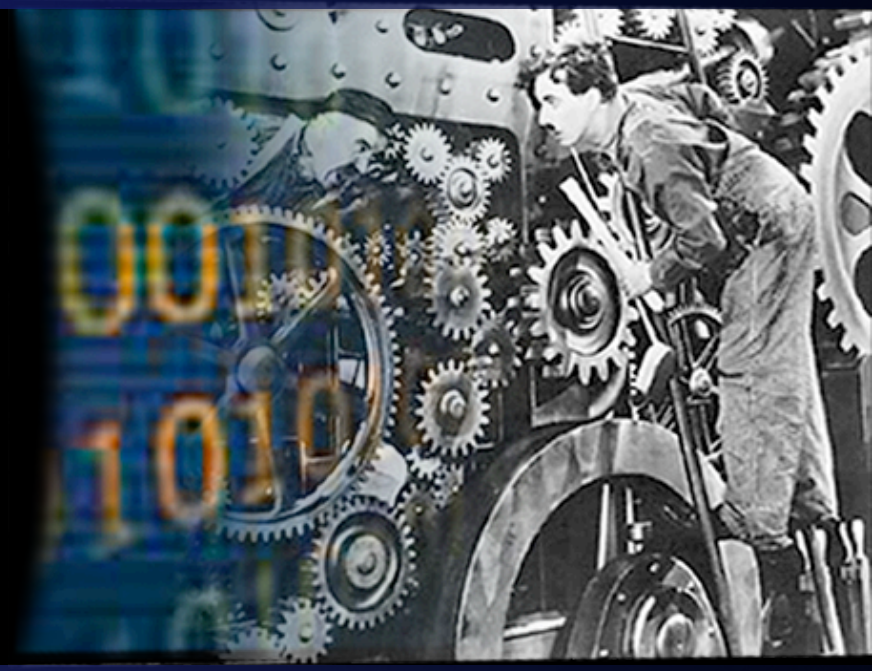
Mash-ups & Beyond

The Role of Remixability



Rod Smith

JAOO conference
- for Developers by Developers

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Business Insights: what are customers telling us

Millions of markets of dozens of people… … where's the business value?

Targeting niche markets - Internet technologies continue enabling businesses to expand their ecosystems & partnerships

A cornerstone for Web 2.0 is enabling data & services to work in ways beyond their original intent

Unlocking valuable business data opens new business opportunities

Instant business value - mashing up the right content both from intranet & internet sources to gain business advantage

Key Business Drivers

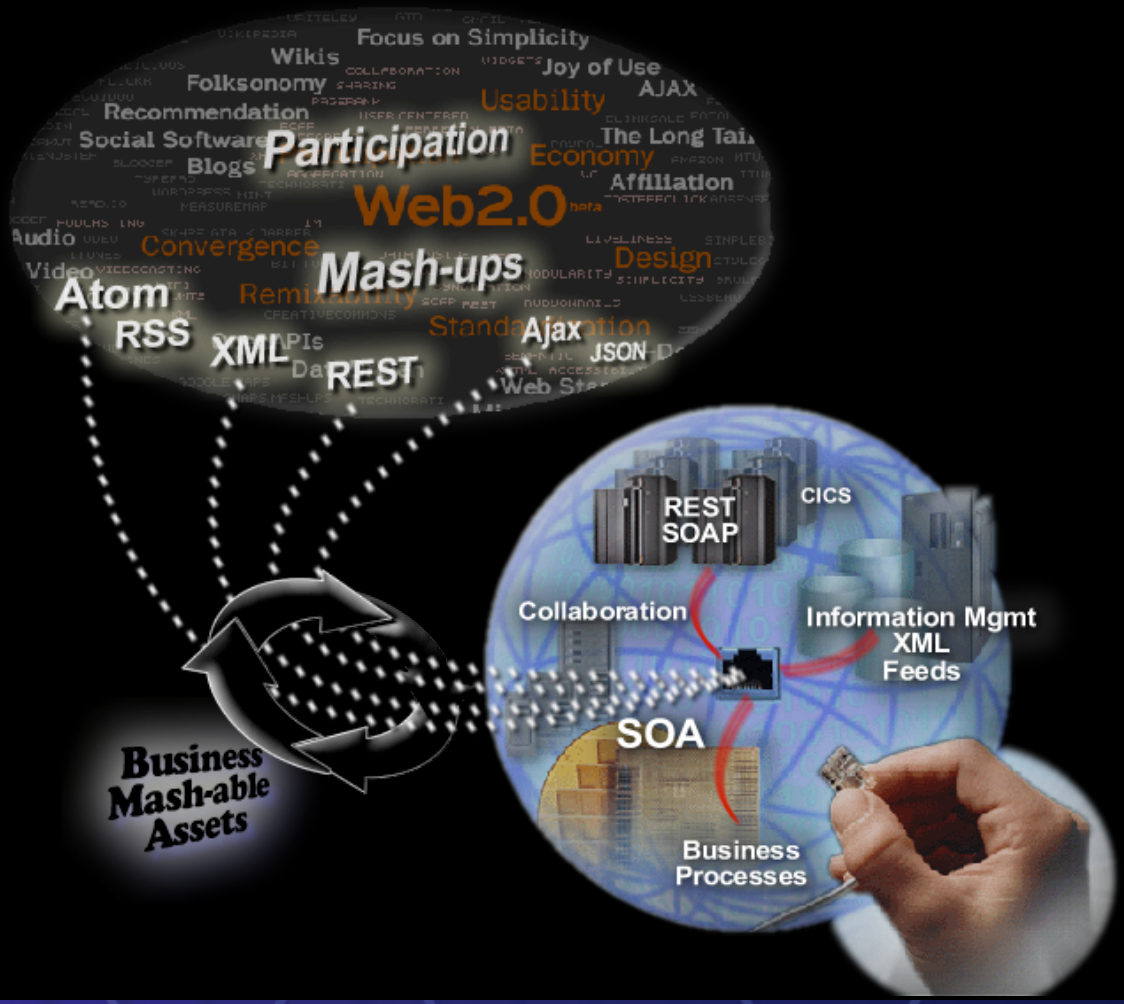
- LOB teams are just IT savvy enough to create their own services/solutions that drive their part of the business
  (Igniting the Phoenix: A New Vision for IT/Sapir)
- Cost of customization down by orders of magnitude enabling acting on emergent business opportunities quickly.
- Business world beginning to "standardizing" on web 2.0 content portability through syndication feeds & widgets

