

The IBM WebSphere Software Platform

e-business Infrastructure'



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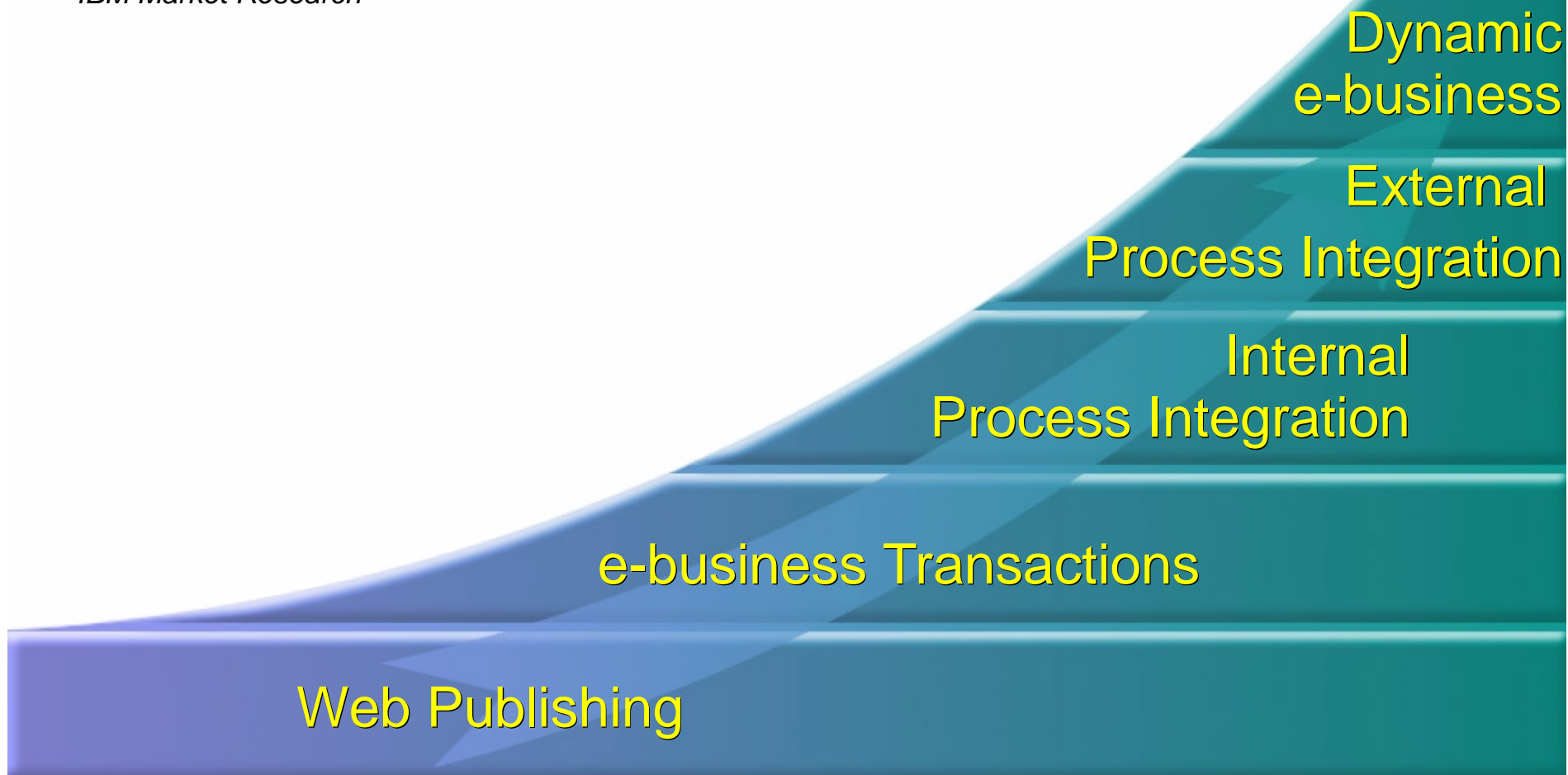
Agenda

- The *(ever growing)* IBM WebSphere Software Platform
 - ▶ Reach & End User Experience
 - ▶ Integration & Process Management
 - ▶ Infrastructure & Tools
- Q&A

States of e-business adoption

a long term trend toward the creation of more automated and integrated business processes which are transforming our world.

*Source : The McKenna Group,
IBM Market Research*



Changing Technology Requirements

*i*ntelligent transactions

*i*ntegration

*i*nfrastructure

Transactional Integration of in-house applications and dynamically outsourced application functions

Web applications transparently coordinate transactions between internal and external applications.

Web applications transparently coordinate transactions between different in-house applications.

Web applications with separation of business logic and presentation, some transactional integrity and integration required

Static Web Serving and e-mail, evolving into limited use of dynamic web content

WebSphere: Transforming e-business

Customer and Partner Applications

B2C, B2E, B2B

WS Commerce Suite
Lotus Collaboration

Application Accelerators

WS Business Integrator
WS Process Manager

Development

VisualAge for Java
VisualAge Generator
VisualAge Enterprise Suites
WS Homepage Builder
WS Studio
WS Host Publisher
WS Business Components

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Tivoli Policy Director

Integration

WS MQ Integrator
WS Adapters
WS Host Integration
- Personal Communications
- Communications Server
- Screen Customiser
- WS Host on Demand

Foundation Extensions

WebSphere Application Server

Foundation

WebSphere MQ

WebSphere: Capabilities

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B2C, B2E, B2B

Application Accelerators

Development

Providing the
ultimate Web
development
environment

Presentation

Managing the
e-business
user
experience

Deployment

Maximizing
e-business
performance

Integration

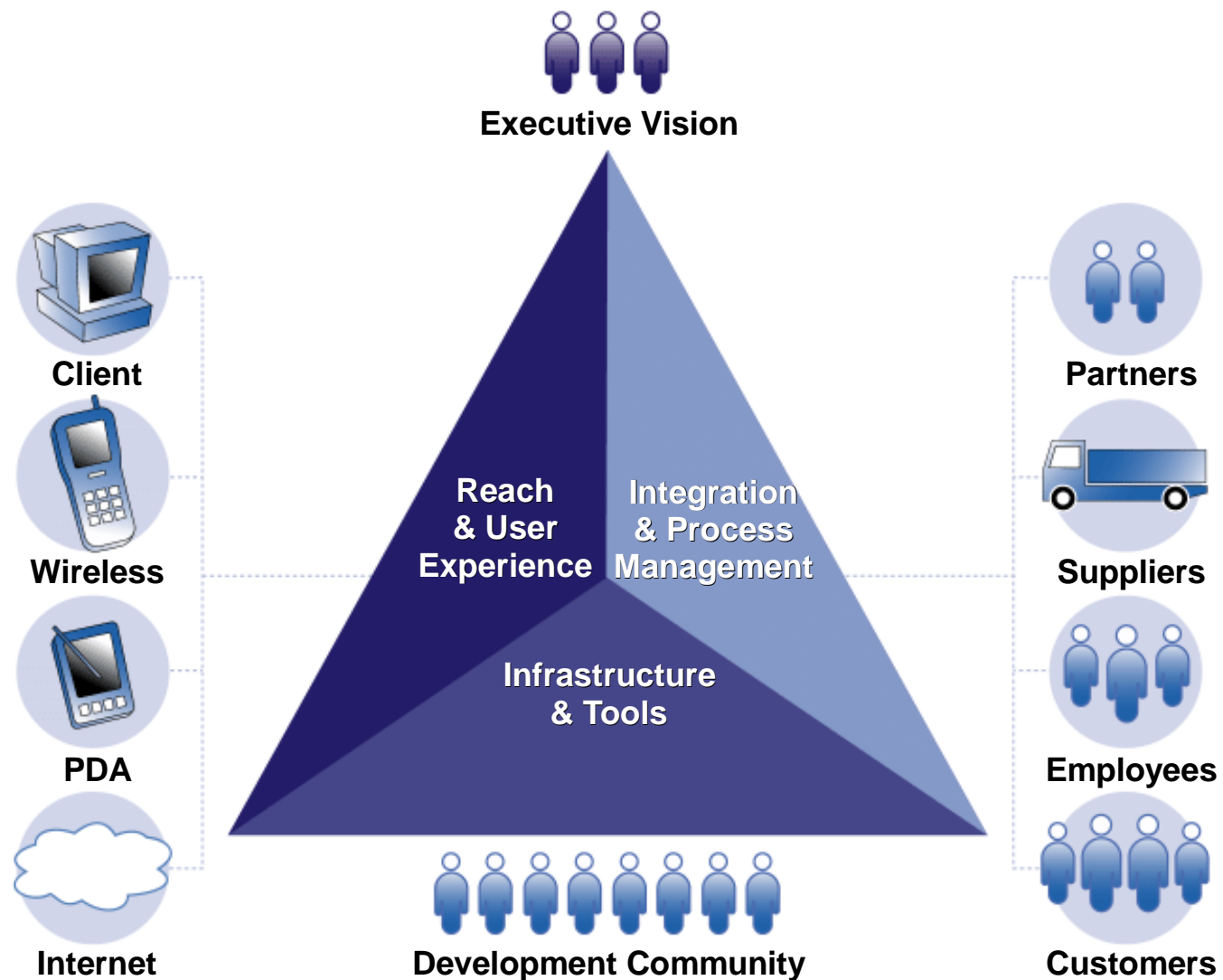
Integrating
your
e-business
inside and out

Foundation Extensions

Foundation

IBM

Looking at it another way.....



WebSphere software

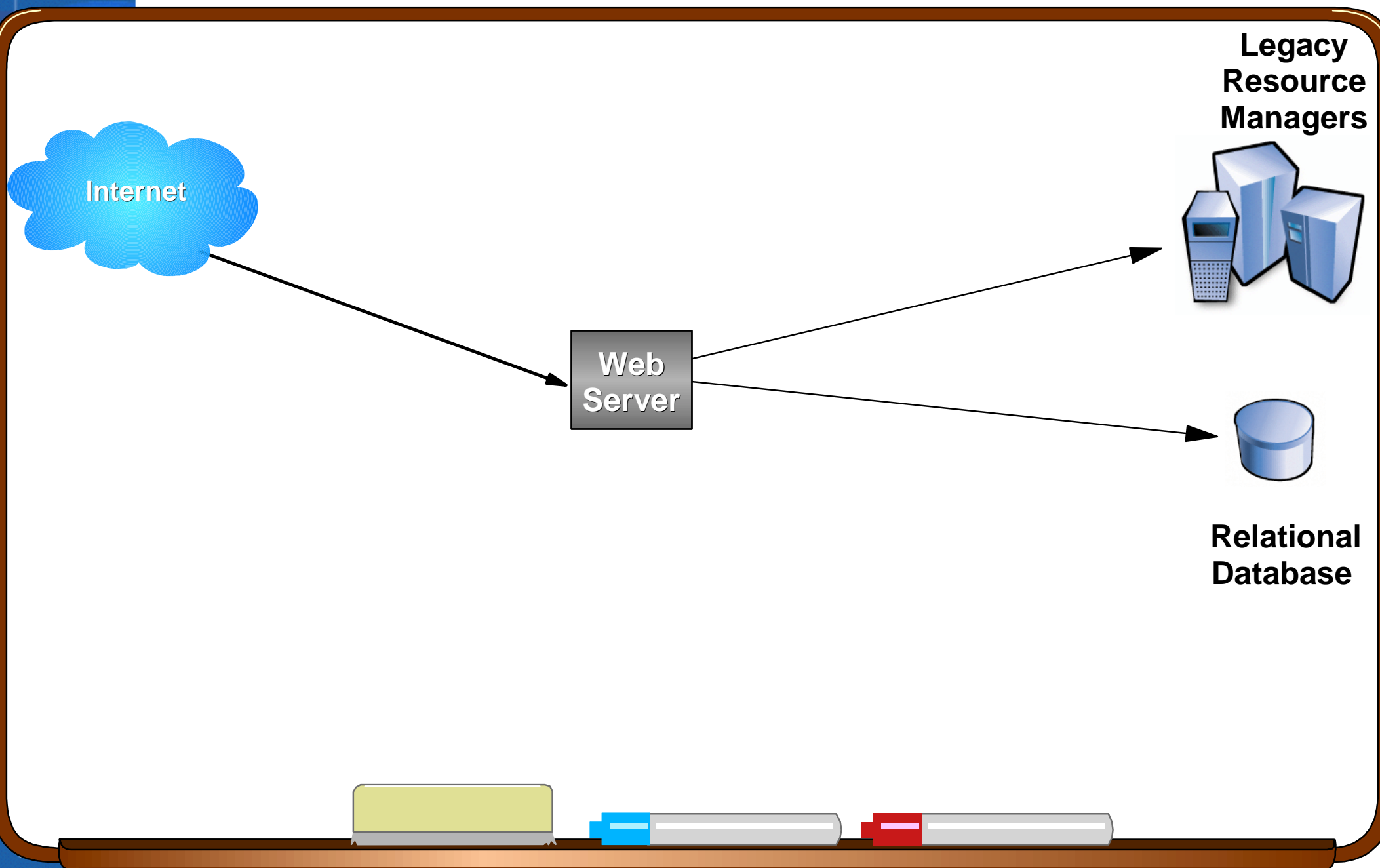
User Experience.....Critical Challenges

- Users won't return if they have a poor experience or if another site is better
- Need to achieve "stickiness" while increasing effectiveness
- The standards for a first-class web site are constantly rising
- Don't have the resources to handle the onslaught of content and new technology

