It's the service, stupid!

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• 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 \textit{software} in terms of \textit{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.

\textit{Its the service, stupid!}
• Service-oriented architectures will become quickly the leading software paradigm.
• However, SOAs will not scale without significant 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.
Its the service, stupid!
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.
Its the service, stupid!

Problem Solving Layer

Computing Layer

Domain Specific Problem Solving Sol’ns
- Call Center Management
- Payroll
- eCommerce
- Etc
- Etc

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

Michael Broodie
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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 eBussines* 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.