

How to Build Up a Virtual Society from the Citizens' point of View

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Today's Talk

0. Our Research Direction
1. Emergence of the Virtual World
2. Impact of A.I. and Cyber Space
3. Individual, Social and Cultural Effects by Interactive Electronic Media
4. Influence of Evolving Technologies to our Life Style

0. Our Research Direction

Be a Producer for Information Society through
Designing and Constructing Electronic Society

The rapid spread of the Internet

Fusion of telecommunications and broadcastings

→ New services bring some changes to our society

To design new social systems with Information,
Communication Technologies (ICT) from citizens'
point of view

Focusing on

Technological Development and Social Aspect

→ Research of Inter Discipline

→ Bring up Producers of Information Age

1. Emergence of the Virtual World

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used to be a field for special people.

Net Games **SecondLife** 3D Computer Graphics

Virtual character, Personality or Life in Cyber World



<http://secondlife.com/>

Enterprise / Government activities in the Second Life

Press release (Dell Computer)

Open a branch office (Reuters)

Announcement of new designed dresses (Christian Dior)

Event for new products (IBM)

Open a virtual embassy (Swedish Government)

Start up advertisement delivery (Book Off)

Open an office for recruiting (Mixi)

英語版はこちら
今すぐはじめよう!



Total Residents:	5,254,160
Logged In Last 60 Days:	1,626,207
Online Now:	19,698
US\$ Spent Last 24h:	\$1,641,138
LindeX Activity Last 24h:	\$156,286
SEE MORE economic statistics here!	

Headlines [read more news...](#)

USA Today
[Faithful build a Second Life for religion ...](#)

Washington Post

日本語版、まもなく公開!

<http://secondlife.com/?lang=ja-JP>

Computer Simulation could be one of the Virtual World

Scientific Visualization

Our works in 1980s and 90s

Surgical Simulation

Analysis of Egyptian Mummy

Collision of Comet Shoemaker–Levey 9
with Jupiter in 1994

Classic ballet

Video

Virtual World as a Society

a general tool for many people.

Education Shopping Auction
Stock Exchange Government Services
Politics . . .

It connects to real life.

2. Impact of Cyber Space to Real World

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Emergence of so-called **Ubiquitous Society**.

It should be a tool to realize a good society for people.

How to get knowledge of people into virtual world.

→ Social system to put community knowledge
to practical use.

