Section 4

New Trends Created by Ubiquitous Networks

1 New trends created by Web 2.0

As ubiquitous networks advance and the range of users rapidly expands, "Web 2.0," a concept that constructs a distinct brand new world web from the conventional web (Web 1.0), is attracting much attention in a viewpoint of focusing on the characteristics of the Internet and using its inherent capabilities effectively. At present, Web 2.0 does not refer to any specific service or technology, nor is there a clear definition of the term. However, in its theory, one can find a vision of new socio-economic system which may be brought by the progress in ubiquitous networks **(Figure 1-4-1)**.

2 Concept of Web 2.0

The two characteristics of Web2.0 are "user participation" and "open orientation."

(1) User participation
In Web 2.0, service providers consider the users as "reliable and productive collaborators" and many of whom will participate actively in the creation of contents and the development of services. A primary example is the online encyclopedia, Wikipedia.
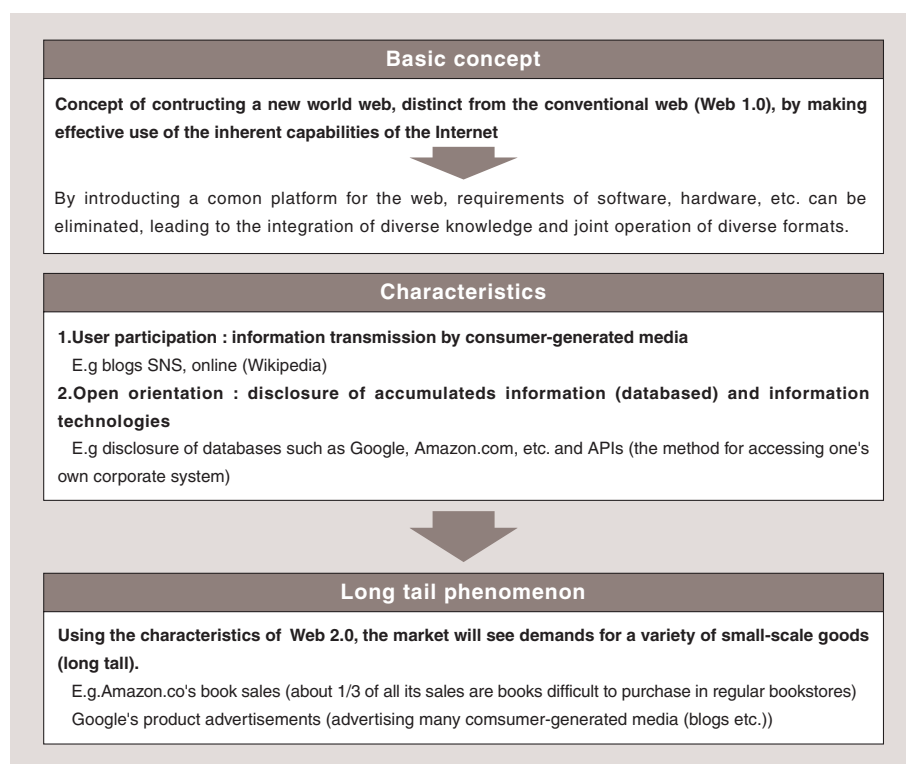
(2) Open orientation
In Web2.0, service providers widely disclose the data they own (such as databases) and encourage others to use them actively; this is the idea of "open orientation."

For example, Google and Amazon.com publicly disclose their databases and APIs (application program interfaces) that explain how to access the company system. Anyone can use these databases and APIs to develop services with new added functions.

3 Long Tail

By the progress of Web 2.0, diverse and small-scale demands for goods, called "long tails," have gained a potential toward a possible attractive market. Until now, diverse and small-scale demands for goods have been expected to produce only limited profits even if they form a market. However, it has become possible to accumulate and create such demands for goods in an efficient manner through the progress of Web 2.0 which is char-

Figure 1-4-1　Outline of Web2.0

Basic concept
Concept of contructing a new world web, distinct from the conventional web (Web 1.0), by making effective use of the inherent capabilities of the Internet
By introducing a comon platform for the web, requirements of software, hardware, etc. can be eliminated, leading to the integration of diverse knowledge and joint operation of diverse formats.

