#### Global Harmonization Through Collaboration

# Keynote: The Semantic World

Presented By: Dave McComb

Date: August 29, 2012





# AIR TRANSPORTATION INFORMATION EXCHANGE CONFERENCE - (FEATURING AIXM, WXXM AND FIXM)

August 28, 2012 - August 31, 2012 NOAA Auditorium and Science Center Silver Spring, Maryland





#### Air Transportation Information Exchange Conference - (featuring AIXM, WXXM and FIXM)

# Your current systems SUCK.

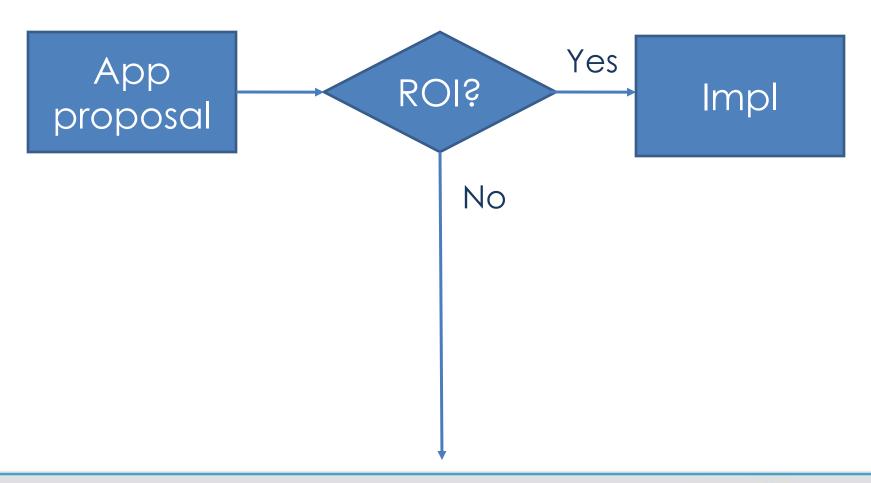
How did they get that MdAs

## Application Portfolio Process Unmanaged Schema Explosion

## **Application Portfolio Process**



### **Application Portfolio Process**



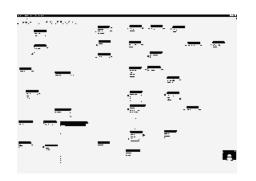


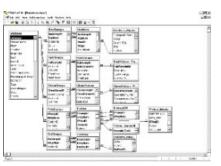


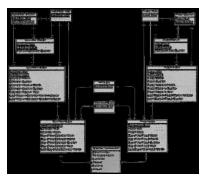
#### Unmanaged Schema Explosion

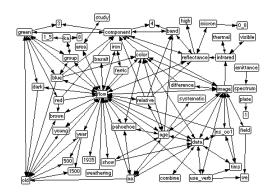


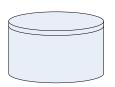
### Schema Explosion

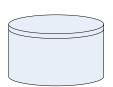


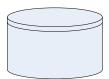


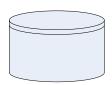










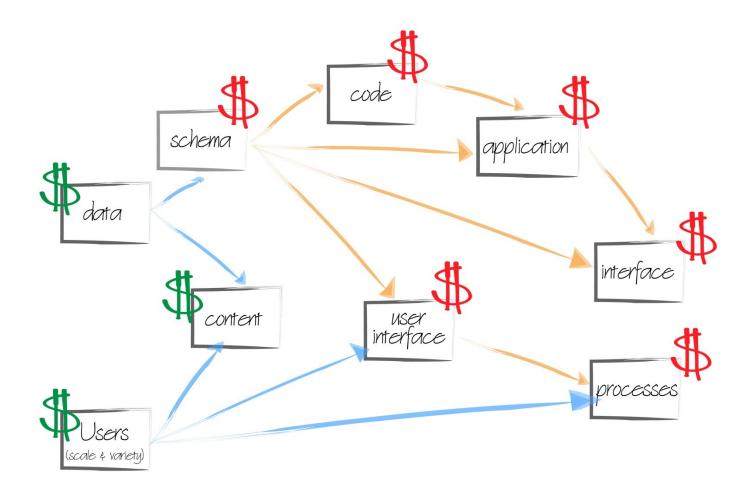






# Increase in Schema Complexity Drives Most of Your IT Costs



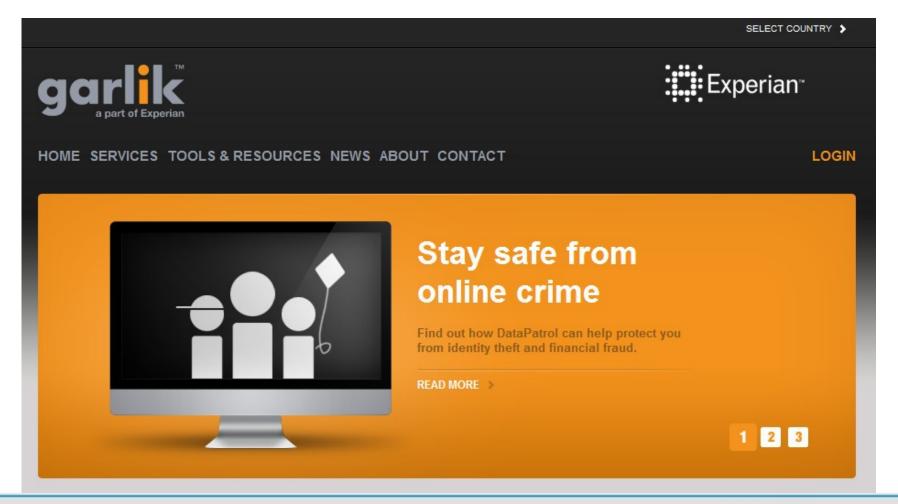




Three companies that have escaped this fate...



## garlik/Experian







#### BBC



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#### SPORT OLYMPICS

Home | Football | Formula 1 | Cricket | Rugby U | Rugby L | Tennis | Golf | Olympics

**Future** 

Team GB | Athletes | Countries | Venues | Guides

19 August 2012 Last updated at 16:24 GMT

#### London 2012

BBC



