Web 3.0

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What is Web 3.0?

- It is a "web of data" which enables machines to understand the meanings of information on the World Wide Web and respond to complex human requests based on these meanings.

- Also known as Semantic Web.

- 8.8 gbps

- It enables automated agents to access the Web more intelligently.

- The term was coined by Tim Berners-Lee who is also the inventor World Wide Web.

- Expected to be developed between 2010-2020.
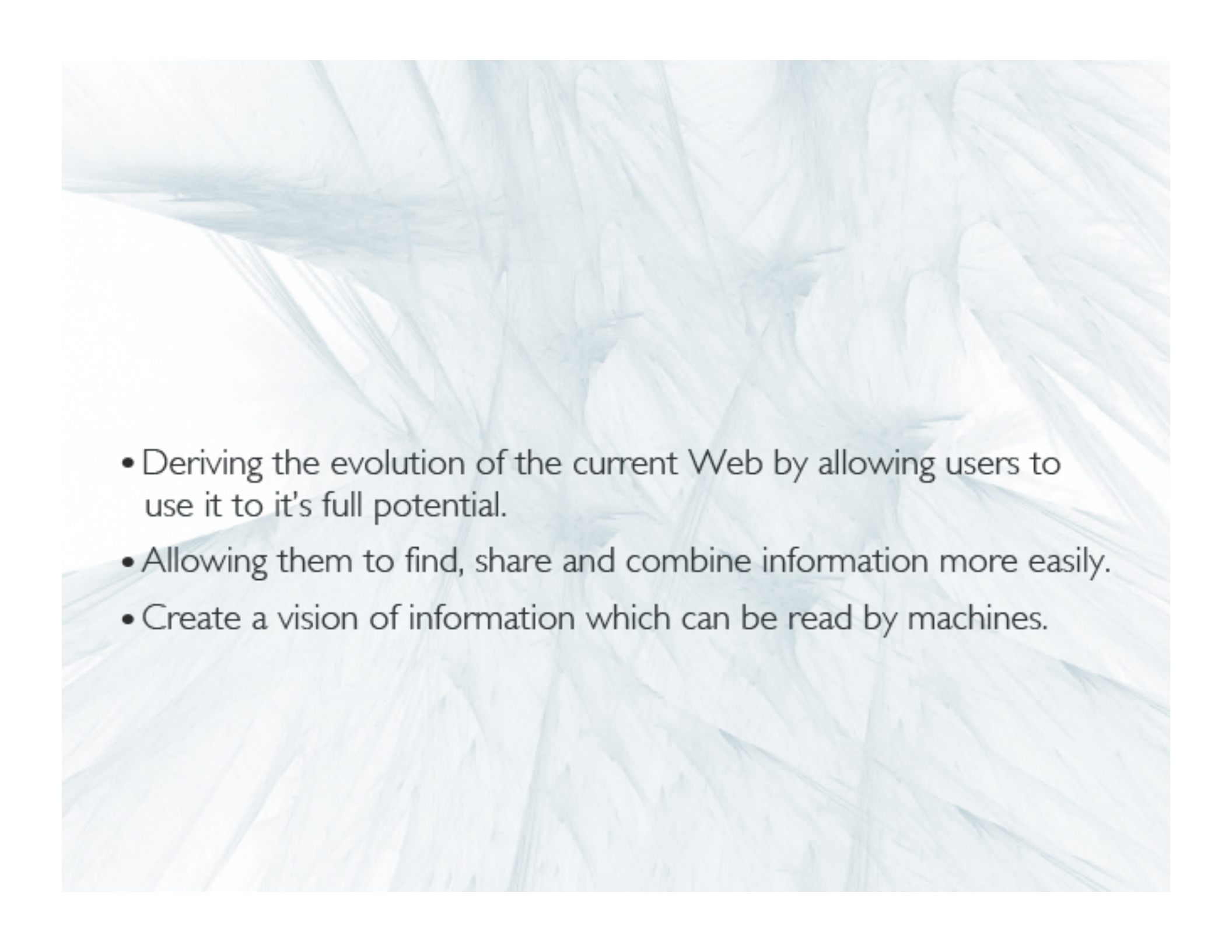
A web where the context of content
is defined by data

Capable of reading and understanding

content and context

What is it's purpose?