To make the knowledge of residents as community resource

Community map on the Net using WebGIS for safety of living

Traffic Accident

Crime Area

Shelter for Disasters

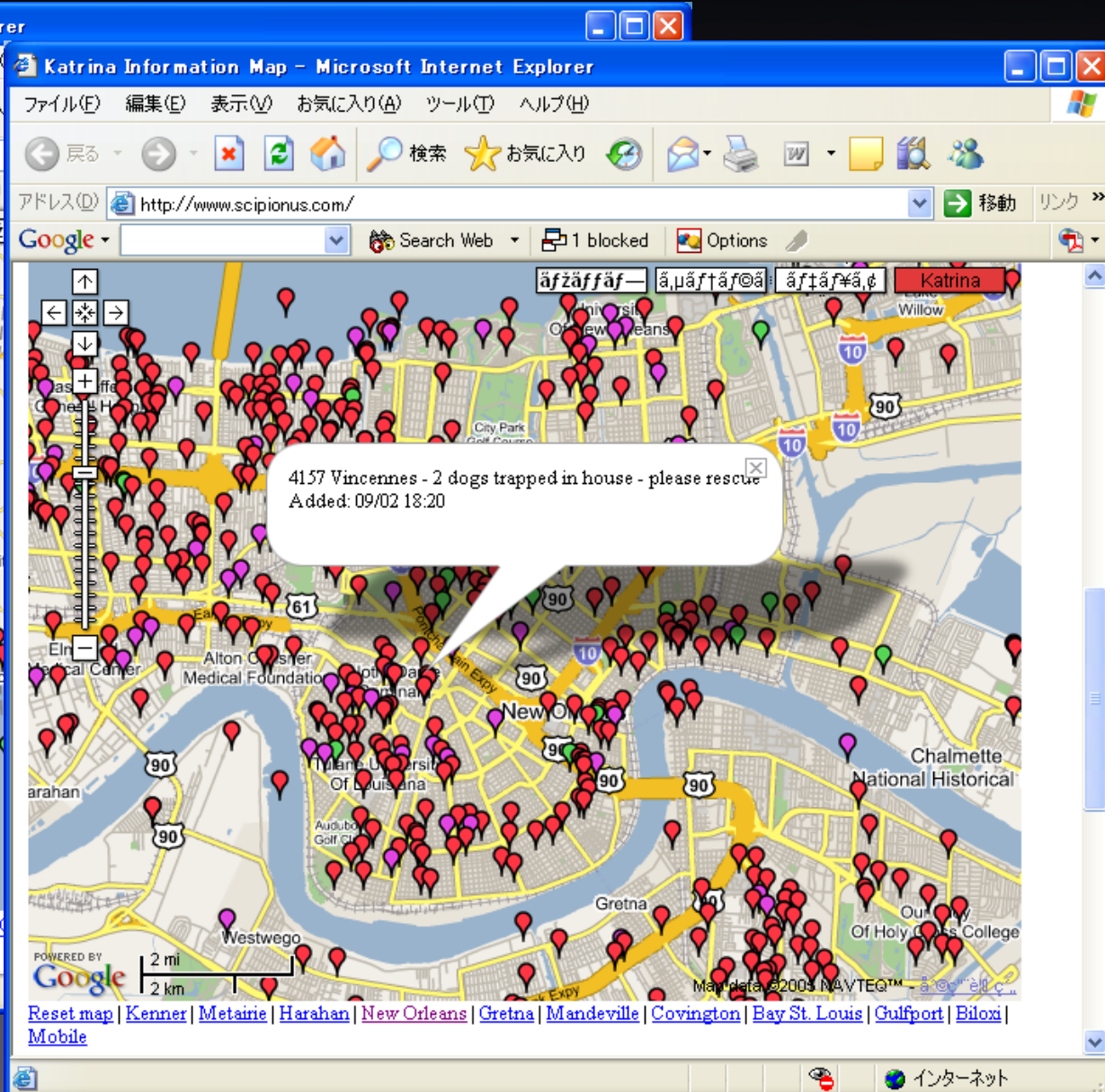
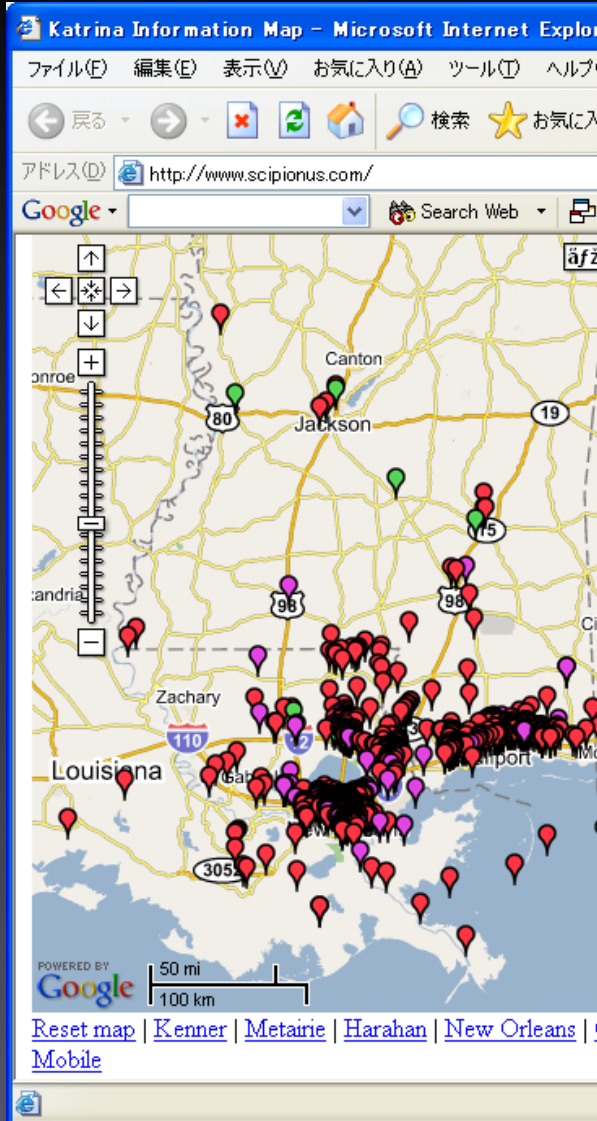
Transfer the community knowledge of elderly to younger
generation

