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NEC's Cloud Solution

Telecom Operators have the Great Business Chance for Cloud Computing for Remarkably Large Profit.

The environment surrounding Telecom Operators ("Operators") is getting more and more serious because of various elements, including increasing traffic, decreasing incomes, managing facility investment and establishing BCPs (Business Continuity Plans) and so on. In these circumstances, it is very true that many Operators have already started to address Cloud business.

However, in terms of Cloud business for Operators, there are three cases of Operators, Operators who already have a business strategy, Operators who are planning but still strategizing, and other Operators have no idea about it.

Cloud services consist of IT services provisioning capability ("IT") and Network connectivity to provide services to large customer basis ("NW").

Operators definitely have IT and/or NW, and therefore can create value added by integrating IT with NW. Many people think that Cloud business has many advantages for Operators because they have the tangible assets of IT and/or NW, the intangible assets of an excellent service track records, a large local customer base, especially of Small-and-Medium-sized Enterprises ("SME"), with whom Operators are in constant contact through their on-going billing relationships, and the most valuable asset of all, the "Trust" of their customers. Everybody has a strong impression of Operators as very reliable, safe and secure in their operations. That's why people entrust Operators with their valuable data.



A number of very reliable specialists have analyzed the direction of Cloud business deeply and they insist that:

Operators Cloud business shall be localized globally to work together with local S/W vendors and expand such localized services to SME and large enterprises in each region in each countries. Such services shall not be just unified and stereotypical.

And also, Cloud application shall be specialized for each SME who could not invest in IT so far, taking into account their business characteristics and conditions. Such applications shall not be just general and universal for large enterprises use only.

Again, Operators already have valuable assets and are in very good positions to start Cloud business quickly and increase income drastically in a short period of time.

Another advantage of Cloud business for Operators is synergy; their primary telecom business will be expanded and their churn rate will go down.

In addition, the approaching new wave of Cloud business is about connecting more than IT resources and services. The next wave will be about bringing specific services to vertical industries such as healthcare, education, retail and government. One of the resulting trends is that data will be

accumulated out of the cloud. The increasing needs to integrate services with processes will require a broader number of sensors and devices to be connected to the Operator's Cloud.

Increasingly, Machine-to-machine (M2M) communications come to the forefront of services focused on vertical industry. Therefore, it is a prime chance for Operators to start and expand Cloud business in order to get remarkably large profits.

NEC's advantages for Operators' Cloud business are 3 points;

Firstly, NEC, as a comprehensive IT company, has great experience and a long record of success in the IT industry. NEC has been developing H/W through S/W for PC, Storage, and Server. As an IT Solution company, NEC can call upon a large pool of internal human resources as well as its connections with outside ISVs. NEC, as a Sier, has business know-how and marketing capability in any industries.

Secondly, NEC has deep experience in the Telecom Carrier industry, and has been supporting the infrastructure business in the Telecom industry globally.

Thirdly, NEC has a global network through locally-incorporated companies in each country that can fully support local projects, taking into account the specialties and features of each project in each region. NEC's excellent level of local support is a big advantage advantageous over other heavy players with global standards.



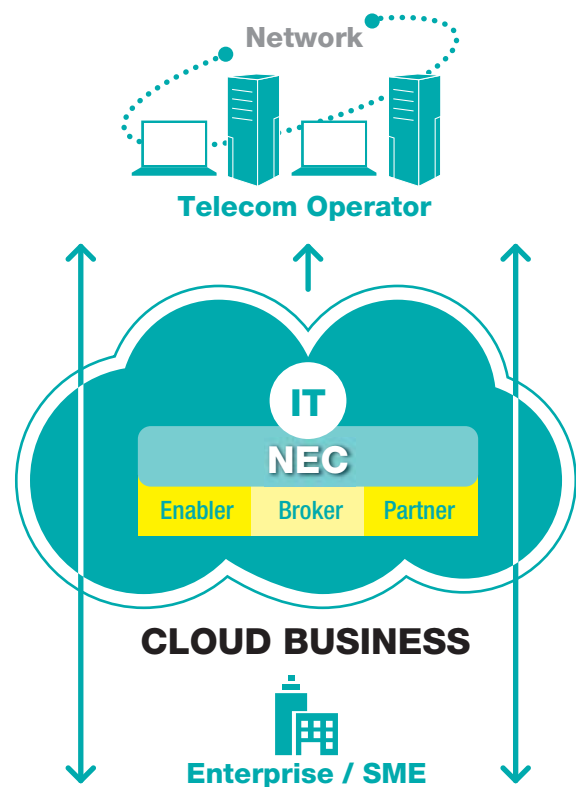
Now, NEC has three roles in Cloud business: “Cloud Enabler”, “Cloud Broker” and “Cloud Partner”

As a “Cloud Enabler”, NEC, as an IT vendor, can help Operators start their Cloud business quickly by providing both an H/W platform (servers and storages) and an S/W platform, which is called “Marketplace” and can be added onto the Operators’ existing communication-based service provisioning systems. Since NEC has been doing System Integrators Business in all areas for a long time, NEC has a wide range of hardware and software intellectual property. NEC can also provide management consulting support, such as reorganizing Operators into a more competitive organization to get off to a quick start in their Cloud business.

As a “Cloud Broker”, NEC can not only provide NEC-developed Cloud services and applications, which have a good record in market, they can also provide a rich services portfolio for the Operators’ Marketplace, which NEC has established jointly with more than 100 services partners and global Internet Service Vendors (“ISVs”), as well as the local ISVs.

As a “Cloud Partner”, NEC uses their understanding of the Operators’ business to fully utilize NW assets and operational functions to enrich their Cloud business. NEC can also help Operators to create unique Cloud solutions best fitted to their respective requirements by leveraging Operator assets such as user profiles and N/W connectivity that are not easily accessible by other Cloud service providers. Because

NEC has accumulated Cloud business and systems with many different Operators, it can apply its experience to the major concerns Operators have, like how to increase the number of subscribers.





NEC has already contributed to Cloud commercial services successfully in 15 projects in 7 countries outside Japan including TLF Spain, TLF Argentina, O2 Ireland and MTS Belarus.

16 additional projects will be shifted to commercial phase by the end of 2012 which include not only SaaS but also IaaS and VDI/DaaS.

In Asia Pacific region, 3 projects are already in commercial phase in Thailand and India.

7 projects are waiting for commercial start in Thailand, India, China, Korea and Philippines.

Operators' Cloud business should be localized.

In any region and any country, NEC's local offices can fully support Operators to successfully localize, competing with the other world-famous big players who just proceed with unified and stereotypical cloud services without working with local S/W vendors and therefore can't provide such fine-tuned services for the local SME.

NEC's strategy is to further expand Cloud business to local SME with mission-critical information in each country globally by utilizing and combining Operators' assets - especially customer trust - and NEC's solutions by the three roles described above, together with marketing know-how.

In summary, NEC, as a global vendor in both the IT and Telecom industries, is very flexible and well-positioned to becoming the best partner for Operators in the Cloud business so that their profits can be maximized and shared between both parties for win-win business.
