



# **SOA and IP Telephony**

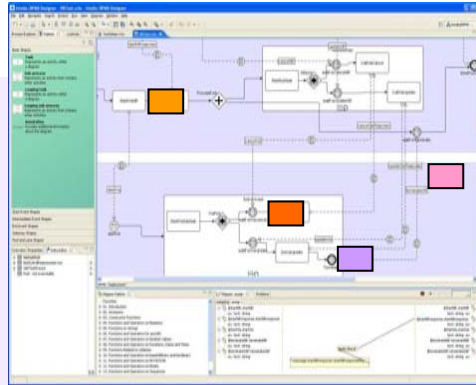
**Michael Giordano, Avaya**

**Director, Service Oriented Architecture**

## Service Oriented Architecture .... Communications embedded throughout the fabric of business

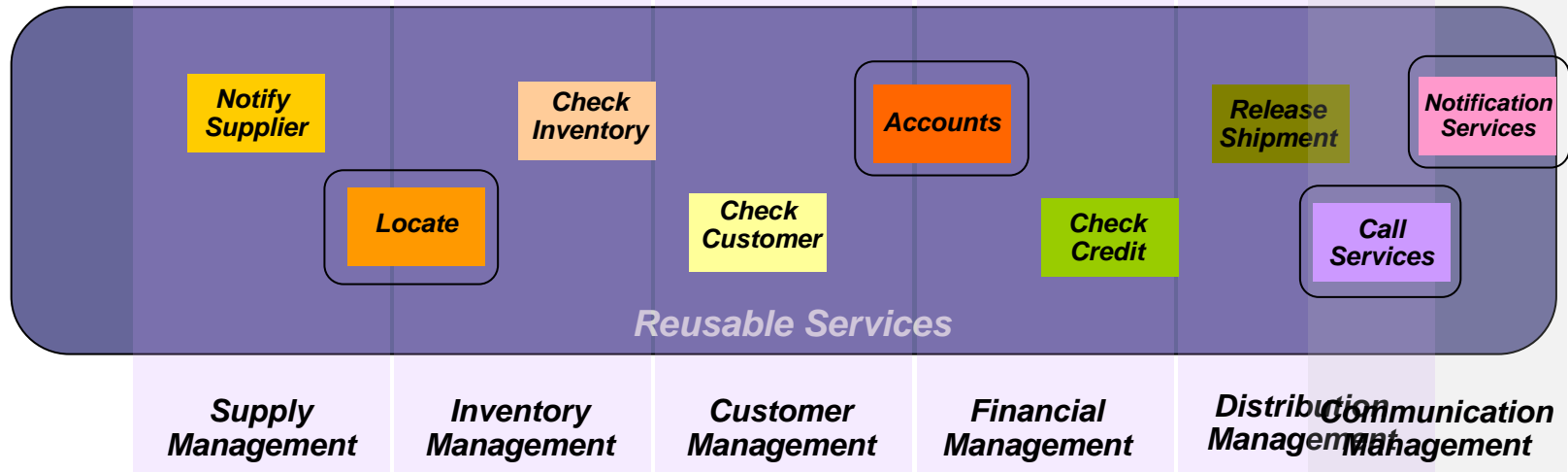
Order Shipment Order Shipment Customer Notification Process

The promise of SOA: gain productivity and agility ....

