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Interoperability, Information Fidelity, and the Need for SOA Healthcare Standards

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What is Interoperability?

Quiz time. Are you interoperable...

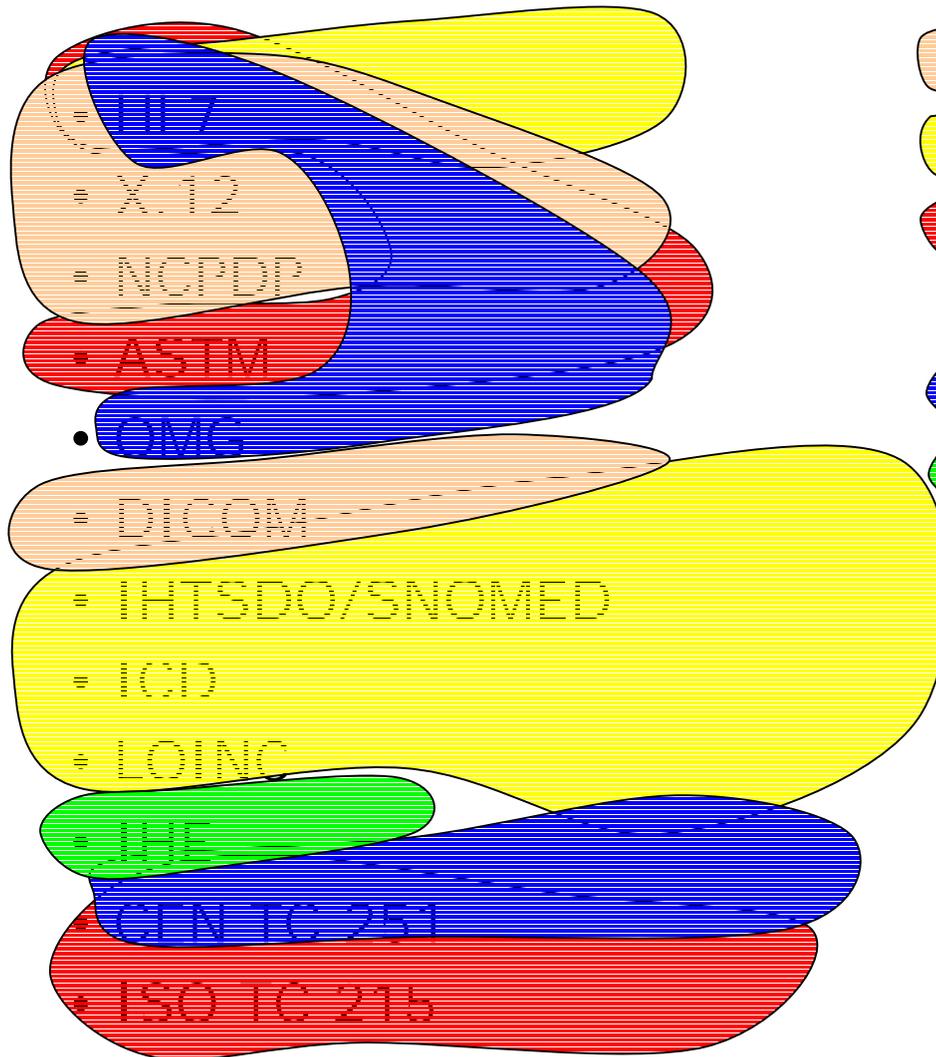
- ... if you and your business partners speak different languages
- ... if gender = "01" means "male" in your business and "female" for your business partner?
- ...if information sharing is primarily by fax or e-mail?
- ... if electronic data is exchanged via DVD-ROM?
- ...if you use XML?
- ...if you use Web Services?

What is information fidelity?

Quiz time. Do you have rich, robust information if....

- ... the definition of “episode” differs within your organization?
- ... your IT systems require users to capture coded data?
- ... you lack processes to validate accuracy of data entry?
- ... you allow localized extensions to your common data set?
- ... business rules are inconsistently enforced depending upon the applications being used
- ... two systems within your organization have the same data content (but that content differs)?

The beauty of standards...



