Model Driven Architecture™

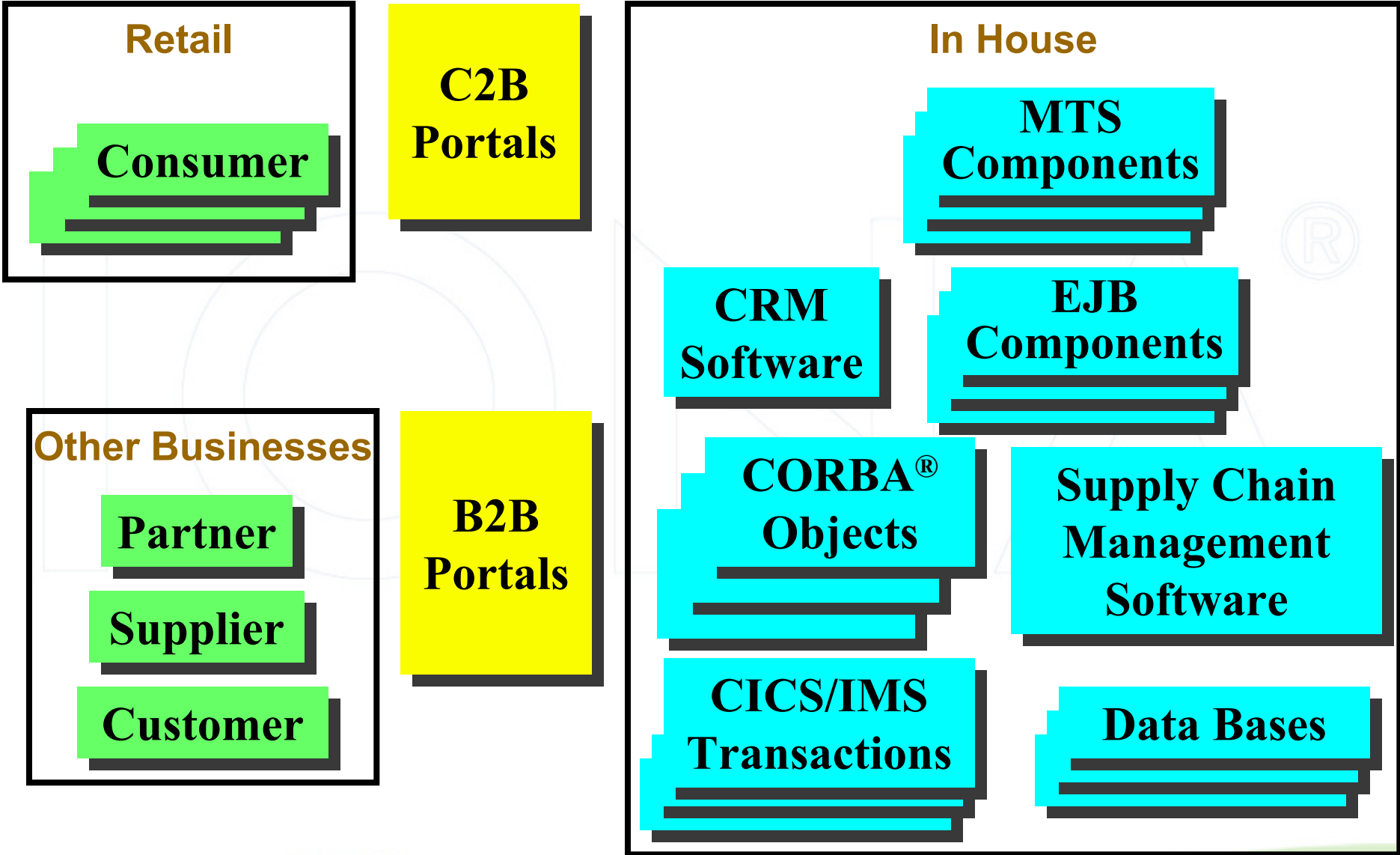## Using Industry Standards
for
Total Business Integration

