

Data Sharing:

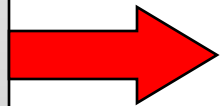
Different Needs, Different Solutions

(<http://www.esp.org/rjr/Data-Sharing-RJR.ppt>)

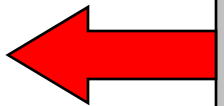
Robert J. Robbins
rrobbins@fhcrc.org
(206) 667 4778

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Different Needs, Different Solutions



(<http://www.esp.org/rjr/Data-Sharing-RJR.ppt>)



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Simple Fact

Sequencers (and other data-intensive instruments) are readily available to RO1 researchers.

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In some communities, data sharing is both needed and expected.

In many labs, local data management has become the rate-limiting step.

Topics

- Data Sharing
- Data Exchange Standards
- Industry Trends: Information Appliances
- Industry Trends: Information Services

Data Sharing

Driving Parameters

Data Sharing

Not all data-management or data-sharing or data-exchange problems are created equal.

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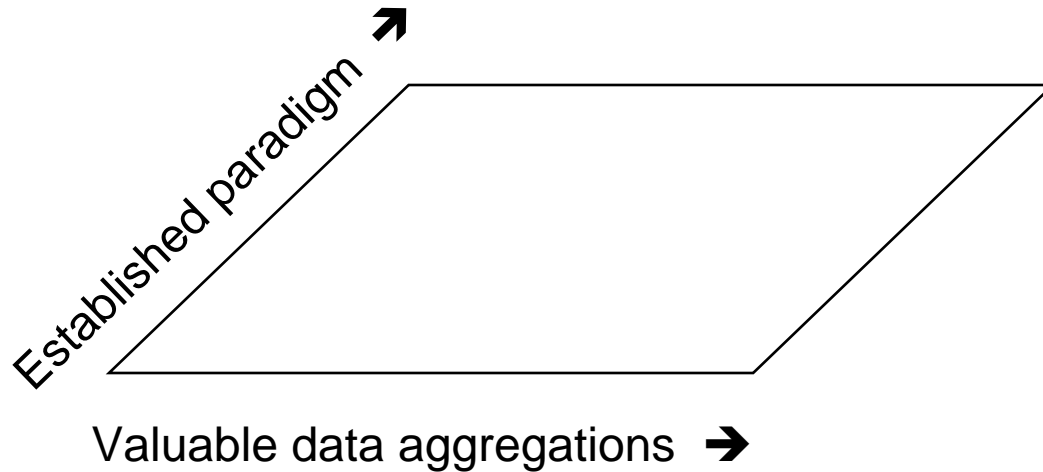
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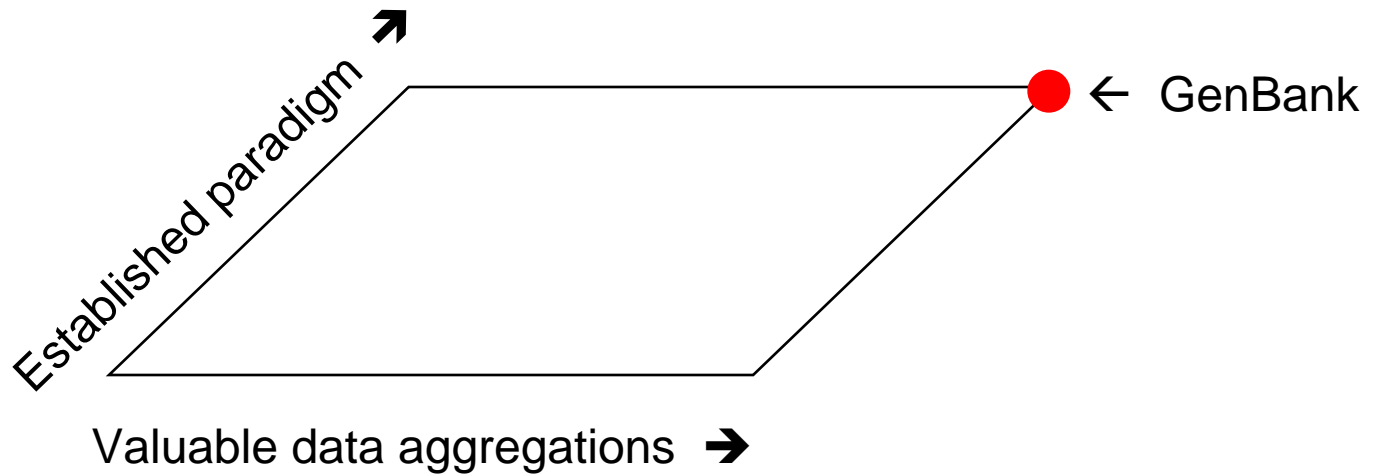
Different needs call out for different solutions.

Some of the different needs trace directly to different attributes of the data themselves.

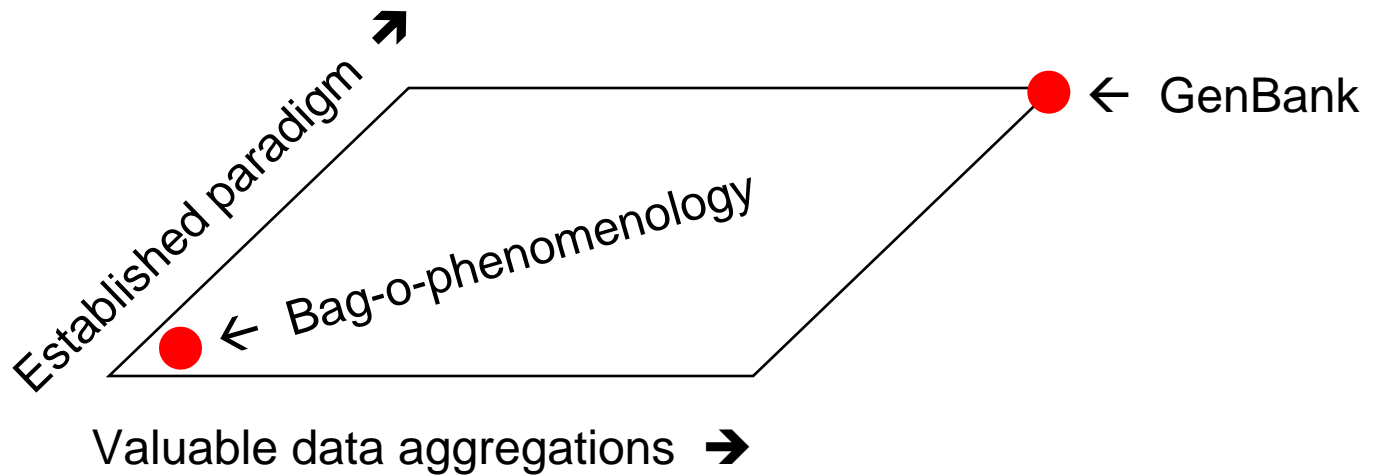
Data Sharing: Driving Parameters



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Data-sharing continuum:

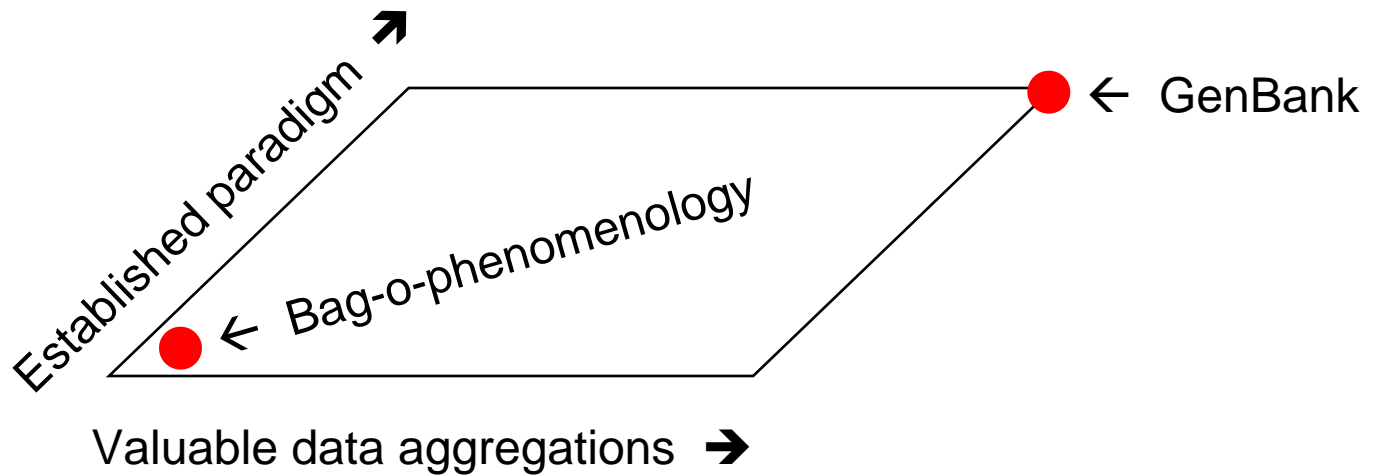
None: data intended for local use only

Collaboration: data shared only with active collaborators

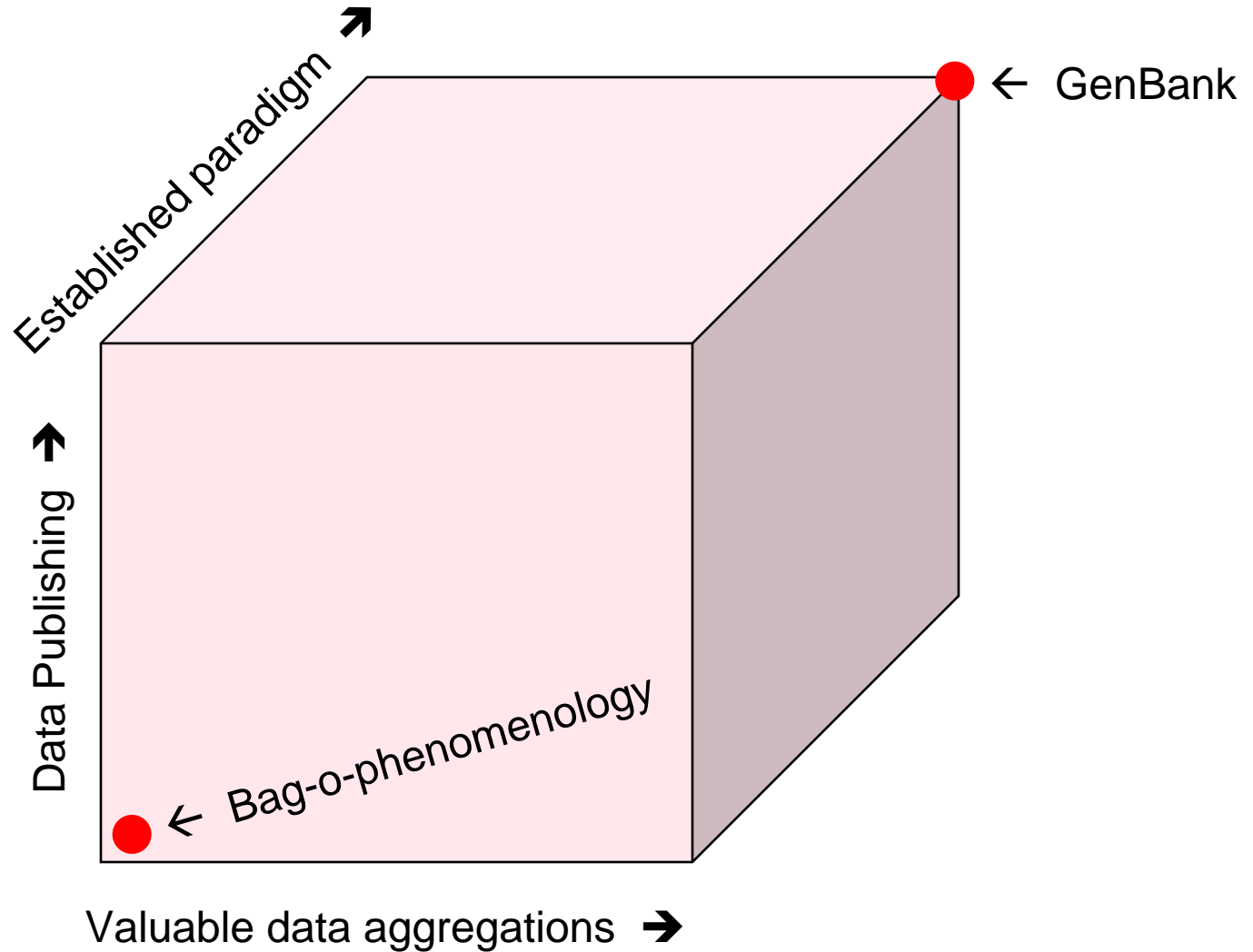
Community: data shared with members of a community

