



**Its the service, stupid!**

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# Its the service, stupid!



- A generation ago we learnt to abstract from hardware.
- Currently, computer engineering is in the next period of abstraction.
- Currently we learn to abstract from *software* in terms of *service* oriented architectures (SOA).
- It is the service that counts for a customer and not the specific software or hardware that is used to implement the service.



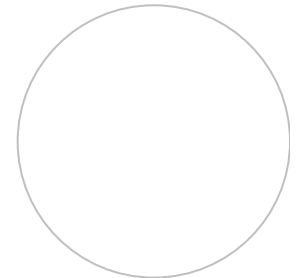
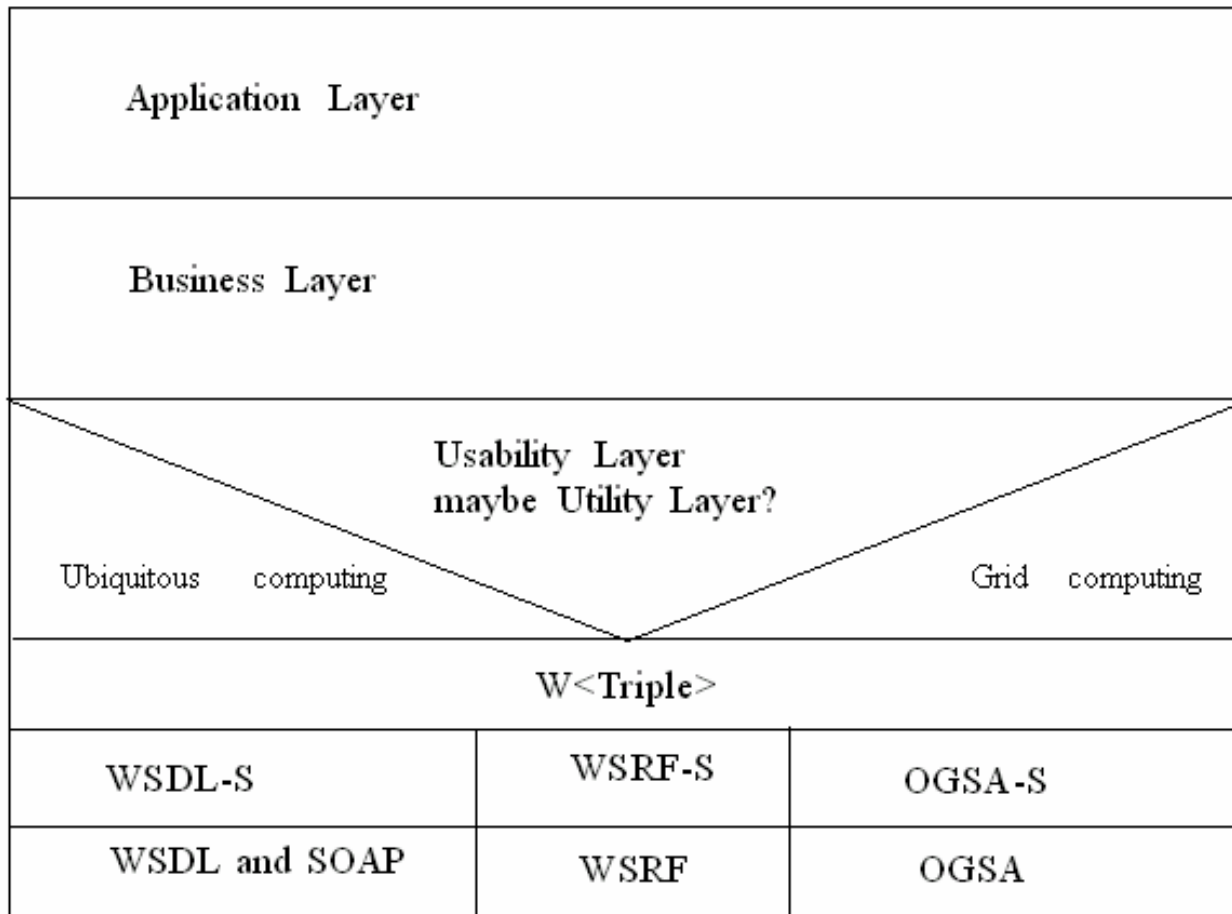
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- Service-oriented architectures will become quickly the leading software paradigm.
- However, SOAs will not scale without signification mechanization of
  - service discovery, service adaptation, negotiation, service composition, service invocation, and service monitoring; and
  - data and process mediation.
- Therefore, machine processable semantics needs to be added to bring SOAs to their full potential.
- **Semantically Empowered Service-oriented Architectures (SESA)** will be the upcoming operation system for handling heterogeneous, distributed computational resources based on software reuse.



