Blog-based research notebook
for **personal** knowledge management
& **bottom-up** knowledge sharing

Shin-ichi TODOROKI

Advanced Materials Laboratory/NIMS Japan

Synthesis > Measurement > Analysis >
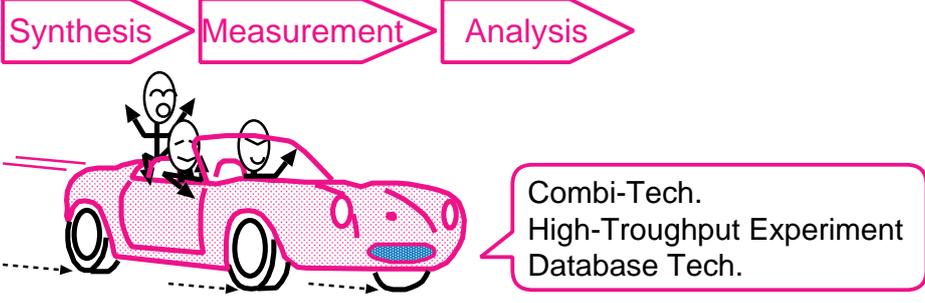
Combi-Tech.
High-Troughput Experiment
Database Tech.

Slide 1

Abstract

As a replacement of paper-based notebook, an user-installed blog server is used for personal knowledge management. Its contents are readable, edit-able and re-trievable within the attached network with user authentication. This feature has enough merits that compensate for the difficulty in storing handwritings. More-over, the present system solved the problematic separated storage of experimental data and their supplemental descriptions, which are formerly recorded in hard disks and paper-based notebooks, respectively. This all-in-one knowledge management system enables an automatic linking service from data files to related blog contents. Its web-based nature also enables us to share the contents with colleagues over the net. It is an alternative way of using large-scale top-down group-ware for small closed communities.

References

- S. Todoroki, T. Konishi and S. Inoue: "Blog-based research notebook: personal infor-matics workbench for high-throughput experimentation", Appl. Surface Sci. (2005) (in print). doi:10.1016/j.apsusc.2005.03.235
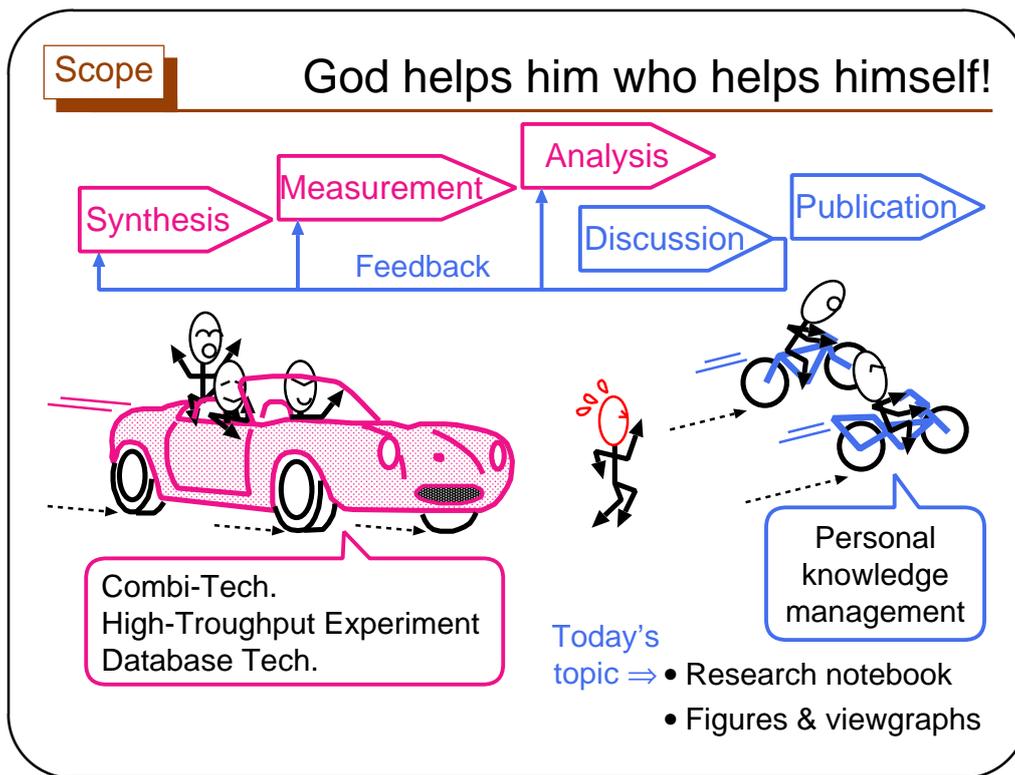
- http://www.geocities.com/Tokyo/1406/node2.html#link:persinfoE