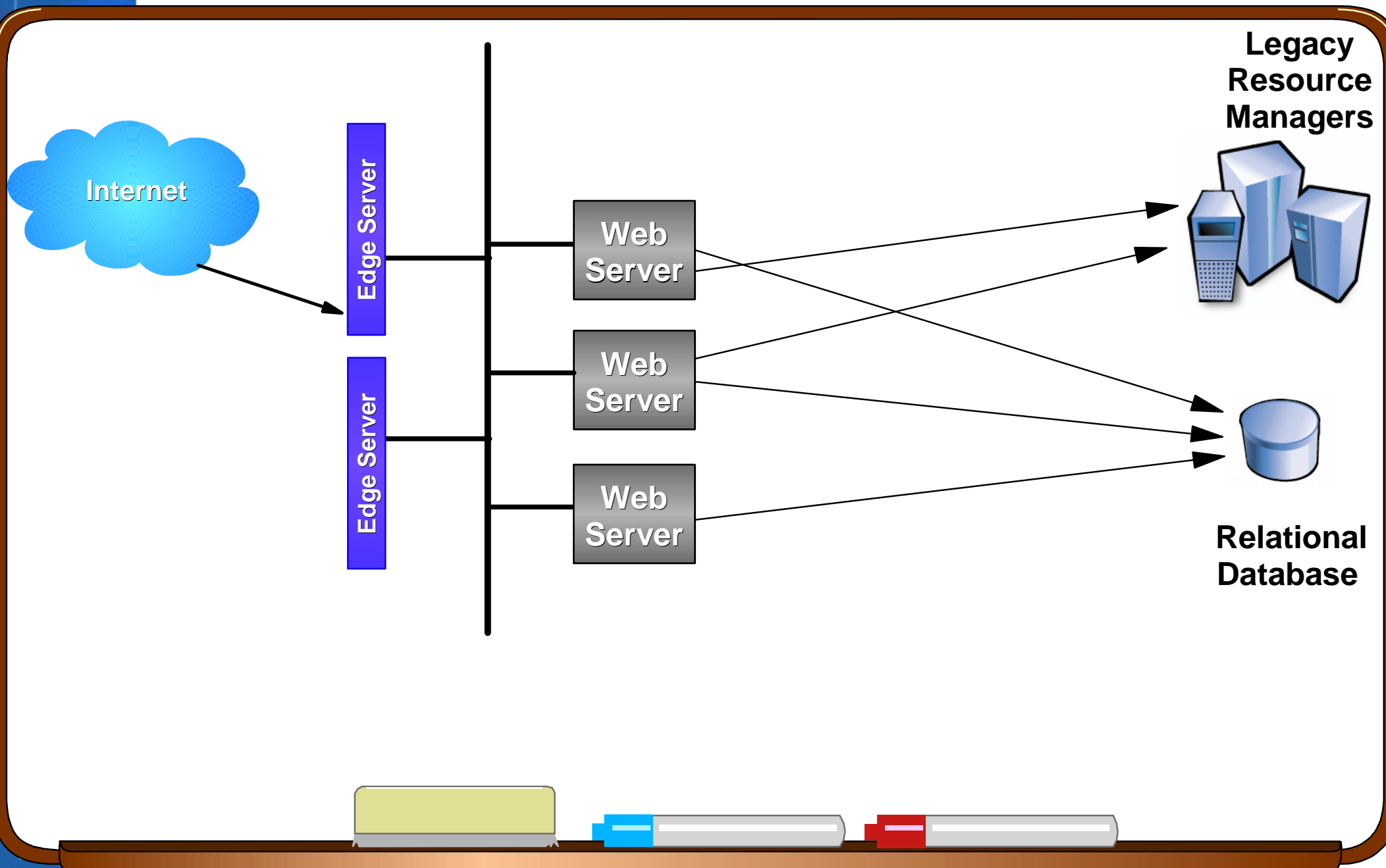
How do we build
this.....?



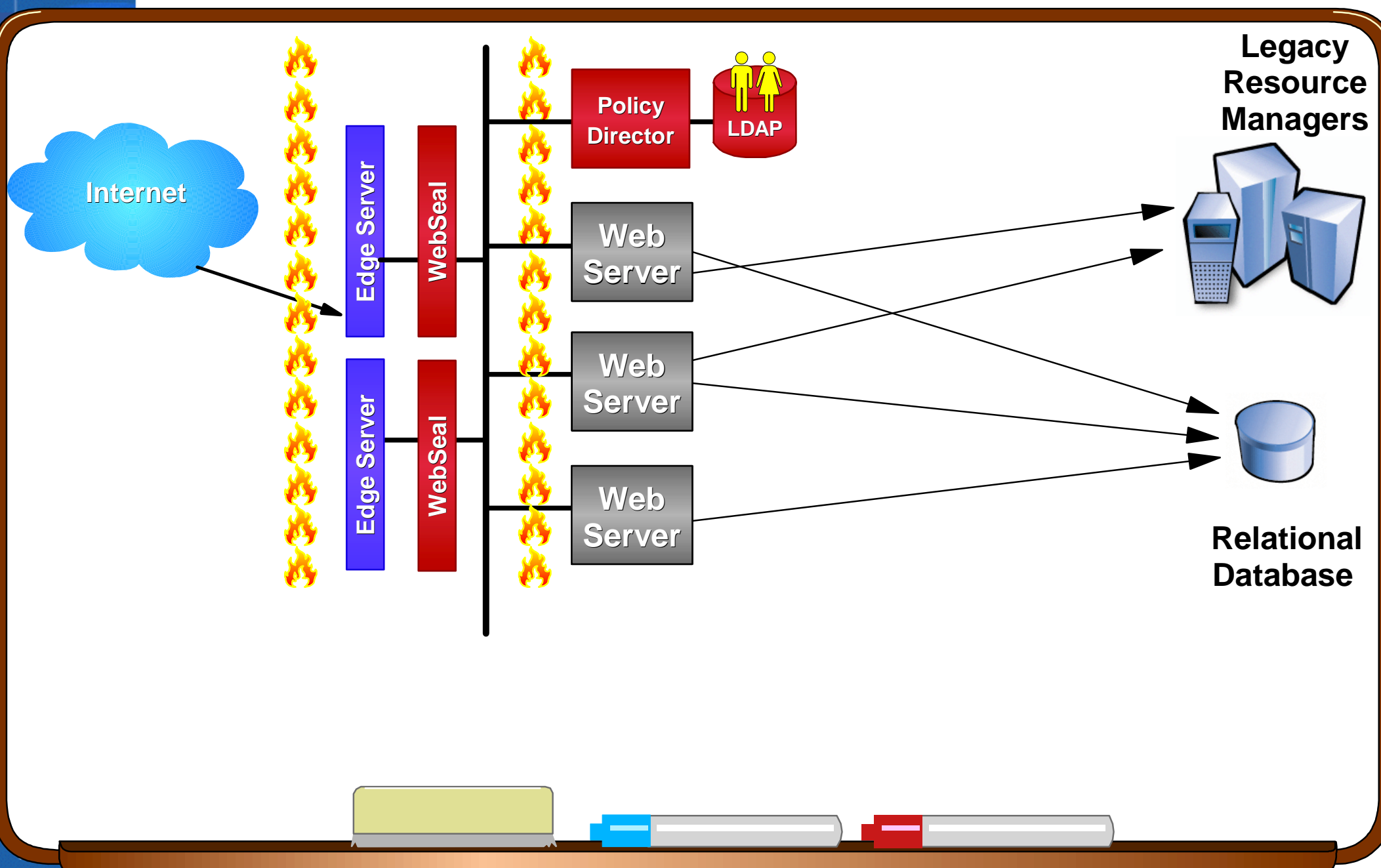
Basic web application



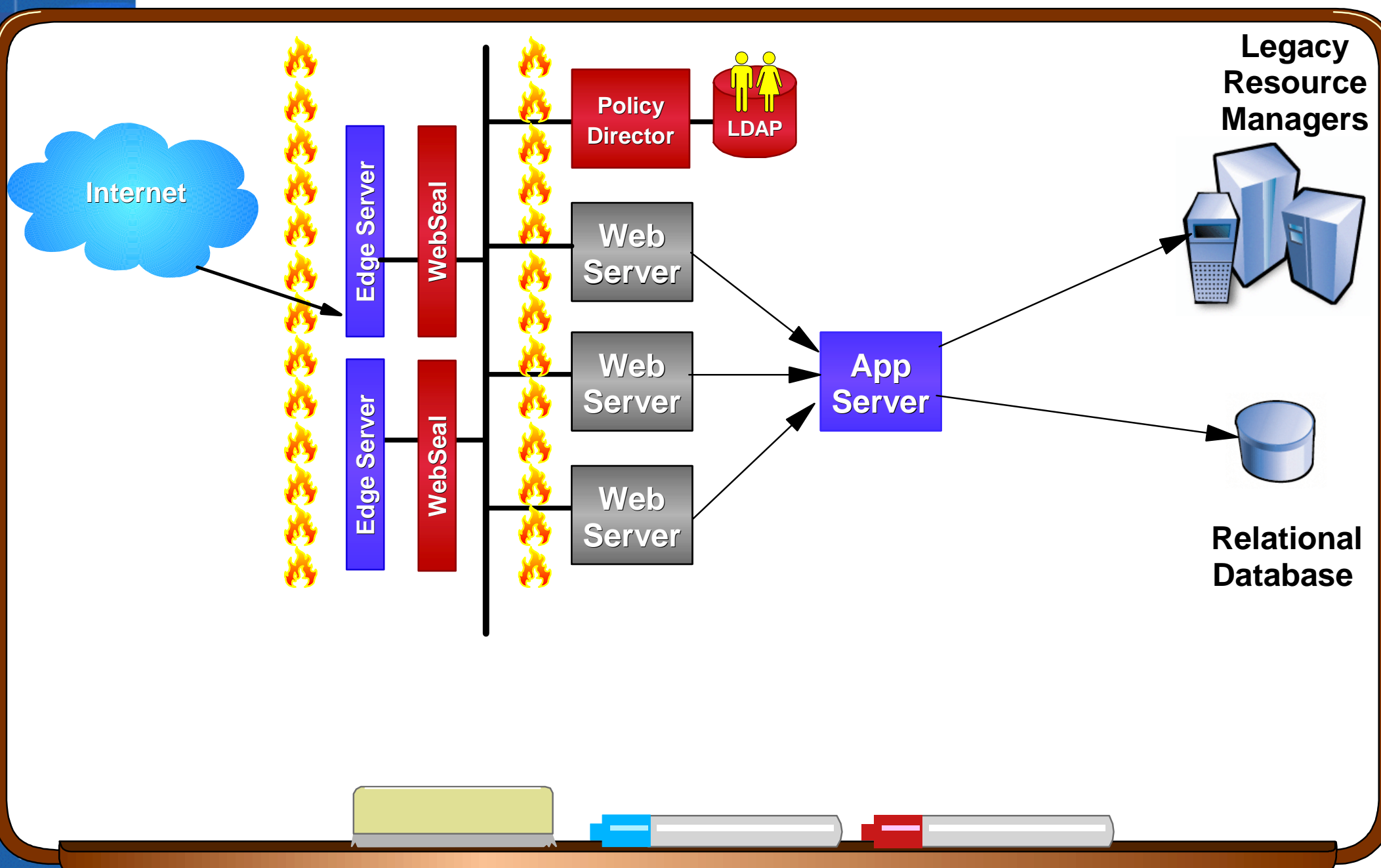
Making the web site scale (massively)