Which nations got the most out of London 2012 and which took a battering? BBC Sport examines the medals table

#### Headlines

Cuts expected to some GB sports 236

#### FOOTBALL

Coleman welcomes end to Team GB

#### VOLLEYBALL

Brokking leaves due to funding

#### WORLD

In pictures: Olympic homecomings

Lighthouse named after Walcott

Spectacular end to





#### **Amdocs**





#### Frost & Sullivan Name Amdocs BSS Vendor of the Year in Asia Pacific

news: amdocs.com now available in Japanese

news: Globe Telecom selects Amdocs for BSS transformation project



SURVEY: NETWORK
PLANNING BOTTLENECK



AMDOCS NAMED BSS VENDOR OF THE YEAR



CUSTOMER SUCCESS



SERVICE FULFILLMENT STRATEGIES



AMDOCS BLOGS



WINNER: 2012 OUTSOURCING AWARD





What is different about Semantic Technology?

#### Relational v. Pre-relational



- Open standards
- More flexible



#### Semantic v. Relational

- Open standards
- More flexible
- Designed to scale
- Can do things either impossible or very difficult with traditional technology

# How does it work?

## Identifiers



# Local IDs

Really hyperlocal

Empld	FirstName	LastName	Salary
001	Joe	Jones	\$80,000
002	Susan	Smith	\$90,000

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#### **GUIDS**

- May be globally unique, but not globally resolvable
- What will you do when someone sends you a message with this in it?
- {21EC2020-3AEA-1069-A2DD-08002B30309D}



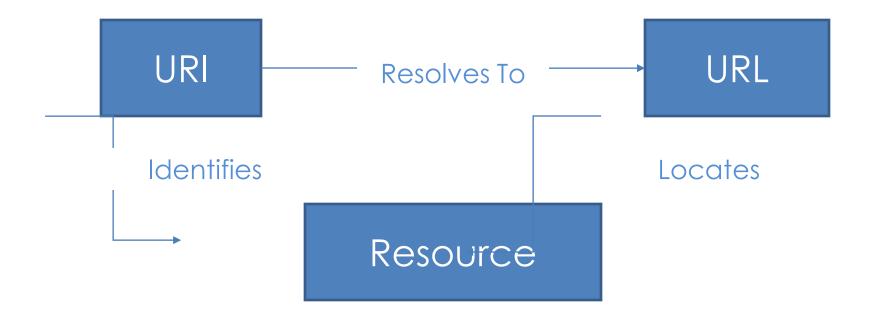
# A global id, that really is global



- URI/URL
  - http://semanticarts.com#emp001







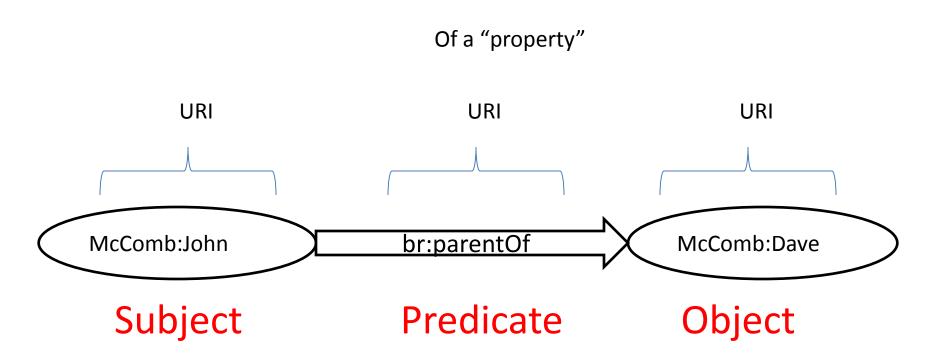
Adapted from: www.sbolstandard.org/initiatives/best-practices