Open: data published and made available to the world

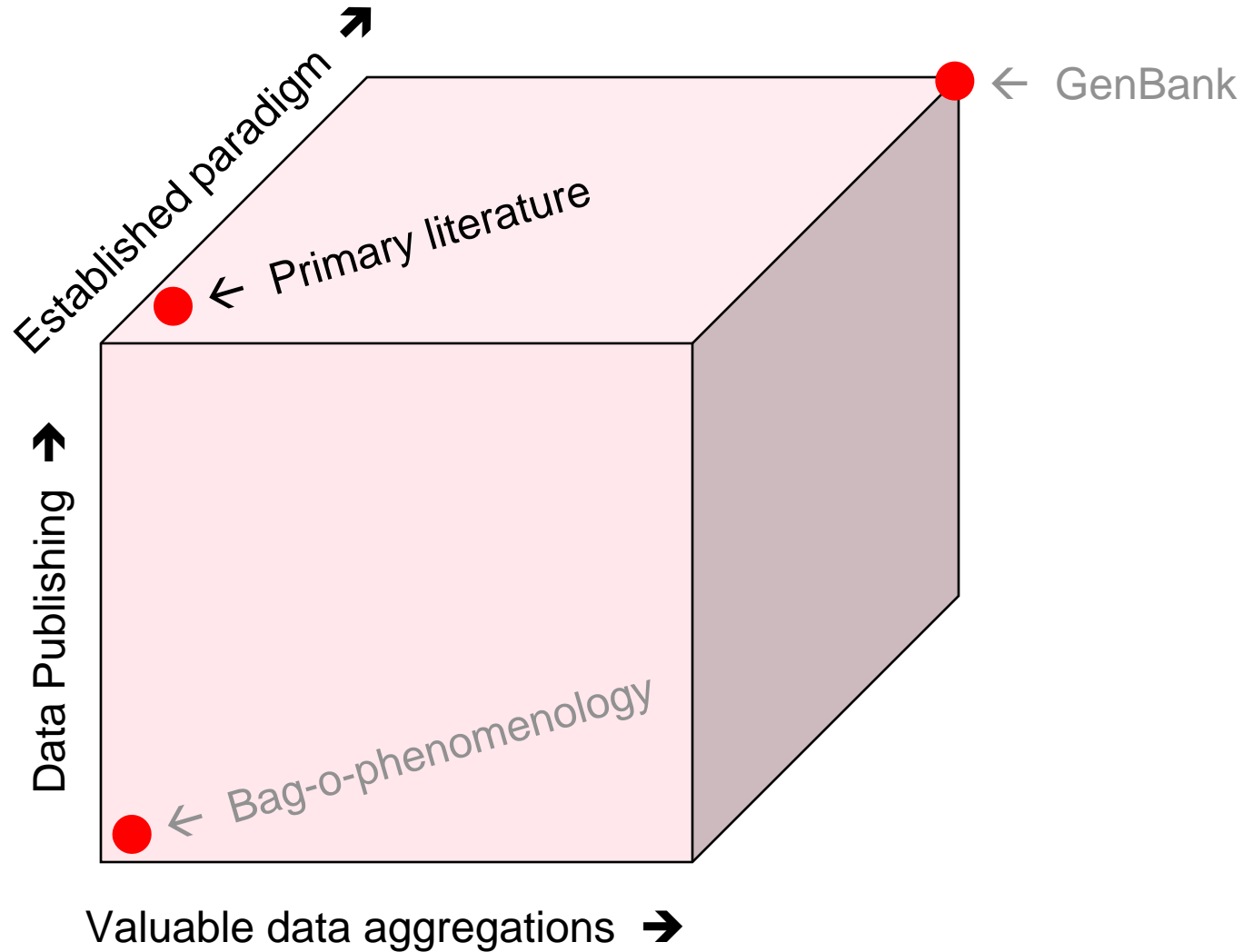
Data Sharing: Driving Parameters



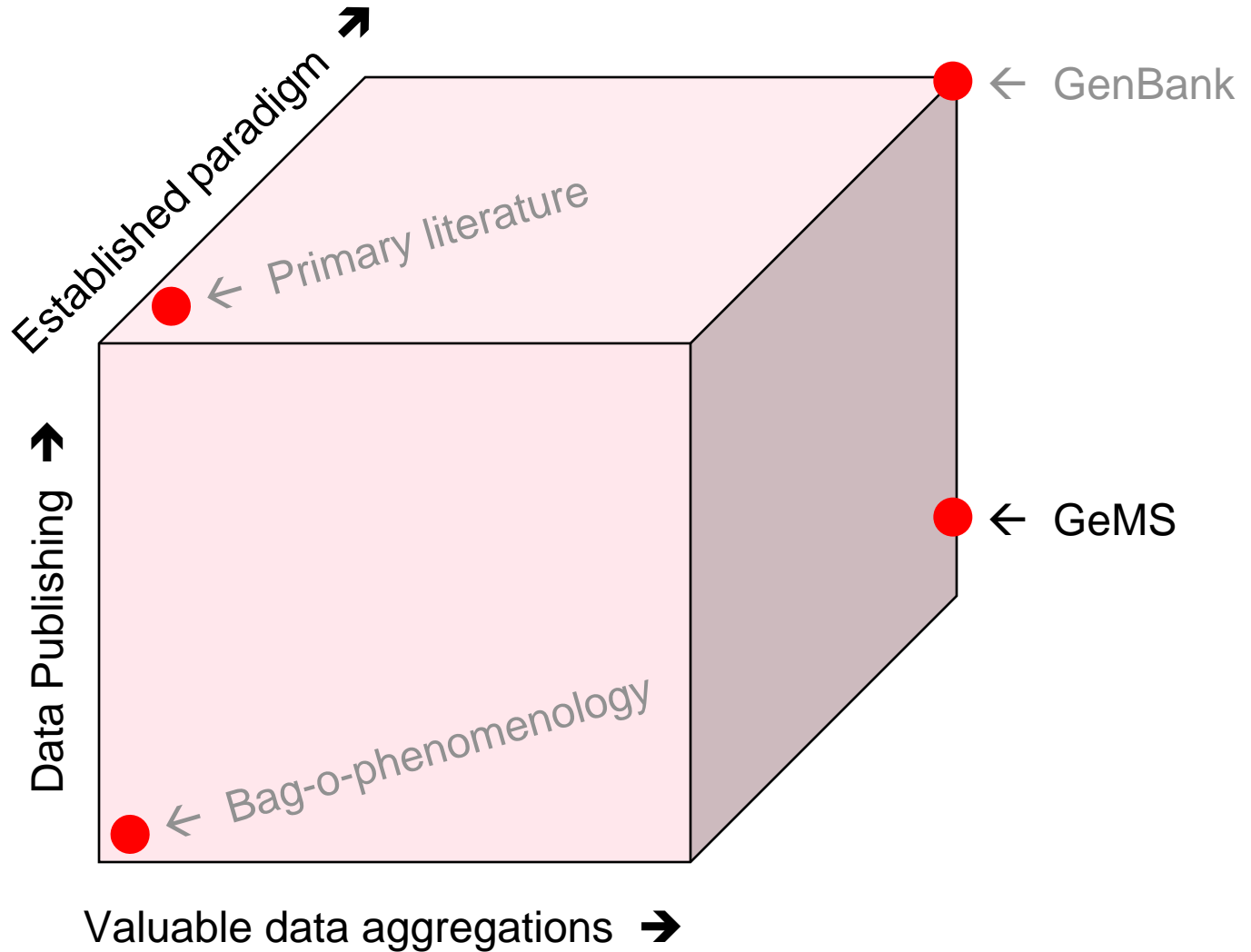
Data Sharing: Driving Parameters



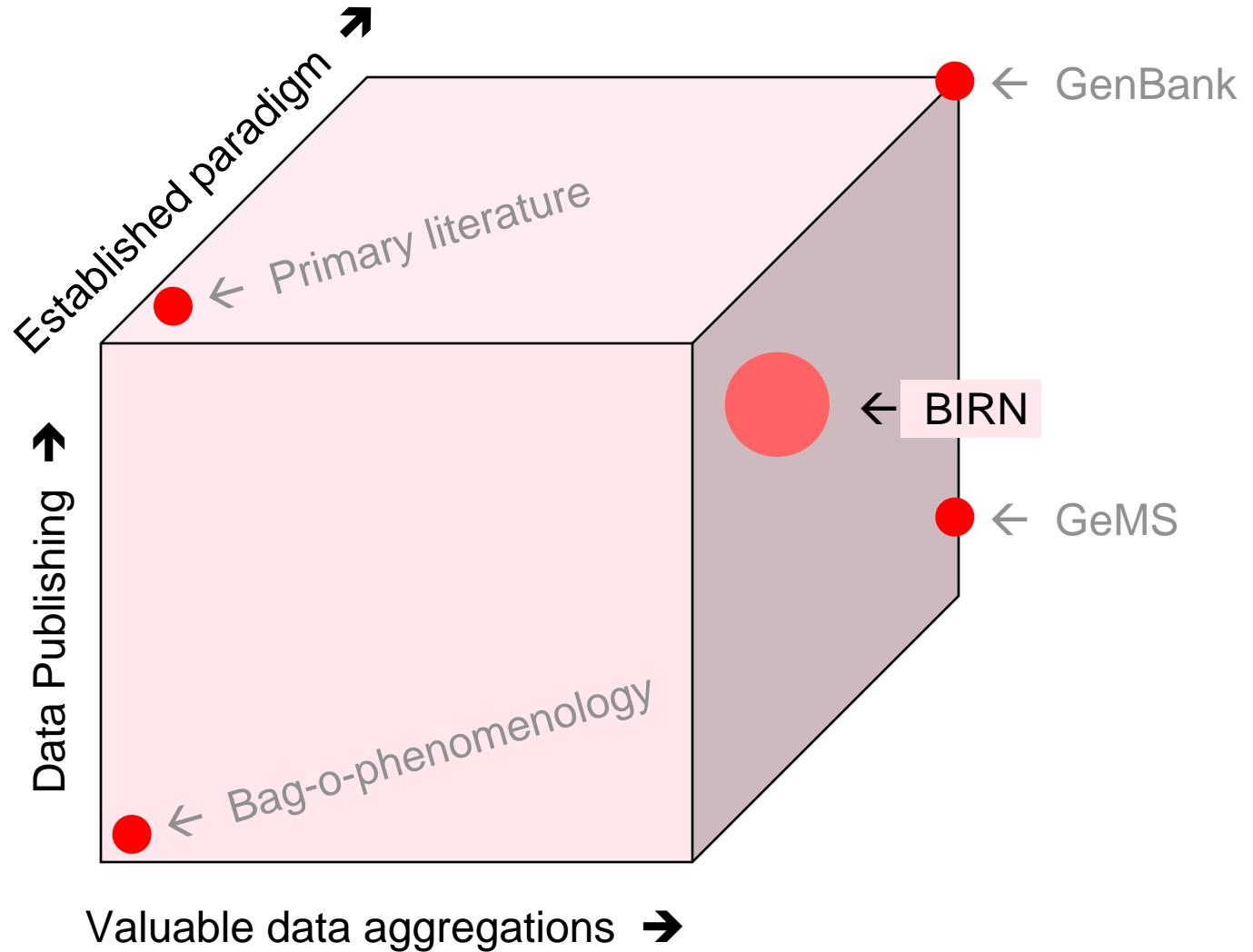
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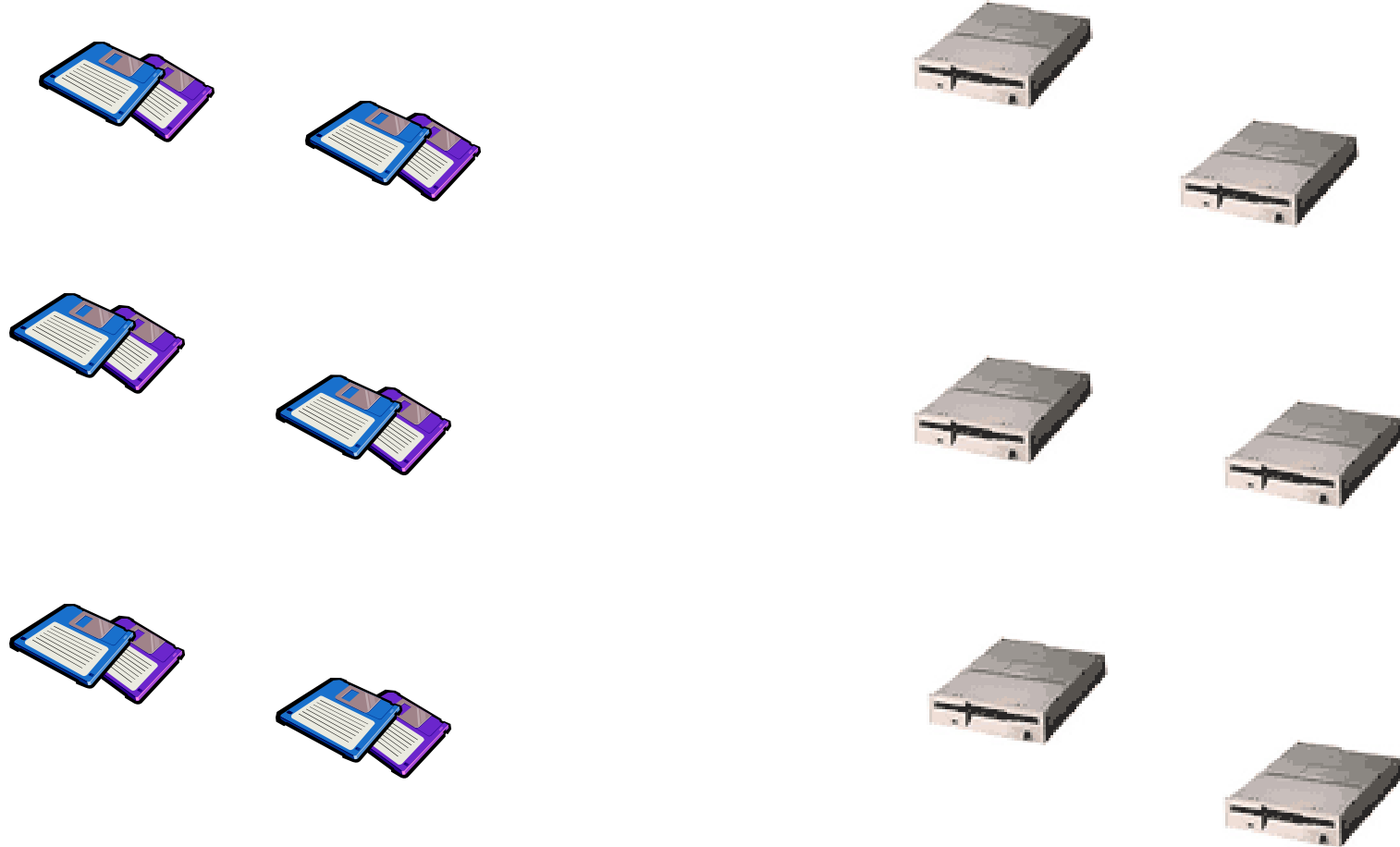
Data Sharing: Driving Parameters