The long tail: whole bunch of business opportunities that have been unaffordable to reach

inside Web 2.0: emerging “self service” business pattern

- Focus on **SIMPLICITY**: empowering content-centric developers
- **DATA-DRIVEN**: business value centered on content
- Remixability: new business opportunities to **COMBINE** content
- OpenAPIs: building/extending ecosystems both with ISVs & customer **COLLABORATION**
- Rich Internet Applications: improved **EXPERIENCE** leads to improved revenue
- **USER GENERATED CONTENT**: encourage active participation & self organization to influence product development

Business Insights: customer pain points



Internet technologies continue enabling businesses to expand their ecosystems & partnerships

Partnerships cause integration work items it IT - usually requiring a minimum of 6 months per request

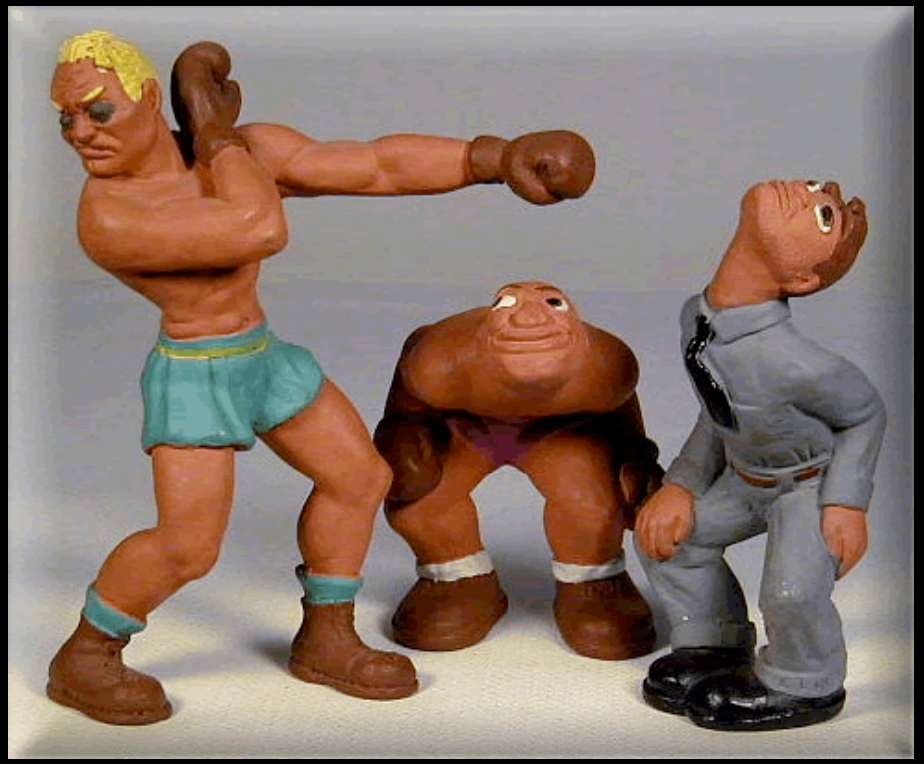
Change Happens a number of business collaborations last less than 12 months - do the math

Attention Disorder keeping a pulse on the volume of external business data that *could* impact results is constantly in flux

Business Insights: mash-ups concept not that new - but has evolved

The evolving line-of-business & IT relationship….

- Shadow IT: *do-it-yourself IT* has always been around
- The content: balancing control & *collaboration*
- Instant value: *immediate* business impact
- Wow factor: *now* , can you *mix in* this and this and …

