

Chair for Information Architecture | HS2008

Elective Course Information Architecture

INFORMATION Architecture: The Architecture of Information

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iA

Chair for Information Architecture

Overview

- Information Architecture - Review L1
- From Card Boxes to Web 2.0
- Principles
- Evolving Trends - Web 3.0
- Collaboration in Space - Value Lab

Information Architecture - Review L1

The Architecture of Information

‘,INFORMATION Architecture’ expands the definition of architecture to areas outside the traditional realm.

Introduction Information Architecture

Information Architecture - Review L1

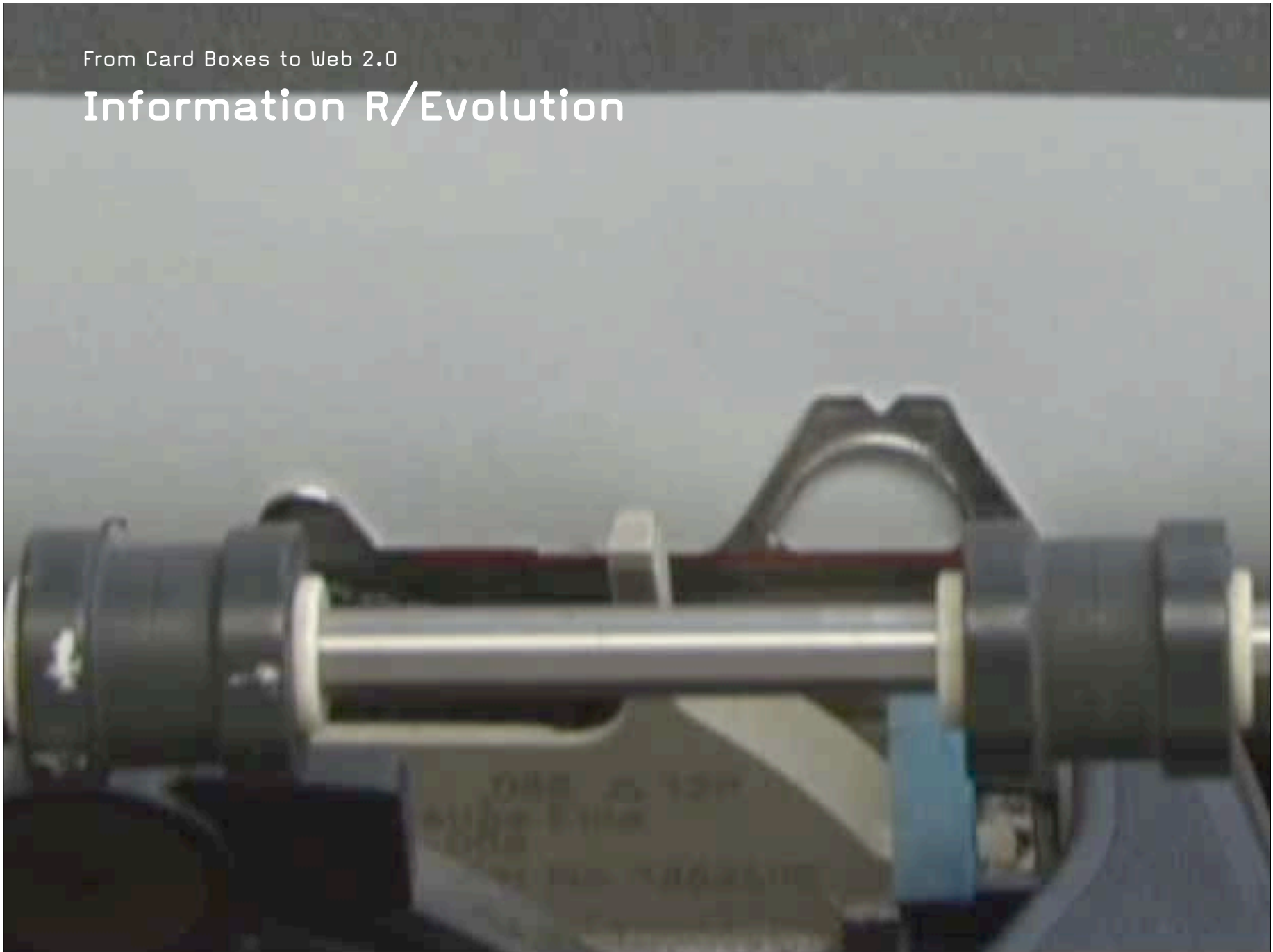
Using architectural metaphors to structure,
understand and communicate information better

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From Card Boxes to Web 2.0

Information R/Evolution



The Architecture of Information

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- **Principles**
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Principles

Web 2.0 - Social Media

Social Media is the use of electronic and internet tools for the purpose of sharing and discussing information and experiences with other human beings.

Principles

Web 2.0 - Social Media

Social Media is based on a conversation
that is powered by...

Principles

Web 2.0 – Social Media



Principles

Web 2.0 - Social Media



Principles

Web 2.0 - Social Media

It is a conversation between students,
employees, customers, investors, ...

- A conversation between PEOPLE!

