

The Top 10 Mobile Internet News of 2010

Korea Communications Commission (KCC) and Korea Mobile Internet Business Association (MOIBA) announced the top 10 mobile Internet news of 2010 in which huge changes took place in the social, economic, cultural industrial fields in accordance with the paradigm shift to smart mobile.

< The 10 Mobile Internet News >

Classification	Details
1. Rapid increase of smart phone users in Korea	<ul style="list-style-type: none"> o Smart phone users rapidly increases in Korea. - 806,000 in Dec. 2009 (2%) → 6.25 million in Nov. 2010 (12%)
2. Open market and application frenzy	<ul style="list-style-type: none"> o Open market applications and downloading increased exponentially - Global Applications (Apple App Store + Google Android): 230,000 in Mar. 2010 → 440,000 in Nov. 2010 · Domestic Applications: 4,400 in Mar. 2010 → 7,640 in Nov. 2010 - Global App Downloads: 3 billion in Jan. 2010 → 10.9 billion in Dec. 2010
3. Extensive expansion of WiFi wireless broadband network	<ul style="list-style-type: none"> o Facility-first competition policy was introduced to the wireless broadband network and WiFi network of the second highest level in the world was implemented. - 13,000 in Jan. 2010 → Nov. 2010: Approx. 66,000
4. Introduction of rate plans for unlimited data use by 3 mobile communications service providers	<ul style="list-style-type: none"> o Rate plan of KRW 55,000 or more a month for unlimited 3G network data use

Classification	Details
5. Advent of tablet PCs, such as Galaxy Tab and iPad	<ul style="list-style-type: none"> o More than 19.5 million tablet PCs sold this year o Cumulative sales of iPhone · Galaxy S terminals <ul style="list-style-type: none"> - Global: 33.74 million in Dec. 2009 → 81.04 million in Dec. 2010 - Domestic: 0.2 million in Dec. 2009 → 3.2 million in Nov. 2010
6. Changes in mobile services with living-friendly and personalized SNS and LBS	<ul style="list-style-type: none"> o Diverse functions of smart phone, a 'compact PC in the palm of your hand', were combined and developed. This led to introduction of various applications and expansion of service use.
7. Official launch of WAC and promotion of integrated app store (K-WAC)	<ul style="list-style-type: none"> o WAC, a wholesale market for applications commonly used in all operating systems, was launched. <ul style="list-style-type: none"> - Common open type WAC of Korea's 3 mobile communications service providers
8. Implementation of cooperation system for mobile Internet	<ul style="list-style-type: none"> o 'Smart Mobile App Development Support Center' implemented o 'Internet Win-Win Cooperation Council' founded o Joint cooperation projects with 3 mobile communications service providers promoted (KRW 7 billion)
9. Activation of convergence between mobile Internet and other industries	<ul style="list-style-type: none"> o Mobile Internet convergence service began in full scale in line with expansion of smart phone use, such as 'smart work'.
10. Increase of damages in smart phone users	<ul style="list-style-type: none"> o Consumer complaints for frequent call disconnections and problems concerning smart phone after-sale service and app refund increased.

Attachment: One copy of the Top 10 News

[Attachment]

Details of the Top 10 News

1. Rapid Increase of Smart Phone Users in Korea

- o As of the end of November, the count of smart phone users in Korea is approx. 6.26 million.
- As of January 2010, the percentage of smart phone users among all mobile phone users (feature phone + smart phone) was merely 2%. However, as of November, approx. 12% of mobile phone users are smart phone users.

2. Open Market and Application Frenzy

- o The count of open market applications and downloading increased exponentially.
- As of March, the count of applications registered in Apple's App Store was approx. 200,000. It increased to approx. 310,000 as of Nov. 2010. As for the applications registered in Google's Android Market, the count increased from approx. 26,000 in March to approx. 130,000 as of November.
 - ※ For domestic applications, the count increased from 4,400 in Mar. 2010 to 7,640 in Dec. 2010.
- The count of global mobile application downloads was 3 billion in Jan. 2010. It increased by approx. 3.6 times to 10.9 billion in Dec. 2010.
- In line with the current trend, the download count is

expected to exceed 70 billion (approx. 7 times) by 2014.

- o Competition among the three communications service providers of Korea over 'app store' expansion and reorganization has commenced in full scale.
- SK Telecom opened T-Store to customers using smart phones of other communications service providers.
- KT reorganized 'Show App Store', a smart phone open market, as 'Olleh Market', an integrated store selling both contents and applications.
- LG U+ commenced the company's own open market service in October 2010.

3. Extensive Expansion of WiFi Wireless Broadband Network

- o KCC introduced the facility-first competition policy for broadband wireless network expansion in line with the 3rd 'Smart Mobile Korea Vision 2010'.
- Mobile communications service providers competitively expanded WiFi networks. Currently, the level of WiFi network in Korea is the second highest in the world.
※ A total 66,000 hot spots as of Nov. 2010 (KT: 40,000/ SKT: 15,000/ LG U+: 11,000)

4. Introduction of Rate Plans for Unlimited Data Use by 3 Mobile Communications Service Providers

- o All mobile communications service providers offer unlimited 3G

wireless data use for customers on the rate plan of KRW 55,000 or more a month.

- With the unlimited data service system, smart phone users' video upload · download and network game use increased rapidly.

o Wireless data sales increased continuously.

