STEP Integration and Interpretation Methods

William F. Danner
National Institute of Standards and Technology

Yuhwei Yang
Product Data Integration Technology

Presenter: Dr. Kent A. Reed
National Institute of Standards and Technology

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STEP -- the STandard for the Exchange of Product model data

ISO 10303 is an international Standard for the computer-sensible representation and exchange (transfer, sharing, and archiving) of product data

-- product support throughout its life cycle

-- system independence

-- single, neutral representation form

-- multiple implementation methods

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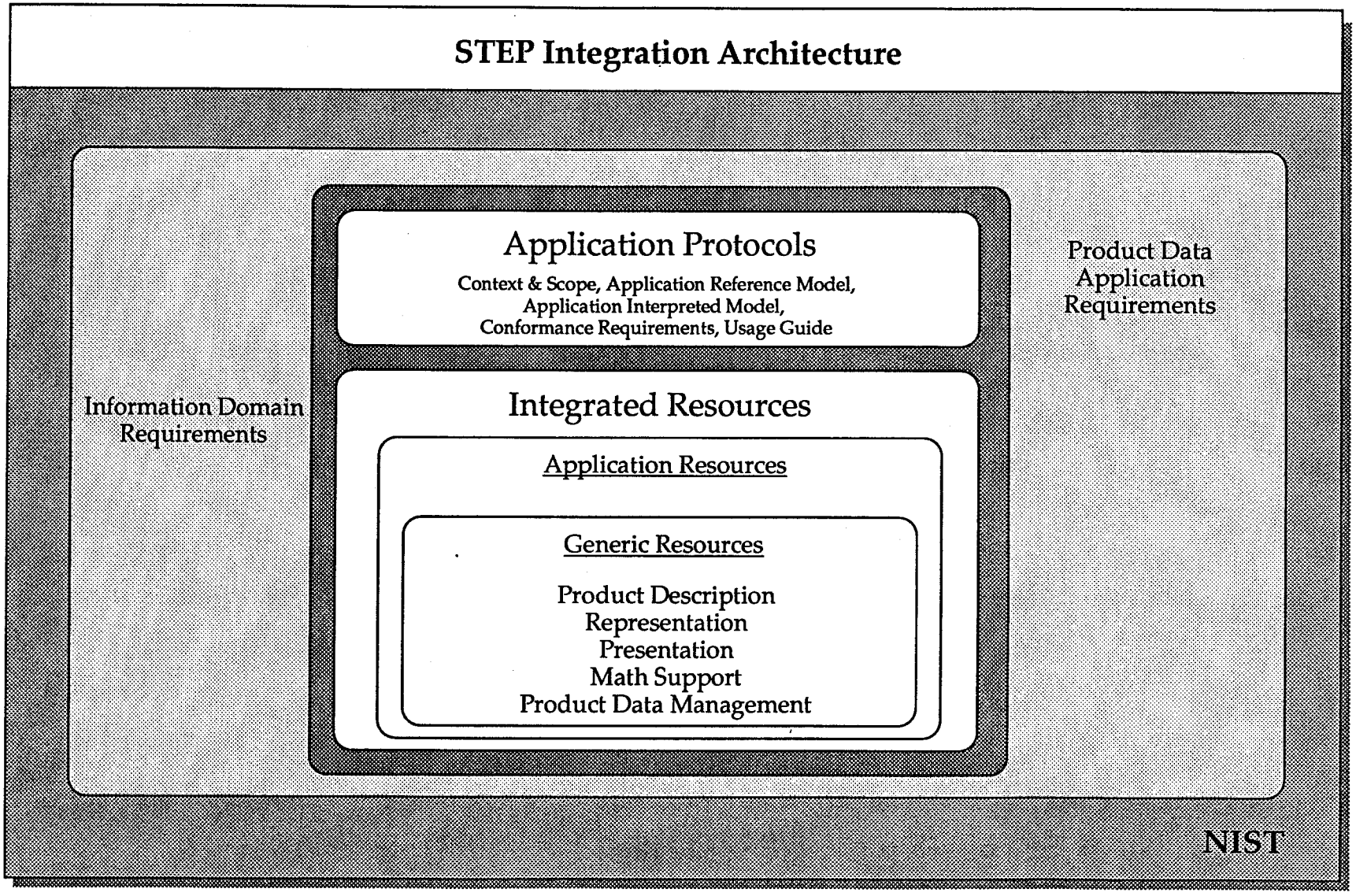
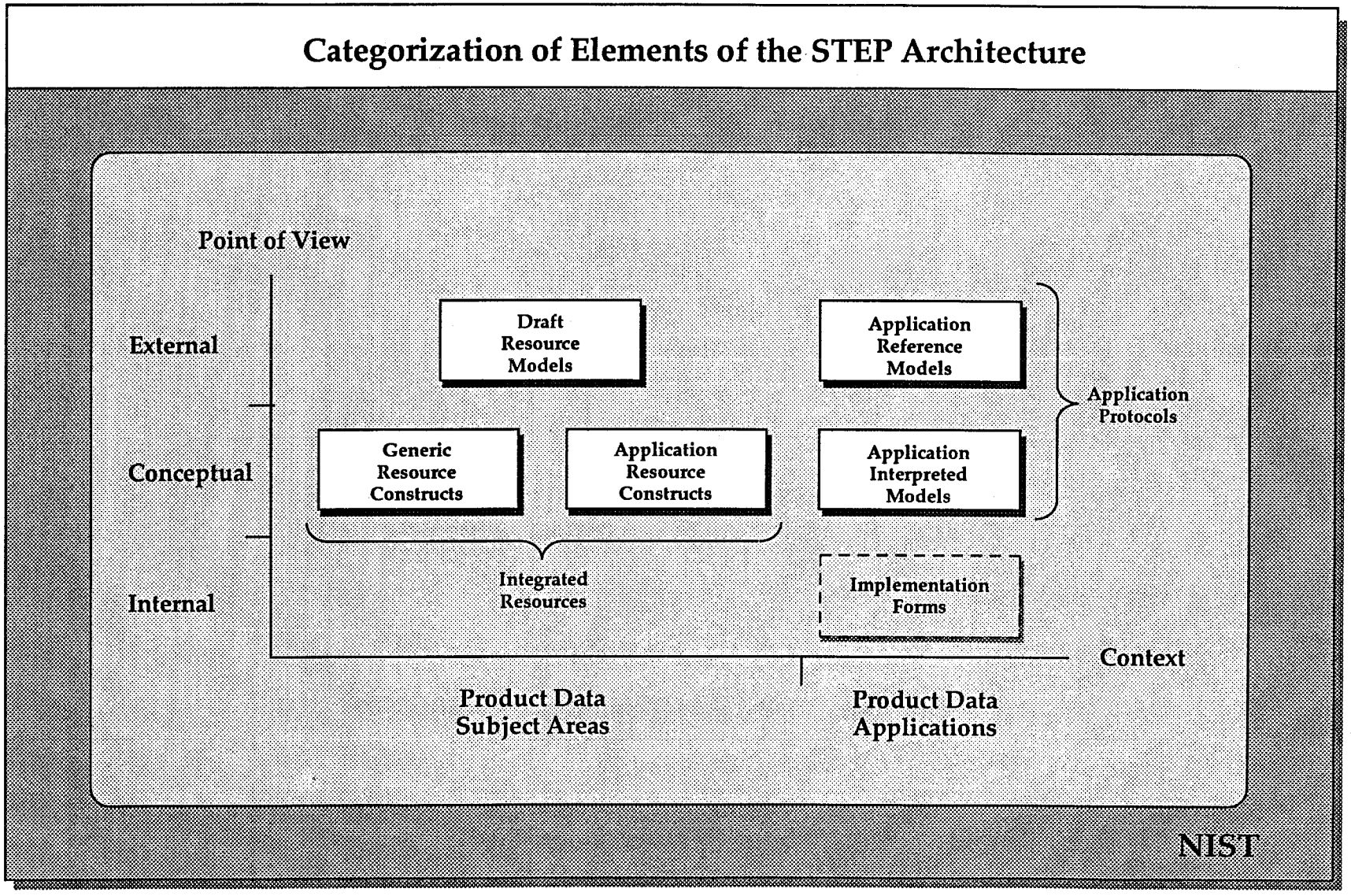
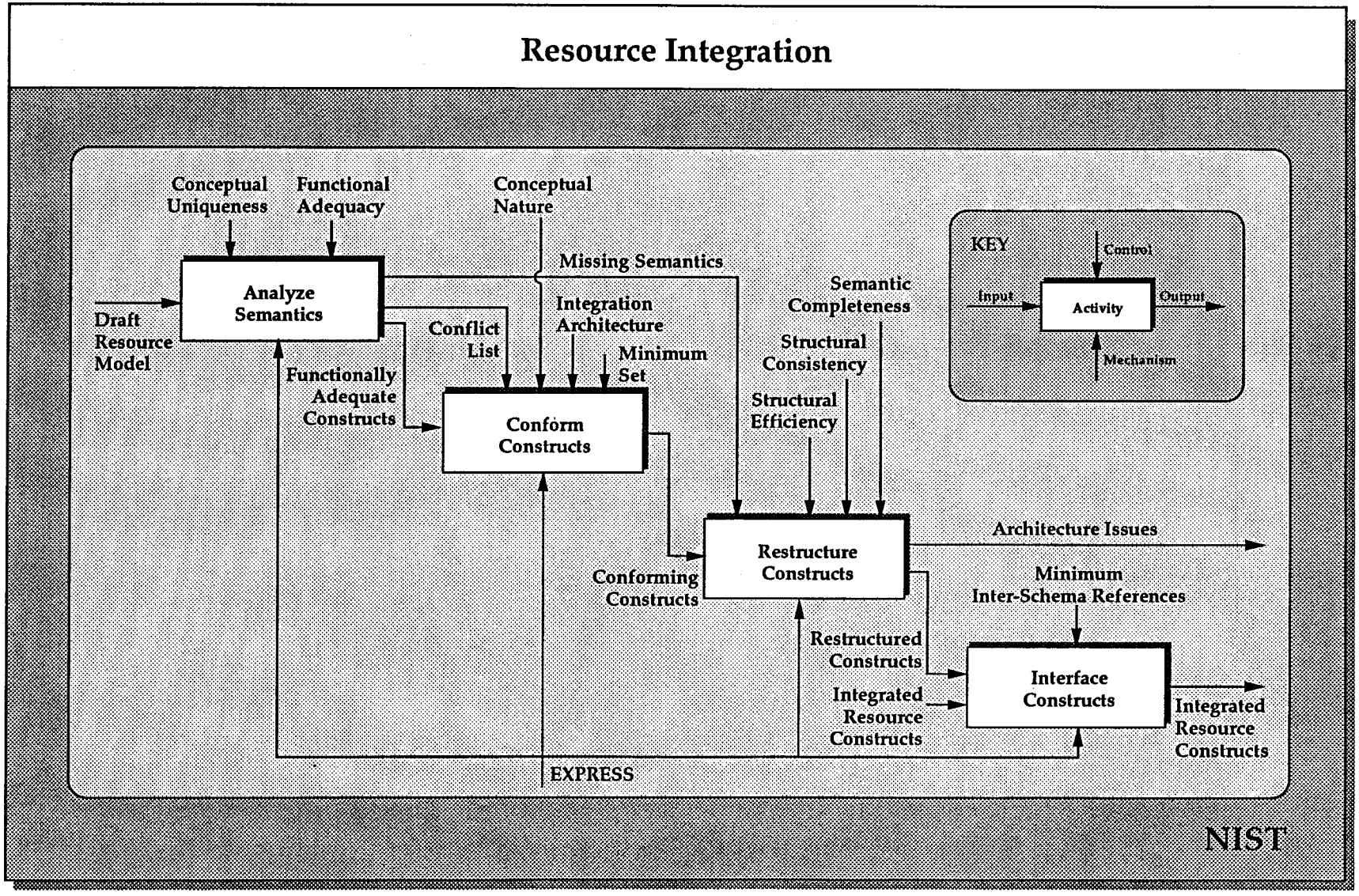

