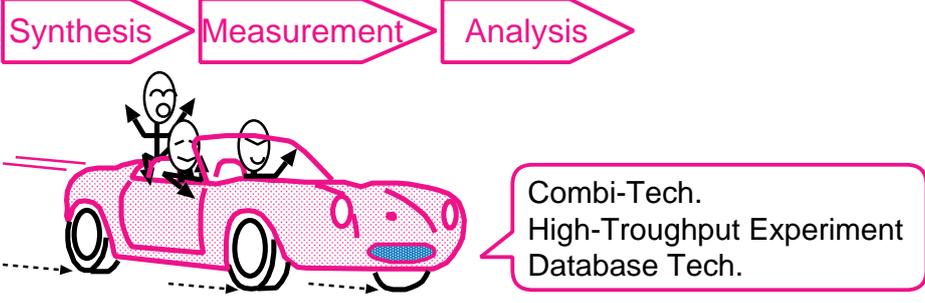


Blog-based research notebook
for **personal** knowledge management
& **bottom-up** knowledge sharing

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Synthesis → Measurement → Analysis



Combi-Tech.
High-Troughput Experiment
Database Tech.

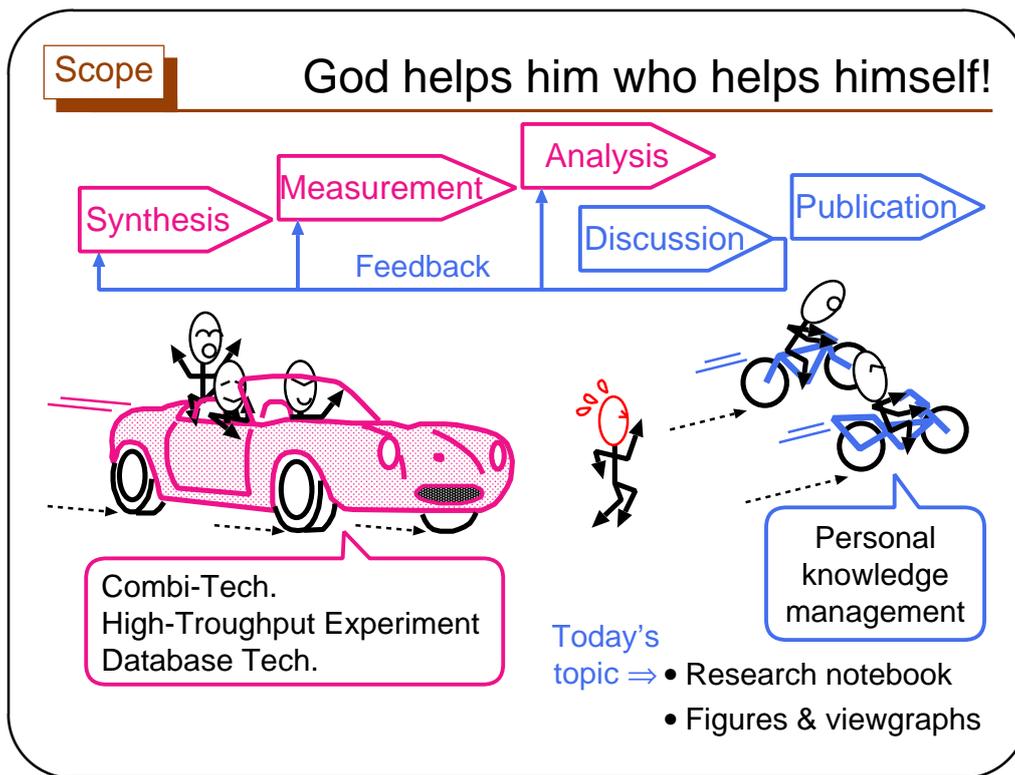
Slide 1

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 retrievable within the attached network with user authentication. This feature has enough merits that compensate for the difficulty in storing handwritings. Moreover, 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 informatics 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)



Slide 2

Introduction What's blog?