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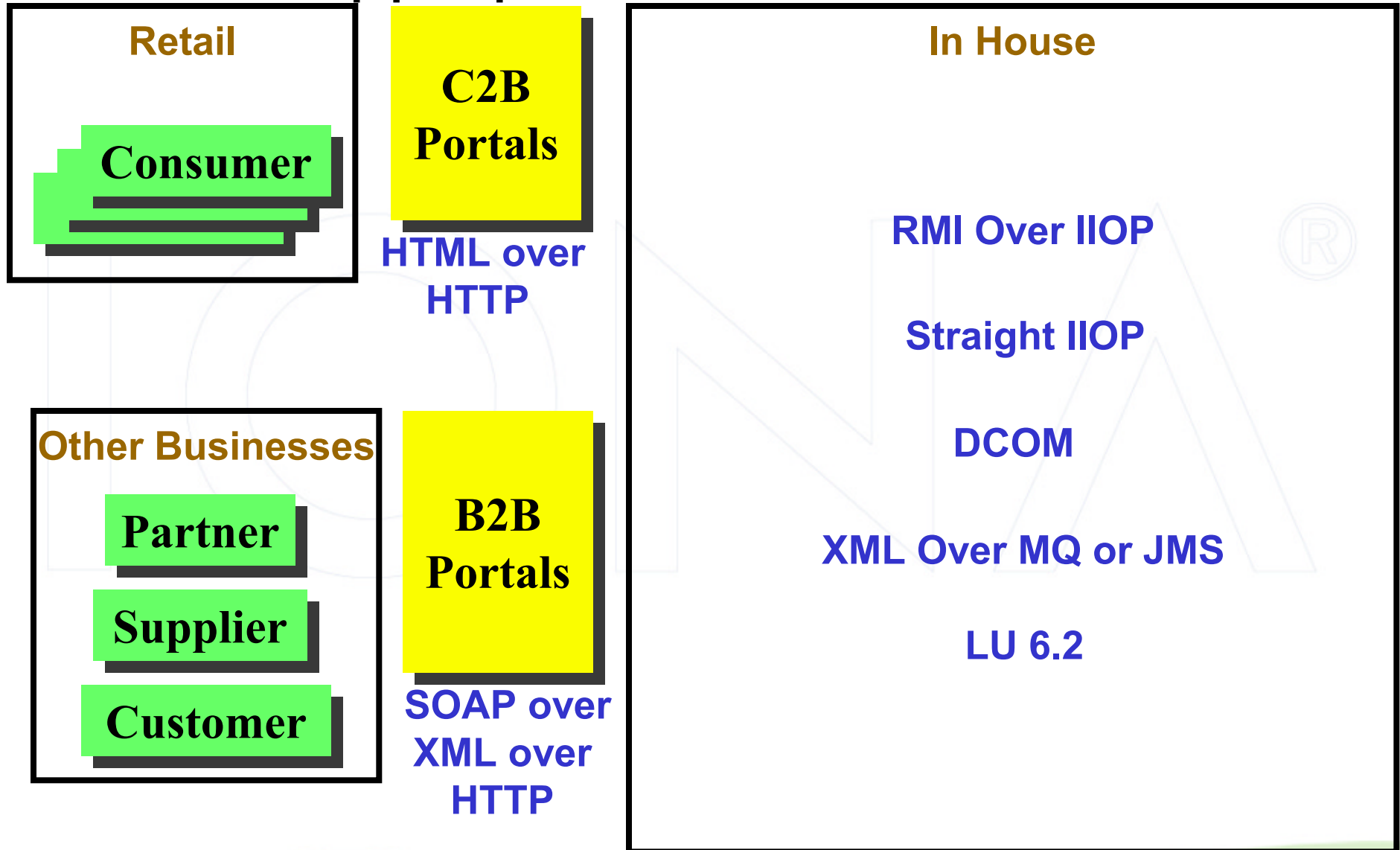
Strategic Enterprise Solutions Group

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Total Business Integration ™

The Enterprise and Its Boundaries

IONA®

Retail

Consumer

C2B Portals

Other Businesses

Partner

Supplier

Customer

B2B Portals

In House

MTS Components

CRM Software

EJB Components

CORBA® Objects

Supply Chain Management Software

CICS/IMS Transactions

Data Bases

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Integration Communication Appropriate to the Context

IONA®

Retail

Consumer

C2B Portals

HTML over HTTP

Other Businesses

Partner

Supplier

Customer

B2B Portals

SOAP over XML over HTTP

In House

RMI Over IIOP

Straight IIOP

DCOM

XML Over MQ or JMS

LU 6.2

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But Enterprise Boundaries Keep Shifting! IONA