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- In a later stage, we may even talk in terms of *problem-oriented* architectures (or more positively expressed in terms of *problem-solving* oriented architectures)
- because SOAs are biased towards the service provider and not towards the customer that has a problem that needs to be solved.



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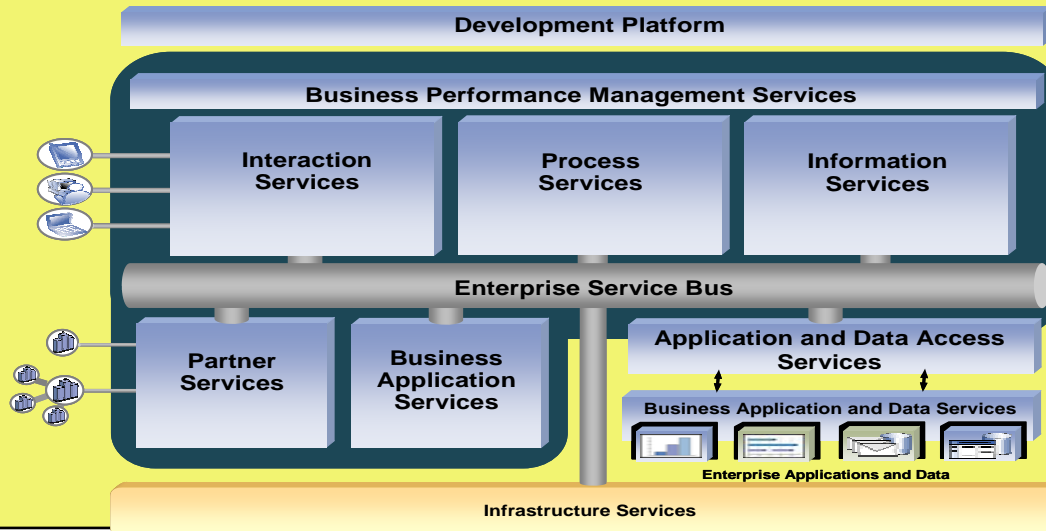


## Problem Solving Layer

### Domain Specific Problem Solving Sol'ns

- Call Center Management
- Payroll
- eCommerce
- Etc
- Etc

## Computing Layer



### Applications & Computing infrastructure

- Applications
- SOA
- Ubiquitous Computing
- GRID
- Utility Computing / On Demand

Michael Broodie  
Chief Scientist Verizon



# Its the money, stupid!



The slide about funding:

- Service orientation and its extension by semantics to cope with heterogeneity puts us in the center of current computer engineering.
- No surprise our funding perspectives in framework VII are brilliant.
- Besides the traditional *knowledge technology* unit we are asked to submit proposals in the
  - *Software and service* unit
  - *Grid* unit
  - *Networks and eBusiness* unit
- All four units grow into the direction of knowledgeable services.
- And our topic is not just decoration but a or the central pillar of these upcoming projects.
- Just as an example, already in framework VI, the *European Semantic System Initiative (ESSI)*, represents nearly 100M€ project budget.