STEP Integration Architecture
Application Protocols
Context & Scope, Application Reference Model,
Application Interpreted Model,
Conformance Requirements, Usage Guide
Integrated Resources
Application Resources
Generic Resources
Product Description
Representation
Presentation
Math Support
Product Data Management
Information Domain
Requirements
Product Data
Application
Requirements
NIST

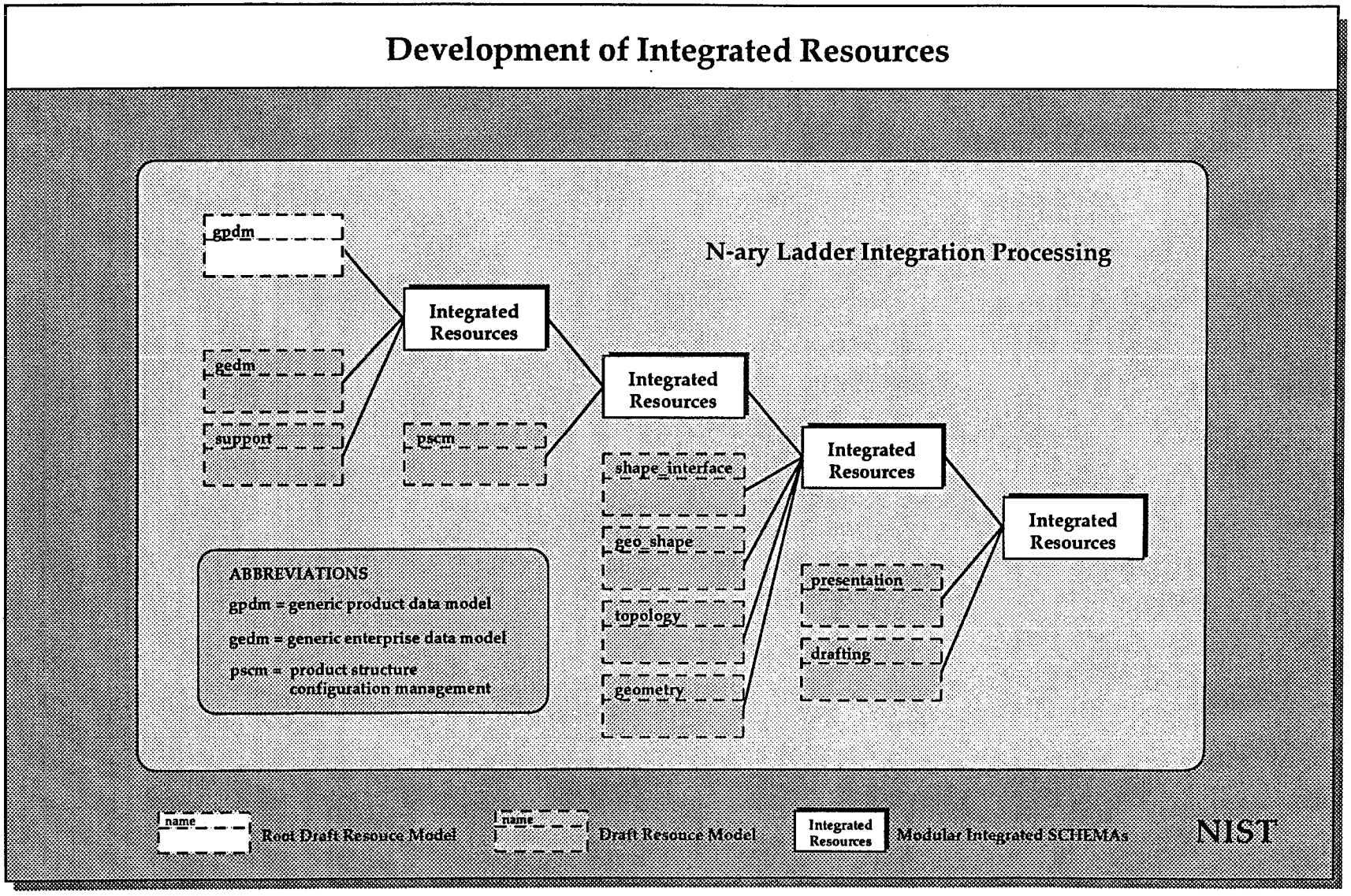
Categorization of Elements of the STEP Architecture



