



Fixed and Mobile Convergence and Synergy



KDDI provides a comprehensive lineup of services from the Internet to fixed and mobile communications and more. Based on the high-quality communications networks and advanced technology that support these services, we are working to build a ubiquitous network environment.



The **au** Business

- Successfully Acquiring the Dominant Share in the Japanese 3G Market
- *Movie Mail* Represents a New Stage in the Evolution of Communications

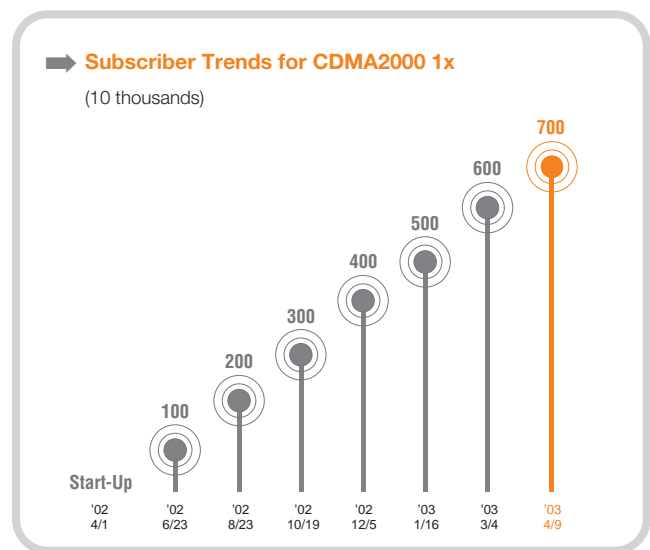
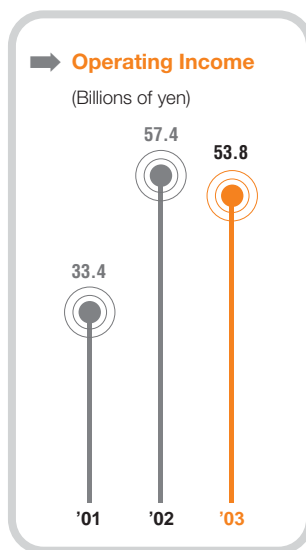
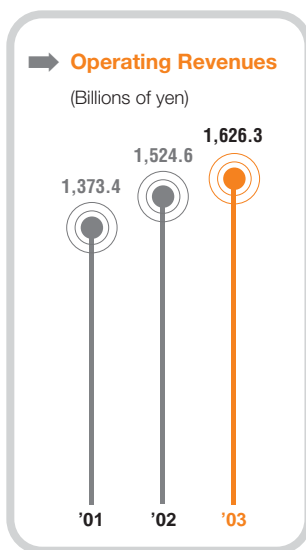
3G STRATEGY FOR au

In April 2002, KDDI launched its third-generation (3G) cellular-phone service, CDMA2000 1x. With this new technology, au subscribers enjoy high-speed access to a wide range of data services at 144Kbps. Enhanced mail functions include *Movie Mail* and *Photo Mail*, which allow customers to record and mail video clips or still images from their cellular-phone handsets. Other exciting new content includes a positioning information service based on

GPS technology, and the *Chaku-Uta*™ ringtone service, which can download CD-quality music data.

Since the Japanese telecommunications market is shifting from voice to data communications, including e-mail, these services are helping to boost au's Data ARPU (average revenue per user per month).

CDMA2000 1x handsets have backward compatibility with the 2G cdmaOne system. This allows customers to communicate





A5304T



A5303H



A5302CA



A5301T



A3012CA



A1302SA



A1301S

using 2G technology when outside of 3G coverage areas. KDDI has also established an infrastructure conversion system that allows existing 2G base stations to be upgraded merely by replacing panels. The extreme simplicity of this system will ensure rapid coverage expansion with fewer investments. By December 2002, just nine months after the launch of the CDMA2000 1x, the coverage ratio had reached 90% on a population basis.

These 3G strategies allowed KDDI to attract 6,806,000 subscribers for the new service in the first year of operation. This means that almost one-half of the total au subscriber base, which stood at 14,049,000 as of March 31, 2003, has migrated to 3G services. KDDI now has a dominant share of the Japanese 3G market.