Web tools

~ easy to use ~

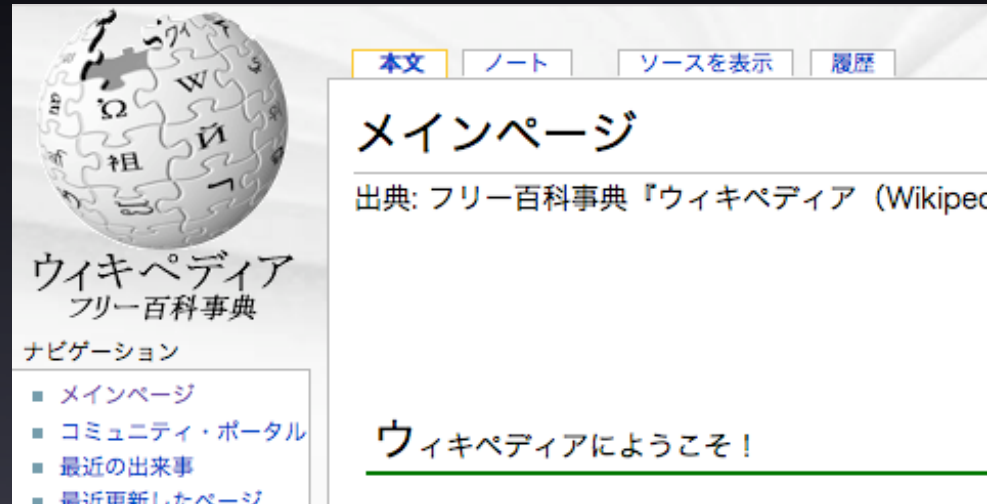
- blog, SNS (Social Networking Service/System), WebGIS, several kinds of Web APIs
- Google maps in Katrina case

GoogleMaps in Katrina case



To put community knowledge to practical use.

- Wikipedia



- Social Bookmark

2. Impact of Cyber Space to Real World

- We have to pay attention to agents as software running in computers or cyber environment itself, because we cannot see them actually.
- On the other hand, we expect the cyber space, where agents are automatically running and gathering adequate information for their users, can contribute to a convenient and secure real society.

2. Impact of Cyber Space to Real World

- New tools : their light side and shadow (ex. automobile)
- RFID chip contributes to distribution process.
Microchip implanted pets safely returned their owner.
→ We can exchange information with society without consciousness.

3. Individual, Social and Cultural Effects by Interactive Electronic Media

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history of Web services

1991	WWW		
1993	browser (Mosaic)		
1994	streaming		
1995	search engine (yahoo)	JAVA	
1996	Net Auction (eBay)	agent	
1997	ADSL		
1998	IM	portal	
1999	mobile net connection (iMode)	P2P	
2000	Electronic Money	Affiliate	
2001	RFID	GPS mobile phone	
2002	WiFi	IP phone	Grid computing
2003	blog		
2004	WiMAX	SNS	Skype
2005	RSS		
2006	Ajax	Web2.0	
	↓	???	(The Nikkei June 26, 2006)

3. Individual, Social and Cultural Effects by Interactive Electronic Media

- Mosaic guides people into the Internet.
- Not only to get the information, but also to send messages into the world.
- Effective tool for communication in a disaster. (Katrina case)
- Interactive communication tool as blog or SNS.

3. Individual, Social and Cultural Effects by Interactive Electronic Media

- 8.68 million blog users (March 2006 in Japan), which is 2.6 times larger than that of last year.
- 7.16 million SNS users. 6.5 times larger.
- **Go Pets** as an International communication tool for non English native speaking people.