-  *Messaging Standards*
-  *Terminology Standards*
-  *"Functional" Standards;
Structured Doc Standards*
-  *Services Standards*
-  *Standards Profiling*

SOA ≠ Web Services

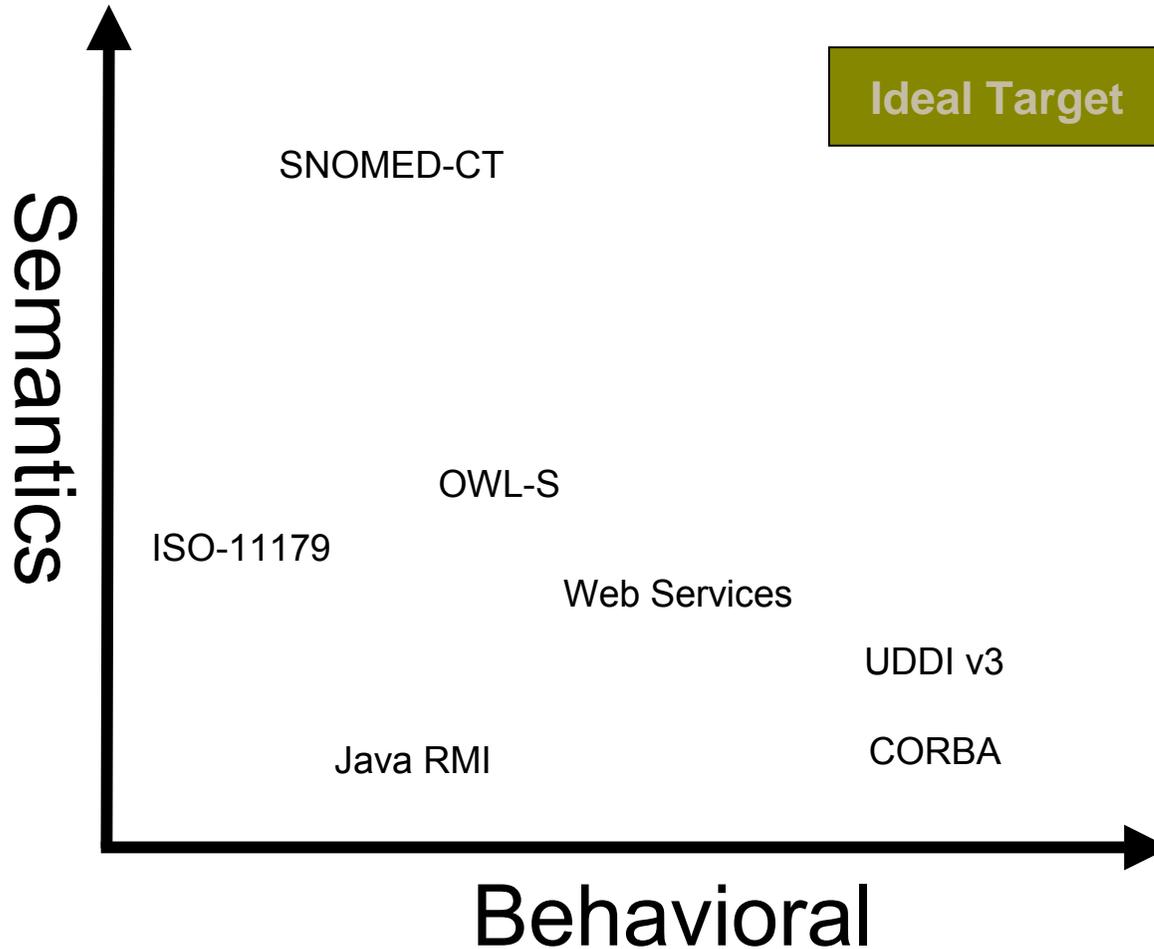
	SOA	Web Services
Is a technology platform?	No	Yes
Is a transport protocol?	No	Yes
Primary ownership is business-line owned?	Yes	No
Affects workflow and business processes?	Yes	No
Is an enabler for business / IT transformation?	Yes	Yes
Is an industry standard?	No	Yes

Our Challenge...

“How do you know that the [web-] services you’re building are not just the next generation of stovepipes?”