7-X-IL

[PHOTO MAIL]

Though KDDI was not the first telephone company to offer camera-equipped handsets, it has now become a major player in this area. The first au mobile handset with camera functions was the A3012CA, which was launched at the same time as the CDMA2000 1x system. The *Photo Mail* service, which allows customers to attach pictures taken on their handsets to e-mail messages, was also introduced at the same time. Various features, including the ability to attach up to five pictures to a single e-mail item, differentiate KDDI's service

from those of its competitors. To enhance user convenience, KDDI has established *Photo Mail Bin*, which allows customers who cannot view attached pictures on non-au handsets or old au handsets to see them on the Internet. Innovations such as this are helping to attract subscribers to the CDMA2000 1x system. Since the initial launch, au has introduced a string of handsets with high-quality digital cameras. Efforts to promote sales of these handsets have helped to revitalize the Japanese mobile market, the growth of which had slowed as the penetration rate rose.

△-E-X-IL

[MOVIE MAIL]

In September 2002, KDDI launched the A5301T, the first au handset with video recording capabilities. It simultaneously introduced the *Movie Mail* service, which allows customers to attach video clips of up to 15 seconds, which are created on cellular-phone handsets, to e-mail messages. *Movie Mail* represents a new stage in the evolution of communications via camera-equipped cellular-phone handsets. Sales of the new handsets have increased steadily since the launch, reaching 1.44 million units on March 31, 2003. By the end of March 2003, only six models were available. KDDI aims to expand data communications by making *Movie Mail* available on most handsets.



[CHAKU-UTA™ (DOWNLOADABLE RINGTONE SONGS)]

In December 2002, KDDI introduced the new *Chaku-Uta*™ service, which allows customers to download 15–30 second clips of the latest hit songs in CD-quality from compatible sites on EZweb. These can either be used as they are, as ringtones of singer's voices, or enjoyed simply for playback through a mobile handset. Download traffic has expanded steadily since the launch of the new system, which is now au's leading service in terms of access numbers. Initially a range of 300 songs was offered, but this was increased to 3,500 songs in March 2003. At the end of March 2003, the service was supported on five handset models. As with *Movie Mail*, KDDI intends to provide this capability on most of its handsets in the future.

With ringtone-melody services, royalties are paid only to composers. For its new *Chaku-Uta*™ service, KDDI has established a system under which royalties are distributed to the record companies and artists that provide the content. In addition to creating a new market, KDDI has also established a new business model different from ringtone-melody services.



[PACKET DISCOUNT]

Packet Discount, a new packet charge discount system, has been introduced to allow customers to enjoy the various innovative data services offered by au at a reduced cost. For a monthly charge of ¥1,200, customers can access data for a charge of ¥0.1 per packet, compared with

the existing rate of ¥0.27. By offering cheaper access, this led to stimulation of increased use of data communications by attracting customers who have made little use of data services in the past.



[ENHANCING THE au BRAND CAPABILITY]

In the year ended March 31, 2003 (fiscal 2003), KDDI significantly enhanced the image of the au brand through measures focusing on 3G services and charges. As a result of these efforts, the number of new subscribers was raised substantially above the initial target, and au's share of net increase was 28.1%. The cumulative share of subscriber numbers increased by 0.9 points over the previous fiscal year's level to 18.6%.

[TERMINATION OF PDC SERVICES]

KDDI terminated cellular-phone services based on the old PDC system at the end of March 2003. Enrollment of new contract subscribers was halted at the end of March 2002, and at the end of June 2002, KDDI also stopped accepting new subscribers for prepaid PDC cellular-phone services. At the same time, to prevent PDC subscribers from moving over to other carriers, KDDI undertook schemes to encourage subscribers to switch from PDC handsets to cdmaOne and CDMA2000 1x models. Approximately 70% of customers made the shift to au CDMA services. The termination of the PDC service involved substantial costs in fiscal 2003. However, we created a system to concentrate management resources by using CDMA technology exclusively. au will be able

to provide customers with enhanced services, while improving the efficiency of its business operations.



[BREW™ AND CORPORATE STRATEGY]

The BREW™-capable A5304T handset went on sale in February 2003. BREW™, which was developed by Qualcomm, is an application platform for cellular telephones. Customers can extend the functionality of their cellular telephones simply by downloading suitable applications. Compared with JAVA, BREW™ applications start and run more quickly and consume less power. Because the load needed to operate BREW™ is relatively small, it can be incorporated into cellular-phone handsets at low cost. KDDI plans to install BREW™ in all handsets, from low-end to high-end models.