3. Individual, Social and Cultural Effects by Interactive Electronic Media

- Several useful tools to exchange individual digital works through the Internet.
- **Creative Commons** emphasizes the creativity of amateur creators.

creative commons



ホーム 学ぶ 公開する 探す ニュース World

CCJPについて

▷ クリエイティブ・コモンズの理念



クリエイティブ・コモンズのライセンスは、完全な著作権保持と完全な著作権放棄の間の中間層を埋める役割を果たします。具体的には、コンテンツに対して著作権を保持しながら一定の自由を事前に許諾している事を、分かりやすく表示することでより自由な著作権ルールを実現し、より豊かな情報流通と文化・科学技術の発展をサポートします。

坂本龍一：『chain-music』プロジェクト



2006年05月21日

音楽家の坂本龍一がイラク戦争に抗議し、平和を祈念するために2003年3月に開始した「チェーンレター（連歌）」のプロジェクト、『chain-

music』の楽
music』は1
て作られてい
田亮司、カ
ルヴィアン、

ブーキーといったアーティストた
URL: <http://www.sitesakamoto.com>

notion



03:00/54:30

STOP ■ START ▶

QUICKTIME

CHAIN-MUSIC Ryuichi Sakamoto + Haruomi Hosono + Towa Tei + Atom Heart + Ryoji Ikeda + Carsten Nicolai + David Sylvian + Mika(Panasonic) + Thomas Knak + Cornelius + moOog yamamoto + christian fennesz + Paul D.Miller a.k.a DJ Spooky + Daniel Bernard Roumain + Hector Zazou + mukul + taylor deupree + Christopher Willits + groopies + O.Lamm + sutekh + agf

[DOWNLOAD + Flash Player + QuickTime]

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3. Individual, Social and Cultural Effects by Interactive Electronic Media

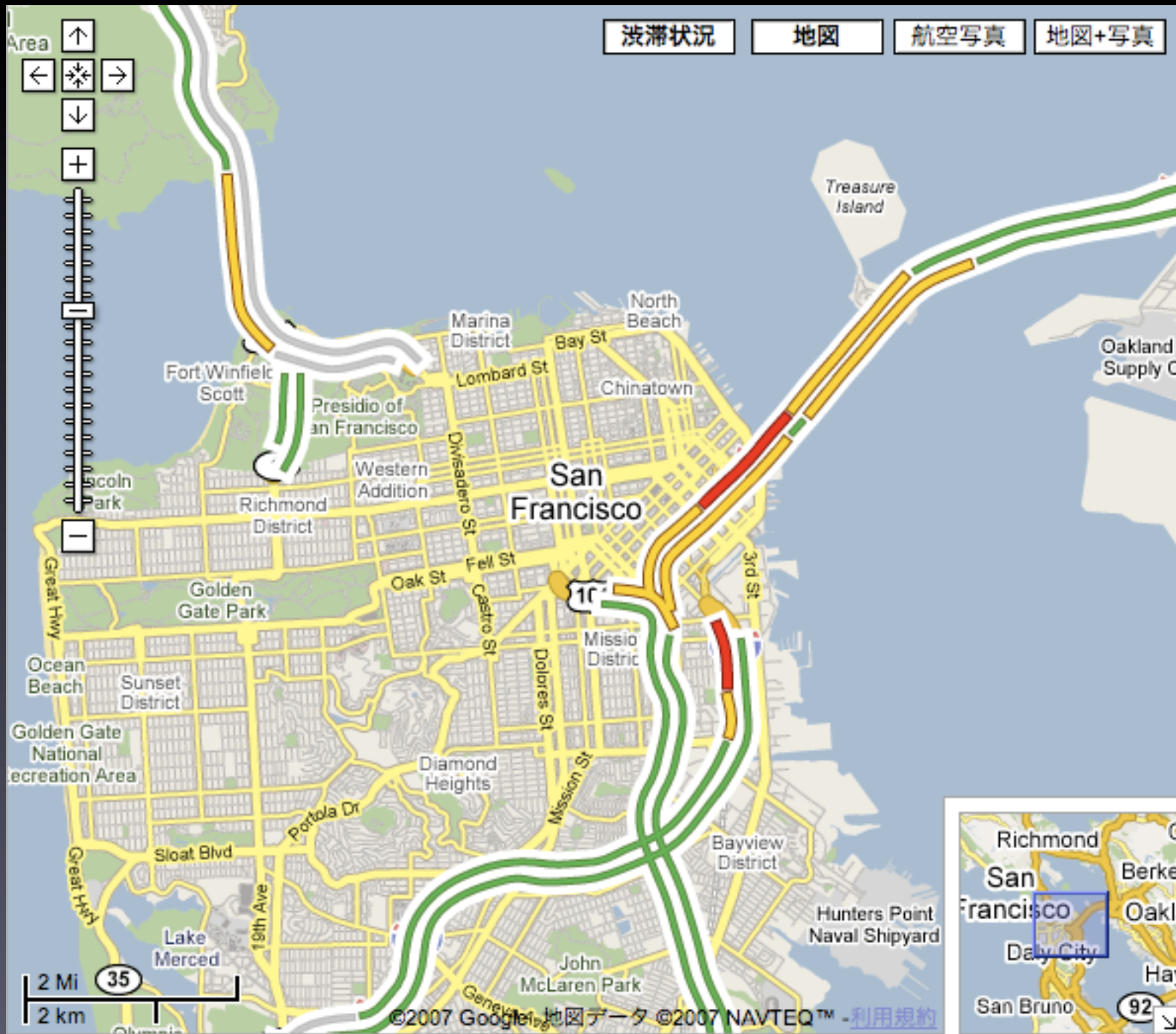
- **Long Tail** Phenomena in Cultural field could lead so-called sub-culture or pop-culture into the major field.
- **YouTube** gathers tens of thousand new videos per day. NBC uses YouTube as advertisement of their TV drama. It means one of major media accepts a grass-root new media.
- **last.fm** Recommended Web Music Radio

