



**Economic and Social
Council**

Distr.
GENERAL

TRADE/CEFACT/2004/9
8 March 2004

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

COMMITTEE FOR TRADE, INDUSTRY AND
ENTERPRISE DEVELOPMENT

Centre for Trade Facilitation and Electronic Business (UN/CEFACT)

Item 7 of the provisional agenda

Tenth session, 17-19 May 2004

**UN/CEFACT'S E-BUSINESS VISION
BUSINESS DRIVING TECHNOLOGY**

Submitted by the UN/CEFACT Steering Group (CSG) *

Document for approval

Summary

* UN/CEFACT's vision is to provide "simple, transparent and effective processes for global commerce". In order to realize this goal, UN/CEFACT researched advances in information and communication technology (ICT) and adopted new approaches to trade facilitation based on simplification and harmonization of business processes. The vast breadth of knowledge is captured in Business Collaboration Models (containing all user requirements related to business processes and associated information exchanges) and associated recommendations providing a solid infrastructure to support current and future trade facilitation requirements. Commitment to this strategy will take UN/CEFACT into the next era of trade facilitation. The real benefits to the users will be reduced costs, protection of existing investments, responsiveness to technology changes, and increased ease in conducting business.

1. UN/CEFACT's principal focus is to facilitate international transactions, through the simplification and harmonization of processes, procedures and information flows, and so contribute to the growth of global commerce. This is achieved by analyzing and understanding the key elements of international processes, procedures and transactions and working for the elimination of constraints in order to develop methods to facilitate processes, procedures and transactions, including the relevant use of information technologies. In short, UN/CEFACT's vision is to provide "simple, transparent and effective processes for global commerce".

2. At the center of this vision (e-Business Strategy) are three fundamental elements:

- Cross-sectoral analysis (to promote interoperability and supply chain synchronicity);
- Business process and information modeling (to capture user requirements and promote syntax independence through the creation of Business Collaboration Models); and
- New syntaxes as they emerge (e.g., eXtensible Markup Language (XML), Web Services, shared and/or distributed objects, etc.).

3. By combining these elements of the vision together, along with the important objective of supporting the current UN/EDIFACT standards development and implementation, UN/CEFACT is able to utilize the same business process models and the same information definitions for any language or syntax of the future.

4. In order to achieve this goal, UN/CEFACT's Techniques and Methodologies Group developed the Business Collaboration Framework (BCF), as illustrated in the Figure below.

