

What Lies beyond docomo cloud?



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NTT DOCOMO's Medium Term Vision 2015, announced in November 2011, presented the concept of the docomo cloud. As the vision presentation declares, "Propel service innovation and convergence of industries/services by leveraging 'DOCOMO's clouds' to allow people to lead a smart life characterized by enhanced convenience, fulfillment, efficiency and safety/security."

The essence of the mobile cloud is the concentration of terminals' data and functions in the cloud. Because a terminal's data resides in the cloud, even when the terminal is lost, its data, for example e-mail, phone book contacts and photos, can be restored. When you change your terminal's model, you can immediately use your new terminal with your most up-to-date data by synchronizing it with the data in the cloud. Also, because the data is stored in the cloud, you can enjoy services and contents on the same environment even when using different types of terminals, such as smartphones and tablets. In other words, the docomo cloud is a system that provides a more convenient and more personal environment for using services based on your time and place. And making tremendous contributions to the use of smooth cloud services is high-speed LTE wireless transmission.

Google Inc. and Apple Inc. are early providers of cloud services. However, they differ slightly from each other on how they position the use of their cloud services. Because Google's business model is to reap profit from advertising, it is utilizing the cloud to provide services in order to attract customers. Apple's business model is to gain from the sales of its terminals, so it is making use of the cloud to increase their

value. NTT DOCOMO, meanwhile, is exploiting the docomo cloud as business infrastructure so the company can evolve into an integrated service company and fulfill its vision of a "smart life." The docomo cloud is composed of a network infrastructure, which provides terminals you always have on hand and ID, payment, and authentication functions; and a personalization infrastructure, which processes a variety of information provided by users, including their history data, with their permission. The docomo cloud provides greater personal services by meeting the advanced needs of each of our diverse users.

In the cloud era, methods of developing services are changing from their conventional ways. As competition with Over-the-Top (OTT)^{*1} players over services intensifies, the speed of service development determines victory or defeat. The development of Shabette Concier (voice-agent service) was completed in a short time by a mere five-member development team using agile development methods. After the service began, it was continually improved in successive one to two-week cycles by developers' attentively following users' frank comments posted on services such as Twitter^{*2}. Agile development, which presupposes changes in specifications and successive additions of functions, and carries out development in short, repeated cycles, is particularly compatible with the cloud, where functional extensions and improvements are possible by changing software on the cloud side.

In the case of cloud services, master data sets reside in the cloud. Because services are provided by the cloud side, linking with external services is easy. Photo Collection^{TM*3} works externally with Evernote^{®*4}, Eye-Fi^{®*5} and HighCam^{TM*6}. Images and video stored by each service can be viewed and processed all at once on Photo Collection. The key to linking with these external services is creating open Application Programming Interfaces (APIs) and actively releasing them. Releasing open APIs in a variety of formats to different types of industries and other business fields and supporting developers to create new innovations and services that take advantage of the docomo cloud are also critical roles for DOCOMO R&D.

Dreams lie beyond the docomo cloud. Precisely because the business environment is changing wildly today, as exemplified by the diversification of users' needs, the spread of open platform terminals, and the entry of global and diverse OTT players into the mobile market, I want to do my best to use docomo cloud as an instrument to achieve dreams with swiftness and a spirit of challenge. I take to heart my mission of making the docomo cloud the catalyst for open innovations.

*1 **OTT**: The provision of services such as VoIP and instant messaging as a layer on top of the communication carrier's network. These services are not subject to geographical or carrier restrictions.

*2 **Twitter**: A registered trademark or trademark of Twitter Inc. in the United States and other countries.

*3 **Photo Collection**TM: A registered trademark or trademark of NTT DOCOMO.

*4 **Evernote**[®]: A registered trademark or trademark of Evernote Corp. in the United States and other countries.

*5 **Eye-Fi**[®]: A registered trademark of Eye-Fi Japan, Inc.

*6 **HighCam**TM: A registered trademark of HighlightCam Japan, Inc.