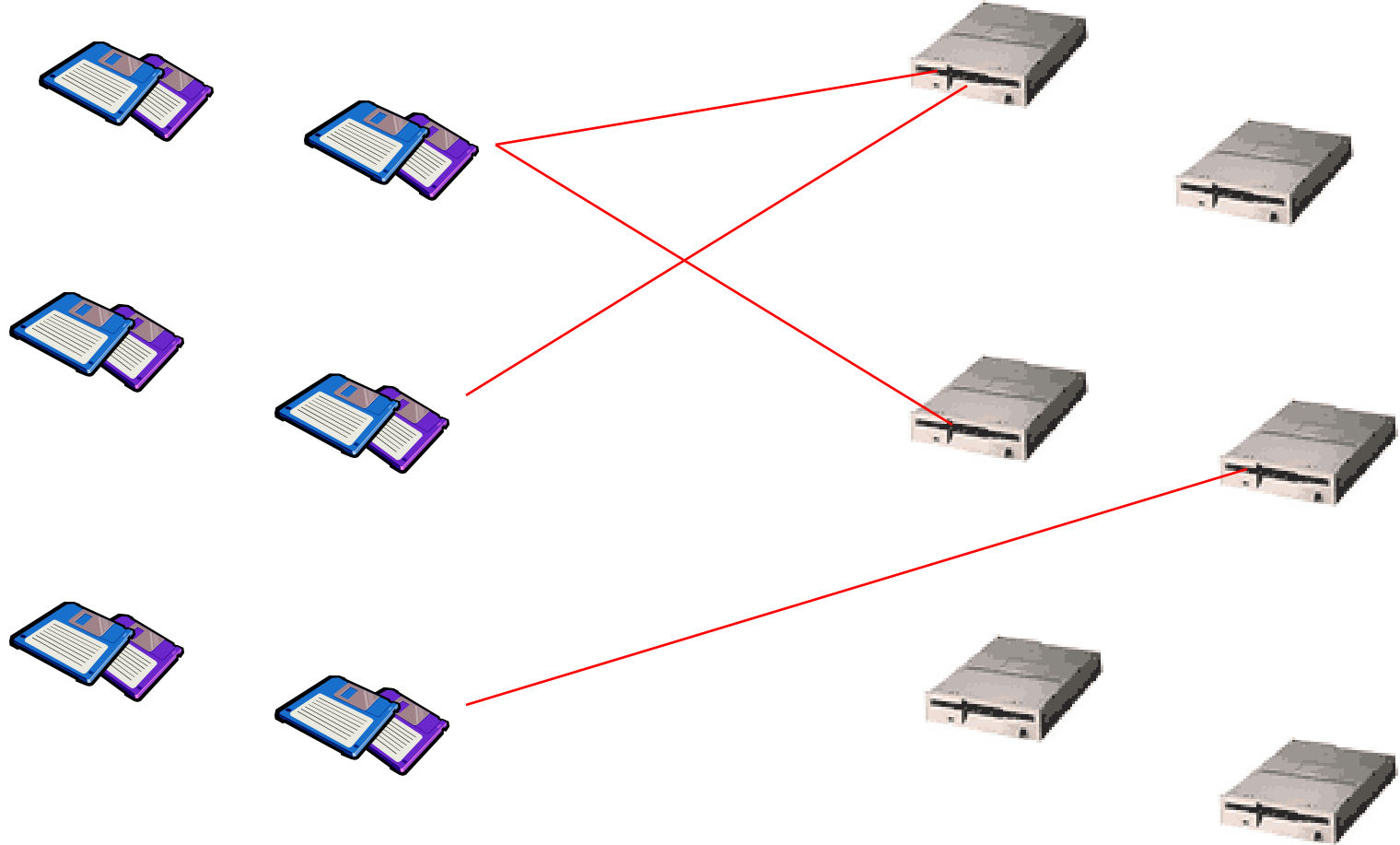
Background

Data Exchange

Bad Data-exchange Standard



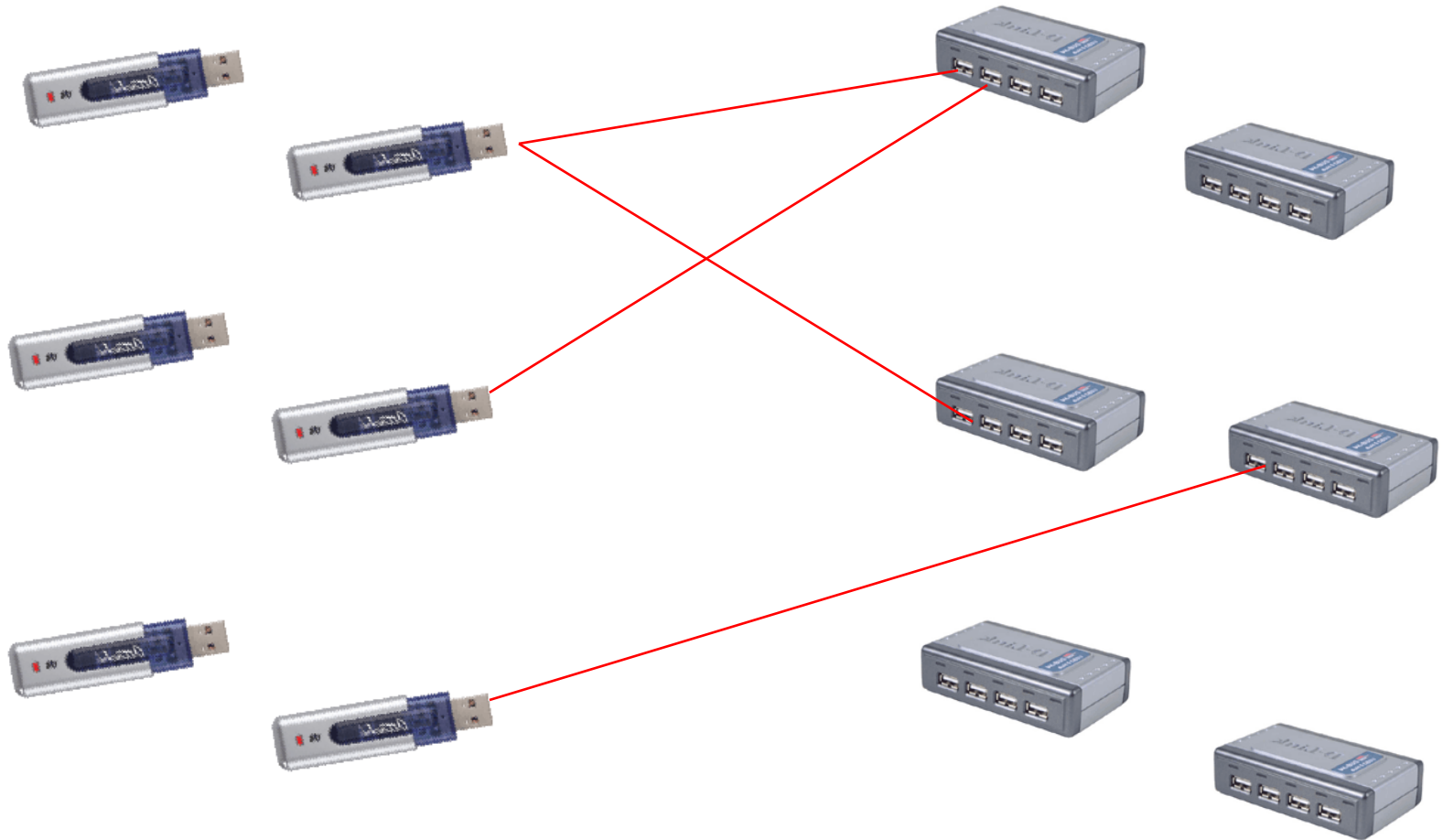
Bad Data-exchange Standard



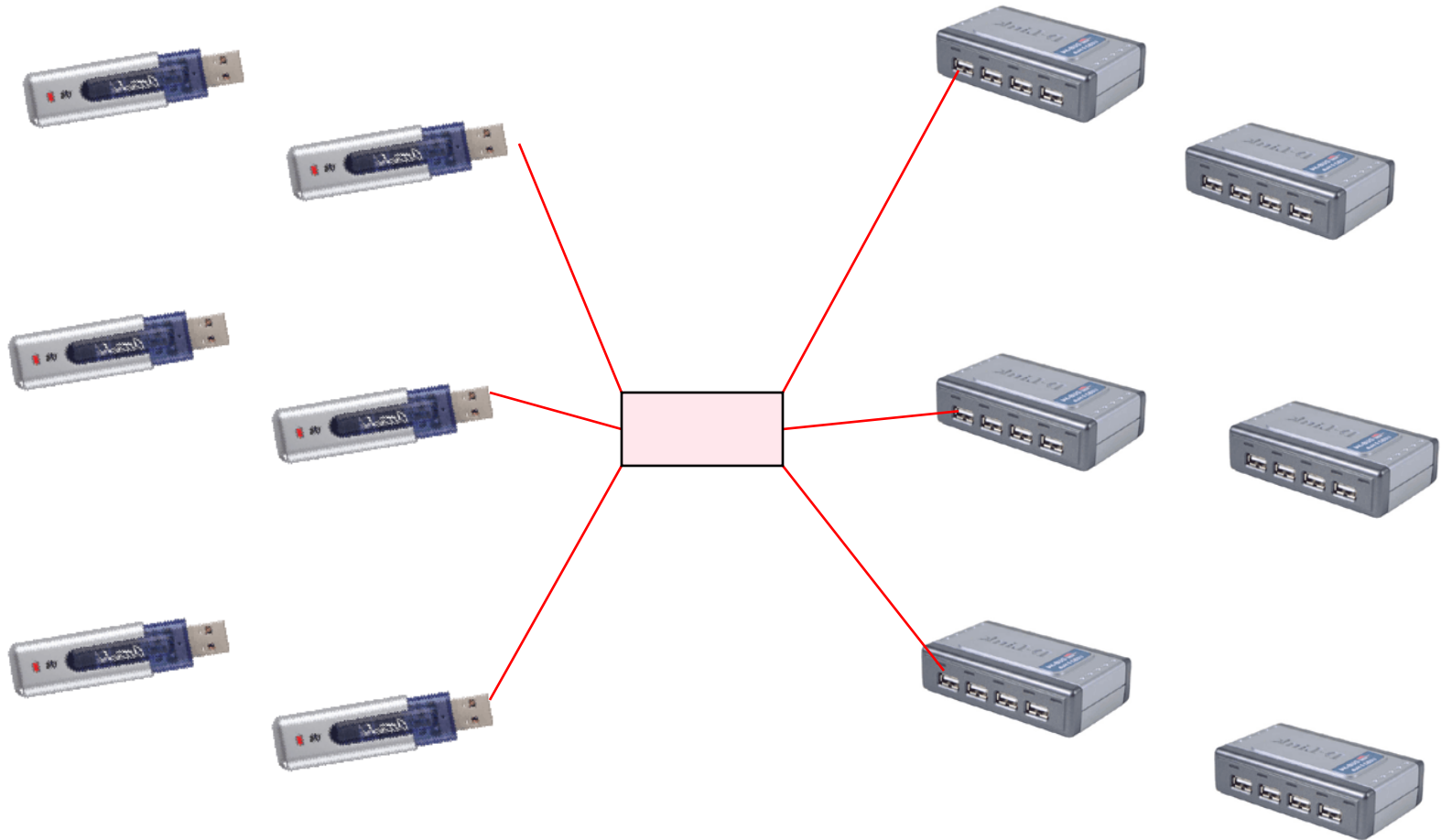
Good Data-exchange Standard



Good Data-exchange Standard



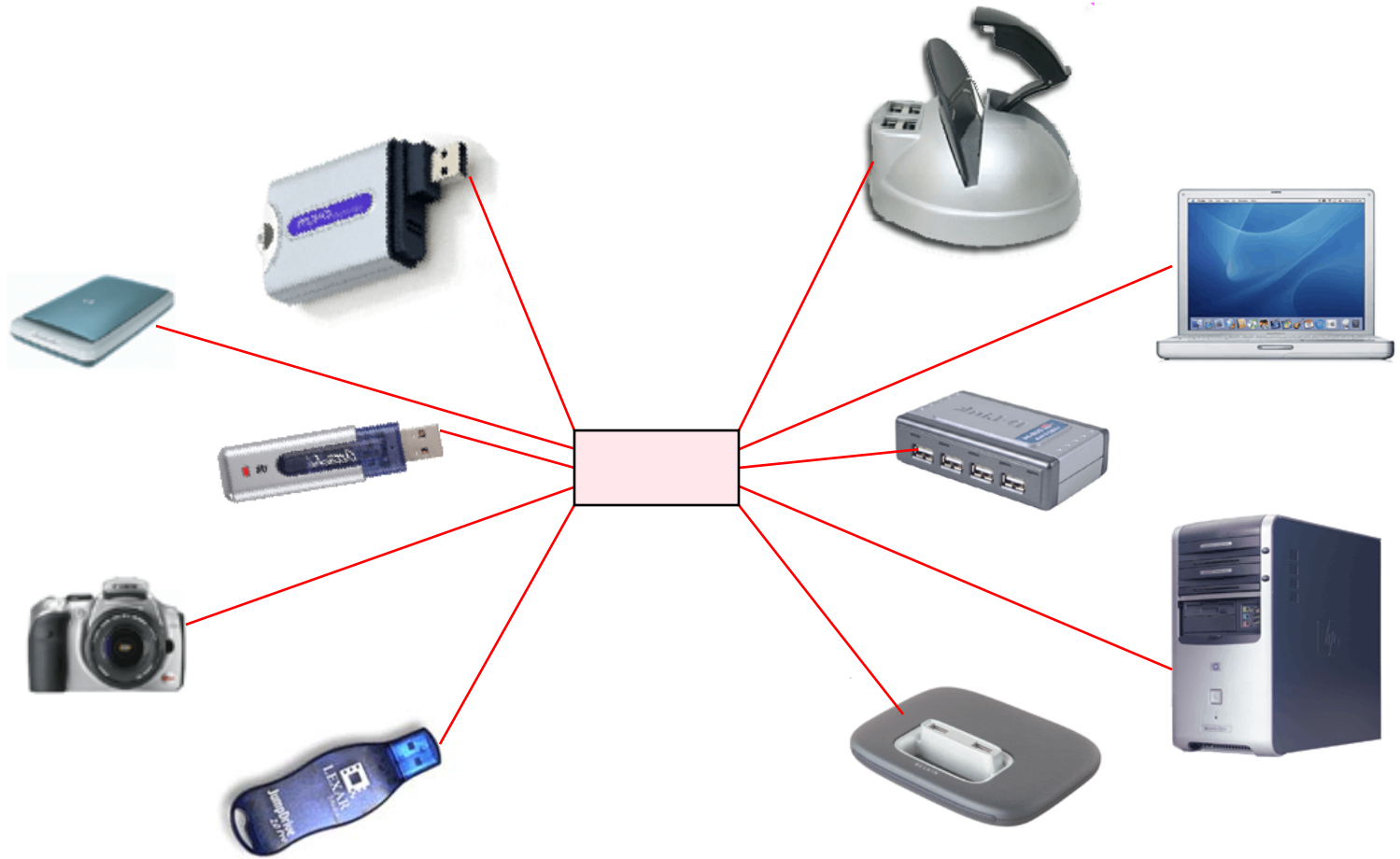
Good Data-exchange Standard



Good Data-exchange Standard



Good Data-exchange Standard



Good Data-exchange Standard

LESSON:

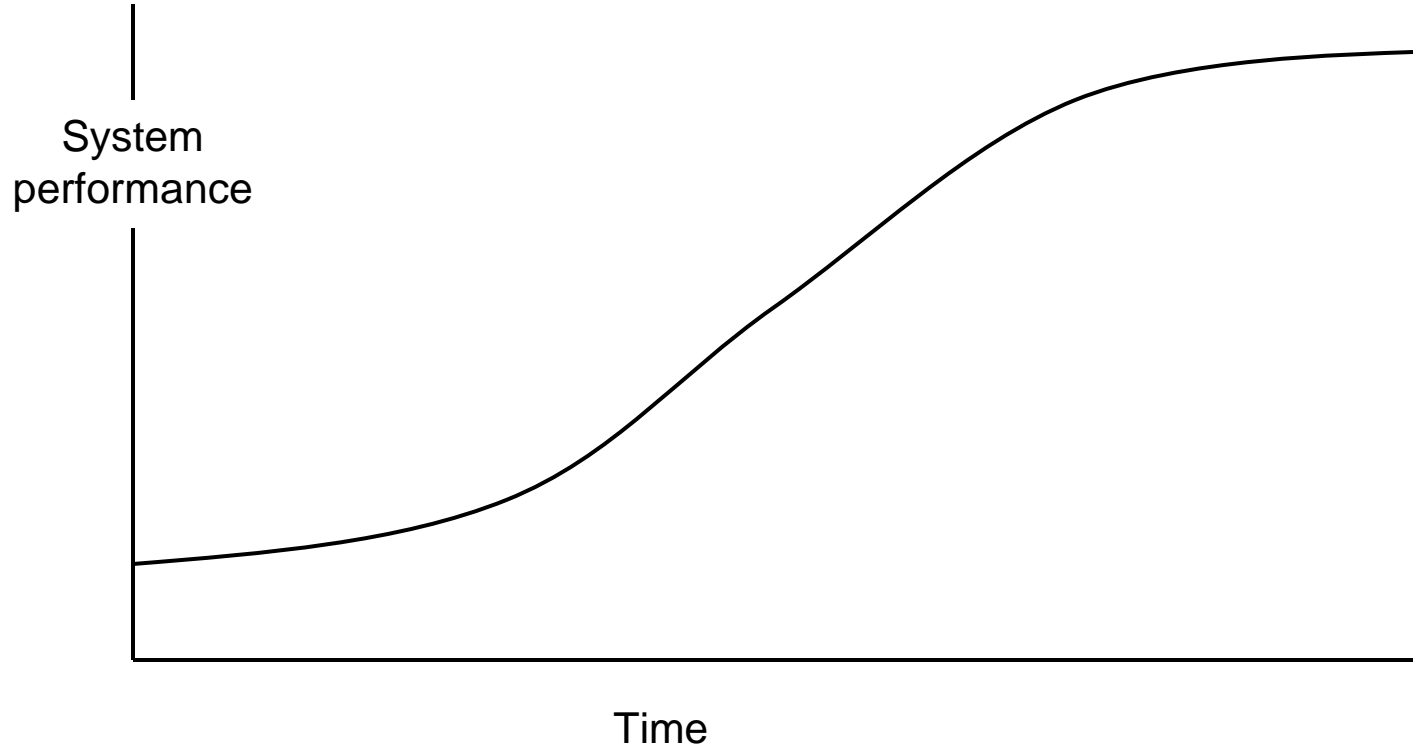
Design for change



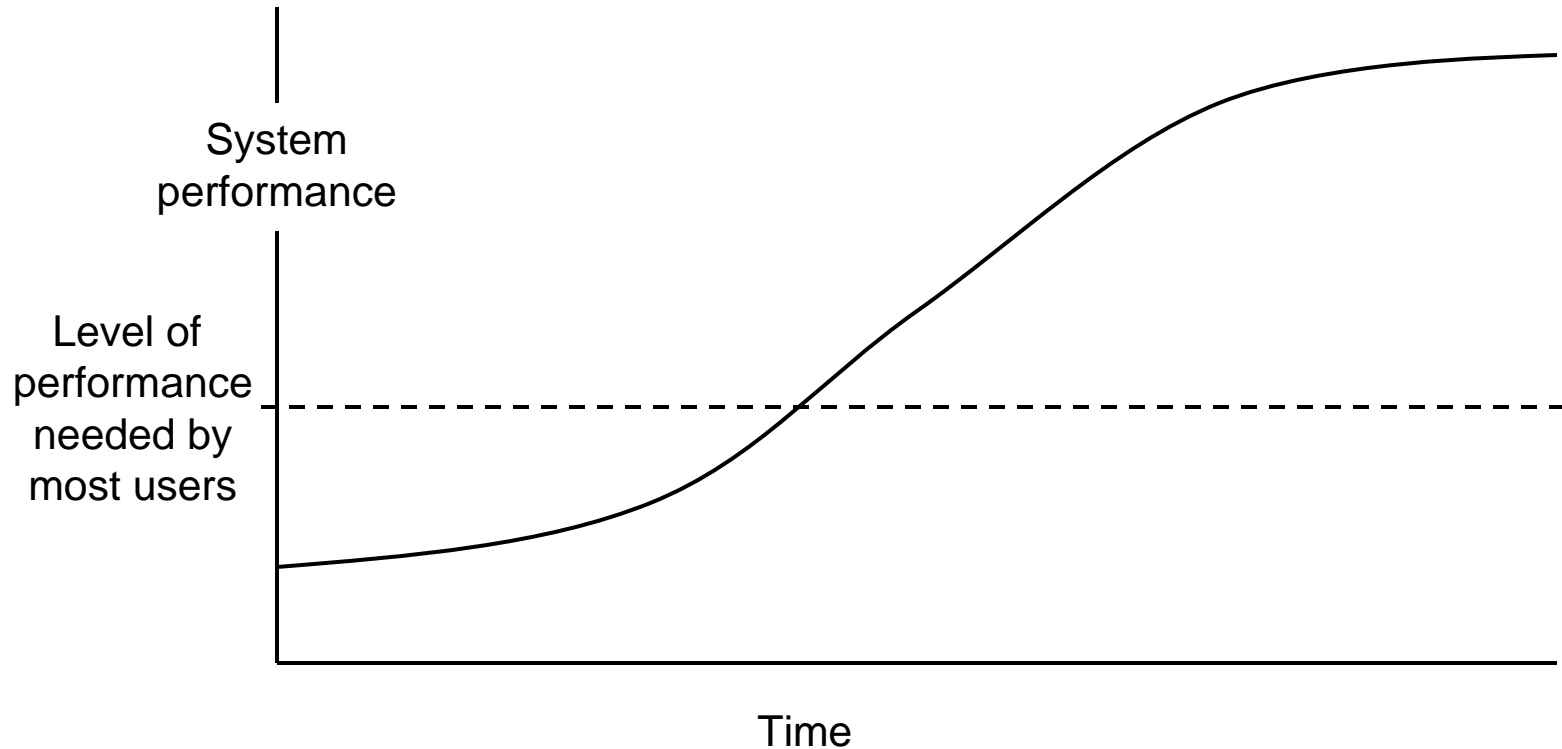
Background

Industry Trends

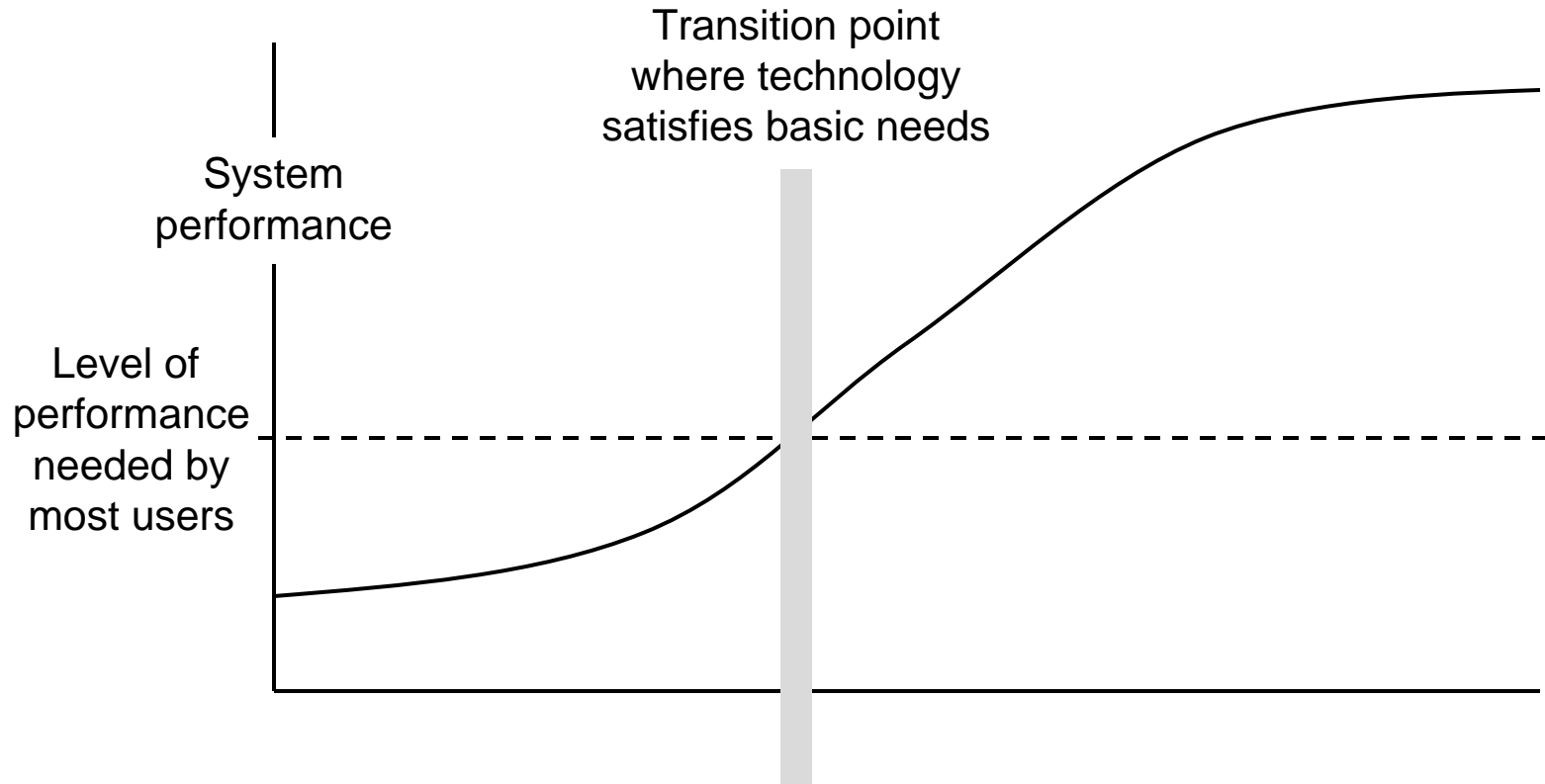
Industry Trends



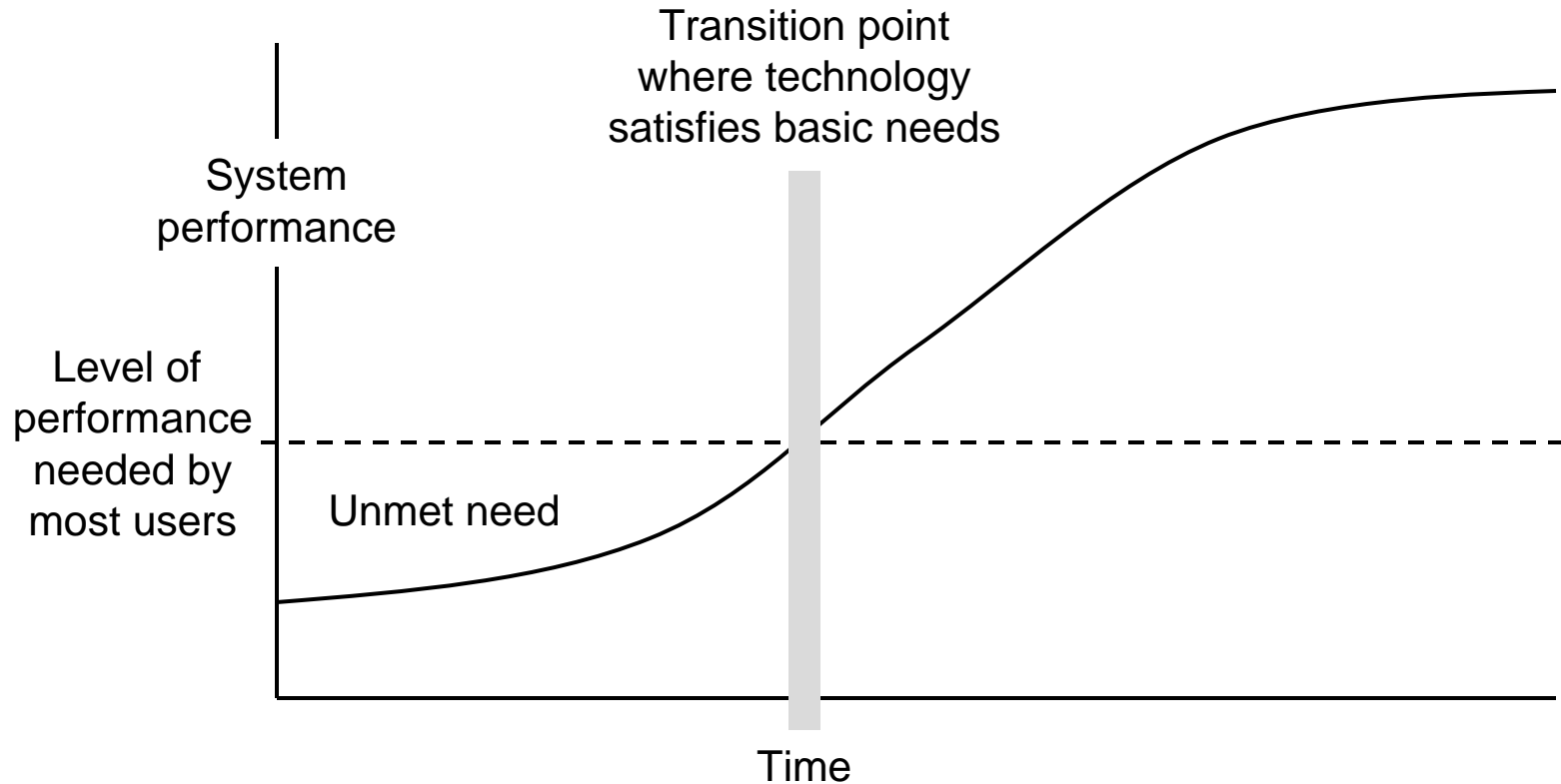
Industry Trends



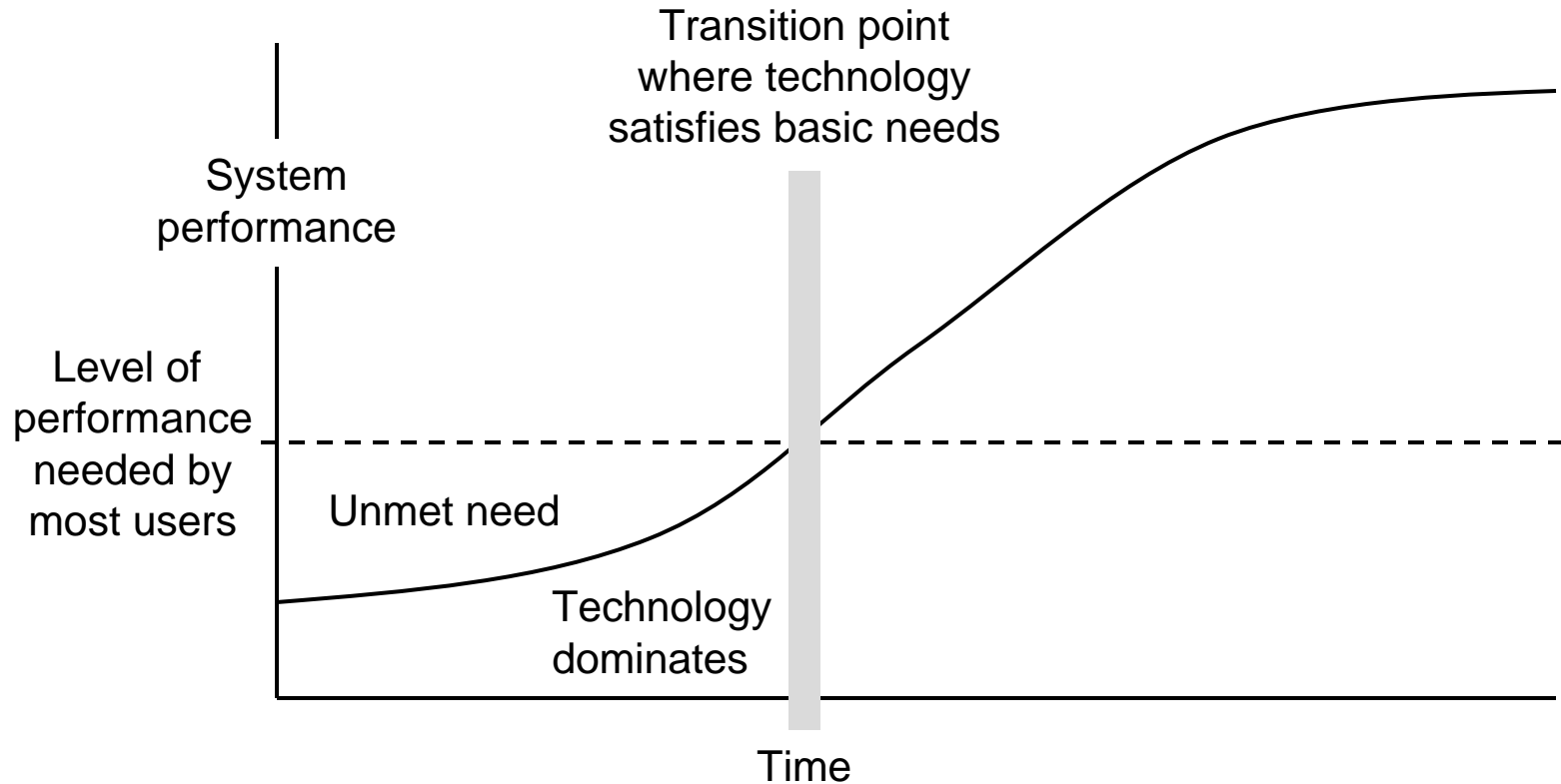
Industry Trends



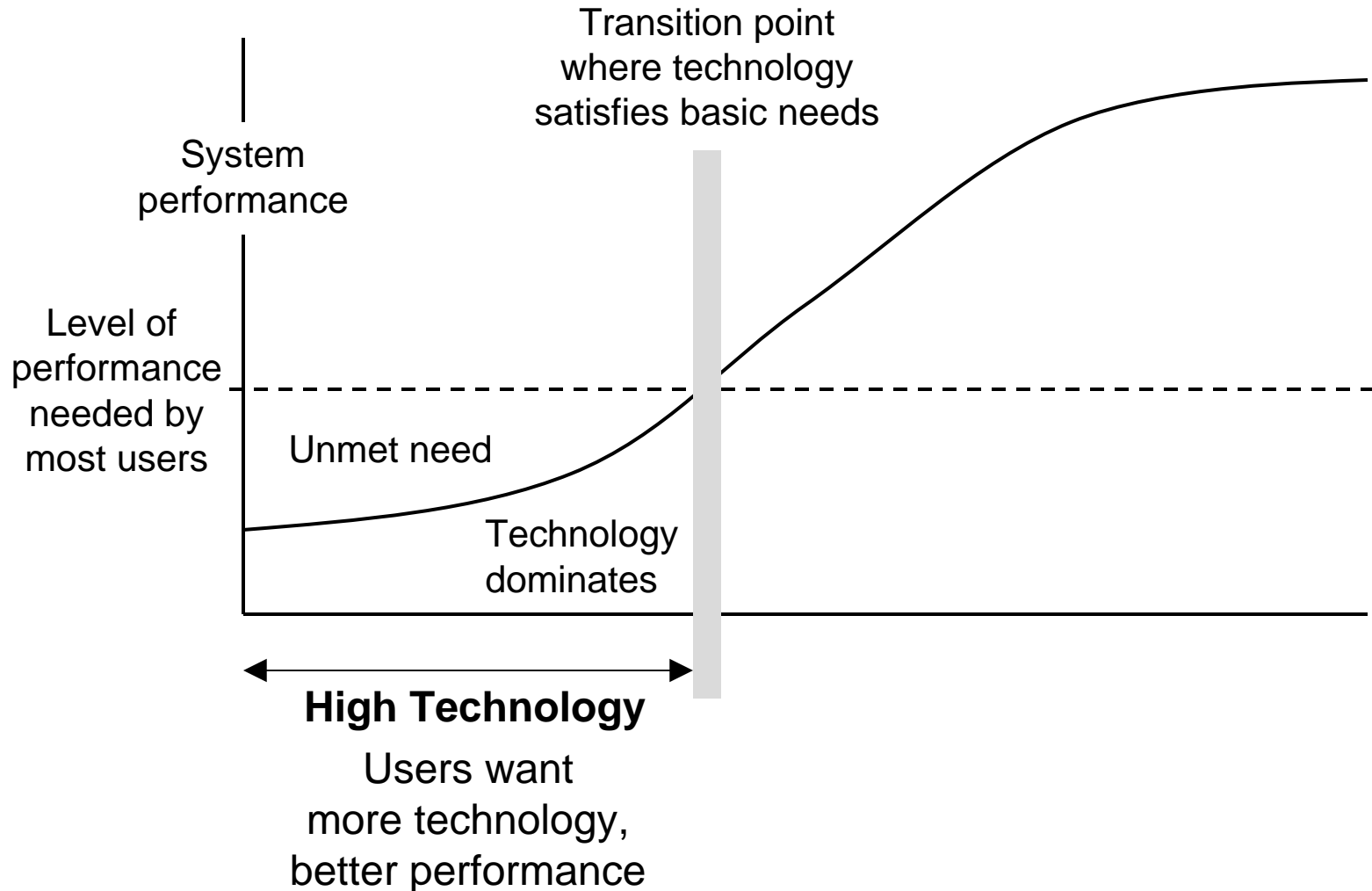
Industry Trends



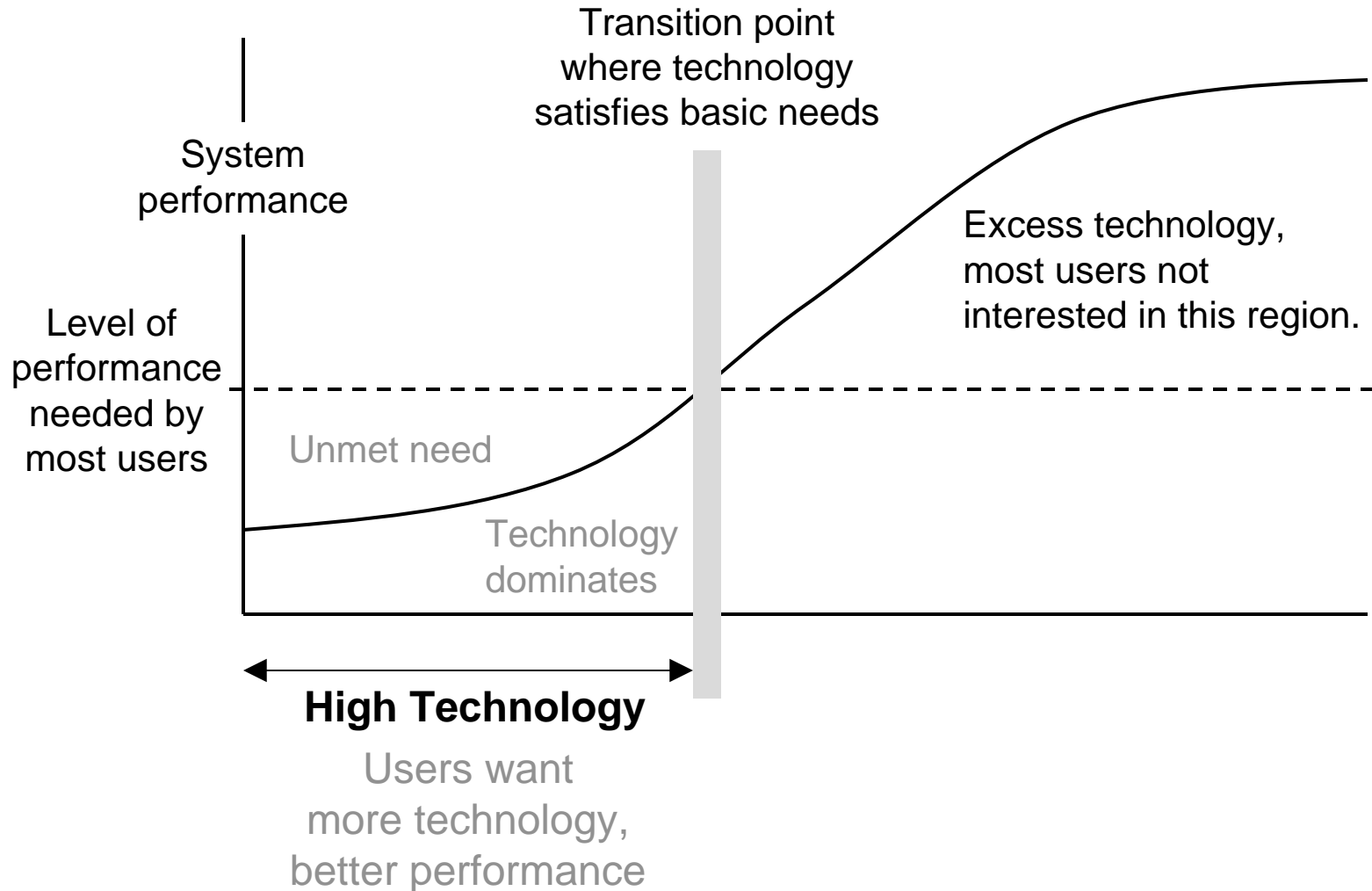
Industry Trends



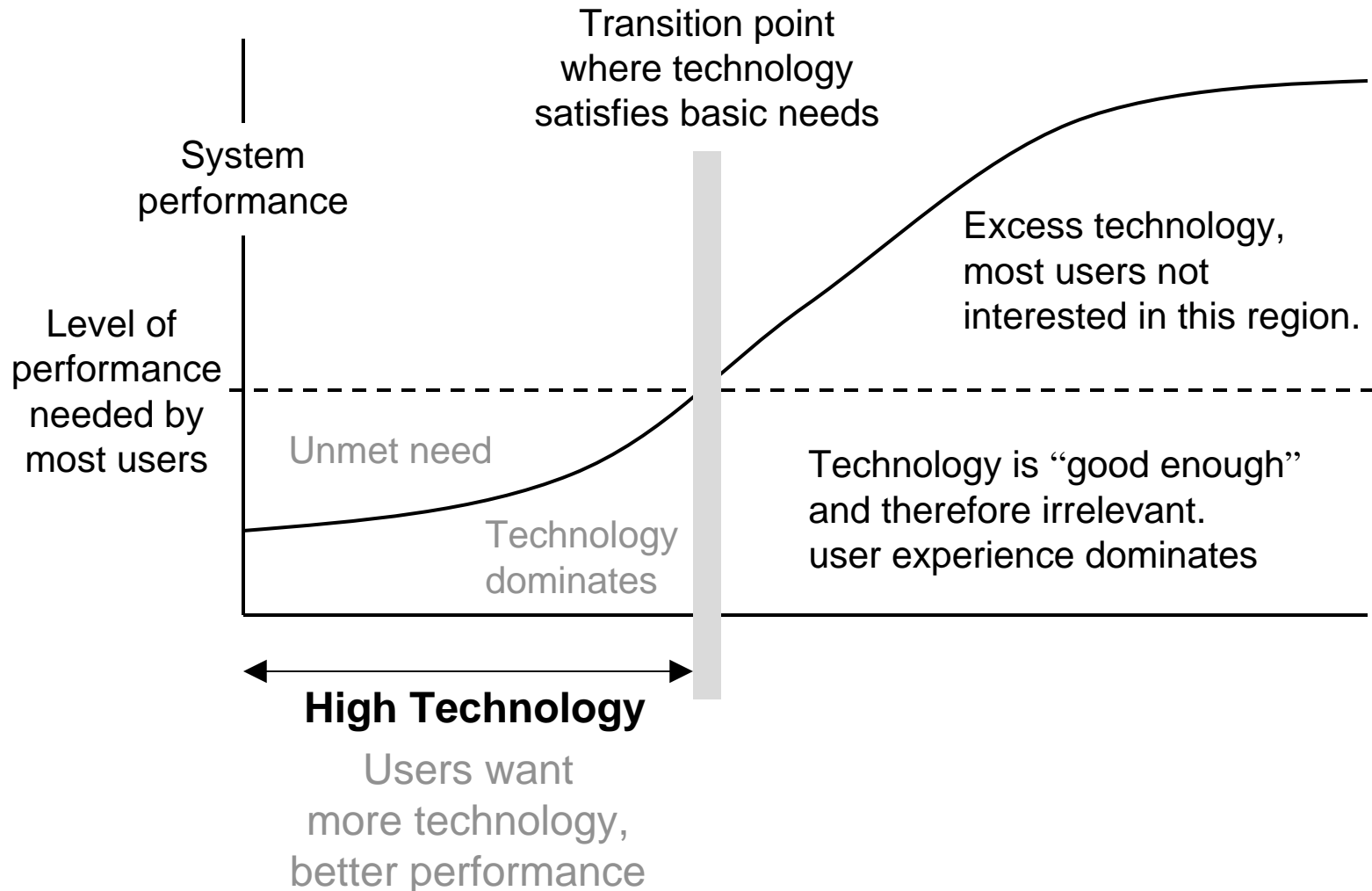
Industry Trends



