Transforming an Online Portal Site into a Playground for Netizen

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ABSTRACT. NHN was a laggard in the Internet portal business in Korea. When it entered the market, global giants such as Yahoo already had built a formidable presence in the Korean market, where leadership advantage was cited as a defining success factor. NHN was far behind not only because of timing but also because of information sources–which are the real root of their business–due to a lack of open web sites in Korea. They also discovered that an information portal has an inherent limitation in creating stickiness in its site. People click and leave the typical information portal upon finding their query results. However, the portal site business model is based on web advertisement, and performance depends on stickiness. This case explains how NHN beat the odds and became the leading portal in Korea. This company's innovative technology and customer-oriented strategy not only allowed it to surpass all of its competitors, but it also is revolutionizing the portal business both in Korea and globally. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress. com> Website: <http://www.HaworthPress.com> © 2005 by The Haworth Press, Inc. All rights reserved.]*

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INTRODUCTION

Online portals have developed their business model through years of experience. In the beginning they provided information directories and index services. These early portal service providers considered online advertising as the core of their business model based on a considerable level of traffic. However, information search portals found that there are some weak points in this business model compared to other online sites. Users click and immediately leave for other sites upon finding the necessary results. Moreover, as advertisement sponsors tend to pay on the basis of advertisement performance such as click-thru, etc., rather than a simple page view, this is a critically weak point. Thus, it is crucial for online portals to entice visitors to stay long enough to respond to online advertisement. Through the years, because of severe competition, portal service providers have striven to make their sites surfing destinations rather than as simple gateways where users just pass by to go to other sites.

Generally speaking, a site's stickiness is the center of all its efforts. Being sticky means making customers stay for a long period of time at the site, and motivating them to keep coming back. It also means creating more loyal customers. Since competition between online portals is just a click away, having loyal customers is a competitive advantage of a company. It is also closely related to the revenue increase from online advertisement, which is expected to hold more than 60% of the portal market in 2006 (IDATE, 2001).

Conventionally, the four tactics for developing sticky e-Commerce sites are well accepted by researchers and e-Commerce entrepreneurs: providing relevant information for users' need, engaging users, helping to provide convenient access to information, and co-creation of the company's value with customers (Davenport and Lynch, 2000). While top managers of portals acknowledge the importance of making their sites sticky, what is less clear is how to create services that would lure customers to their sites and encourage them to stay for a longer period of time. Even though there are some frameworks or guidelines for sticky e-Commerce sites, they are focused on more general online merchants whose scope of business is much narrower and clearer than portals in terms of the information they provide.

As far as an information search and retrieval service is concerned some portals achieved stickiness by maximizing the width and breadth of the information they provide (Yahoo, AOL). However, as users' experience with the Internet is becoming more mature, portals have attempted to develop smarter search engines that provide more "relevant" information with less searching time (Google). However, the "relevance" of information is user-specific and task-specific, but information that most search engines provide is limited to static information from similar sources. Therefore, the challenges in transforming online portals to destinations from gateways with information search and retrieval service requires managers to address a number of important questions.

In an effort to discuss these concerns, we present a case study that describes the information search and retrieval service at NHN, one of the leading online portals in Korea. Specifically, this case illustrates how NHN used the information search and retrieval service to lock in users and thus increase revenues and provide the information (or knowledge) that users want.

For this case study, we interviewed all of the company's executives and a number of customers, and we collected extensive data and observed the company's effort over three years, 2000-2003. We also had access to the click-stream data of all online surfing behavior of about 10 thousand online panels. This detailed data supplements our qualitative analysis from the interviews and in-depth investigation of other sources of information.

THE NHN STORY

NHN (CEO-Bum Soo Kim, http://www.nhncorp.com) is the representative domestic group specialized in the Internet, running "Naver," a large Internet information portal service and "Hangame," an Internet online game service. The NHN story is one of the Korean dot-com legends with creative and flexible management based on confidence in its own technology.

Naver started as an internal startup of Samsung SDS in 1997 with 5 developers making use of the experience accumulated in developing diverse information search engines. Naver was separated from Samsung in June 1999, shortening the expected time frame for separation from 3 years to 18 months. The early separation was due partly to Samsung SDS not being optimistic on the future of Naver. As Mr. Kim indicated:

> We thought that Naver would go bankrupt soon. With portals such as Yahoo, Lycos or Daum, how could it survive in the Internet industry where leadership advantage is essential?