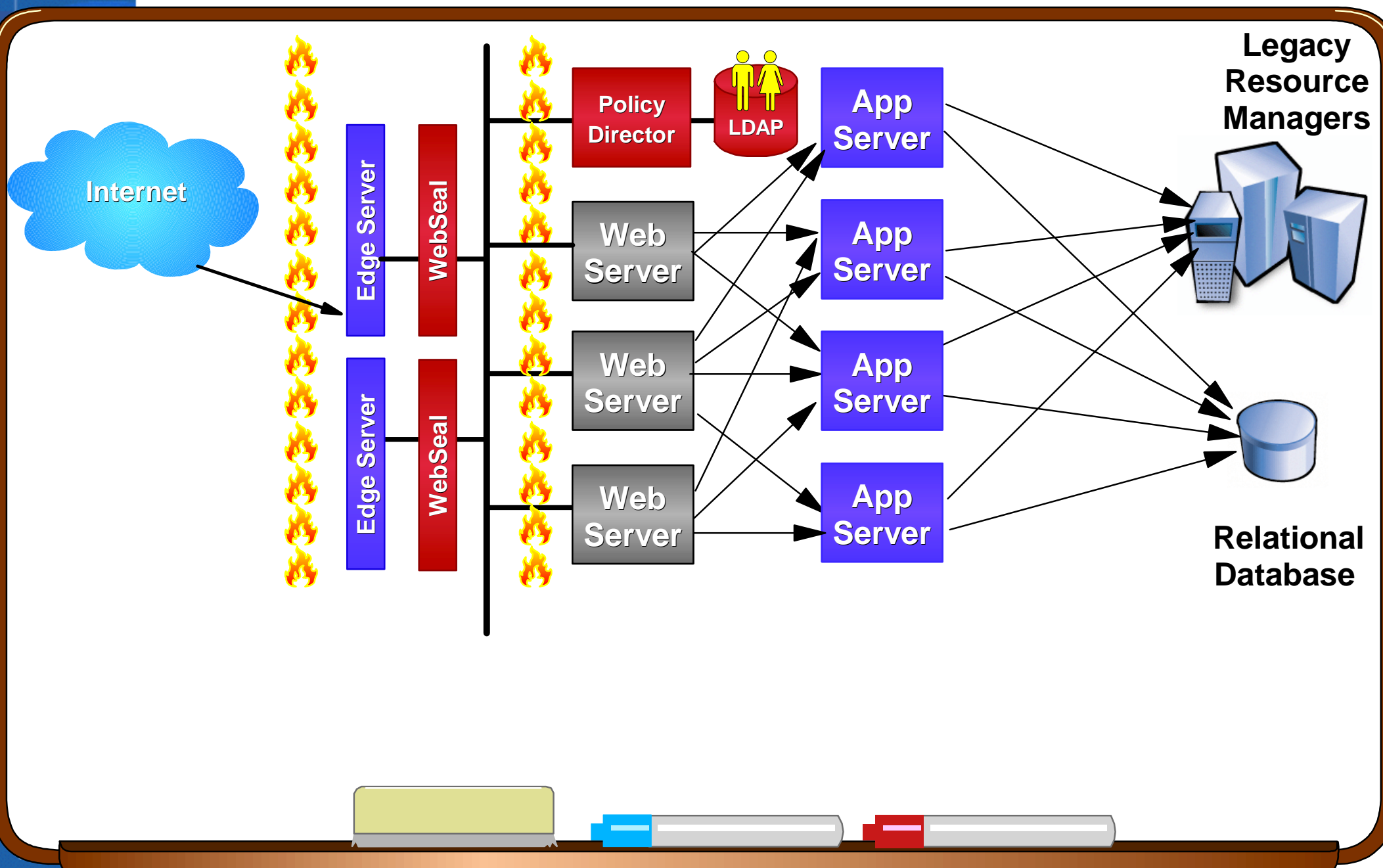
Making the web site secure



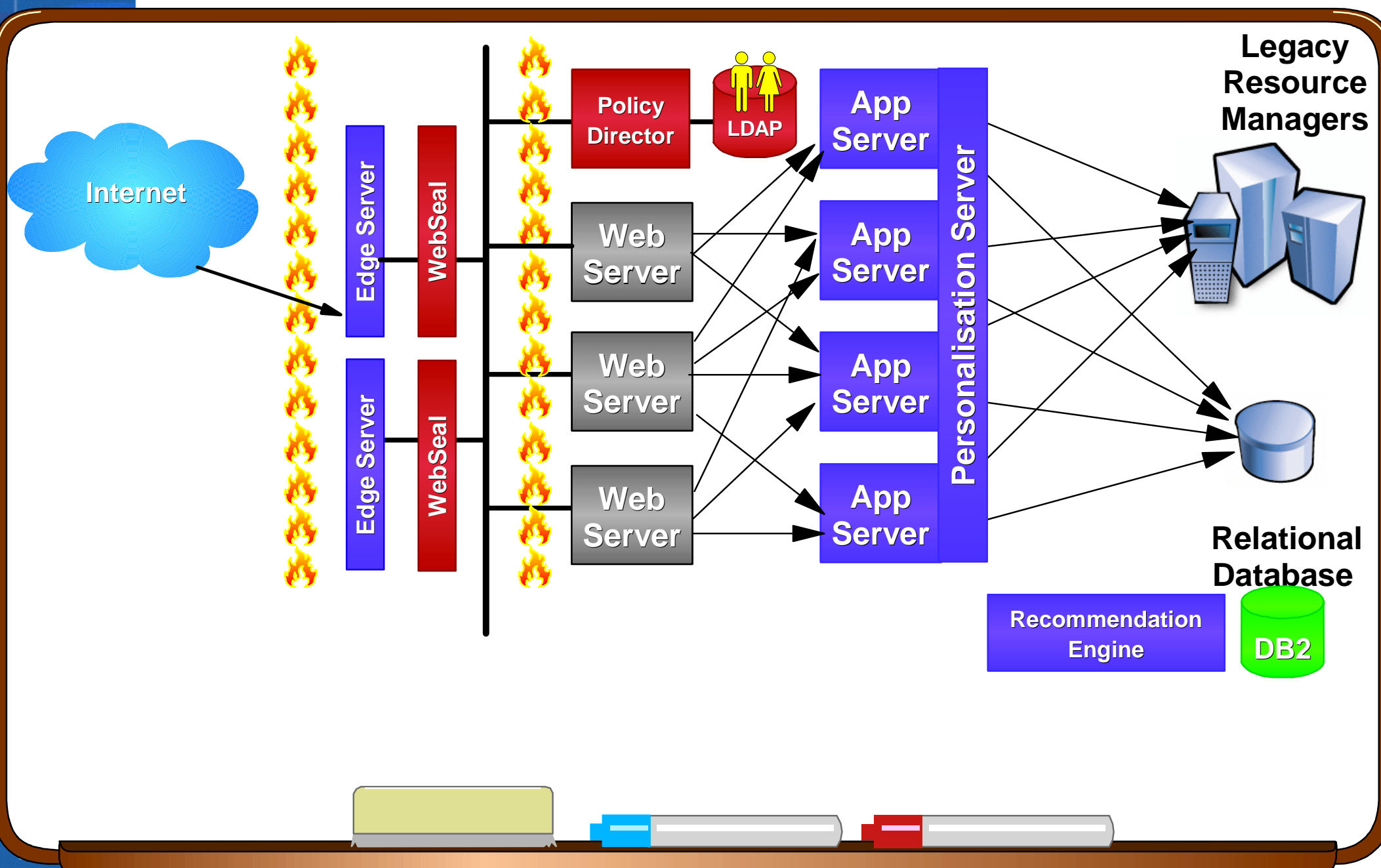
Adding richer business behaviour



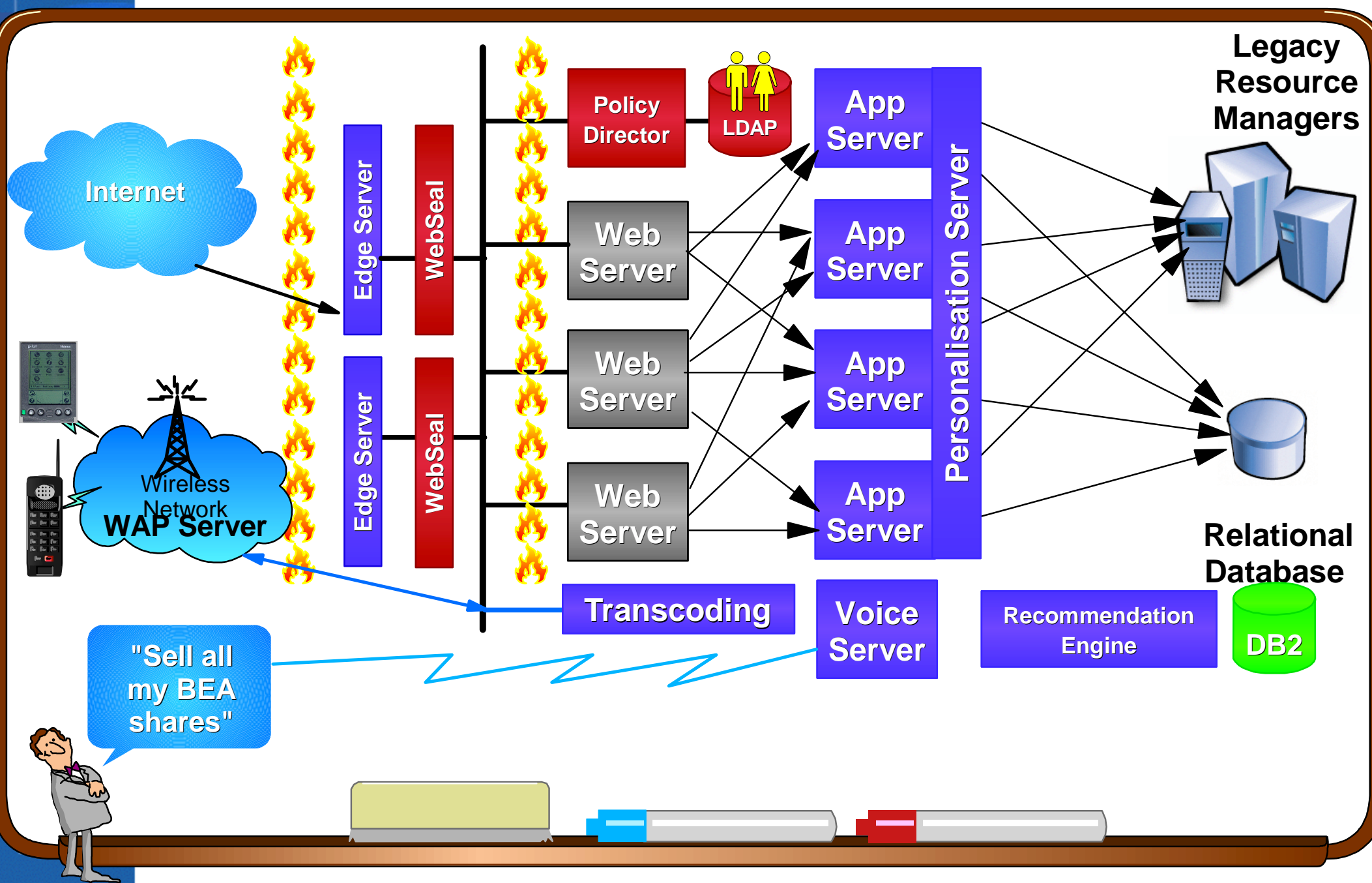
Scaling the new business logic



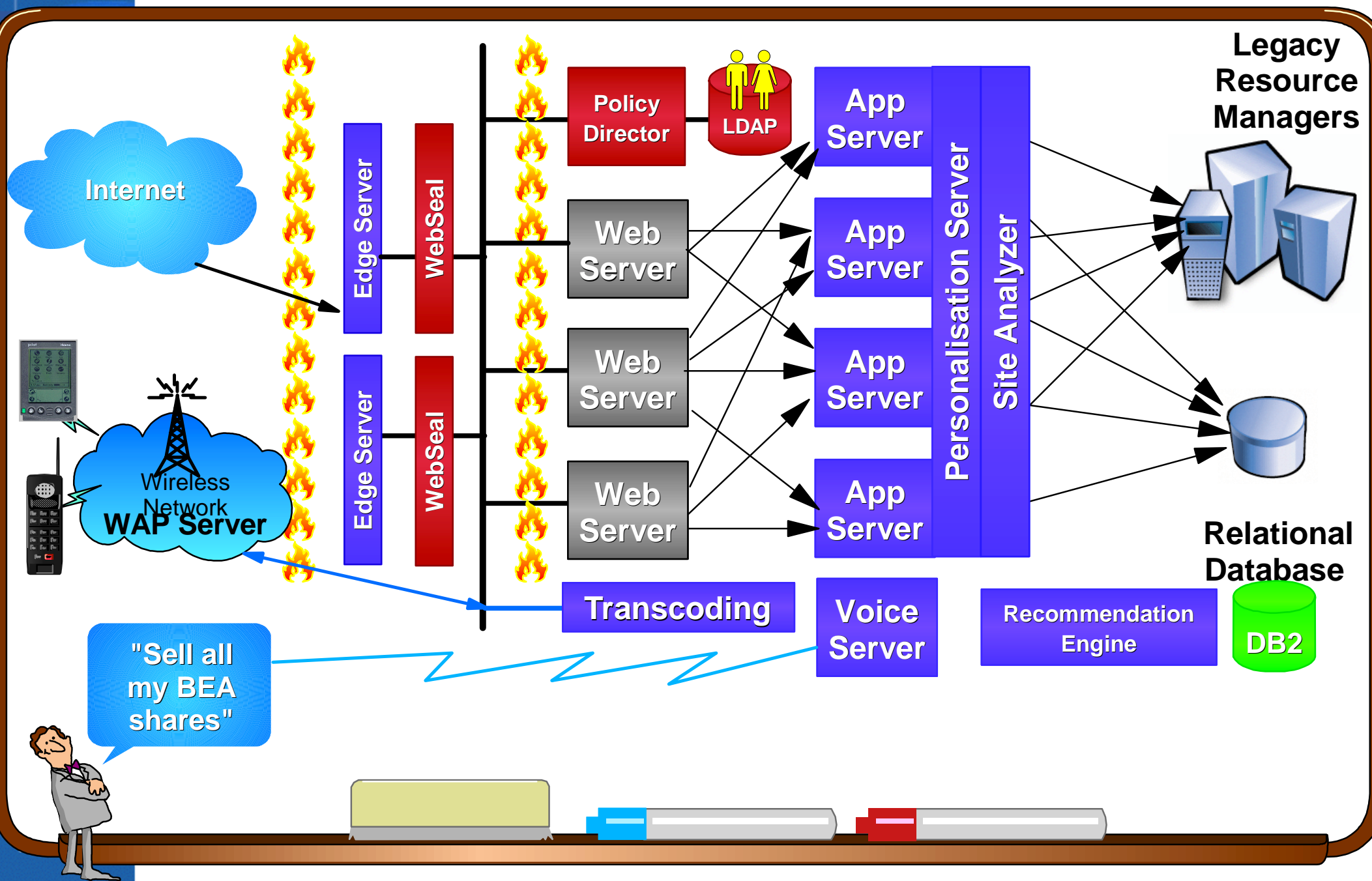
Personalising the Users Experience



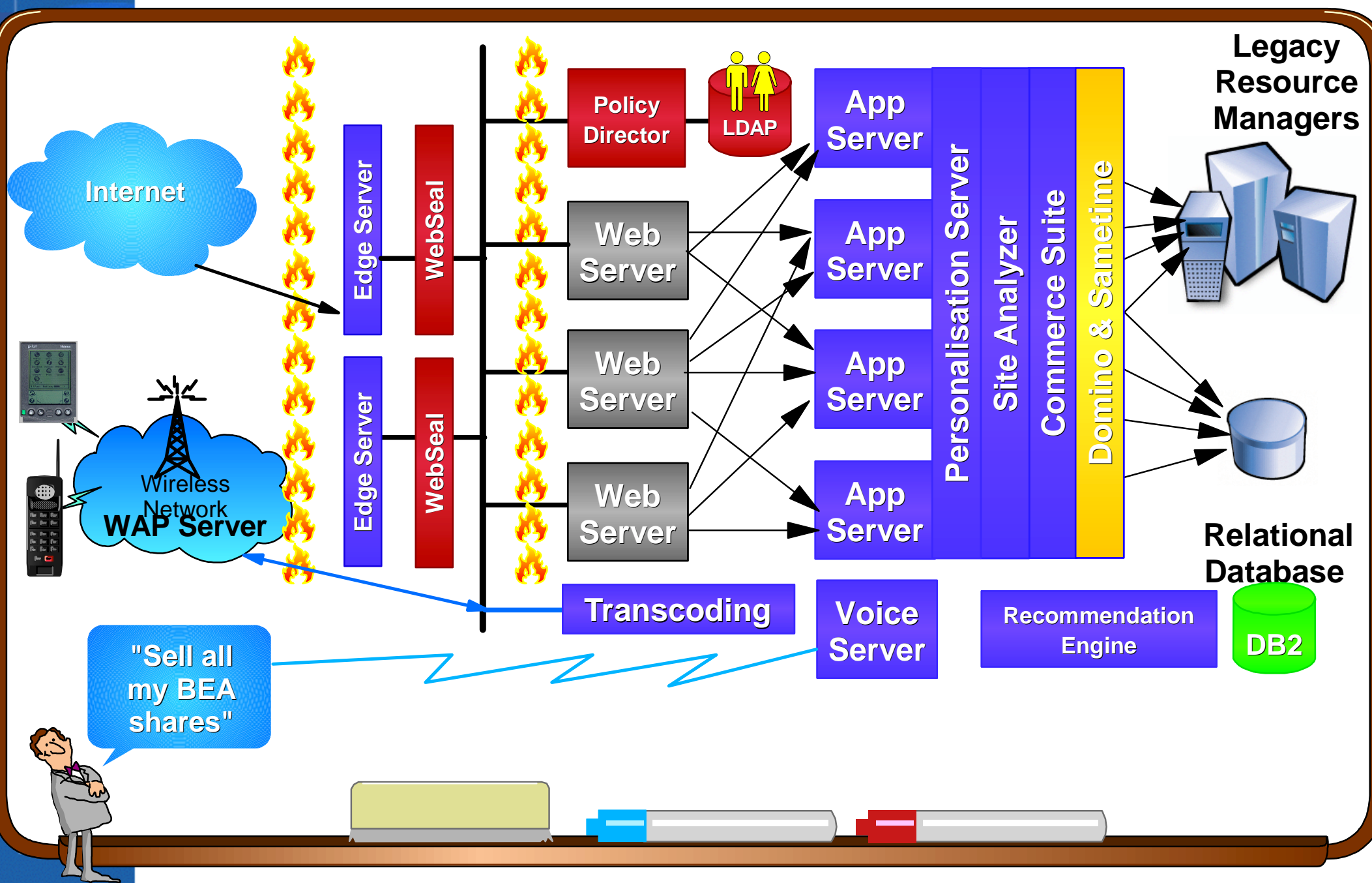
Enabling multi channel access



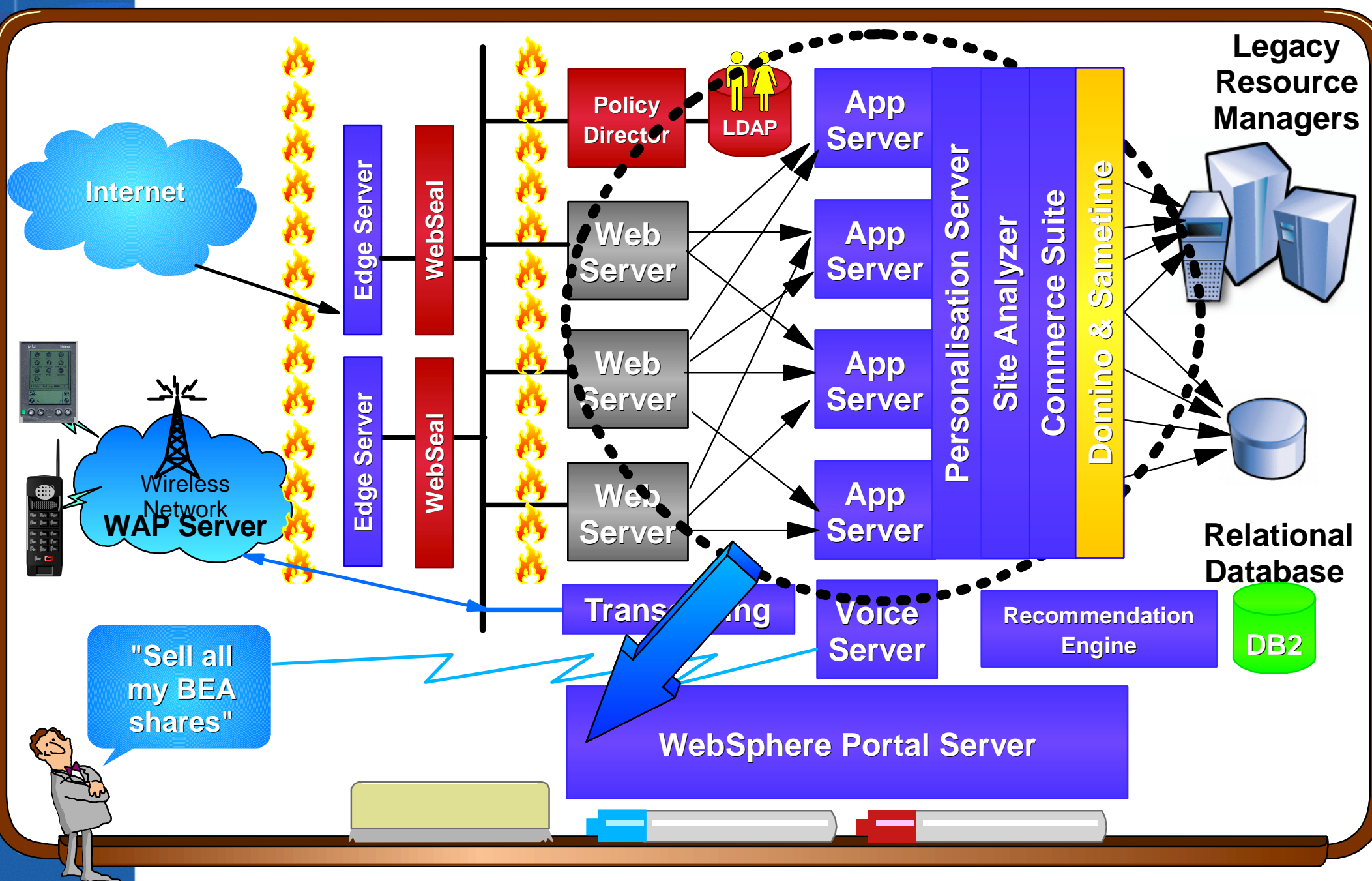
Measuring, analysing and improving



Add commerce....and collaboration

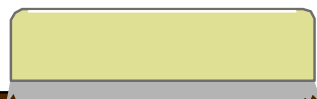


Now bring all this together



So that takes care of the user
experience....

.....what do I do about my
integration problem.....?



What exactly *IS* my problem ?.....lots of systems.....



W2000



Solaris



AIX



OS/400



Linux



z/OS



....lots of applications.....



