

What Research is needed on Telecomms Services?

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Technical Issues

- generic issues:
 - what is a telecomms service?
 - what is a service architecture?
 - how can service obligations and responsibilities be specified?
- distribution issues:
 - how can core/periphery services be made to interwork?
 - how can distributed, diffuse and composite services be handled?
 - what are the implications of multimedia/mobile services?
 - how can service scripting be supported and policed?
 - are TAPI/TSAPI/Parlay/JAIN adequate for third-party service development?
 - how can service interworking be ensured?

Service Coordination

- cross-service issues:
 - how can network/PBX/CTI/Internet services be made to interwork?
 - how can number portability be handled with mixed public/private networks?
 - how can personal messaging be unified (e.g. voice mail, email)?
 - what is the role of agents in service coordination?
- object-oriented approaches:
 - what is the role of CORBA and TINA?
 - how could CORBA interfaces as services be given semantics?
 - how are (ODP) trading concepts relevant to services?
 - what does an ODP-like viewpoint on services offer?

Surrounding Issues

- commercial aspects:
 - how do technical issues in service design relate to business processes?
 - how can service creation be de-skilled?
 - what training is needed in service design and analysis?
 - what would a billing SCE or API look like?
 - how can services be tested?
 - how can the source of a service fault be isolated?
- evolutionary aspects:
 - what hybrid techniques will evolve (e.g. formal + informal, offline + online)?
 - how will changes in services affect the nature of interaction and detection?
 - why is feature interaction considered mainly in telecomms services?

Personal Perspective

- research still catching up practice
- developments still technology-driven rather than service-driven
- top-down (user) rather than bottom-up (engineering) view needed
- broad interpretation and framework for services should be evolved
- service framework needs to be standardised, with stable APIs
- service and technology issues need to be separated
- balance convergence (technical limits) and divergence (commercial pressures)
- theory and practical support are needed for service construction
- feature interaction *detection* should disappear as a subject
- quality of service needs as much prominence as functionality