Despite these negative evaluations, Naver began to provide a full scale Internet portal service in 1999, and changed its name to NHN in June 2000 after acquiring Hangame Communication, which had become popular by transferring traditional Korean games successfully into online games, with 9.8 million members. After the merger, NHN started charging for online game services. Most experts were pessimistic about the move because other online game sites provided similar services for free at that time. But the result was a great success. Daily sales of 50 million Won (the exchange rate between won and the dollar is currently 1100~1200) provided a stable profit source of NHN. It also strengthened its business portfolio by providing various premium services such as custom-tailored advertisements based on the registration of popular search key words of home pages into the Naver search engine.

With a strengthened revenue base, NHN was successfully listed on KOSDAQ in 2002, and its stock price has continued to rise. It reached 640% compared to the initial public offering price as of the 4th quarter of 2003. Now, NHN's market capitalization is the largest on KOSDAQ. How did this seemingly unpromising laggard in the portal business become such a success story?

THE BIRTH OF INFORMATION/KNOWLEDGE RETRIEVAL SERVICE

Since the beginning of 2000, CEO Mr. Lee (at that time NHN had two CEOs. Mr. HaeJin Lee was responsible for Naver and BeomSoo Kim was responsible for Hangame. Lee stepped down in March, 2004) had thought that simply improving the search engine and enriching the contents with items like an encyclopedia, images, news, etc., were limited in the effort to increase users. These improvements did not lead to an increase in user retention and revenue. NHN has been in 3rd or 4th place among Korean portals in terms of pages viewed and the number of visitors over the first three years of their existence.

Through various efforts to increase traffic on their site, they recognized their fundamental disadvantage against global players such as Yahoo, Lycos, and Google. First, the sheer volume of web pages in Korea

is much smaller than that of the English-speaking world. Second, more seriously, Korean use of the web was (and is) quite different from the Western world. In Korea, from the beginning, reflecting the network oriented and highly knitted homogenous culture, people have interacted through web communities (so-called Internet cafés) rather than individual web pages. From the portal's perspective, the problem with Internet cafés is that only registered members can access the contents of those closed communities. Therefore, this information source is off limits to web "crawlers" that Internet portals employ to collect information. Mr. Lee concluded that some epoch-making contents would be necessary to develop business further. So Mr. Lee ordered:

> Besides gathering the written information scattered in scant web sites, find methods to create information. That may mean extracting the experience and knowledge of each person's brain.

For example, if you want information on duty-free shops, then you would find answers without difficulty. However, if you have the question "How did duty-free shops begin?" then it is not easy to find the answer. There are many questions that people are curious about for which the answers are hard to find. The examples of those kinds of questions could be "Why are flowers beautiful?" "Why is there a small hole on the windows of an airplane?" and so on.

So the search engine team of NHN developed the Hankyore DBDIC, a site that was designed to construct a database of knowledge through questions and answers among members since 1999. Furthermore, the collection of questions was published with popularity, but popularization of the site had not materialized because it was confined to mania only. The leader of the search engine team, Ms. MiJung Choi, made the following conclusion.

> Since DBDIC was operated in a separate closed site, there were not sufficient channels for users to accumulate and utilize knowledge through spontaneous participation. Furthermore, if users had questions, they consulted the search engine first to visit DBDIC additionally, which in turn meant that if DBDIC was combined with Naver, the effect could be fantastic.

After long negotiation, in October 2002, Naver launched the Knowledge-In service (a knowledge/information search and retrieval service, which is pronounced GisikIn and means intellectuals in Korean).

Knowledge-In service (KIN) is a kind of "asking and answering" knowledge community. The core of the system, knowledge content, builds a community in both directions while users spontaneously provide and exchange information. The following example illustrates how KIN works. If, for example, you submit a question "How can one make a million dollars in a year?" anyone can provide an answer to the question. Then you are supposed to select the best answer among them. So when users type "1 million dollars" on the search window, the question and following answers, including the one chosen by the questioner and others, would appear as a part of the search results.

When NHN named it "Knowledge-In" they were not conscious of the definition or differences of knowledge and information in depth, which was controversial in research related to Knowledge Management. They named it Knowledge-In rather than Information-In, because they thought the retrieved information would be refined because of the quality obtained from the filtering process. In other words, a questioner chooses the best answer, and others also evaluate the quality of the responses.