**Suppliers
and Orders**

W2000



**General Ledger
and Financials**

Solaris



HR

AIX



Manufacturing

OS/400



**Warehouse
and Lorries**

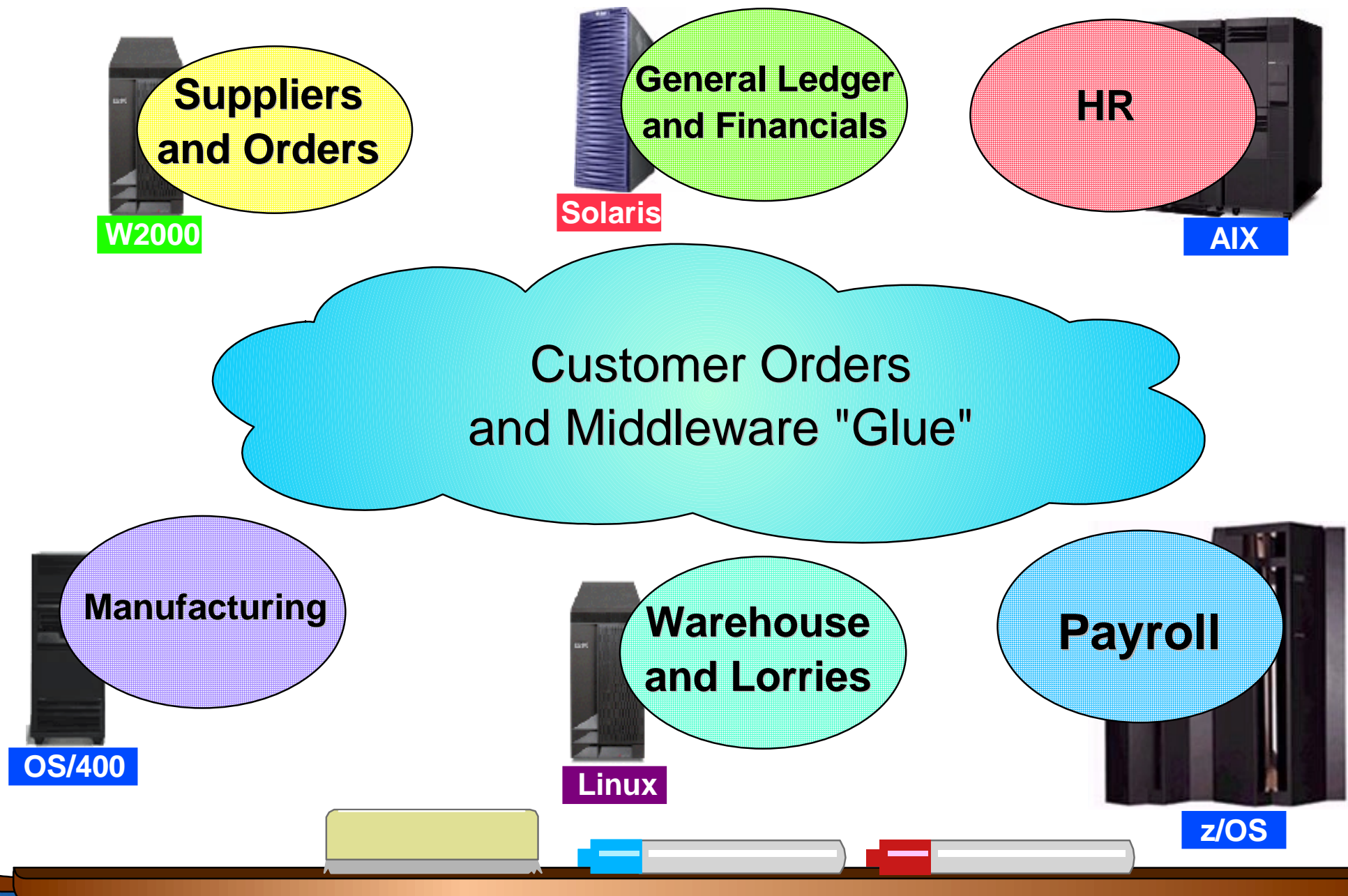
Linux



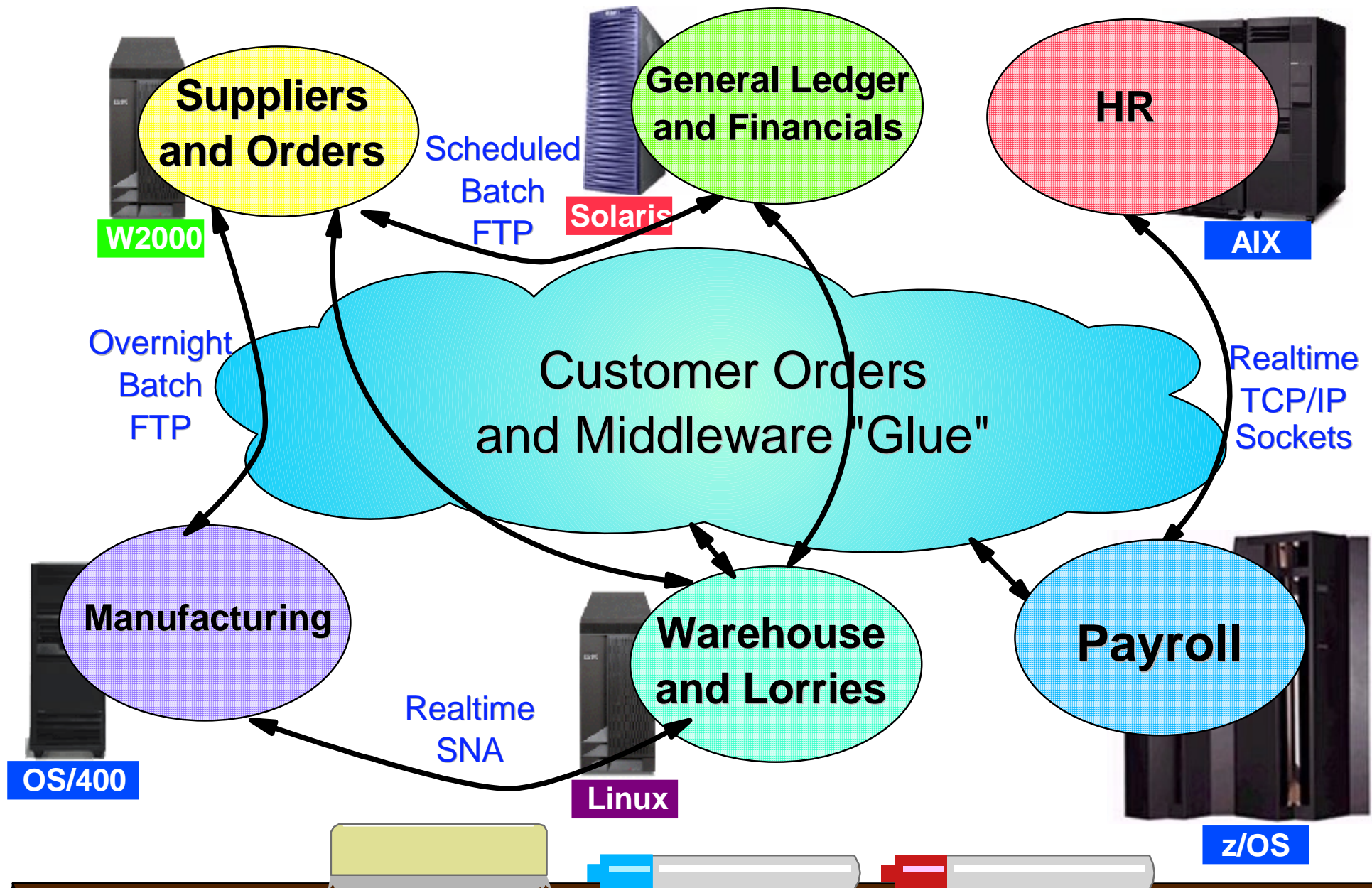
Payroll

z/OS

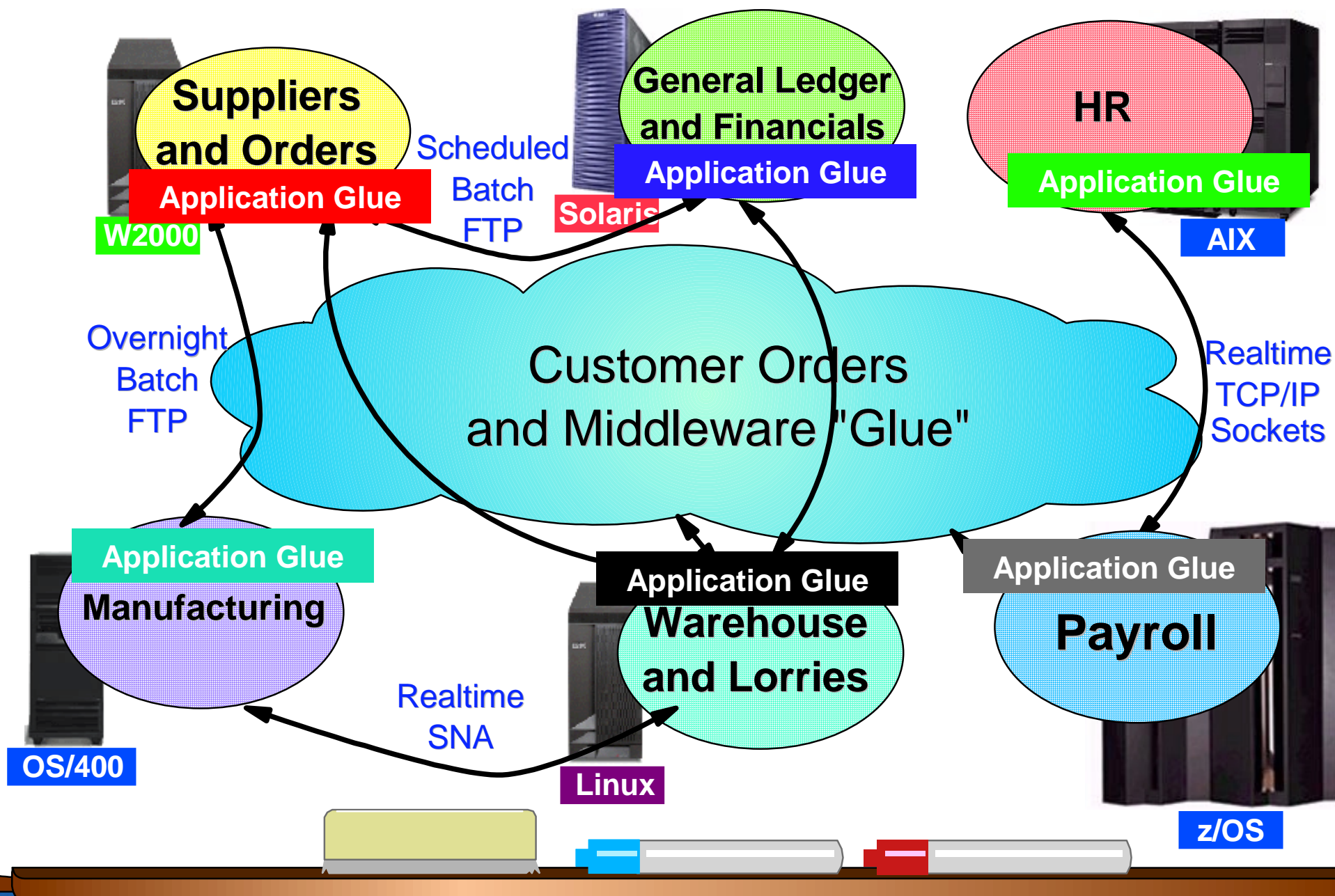
...some in-house "glue"....



...plenty of "wet string" tying it together



...there's some logic mixed in too....



Why is this a Problem ?

■ Bespoke Application Code

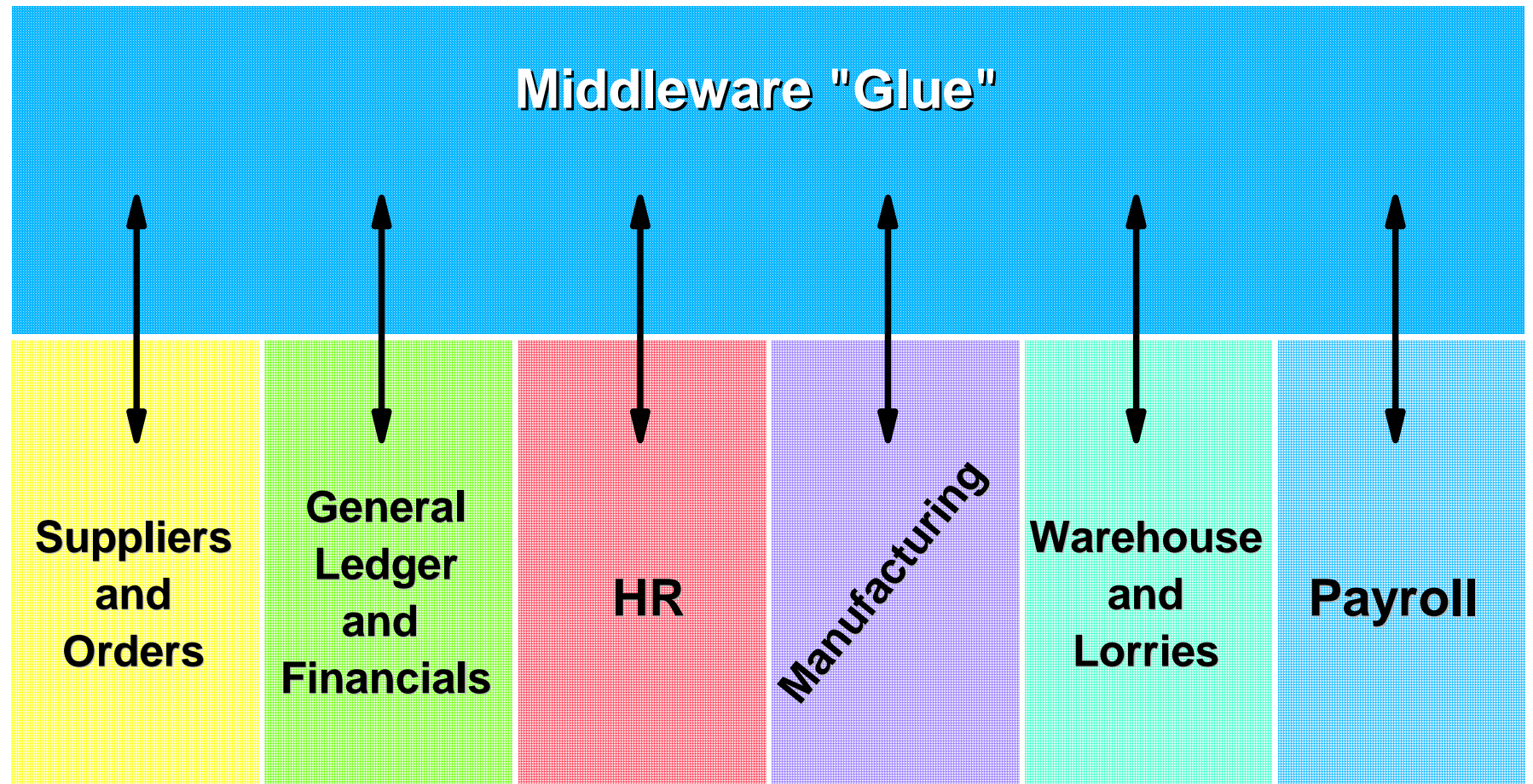
- ▶ Costs of maintenance
 - Can be up to 40% of AD budget (Gartner)
- ▶ Costs of code distribution
- ▶ Error prone

■ Unreliable Connectivity Tools

- ▶ Costs of reconciliation
- ▶ Costs of lost or delayed business
- ▶ Undocumented, Unsupported

■ Difficult to integrate / acquire other organisations

What I'd really like is.....



Or better still.....

Application marshalling, formatting and rules-based broking services

Reliable and universal data delivery system

A set of off-the-shelf or bespoke connectors (adapters)