3. Individual, Social and Cultural Effects by Interactive Electronic Media

- **Web2.0** movement could build a new Web culture.
- from one service by a single server application to **mashup** type service by multiple server applications.
- customer information + WebGIS (GoogleEarth)
- GoogleEarth + VICS → traffic information

Internavi Premium Club on Google Earth™





Map Hybrid Satellite



Road construction, on FDR DR SE at SOUTH ST

3. Individual, Social and Cultural Effects by Interactive Electronic Media

- Open policy for services and data (Amazon, Google)
API (Application Program Interface) on the Net
- OS API is within PCs.
Web API is open to society via the Net.

4. Influence of Evolving Technologies to our Life Style

4. Influence of Evolving Technologies to our Life Style

- The Internet is getting a general tool in our life style like automobile.
- Digital divide is a crucial problem in our time.
- Digital divide for hardware (infrastructure) and Digital divide for users.
- User interface design is important.
mobile phone or digital TV are good gateway to the Net.
- Text Interface → GUI → tangible ?

4. Influence of Evolving Technologies to our Life Style

Net Shopping

- 95–00 **narrow band**
BtoB BtoC yahoo rakuten
- 00–03 **broad band**
BtoBtoC travel site online stock exchange
- 03–06 **ubiquitous network**
CtoC PtoP mixi skype
- 06– **machine to machine**
recommended shopping or services by agent (A.I.)

4. Influence of Evolving Technologies to our Life Style

Political Scene – Digital democracy –

- 1992 U.S. Presidency Election First Internet election
Clinton–Gore: information super highway
- 1996 U.S. Presidency Election Email or Web for campaign
- 2004 U.S. Presidency Election
access number on the day before election:
Bush: 310 thousand Kerry: 300 thousand
- from Web to blog
Political campaign in a virtual world (a Mayer of the west coast in the U.S.)