It was not an easy job. It took 2 years for the idea to become a reality. But they were sure that KIN would not only increase the number of users but also their retention rate. The extreme popularity of Hankyore DBDIC between maniacs suggested the possibility that KIN would lead users to stick with NHN's portal site. Then CEO, Mr. HaeJin Lee, stated that:

> Internet Hankyore was also aware of the importance of knowledge service. They also strove much to commercialize and activate this service, but lacked the service and technology to control the large-scale network traffic that NHN possessed. On the contrary, we had a competent marketing/publicity department and technology to control as many as 200,000 simultaneous connectors.

From their experience of charging for access to Hangame they became aware of the importance of having loyal customers. They were confident that the only way to create loyal customers was to make the process interactive and entertaining, and to provide more reliable/relevant information. The strategy team agreed that retention of users would depend more on the management of the activities. Ms. MiJung Choi stated that:

> We did not worry about the technology. What we needed was just more databases. However, when we planned this service, most experts' reactions were negative. They did not expect people would

be enthusiastic about answering someone else's question without any substantial reward. So from the beginning it was clear that the key to the success of this service was management of clients rather than technology.

So NHN developed a policy regarding "rewards and penalties" so that the process would be more dynamic, competitive and fun, like playing a game. Examples of the detailed policies are:

- For each activity, users get points such as:

  - 1 point for the suggesting questions,
  - 10 for selecting the best answer,
  - 1 for proving the answer,
  - 1 for voting, 100 for registration,
  - 5 for log-in per day, and so on.

- For undesirable behavior, they deduct user's points for various reasons such as:

  - 20 points for not choosing the best answers within 2 weeks after posting questions,
  - 10 points for deleting the question while others are posting answers,
  - 1 point for unsolved questions, and so on.

They also honor a user when he or she contributes to KIN every other week by putting the provider in a hall of fame. They also interview him/her and post this interview on the homepage of Naver. The user also gets 1000 points.

ELEMENTS OF THE TRANSFORMATION
OF AN INFORMATION SEARCH SERVICE
FROM A GATEWAY INTO A FINAL DESTINATION

When NHN started the KIN service, what they focused on was increasing the number of loyal customers as well as the number of users because retaining customers was closely related to increasing revenue. Thus from the beginning NHN implemented carefully conceived tactics of stickiness. Careful examination of NHN's efforts for KIN implemen-

tation divulges the four fundamental elements that underlie e-commerce stickiness identified by Davenport and Lynch (2000):

1. Relevance: the information from the site should be what users expected
2. Engagement: The site should provide some features of interactive entertaining activities.
3. Convenience: The site should provide fast access to the information without difficulties in navigation.
4. Co-Creation: The site encourages users to make a substantial investment of their own information to build the site contents.

NHN approached these elements innovatively and differently from other portals. In the following sections, we elaborate on the four elements of the stickiness of online portals with illustrations from the perspective of Naver's KIN.

Relevance

The Portals' puzzle: Because various people visit a portal it is best to provide information with width and depth at the same time. **NHN's solution:** The key to the solution is the users. Let them say what they want to know.

Many e-commerce companies have made efforts to accommodate target audiences' expected needs on their site. Based on a user's need, it is necessary to control the scope of the information and update it in a timely manner. However, in portals where users are not specifically distinct, unlike other websites, figuring out each user's need is not easy because it deals with information. Keywords give some clue. However, the relevance and quality of information a user is seeking remains unknown to portals. It is more like a puzzle.

Many information portals have striven to develop smart search engines. However, at present, there are still many websites in the Internet that cannot be retrieved by search engines (Ahn, 2001). Furthermore, since retrievable information is mostly concentrated on news, computer IT technology, and various entertainment data, the data necessary for liberal arts and social science or other areas is very scant. What is worse, as most sites generally provide similar information from similar sources,

it is very difficult to find the information that exactly meets the diverse and individual questions of each user.

KIN suggests a revolutionary way to provide "relevant" information to users. Ms. Bokyung Kim, a manager of the KIN project, states that:

> We thought that the best way to figure out relevant information for users should be from users. There is more information/knowledge that people can detect that search engines cannot detect. So the best strategy is to leave all the activities for information search to users and help them with only systems.

