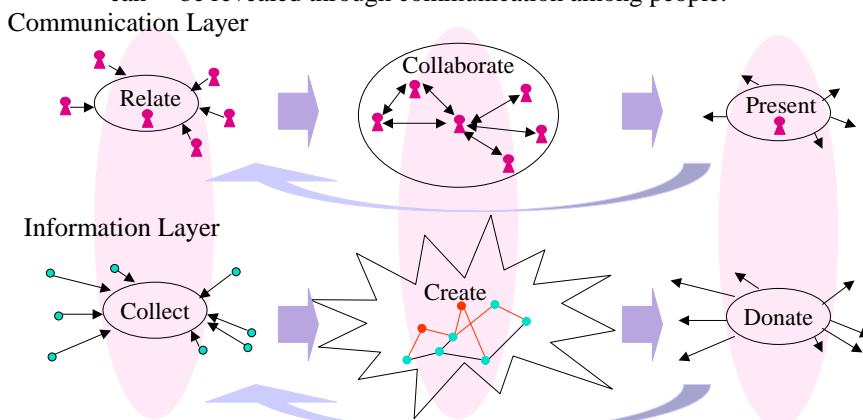


Semblog

Hideaki Takeda and Ikki Ohmukai
National Institute of Informatics

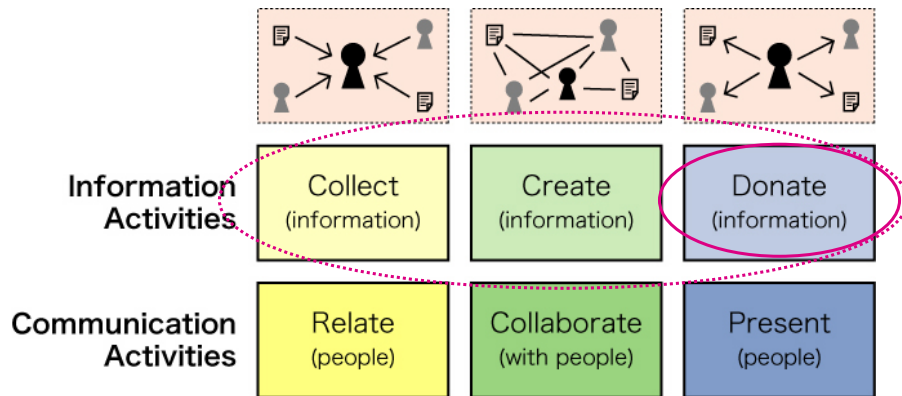
Information and Communication Activities

- Two layers for our activities
 - **Information layer** only concerns explicitly represented and processed information.
 - **Communication layer** concerns potential information. Potential information can be revealed through communication among people.



Web as ICA

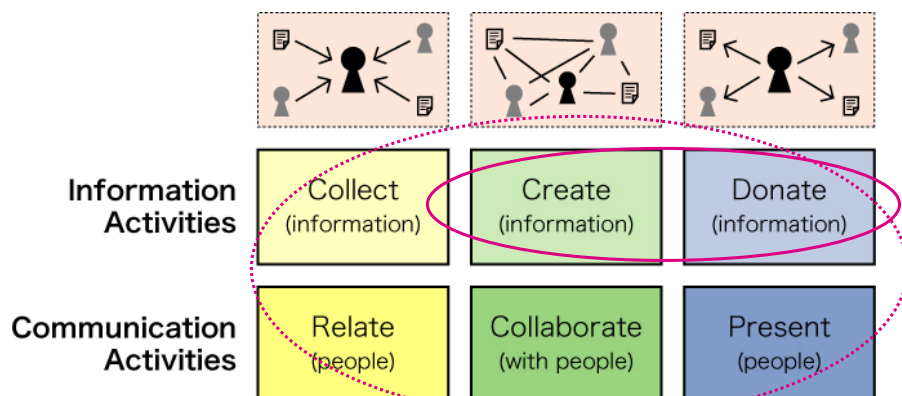
- Most of blog tools do not support whole process of information distribution.



