Where can mature carriers grow?
In the carrier cloud

For the world's telecommunication industry to continue growing, service providers must explore not only new areas of business but also new, innovative business models. Cloud services are a promising way for carriers to meet new customer demands while developing important new revenue sources. Especially for small and medium sized enterprises, IT services and resources delivered from the cloud can help customers reduce their capital investment and gain the financial benefits of using opex-oriented models for software, systems and services.

NEC has a long history of integrating computers and communications. This puts NEC, one of the world's leading networking and IT companies, in a unique position to work with carriers locally to quickly build and support the customized solutions that are most useful to their own customers.

BUILDING THE CLOUD

NEC partners with each carrier to build an integrated, customized cloud service. We work together to design the right service for each market, from the business model and service roadmap to the platform, operations and support systems. While each system is individualized, it is required that all cloud solutions meet a powerful set of standard requirements.

NEC provides a wide range of end-to-end solutions and managed services in addition to building next-generation network infrastructure. Key components of NEC's cloud solutions, such as Platform as a Service (PaaS), Infrastructure as a Service (IaaS) and Software as a Service (SaaS), enable carriers to operate flexible, scalable and secure services. NEC offers managed services including IT consulting and third-party management with which carriers can smoothly control their services and thrive within the cloud.

OPPORTUNITIES IN THE CLOUD

Commercially mature carriers are far ahead of desk-bound Web 2.0 enterprises in their ability to utilize cloud computing. They already have key resources in place like networks, secure switching central offices, datacenters, and back-up centers that contribute to superior quality of service, end-to-end security and commercial stability. This means they can increase revenue by offering better services at more attractive prices.

Carrier-Centric Cloud: Capture multiple value chains
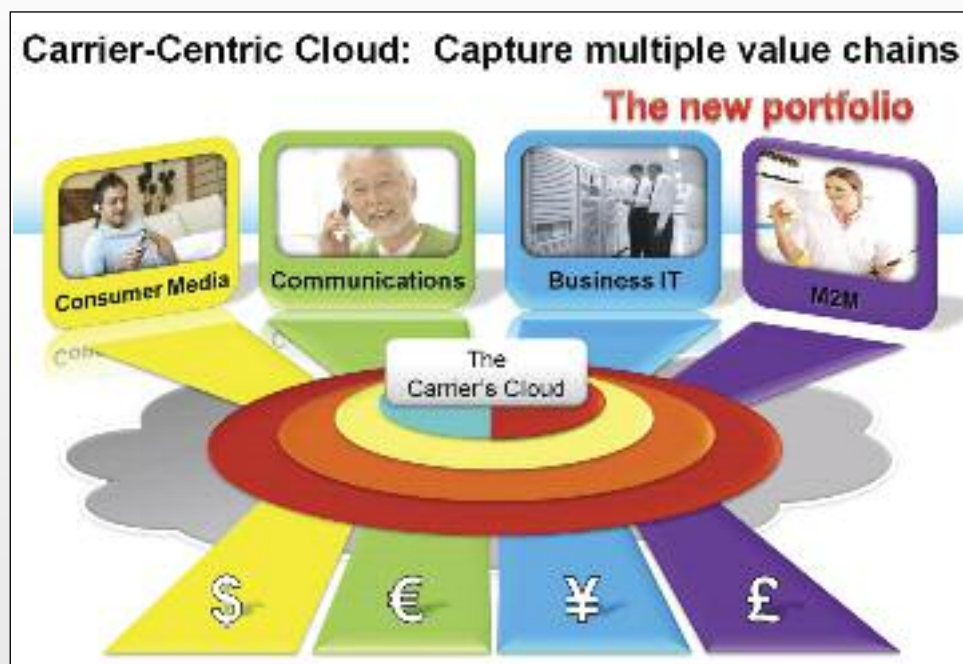
CASE STUDY: TELEFÓNICA FINDS VALUE IN NEC'S CARRIER CLOUD

Telefónica, the world's leading integrated international telecommunications company, needed a new business model to bring more value to its 300 million customers around the world – and more revenue to its own bottom line. They chose a low-risk strategy that required little up-front investment: providing SaaS to their customers. For their partner, they chose NEC. They trusted that NEC's long, proven history of integrating computers and communications would transition them smoothly into the carrier cloud. In fact, NEC was the only company able to provide both the IT and the networking their vision demanded.

What's more, NEC was able to build and grow the cloud and its services quickly. With NEC's aggregation skills, the applications were deployed quickly. As soon as the network was up and running, NEC's multi-tenancy SaaS platform allowed multiple end users to immediately subscribe to and use a variety of application services on the same infrastructure. NEC set up the service infrastructure within 45 days, and Telefónica acquired over 10,000 new customers in the first year alone. This number continues to grow.

Now, these satisfied customers are eagerly utilizing business-improving applications such as CRM, billing, video-conferencing and GPS applications at affordable prices. Telefónica's ability to quickly address customer requests for new applications is enhancing Telefónica's reputation and organic word-of-mouth publicity. Meanwhile, by using NEC's carrier cloud, Telefónica is preparing to roll out an increasing portfolio of revenue-driving services to their international territories.

One of the advantages is the marketplace, where customers can buy service licenses, give feedback, get expert help and move data between applications. This integrated functionality exceeds earlier ASP models that ran hosted software licenses in separate silos.

Another carrier advantage is the ability to add value to cloud services with their access to information about user's context (e.g. location or preferences). This can add value by providing convenience for customers. At the same time, integrating this data provides valuable information for the carrier about customer use and sales channels.

Mobile networks are becoming cloud-ready by extending their broadband data capability. At the same time, mobile applications themselves will become smarter by using cloud services.

The potential growth of new users is also large because of the opportunity presented by new devices such as smart cars, set-top boxes and electricity meters. These machine-to-machine (M2M) applications represent millions of cloud devices that will need to be connected and controlled. Home gateways and femto cells let users stream media in their homes, access media libraries in the cloud or remotely control home electronics and appliances.

WINNING WITH CLOUD

What is the winning formula for carrier cloud? It's a carrier-grade cloud that delivers services that millions can rely on, plus integrated IT and network innovation. NEC knows that the businesses carriers work with and the millions of customers who depend on them would be paralyzed without access to their systems.

That's why NEC's basic cloud proposition comes standard with many of the same mission-critical middleware and operational management systems that fortify our most powerful cloud service platform, which has 99.9999% availability.

NEC's experience in integrating networking, infrastructure and support has given us an unparalleled toolbox to build fast, strong, secure cloud environments. We use invariant analysis to detect silent errors and virtual machine mobility to move services before failure. Redundancy ensures that there are always IT resources available to continue processing during any resource failure, and service mobility ensures that live services are not affected.

For NEC and our customers, now is the time of IT and network integration. NEC's carrier cloud is ready to be deployed anytime, anywhere in the world.