- Deriving the evolution of the current Web by allowing users to use it to it's full potential.

- Allowing them to find, share and combine information more easily.

- Create a vision of information which can be read by machines.

Tim Berner-Lee;

"I have a dream for the Web become capable of analyzing all the data on the Web — the content, links, and transactions between people and computers. A 'Semantic Web', which should make this possible, has yet to emerge, but when it does, the day-to-day mechanisms of trade, bureaucracy and our daily lives will be handled by machines talking to machines."

How it's going to do it?

- Metadata: "Data about the containers of data".

- Tagging System

- Resource Description Framework (RDF): Defines and describes data and relations among data.

- The Web Ontology Language (OWL): Family of knowledge representation languages for authoring ontologies. The languages are characterised by formal semantics and RDF/XML-based serializations for the Semantic Web.

- Microformats: Data embedded within XHTML

Where are we seeing it?

- Hakia (Beta)
- Powerset: Only Wikipedia
- Sensebot (Beta): Brief, keywords, tags.
- Deepdyve: Does not uses it's index but only internet.
- Cognition: Wikipedia

hakia®

[search]

Leading Semantic Search Technology

What is Semantic Search ?
10 points of differentiation from keyword indexing

PubMed.gov Test hakia's semantic search against
PubMed's search over the same content

SENSENEWS [SENSEnews.com](#) is a new technology to enable an investor to
instantly assess the character and impact of all available
information from traditional news, online and social media on a
company's valuation, stock prices, and other key factors.

Aero hakia® [AEROhakia](#) is an Enterprise Search product deeply customized
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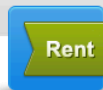
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JUL 16
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Cognition Search: Formula for "Meaning" in Search

0

Tweet

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SHARE

👍 Like   f Be the first of your friends to like this.

Backed by the experience of leading linguistic experts and technology that takes into consideration, ontology, morphology and synonymy, CognitionSearch, the semantic engine from Cognition technologies touts to have the perfect recipe to nail "meaning" in search.

Launching in the vertical domains of legal services, medical and health sciences, Cognition search intends to gain traction and finances to hopefully launch as a full-fledged engine in the future.

What runs CognitionSearch?

Briefly, the technology powering Cognition Search...

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👍 Like

18,508 people like Search Engine Journal.

Vikesh   Silvia   L Scott   Marcin   Robert

SenseBot

The Search Engine that finds sense in a heap of Web pages

SenseBot is a semantic search engine that generates a text summary of multiple Web pages on the topic of your search query. It uses **text mining** and **multidocument summarization** to extract sense from Web pages and present it to the user in a coherent manner. A "Semantic Cloud" of concepts is displayed above the summary, allowing to steer the focus of the results. To learn about our approach, go to the About SenseBot page, or browse Samples.

Download a Firefox browser add-on integrating SenseBot with your Google searches. Search as usual, and a summary of the results will be generated right on the Google page.

Visit our Sentiment Analysis site and look up public sentiment on a topic of your interest. You can also order customized reports showing sentiment trend over time.

We provide a number of **Products and Services** based upon SenseBot technology, including B2B services for enterprises and Web portals.

Search

Semantic API

Sentiment Analysis

Products / Services

In the news   Samples   Technology   Company   Contact us

Semantic Blogging:

- "The process of blogging inherently emphasizes metadata more than traditional Web publishing methodologies".

- RSS feeds are another way that blogs already have machine readable data that is easily accessible by the semantic web.

- Tags can be linked easily to other blogs containing similar information.

What is the difference ?

