

**New IT service trend:  
Knowledge service and a  
software-as-a-service application**

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- Challenges for knowledge processing
- Some cases
  - Monitoring competitors and technologies
  - In-house knowledge assets
  - Patent analysis
  - Web marketing
- BI built on a software as a service
- Service model analysis
- Summary

BI: Business Intelligence

# Challenges

- Management of in-house knowledge assets
  - Best possible allocation of human resources
  - Efficient utilization of employees' knowledge
- Tracking and analysis the business information
  - Highly networked competitive environment
  - Fast-moving business environment
- Business Intelligence (BI) management
  - Parallel information systems and overlapping information sources
  - Organization-wide common functions
  - Common models (information processes) for managing BI information



**User-friendly service is able to manage knowledge assets and analysis business information**

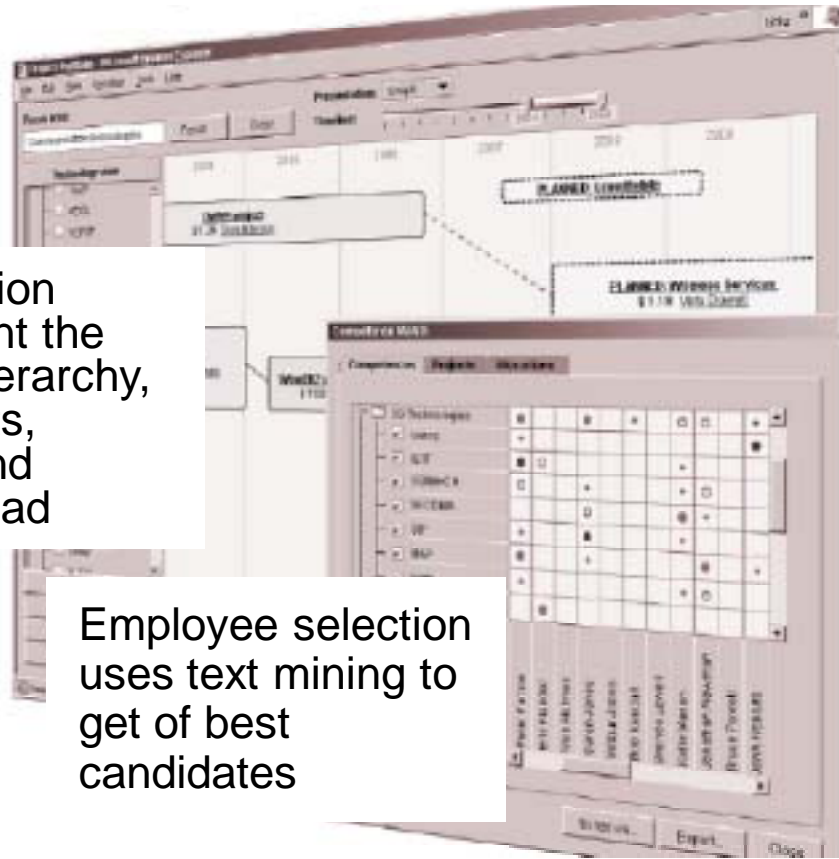
# In-house knowledge assets

Integrating Project Base, Skill Base and Knowledge Base of key technologies

Which employees fit best to get acquainted with a giving technology?

Employee selection takes into account the position in the hierarchy, knowledge assets, project history and current project load