Principles

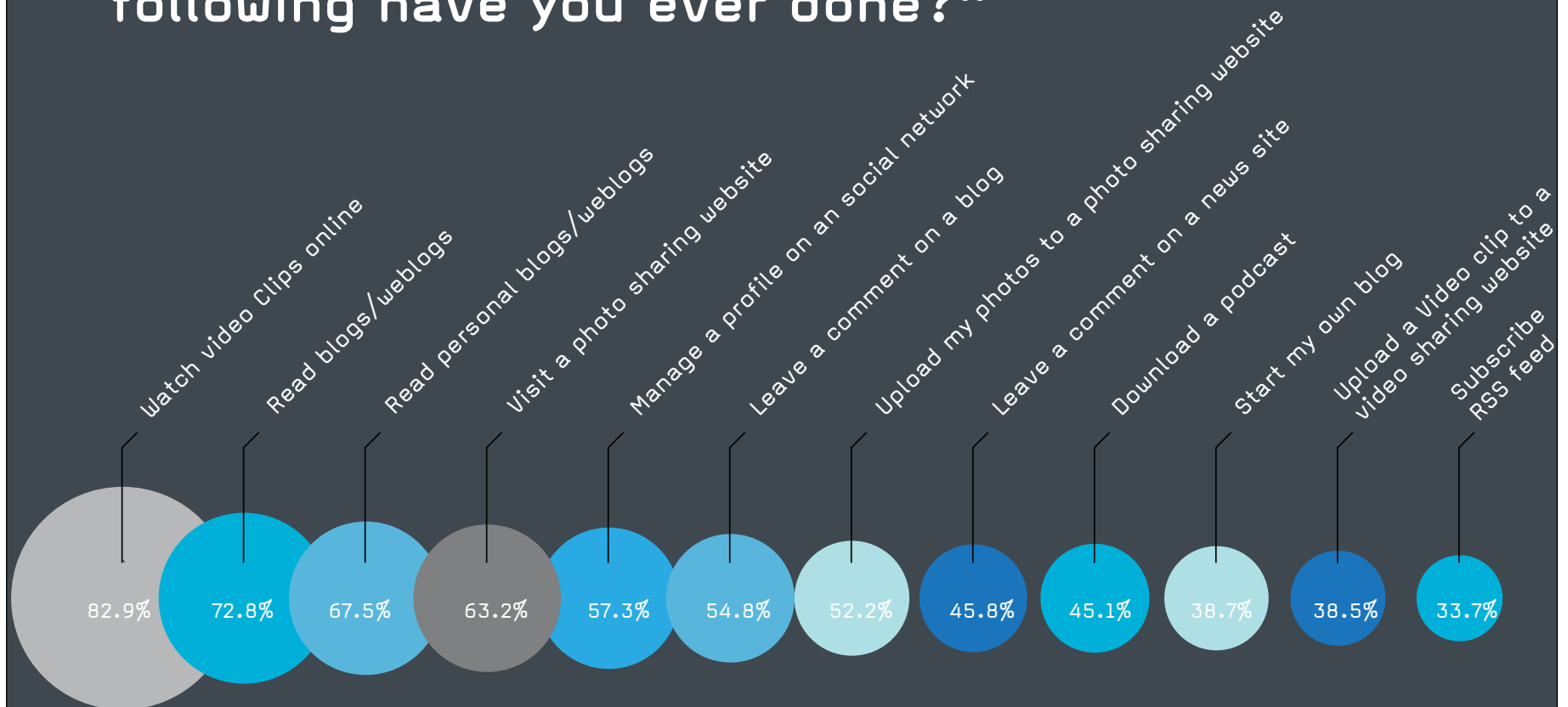
Web 2.0 - Social Media

Facts and Figures

17'000 active internet users
between the ages 16 - 54
in 29 countries
from 2006 to 2008

Web 2.0 - Social Media

„Thinking about using the internet, which of the following have you ever done?“



Principles

Web 2.0 - Social Media

Which basic principles does the Social Media Conversation follow?

Principles

Web 2.0 - Social Media

The Social Media Conversation is...

...NOT organized!



...NOT controlled!



...NOT on Message!



ICE COLD

Coca-Cola

TRADE MARK
REG. U.S. PAT. OFF.