- http://www.geocities.com/Tokyo/1406/node5.html#link:persinfo (in Japanese)

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OVERVIEW

The Third Japan-U.S. Workshop on
Combinatorial Materials Science

Blog-based research noteboo

Okinawa, Japan, December 8-10, 2004
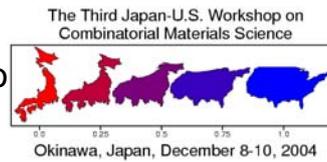
The dilemma

What's wrong with our paper-based notebook?

Why Blog?

What's the advantage of using blog system?

Requirements

What's needed to use it as our research notebook?

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The dilemma   Once upon a time ...

LOG BOOK
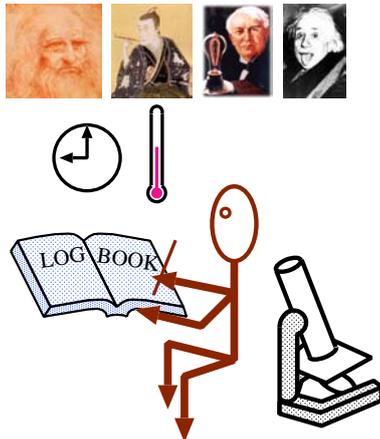
- Experimental data

- Data evaluation, Strategies, Supplemental notes ...

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Slide 8

Slide 9

The dilemma   Throw away your notebook

& take the advantage of retrievablity!

- Not too bad to type

- Easy to search

by Pentel
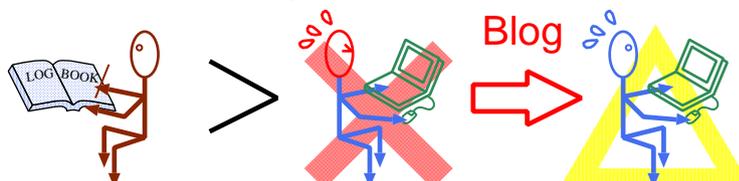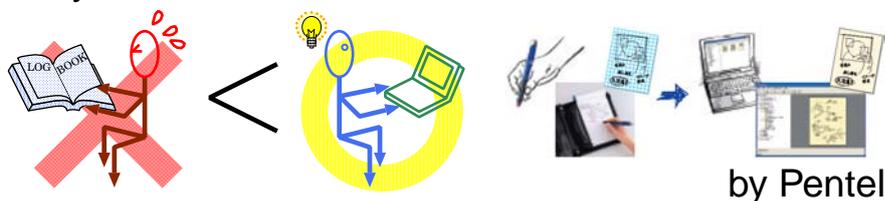
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OVERVIEW

Blog-based research notebook

The dilemma

Separated data storage takes time to get feedback.

Why Blog?

What's the advantage of using blog system?

Requirements

What's needed to use it as our research notebook?

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Why Blog?

Features

- Easy-to-use authoring tools

  $\Longrightarrow$ *Can add graphics & hyperlinks*

- Full-text retrieval

- Controllable through any web browsers

- Each page can be called by hyperlinks incl. date
  (It's Japanese style!)
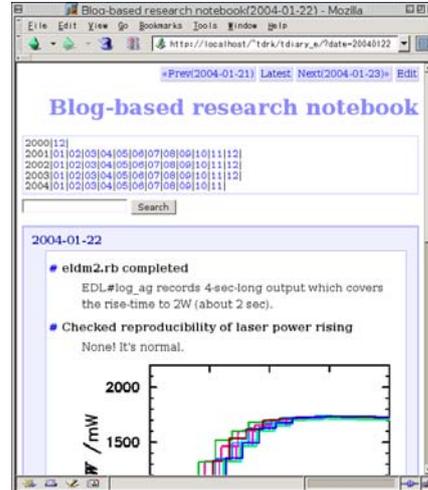
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Why Blog?

How about existing e-notebooks?