Merriam-Webster Online - Mozilla

Merriam-Webster OnLine

Merriam-Webster's Words of the Year 2004

Based on your online lookups, the #1 Word of the Year for 2004 was

Blog noun [short for *Weblog*] (1999) : a Web site that contains an online personal journal with reflections, comments, and often hyperlinks provided by the writer

Blogger

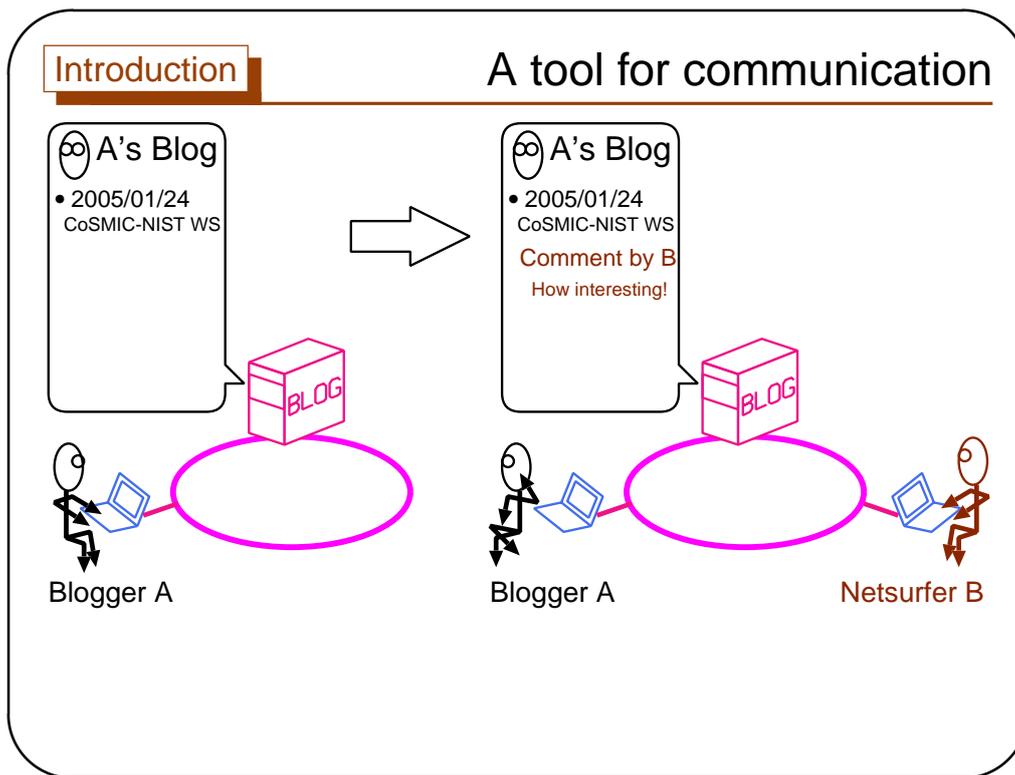
What's a blog?

Create a blog in 3 easy steps:

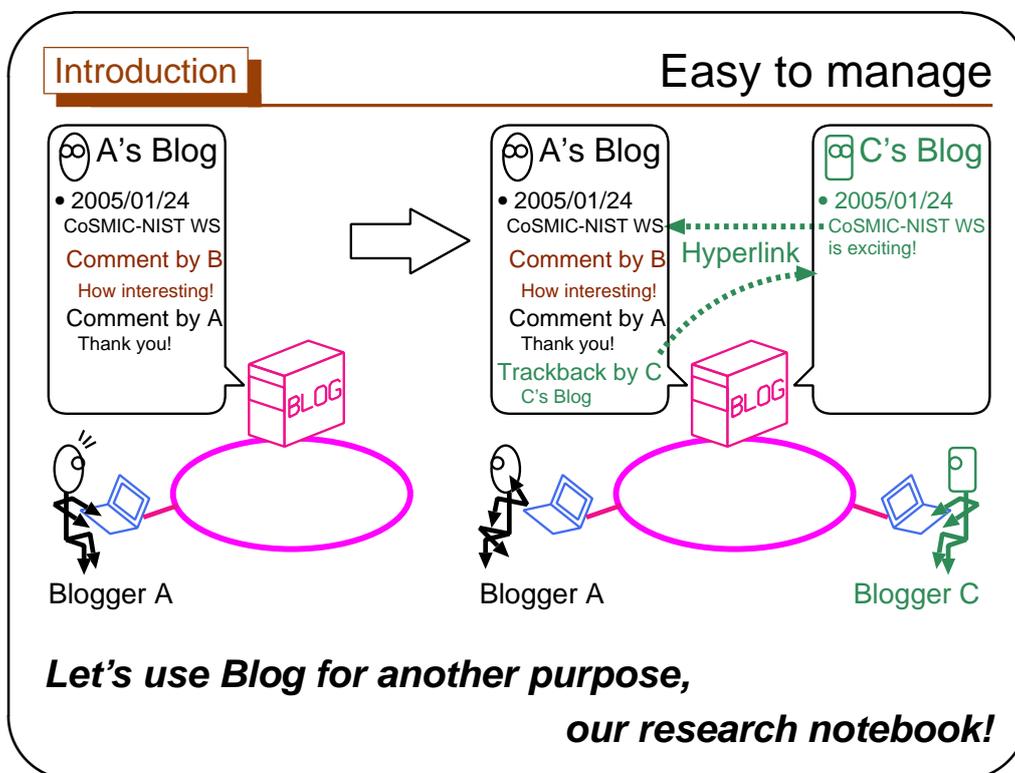
- 1 Create an account
- 2 Name your blog
- 3 Choose a template