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Weblog as ICA

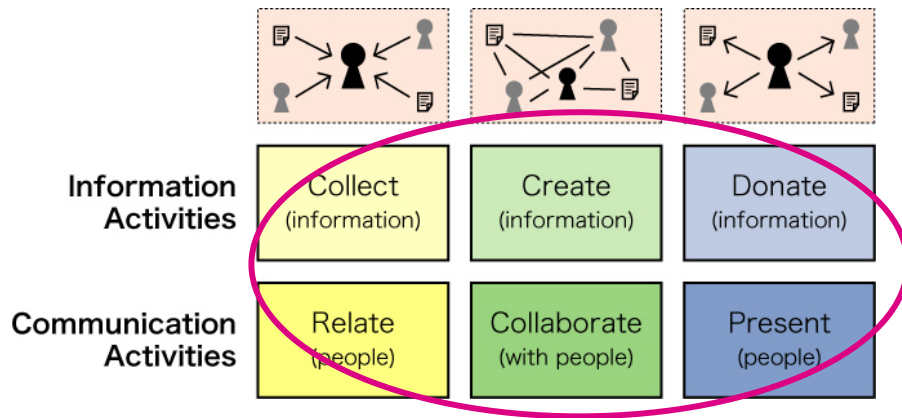
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Semblog as ICA

- Most of blog tools do not support whole process of information distribution.



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Semblog Project

- Applying Weblog and Semantic Web technologies for ICA support.

- Model

- “Person” on Web

- ◆ Weblog: Information archive for individuals
 - ◆ Foaf

- Interpersonal relations

- ◆ Links between Weblogs
 - ◆ Foaf relations

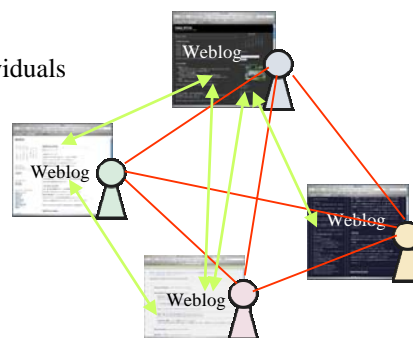
- Steps

- ◆ Phase 1 : Platform

- Metadata design
 - Basic tools for seamless support in searching, editing, and publishing

- ◆ Phase 2: Applications

- Recommendation
 - Search



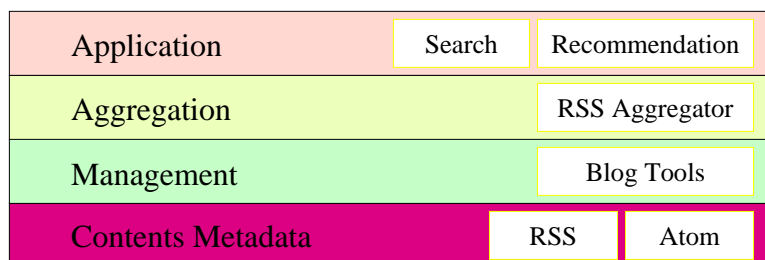
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Semblog Products

- RSS-based information exploiter
 - Extension of RSS aggregator
 - Seamless support of searching, editing, and publishing
 - ◆ Searching: search from myself (egocentric search)
 - ◆ Editing: (weblog tools)
 - ◆ Publishing: Three ways
 - *Check*: which weblogs I am reading
 - *Clip*: which entries I am interested
 - *Post*: what I am thinking
 - Developed Tools
 - RNA : Server-side scripts
 - glucose : Windows client

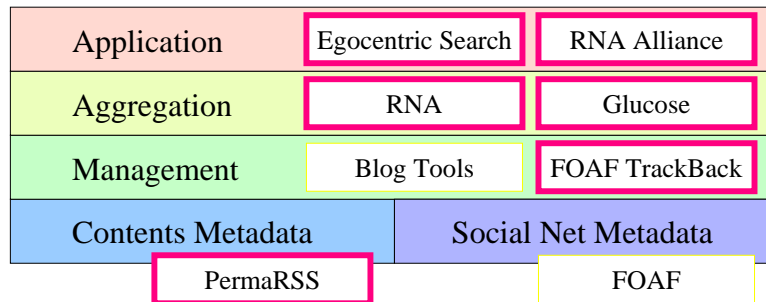
Weblog Architecture

- 4-layered model



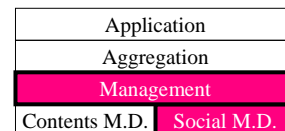
Community Web Architecture

- 4-layered model



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FOAF Management

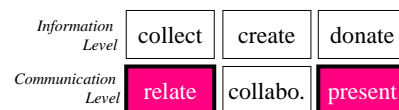


- Maintaining social network to determine information channel
 - FOAF: Friend Of A Friend is open metadata format to describe human relationship with RDF.
 - Self introduction section e.g., name, e-mail address, weblog URI...
 - Human relationship section with <knows>
- FOAF TrackBack
 - Our proposal
 - Provides an easy way to expand social network



knows →

← isKnownBy



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PermaRSS

Application
Aggregation
Management
Contents M.D.
Social M.D.

- PermaRSS is a permanent entity of an RSS for each blog entry.
 - Our proposal
 - Including...
 - ◆ Link and TrackBack relationship with other entries.
 - ◆ Topics and categories with rdf:resource
 - Each blog entry has different PermaRSS files.