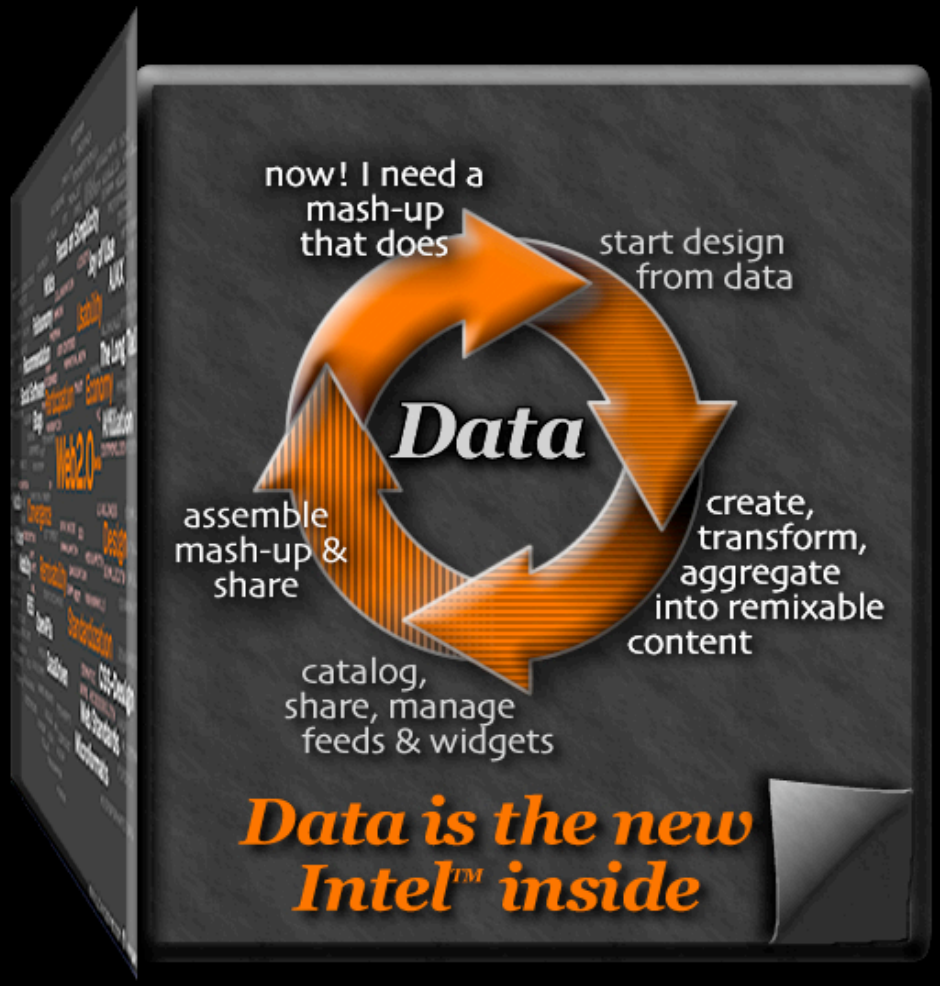


Reshaping of Enterprise: emerging "self service" business pattern

Web 2.0 Content Ecosystem

- enterprise *mash-ups* - enabling "web apps" creation by LOBs & subject matter experts
- ease of access to the data that can be combined in different ways to meet ad hoc business opportunities
- designing for *re-mixability*
  - combine data for diverse information services
  - transforming into portable, re-mixable assets & services
  - discover-ability of content both internet & intranet
- exploiting *emergent* business opportunities

Reshaping of Enterprise: emerging "self service" business pattern



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Remixability - Why Is this Important?

Data is the new Intel inside & the ability to easily remix content is here to stay… owning a unique, hard-to-replicate data source as a competitive advantage

- Amazon has valuable content their ecosystem can remix in ways to create new on-line retail opportunities
- eBay has valuable content for their community
- Google has content can remix in ways to create new business opportunities

Businesses own huge amounts of a unique, hard-to-replicate data sources - enabling them to unlock at the cost point - is key

Enterprise Mash-up Ecosystems: opening business content with middleware & information services to be re-mixable for emergent business opportunities

Break the mold - show me the flexibility to remix my content & (web) services in ways beyond their initial design

Dun & Bradstreet - Web 2.0: The Future of Information

Web 1.0

Centralized Web Portal

Data Integration

Application Centric
How do I get data into my application?

Invention
Build it, they will come

Interoperate
Point to point XML integration

Technology Owned

Web 2.0

Web Services

Mash-ups

Data Driven
I have all this data, how can I unlock it?