Web 1.0:

- The web as an information portal.
- It was all about our search for online viability.
- It was lack of;
    — content
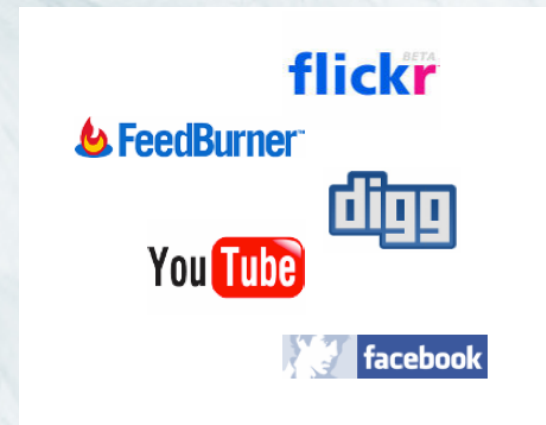   — interaction
    — scalabilty

Web 2.0:

- Focus on the power of community to create and validate.
- It is all about the power of networks, collaboration, friends.
- It was lack of;
  — personalization
  — true protability
  — interoperability

Web 1.0:

Web 2.0:

The Evolution to Web 2.0

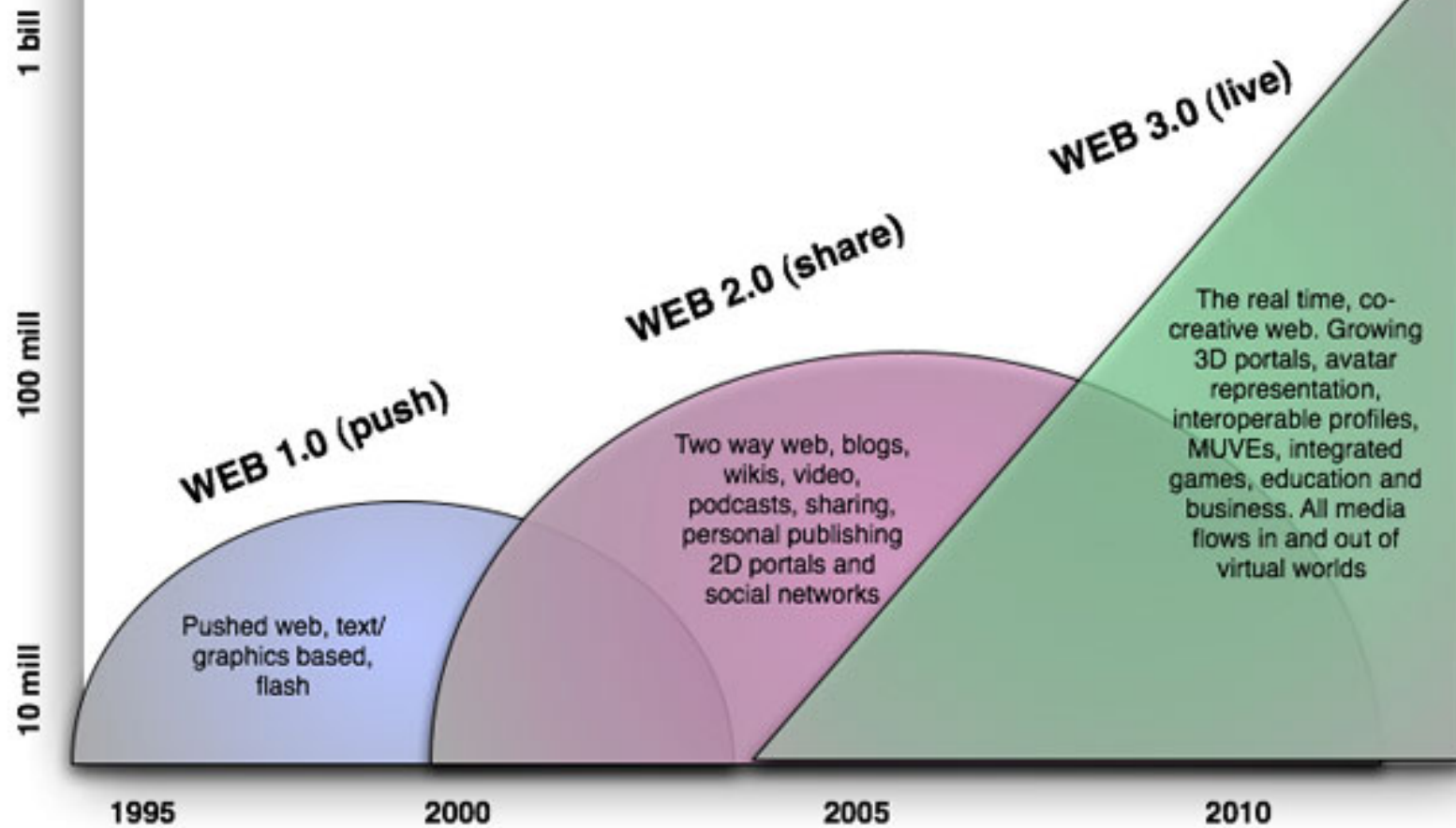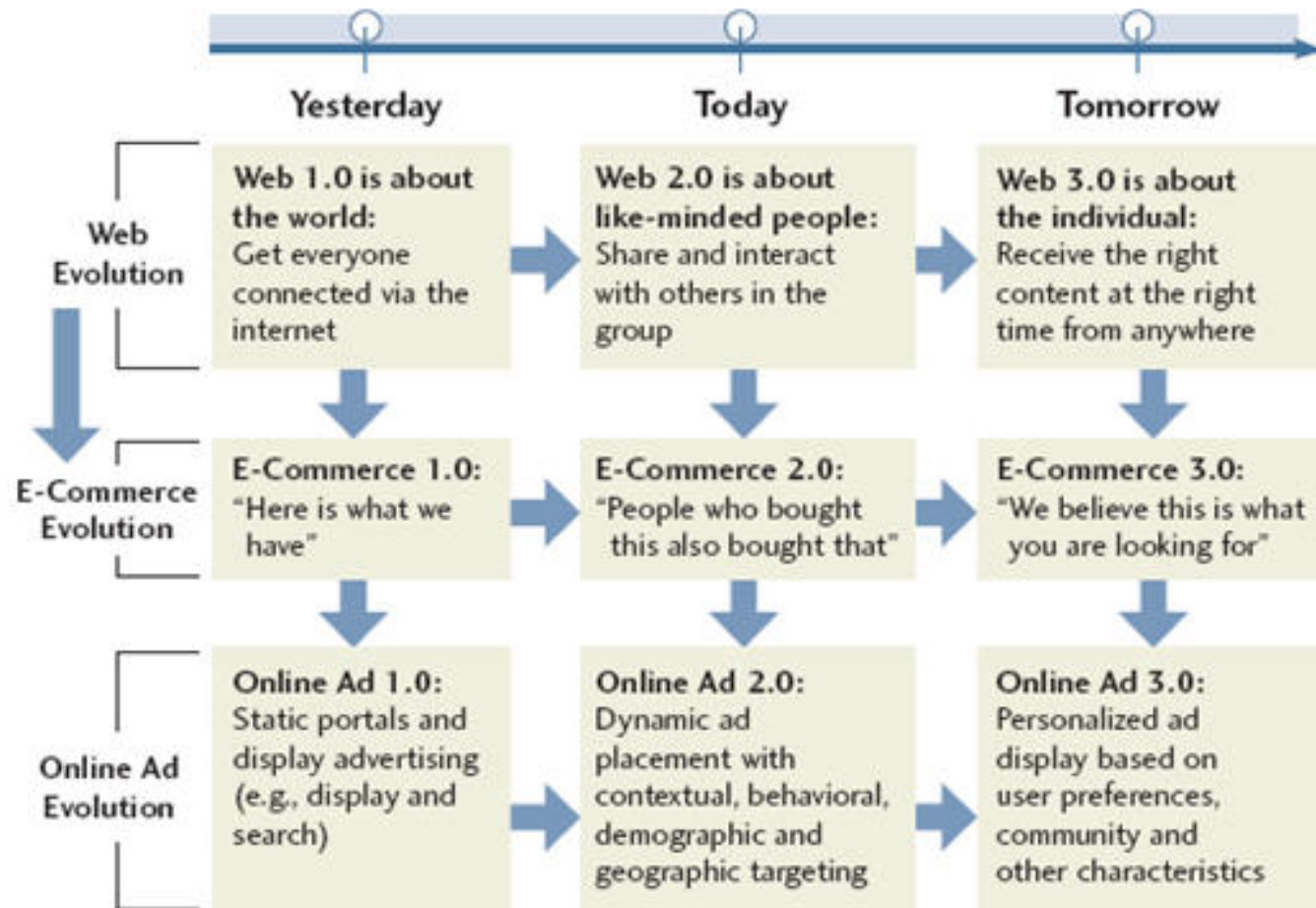| Web 1.0:	Web 2.0:
"the mostly read only web"	"the mostly read-write web"
45 million global users	1 bilion global users
focused on companies	focused on communities
home pages	blogs
owning content	sharing content
Brittannica Online	Wikipedia
HTML, portals	XML,RSS
web forms	web applications
directories (taxonomy)	tagging (folksonomy)
Netscape	Google
page views	cost per click