IN BOTTLES
SOLD HERE

From Card Boxes to Web 2.0

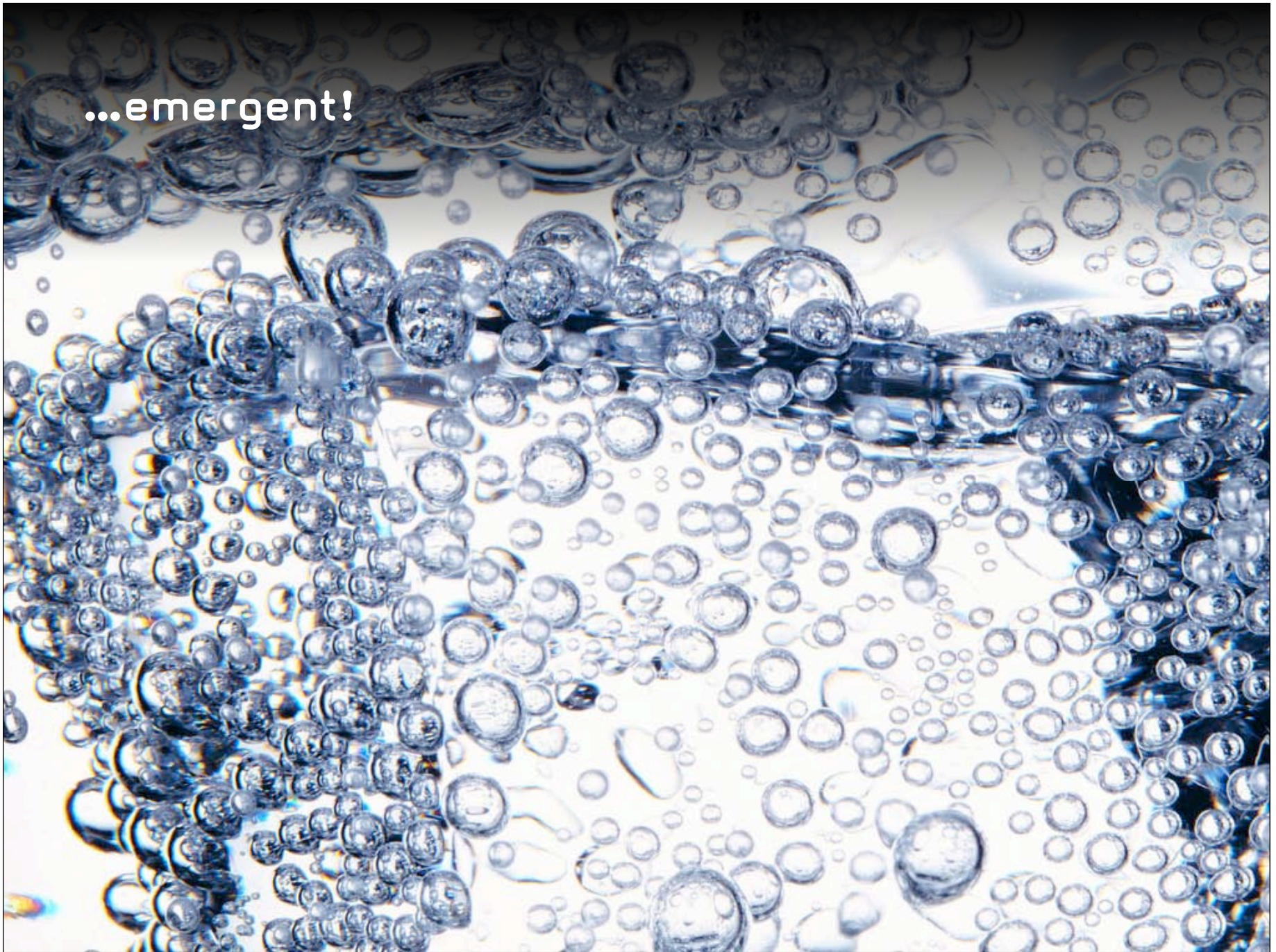
Web 2.0 - Social Media

...but Social Media Conversation is...

...vibrant!



...emergent!



...fun!



...compelling!



From Card Boxes to Web 2.0

Web 2.0 - Social Media

Some more principles...

Principles

How the Web has evolved...

1.0 one-way &
broad

1.x dynamic &
interactive

2.0 simple &
social

E-Mail
Static Websites
Discussion Forums
Instant Messaging
Chat Rooms

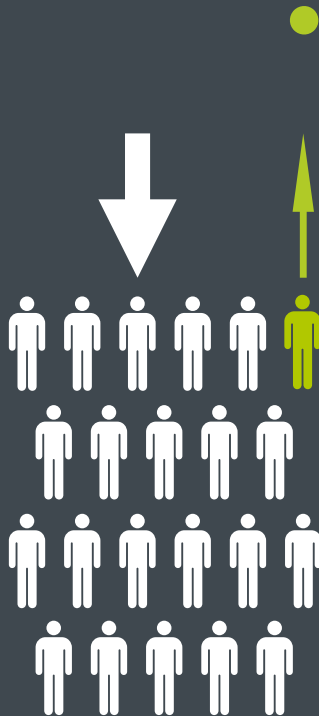
Dynamic Websites
Portals
Communities
Agents
Video Conferencing
Web Services
Collaborative Filtering
VOIP

Blogs
Wikis
RSS
Mashups
Pod- & Webcasts
Social Networks
Social Bookmarking
Folksonomies

How the Web has evolved...