Employee selection uses text mining to get of best candidates

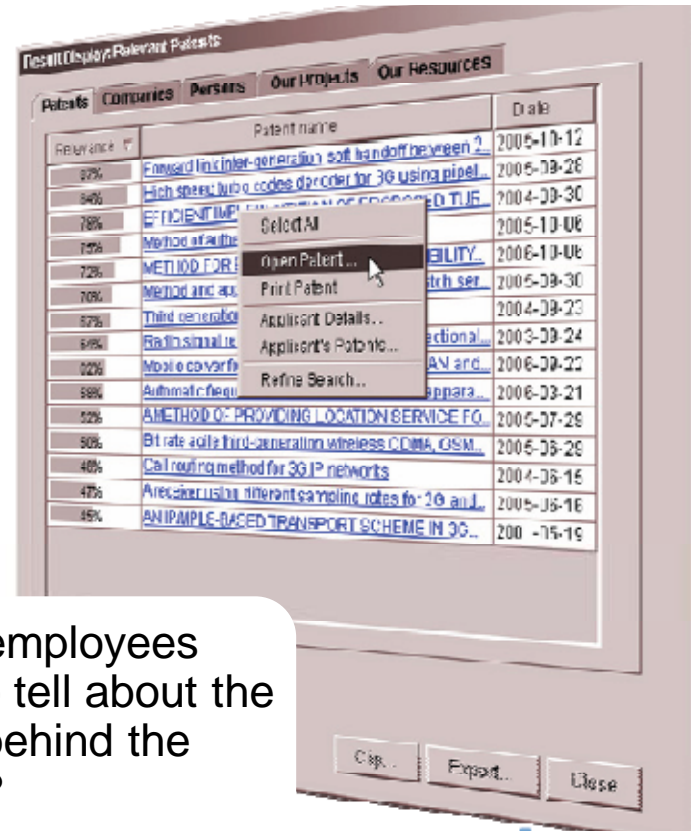


# Patent analysis

Patent Base is analyzed and relevant dependencies are stored to the Knowledge Base

What kind of patents our patents have related to the technologies of our competitors?

Patents on multiple levels of technology hierarchy can be found with one query



Again, which employees are the best to tell about the technologies behind the given patents?

# Web marketing based on a CGM analysis



## CGM: Consumer Generated Media

### Blog

### SNS

### Bulletin board

#### Massive

■ Blog pop. In 2006  
 Japan : 6.2 million  
 China : 60 million

#### Highly reliable

Credibility  
 Blog 83.7%  
 SNS 89.4%

#### Fresh

0.5 million opinions are generated/day (in Japan)

#### Free voices

Experiences, interests, and concerns

Enables management of information for vocal customers, as well as purchasing customers

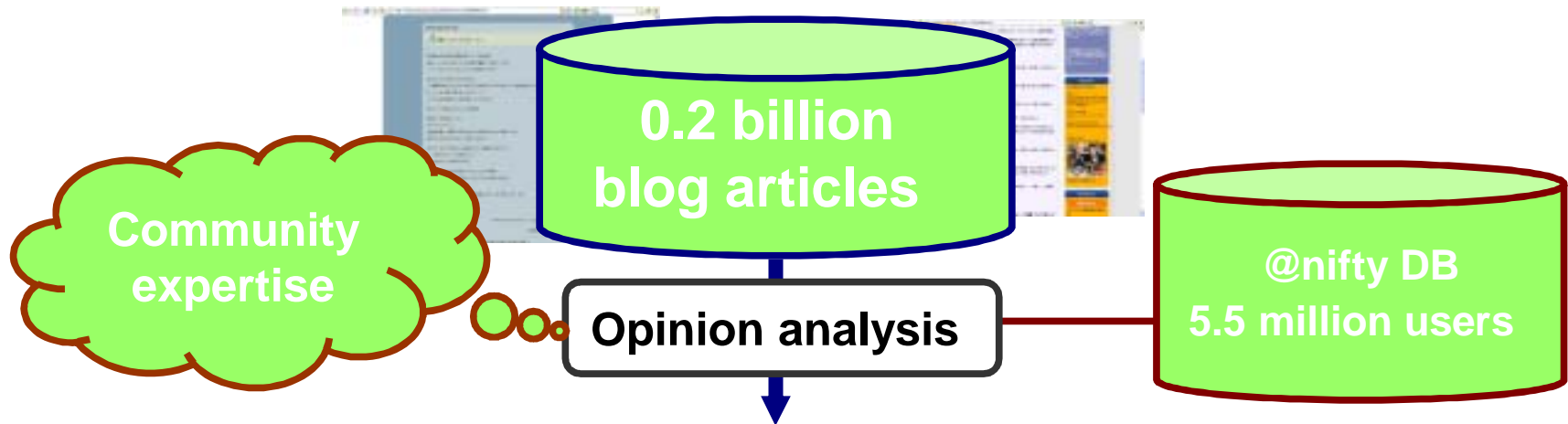
# Effects of a web marketing built on a web2.0 model