- Public server ($\Downarrow$ top-down)

- Private server ($\Uparrow$ bottom-up)
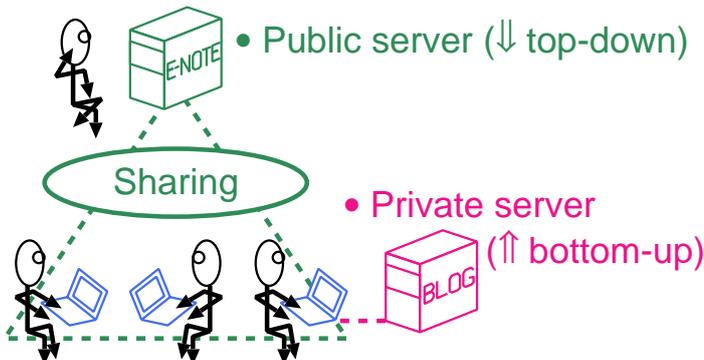
- Informations: To be shared & Not

- Blog is good for private use.

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Why Blog? | *Isn't it another separated storage?*

Contents

Hyperlinks

Sharing

Contents

- No! Hyperlinks hide the border.

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OVERVIEW

Blog-based research notebook

The dilemma

Separated data storage takes time to get feedback.

Why Blog?

Easy-to-use, full-text retrieval, good for private use

Requirements

What's needed to use it as our research notebook?

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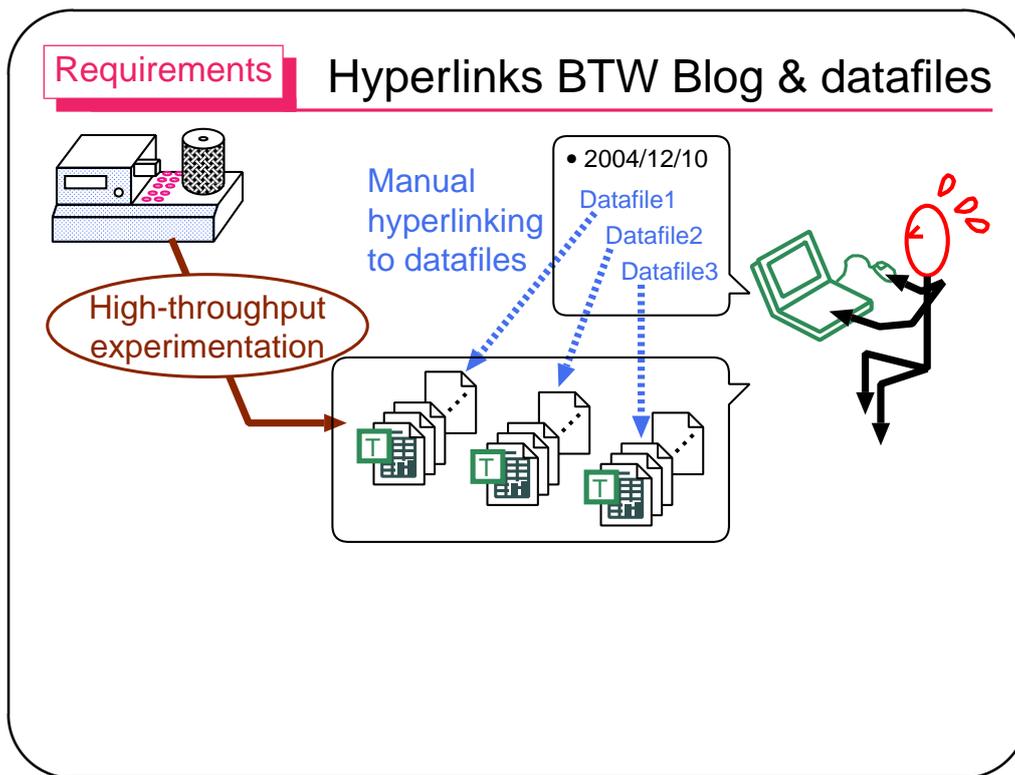
Slide 16
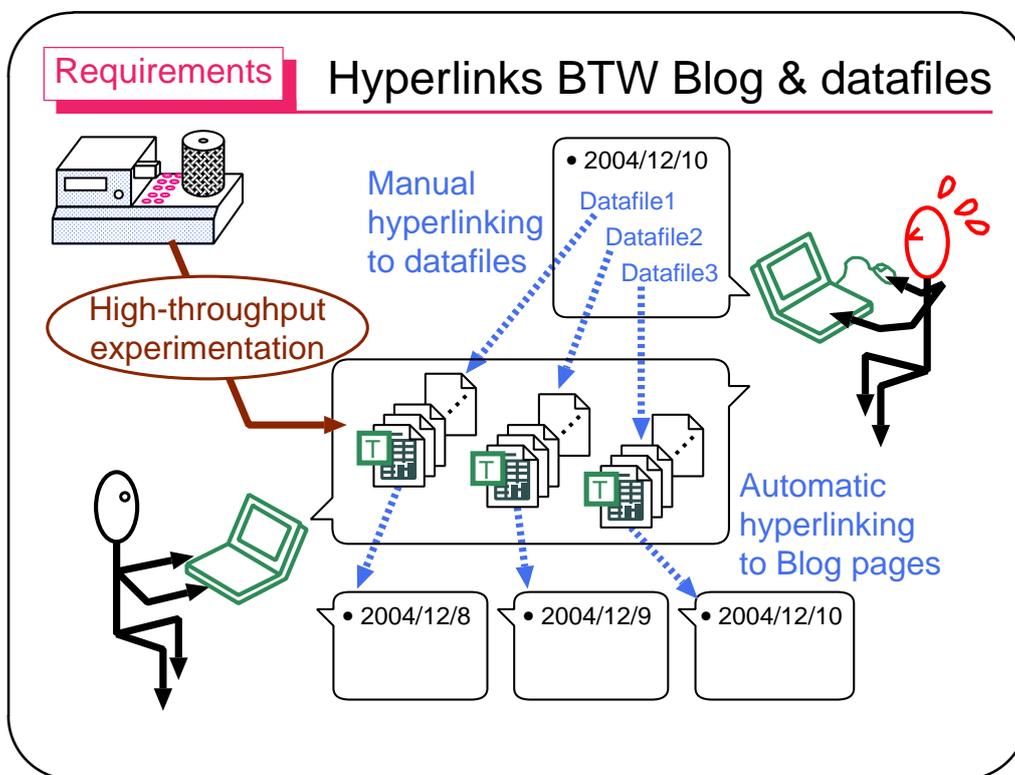
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Requirements