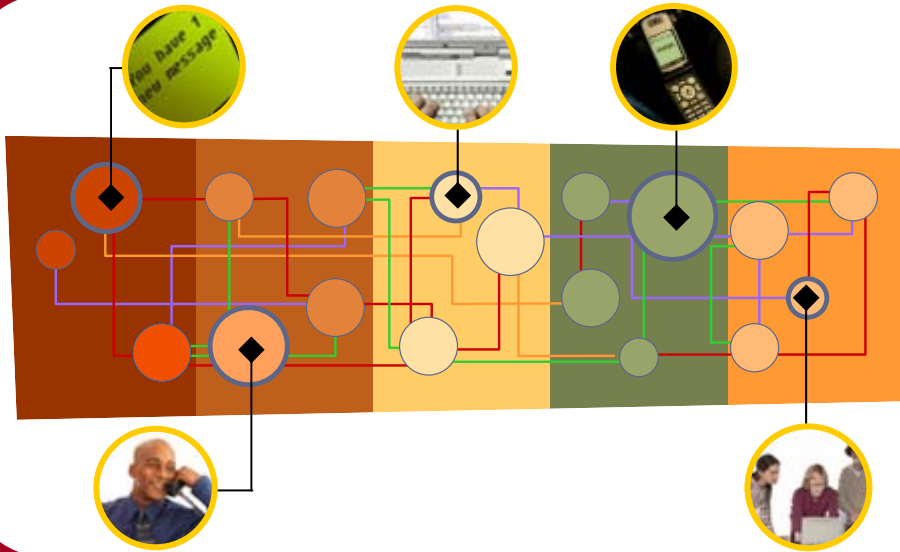


Leveraging SOA and comm services for multi-modal service and response.

### Service Oriented Architecture



## Intelligent Communications Value

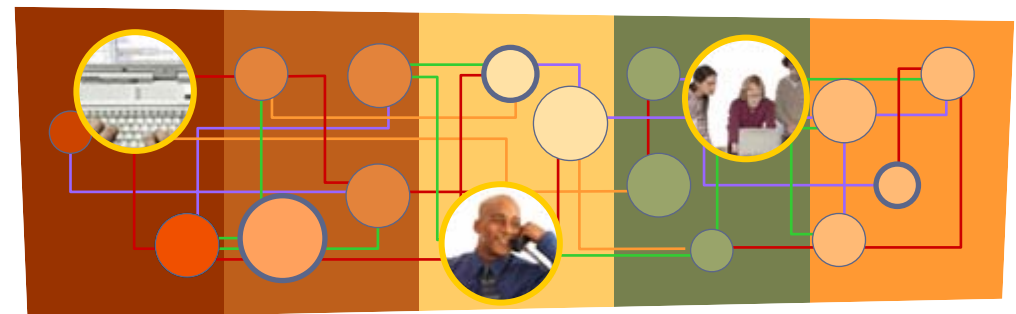


### Today's Business Processes

- Business process stops - waiting for human response and action
- Human latency is introduced
- Process is vulnerable to human error

### Communications Enabled Business Processes

- Human interaction is embedded-in, and controlled by, the business process
- Communications are invoked as required
- Interactions are fully closed-loop