BREW™ can create applications that make use of data stored in handset hardware, including address books and other files, so that, while previously, customers had to use the e-mail software as originally installed in the handset, with BREW™ content providers can provide their original e-mail applications. On the other hand, BREW™ also allows instruction data to be pushed to cellular-phone handsets from centers. This means that a variety of sophisticated applications can be provided for both consumers and corporate users. By customizing individual BREW™ applications, KDDI will be able to offer corporate mobile solutions based on close integration of cellular telephones into corporate operating systems.

[CONTINUING FOCUS ON 3G STRATEGY]

In fiscal 2003, three carriers lined up to provide 3G services in Japan. Though au still has a dominant share of the Japanese 3G market, it must continually keep one step ahead of competitors. In the fall of 2003 it will launch CDMA2000 1x EV-DO, which will provide a sector throughput averaging 600kbps and peaking at 2.4Mbps. The new system will also have backward compatibility with CDMA2000 1x, and all backbone operations will be based on the IP network. Hence, costs will be low, which means lower packet charges for data communications. KDDI will boost the potential of its 3G strategy by offering customers the ability to enjoy low-cost access to a wide range of interesting content that is not available on conventional cellular telephones.

BBC & Solutions Business

- ➔ Advantages in Its Ability to Provide Both Fixed-line and Mobile Services
- ➔ Aiming to Provide a Wide Range of Solutions Services in a Shrinking Market

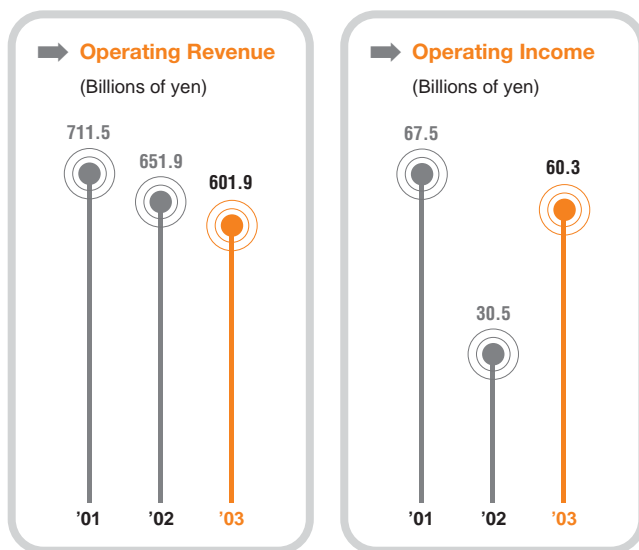
TRENDS IN THE FIXED-LINE TELEPHONE BUSINESS

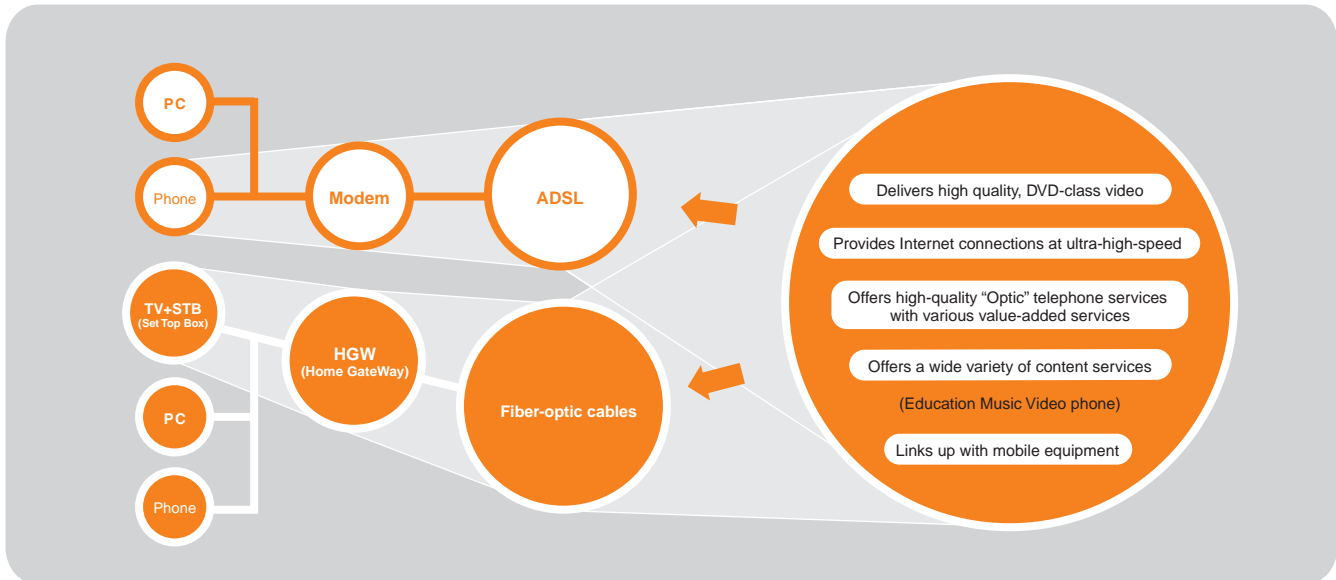
The introduction of the MYLINE service, which allows customers to select their preferred carriers, has triggered an upsurge of competition in the fixed-line telephone market as carriers vie to attract customers. The market itself is shrinking because of economic stagnation, and also because of a decline in traffic resulting from the shift to mobile and e-mail. In the year ended March 31, 2003 (fiscal 2003), competition to attract new customers intensified as IP telephone services (VoIP) became widely available. Yahoo!BB