Through KIN, NHN has built a platform by which users can naturally form and accumulate knowledge through spontaneous questions and answers. Accordingly, users are given a direct communication channel, which enables them to reach information that is not accessible in the conventional Internet search portals. The users of KIN are able to exchange questions and answers almost in real time, to simultaneously compare the opinions of many individuals and to get concrete and practical answers for their questions. Users are given a chance to get the exact information that they want to know. In other words, other users gather, customize, synthesize and even evaluate information/knowledge the user needs. These are the functions that search engines often fail to provide.

The data that NHN provides shows that users of KIN are looking for different kinds of knowledge than users of the traditional Naver search engines (Figure 1). It shows that keywords they used for search through KIN include more "information on how to" while traditional search engines have more terms related to "information on what" (underlined words on Figure 1). This confirms that KIN is successful in transforming implicit knowledge about which people are concerned to explicit knowledge in a certain way, which usual search engines hardly provide. To acquire that kind of information, one needs to enter specific sites that would provide "how-to knowledge" such as about. com, askme.com, or expertexchange.com. However, even these search engines have trouble finding such sites. Even if such a site is discovered, it takes time and effort to evaluate the quality of the information. In KIN, you get opinions from many experienced users with a high level of expertise.

Engagement

Numerous e-commerce sites strive to find ways of engaging their customers. Interactivity and entertainment are the center of the strategy

FIGURE 1. Keywords Comparison Between KIN and Naver Search Engine

KIN

Usual Naver Search Engine
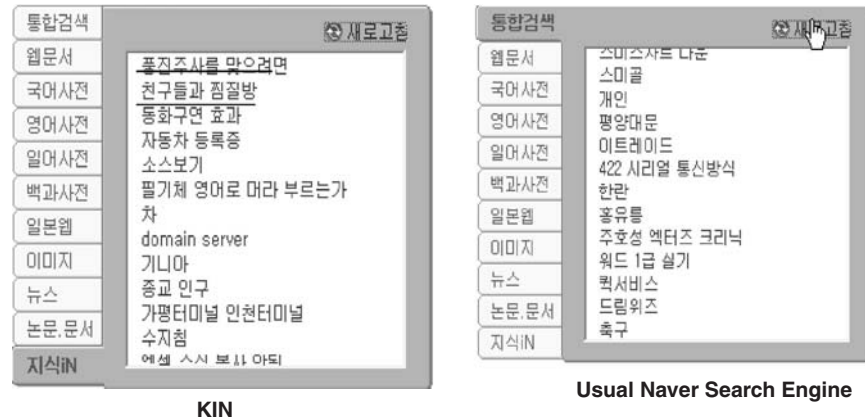
Source: http://search.naver.com/
Translation of the keywords above:
Keywords on the left: <u>How to immunize measles</u>, <u>going to public hot bath with friend</u>, the effect of oral narration of kids; story, vehicle license, reading computer source codes, what is the cursive in English, Tea, Domain server, Guinea, Demographics on religion, KaPyung (a city name) Terminal and Incheon Terminal, Acupuncture.
Keywords on the right: SmithGole, Individual, PyongYang gate, e-trade, 422 serial communication protocol, Temperature, HongYu Tomb, JohoSeong Actor's Clinic, Word processing license, Express parcel delivery, DreamWiz, Soccer.

The Portals' puzzle: Basically there exists only lean interaction between users and electronic engines while users search for information. There is a limit in nature in engaging users with the information searching process. So adding interactive features, other than an information search, such as games and communities, is necessary.

NHN's solution: Make the information search process as rich and interactive as face-to-face communication.

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of engaging users. E-commerce sites interact with users by letting them post their reactions to the service, or product/article in case of a news or magazine company such as CNN.com and epinions.com.

Online portals create interactivity by inducing users to form communities based on their interest. Also many portal sites are adding entertainment services such as games or competition among users for certain prizes. One interesting item is that there have been no attempts to encourage users to engage in information searches. Basically the information search has remained in the realm of interaction between users and searching engines. Media richness theory suggests that computer-medi-

ated communication is lean compared to face-to-face communication (Daft & Lengel, 1984; Lengel & Daft, 1988). The interaction between search engines and users is lean so that portal managers can't expect much interactive and entertainment quality from information searching activities.