Web 3.0:

- The Semantic Web: Changing the web into a language that can be read and categorized by the system.

- Personalization: Contextualizing the web based on the people using it.

- Artificial Intelligence: Extracting meaning from the way people interact with the web..

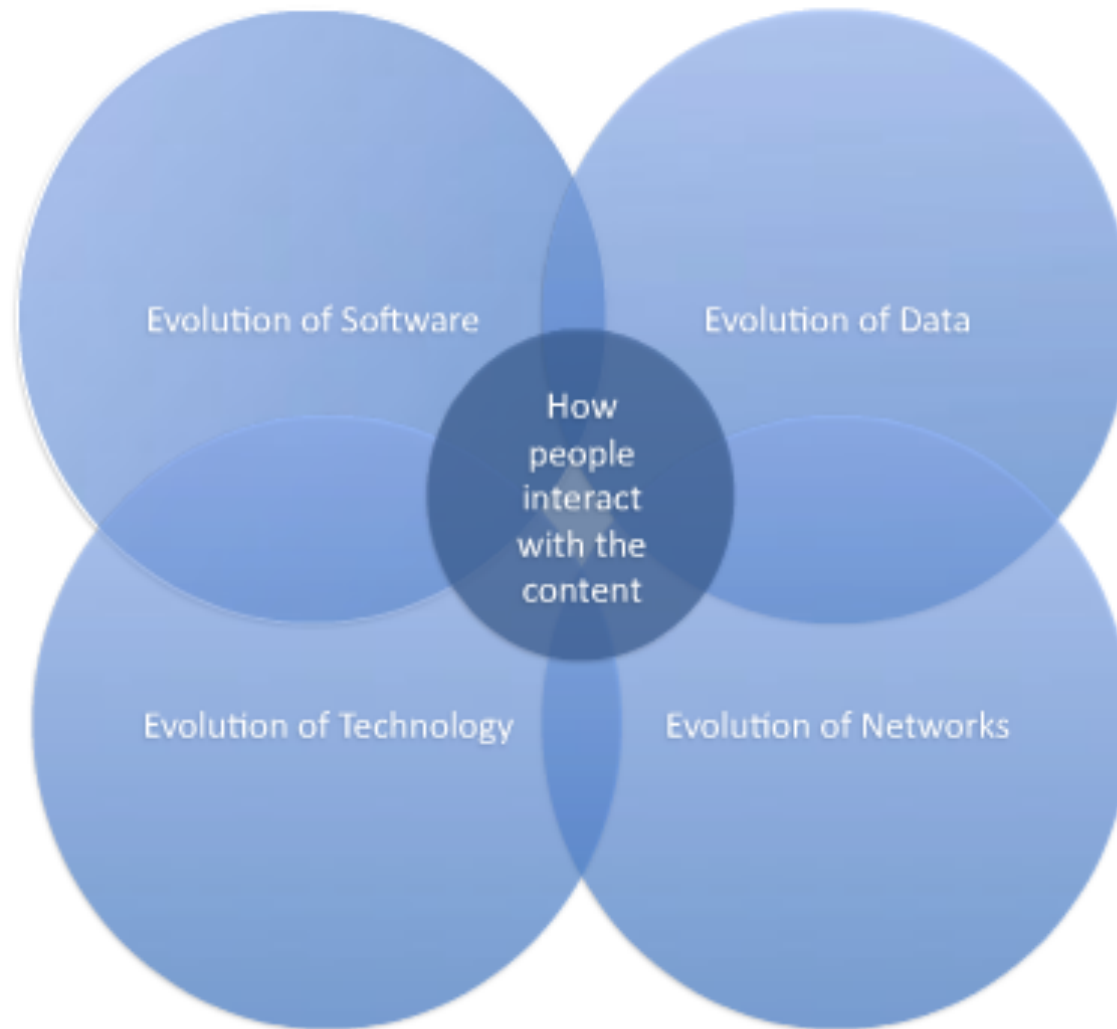- Mobility: Everything, everywhere, all the time.