1996

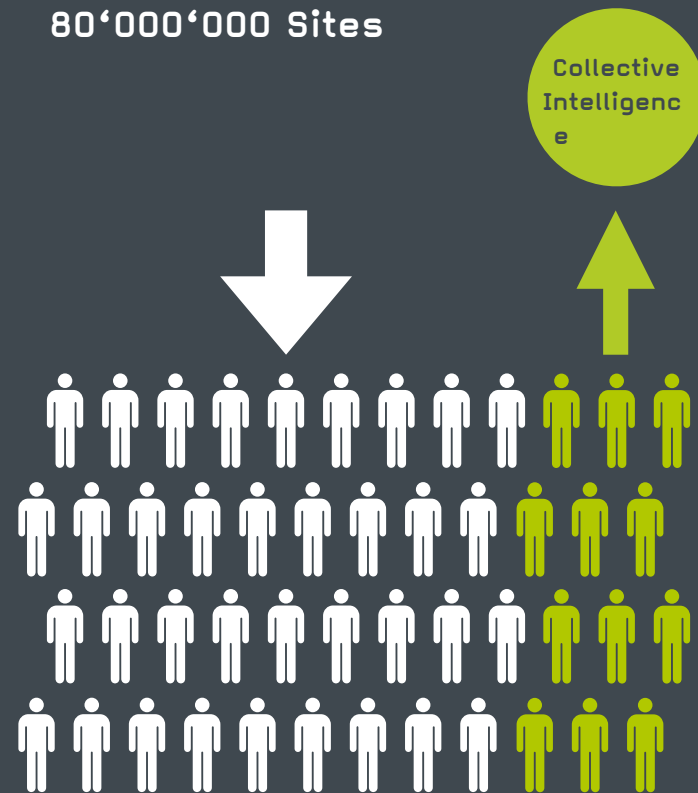
mostly read-only
250'000 Sites



45 million users worldwide

2008

widely read-write
80'000'000 Sites

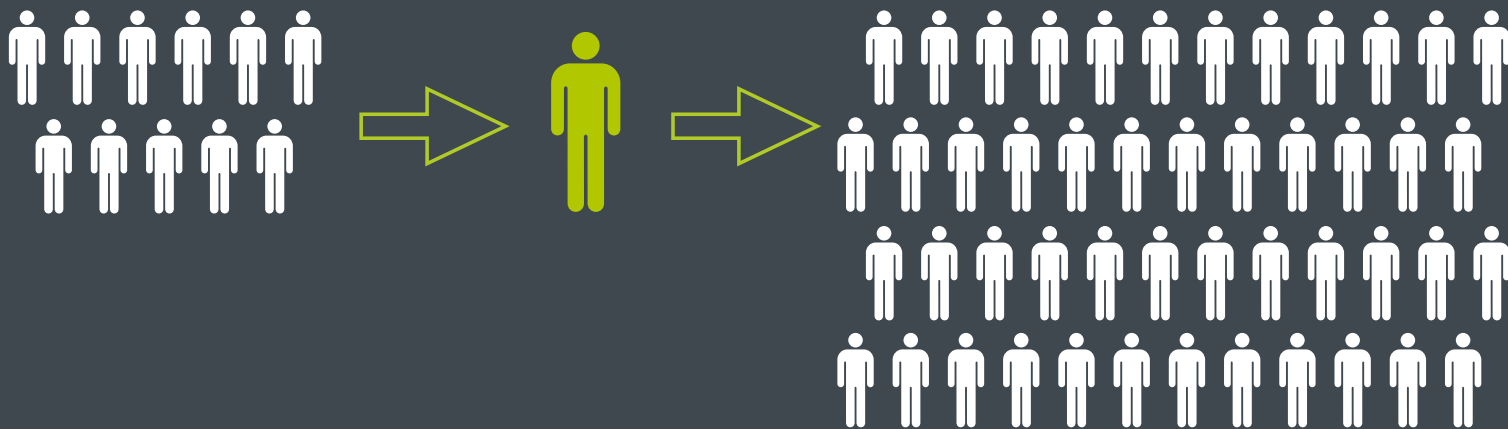


1+ billion users worldwide

Principles

The Principles of ,old' Media

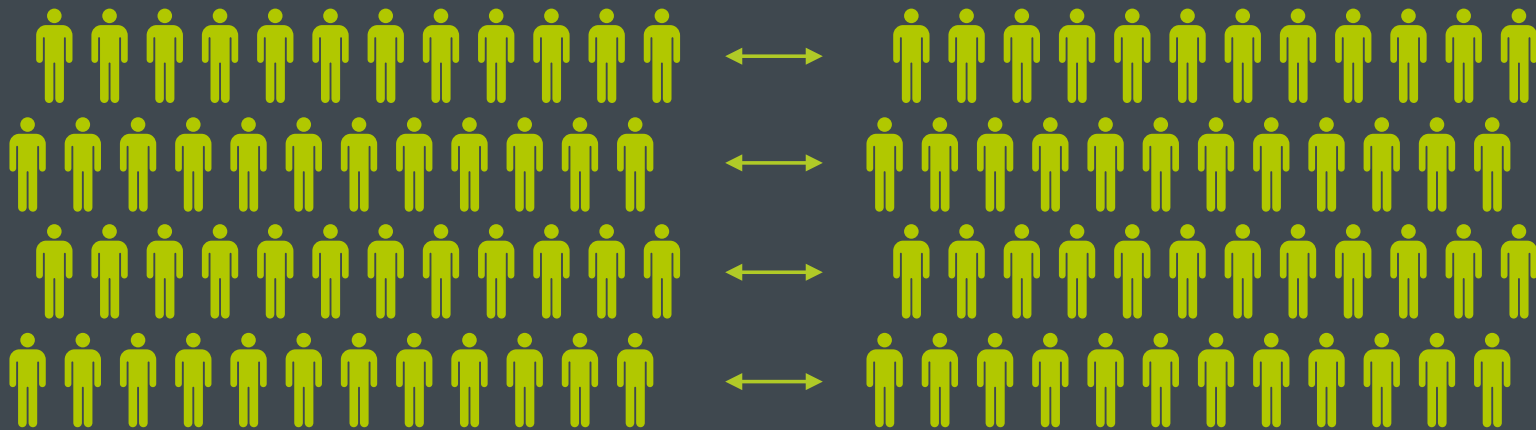
A minority writes for a publisher who then sells it on to the majority as the publisher owns the production and distribution channels



Principles

The Principles of Social Media

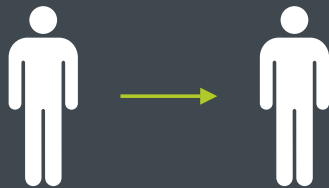
Anyone can produce, copy, and share anything with anyone - at almost no cost.



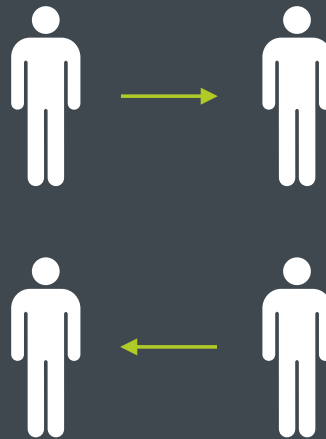
Principles

What do we mean with Collaboration?