What is fundamentally different is that KIN pulled out the interactive and entertainment aspects in the information search and retrieval process itself, while others provide other types of service. Ms. BoKyung Kim stated that:

> KIN planning team attempted to add face-to-face richness to the lean information search. It may be called electronic face-to-face. Even though the search is performed on a lean electronic system, the process of content creation–the questioning and answering process–is more like rich face-to-face communication.

Thus it is an active and dynamic retrieval service, breaking the convention of the ordinary information retrieval function that merely provides information mechanically gathered from other web sites. One Korean newspaper reported that:

> NHN's KIN is connected with the Naver search engine and is evaluated as creating a new paradigm of a P2P (person to person) information retrieval service for the first time in Korea. (*Digital Times*, 09/05/2003)

In an offline setting, users are reluctant to express themselves even if opportunities are given. Since online interaction is carried out under anonymity, KIN grants users opportunities to freely ask and answer questions.

The detailed activities of KIN are graded, so that users can become heroes with accumulated points given out as rewards to stimulate their interest, and to challenge them. There is also competition between answer providers for the best answer. The reward and competition aspect of the service stimulates interest in an otherwise dull search function of the conventional search portal service. Some questions and answers seem to be made just for entertainment. For example, NHH's advertisement on KIN asks "Why does Santa Claus only wear red clothes?" Thus, it is enjoying unprecedented popularity with average accumulation of 20,000 questions and 30,000 answers a day.

Convenience

> **The Portals' puzzle:** Make the information search convenient with accurate and wide matches between the users' queries and the documents.
>
> **NHN's solution:** Make the information search convenient by providing users refined information/knowledge.

Convenience is perceived as speedy site navigation, easy browsing, wide selection, and reduced search time. Users consider search engine capabilities for getting information quickly to be part of the time savings equation. One of the problems regarding information search and retrieval is information overload. That is why reducing or eliminating unnecessary information is becoming more important.

Now most portals put enormous efforts into developing "intelligent" search engines so that search engines understand both your query and the documents that might match it with speed and accuracy. Providing caches with no need for visiting links would also make a search more convenient for users. There are the limitations in most search engines. For example, some sites pile up excess information in offline databases. This creates difficulties when this data needs to be accessed by search engines.

KIN approaches this issue in a totally different way. Ms. Mijung Choi said:

> We want our customers to be able to find answers to their own queries without visiting other sites. So the first thing we need to do is evaluate the quality and relevance of the information to a certain query. As we introduced in the beginning, the questioners are obliged to choose the best answer(s) to be rewarded by receiving points.

KIN is designed to filter information and refine it before it is published. Even after the best answer(s) is (are) chosen, any interested users can evaluate the answers using a five-point scale. So the published information in KIN actually goes through multi-level filtering processes. In the usual search engine, information seekers have to deal with the process by themselves. However, KIN's users access higher quality information faster and without the trouble of sorting out numerous information items to get what they need.

One of the frequent users, Ms. HeuKyung Hong, an event PD of NetsWorld, states that:

> When I need information on something I always use KIN with the expectation that I will find the exact kind of information that I am looking for without any trouble. I used to surf many sites to find information before I knew KIN, but now I don't need to do that anymore. (*The Electronic Times* 04/07/2003)

Furthermore, KIN also reduces the information search procedure. In most portals, what users get is the links to other sites; and users need to get into each specific site to get information on a certain topic. When the knowledge for which they are searching is "tacit," a skillful search procedure is required. However, KIN eliminated this drastic procedure by forming a vast database so those users do not need to leave Naver to access the information elsewhere. There is no need for refinement or filtering.

Co-Creation

The Portals' puzzle: Information is out there so the information search service is not apt to implement a co-creation strategy.

NHN's solution: Upgrade your customers' status from information seekers to your partners by letting them provide information and knowledge from their brains and hearts.

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e-Commerce sites desire to give users a strong sense of belonging and ownership that keeps them coming back to the site. Some sites related to investment, such as Fidelity Investment and Charles Schwab, encourage users to play a part in building site content with their own information. Companies supply systems and users provide content so that they co-create the site's value (Kambil et al., 1999).

Customization/personalization is the other side of co-creation because user-provided content makes it more useful and harder to discard (Kambil et al., 1999). Most portals accommodate personalization features. For example, MyYahoo! allows users to put whatever most interests them at the top of the page.