CREATE YOUR BLOG NOW

Slide 3



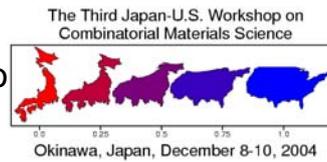
Slide 4



Slide 5

OVERVIEW

Blog-based research notebook

**The dilemma**

What's wrong with our paper-based notebook?

Why Blog?

What's the advantage of using blog system?

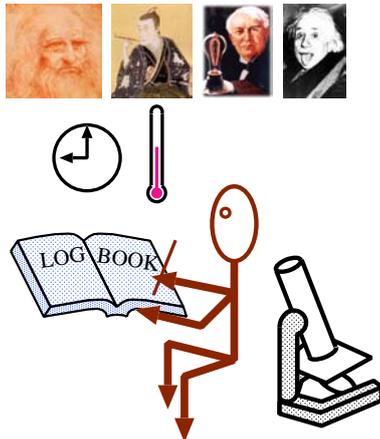
Requirements

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

Slide 6

The dilemma

Once upon a time ...



- Experimental data
- Data evaluation, Strategies, Supplemental notes ...

Slide 7

The dilemma After the widespread use of PC,

- Experimental data \implies PC
- Others stay in the book **Separated storage**

Slide 8

The dilemma We still use papers because ...

- Easy to record
- Easy to search

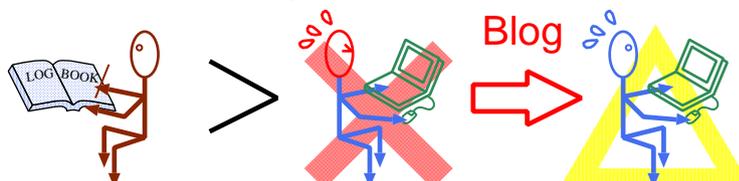
Separated storage:
we have to search both
& reorganize them
 \downarrow
Takes time
to get feedback

Google
Desktop Search BETA

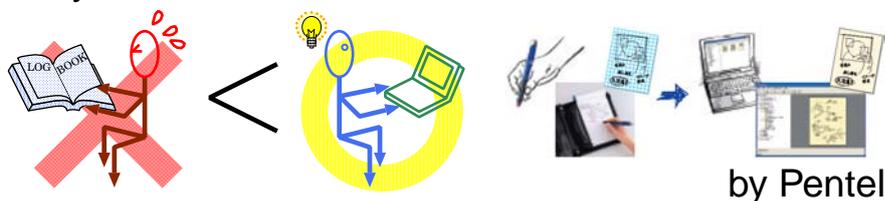
Slide 9

The dilemma**Throw away your notebook****& take the advantage of retrievability!**

- Not too bad to type



- Easy to search

**Slide 10****OVERVIEW**

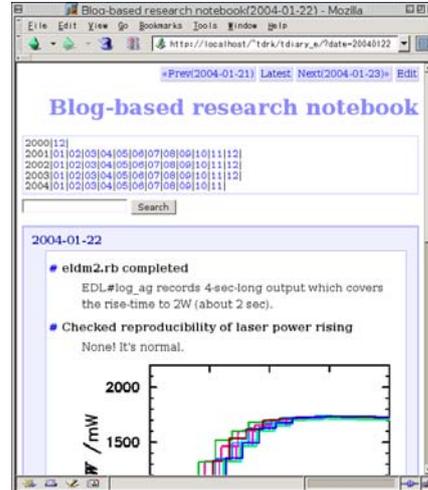
Blog-based research notebook

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?***Slide 11**

Why Blog?

Features

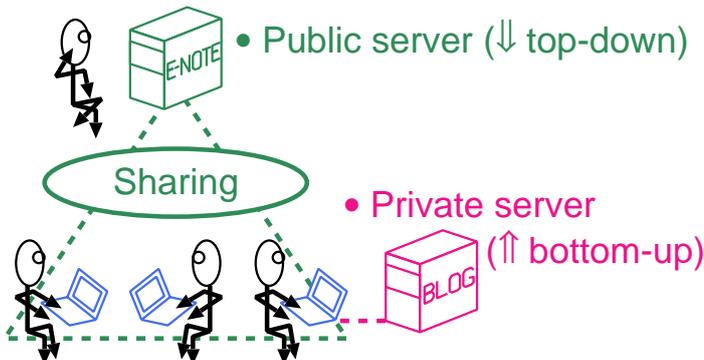
- Easy-to-use authoring tools
 - ⇒ *Can add graphics & hyperlinks*
- Full-text retrieval
- Controllable through any web browsers
- Each page can be called by **hyperlinks incl. date**
(It's Japanese style!)