Janet Martino, LTC, USAF (Retired),
to a panel of Healthcare IT Leaders

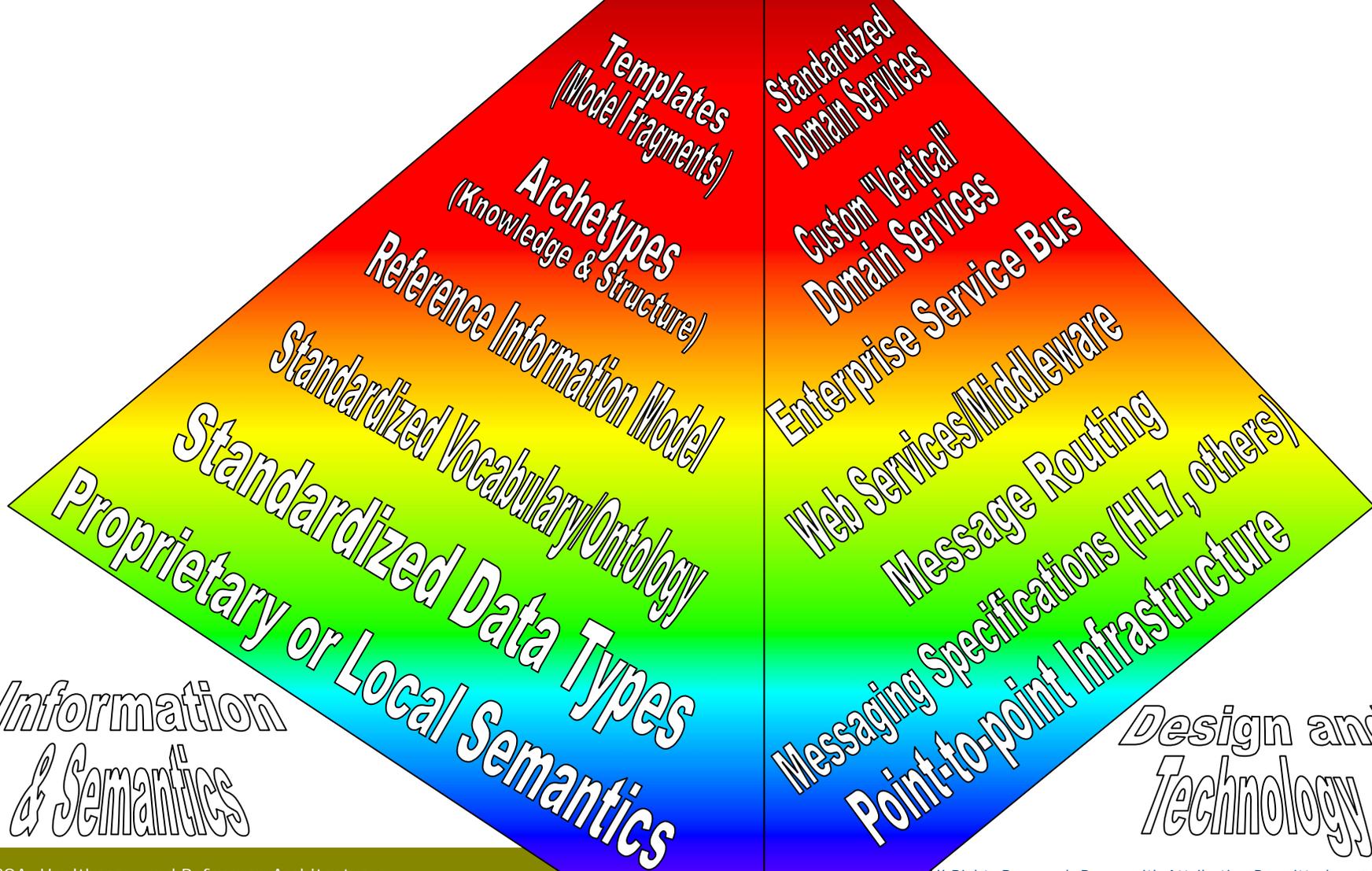
Addressing the Two Dimensions of Interoperability



- Behaviorally, there are a lot of solutions
- Need to marry Semantic Interoperability with Behavior
- The touchstone business case is the notion of automated discovery, composition, and delivery