began to offer VoIP to ADSL customers in April, which was followed by other ISPs and existing telecommunication carriers. KDDI introduced a trial service for corporate users of its DION Internet service in July and switched to full-scale services in November. A trial service for DION ADSL consumers began in December, in preparation for the launch of full-scale services in April 2003.

VoIP networks can be established for a lower cost than conventional switch-based telephone networks, so call charges can also be lower. Currently, all providers are offering free calls between their VoIP customers and charges of ¥7–¥8 for three-minute calls to fixed-line telephones anywhere in Japan. Fixed-line telephone revenues are expected to drop as customers shift to VoIP services. However, KDDI is determined to retain the customers that it has attracted away from other carriers through the MYLINE system by aggressively marketing its unique capabilities to link VoIP and mobile services to differentiate its products.

In December 2002, the Ministry of Public Management, Home Affairs, Posts and Telecommunications assigned the prefix number "050" for use with VoIP services. At present, VoIP customers cannot receive calls from non-VoIP telephones. Competition is expected to escalate still further when this becomes possible with the completion of upgrades of NTT switches after the summer of 2003.





BROADBAND AND ADSL

In the year ended March 31, 2003 (fiscal 2003), the shift from dial-up Internet services to broadband services with 24-hour connection accelerated, especially the move to ADSL. KDDI initially lagged behind other carriers in recruiting ADSL customers. However, it launched a major ADSL campaign, *Omakase ADSL* (absolute ADSL) in July 2002 and has since recorded strong growth in its subscriber base by offering better customer support than its competitors, including free installation and a 24-hour/365-day helpdesk service. By the end of March 2003, approximately 500,000 customers had signed up for the ADSL service. Because KDDI does not have its own ADSL network facilities, it has expanded its service area and improved line speeds under a flexible strategy based on alliances with various companies. The maximum line speed is 12Mbps at present, but KDDI plans to keep pace with future improvements. ADSL lines also play an important role as infrastructure for VoIP services. To differentiate its services from those offered by competitors, KDDI plans to offer ADSL services and VoIP services at a package rate from April 2003.

MEGA-CONSORTIUM AND PROVIDER ALLIANCES

ISPs with ADSL services are forming a variety of alliances in readiness for a major shift to IP telephone services. In June 2002, KDDI formed a mega-consortium in which the other major participants

are NEC, Matsushita Electric Industrial and Japan Telecom. These companies are now considering various approaches, including joint development of broadband content, and platform sharing. Eleven companies, including the mega-consortium members, have also formed an alliance in the area of VoIP services. The aim is to enhance customer convenience by increasing the number of subscribers available for VoIP among member subscribers.

FTTH STRATEGY

KDDI DION Internet service offers optical fiber access using the B-Flets system operated by NTT-East and NTT-West, and Tokyo Electric Power’s TEPCO Hikari system. Further, in March 2002, KDDI began to offer the “Optical Fiber Condo” service, whereby KDDI installs fiber-optic cables in condominium buildings in readiness for the provision of broadband services throughout each building. The number of condominium buildings which have signed up is increasing steadily.