Innovation
Distributed, discoverable, easy to use

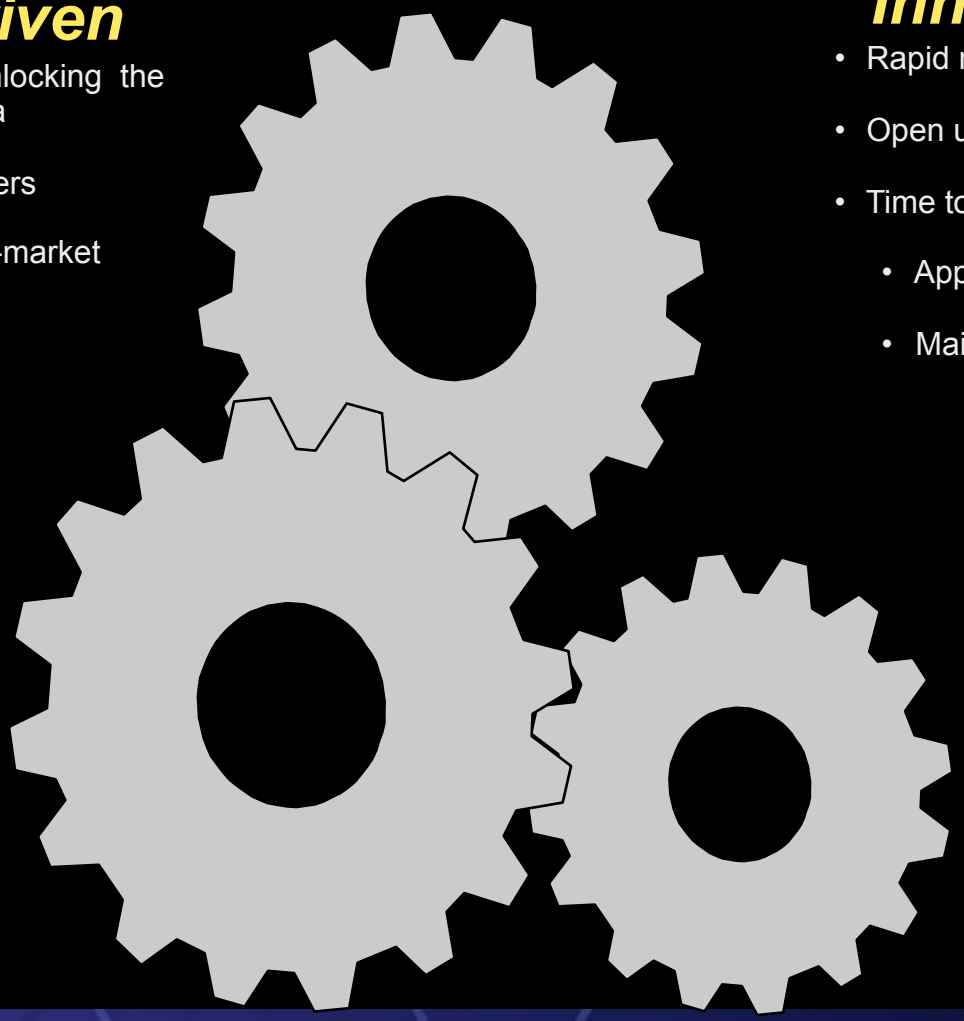
Collaborate
Real Time B2B Multi-Channel Composite Applications

User Owned

Dun & Bradstreet - Web 2.0: The Future of Information

Data Driven

- Customers are unlocking the value of D&B data
- 90% new customers
- 70% small to mid-market customers



Innovation

- Rapid new product deployment
- Open up new channels
- Time to market reduced by 30-50 %
  - Application development cost reduced 30%
  - Maintenance costs reduced by 40%

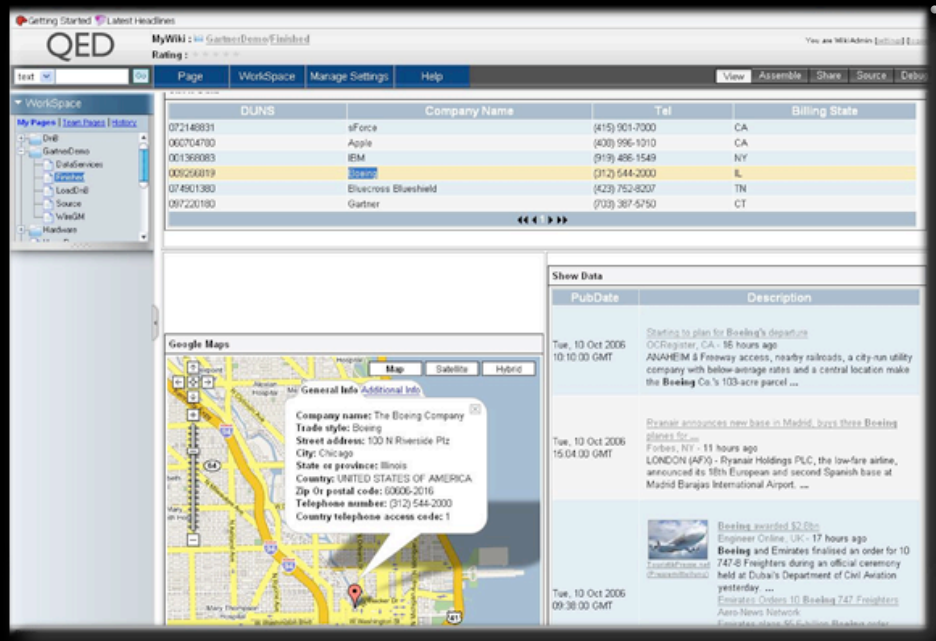
Collaboration

- User tools to rapidly adapt to business changes
- Reuse and re-mixability reduced Integration time from 20-30% to 10-15% of total project time

Dun & Bradstreet - Enterprise Mash-up

Data Driven

- Unlocking the business value of D&B content
- Remixing data sources, & web services to meet business opportunity



Innovation

- D&B GeoPoint: Access rooftop geographic information using the customer's DUNS number
- D&B WorldBase Marketing Plus: Retrieve Real-time company information
- Google Maps: Plot customer data on a map

Collaboration

- D&B web services & content
- StrikeIron™
- IBM mash-up maker technology
- SalesForce: Online CRM solution containing organization's customer account list