**Suppliers
and
Orders**

**General
Ledger
and
Financials**

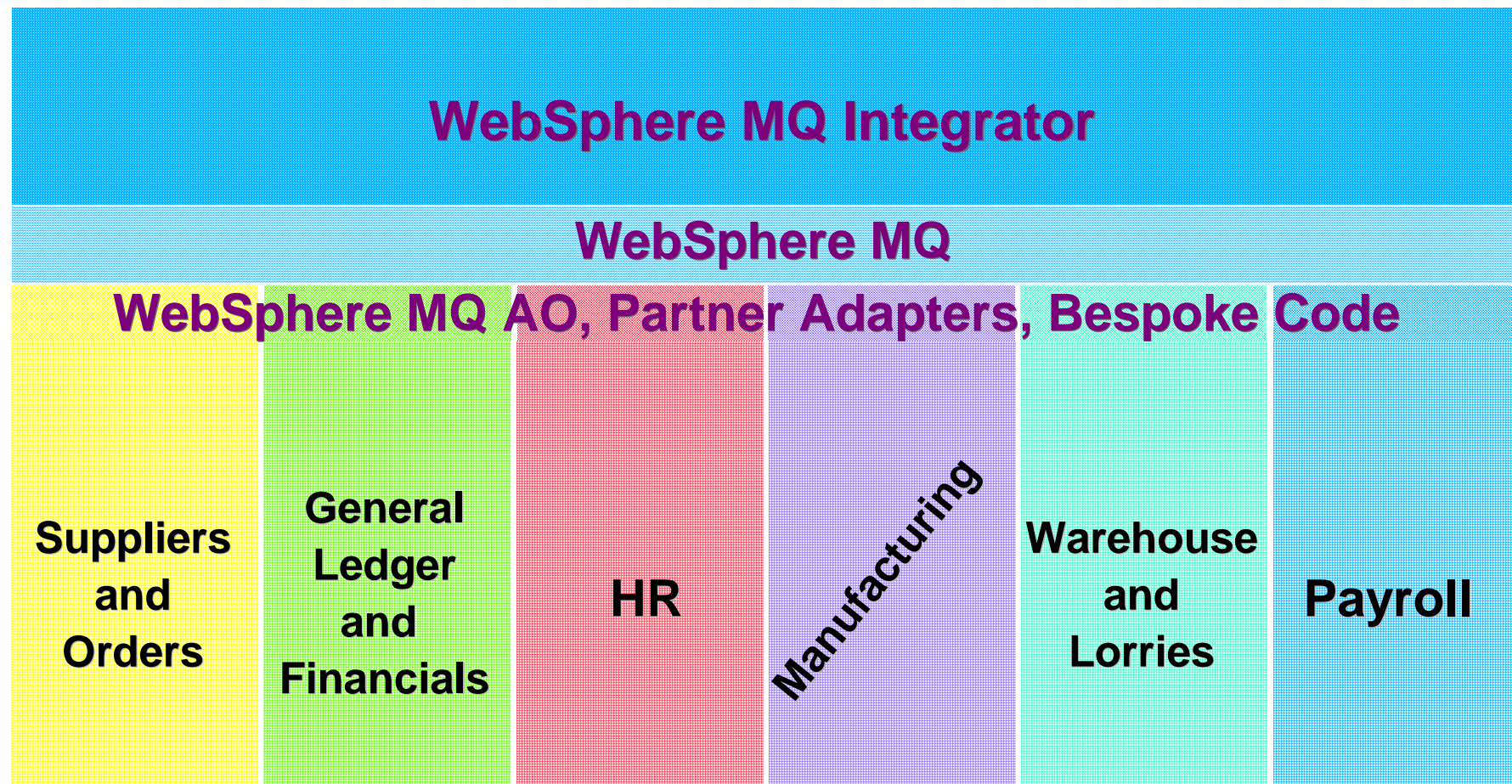
HR

Manufacturing

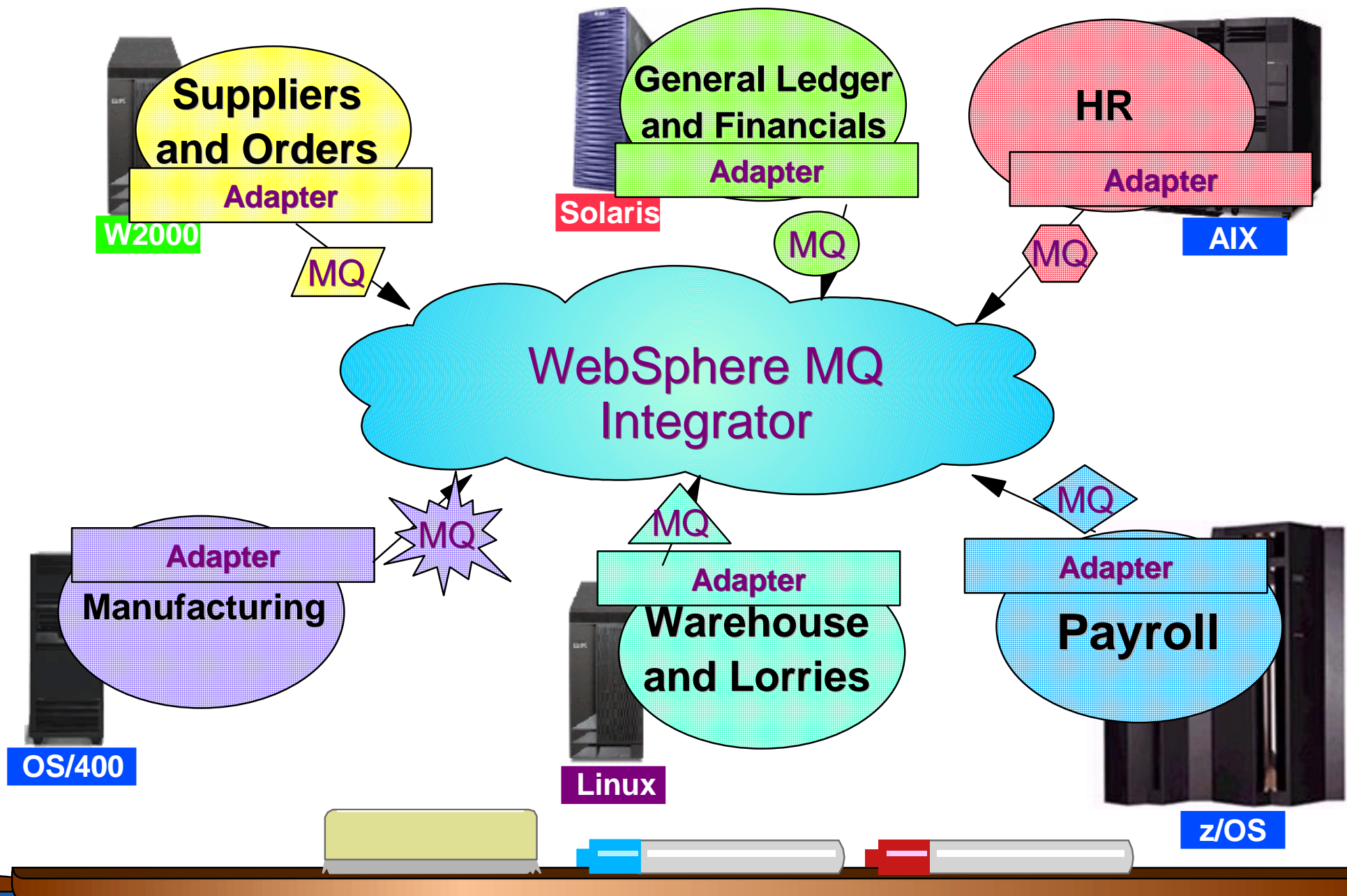
**Warehouse
and
Lorries**

Payroll

IBM can do all this.....



So that means.....



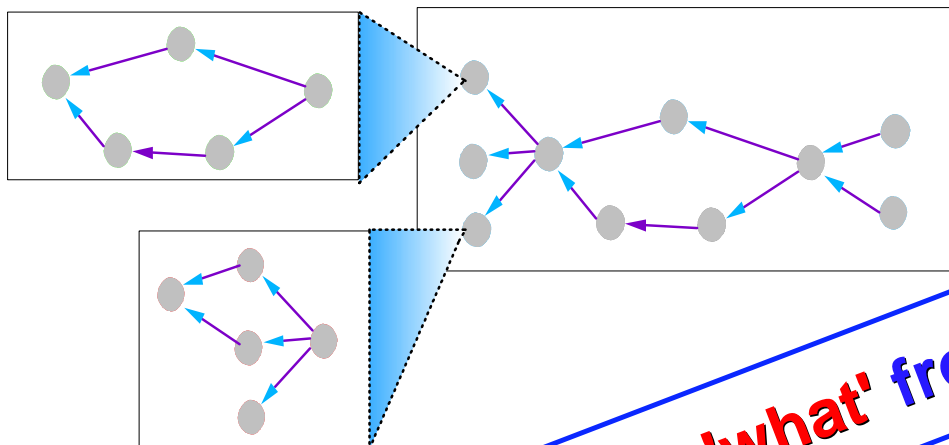
OK, that sorts out my integration
problem.....

....what about those business
processes....?



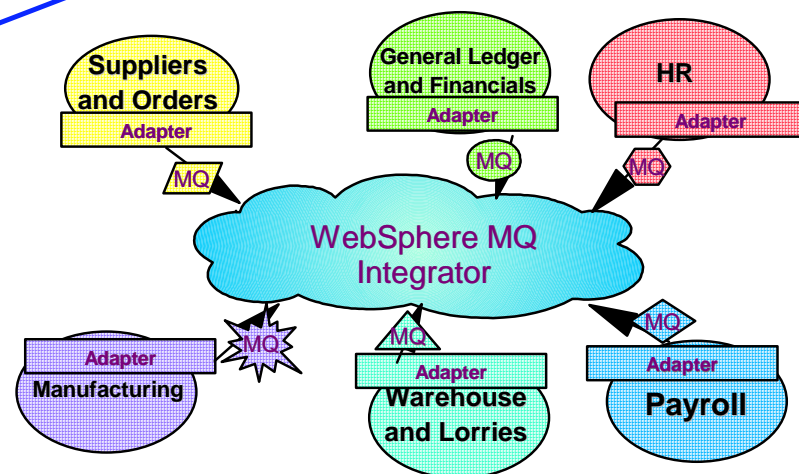
Processes are the "what" infrastructure is the "how"

Business Processes *"What"*

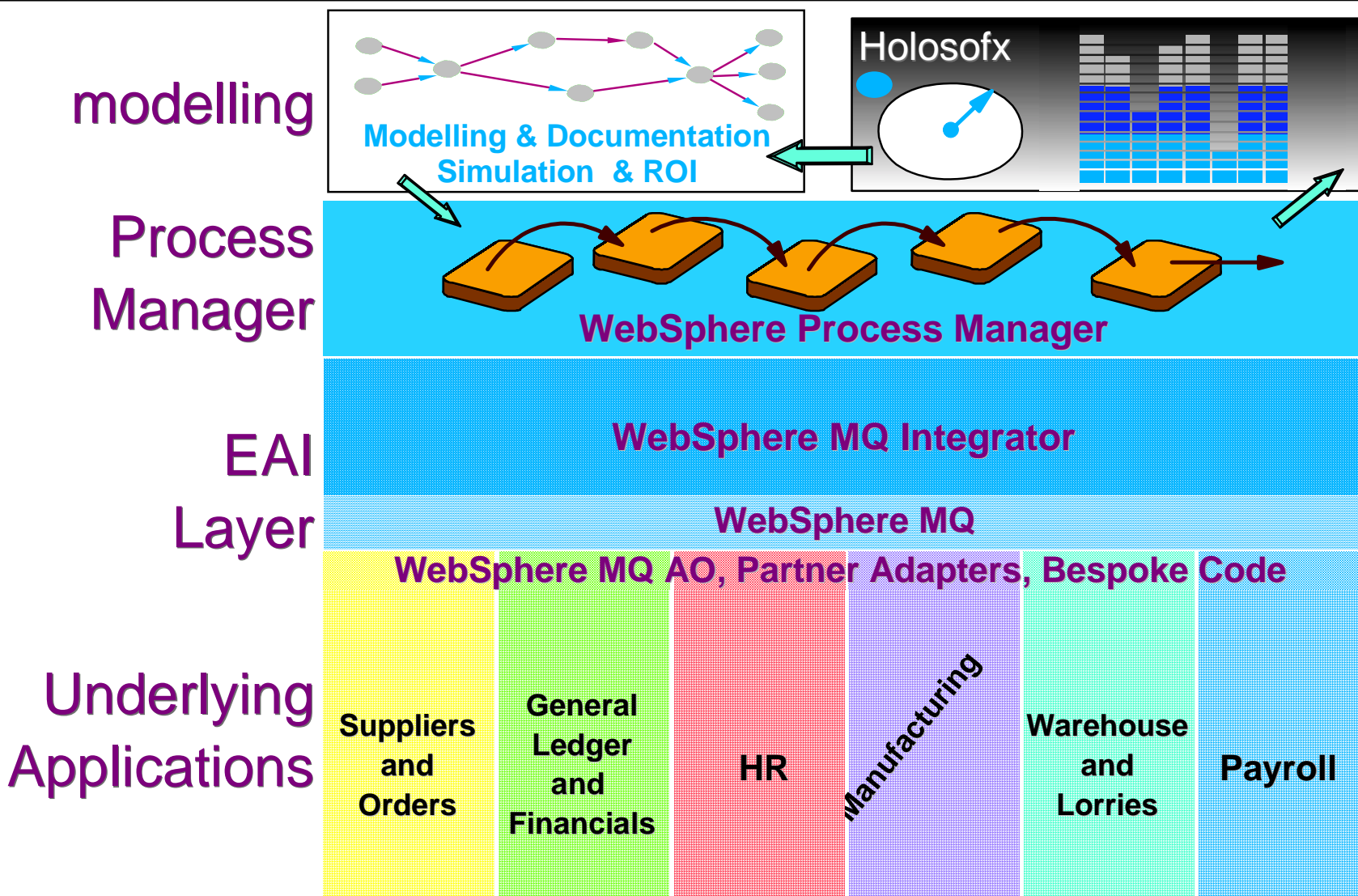


Separate the 'what' from the 'how'.

I.T. Infrastructure *"How"*

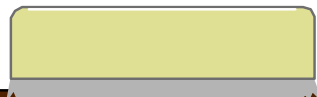


If we add these components in....\



How do I extend this to my partners ?

- How do I integrate with my supplier(s) ?
- How do I deal with all their different processes ?
- How do I deal with our different technologies ?
- How do I make this reliable ?
- How do I manage processes which run across both our organisations ?
 - ▶ How do I re-order my stock ?
 - ▶ How do I do just-in-time fulfilment for my customer orders ?
 - ▶ How do I let my supplier manage MY inventory ?
- How do I react to changes more quickly ?
 - ▶ New suppliers
 - ▶ New routes to market



How does it work today....?

