reach critical mass after 25+ years?

- **Using EDI** (green)
- **EDI Capable** (red)

98% / **2%**

FORTUNE 10000
(1000 in the top 10 Economics)

95% / **5%**

The rest of all Business that should be exchanging information electronically

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Business Problems / Solutions

- *Looking for solutions in the right place!!*

- Business problems are solved with business solutions!

  - So, why are we looking in technical places?

  - Business defined by Technologists?

- Decouple definition of business (*it's meaning*) from the underlying technology.

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E-Business Requirements

- Facilitate a structure and environment that permits business to conduct business that is *familiar* and *trusted* – a "safe harbor"

- Conduct of business does not require a level of sophistication beyond the skill set of the normal business person – *convenient*

- Conduct of business is *profitable* – reduces cost or increases opportunities (execution)

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Four Critical Success Factors

- ### *Familiar*
  - Activity being conducted is as crucial to business as the conducting of business itself

- ### *Trust*
  - Assurance that what they meant to do, is what they did and that it was done accurately, respecting privacy for information and process

- ### *Convenient*
  - In specification and usage; simplicity

- ### *Profitable*
  - In cost savings or increase opportunity
  - In conducing business as prescribed

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Embrace and Deploy Business Solutions

If a business solution is both familiar and trusted, then business will *embrace* the solution as viable and useful.

If a business solution is profitable and convenient, then business will *deploy* the solution.

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Prescription, Precision & Reification

- *Prescriptive* methodology yields predictable results

- Uniformity of notation and *precision* of semantics provide concise and unambiguous business process definitions

- *Reification* provides the rigor and precision necessary for high-fidelity transformation between business definitions and technology definitions – *no loss of semantics or context*

- Technology and Protocol unbiased is the key to easy adaptation and shared solutions

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What does all this mean?

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Business requirements drive Technology solutions

Embody Best Trade Practices in Standard e-Business Processes

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Orchestration

means many activities working in harmony
to achieve business goals

Related Metaphors:
- **Choreography** - partners in a dance
- **Conversation** - dialog, give-and-take
- Rules of a **game** - taking turns, playing tennis

Two ways to Orchestrate:

1. **Technology-centric:**
   - Adapt computer science concepts:
     - Workflow Engines, Distributed state machines, more ...

2. **Business-centric:**
   - Computerize the conversation of business deals:
     - I commit to pay for the goods if you commit to deliver them

   Both are necessary, so who rules?

Business already knows how to orchestrate deals

- Negotiation
  - Offer and Counter-offer
- Offer and Acceptance
- Commitment and Fulfillment
- Deliver the goods and Pay for them

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UMM Logic Chain

- **Business commitments** are a set of expected business results
  - Promise to deliver a compliant product
- **Fulfillment** is the accomplishment of the expected business result
  - Proof of delivery and product acceptance
- So we **organize e-Business activities** to **fulfill** business commitments
  - Quote, order, ship, receive, accept, and pay

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Business Entity Flow Graphs*

are a technique
for organizing
e-Business activities
to fulfill business commitments

*UML Activity Graphs using Object Flows

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Business Entities and States

- Business Entities are the "nouns" of business deals:
  - Examples: Products, Orders, Shipments, etc.