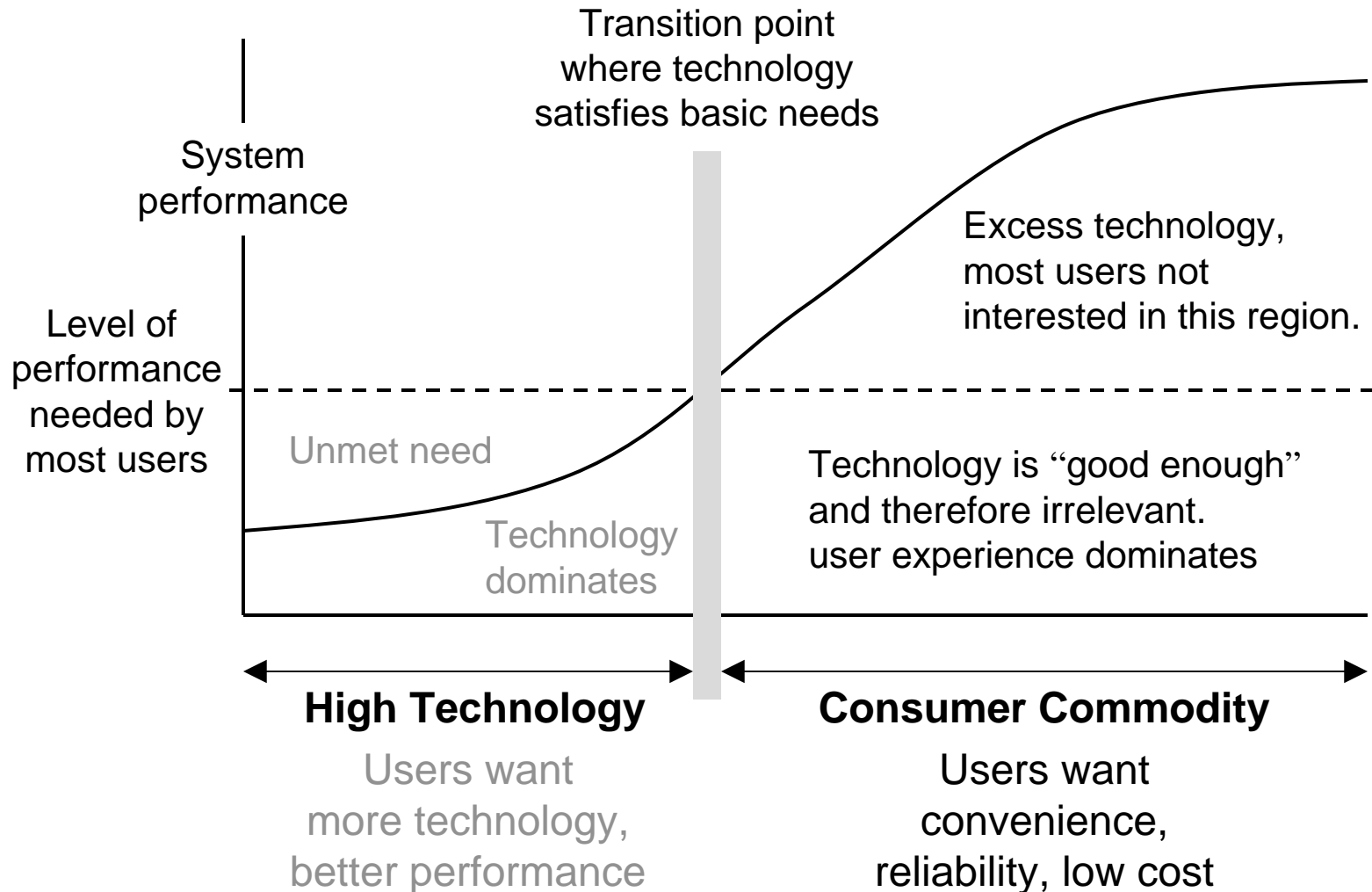
Industry Trends



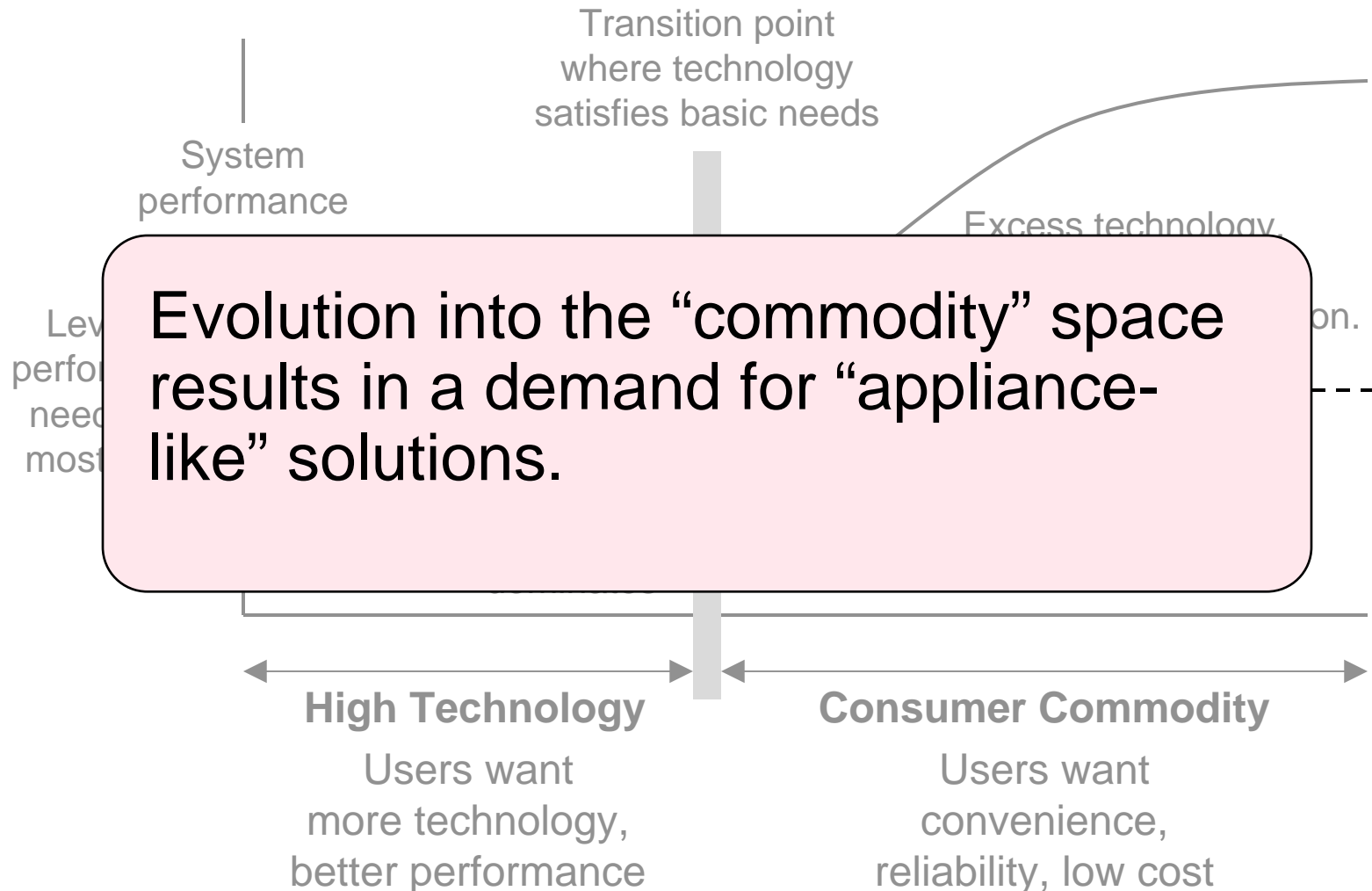
Industry Trends



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Background

Information Appliances

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Information appliances can be as simple as an iPod for music files or as complicated as devices for managing the huge, specialized data stores associated with video-production studios.