Communication



Interaction

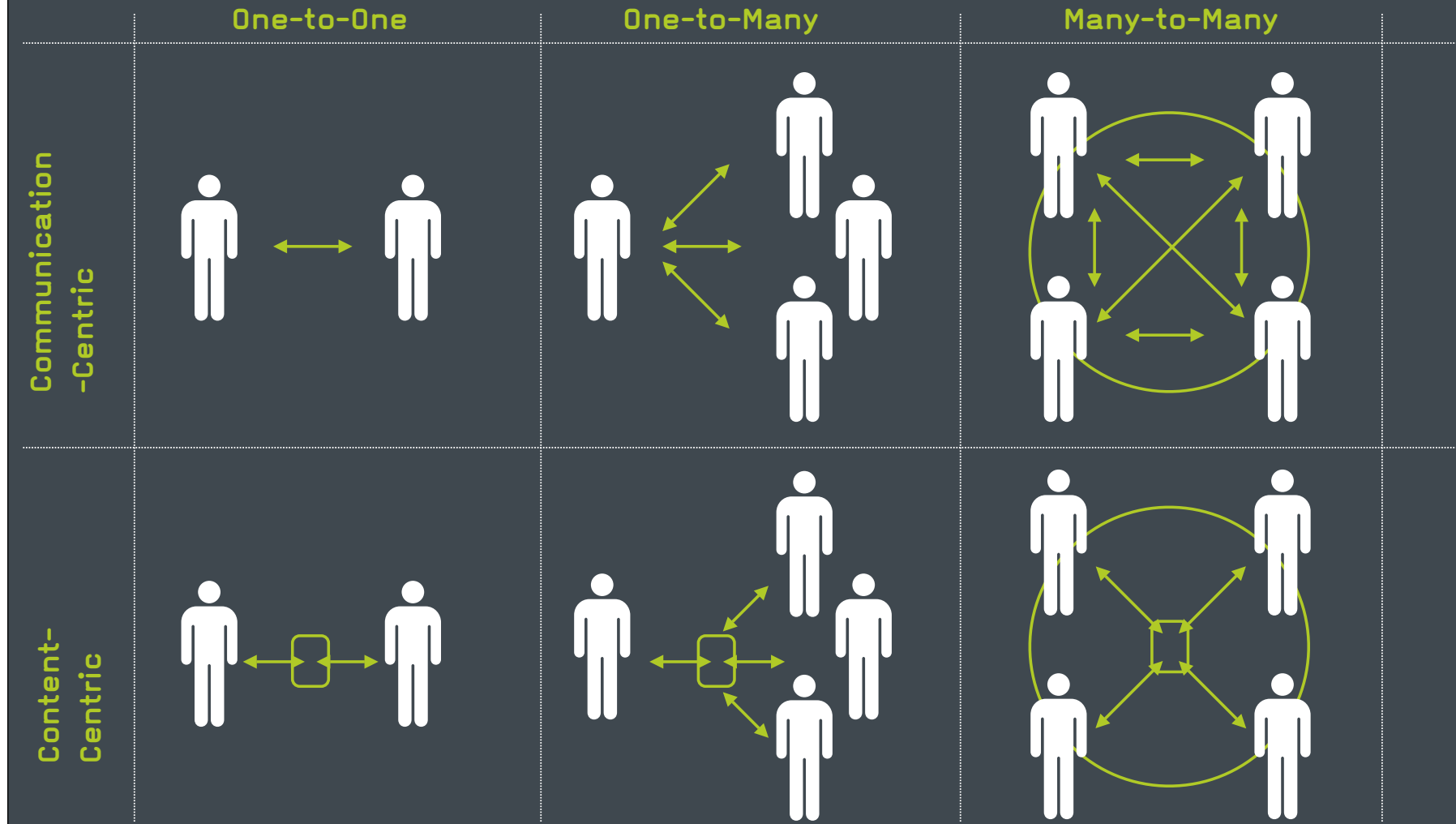


Collaboration



Principles

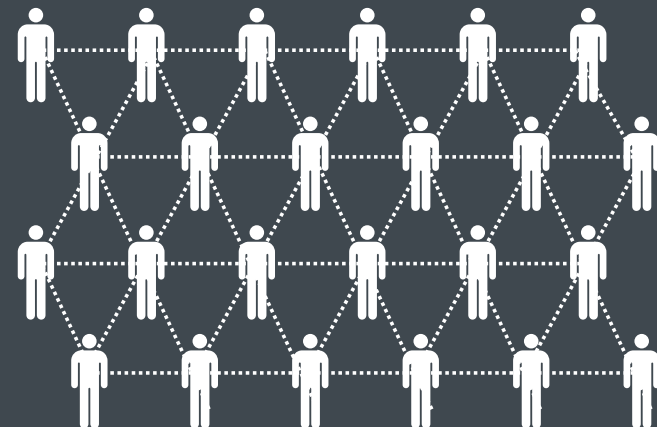
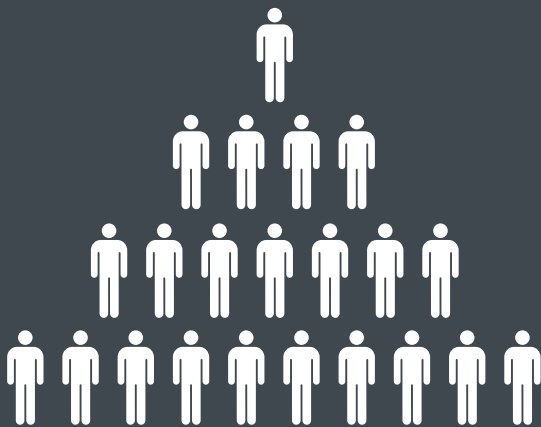
What do we mean with Collaboration?