The economics of digital products tells us that the first copy of digital content cost a great deal to produce, but the marginal production cost approximates zero. So the alliance between customers and NHN was formed: NHN provides a platform and rewards, and customers provide content, consequently NHN avoids the huge cost of creating the first digital copy of information while many other sites attempt to develop rich contents to lure more customers, but fail to manage the cost of digital contents.

However, co-creation is not easy. This partnership is based on NHN's profound understanding on Cyber culture. Ms. MiJung Choi, Team leader of the search engine team, states that:

> Cyber space has its own society and culture. The culture is based on an open and equal relationship among netizens (Net + Citizen). Whatever a user's social status in the offline world is, here, in cyberspace an individual is differentiated by good how he/she is at games, at giving his/her opinion, or how diligent he/she is in providing information for others.

Thus there is consensus between KIN project members that "Knowledge is not that difficult or abstruse. If you are very good at cleaning up your house then you can be a knowledge master in that area." So KIN does not invite experts because it believes that each one has his/her own knowledge in some area and netizens enjoy exchanging their knowledge.

They also made a discussion board for the ardent KIN users to investigate the opinions of participants regarding every feature of KIN services. Since users are business partners, their opinions are treasured. This is frequently reflected when NHN updates its service and develops new features. NHN also has around 100 volunteers who supervise the activities of KIN members. Ms. MiJung Choi continues that:

> We devote most of our efforts to giving our ardent participants pride as KIN users. Last year, we asked users to donate their points to a community charity drive, then we converted it to money, the rate of \10 for a point.

NOTICEABLE RESULTS:
CREATION OF KIN's REVENUE MODEL

NHN expected that KIN would attract more users and thereby increase the page view rate. This increased number of visitors is expected to lead to an increase in advertisements and sponsors. The accumulated knowledge is linked to the profit model of the enterprise in that it signifies the growth of customers' information quantity/marketing forecast ability as well as quality knowledge data. In addition, customers' loyalty ultimately enhances profit and enterprise value by growing in a mu-

tually favorable relationship. Ultimately, the effort ended up as a great success. Even though there was no substantial reward, some enthusiastic members stay awake all night to answer the questions. Enjoying unprecedented popularity with an average accumulation of 20,000 questions and 30,000 answers a day, knowledge data in the quantity of 1 million items were accumulated in just 7 months after opening the service. We summarize the significant and tangible benefit based on the statistics conducted at the end of 2003.

NHN became the leading company in terms of search engine users (Table 1).

NHN became the first portal in Korea for the first time in terms and monthly page view just three months after it started, based on the report by Ranky (www.ranky.co.kr), one of the prestigious Internet survey firms. Naver was in 3rd or 4th place before KIN started (Figure 2).

Since 2003, Naver has maintained the top position and it has continued to widen the gap between itself and the service in 2nd.

NHN also shows the highest loyalty among users, two times higher than the 2nd place search engines based on the survey by KoreanClick (www.koreanclick.co.kr) and Metrics (www.metrics.co.kr), prestigious Korean Internet survey firms in September 2003 (Figure 3).

NHN's search engine placed 1st in the National Customers Satisfaction Index in 2003 based on the survey by KoreanClick and Metrics.

The Internet search engine market, which was not expected to be an important source for creating revenue in the Korean portal market, has rapidly expanded from 20 billion in 2002 to 80 billion won in 2003. Experts agreed that it is due to the success of the KIN (edaily, 01/02/2004).

TABLE 1. Number of Portal Users in Third Week of June 2003
Unit: 1000

Type	Name of Site	Number of Site Visitors	Search Engine User Number	Knowledge Search Engine User Number
Search Engine based on Internet Portal	DAUM	8,016	2,382	-
	Naver	6,579	**4,514**	**1,431**
	Yahoo	4,656	2,967	314
	Empas	2,679	1,505	454