Under a FTTH trial service launched in March 2002, KDDI offered a variety of services, including video streaming and *karaoke*, link-up services with au system, and on-line English-conversation lessons, as well as high-speed Internet access service. The trial ended in August 2002, and the valuable data gathered will be applied to the fulfilled broadband services launching in the autumn of 2003.



CORPORATE DATA MARKET

KDDI's IP-VPN services remained popular in the corporate data market, since businesses value the ability to build secure, simple in-house networks on a platform provided by KDDI. KDDI was also able to attract new intranet customers, including small offices that previously relied on access via ISDN or other systems. By the end of March 2003, the number of access lines had risen to 54,000. KDDI continues to expand its menu of corporate data services, which now also include the Ether-VPN wide-area Ethernet services for companies linking large numbers of PCs into nationwide networks.

MOBILE SOLUTIONS

One of KDDI's advantages is its ability to provide both fixed-line and mobile services. In its corporate solutions business, KDDI aims to strengthen the linkage with mobile services, such as the au system. In October 2002, it launched the *GPS MAP* service, a positioning information management service based on au's unique *GPS Keitai* cellular-phone. By sending a request from an office PC, managers can ascertain the locations of sales or delivery personnel carrying *GPS Keitai* handsets. With advantages that include ease of implementation and the precision of GPS data, the service has attracted interest across the entire business spectrum. In the first six months almost 200 companies placed orders. KDDI will continue to provide a wide range of solutions to realize "Fixed & Mobile Convergence," including the use of GPS and BREW™ applications.

G-BOOK AND AirNavi

In October 2002, Toyota Motor Corporation launched the *Will CYPHA*, a passenger car with a built-in CDMA2000 1x communications module. A variety of information content can be downloaded through the au cellular-phone network onto an integrated communications terminal called the *G-BOOK*. By working with KDDI, Toyota aims to differentiate its products in the telematics market. For KDDI, the introduction of telematics-related services offers a way to make effective use of infrastructure, since the frequent hours of traffic for vehicles are in the daytime, which differs from the normal peak hours for conventional cellular-phone services. Around the same time, Pioneer Electronic Corporation launched the *AirNavi* automobile navigation system, which has a built-in CDMA2000 1x communications module. There are many potential telematics services. KDDI intends to strengthen its presence in the telematics market and gain a large market share by introducing the CDMA2000 1x EV-DO system.

TU-KA Business

➔ Emphasizing Simplicity in Handset Functions and Charge Plans



TU-KA SIMPLE STRATEGY

In the second half of the year ended March 31, 2002 (fiscal 2002), TU-KA began to focus its marketing efforts under an improved management structure toward a specific user profile. The target customers are people who mainly use voice services and e-mail. This strategy was given a more concrete form in the year ended March 31, 2003 (fiscal 2003). While competitors were preoccupied with high-end products, such as built-in cameras, TU-KA was able to create the world's thinnest cellular-phone handset by eliminating the camera. The new handset is 15mm thick, and though its functions are simple, its ease of use and attractive design have made it very popular.



TU-KA also emphasized simplicity in its charge structure with the introduction of the new "Simple Charge Series." Under these plans, all basic charges are covered by call charges, and customers on two-year contracts enjoy even lower rates. The aim of this simple strategy is to attract and keep subscribers, especially people in their thirties and forties who are not especially interested in 3G services.

The total number of TU-KA subscribers declined, in part because of the increase in cancellations of pre-paid handsets. However, there has been a sustained reduction in the churn rate for post-paid handsets, and TU-KA is moving toward a business structure that will allow it to produce steady cash flows by keeping its customer base.

Pocket (PHS) Business

➔ Building Sales Through a Winning Focus on Data



DATA STRATEGY EXTENDED

As in the previous year, DDI Pocket continued to implement a data communications strategy based on the *AirH*[™], terminals for the flat-rate data service. There was a year-on-year increase in the *AirH*[™] sales ratio, and the percentage of data users increased to 47% of all subscribers. In addition to the existing PCMCIA-card type and compact flash type, the variety of data card terminals was further expanded with the introduction of SDIO and USB types. The SDIO card is designed for use in the SD card slots of PDAs, and the USB type is intended for PC users and can be plugged into a USB port. These ultra-compact applications open the potential to create new



markets, including promoting installation in other equipment, such as digital cameras. With regard to PHS, which is an infrastructure contributing to the realization of a ubiquitous society, DDI Pocket is also expanding its sales channels for MVNO (Mobile Virtual Network Operation) business, and it now deals with wholesale services to a total of six companies. As a result of these initiatives, the number of subscribers as of the end of March 2003 rose to 2,975,000, the first net increase in the last five years. Though other PHS companies are expected to move into the flat-rate data service market from the year ending March 31, 2004 (fiscal 2004), DDI Pocket has an overwhelming advantage in terms of its coverage area and lineup of handsets.