Designing for Interoperability

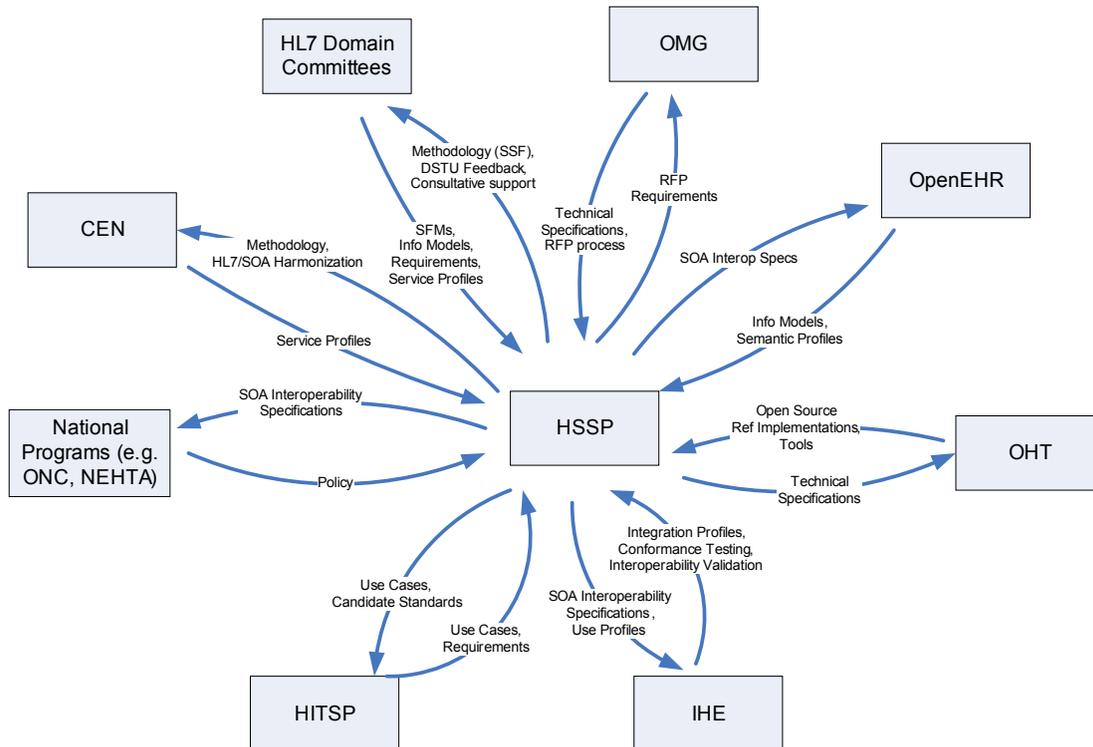
Interoperability



Ability to Interoperate

What is the Healthcare Services Specification Project ?

- Standards specifically to support *healthcare SOA*
- Establish industry-accepted "SOA Service" definitions, functions, behavior, (functional and technical specs)
- Joint effort involving HL7, OMG, Open Health Tools (OHT), and IHE



HSSP's Objectives:

- To create useful, usable healthcare standards that address functions, semantics and technologies
- To complement existing work and leverage existing standards
- To focus on *practical* needs and *not perfection*
- To capitalize on industry talent through open community participation

What does this have to do with SOA?

Everything!

- Provides authoritative “sources of truth” within an organization
- Well defined, cohesive functions that are reused promotes consistency (e.g. shared business rules)
- Authoritative sources minimize unplanned redundancy and promote information quality
- Healthcare-specific SOA services may also define information constructs (e.g., consistent semantics)
- SOA allows for precise, rigorous expression of function (e.g., behavior) and access to those functions by others
- Promote interoperability by defining interfaces that focus on function and not on technology, and supporting standards
- Improve fidelity through use of formally expressed information constructs built on coded data and ontology

Why hold a conference on SOA and Health Quality?

- To break the “log-jam” between IT companies, healthcare software vendors, and healthcare organizations
- Health care as a domain sector is different. That said, not *everything* is different. We can learn from others.
- Without considering quality impact, this would be “just any other” SOA conference
- Eliminate the perception that nobody in health care is doing anything using SOA
- To get beyond the hype. While not a “silver bullet” it provides some real benefits to the health industry

MOST IMPORTANTLY, this event will allow us to share experiences, network with colleagues, and learn the tricks and traps that our peers have encountered.

Our risk...

“It is cheaper and easier than ever to create badly designed applications and spaghetti integration.”

Alan Honey, Enterprise Architect, Kaiser-Permanente

Thank you!

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