

Search Technologies in the Critical Path of the Next Generation Internet

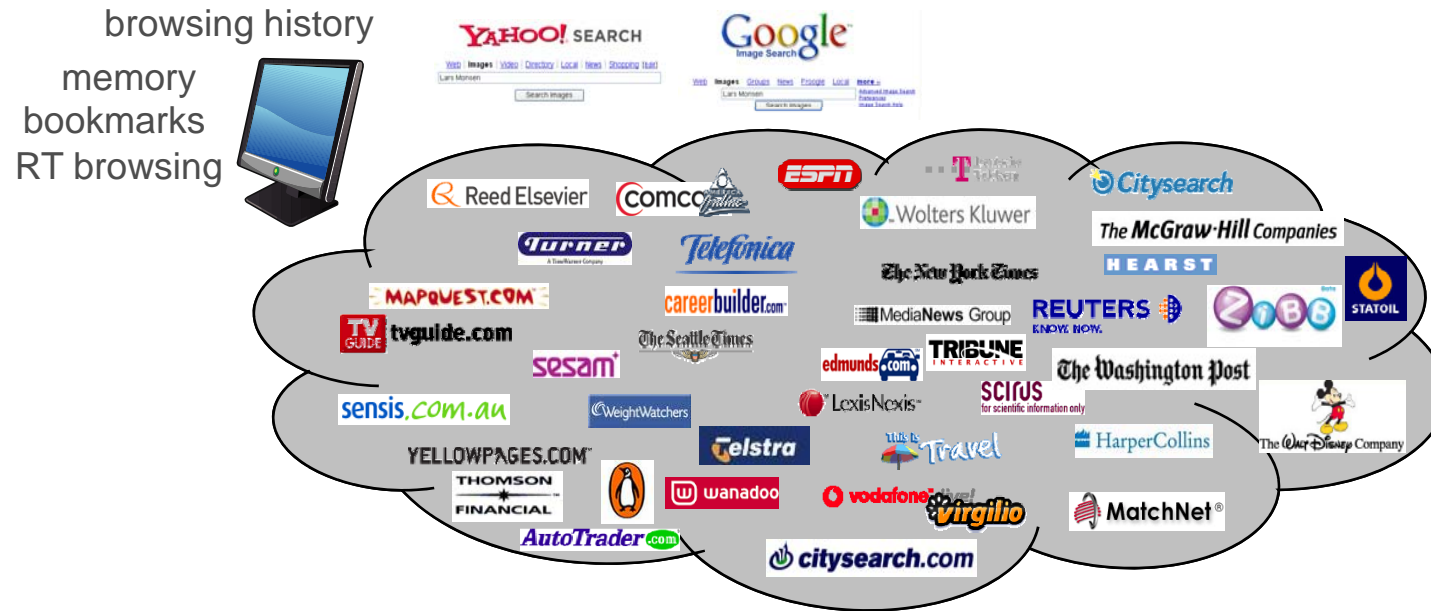
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fast

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(1) Search in the Critical Path



- Search has become the portal; the *interface* to large-scale Internet and enterprise data.
- The good news: destination and speciality sites emerging.

(2) Also in Enterprise Critical Path

– Search *embedded* in a lot of business-critical applications:

- Business intelligence.
- Surveillance and security.
- Fraud detection.
- Quality management.
- e-commerce.
- Recommendation systems.
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Example: Rakuten

“eBay of Japan”



Handling Extreme Query Volumes While Keeping the Catalog Up-to-date

- ✓ Handling 500 updates per second.
- ✓ Extreme performance requirements with 2,000 QPS during normal traffic, peak level of 3,000 QPS in real-time scenario.
- ✓ Generates \$12M of transactions per day through search.



(3) What is Search then?

- Naive interface hides extremely complex technology:
 - 0,2 second query response time.
 - 10+ Billion documents.
 - x00 millions of users.
 - Extra functionality locks in users:
 - E-mail.
 - Storage.
 - Social networks.
 - "Office" applications and widgets.
- "Battle of the consumers."

(4) (Some) Implications

- Technological:
 - Pervasive; embedded and in the **critical path**.
 - Evolving technology: context-sensitive, personalized information **provisioning**.
- Economical:
 - Room for a whole separate **industry**.
 - Vital for digital marketplaces - changing **advertising** ecosystem.
- Ethical and legal:
 - Preservation of **privacy**.
- Social and cultural:
 - **Users** socially activated – impact on trends, customs and authorities.
 - Users swayed by the taste of others – **conformity**.
 - Consumers provided free services – **user locking**.
 - **Anglofication?**

(5) Summary

- Extreme scale information access mastered through search technologies.
- Search technologies is in the critical path between *intent* and *content*.



Thank you – questions?



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