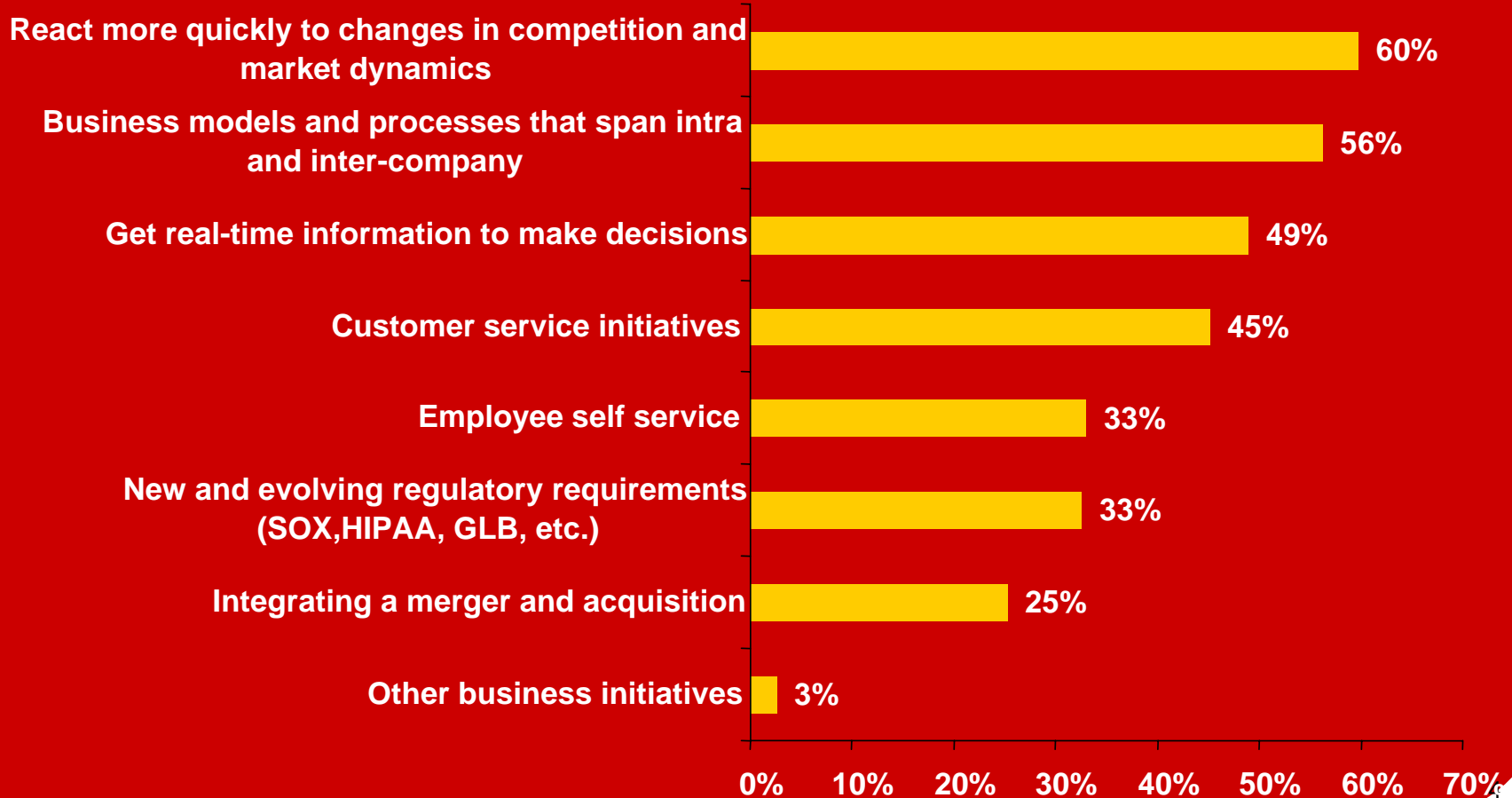


## Business Trends

### SOA enables business

*Communication services can address critical needs in these areas ...*

**Q: What are the business problems