NextGen NEO Demo

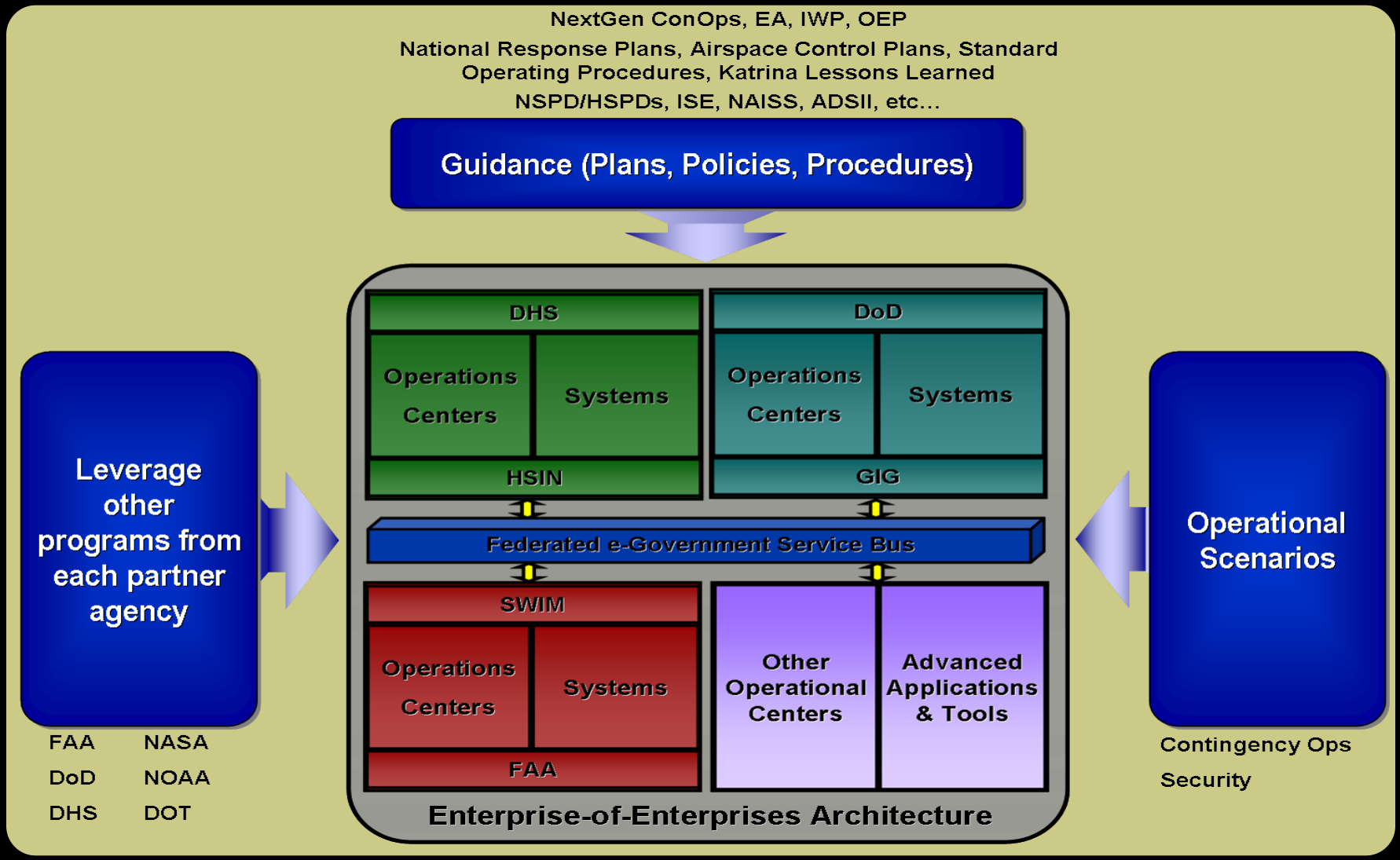
- During Hurricane Katrina authorities could not quickly use existing systems to find airports that were opened and had runways with enough capacity to land C130 transport planes carrying relieve supplies.

- During NEO Spiral 1 Scenario development, Boeing saw a need for authorities to use existing data and systems to react to unexpected events and develop new capabilities.

- Within three weeks Boeing and IBM had deployed mashup capability using IBM's Mashup Center. Boeing successfully demonstrated the capability to FAA, DoD, DHS.