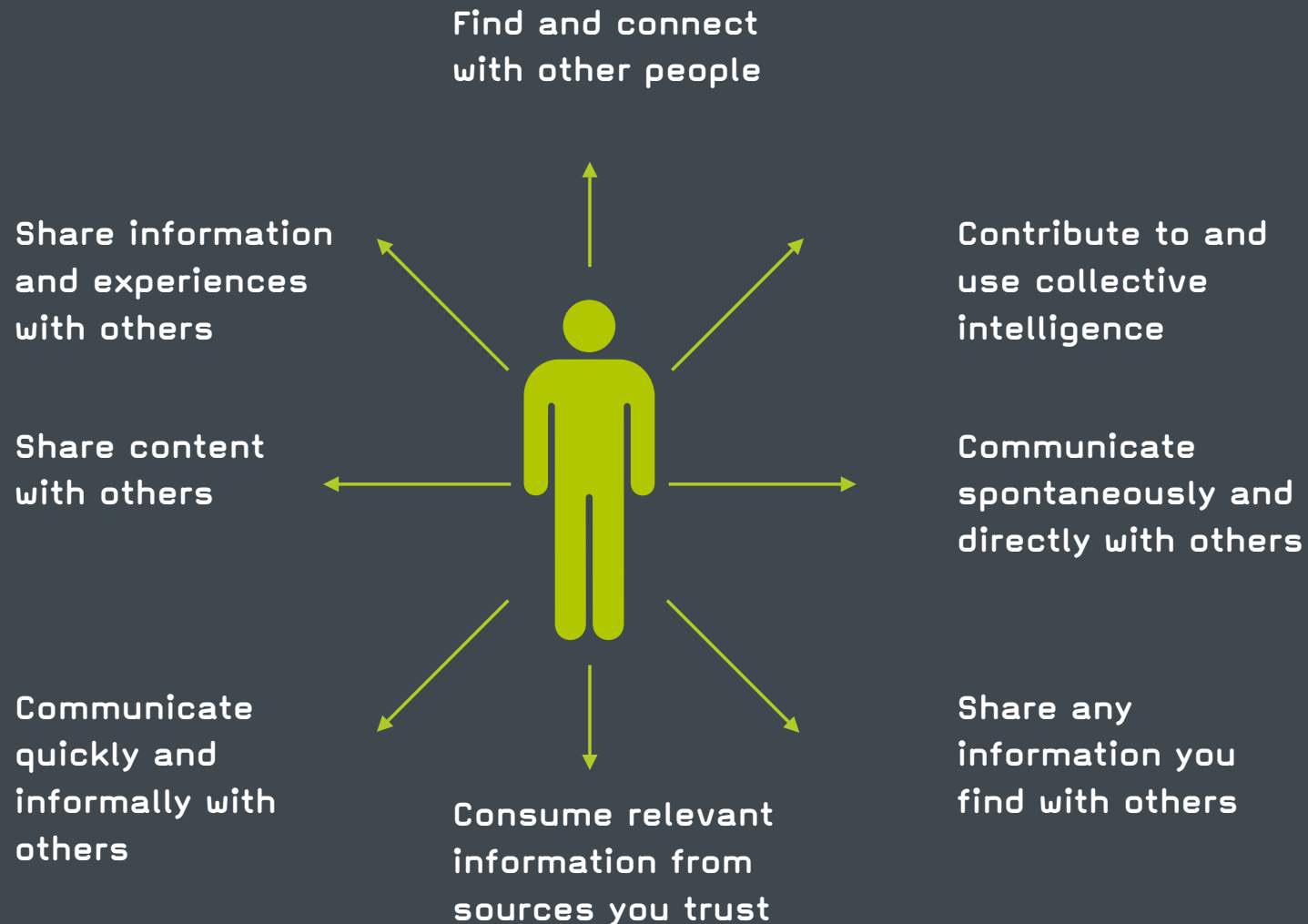
The collaborative Culture

Command-and-Control
Formal
Hero-Culture
Fear of making
Mistakes

→ Consensus-Driven
→ Informal
→ Mentoring-Culture
→ Trial-and-Error

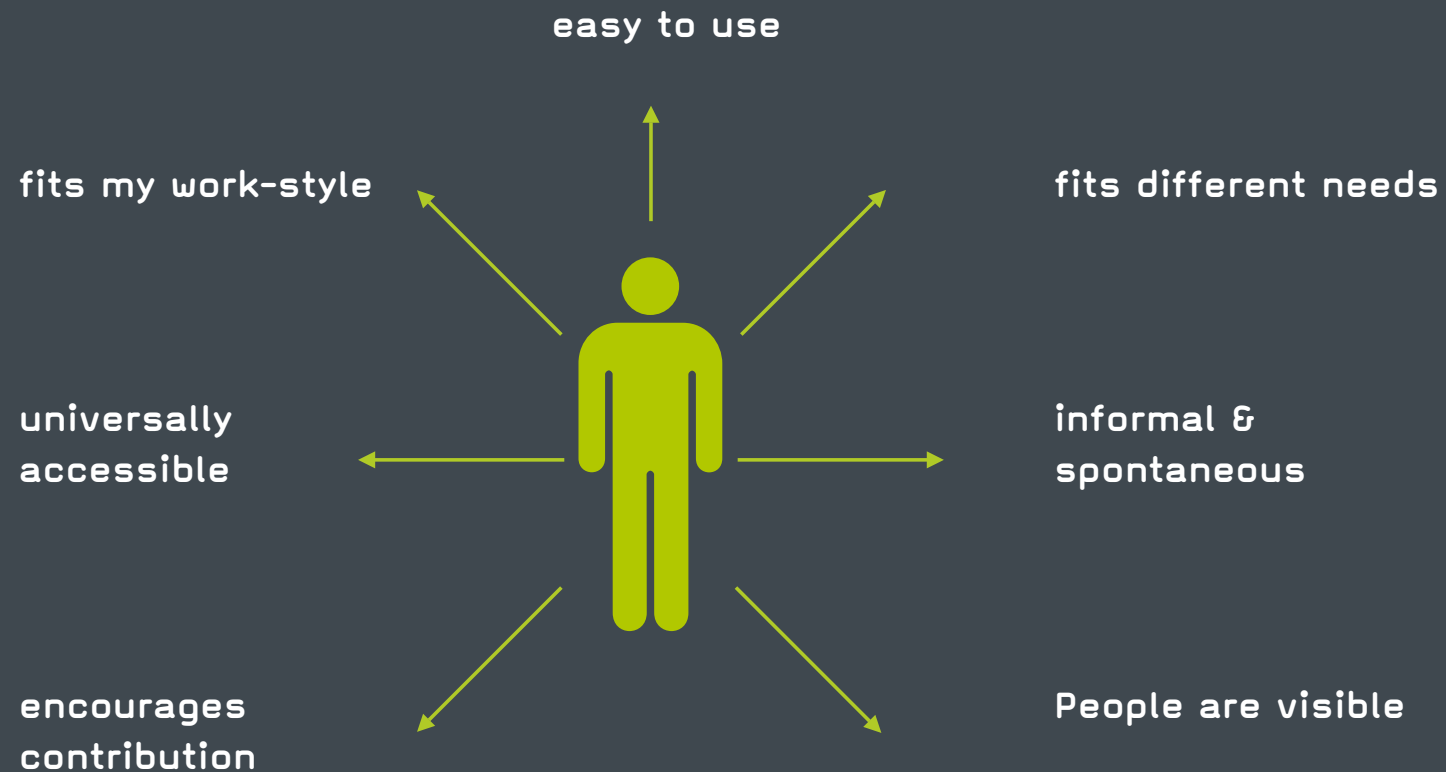


The Needs that the Tools address



Principles

We need truly collaborative Tools



Principles

We need to change Behaviours



Summary

The trend in social media is the continuous shift to upload and share rich multi-media content and there is a big movement towards participation.

This represents a real shift in media consumption and production from passivity (TV) to personal control (YOUTUBE).

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- **Evolving Trends - Web 3.0**
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The Architecture of Information

Evolving Trends for Web 3.0

The thing about predictions...



Evolving Trends for Web 3.0

Prediction 1

"I think there is a world market
for maybe five computers."

Thomas Watson, Chairman of IBM, 1943



Evolving Trends for Web 3.0

Prediction 2

"Computers in the future
may weight no more than 1.5 tons."

Popular Mechanics, forecasting the relentless march of science, 1949



Evolving Trends for Web 3.0

Prediction 3

"640K ought to be enough for anybody."

Bill Gates, 1981 apocryphal



Evolving Trends for Web 3.0

Prediction 4

"There is no reason anyone would want
a computer in their home."

Ken Olson, President, Chairman and Founder of Digital Equipment Corp., 1977

Reality

Humans are capable of using the Web to carry out tasks such as finding the Swedish word for "cat", reserving a library book, and searching a low price for a DVD.