your company hopes to address using SOA?**

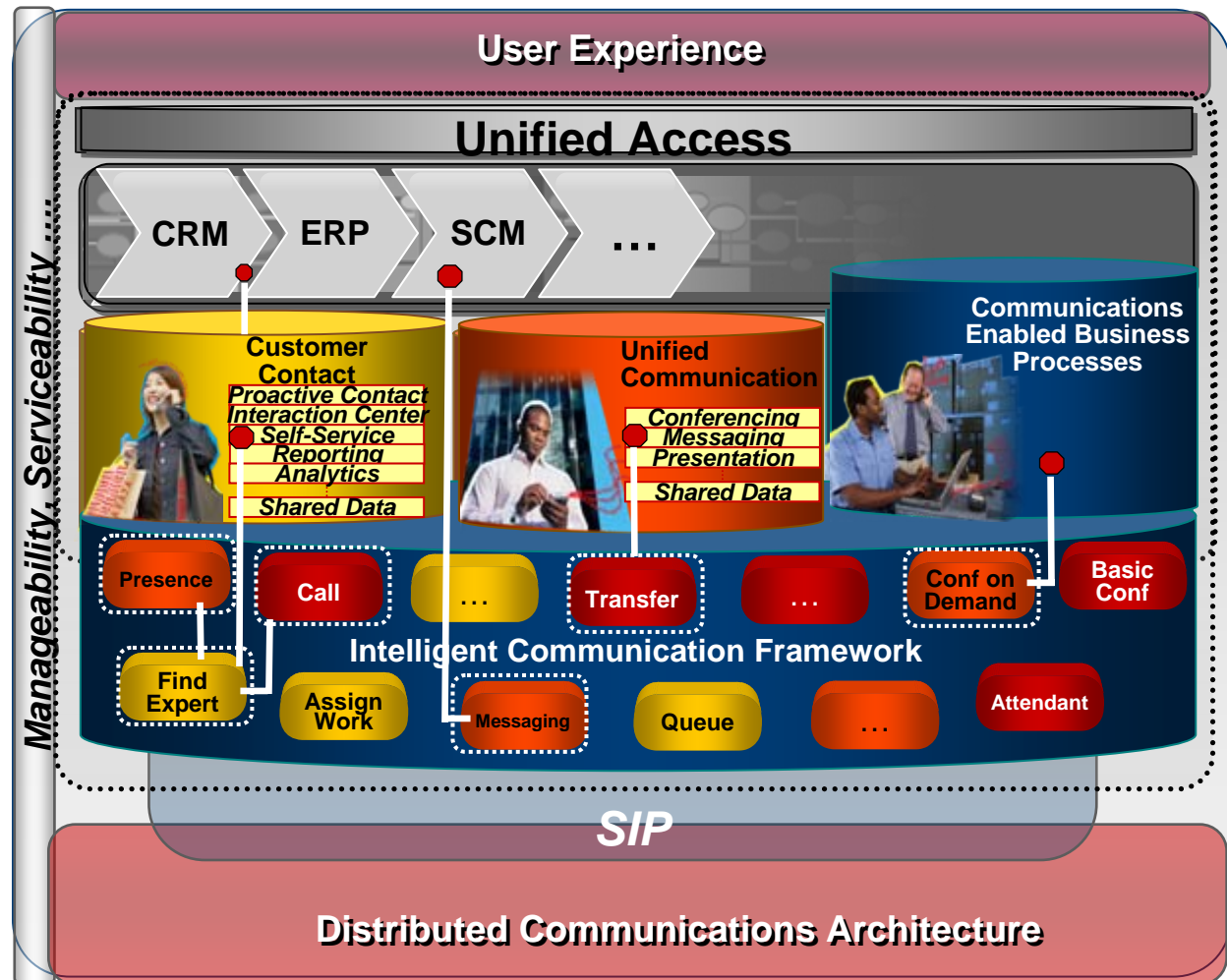


<sup>1</sup>Source: Conducted by IDG Research Services Group and co-sponsored by BEA Systems, February 2006