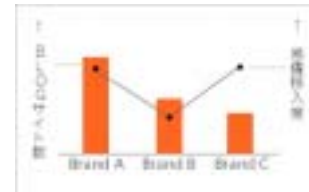
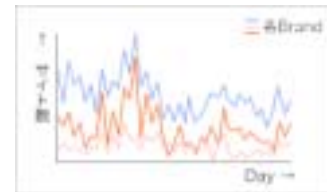
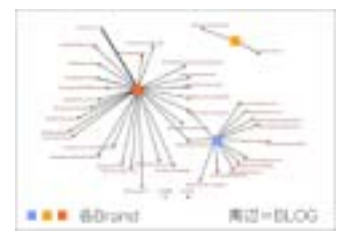
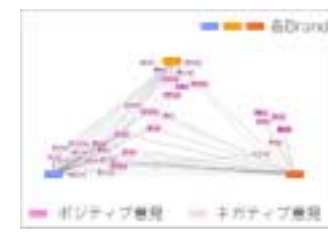
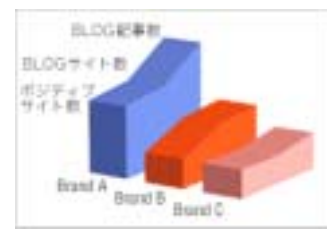
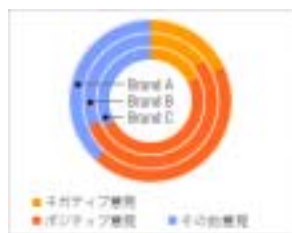
- Analyze what consumers really think  
Huge amount of samples
- Grasp changes in consumer taste  
Real-time analysis, historical analysis  
Analysis from multiple perspectives
- Increase the influence on consumer behavior  
Extract and utilize influencers
- Reduce survey/analysis cost and time  
Introduce data/text mining

# BuzzPulse@nifty

service analysis for a word-of-mouth reputation



**Quality of reputation**    **Quantity of reputation**    **Who?**    **Brand power**    **Influence**



	ポジティブ	ネガティブ	内容
属性(観点)			「悪い」という声が多量にあるが、悪評の割合が低い(1.1%)。これは悪評も割合的に少ないこと。
効果			悪評については苦情対応が大きい。悪評の割合が低いことには留意が必要。
アクション			顧客満足度を向上させるために、苦情対応の体制を整える必要がある。
取組後			苦情対応の体制を整えることにより、悪評の割合が減少した。



# What the BuzzPulse reveals

**BuzzPulse enable users to see the following in regard to word-of-mouth concerning a keyword (product/brand):**

**Quantity:** The number of cases where a keyword is quoted, e.g. number of blogs, number of blog articles, and number of opinions [How much it is talked about]

## **Quality:**

- The number of blogs, number of blog articles, and number of opinions classified into positive “opinions” and negative “opinions”
- Actual rating words and co-occurrence words (actually used words in both cases) in regard to the keyword; The number of rating words and co-occurrence words [How it is talked about]