- The total amount of data sales by the 3 mobile communications service providers of SKT, KT and LG U+ in the 3rd quarter was KRW 1,280.1 billion. This figure exceeded the voice call sales amount of KRW 1,271.8 billion.

< Voice Call and Data Sales per Communications Service Provider >

<Unit: KRW 100 million>

Classification		Q1	Q2	Q3
SKT	Call Charge	7,060	7,130	6,710
	Wireless Data	6,660	7,130	7,680
KT	Call Charge	4,141	4,085	3,786
	Wireless Data	3,320	3,561	3,716
LGU+	Call Charge	2,193	2,371	2,222
	Wireless Data	1,239	1,337	1,405
Total	Call Charge	13,394	13,586	12,718
	Wireless Data	11,219	12,028	12,801

<Source: Data from each company>

5. Advent of Tablet PCs, such as Galaxy Tab and iPad

- o As of the end of 2009, 4 million tablet PCs were sold worldwide. However, this year, with the launch of iPad (Apr. 2010) and Galaxy Tab (Aug. 2010), the figure increased by 4.6 times from the previous year (19.5 million tablet PCs sold).
- Cumulative sales volume of Apple's iPad officially placed on sale from Nov. 30 is 50,000. As for Galaxy Tab, which was placed on sale prior to iPad, the cumulative sales volume is 200,000.
- o The global cumulative sales volume per iPhone and Galaxy S terminal is 81.04 million in Dec. 2010. This was an increase by 2.4 times from 33.74 million in Dec. 2009.
- The cumulative sales volume per iPhone and Galaxy S terminal in Korea is 3.2 million in Dec. 2010. This was an increase by 16 times from 200,000 in Dec. 2009.

< Cumulative Sales per iPhone and Galaxy S Terminal >

(Unit: 10,000 terminals)

Classification		Dec. 2009	Dec. 2010
iPhone	Global	3,374	7,204
	Domestic	20	120
Galaxy S	Global	※ Released on Jun. 14, 2010	900
	Domestic		200

- o Tablet PC to combine the portability of smart phone and convenience of laptop computer triggered drastic changes in the media fields, such as publishing, video and education fields.

- Tablet PC is already making inroads into other digital devices market of portable game consoles, e-books, navigations and PMP.
- The use of tablet PC is expanding to a wide area covering education, medical service and marketing, etc.

6. Changes in Mobile Services with Living-friendly and Personalized SNS and LBS

- o Combining the characteristics of mobile devices, such as portability, instantaneity and personalization, and diverse functions of smart phone, a variety of new mobile applications services were introduced into the market.
- Use of location information-based services, such as LBS, mobile map and local service, through smart phone has increased.
- Use of services faithful to the original functions of a communication device, such as instant messenger, SNS and e-mail, became active.

7. Official Launch of WAC and Promotion of Integrated App Store (K-WAC)

- o WAC, a wholesale market for applications commonly used in all operating systems, was launched.
- WAC is a wholesale market for applications commonly used in all operating systems. Communications service providers all over the world can purchase applications from WAC and sell them to their own customers.

- o In response to this, the integrated app store (K-WAC) project was promoted.
 - Developers use terminal information and open API, etc. to develop applications. Then, the applications are registered as contents in the integrated app store through Korea Mobile Internet Business Association (MOIBA).
 - The 3 mobile communications service providers bring contents registered in the integrated app store to their own app stores (T-Store, Show Store and OZ Store).
 - Users can access contents in the integrated app store through the app store of each communications service provider.

8. Implementing of Cooperation System for Mobile Internet

- o 'Smart Mobile App Development Support Center' was implemented
 - To promote the application development environment of Korea so that the small-scale or individual developers can conveniently access composite information necessary in development
 - To provide test beds, development spaces, educational programs and app development program control tools and to operate cooperation channel for experts (smac.kr: MOU concluded on Jun. 2010 among 13 organizations, such as the government organizations, research institutes, web portals, universities and associations)

- o 'Internet Win-Win Cooperation Council' founded
 - Internet business support center was implemented to support small and medium-size businesses. In addition, mobile Internet cooperation projects were promoted together with technology sharing, development support and development of human resources.

- o Joint cooperation projects promoted
 - The 3 mobile communications service providers invested KRW 7 million to prepare illegal and harmful contents monitoring system for the purpose of creating wholesome mobile Internet contents distribution environment and to provide technological and marketing support to small contents providers (CP).

9. Activation of Convergence between Mobile Internet and Other Industries

- o In line with the increase of smart phone use and distribution, the domestic private communications service providers began activities to provide mobile Internet convergence services in full scale.

- o Case: Smart Work Era
 - Mobile office is realized as smart phone represented by iPhone was actively introduced into businesses. This led to the era of 'smart work'.
 - Smart work is a form of flexible work to overcome the restrictions of time and space using ICT that is advancing each day.
 - In reality, large enterprises, public corporations and foreign companies in Korea began steps to increase flexibility of their

operations by implementing smart work centers one by one.

- KCC will promote to develop and spread the Korean type smart work model with an investment of KRW 234.1 billion by 2015 in order to advance smart work infrastructures, to spread services, to create safe and convenient environment, to strengthen competitiveness and to lead the market.

10. Increase of Damages in Smart Phone Users

- o Consumer complaints increased on the frequent call disconnections and problems relating to smart phone after-sale service policies and refund of applications purchased through mobile app stores.
- Of 1,452 smart phone-related reports to Korea Consumer Agency, 919 reports (63.3%) were about the quality of smart phone (as of Jun. 2010).