An user-written software

Visualizes datafiles & opens corresponding blog pages
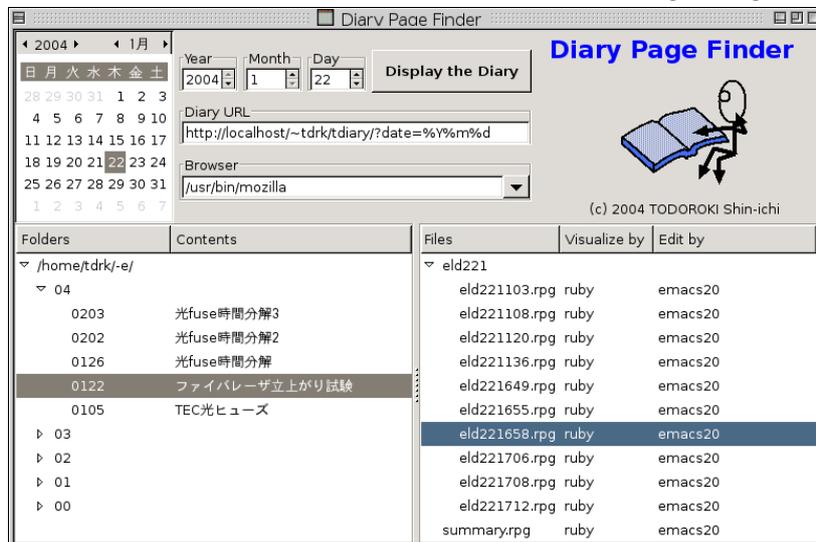
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Requirements Cooperation w/ other e-notebooks
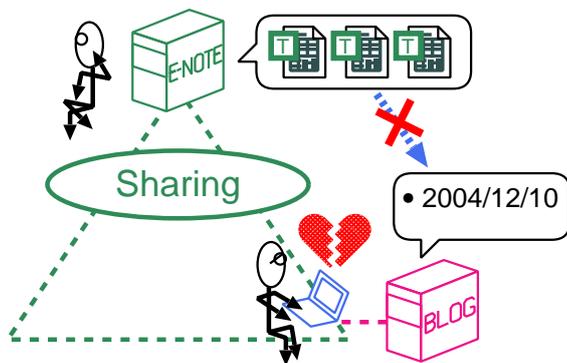
- Auto-link service is essential

  for knowledge-sharing systems.

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SUMMARY

Blog-based research notebook

The dilemma

Separated data storage takes time to get feedback.

Why Blog?

Easy-to-use, full-text retrieval, good for private use

Requirements

*User-installed server with **authentication***

***Infrastructure** for 'Blogging anytime anywhere'*

***Auto-link service** from datafiles to blog pages*

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