Characteristics
1.User participation : information transmission by consumer-generated media 　E.g blogs SNS, online (Wikipedia) 2.Open orientation : disclosure of accumulateds information (databased) and information technologies 　E.g disclosure of databases such as Google, Amazon.com, etc. and APIs (the method for accessing one's own corporate system)

Long tail phenomenon
Using the characteristics of Web 2.0, the market will see demands for a variety of small-scale goods (long tall). 　E.g.Amazon.co's book sales (about 1/3 of all its sales are books difficult to purchase in regular bookstores) 　Google's product advertisements (advertising many comsumer-generated media (blogs etc.))

acterized by a wide range of user participation. As a result, these demands are now expected to form a market which is comparable with other general markets.

4 Trend to openness and progress in collaboration

The origin of Web 2.0 can be discovered in software development through open source. The significance of open source is to link dispersed knowledge together through networks and collaborate in developing intellectual properties and overcoming challenges.
One characteristic of open source in recent years has

been that the field of collaboration has been rapidly expanded by the spread of networks including the Internet globally as well as to every field and the development into ubiquitous networks. The work of developing intellectual properties such as software heavily depends on human elements. Such progress in ubiquitous networks makes it possible to achieve collaboration which is based on much more diverse knowledge than in the past. It is thus expected that the power to develop software will increase drastically.

Section 5

● Rise of Consumer-Generated Media

1 Consumer-generated media and value of networks

As new communication tools of the Internet, two things are getting much attention: blogs and SNSs. What is common between blogs and SNSs is the fact that any individual, with or without expert knowledge, can easily transmit information; they are called "consumer-generated media," or CGM.

While Web browsers and portal sites have contributed to the increase in Internet users, blogs and SNSs are contributing to the dramatic increase in the amount of information provided on the Internet as they turn many users who had only browsed the Net before into information providers and transmitters. In other words, the expansion of the range of information providers through blogs and SNSs is drastically raising the value
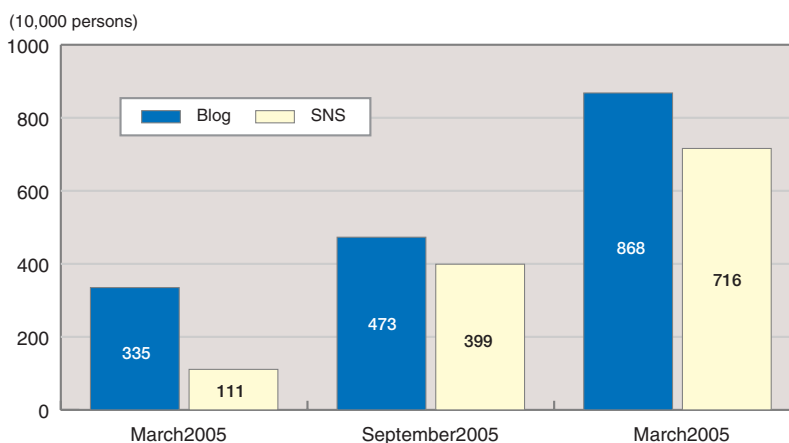
of the Internet as a database.
As of the end of March 2006, 8.68 million people were registered as bloggers, and 7.16 million were registered as SNS members **(Figure 1-5-1)**.

2 Blogs

A blog is a journal-like web site operated by an individual or a small group of individuals, updated on a daily basis. Its contents vary widely from individual hobbies to just about anything. Some of the factors for the popularity of blogs are (1) it is possible to create one's own homepage simply by entering text; (2) free service is provided; (3) updating and browsing are possible even from a mobile phone; and (4) tools are available to promote more active communication, such as track back and RSS distribution functions.

Figure 1-5-1   Transition of registered bloggers and SNS members

Based on "Numbers of Registered Bloggers and SNS Members," MIC