Retail

Consumer

C2B Portals

In House

Future Migration

New Component Today

Other Businesses

Partner

Supplier

Customer

B2B Portals

Or

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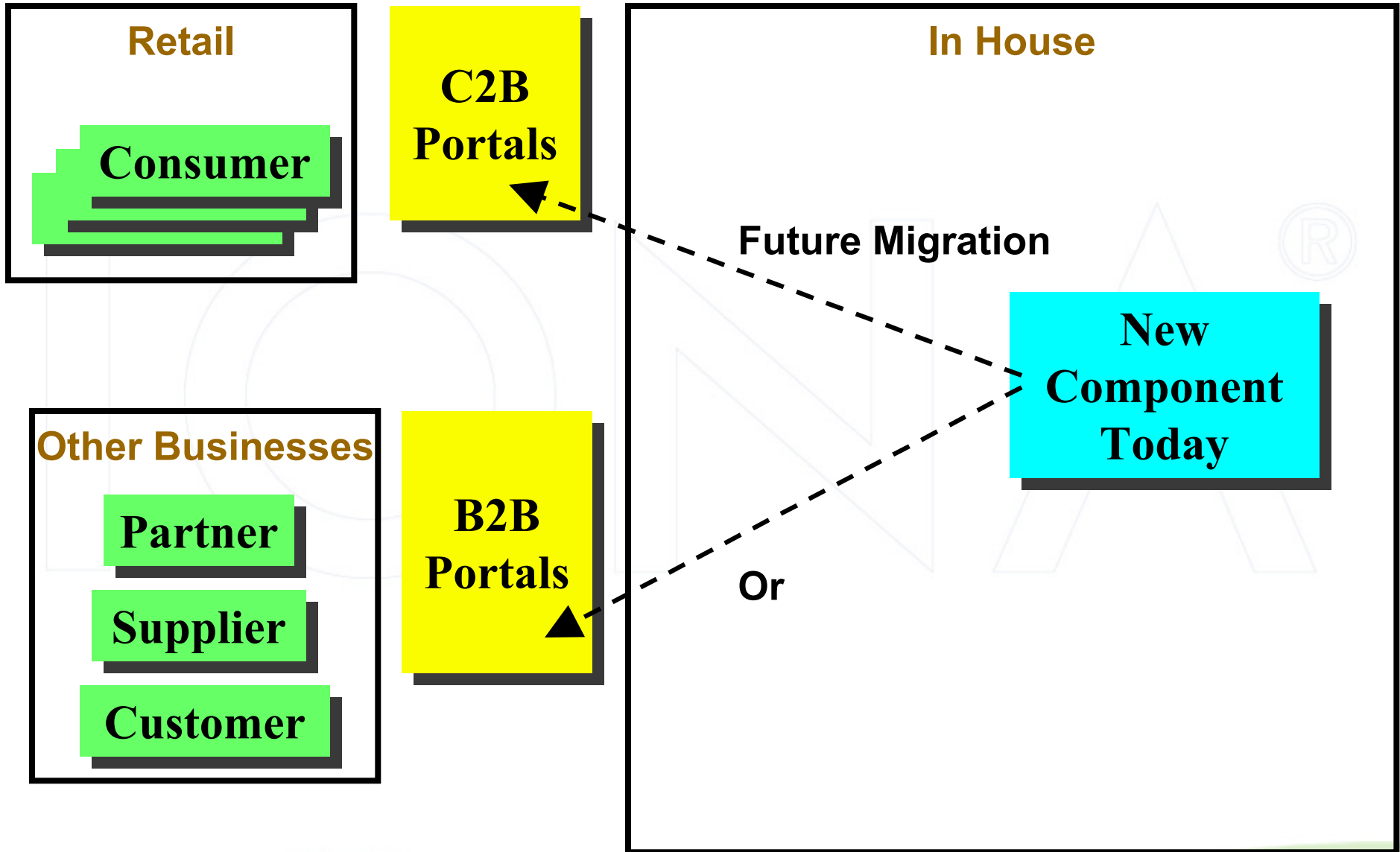
Boundaries Can Shift the Other Way Too