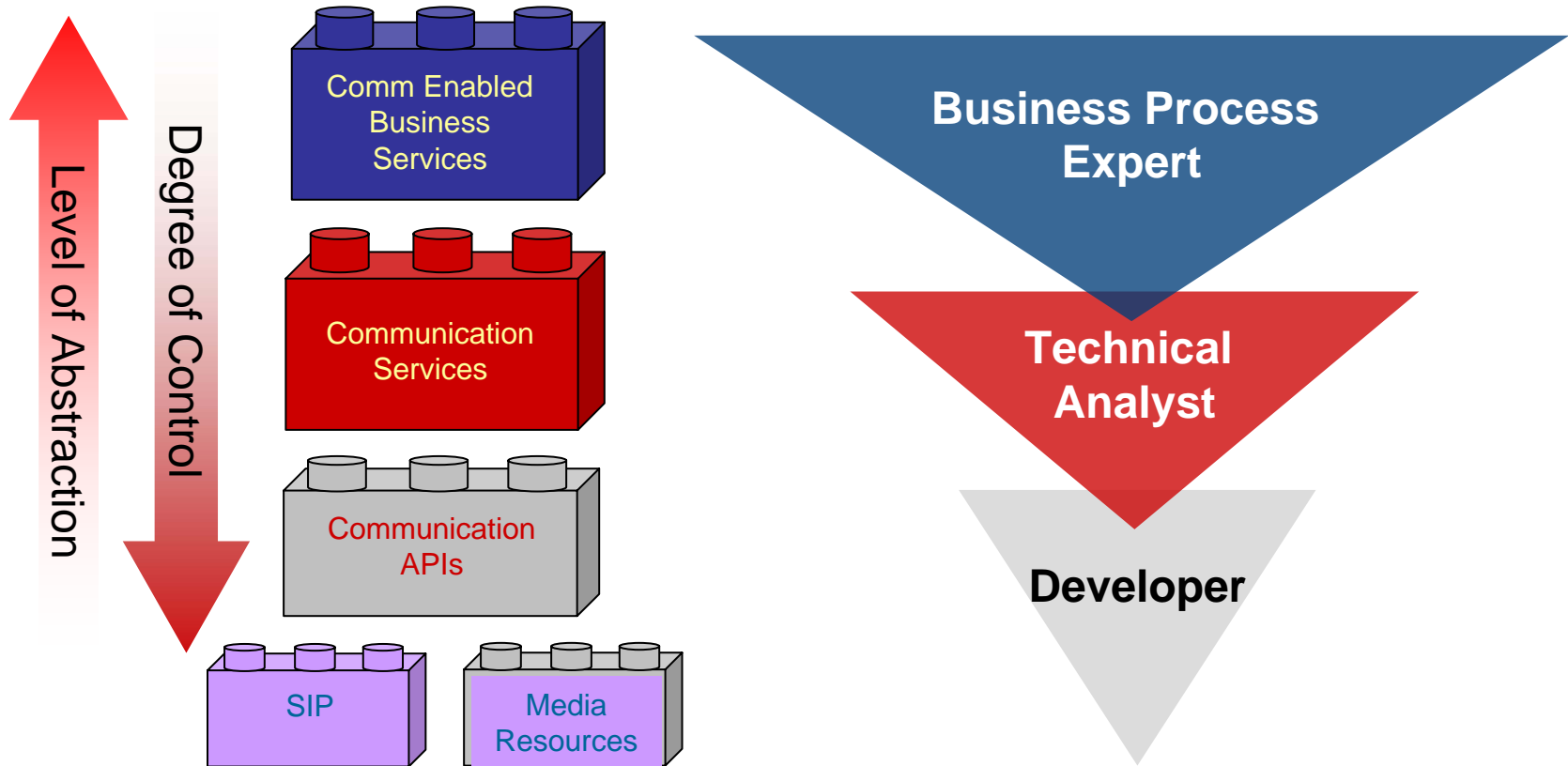
## SOA + IP Telephony

- Incorporates common sharable services
- Core vendor and 3<sup>rd</sup> party app's and customer business processes access common services

### Intelligent Communication Framework



# Delivering communications at different levels across the Enterprise



- Targets varying programmatic levels of abstraction to a range of CEBP developers
- Rich ecosystem with established partners

## Communication Services – “High Level Composites + all-terrain” communications: web, phone, IM, email, SMS, paging ... over any network”

### Find & Call

**What it does:** locate users trying multiple devices (hunt mode) according to the contact preferences defined in the system

**Value:** reach necessary users quickly

### Advisory

**What it does:** contact set of users and deliver a message via phone, email or SMS; users confirm receipt

**Value:** deliver critical messages quickly and confirm receipt

### Notify & Response

**What it does:** contact set of users with message; users respond via voice or web portal

**Value:** execute rapid two-way communication for critical decision-making

### Exception Conference

**What it does:** invite set of users to an instant conference, which can be initiated based on an event trigger

**Value:** locate and bring users into conference immediately, based on a defined event (no need to manually start conference)