- **You can also see the URL, loyalty, and influence of each article**

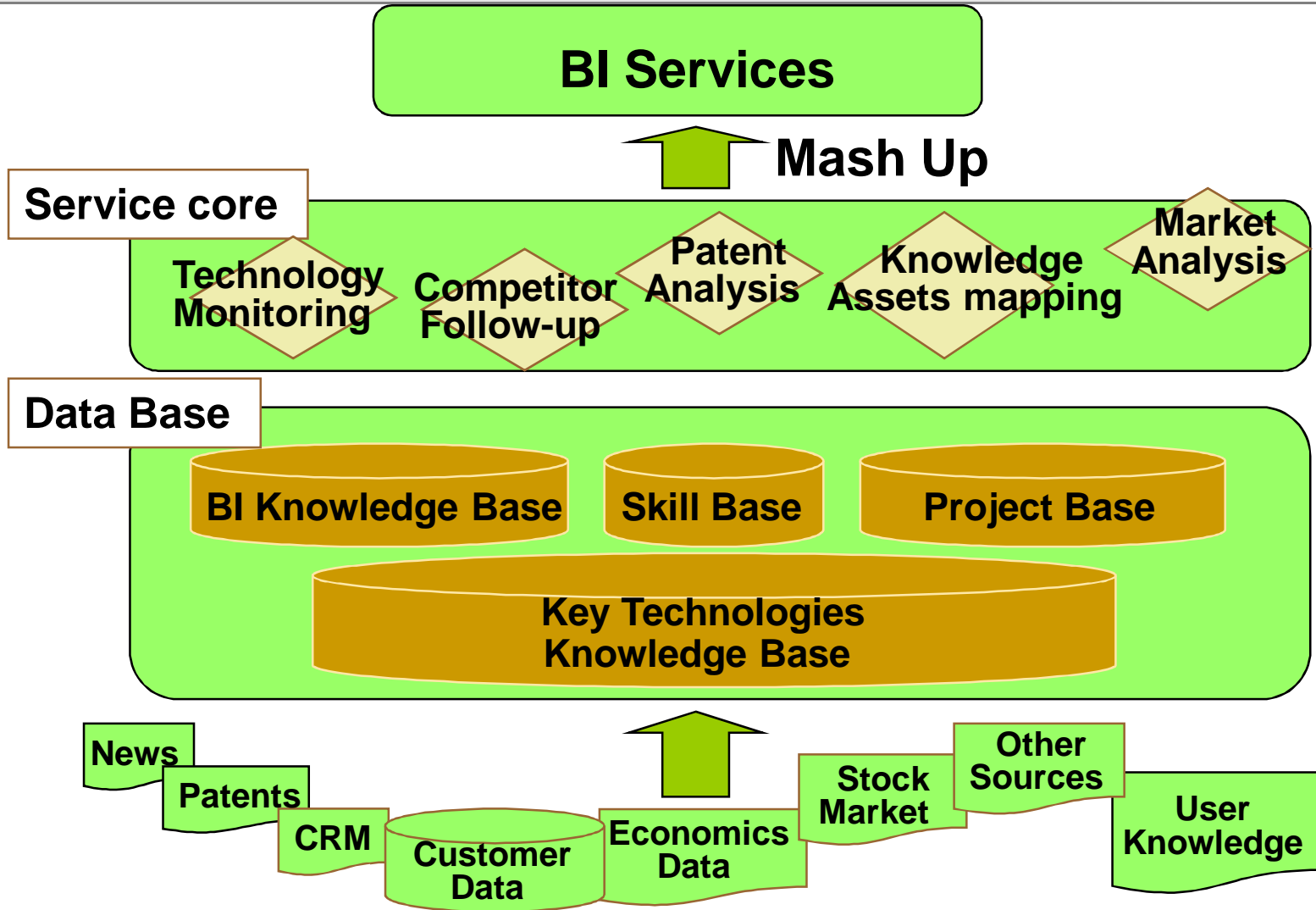


**Furthermore, more detailed analysis, such as comparisons with others (products/brands) or historical comparisons, are also possible**