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- connect to digital networks for the purpose of gathering or distributing information.
- manage data in standard formats and can share information easily with other similar systems.

Definitive Information Appliance



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Information Services

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Unedited information services provide open publishing opportunities for authors.

Information Service



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GE	33.40	↓ 0.49 (1.44%)
PFE	24.45	↓ 0.05 (0.20%)

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Seeking the Tao of Eli Lilly
17 April 2006, 10:44am ET, *TheStreet.com*

Most Recent Headlines

Badger Income Fund April cash distribution
17 April 2006, 10:48am ET, *PR Newswire*

AP Top Sports News At 10:48 a.m. EDT
17 April 2006, 10:48am ET, *AP Online*

Federer Beats Djokovic in Monte Carlo
17 April 2006, 10:48am ET, *AP Online*

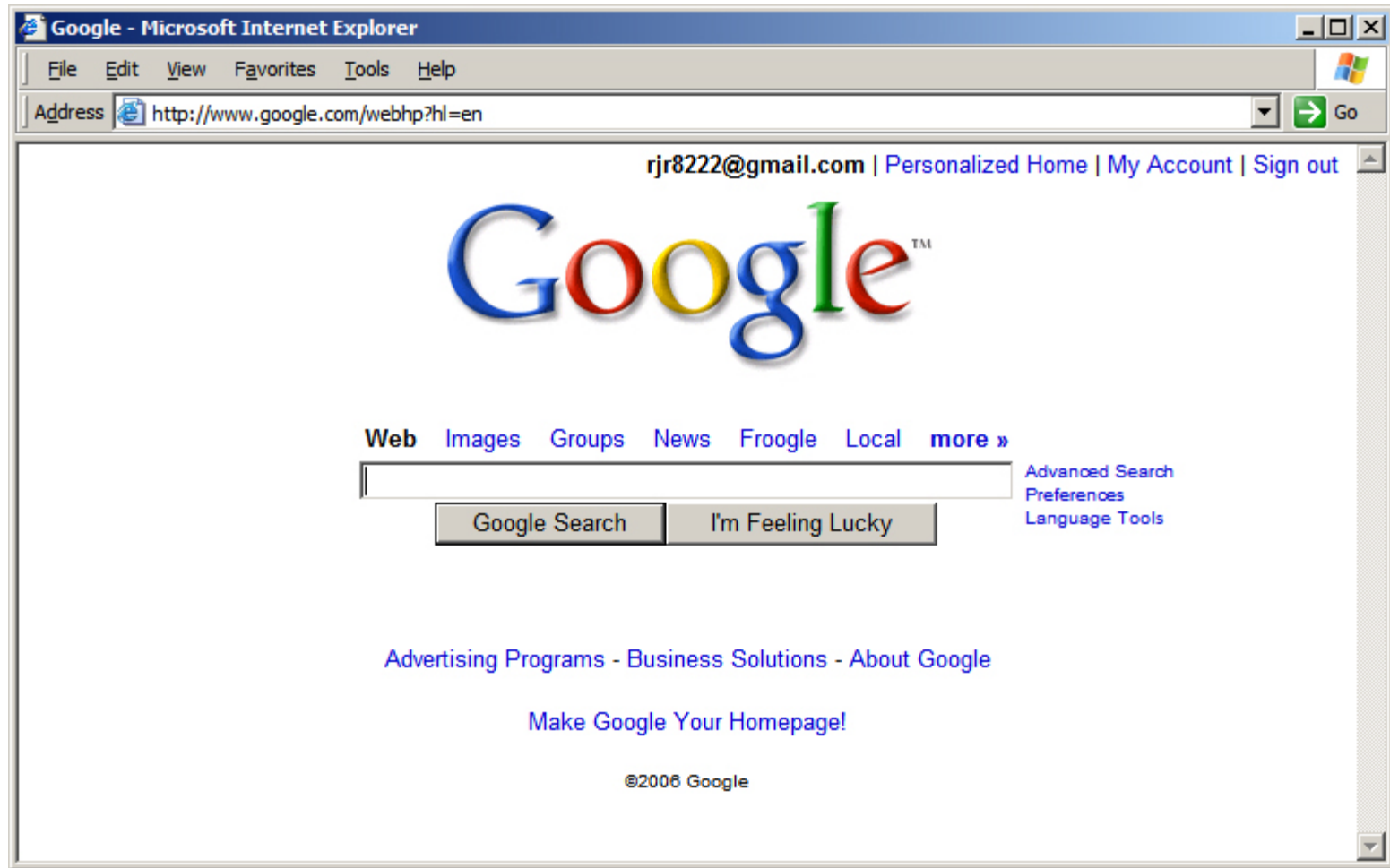
Market Figures as of 10:47 a.m.