Next Generation Air Transportation System
Joint Planning and Development Office

Overarching Approach to the Joint NEO Project



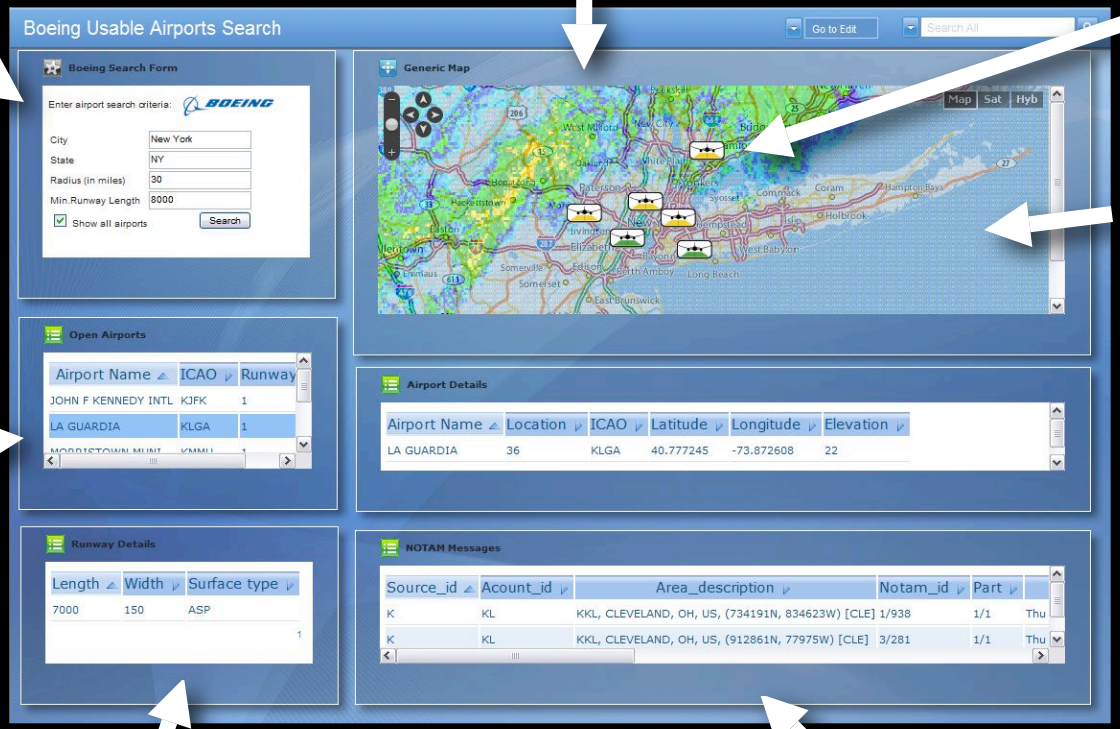
NEO Airport Mashup

Operator Queries

Yahoo Map

Airport Location/Status Data

(Colored Icons)



Weather Data

(Overlay)