web society in the future

web society in the future

three view points

platform

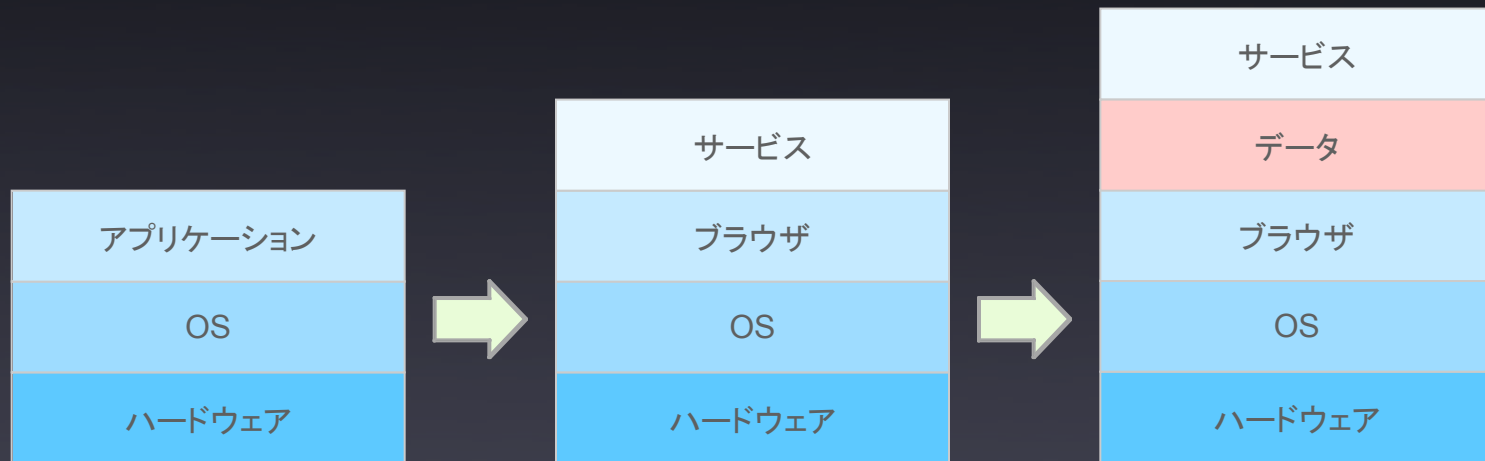
individual

contents

+

the next paradigm

data as platform



“Data as next intel inside”