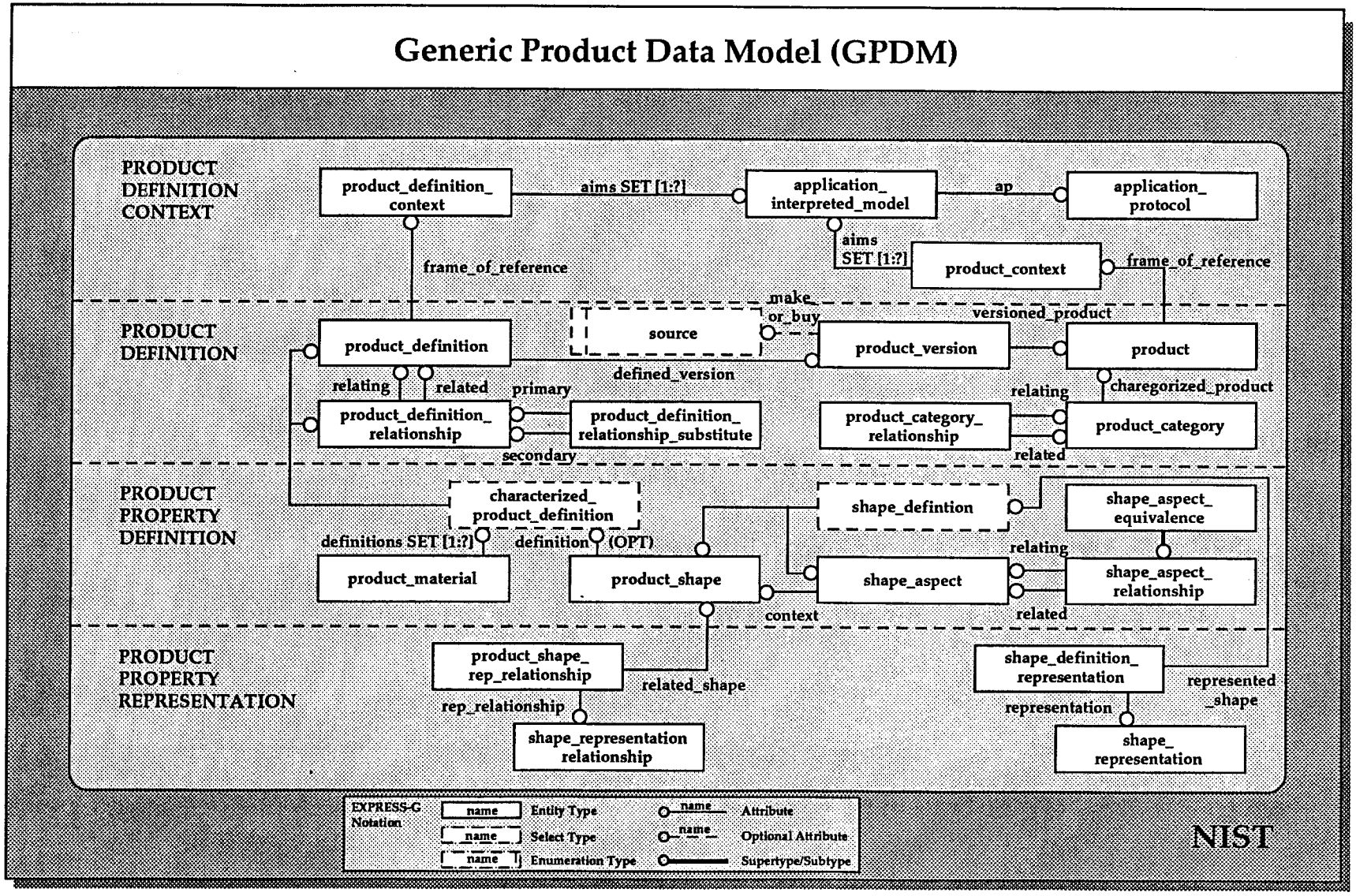
Resource Integration



Development of Integrated Resources



Generic Product Data Model (GPDM)



Application Protocols

- Context, scope, & functional requirements
  Application Activity Model (AAM)
- Application Reference Model (ARM)
- Application Interpreted Model (AIM)
- Conformance requirements & test purposes.
- Usage Guide