Airport Data

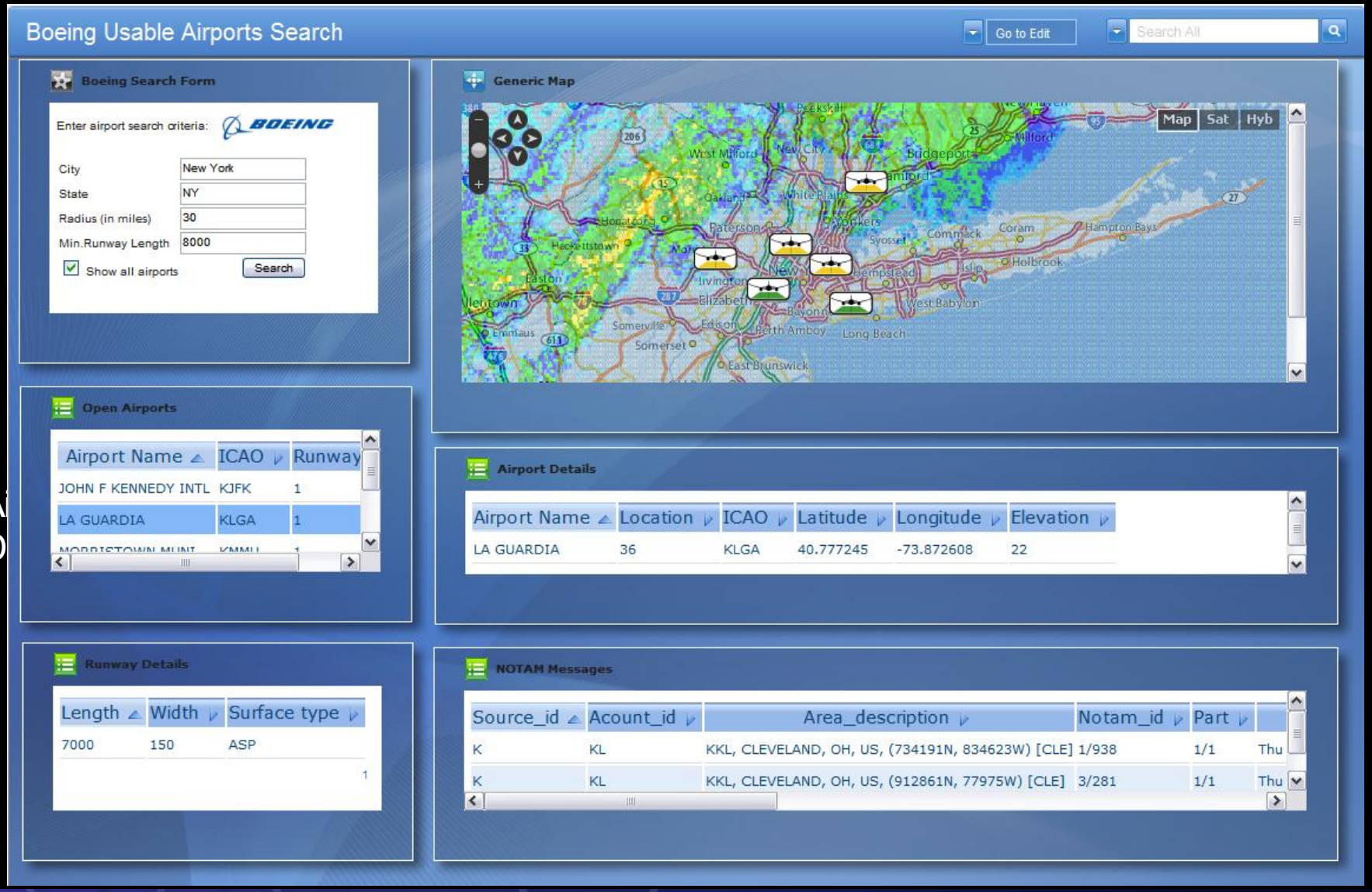
Airport Detail

Runway Data

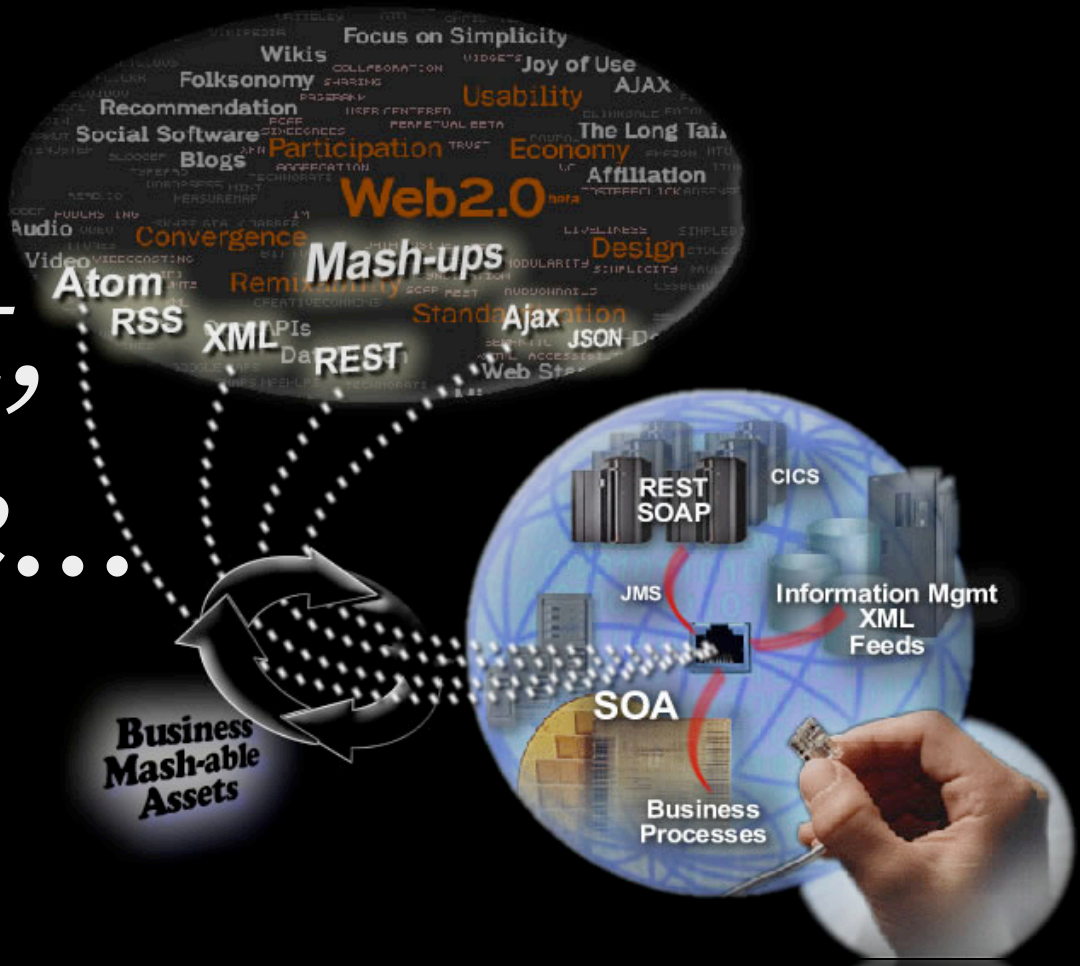
Alert/Warning

(NOTAM) Data

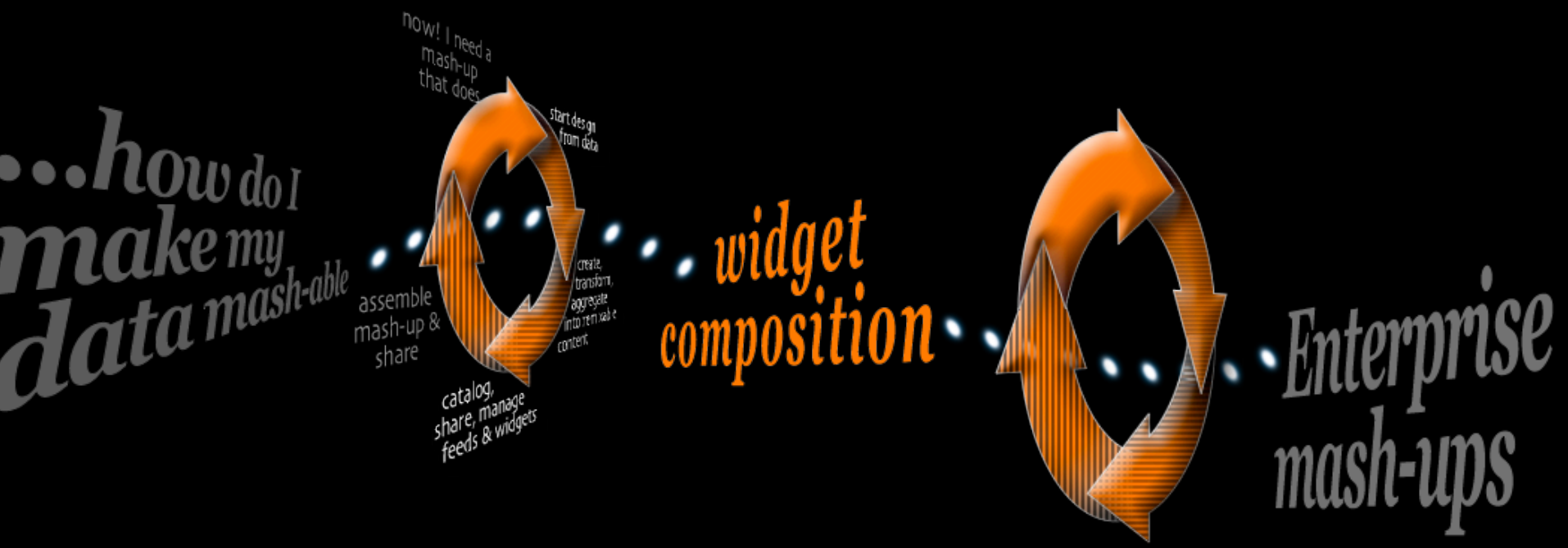
NEO Airport Mashup



wait wait, there more…



Remixability - beyond the desktop...