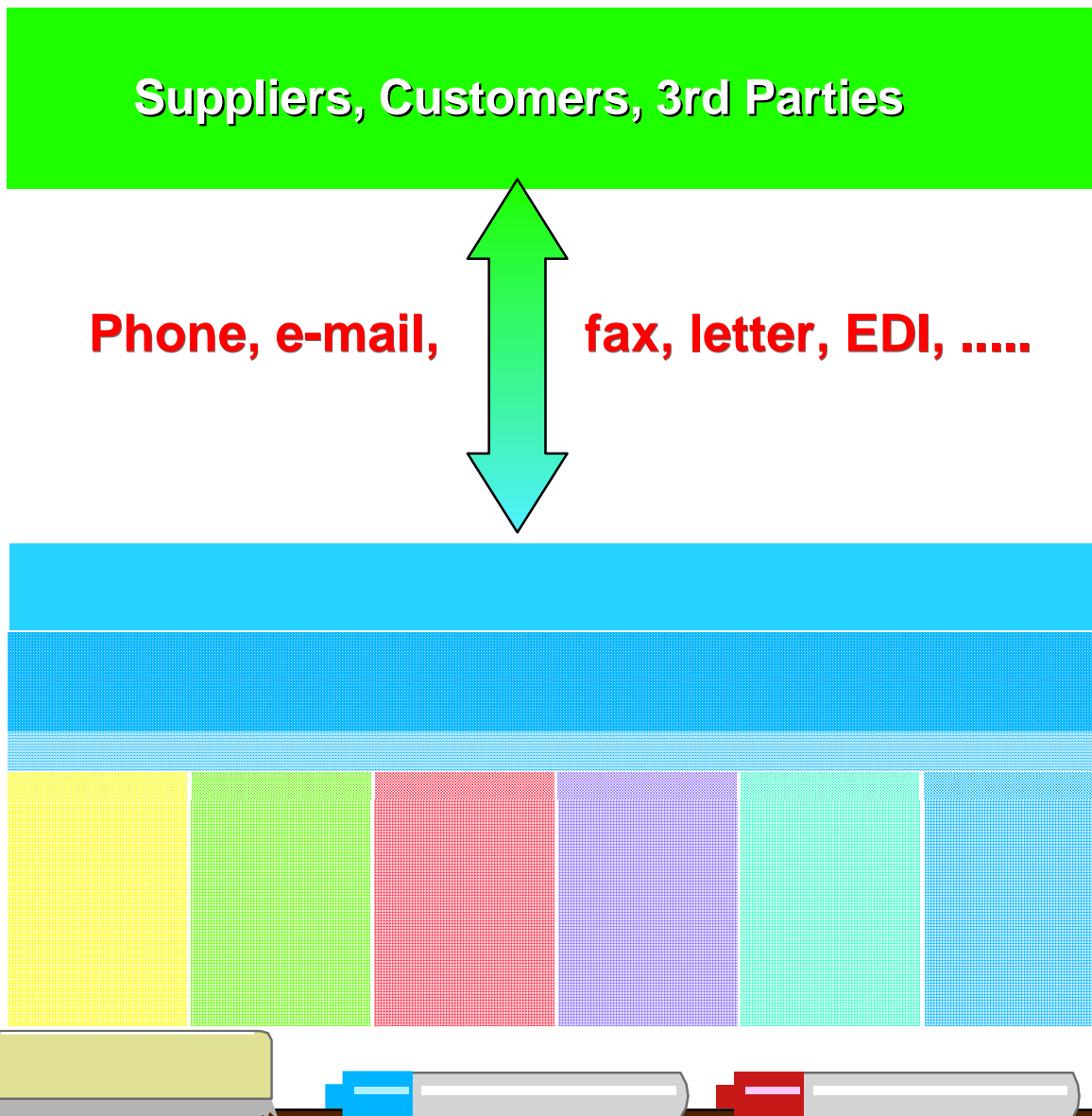
outside

Suppliers, Customers, 3rd Parties

Phone, e-mail,

fax, letter, EDI,

inside



Managing the process

outside

Suppliers, Customers, 3rd Parties

use different
protocols to
connect to
partners

Phone, fax, letter
or
Partner Agreement Manager

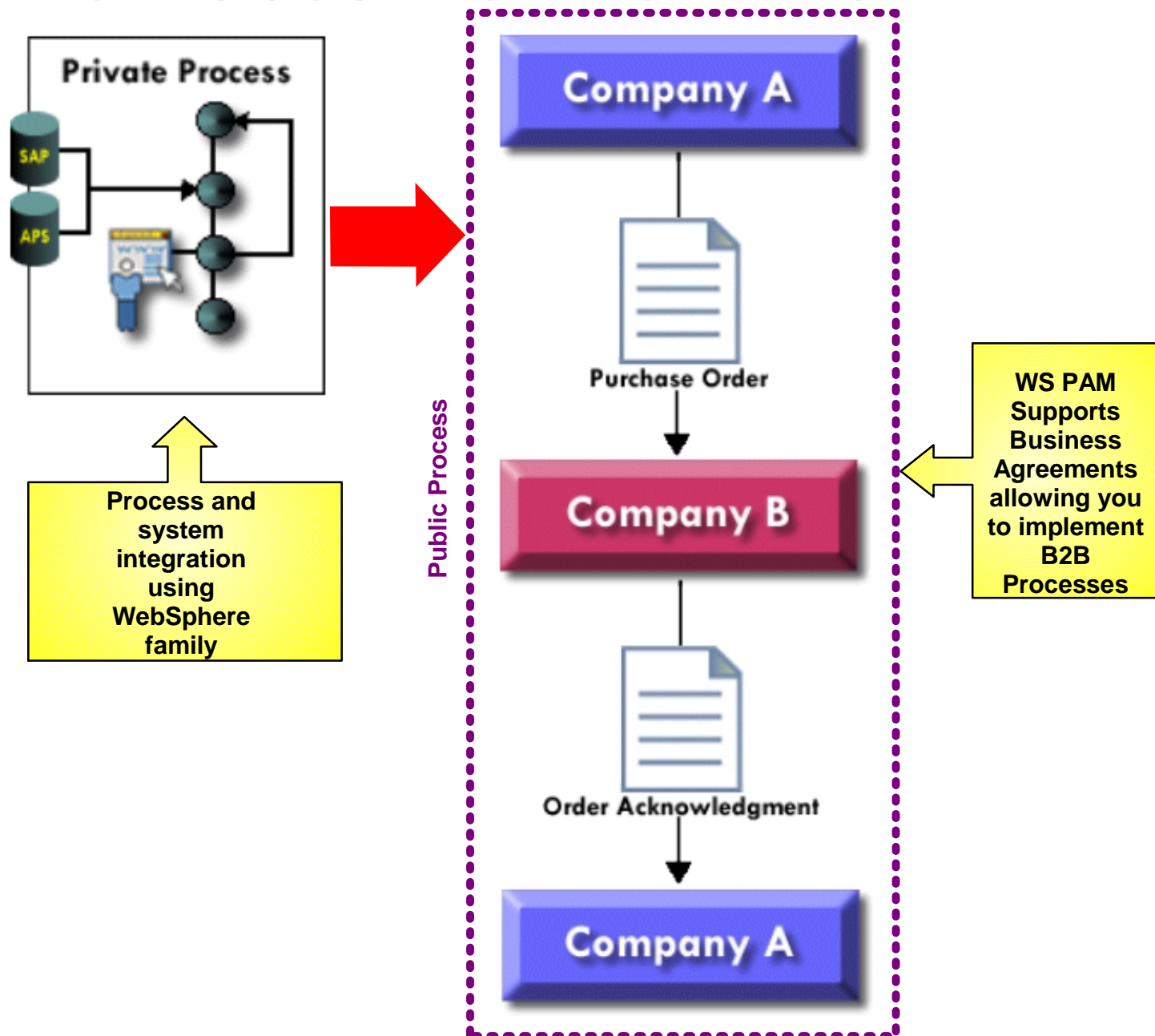
use
WebSphere
PAM to
coordinate
shared
processes

inside

use
WebSphere
family to
integrate
internal
systems

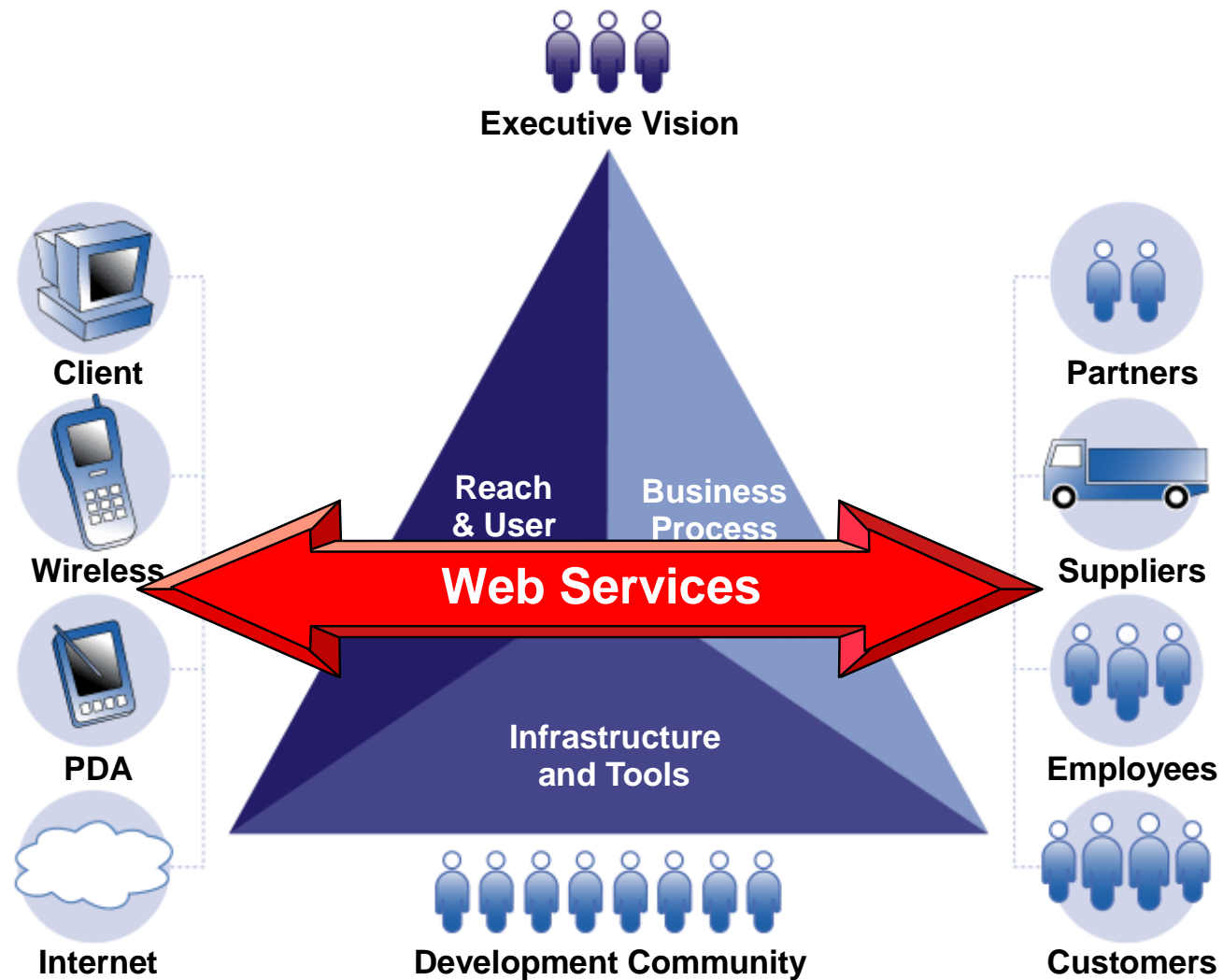


How does that work then ?



IBM

WebSphere Software Platform



What Are Web Services

and What Is Their Value?



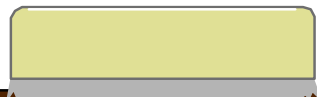
**Applications which interact with each other using
Web standards**

- Businesses benefit by using Web Services to:
 - ▶ Connect **applications to applications** in other businesses quickly and easily
 - ▶ Establish interaction with marketplaces more efficiently
 - ▶ Deliver business functions to a broader set of customers and partners
 - ▶ Pursue new business models by combining applications in new dynamic ways

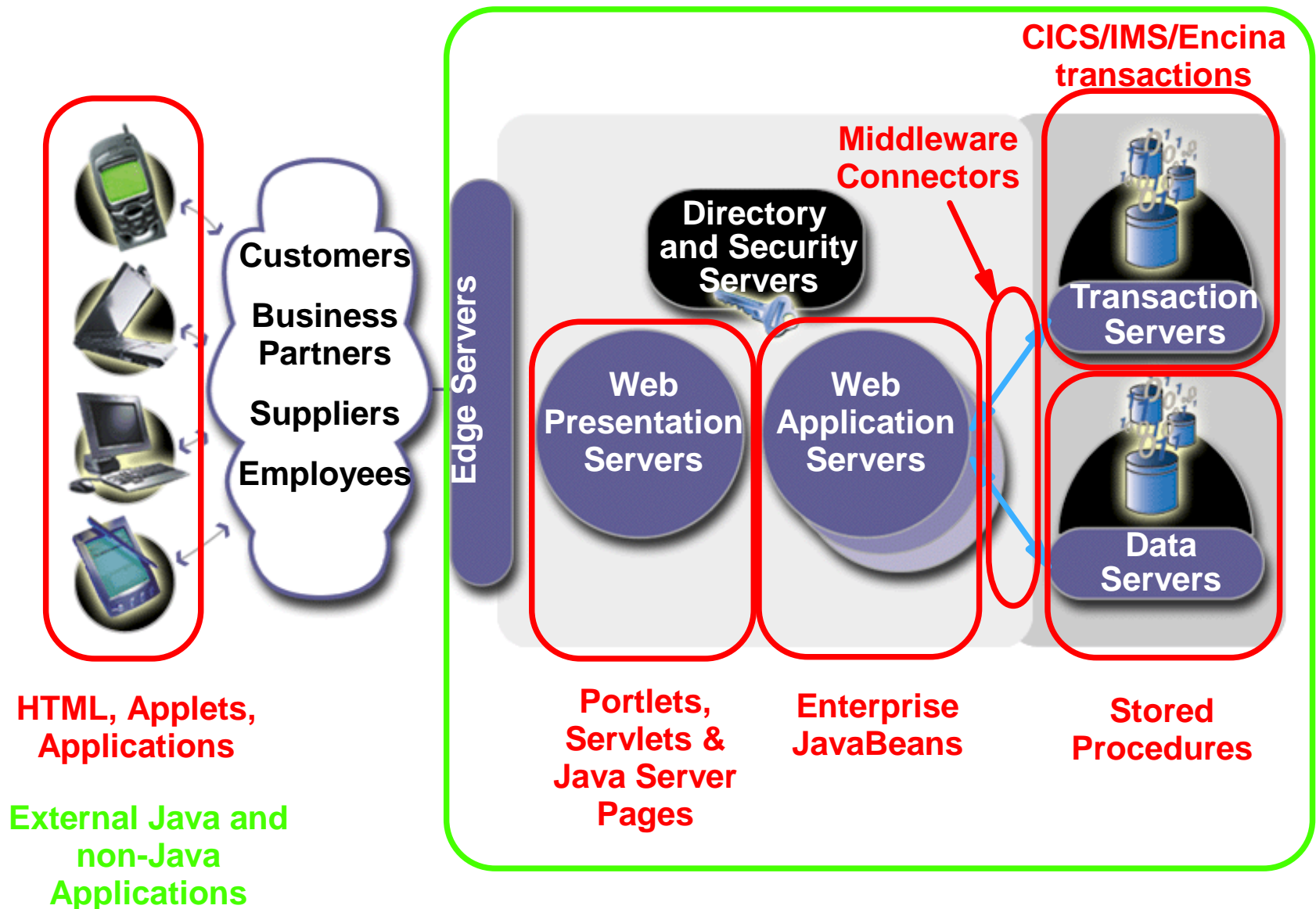
Development Tools

.....today

.....and tomorrow



What do we develop?