<i>Information Level</i>	collect	create	donate
<i>Communication Level</i>	relate	collabo.	present

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Extended RSS Aggregator / Publisher

Application
Aggregation
Management
Contents M.D.
Social M.D.

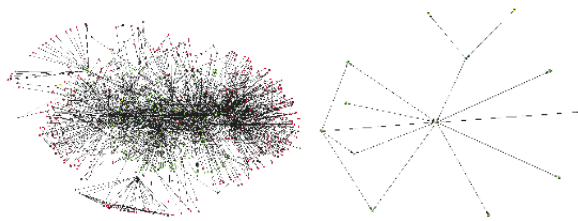
- Not only aggregate RSS, but also reedit and republish
- Three levels of "Degree of Interest"
 - **Check**: Which site you are interested in...
 - ◆ Publish registered favorite sites
 - ◆ Show sites / entries in chronological order
 - **Clip**: Which content you are interested in...
 - ◆ Publish favorite contents
 - ◆ Generating clip list in 1-click
 - **Post**: What is your opinion...
 - ◆ Publish your opinion on your Weblog
 - ◆ Authoring support with built-in editor

collect	create	donate
relate	collabo.	present

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RSS-based Applications

- Authoring support after RSS aggregation
 - On a social network
- Egocentric search
 - Gives higher score to "close-to-me" contents.
 - ◆ Blog authoring = communication
 - Seeks fresh contents by determining a scope of local search.
 - Social network extraction with local spidering and Weblog site detection



Application	
Aggregation	
Management	
Contents M.D.	Social M.D.

collect	create	donate
relate	collabo.	present

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RNA: Personal RSS Portal

<http://www.semblog.org/>

- Extension of RSS aggregator
- User can
 - Register weblogs (**Check**)
 - View entries from various aspect (HTML/RSS)
 - Preserve interested entries (**Clip**)
 - (**Post**)
- System does
 - Metadata Management
 - ◆ TrackBack extraction
 - ◆ Keep Metadata-added cache
 - ◆ Generation of ParmaRSS
 - Re-distribution of RSS
 - ◆ Publishing "Checked", "Clipped", and "Posted" entries
 - FOAF Management
 - ◆ FOAF TrackBack (formally "acsh")
- Over 2000 downloads in Japan.

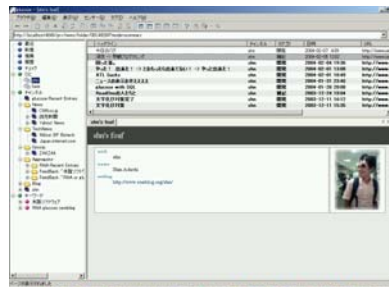


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glucose: RSS Aggregator / Weblog Editor

<http://glucose.dip.jp/>

- A client program to support searching, editing, and posting
- User can
 - Register weblogs (**C**heck)
 - View weblogs with 3-pane interface
 - ◆ TrackBack extraction (Followed by “Re:”)
 - Preserve entries (**C**lip)
 - ◆ Cooperated with RNA
 - Post via weblogs (**P**ost)
 - ◆ Built-in Weblog editor
 - View FOAF
- Over 20,000 downloads in Japan



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RSS-based Applications

- RNA Alliance
 - Comparing DOI among people in FOAF network
 - Calculating similarity of published site list
 - Scoring and recommendation of new items

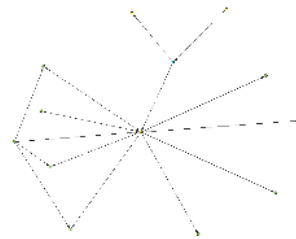
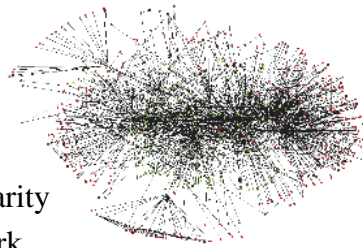
Application	
Aggregation	
Management	
Contents M.D.	Social M.D.

collect	create	donate
relate	collabo.	present

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Community Web Applications

- Egocentric Search Control : ESC
 - ◆ Search for Authoring
 - ◆ Rank contents **close** to authors
 - Distance in graph:
 - Distance by semantic similarity
 - Construction of Egocentric Network
 - ◆ From links from/to their entries
 - Links and trackbacks
 - ◆ From FOAF links



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Conclusion

- Proposal of community web architecture
 - Six activities model
 - Layered model of contents and social network metadata
- Proposal of community web tools
 - RNA: server-side aggregator / publisher
 - Glucose: client-side aggregator / editor
- Proposal of community web applications
 - Egocentric search
 - RNA alliance and recommendation

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