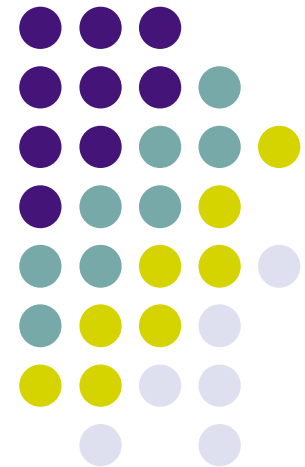


# Web service tunnel vision and Semantic myopia

---

Justin O'Sullivan



# Outline

- λ Who am I?
- λ What I'd like to ask?
- λ Concerns & Challenges
- λ Questions



# Who am I?



- λ PhD Student within the BPM Group (<http://www.bpm.fit.qut.edu.au>), Queensland University of Technology. (Dr David Edmond and Assoc Professor Arthur ter Hofstede).
- λ Systems Architect at GBST (<http://www.gbst.com/>).
- λ <http://www.service-description.com/>
- λ Participant of BPM Center (<http://www.bpmcenter.org>).

# Existing Catalogue



- λ Black & White Cleaning
- λ ABN: 64 010 840 687
- λ HEADING: Lawn Cutting & Maintenance
- λ Ph: 1300 133 811 Fax: (07) 3821 7388
- λ Email: [blackwhitecleaning@bigpond.com](mailto:blackwhitecleaning@bigpond.com)
- λ Website:  
<http://www.blackandwhitehomeservices.com.au>
- λ PRODUCTS & SERVICES: Domestic Cleaning, Commercial Cleaning, External House Washing, Pre Sale Cleaning, Carpet & Upholstery Cleaning
- λ OPENING HOURS: MON 24h TUE 24h WED 24h THU 24h FRI 24h SAT 24h SUN 24h PUB 24h
- λ PAYMENT METHODS ACCEPTED: Bank Card, AMEX, Visa, Master Card, Diners Club, Cheque, Cash
- λ INDUSTRY ASSOCIATIONS: ABSA
- λ ACCREDITATION: Licensed Pest Control
- λ NO. OF EMPLOYEES: 50-100
- λ DATE ESTABLISHED: 1985

**An affordable way  
to a sparkling clean home**

**You'll love the results or you  
don't pay!**

Just call us and one of our professional team will be out to your place in a jiffy and your home will be transformed in no time.

**BLACK & WHITE  
CLEANING**  
1300 133 811



- External House Washing
- Free of Spiders, Webs, Mildew
- Carpets & Upholstery
- Windows Cleaning
- Internal Walls & Ceilings
- Driveways, Paths Washed
- Roof and Guttering
- Vertical Blinds Cleaned
- Cleaning House Ready For Re-Sale
- Builders Final Clean
- Ceilings Vacuuming
- Pest Control Licensed
- Floors Cut & Polished
- Weekly Domestic Cleaning
- Commercial Office Cleaning
- Lawnmowing
- Pruning & Hedges
- Gardening
- Weed Control
- Rubbish Removal
- Tree Lopping

**Call Black & White  
Homeservices**

**1300 133 811**



# What I'd like to ask?



- λ Do I get a discount for paying with a certain type of payment instrument? Is there a surcharge for paying with a certain type of instrument?
- λ How many reward scheme points are required for redemption with a particular service?
- λ What penalties apply if I don't meet my payment obligation?
- λ What rights with respect to suspension / resumption, warranty, extension or privacy does a service offer for its requestors?
- λ What trademark or patent intellectual property rights exist with respect to a service?

# Concern #1



*Conventional services are being ignored for a purely web services view of service description.*

*[Web Service Tunnel Vision]*

- $\lambda$  Ability to compare conventional and web services?
- $\lambda$  Web services will be request mechanisms for conventional services.
- $\lambda$  How do we support service providers in describing their services in ways that they currently use?

# Concern #2



*Semantic richness of non-functional properties of services is not being exploited.*

*[Semantic Myopia]*

- λ Constraints over the functionality – Temporal and locative availability, payment, price, obligations, rights, quality, security, trust, penalties, and discounts.
- λ Necessary pre-requisite for automated discovery, selection, substitution and invocation.
- λ Largely ignoring the context the requestors bring to the discovery process.
- λ OWL-S and WSMO view of NFP's.

# Other Challenges



- λ How do we give requestors the ability to state what they require from a service?
  - λ Value Added Approach vs Goal Based Approach
- λ What level of domain independence should we support within service descriptions?
- λ How do we entice service providers to undertake the (possibly) lengthy task of describing their service(s)?



# Benefits of approach



- λ Domain independent approach to modelling of non-functional properties. [80/20 rule]
- λ Caters for conventional (bricks 'n' mortar) and web services.
- λ We have modelled these properties at a conceptual level (independent of a technology).
- λ Recursive nature of the models.
- λ Comprehensive (semantically rich).

# Sources and References



- λ Justin O'Sullivan, David Edmond and Arthur HM ter Hofstede. Formal description of non-functional service properties. Technical Report FIT-TR-2005-01, Centre for Information Technology Innovation, Queensland University of Technology, 2005.

<http://www.bpm.fit.qut.edu.au/about/docs/non-functional.jsp>

Made available via:

<http://www.service-description.com/>

- λ J O'Sullivan, D Edmond & AHM ter Hofstede, What's in a Service? Towards Accurate Description of Non-Functional Service Properties, Distributed and Parallel Databases, 2(2-3):117-133, 2002.

- λ Yellow Pages (Australia)

<http://www.yellowpages.com.au/>

# Questions

$\lambda$  Any questions??