THE CHANGING INTRAWEB - FROM 1.0 to 3.0 © Gary Hayes 2006

WEB 1.0 (push)

Pushed web, text/graphics based, flash

WEB 2.0 (share)

Two way web, blogs, wikis, video, podcasts, sharing, personal publishing 2D portals and social networks

WEB 3.0 (live)

The real time, co-creative web. Growing 3D portals, avatar representation, interoperable profiles, MUVEs, integrated games, education and business. All media flows in and out of virtual worlds

Y-axis: 10 mill, 100 mill, 1 bill

X-axis: 1995, 2000, 2005, 2010

Web Evolution and Its Impact on E-Commerce and Online Advertising

Source: Yankee Group, 2008
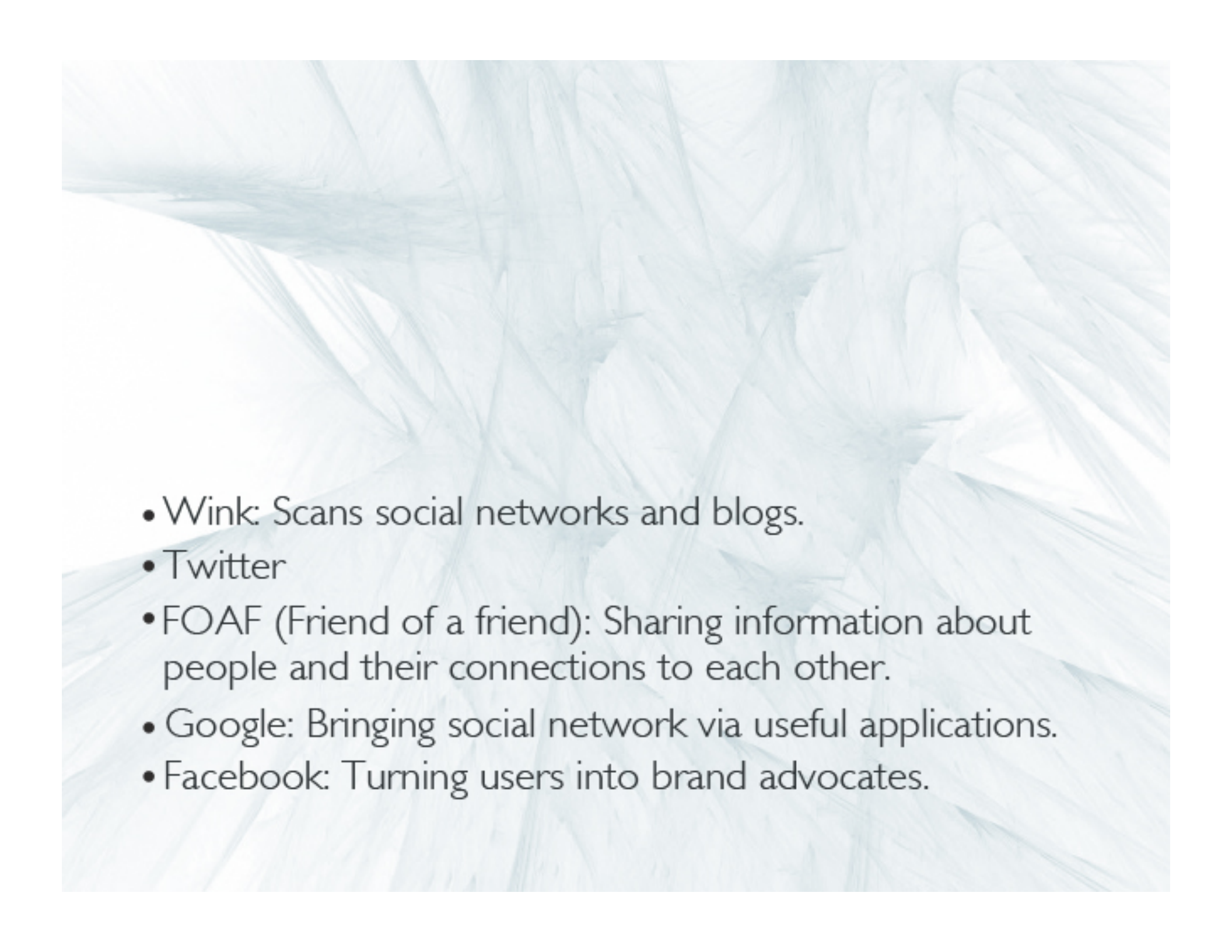
	Yesterday	Today	Tomorrow
Web Evolution	**Web 1.0 is about the world:** Get everyone connected via the internet	**Web 2.0 is about like-minded people:** Share and interact with others in the group	**Web 3.0 is about the individual:** Receive the right content at the right time from anywhere
E-Commerce Evolution	**E-Commerce 1.0:** "Here is what we have"	**E-Commerce 2.0:** "People who bought this also bought that"	**E-Commerce 3.0:** "We believe this is what you are looking for"
Online Ad Evolution	**Online Ad 1.0:** Static portals and display advertising (e.g., display and search)	**Online Ad 2.0:** Dynamic ad placement with contextual, behavioral, demographic and geographic targeting	**Online Ad 3.0:** Personalized ad display based on user preferences, community and other characteristics

Web 3.0 in Facebook

- Face Recognition
- People You May Know
- Determining people's ethnics by name and surname
- Showing the nearest friends from people's locations.
- Advertisements according to your info and interest.

Which Other Corporations?

- Wink: Scans social networks and blogs.
- Twitter
- FOAF (Friend of a friend): Sharing information about people and their connections to each other.
- Google: Bringing social network via useful applications.
- Facebook: Turning users into brand advocates.

The Evolution To Web 3.0

Web 2.0

"the mostly read-write web"
focused on communities
blogs
sharing content
XML, RSS
web applications
tagging ("folksonomy")
Google
cost per click

Web 3.0

"the portable personal web"
focused on individuals
lifestream
consolidating dynamic content
the semantic web
widgets, drag&drop mashups
user behavior ("me-onomy")
iGoogle, Netvibes
advertainment

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Thank You For Listening