### Notify with Task List

**What it does:** assign tasks to a set of users via their preferred communication and track progress

**Value:** track action items to ensure tasks are executed

Telephony  
Record

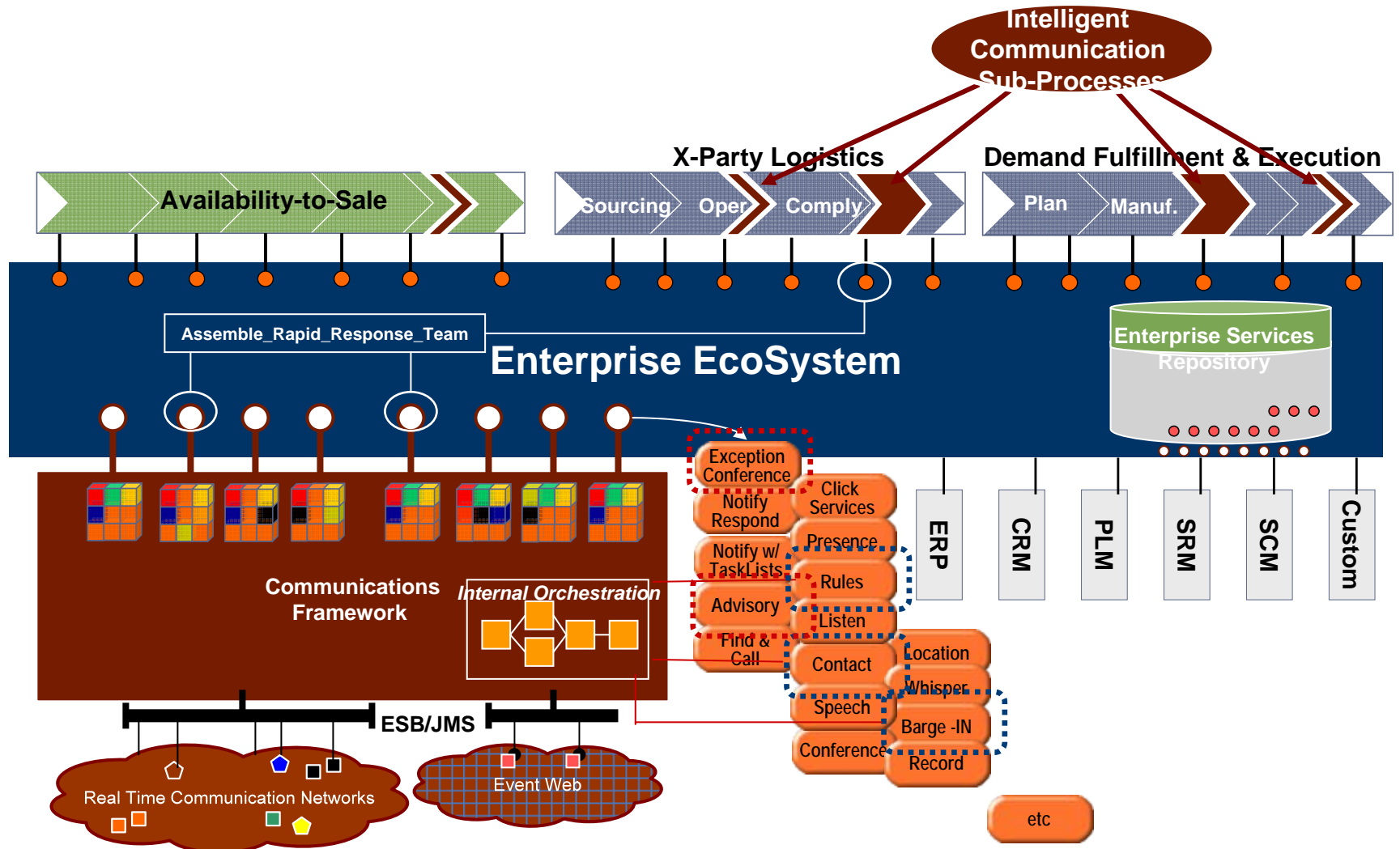
Multi-Media  
Barge

Messaging  
Presence

Conferencing

....

## Managed, Co-operative Approach to Enterprise Integration



## Not Just Customer Service, but an Enterprise Ready to Serve

1

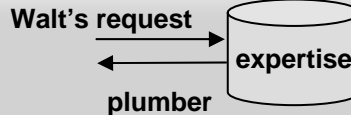
Walt calls the hardware store about kitchen sinks and an electrical outlet for a disposer

Speech



2

Speech recognition checks for expertise: primary match is a plumber, secondary an electrician



Self Service Dialog

3

In-store plumbers are busy; intelligent search launched for best match

Business Processes, Rules & Routing Engine

Business Applications

Data and Intelligence



4

The match is based on:

**Expertise:** Plumber? Electrician? Deep knowledge?

**Availability:** Ready now? Interruptible? Will become available soon?

**Location:** In-store? Another store? Retired, on-call from home?

**History:** Prior experience with this customer?

**Devices:** Audio only? Stream video to cell phone? Kiosk?

5

Call routed to Joe, a retired plumber, available a few hours a week from home.

As call progresses, Joe's cell phone receives streaming video of sink Walt asks about.



