

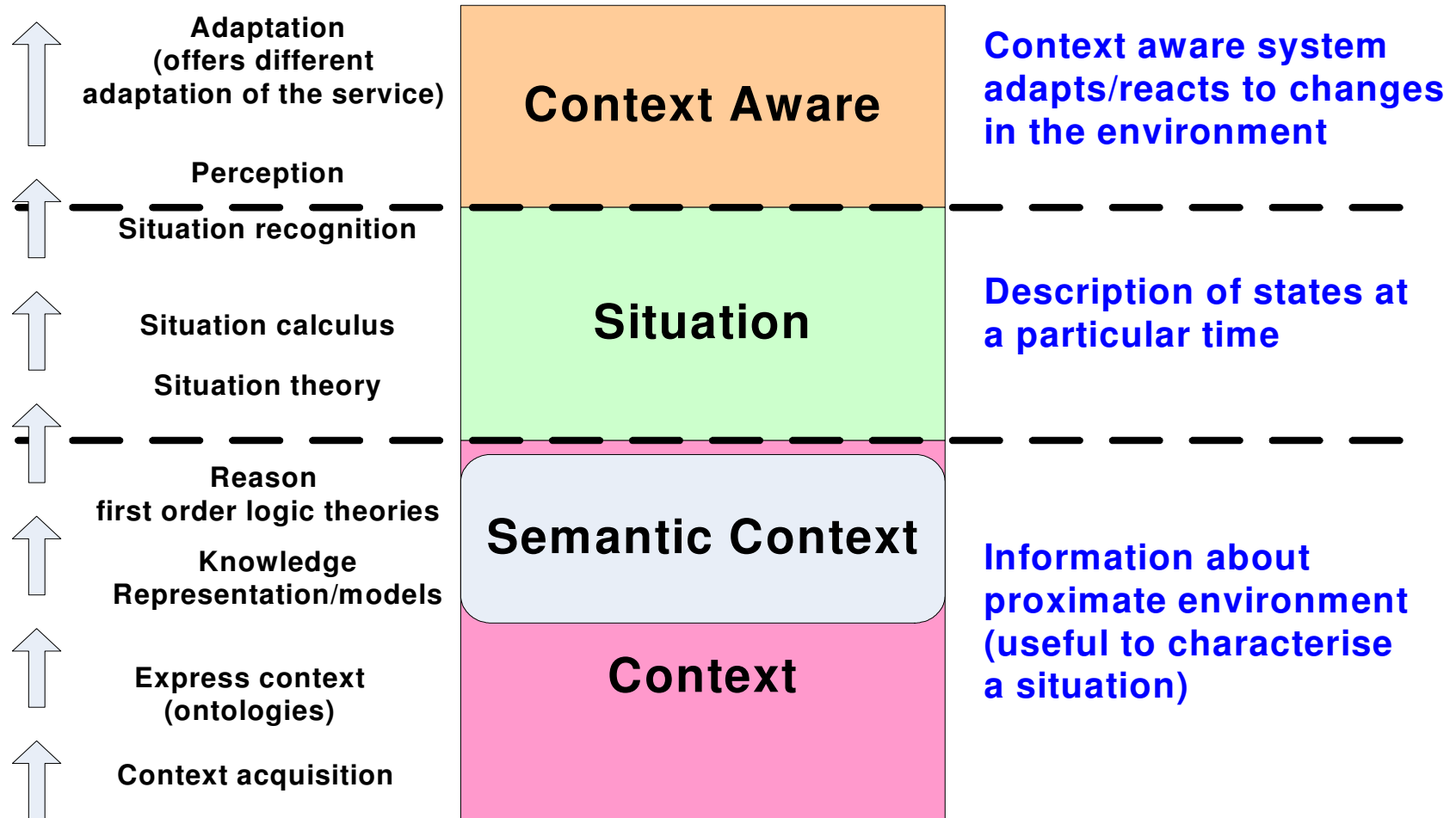


Future Internet Vision: A Context-Aware Perspective

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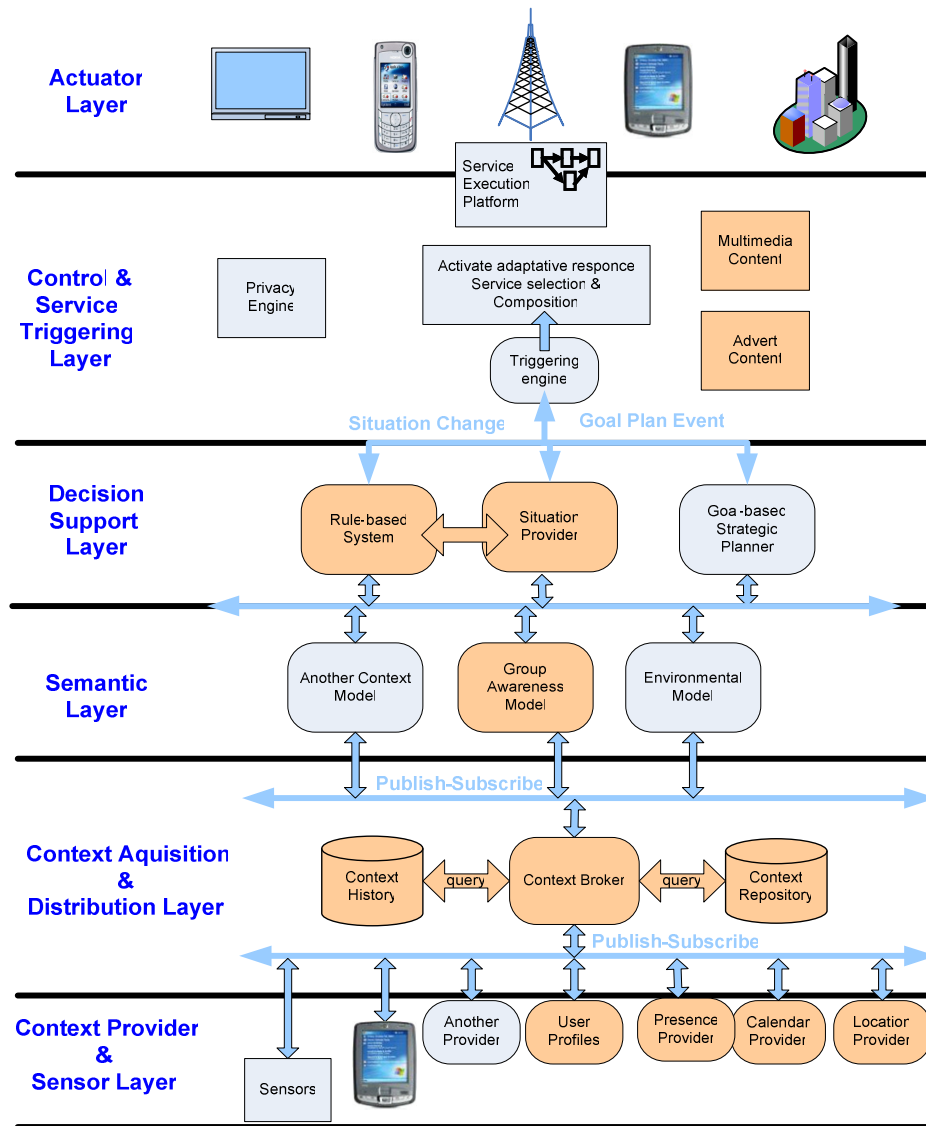


Supporting Context-Awareness





Knowledge Layered Architecture



Awareness manifests itself from the self property of being able to **sense, reason and actuate**.

A future internet capable of embracing this concept and delivering context aware services to users and artefacts elevates this to a pervasive sensing and acting knowledge network. This would be a network able to make decisions, actuate environmental objects and assist users.



Challenges

There are some immense & fundamental challenges:

- This is a major **change in the computing paradigm**. These are pervasive adaptive systems that respond to things around them with **no centralised authority**.
- Services provided are more dynamic requiring **discovery, ad-hoc composition and orchestration**.
- It is a more knowledge based infrastructure that attempts to **recognise situations and reason about the environment**.



Network Support

- **Event based: Event & Context Distributors**
- **Specific “sense-decide-act loop” support**
- **Sensor & Actuator integration**



A Final Thought

**Have I just described
the Web X.0 vision?**