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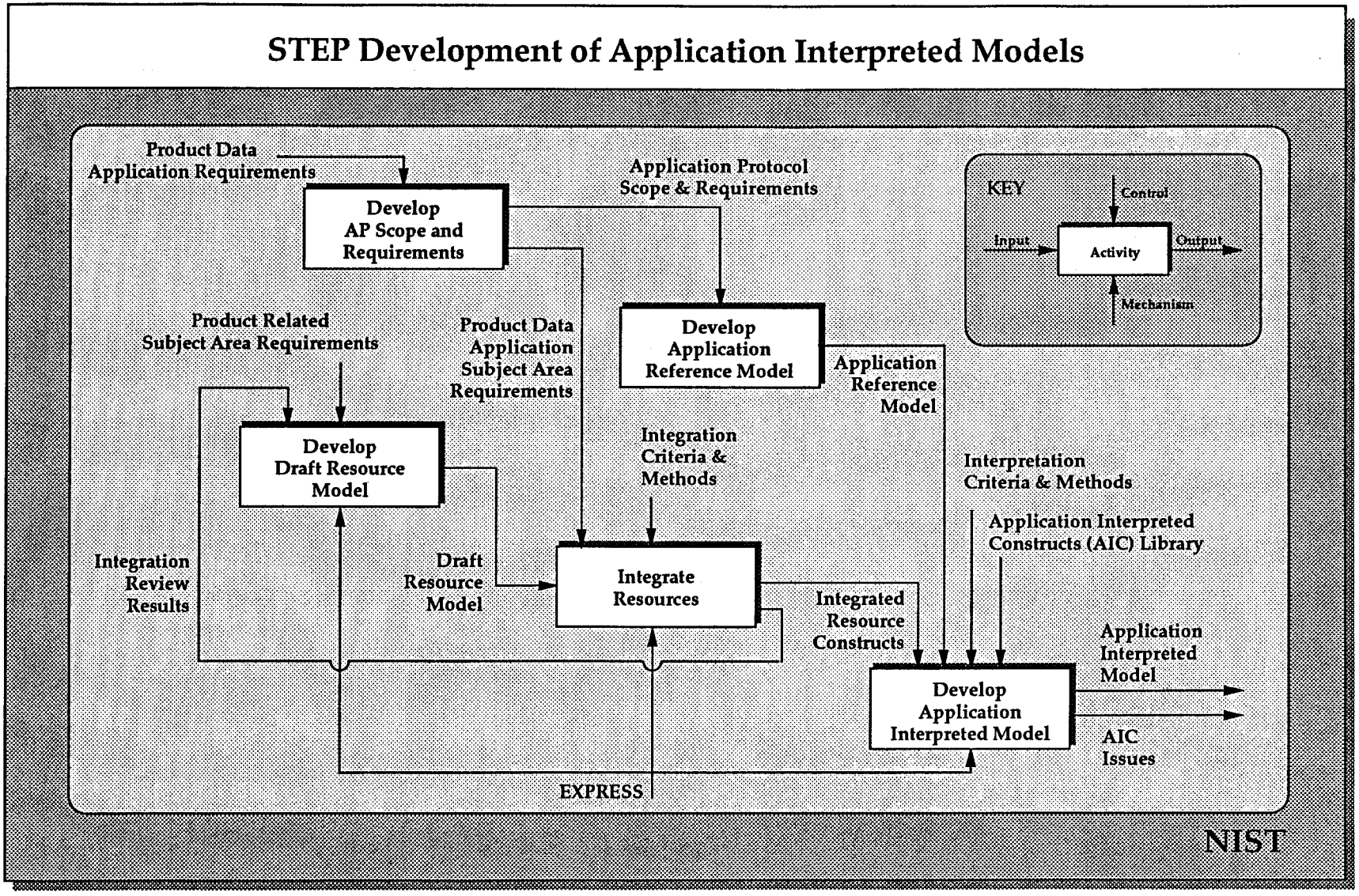
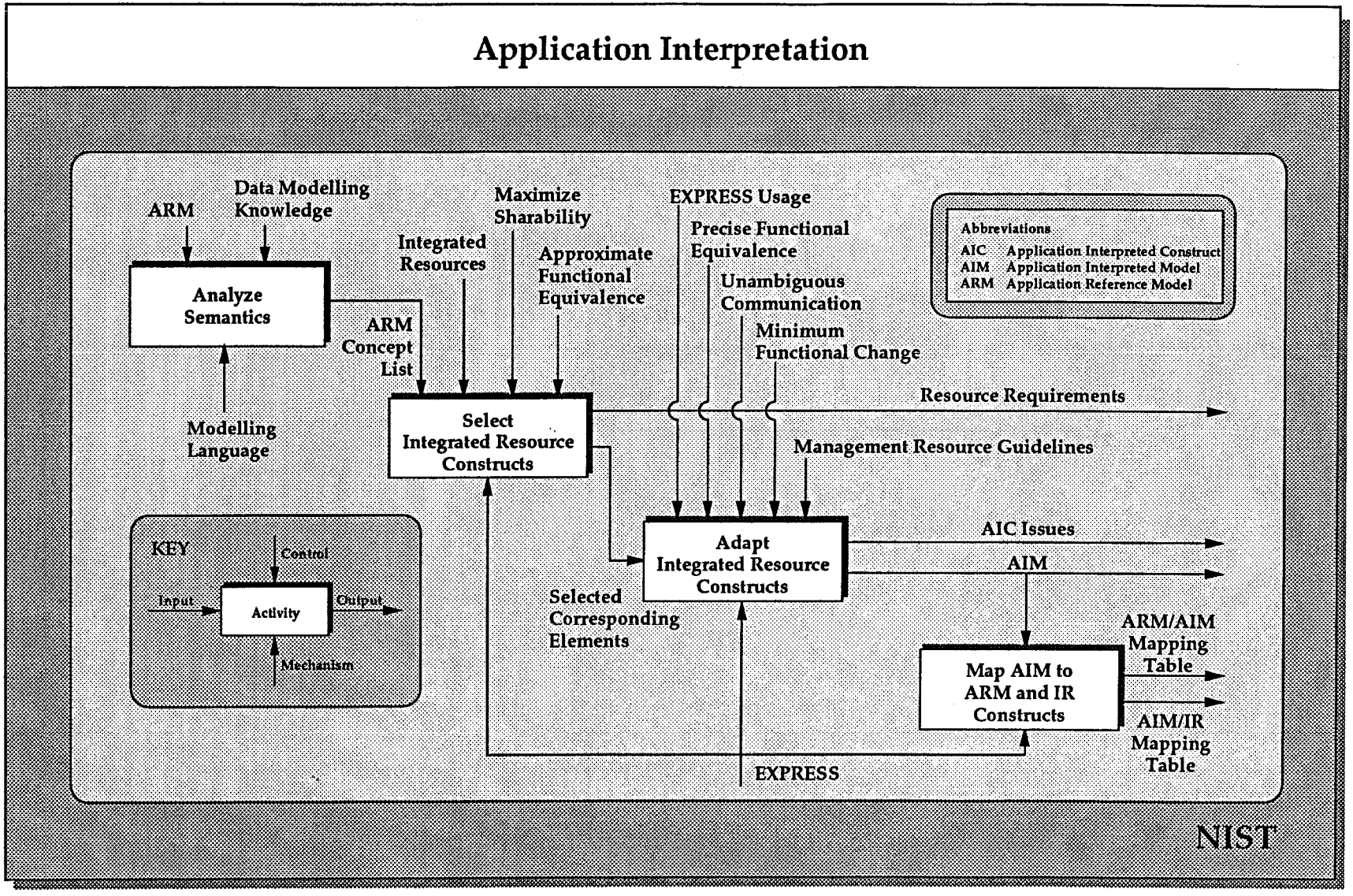
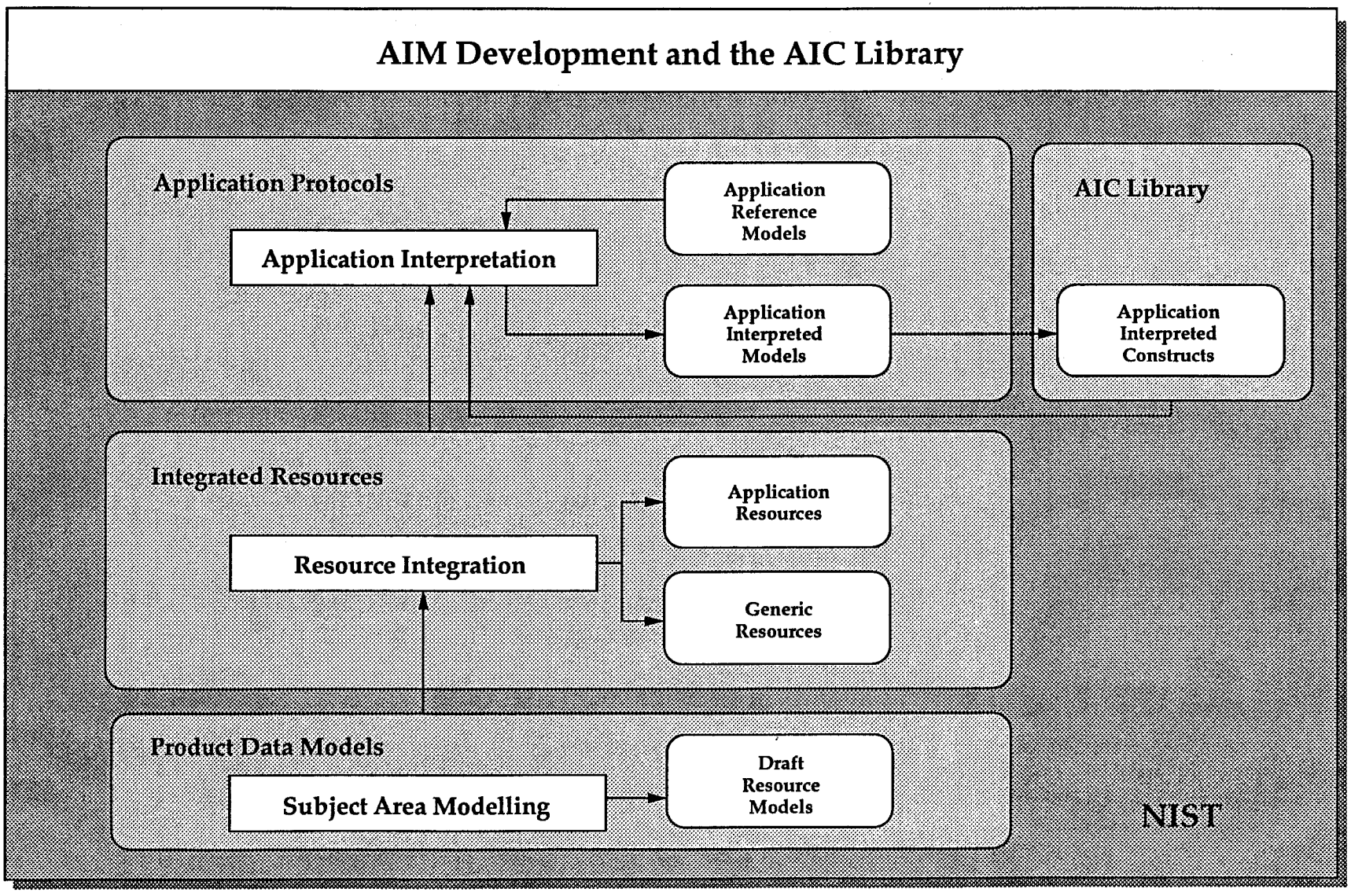
STEP Development of Application Interpreted Models



Application Interpretation




AIM Development and the AIC Library
Application Protocols
Application Interpretation
Application Reference Models
Application Interpreted Models
AIC Library
Application Interpreted Constructs
Integrated Resources
Resource Integration
Application Resources
Generic Resources
Product Data Models
Subject Area Modelling
Draft Resource Models
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Some Challenges for the STEP Methodologies

-- Can one neutral representation simultaneously fulfill the requirements of all implementation methods?

-- Are two levels of resources (generic and application) sufficient?

-- Can semantic data modeling and object-oriented data modeling be brought into one framework?

-- Do static schemata suffice?

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