Presence

Resident Expert



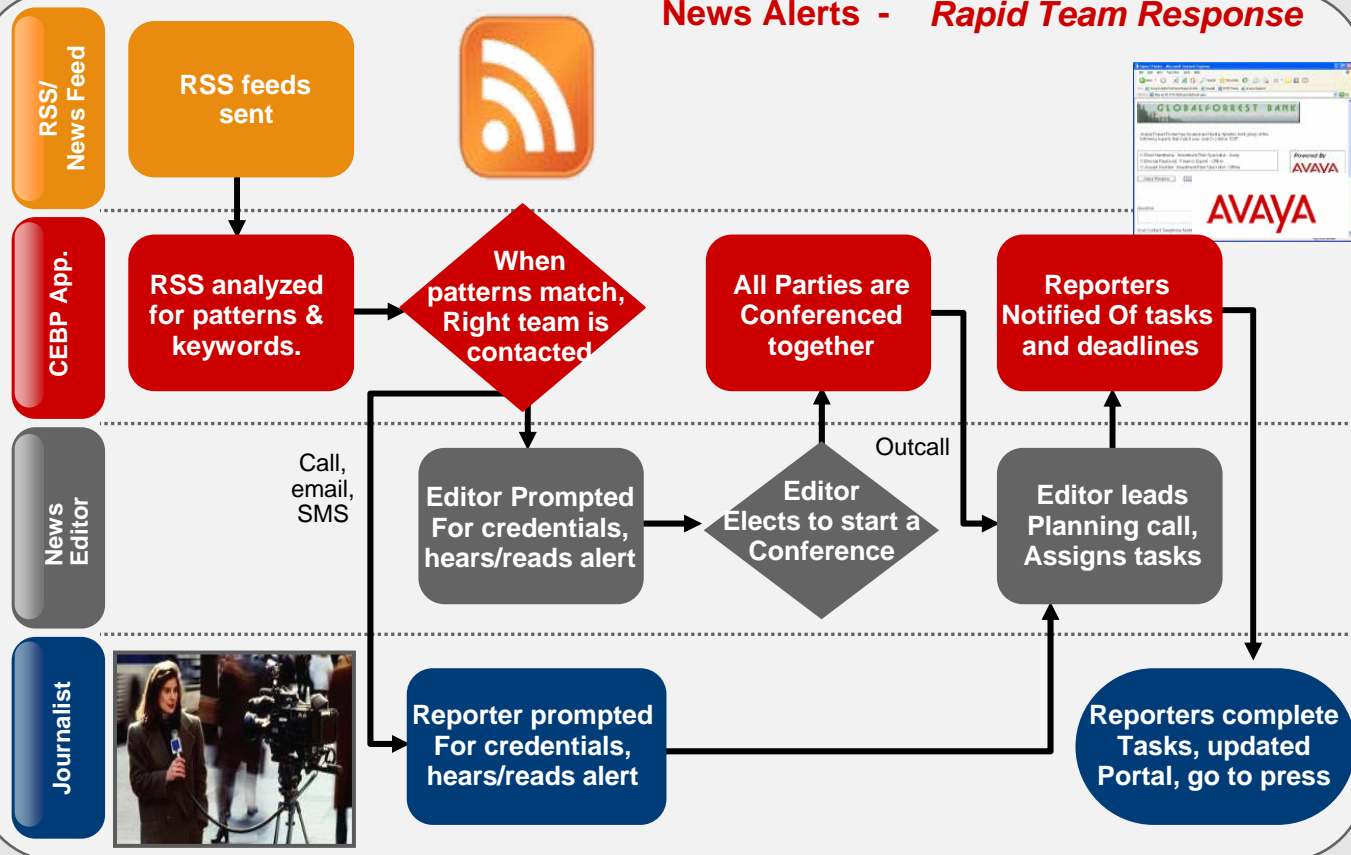
Contact

# Complex Communication Processing Example

## News Alert

*Easily enable broad range of communication enabled business processes via complex event handling and service orchestration*

### News Alerts - Rapid Team Response



- Monitor RSS feeds for patterns
- Match triggers orchestrated flow
- Editor elects to conference
- Reporters notified of tasks
- Complete tasks
- Go to press

# Summary

## ● Foundational Elements

- Full array of communication services on one platform
  - Click services, messaging, e-mail, etc.
  - Parlay-X/ CSTA/II interfaces

## ● Composites - Higher level complex communication services providing communication capability within a business context

- Services out of the box” and/or tailored services to customer needs.
- Hides complexity from application business programmers
- Enabling easy adoption of scalable, reliable sophisticated communication capability.

## ● A communications framework that allows users the ability to re-compose core communication assets into in new uses, easily

## ● Leverage standard enterprise integration patterns

## ● Standard skills and technology generally available in the marketplace