Remixability - beyond the desktop...

… mobility matters, through the Browser

Impact of *Informational* Widgets

The widgetization of the web is about recomposing & customizing content by non-techies

- ~13,000 Google Gadgets & portal
- ~ Yahoo Widgets
- OAA – Widget specification

Enterprise recognizing widget composition as an emerging approach to address content integration - esp. media companies

Widgets are becoming portable from desktop to mobile devices with minimal additional development costs

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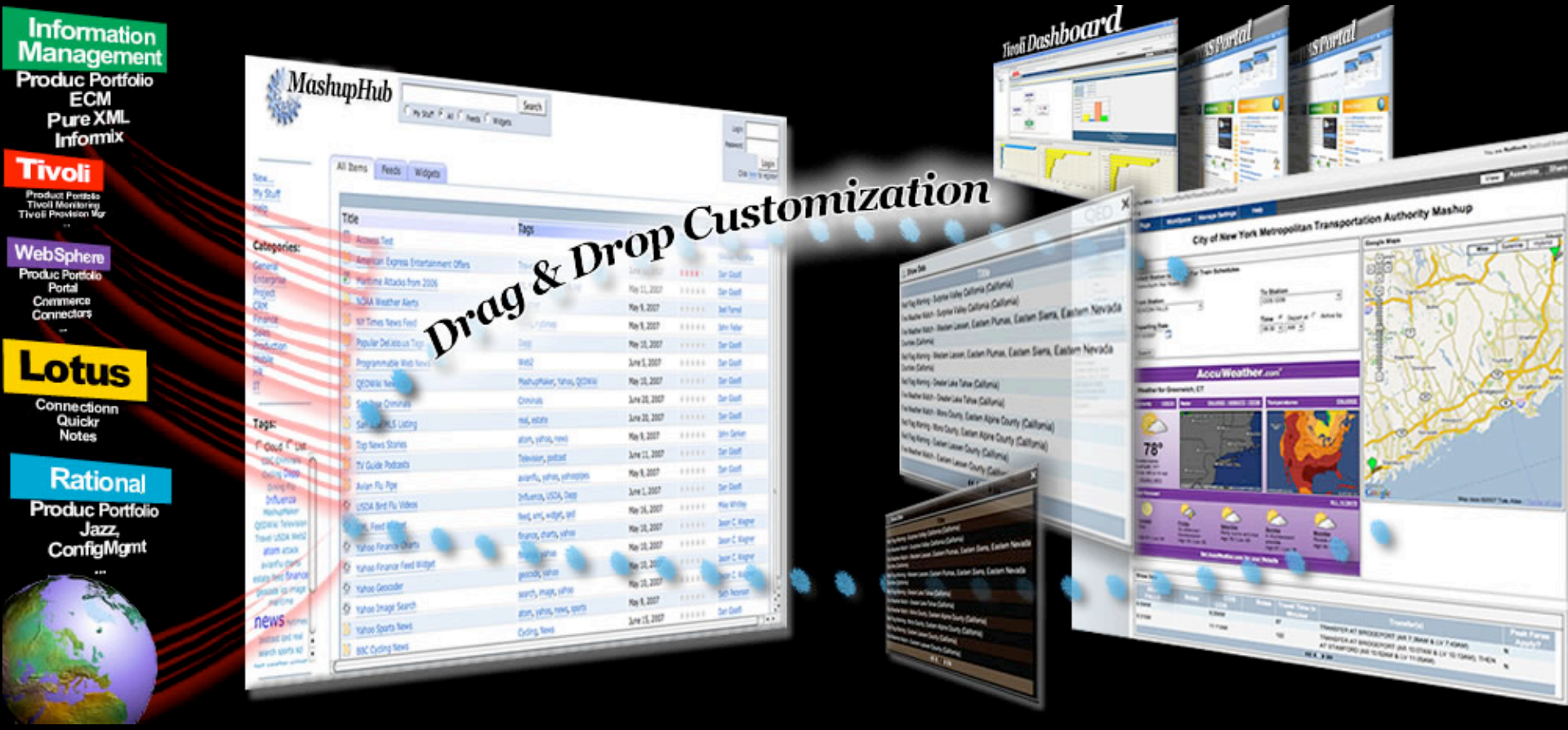
Conclusions

- Enabling IT to transform into a partner with LOBs to engage on new business opportunities
- Mobile webApps are coming - task-oriented users experiences means “widgetizting” actions that can be knitted together instantly
- Can we slice & dice massive amounts of Enterprise ecosystem data into remixable business value

Enterprise Mash-up Ecosystem - Eating Our Own Cookin'



Innovation in the widget arena