Source: www.ranky.co.kr

FIGURE 2. The Number of Monthly Search Page Views
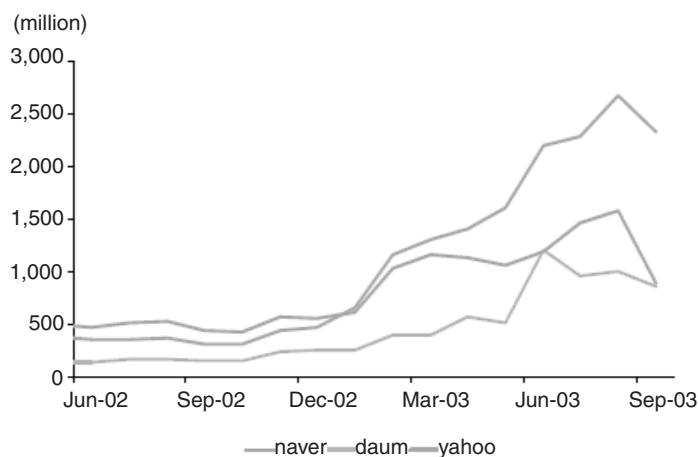
Source: NHN annual report

NHN had the biggest share in the online advertisement market three months after the introduction of the KIN service (Figure 4).

Apart from financial benefits, KIN also endows a meaningful contribution: the database of the service is also becoming a national knowledge management system or encyclopedia. It changes users' behaviors because now they expect to obtain information/knowledge without leaving the portal site. From this perspective, NHN boastfully asserts that "KIN" is a sociologically meaningful project. Significantly, the knowledge management system conceptually corresponds to externalization that converts individual implicit knowledge into explicit knowledge. Besides, solidifying the interaction among users and providing service fidelity, "KIN" naturally overcomes the most serious weakness of portals and provides a critical motive to construct differentiated knowledge community.

IMPLICATIONS FOR MANAGEMENT: LESSONS LEARNED FROM NHN'S KIN SERVICE

The story of NHN's KIN service presents dynamic and unconventional experiences in information search and retrieval service development. We identified how NHN developed KIN as an effort for making a
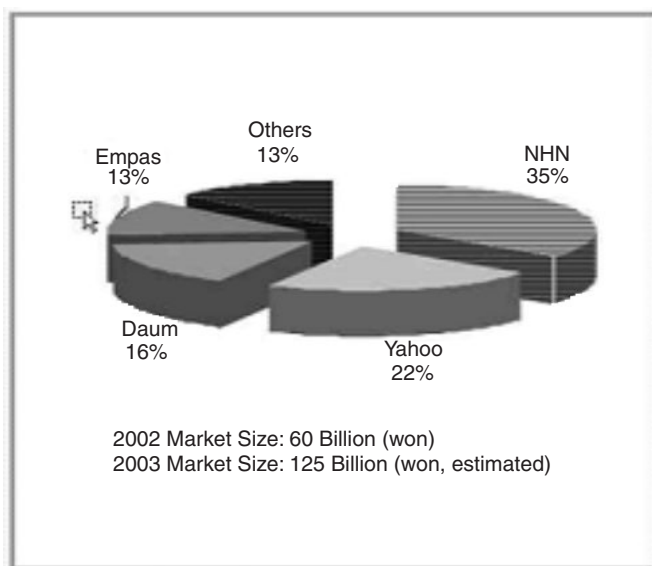
FIGURE 3. Visitors' Loyalty of Main Search Sites

Number of revisiting days
(Loyalty of visitors)
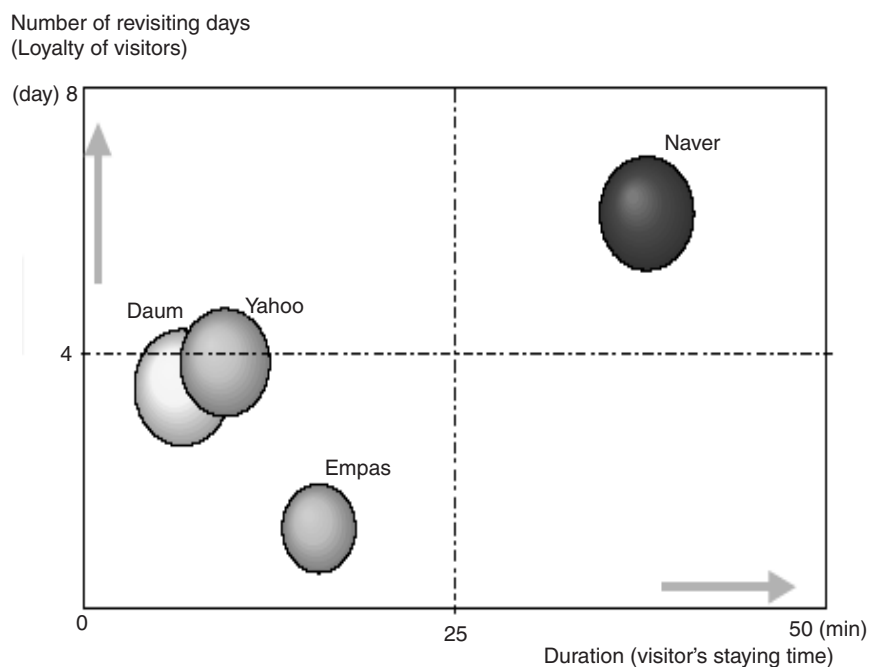
• The size of bubbles means the number of unique visitors