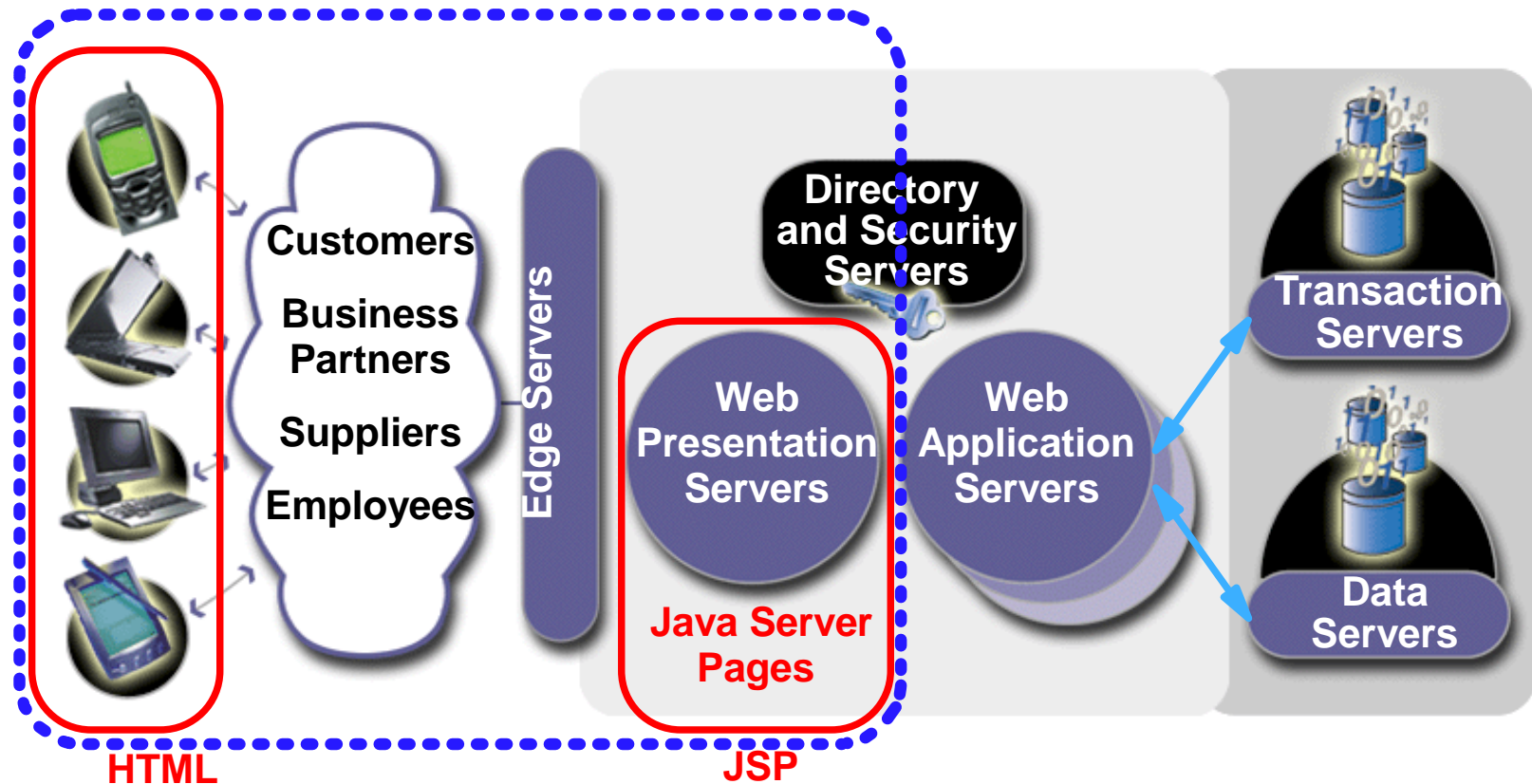


HTML, Applets,
Applications

External Java and
non-Java
Applications

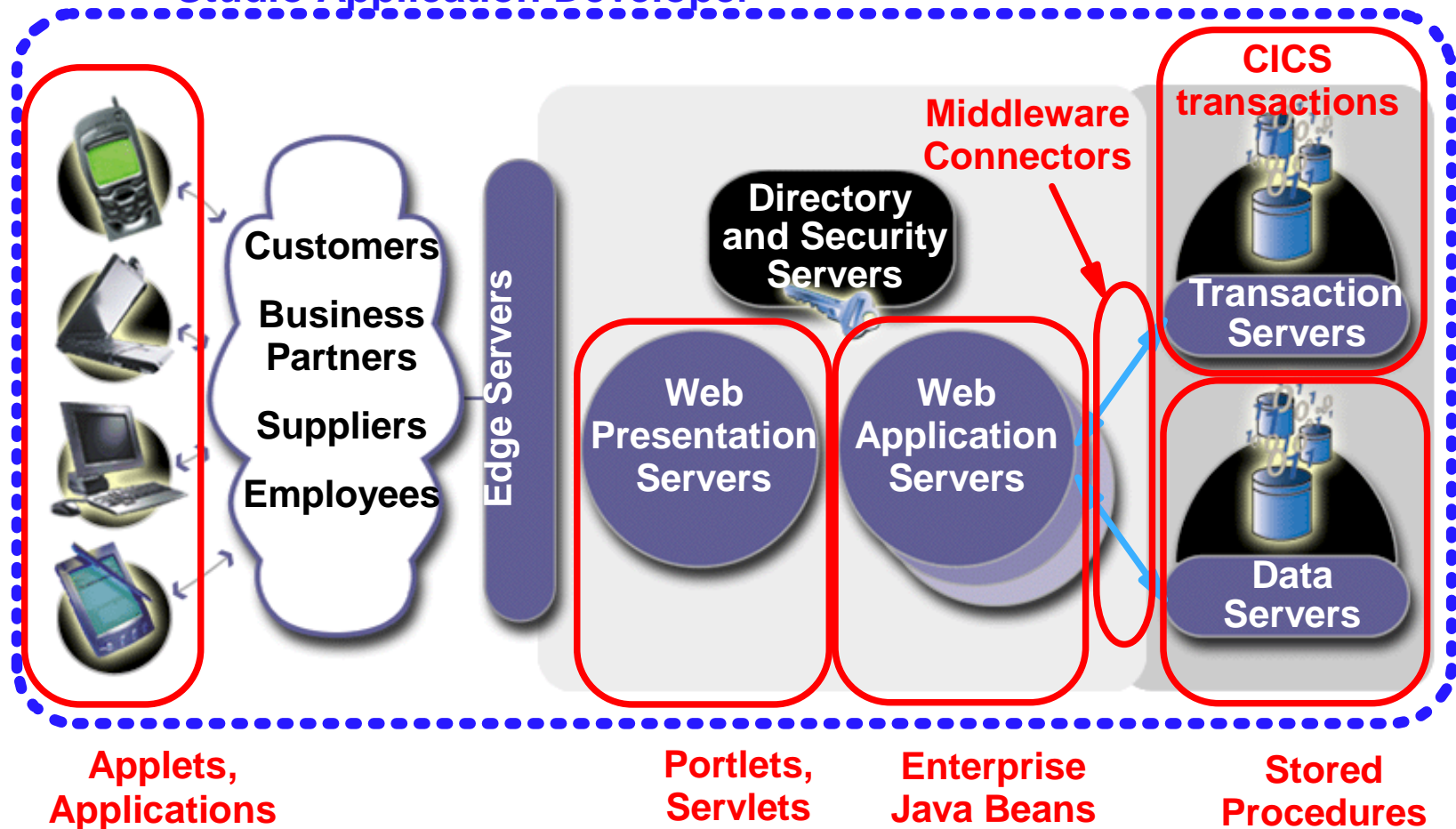
How do we develop themtoday ?

Built by a page designer in WebSphere
Studio Application Developer



How do we develop themtoday ?

Built by a Java programmer in Websphere
Studio Application Developer



IBM

....and tomorrow ?

non-IBM
Offerings &
Extensions

Partner Products & Developer Specific Plug-ins
Rational, Merant, Serena, Instantiations, ...

IBM
Specialized
Modular
Extensions

----- **WebSphere** -----

Portal
Server
Plug-in

Business
Integrator
Plug-in

VoiceXML
Server
plug-in

Commerce
Server
plug-in

... Many more to Come

IBM
WebSphere
AD Tools
Portfolio

WS Studio Enterprise Developer

WS Studio Application Developer

**WS Studio Site
Developer**

Versata
Studio
(i-RAD)

J2EE & Web
Services
Application
Adapter
Toolkit

etc.

Open Tools
Platform
Services

WebSphere Studio Workbench

Infrastructure, Software Configuration Management, Windows/ Linux



Review: What have we covered so far..?

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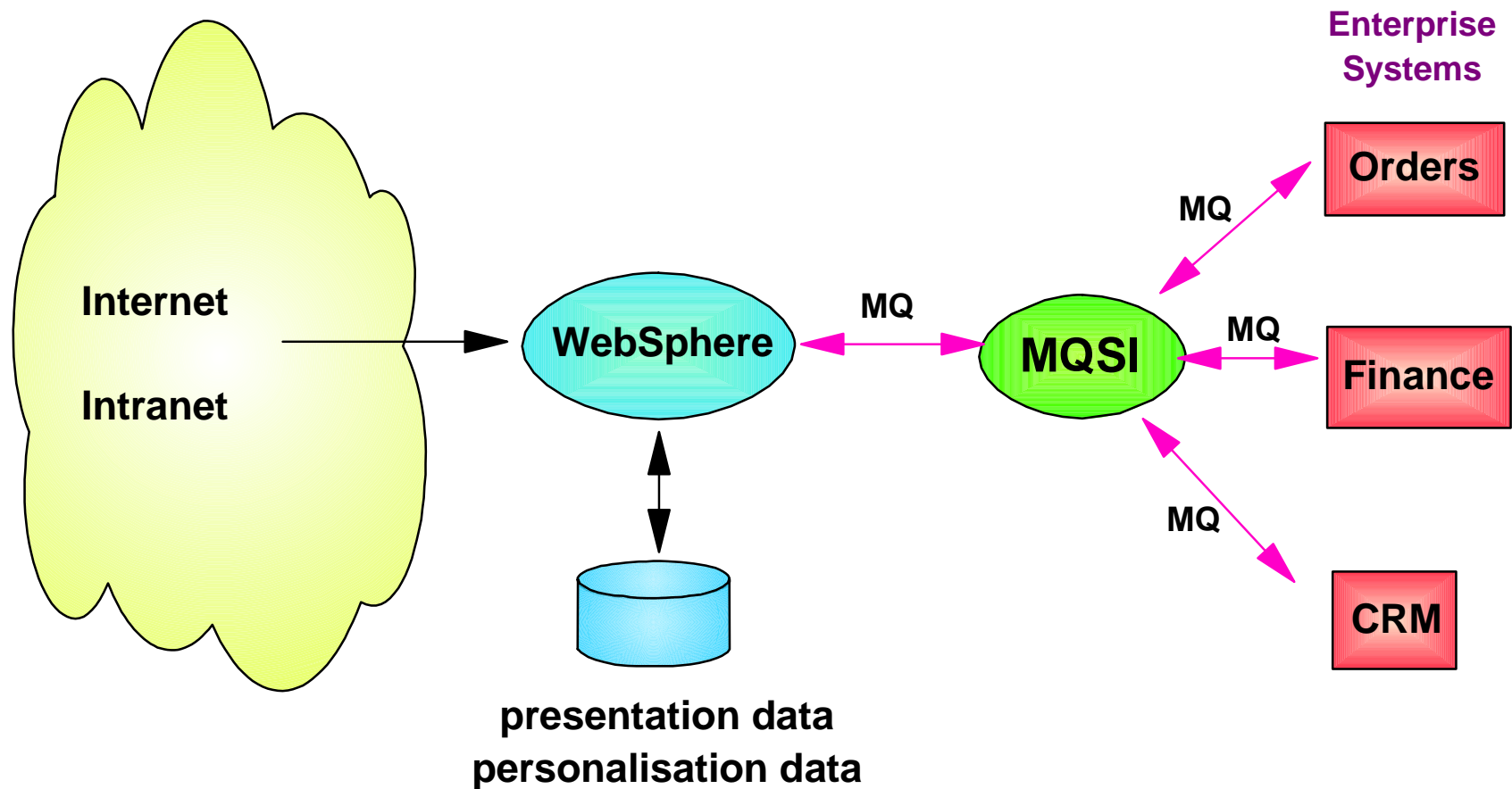
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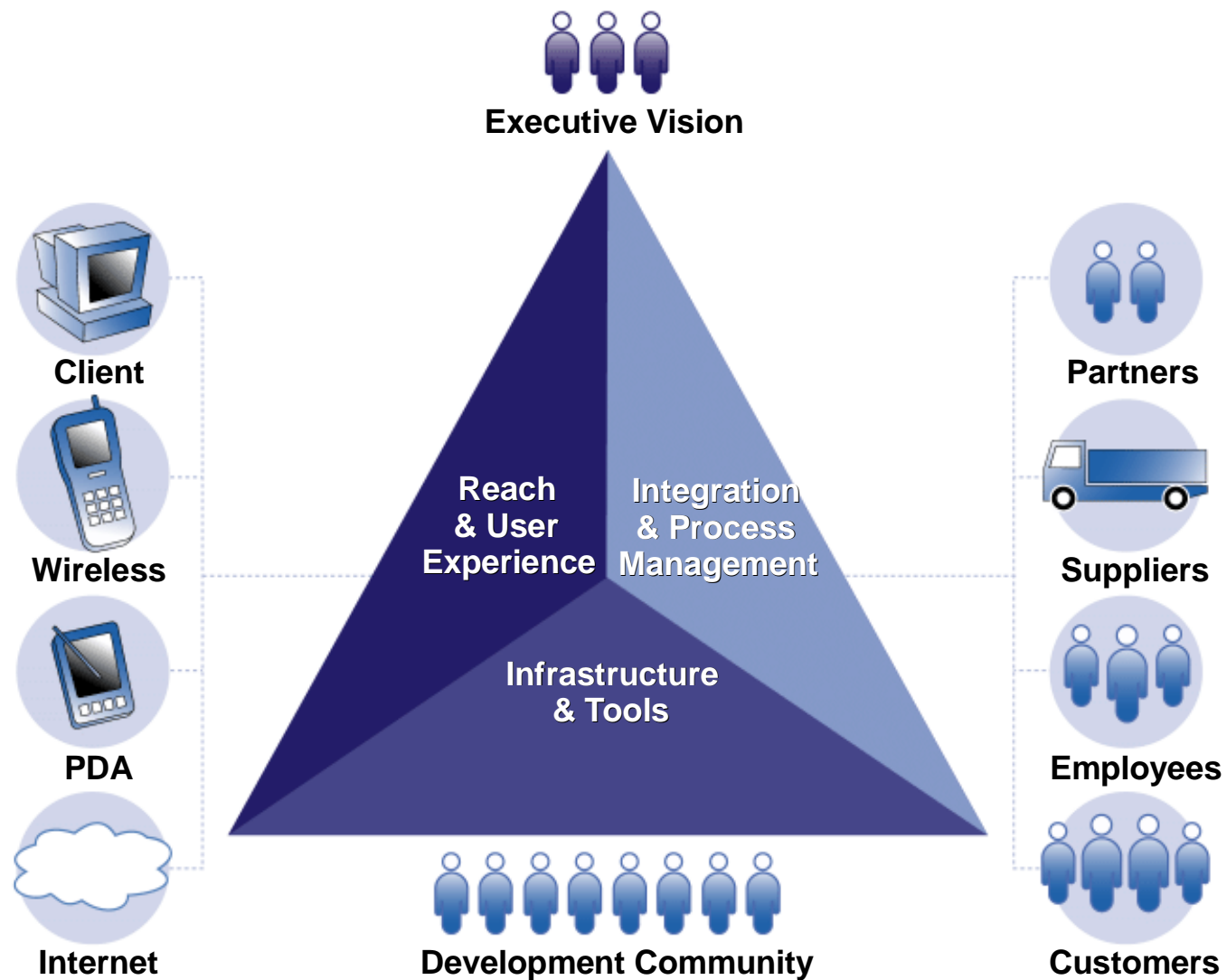
Foundation Extensions

Foundation

A simple proposition....



Summary



WebSphere software