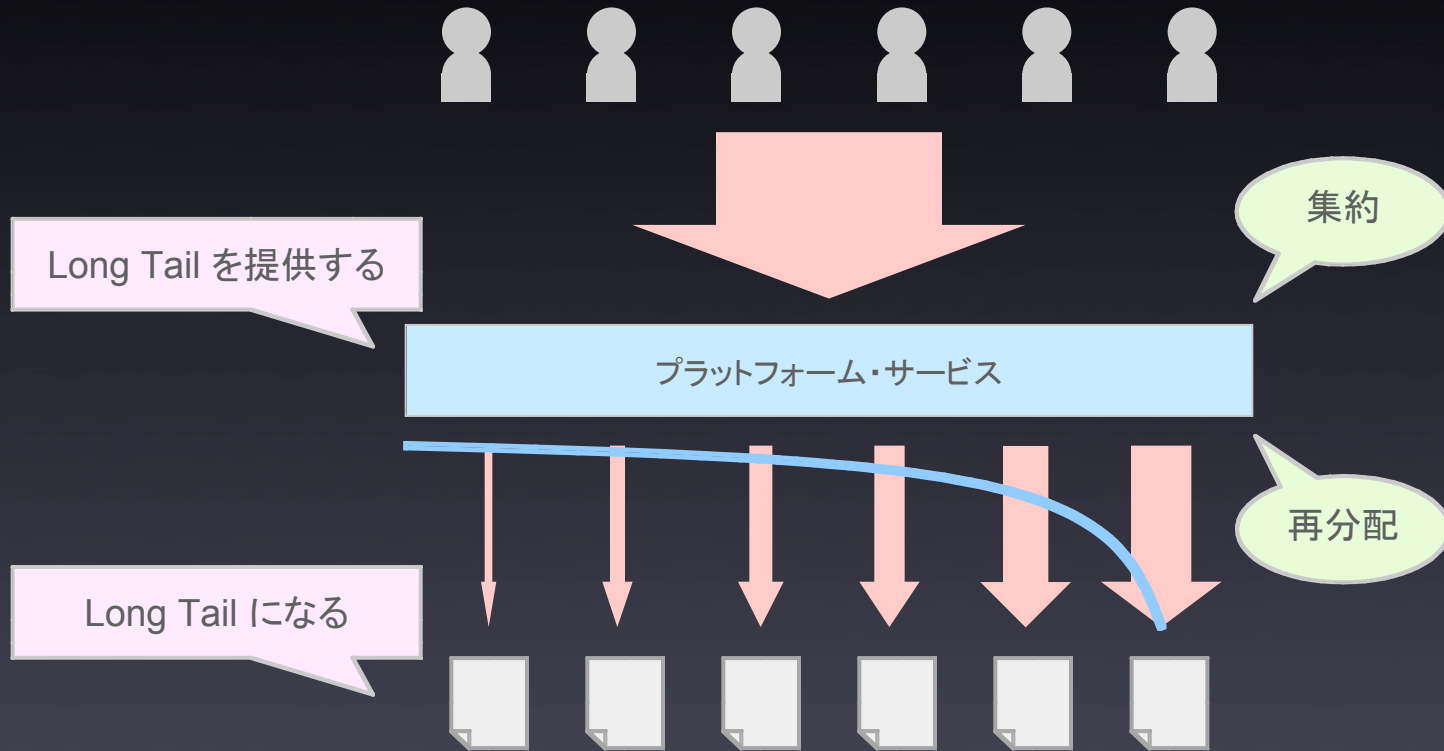
two models on the platform



- platform supplier
- landowner
- hard to join
- highly added value
- Google, Amazon, Yahoo! etc.

- platform user
- tenancy
- easy to join
- low added value
- mashup etc.

“attention” as another platform



The more the site gets the attention, the more it gets powerful.
attention divide

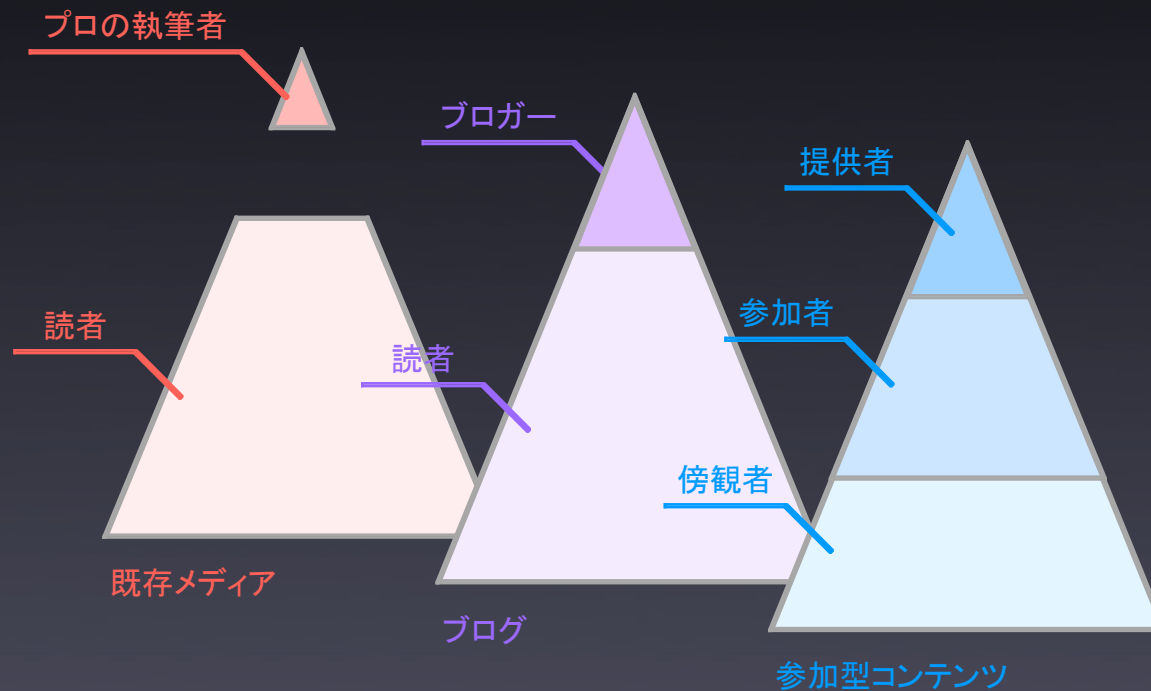
evolving Web platform

Two next generation platform
data
attention

Two service propose strategies
landowner
tenancy

individual and contents are in the next chance

But, one thing.



Web2.0

participant is less than 1%

from virtual world to real society

data combination

traffic medicine distribution

biological activity position sensing

evolving hardware

sensors analysis algorithm display devices

the next paradigm

What's Next ?

MashUp type Business

not only on the Net
but also in the Real

Thank you