Slide 12

Why Blog?

How about existing e-notebooks?



- Informations: **To be shared** & **Not**
- Blog is good for private use.

Slide 13

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

The diagram illustrates a workflow where a user interacts with an 'E-NOTE' box. This box is linked to a 'Sharing' oval, which is then connected to three people sitting at laptops. A 'BLOG' box is also connected to the 'Sharing' oval. Two 'Contents' boxes are shown, one connected to the 'E-NOTE' and another connected to the 'BLOG' via 'Hyperlinks'.

- No! Hyperlinks hide the border.

Slide 14

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?

Slide 15

Requirements

User authentication

- Not available in free service

- Have to set up your own server with
 - ⇒ HTTP server (Apache, Microsoft IIS, ...)
 - ⇒ CGI tools for Blog (tDiary, MovableType, ...)

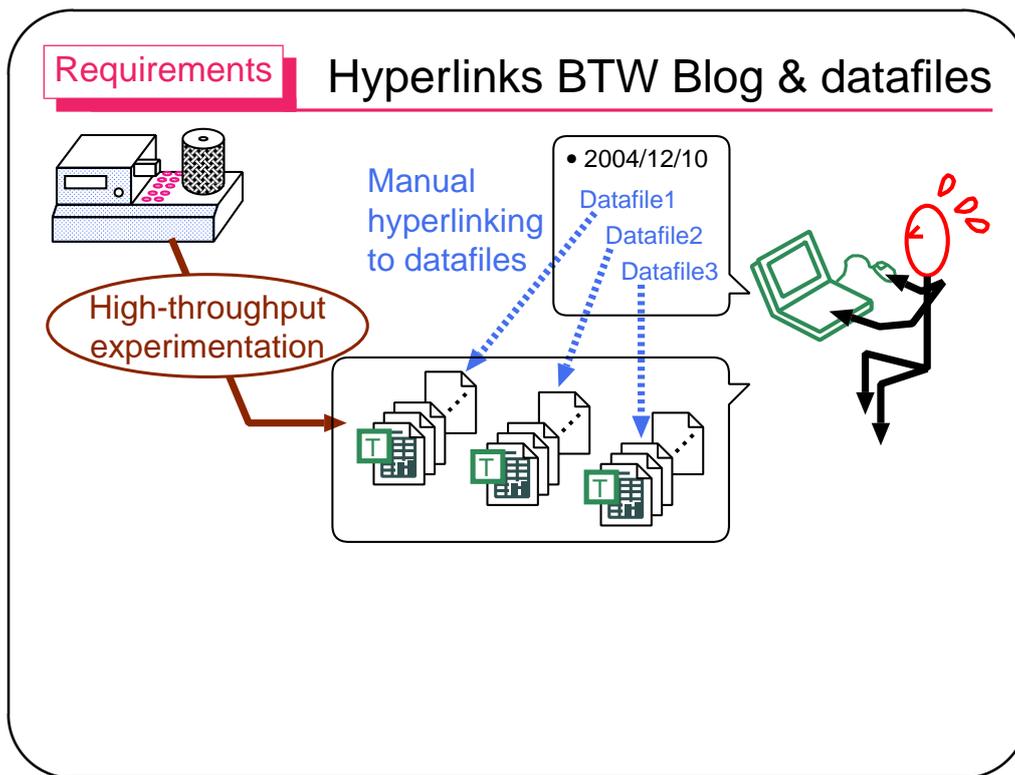
Slide 16

Requirements

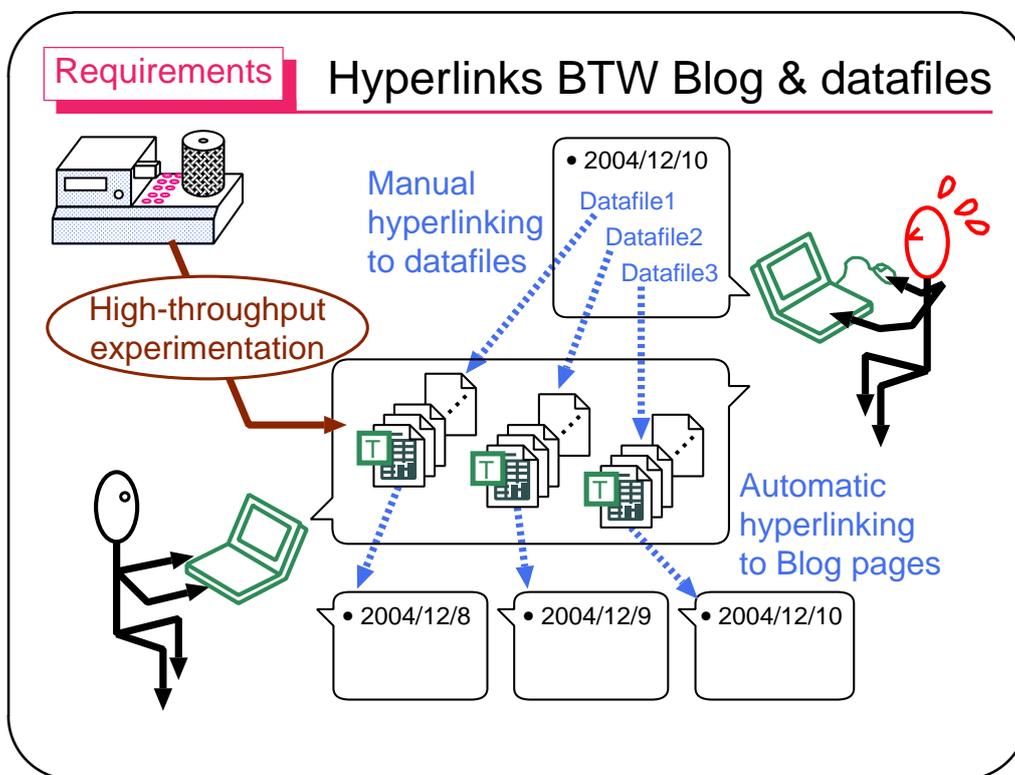
'Blog anytime anywhere'

- Put the terminals everywhere.
- Put a mirror server outside the firewall.

Slide 17



Slide 18

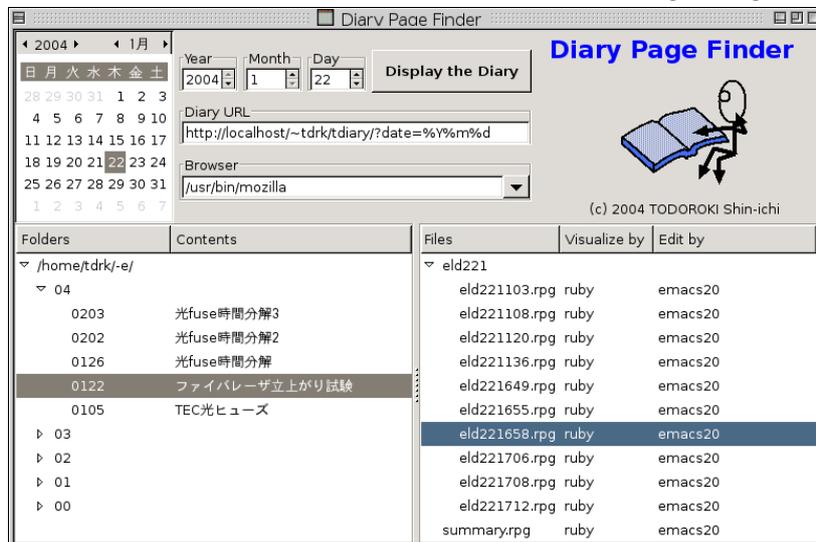


Slide 19

Requirements

An user-written software

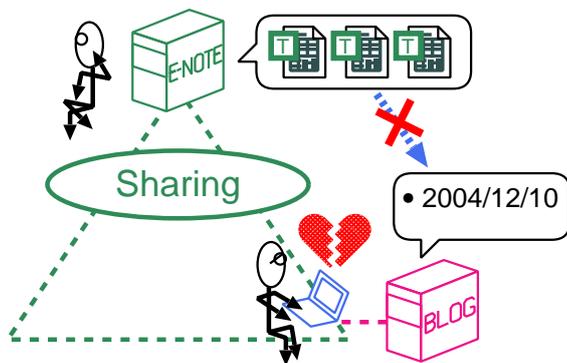
Visualizes datafiles & opens corresponding blog pages



Slide 20

Requirements

Cooperation w/ other e-notebooks



- Auto-link service is essential for knowledge-sharing systems.

Slide 21

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*

Slide 22