- Business Entities undergo Business States

- Business Entities have some of the same *information elements* of Business Documents exchanged between trading partners - but they are not the same things
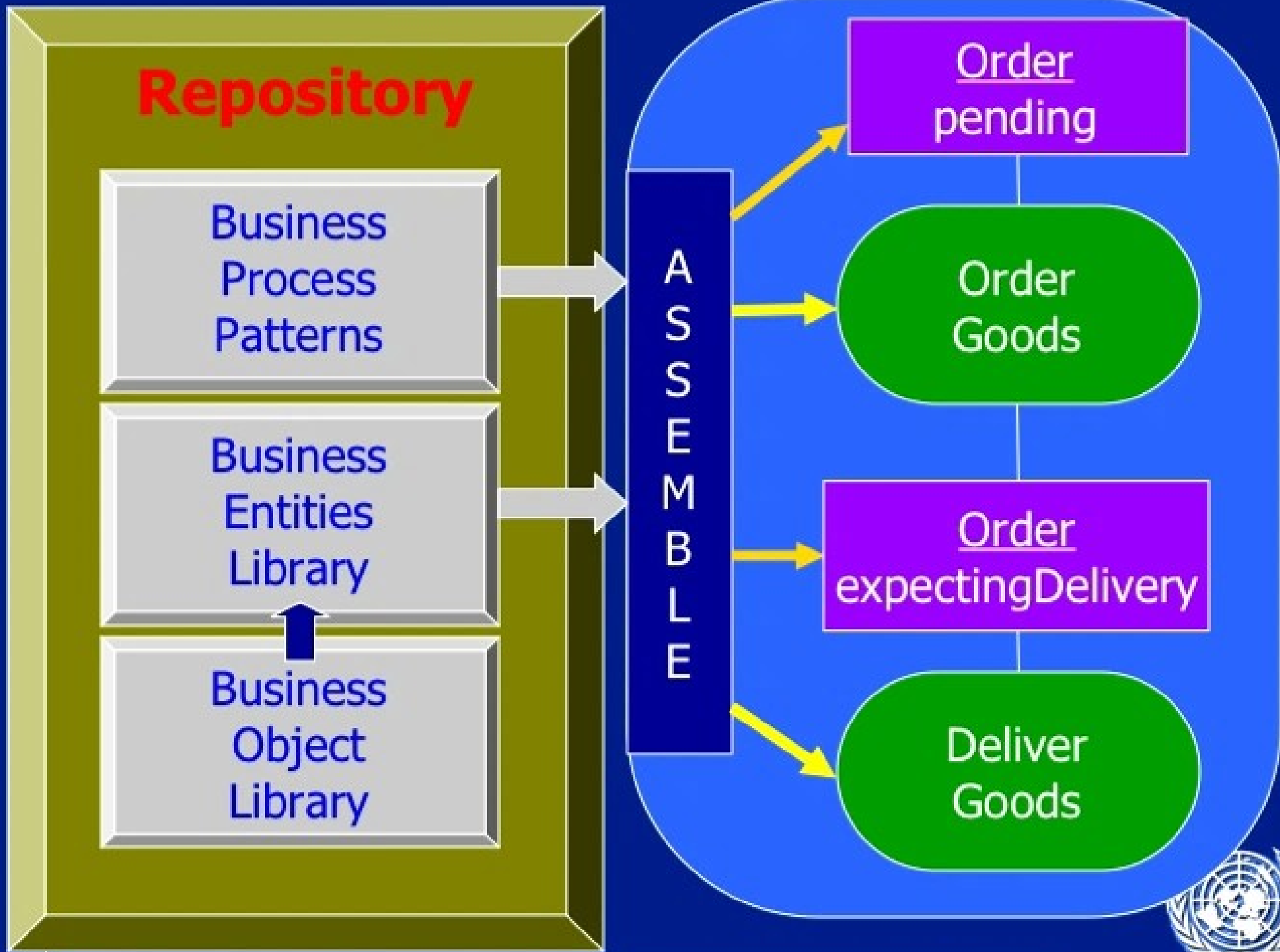
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Business Entities and States

- **Business States** are named states of Business Entities which
  - affect both trading partners and which both partners must agree upon
  - are milestones in the life of a business deal

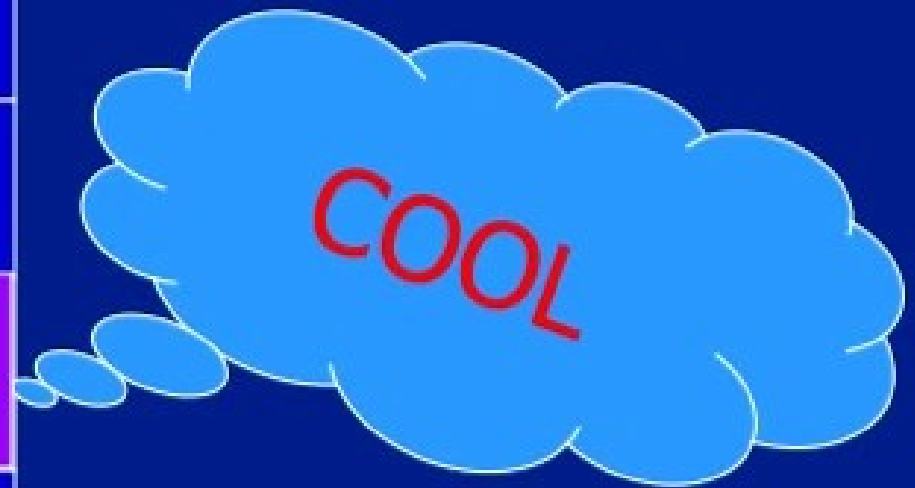- Examples: Order.accepted, Order.fulfilled, Order.cancelled, Payment.received

Orchestration Layer

- Rides on top of Business Transactions

- Can be technically implemented with :

    - Web Services

    - ebXML

    - EDIFACT and X12

    - RosettaNet PIP

    - More ....

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SIMPLE, TRANSPARENT AND EFFECTIVE PROCESSES
FOR GLOBAL BUSINESS