5. This top-down approach to information interchange can be described in four steps.

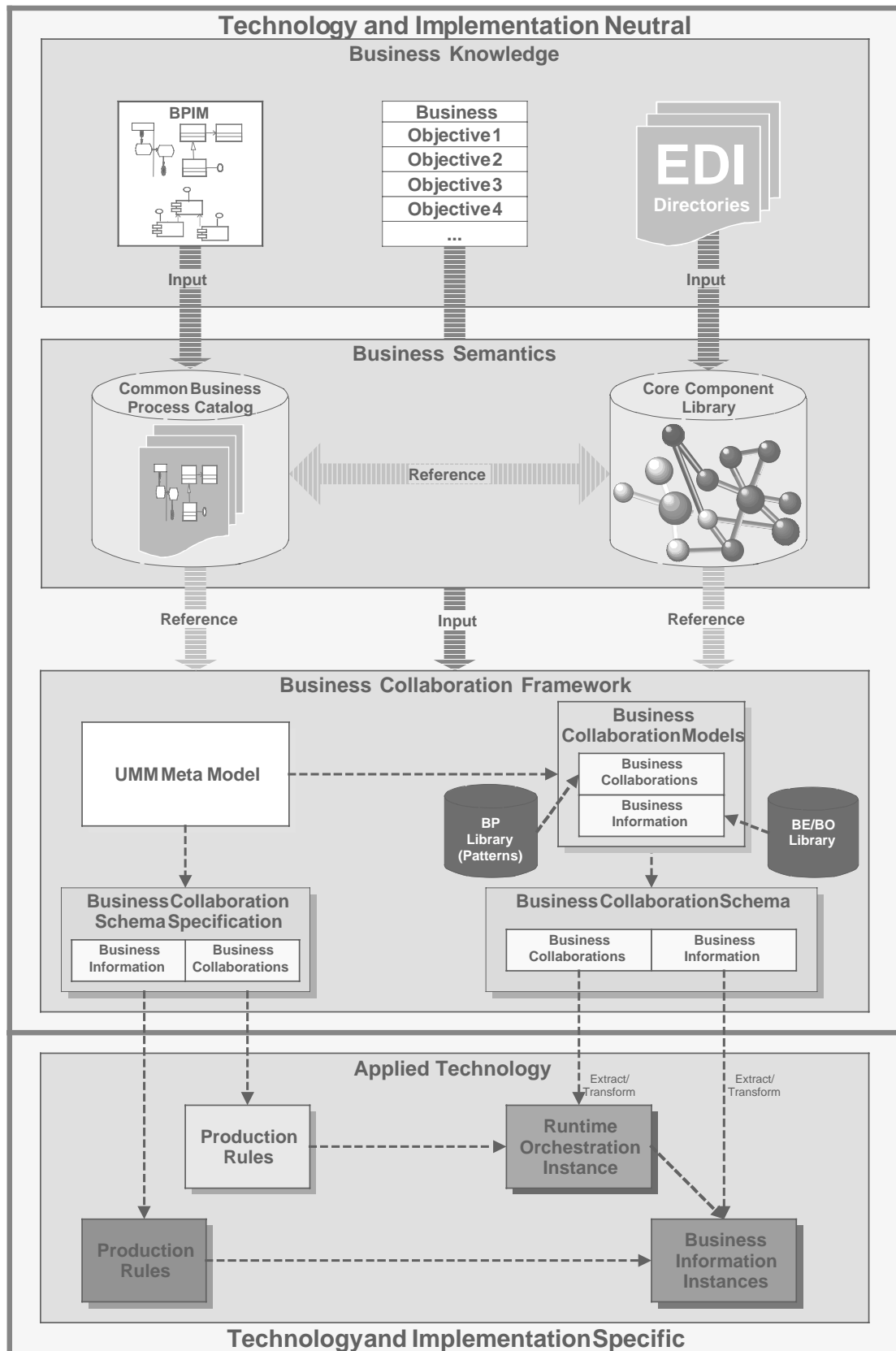
I. Transfer Knowledge. Guided by the UN/CEFACT Modeling Methodology (UMM) of the BCF, a UMM knowledgeable Business Analyst facilitates Business Experts in defining the boundary around the business problem, identifying the affected business processes, business objectives, stakeholders, and constraints. UMM worksheets are used to guide the process and assemble additional business objective requirements.

II. Create the Business Model. Using the information gathered in the previous step, Modeling Experts create a Business Collaboration Model. The model involves at least two trading partners, is UMM compliant, and is technology-neutral and implementation-neutral. Whenever possible, models (or fragments) already developed by other modelers and available within BCF libraries (repositories) are re-used.