➔ Ubiquitous Landscape

**MOBILE PHONES BECOMING
“PERSONAL GATEWAYS” ➔**

Means of communication using mobile phones are becoming more advanced year in, year out. E-mail, for one, has already become an indispensable function for millions of users. And today, with camera functions built in, mail attachments like pictures and moving images are becoming the rule, not the exception. However, the role of mobile phones in the ubiquitous network society will go far beyond that of a communication tool. The models of the not-so-distant future will feature wallet, credit card, key and commuter pass functions, not to mention remote-control functions to control electrical home appliances and other electrical products. KDDI positions the mobile phone as consumers' "personal gateway" to the ubiquitous network society of tomorrow. And we'll continue to provide new and convenient solution services for all customers in making it an integral part of their daily lives.

Outside

Purchasing Merchandise
Settlement
Credit Cards
Commuter Passes
Tickets



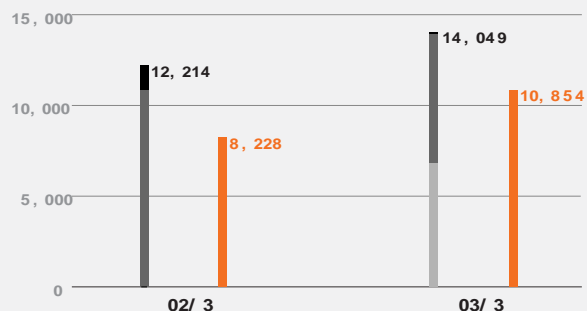
Music Playback
TV

Position Information
Map Interfacing



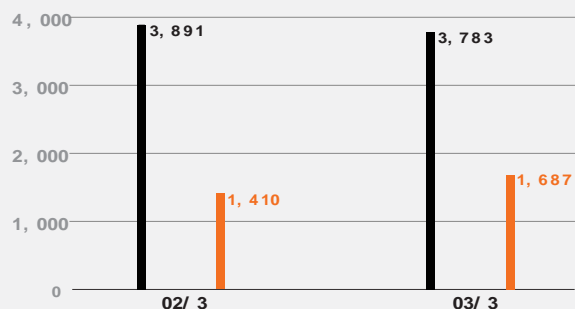
au

		(Thousands)	
		2002/3	2003/3
au	CDMA2000 1x	—	6,806
	cdmaOne	10,822	7,208
	PDC	1,392	35
	Total	12,214	14,049
EZweb		8,228	10,854



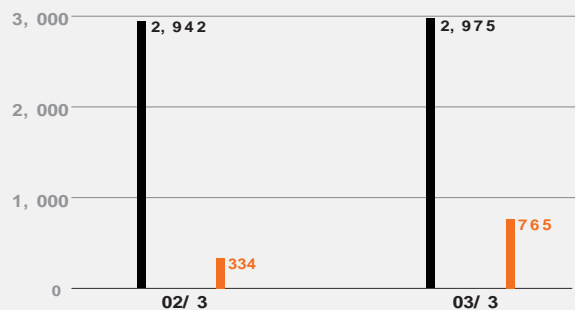
TU-KA

		(Thousands)	
		2002/3	2003/3
TU-KA	PDC	3,891	3,783
EZweb		1,410	1,687



Pocket

		(Thousands)	
		2002/3	2003/3
Pocket		2,942	2,975
AirH"		334	765



ARPU

		2002/3		2003/3	
au	ARPU	(¥)	8,080	7,570	
	Voice ARPU	(¥)	7,190	6,400	
	Data ARPU	(¥)	890	1,170	
	MOU	(minutes)	189	182	
	Churn rate	(%)	2.6	1.8	
TU-KA	ARPU	(¥)	5,790	5,330	
	MOU	(minutes)	149	152	
	Churn rate	(%)	3.1	2.4	
Pocket	ARPU	(¥)	5,330	5,010	
	MOU	(minutes)	185	177	
	Churn rate	(%)	3.2	2.7	

ARPU (Average Revenue Per User)

MOU (Minutes Of Usage)