

Search and Discovery Questions

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Heterogeneity & Diversity

- Q1.1: How do we best support the **formulation of search queries** over possibly rich Future Internet artefacts, over a set of different types of devices and modalities?
- Q1.2: Given the Polymorphic facets of the Internet (e.g. communication-centric, information-centric, context-centric, resource-centric, content –centric, service/computation- centric, device-centric, object-centric and management-centric Future Internet), **how a search environment should look like?** Are the open, federated search services a/the solution

Heterogeneity & Diversity

- Q1.3: Do we need specific **infrastructures** and **representations** to support **search by agents**?
- Q1.4: Can we **chain (interoperate) search** and discovery engines?
- Q1.5: How can we implement/architect search and discovery over **a range of information artifacts** including services, sensor networks and rich multimedia content? What types of indexing/caching could support FI search and discovery?

Heterogeneity & Diversity

- Q1.6: What **types of representations (meta-data)** could we use to support Future Internet search across the heterogeneous resources? How would these be created and maintained?

Human Factors

- Q2.1: how do we support **discovery using social/emotional cues**, individual vs group (is the group an average over the individuals?). For group search issues related to identity, social group, empathy, arise
- Q2.2: How do we best take into account the **diversity of the user community?**
- Q2.3: How do we address **ranking, user feedback** about the relevance of search results, and quality of the recovered information?

Human Factors

- Q2.4: How do we best incorporate **human computation** into search and discovery engines?
- Q2.5: How can we provide **better recommendation systems** based on search environments?

Real Time Issues

- Q3.1: How do we manage **service & discovery** in the FI in **real-time** when everything (producers, consumers, networks) is recomposing and moving in real-time?
- Q3.2: How do we manage the **visibility of services in real-time?**
- Q3.3: How do **balance visibility and real-time requirements?**

Real Time Issues

- Q3.4: How do we **manage changing relationships?**
- Q3.5: Should we discern between **different types of urgency?**

Security & Privacy

- Q4.1: How do we manage **privacy, trust and security** within search?

Evaluation & Benchmarking

- Q5.1: How can we **evaluate** our search environments **in FIRE** facilities?