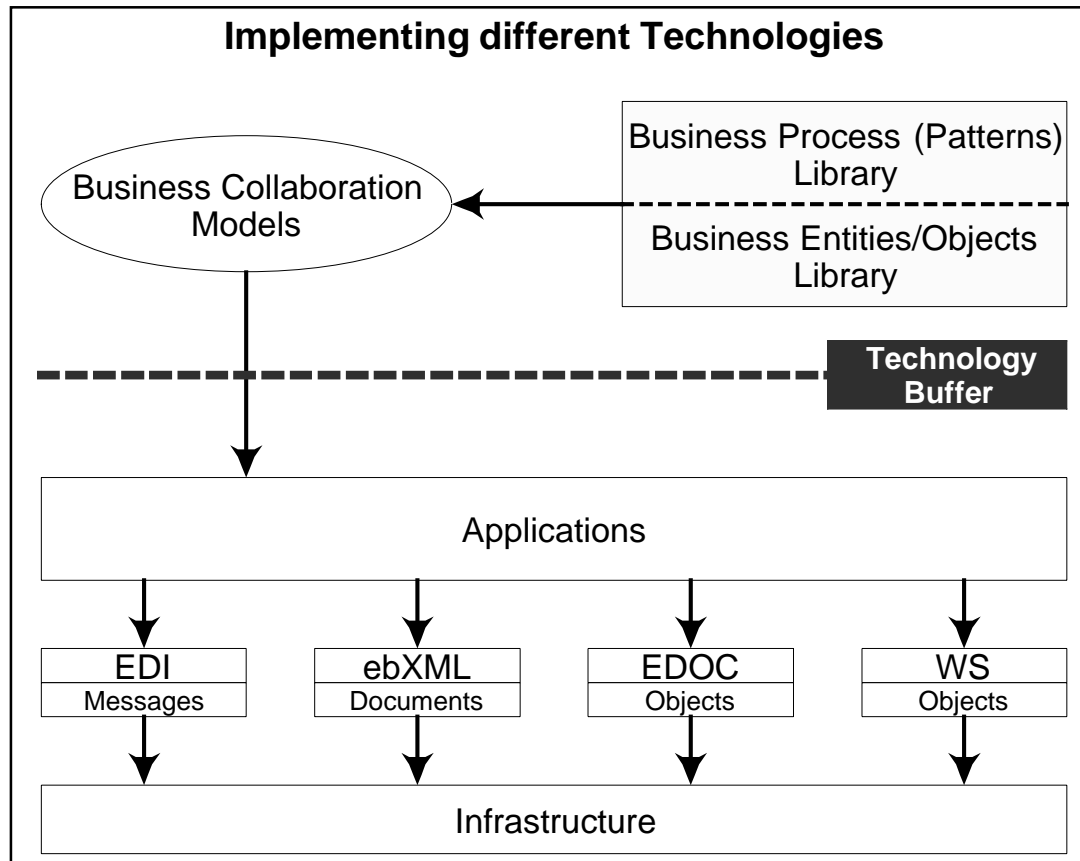
During the creation of the model, Business Semantics are applied. Reference is made, as needed, to a Common Business Process Catalog which stores non-UMM models. These models may serve as guidance for creating UMM compliant and reusable processes in the Business Collaboration Model. The Core Component Library (derived from data definition resources found in EDI directories) is used as a reference in creating reusable, specific business information structures that also serves as input to the business model.

III. Transform the Business Model into a Business Collaboration Schema. As it stands, the Business Collaboration model created in step two can not be directly interpreted by all of today's software. Using the Business Collaboration Specification Schema (BCSS) of the BCF, the model is transformed into a technology-neutral and implementation-neutral format, from which technology-specific production rules can be applied.

UN/CEFACT's E-Business Vision



IV. Implement the Business Model. The technology is now applied to the model. The runtime software applications are produced according to EDI, ebXML, EDOC object, WS object, etc, production rules. Syntax experts in Applied Technology would develop the production rules that bind each technology-specific syntax in this step to the BCSS in the previous step. This would then be used to create executable software and information exchanges.



The Figure above illustrates step 4, showing the application of executable, technology specific information interchange bindings to Business Collaboration Models developed within the BCF.

V. What Does This Mean to the User?

In pursuing this strategy, UN/CEFACT is mindful of the need to ensure that our objectives and actions translate into significant value to our user constituency. We appreciate that the technical aspects of this vision may appear complex and detailed. Thus, it is critical that decision makers appreciate the business benefits attributable to this work.

6. As a direct result of UN/CEFACT's efforts, organizations will realize the identification and documentation of business processes in a standard format. These processes can then be implemented independent of the underlying technology and explicit means of implementation. This provides the flexibility to recognize and efficiently deal with both variations in business practices and implementation technology. These products also provide a framework which recognizes the dynamics and timing of technology advances, thus protecting existing infrastructure investments by reducing the cost of transitioning to new technologies as they are required for marketplace viability. Additionally, these products provide a means of identifying customer requirements and allowing the technology provider community with a means of providing consistency and cost effective solutions to meet user requirements.

7. Toward the bottom line, the real benefits of UN/CEFACT's work translate to standardized processes, reduced implementation and maintenance costs, protection of existing investments, increased responsiveness to technology changes, and increased ease for the user to conduct business.