THE AMERITRADE EASY IRA

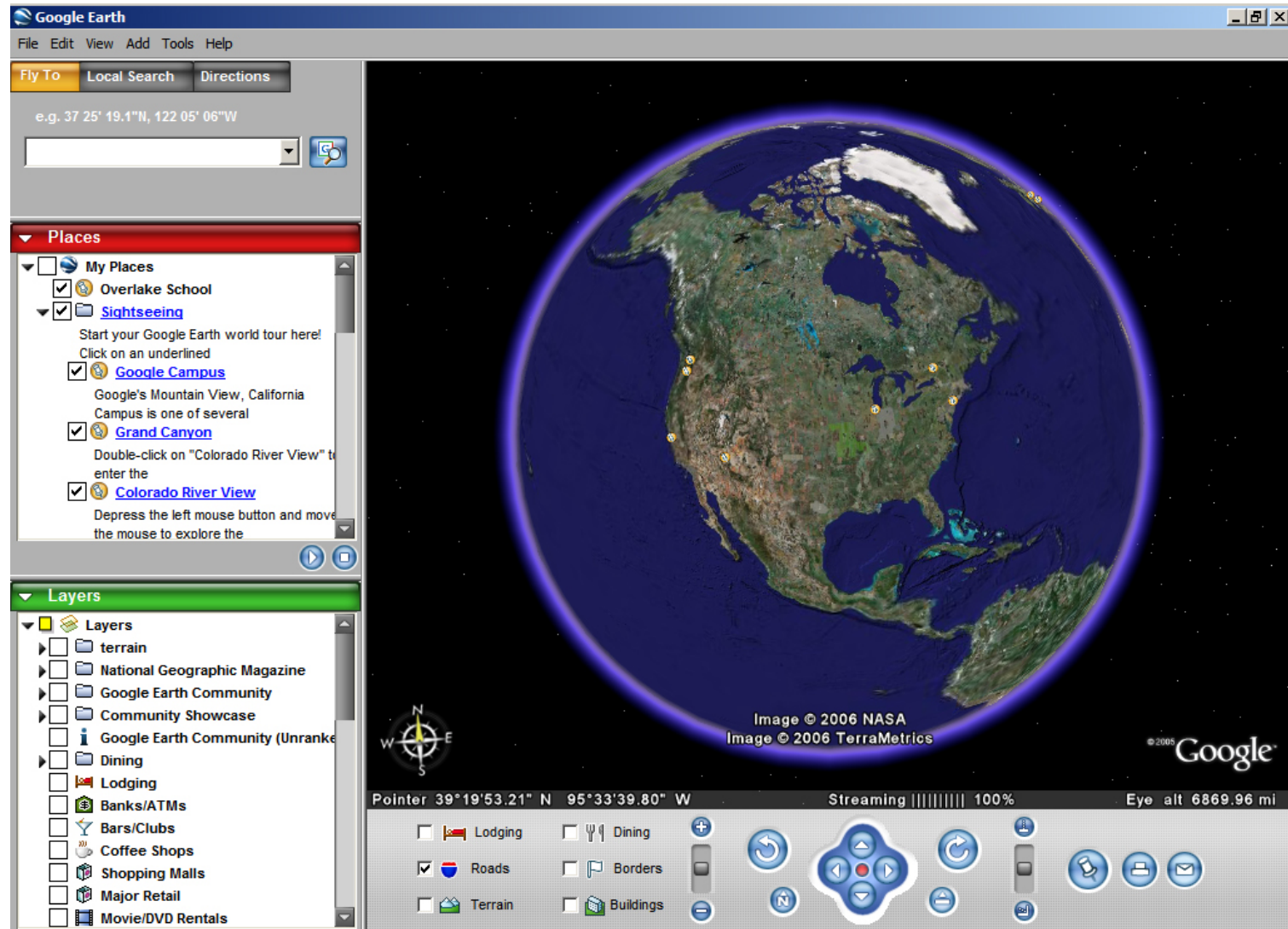
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By WILLIAM J. BROAD and DAVID E. SANGER
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• Video: Nuclear Jihad

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By JOSEPH KAHN
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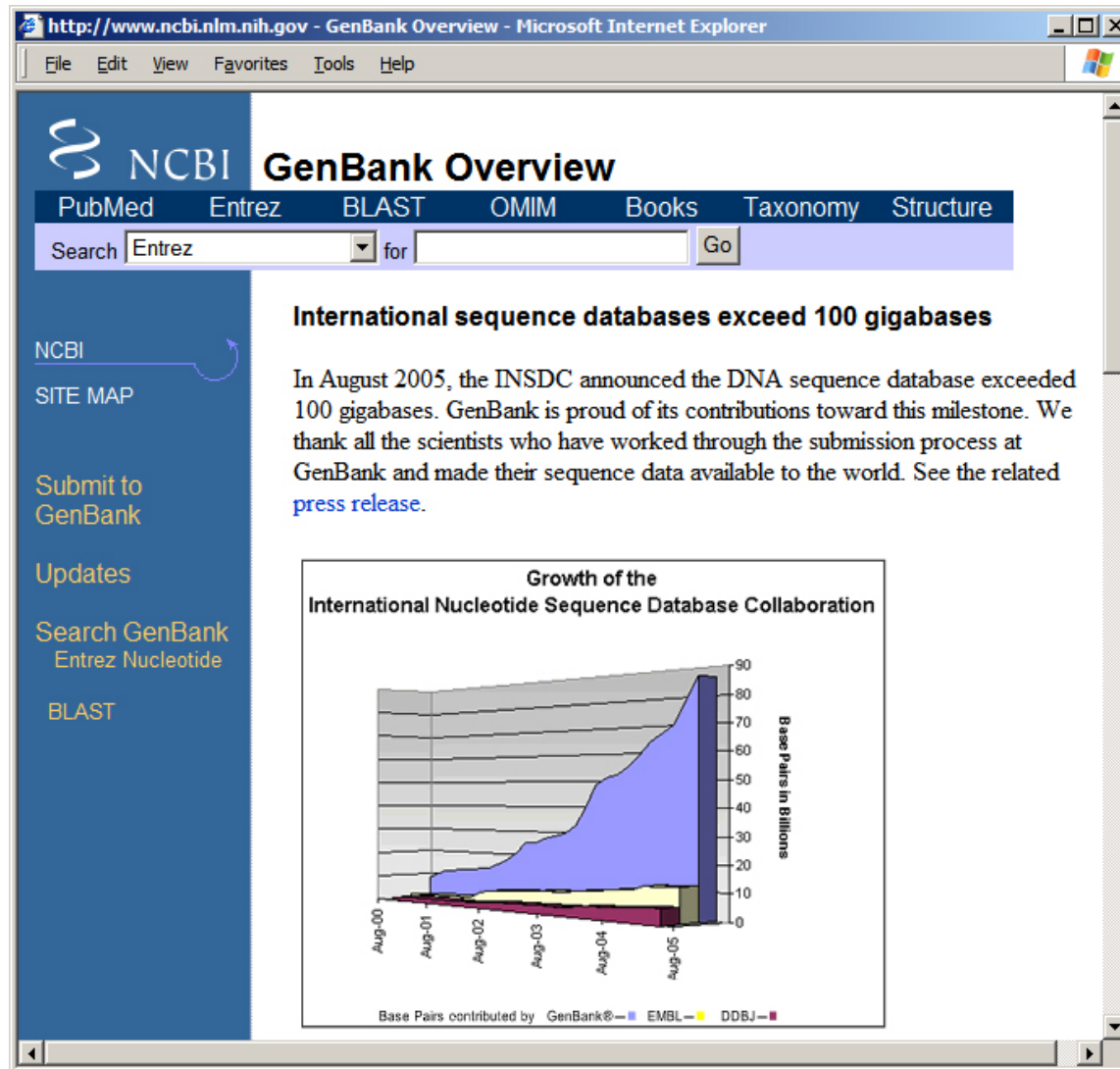
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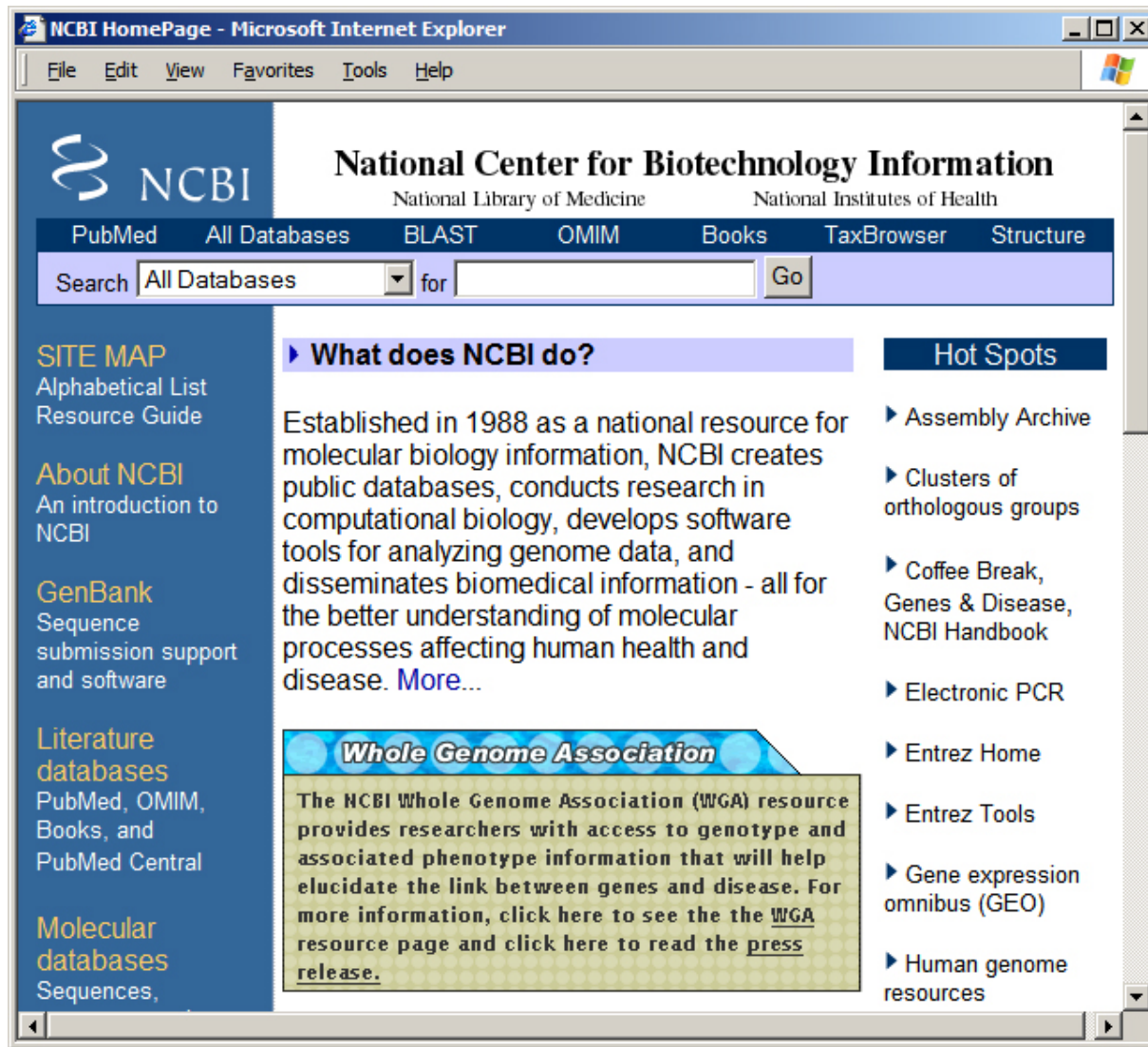
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Information Service



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SUMMARY

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Different types of data need different data-sharing solutions.

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The desire for data-sharing is neither monolithic, nor uniform.

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Information appliances and services are major industry trends.

Summary

Different types of data need different

Data-sharing approaches:

GenBank: national (international) information publishing service

BIRN: technology support for research communities

GeMS: data-management and data-sharing optimized for the individual lab or set of collaborators

END