### One way to express information

#### Anatomy of a triple

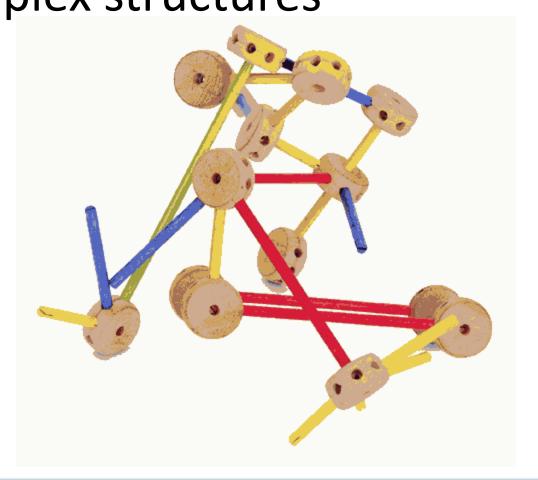






# This simple representation is a building block for complex structures







## Inference



#### **Deriving New Information**

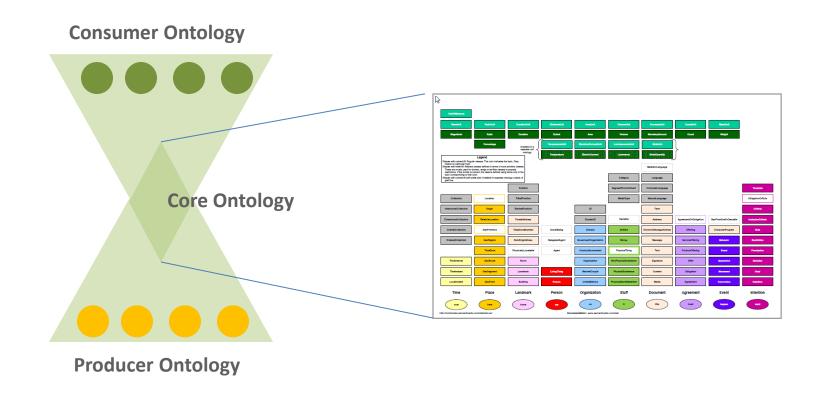
 The key distinction of Semantic Technology is the ability for a machine to derive new information from existing information based on formal classification rules.



# Hyper Modular

# Ontologies are evolvable and can be extended while deployed

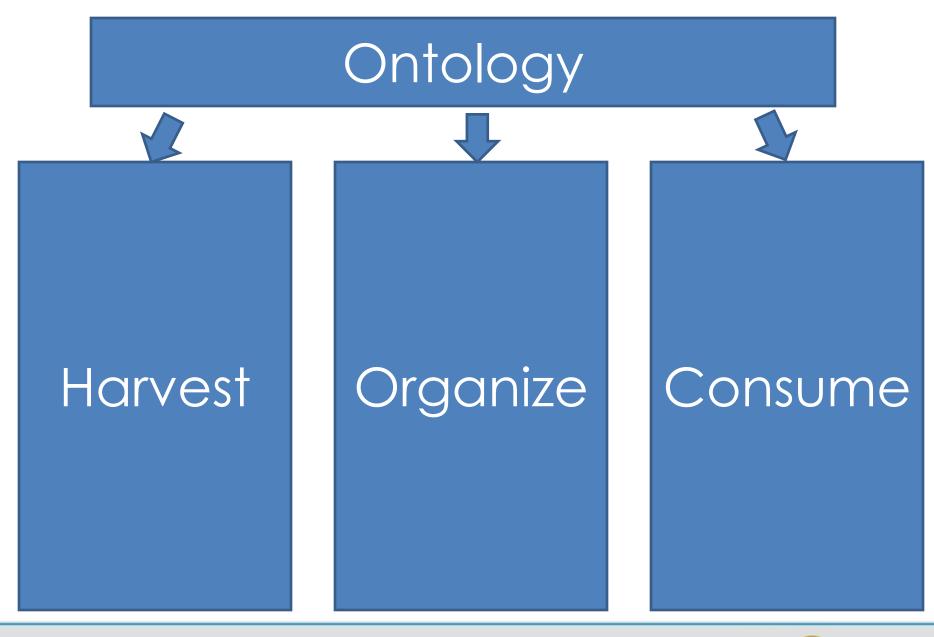






# What can you do with Semantic Technology?

# Semantics is transforming information systems in three main areas





# Getting Started

## Tactical or Strategic

#### **Tactical:**

Pick a sandbox and experiment

Unstructured Integration

Legacy Extraction

External (LOD)

**Dynamic Apps** 

Flexibly Linked
Data

Automatic Classification

Federated Query

**RESTful APIs** 

**Organize** 

Semantically-Driven Work Flow

**Air Transportation Information** 

AIXM, WXXM and FIXM)

**Exchange Conference - (featuring** 

Next Gen Analytics

Mash-ups

SEO

**Harvest** 

Consume





#### Strategic:



## Ontology







**Air Transportation Information** 

AIXM, WXXM and FIXM)

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# Want more? White papers, blogs, this presentation...

www.semanticarts.com

www.semanticarts.com/AirTran

Thank you!

#### Questions









#### **Contact Information**