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Retail

Consumer

C2B Portals

In House

Other Businesses

Partner

Supplier

Customer

B2B Portals

Migration due to merger or acquisition

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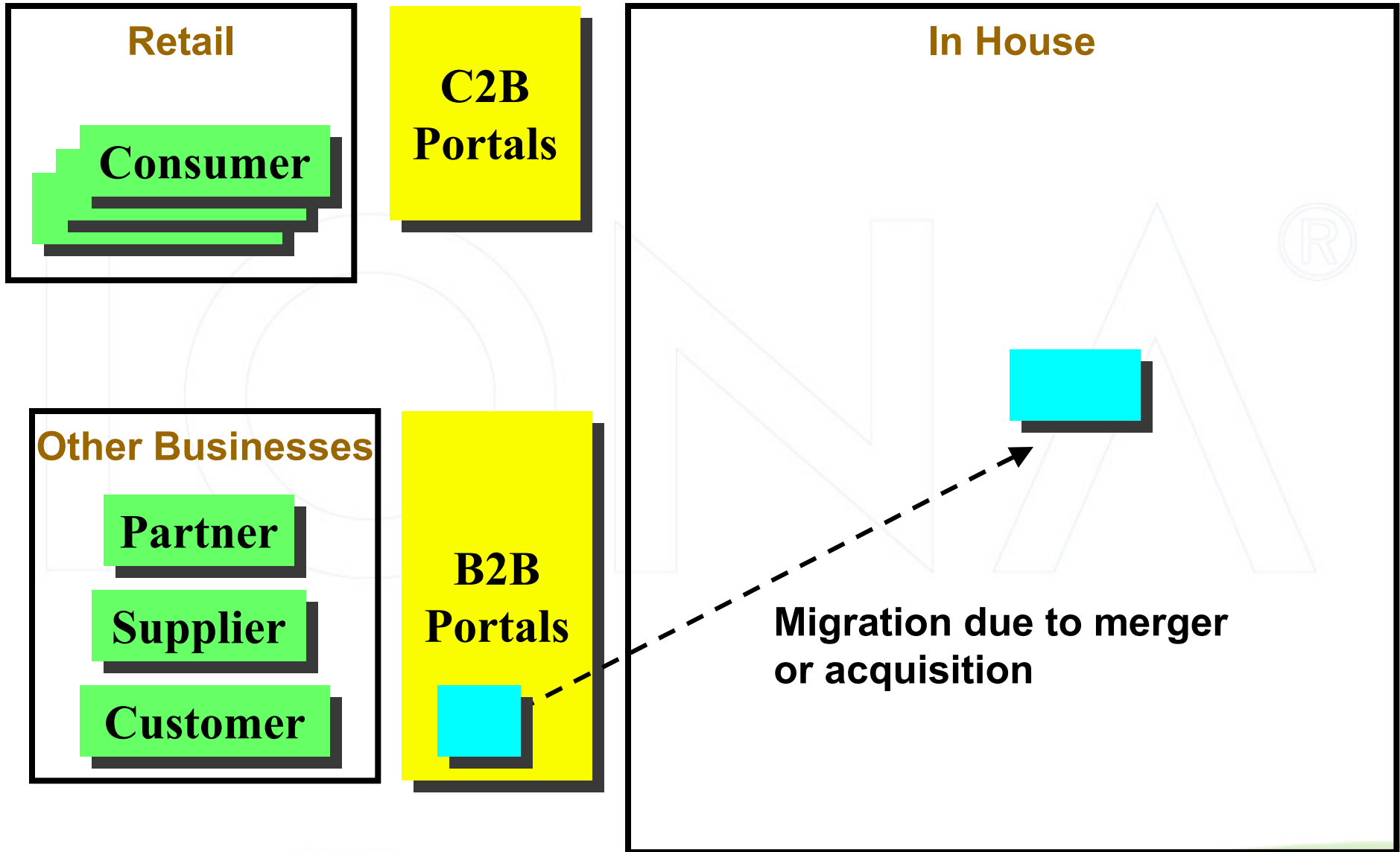
The Challenge

- Requirement: Preserve investment
  - As enterprise borders shift requiring platform shift
  - As platforms themselves change
    - EJB 1.1 → EJB 2.0
    - XML → XML Schema
    - MTS → COM+
    - CORBA® 2.X → CORBA 3.0

- Solution: Isolate information and processing logic from technology specifics
  - Build platform-independent models
    - UML™ is independent of CORBA, COM, EJB, XML, etc., and thus is well-suited as a language for describing these models
  - Map these models to specific platforms
  - Maintain the separation at the implementation level

UML is a trademark of the Object Management Group (OMG)

Deriving Platform-Specific Artifacts from Platform-Independent Models

Platform-Independent Application Model (in UML)

Map to   Map to   Map to   Map to

CORBA   **EJB/J2EE**   **XML**   **MTS/COM+**

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MDA and IONA

- IONA is in the forefront of the move to MDA
  - Very active in OMG MDA-based standards
    - UML, MOF, XMI, and CWM, etc.
  - IONA a co-author of UML Profile for EJB as well
  - IONA Global Services uses MDA principles to create flexible software solutions for customers
- Why is MDA important to IONA?
  - CORBA is strategic for IONA
  - But so are J2EE and XML
    - IONA has a J2EE application server and significant XML initiatives as well
  - MDA important for building solutions that can be flexibly applied in this kind of evolving environment
  - IONA's Total Business Integration (TBI) requires this kind of flexibility

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