• Source: KoreanClick (September 2003)

portal into a final destination rather than a gateway. While other portals might have unique characteristics and deal with specific traits, we believe every portal has something to learn from NHN. Though it may be a bit hasty to conclude that NHN's KIN service fixed all of the weaknesses of portals, it offers very innovative and inspirational messages for others trying to develop new services that would create loyal customers. While there are many lessons to be learned from NHN's KIN service, four deserve special attention.

Re-Examining the Nature of a Portal Business Model: Make the Information Search Fun

It is clear that the rules of the game of online portals are changing. Most portals are striving for ideas on making their sites the final destina-

FIGURE 4. The Scale of an e-Advertising Market

Others
13%

Empas
13%

NHN
35%

Daum
16%

Yahoo
22%

2002 Market Size: 60 Billion (won)
2003 Market Size: 125 Billion (won, estimated)

Source: LG investment and secure's report

tions for users rather than gateways to the Internet. What KIN inspires is that it made the information search fun, which was a bit neglected by other portals as far as stickiness is concerned. It entertains users with a well-designed, interactive information exchange process, a vast database and nice search engines. Users trust it due to its higher quality or more reliable information. It also clearly shows direct impact on the advertisement revenue. The information search service is an effective and efficient source that locks customers into sites as long as possible.

Making a Partnership with Customers

The central weapon of the KIN service is NHN's relationship with its customers. What NHN provides is a system in which questions and answers are posted. Answers can be found by retrieving the required questions, and points are given in accordance with participation. In other words, NHN concentrates on providing a platform instead of contents and it is differentiated not by contents but by the technological superiority of the platform. The KIN service upgrades customers' status to content providers and business partners. The core of the system, knowledge

content, builds a community in both directions while users spontaneously provide and exchange information, thus unconsciously relying on the portal service.

Trajectory of Strategic Choices

NHN seems to have followed a carefully crafted strategic path to develop and nurture its loyal customers. First, it attracted customers with its superior search engine (Customer Developed). Second, it merged with a game company, Hangame Comm. This not only became a source of stable profit but also a large number of customers (Customers acquired). The success of the online game business bestows popularity to Naver as an online portal (Customers Multiplied). Third, it began to provide various premium services and started charging for upgraded services without sacrificing its installed user base (Customers Leveraged). Currently, with the KIN service, the customers became the main content providers (Customers Partnered). Their strategies are exemplary to other e-commerce companies as well as online portals.

Strategic Use of Cyber Culture

NHN's KIN service management is totally based on a profound understanding of culture in Cyberspace, which is headed toward an open and equal relationship. Its success is attributed to respect to its customers' culture. Furthermore NHN's understanding of Cyber culture became the most important criterion in developing or renovating the services. It implies that managers providing online services need to recognize the difference between online and offline cultures. The recognition is an important tool in creating and managing the services.

CONCLUDING COMMENTS

Now, most other Korean portals are trying to mimic NHN's KIN service, and NHN has started to expand its service to other countries in Asia including Japan. Creating an interesting and effective information search and retrieval service is not simple, but it is not an impossible mission either. The experiences of NHN's KIN and lessons resulting from their experiences must be tried in particular portal settings. Ultimately, KIN is about creating loyal customers and adding value with a dynamic and interactive information search and retrieval service. It is the result

of thorough reflection on a portal's primary function and business model. Only this acknowledgment ensures that a portal's strategy for a better information search and retrieval service can be a fortifying force for a portal's success.

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