# Possible value chain

- Correspondence to the business needs of global expert organizations
- Monitoring the business environment
  - Market situation, competitive products, competitor's actions
  - Technology choices, business trends, trend anticipation
  - Efficient utilization of internal knowledge assets
  - Meeting the customer needs, utilizing market and business knowledge
- Offering advanced software and services to support end user business efforts
- Combining end user's BI solutions with service providers' solutions

# BI built on a software as a service



# Service Model Analysis

The most effective means of determining the portfolio of technologies that will be required to support a services world built on a “Web 2.0 beyond” model will require developing a framework involving four major components

**a**

**Service Business Models**

**b**

**Business and User Requirements**

**c**

**Impact of Business Models**

**d**

**Technology Enablers**

# a. Service Business Models

Business Model	Market Examples
Content	<ul style="list-style-type: none"><li>• Wikis: Wikipedia</li><li>• Videos: YouTube</li><li>• Music: Napster, Yahoo, eMusic, AOL, iTunes</li><li>• Social Networks: MySpace, Facebook</li><li>• Virtual Worlds: Second Life, Multiverse</li></ul>
Business Process	<ul style="list-style-type: none"><li>• Platform BPO: Accenture's Navisys; eBay's Paypal</li><li>• Homeshoring: LiveOps</li><li>• HR Recruiting: Wipro leveraging Second Life</li></ul>
Applications	<ul style="list-style-type: none"><li>• SaaS</li></ul>
Infrastructure	<ul style="list-style-type: none"><li>• Utility computing</li></ul>
Communications	<ul style="list-style-type: none"><li>• Collaboration: Webex/Cisco, Webdialogue/IBM</li><li>• Unified and converged communications: AT&amp;T, Verizon, eBay/Skype</li></ul>
Product Engineering	<ul style="list-style-type: none"><li>• Development communities: Amazon.com, Google, eBay, Salesforce.com</li></ul>

# b. Business and User Requirements

- Areas that will be considered include:
  - GRC (Governance, Risk, Compliance)
  - Security and business continuity
  - Service quality and requirements: Integration and automation, speed of provisioning/decommissioning services, RAS (reliability, availability, scalability), QoS (quality of service), service level requirements, self service
  - Globalization, localization and personalization factors (e.g. language requirements, custom configuration)
  - Ecosystem structures and relationships

# c. Impact of Business Models

- Examples of factors that will be considered and assessed to determine the impact in the shift of these business models to a “Web 2.0 beyond” world include:
  - Key factors:
    - Process
      - Development cycles; ecosystem roles, responsibilities and relationships, etc.
    - Tools and technologies
      - Development tools; management systems; application and platform architectures, delivery and access technologies etc.
    - Information and data
      - Role of information and data, content creation process

# d. Technology Enablers

- Technology environments that will be assessed and defined are below.

	<b>Web 1.0</b> (e.g. packaged world)	<b>Web 2.0 B</b> (e.g. Open Source)	
Environments	Enterprise	Enterprise	Public
Information (e.g. content, data)	Close	Semi open Pay contents	Open Free ( Amazon, etc.)
Software (e.g. business process platforms, SOA)	Web1.0 based	SaaS platforms GRC, RAS	Web2.0 based OSS
Middleware (e.g. security, management system)	Bender oriented middleware	Web2.0 based GRC, RAS	Web2.0 based OSS
Device (e.g. servers, networks, storage, client technologies)	ISP, ASP, IDC	ISP, ASP, IDC Pay for Utility, Grid	Communities Free ( Google, etc.)



# Summary

BI services using knowledge management and web2.0 techniques are able to realize following benefits;

- Boosted external business environment monitoring
- Boosted in-house knowledge assets utilization
- Boosted consumer market monitoring
- Added value for existing BI solutions
- More efficient information exploitation with more advanced BI processes
- But, many problems are still under consideration in the mashing applications up with commoditized technologies such as an OSS.



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THE POSSIBILITIES ARE INFINITE