However, a computer cannot accomplish the same tasks without human direction because web pages are designed to be read by people, not machines.

Vision - The Semantic Web

The semantic web is a vision of information that is understandable by computers, so that they can perform more of the tedious work involved in finding, sharing and combining information on the web.

Evolving Trends for Web 3.0

Vision - The Semantic Web

The semantic web vision is not just about helping software become smarter.

It is about providing new technologies that enable people, groups, organizations and communities to be smarter.



Evolving Trends for Web 3.0

Prediction 5

"You never have to file anything by hand again. Your software can automate all filing and information organization tasks for you because it understands your information and your interests."

<http://lifeboat.com/ex/minding.the.planet>, 2008

Prediction 6

"The future Web will be highly distributed, but will have certain large services within it as well — much like the human brain itself, which is organized into functional sub-systems for processes like vision, hearing, language, planning, memory, learning, etc."

Prediction 7

"The global mind also needs a global body so to speak. It will be a smart environment that ubiquitously integrates with our physical world.

We won't have to sit in front of computers or deliberately logon to the network to interact with the global mind. It will be everywhere."

Prediction 8

"The global mind will be physically integrated into furniture, houses, vehicles, devices, artworks, and even the natural environment.

It will sense the state of the world and different ecosystems in real-time and alert humans and applications to emerging threats."

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Collaborative Processes

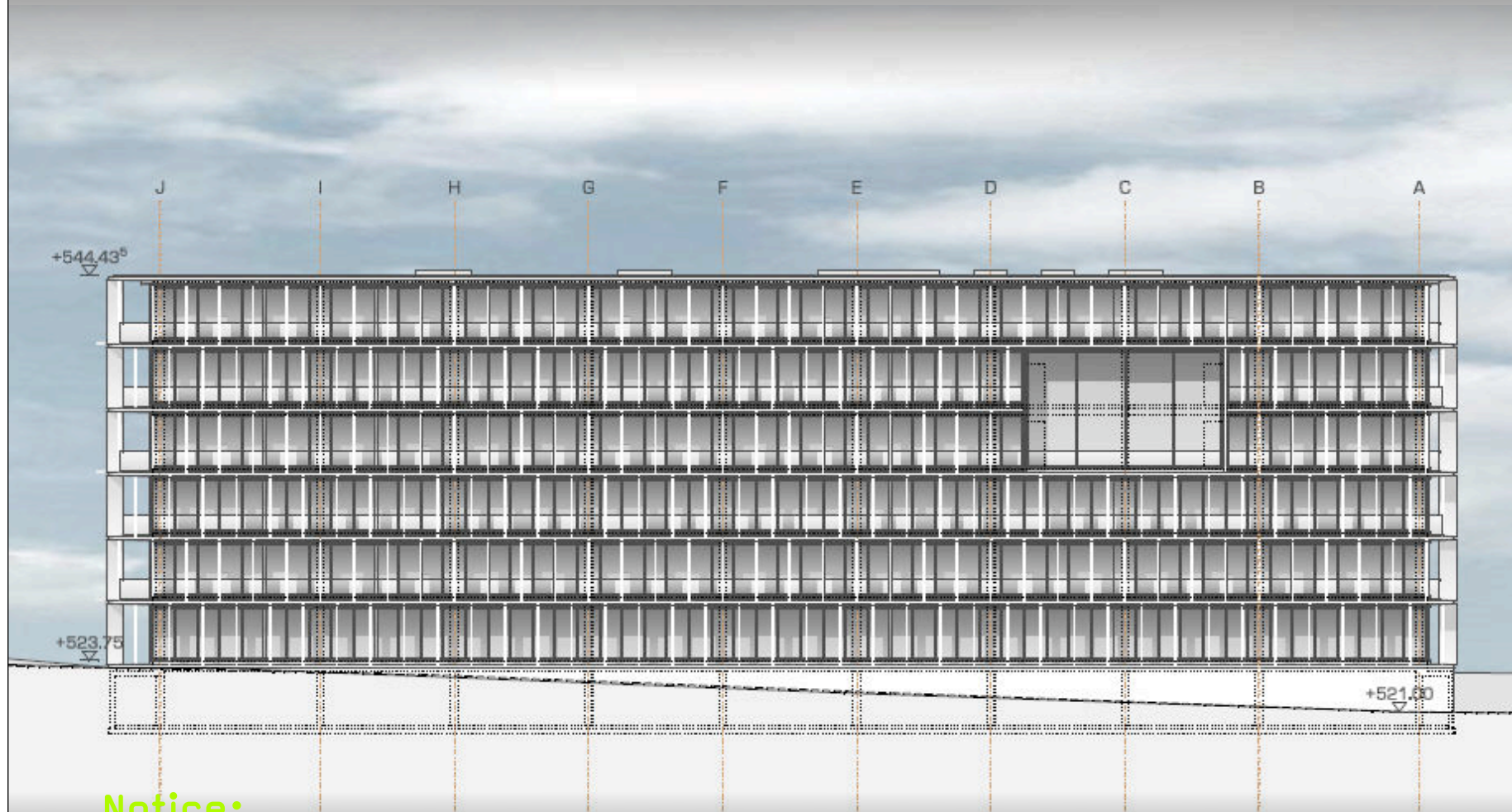
- Team Creation
- Idea Generation
- Decision-Making
- Simulation
- Work or Production
- Evaluation or Recap

Notice:

L5: 27/10/08 Join us to visit the Value Lab!

Collaboration in Space - The Value Lab

The Value Lab is hosted in the HIT Building



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L5: 27/10/08 Join us to visit the Value Lab!

Collaboration in Space - Value Lab

Future User: Interdisciplinary Research Teams



Notice:

L5: 27/10/08 Join us to visit the Value Lab!

Future User: Interdisciplinary Research Teams

- Information Science
- Life Science
- Design Science
- Simulation
- Medical Technology
- Engineering (e.g. Traffic Engineering)
- Architecture, Urban Planning
- etc

Notice:

L5: 27/10/08 Join us to visit the Value Lab!

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Podcast Information Architecture

[http://www.ia.arch.ethz.ch/teaching/
teaching-08/](http://www.ia.arch.ethz.ch/teaching/teaching-08/)

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Sources

- 06: <http://www.ksu.edu/sasw/anthro/wesch.htm>
10: <http://www.flickr.com/photos/stabilo-boss/93136022/sizes/o/>
18: <http://www.flickr.com/photos/gregorypleau/142716935/>
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19: <http://www.flickr.com/photos/missrogue/619781610/>
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22: <http://www.flickr.com/photos/mobilestreetlife/2682971494/>
23: Lee White, <http://insideconversation.wordpress.com/>
24: <http://www.flickr.com/photos/salaboli/2367728559/>
38-41: http://www.flickr.com/photos/digitus_malus/2569565607/
45-48: http://www.flickr.com/photos/asadbabil_smj
51: <http://www.ethz.ch>
52: Chair for Information Architecture, ETH Zürich