2016 Operator Cloud Services Blueprint

February, 2016

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As a major cloud storage battle rages on between Google, Amazon and Microsoft, some mobile operators are wondering if they can successfully compete.

Cloud storage costs continue to decline. Users are increasingly conditioned to expect cloud storage to be free or nearly free, making it difficult to charge for consumer clouds.

Furthermore, many smartphones today come with embedded personal cloud software from the 'Big Two and a Half': Google and Apple, with Microsoft on the fringes. This software automatically stores user content such as contacts and photos in the cloud, making operators question if they have a viable role to play in the cloud.

Given these dynamics, does it make sense for operators to provide cloud services or is it a fait accompli?

Although 'doing nothing' might seem to be the path of least resistance, it is likely to be viewed in retrospect as a fool's errand. An operator doing nothing with clouds is apt to be a case of marketing myopia. Operators have a dubious history of responding to disruptive technologies. Examples include the Internet ("walled gardens") and messaging apps (WhatsApp cannibalizing SMS revenue).

It's one thing if the cloud were a fad, but chances are that it's only going to grow. Operators can stick their heads in the sand and hope the cloud fades away but if they do, they risk being obviated by companies that embrace the cloud. How can operators learn from the past to avoid repeating history?

A sustainable strategy is not simply a matter of fight 'em or join 'em. It does not make sense to compete head-on against the cloud behemoths. Nor does it appear to be viable to align with these companies in the quests for domination as this is just likely to further the behemoths' aims at an operator's expense.

A better approach is a strategy that harnesses the disruptive power of the cloud while avoiding getting caught in the behemoths' crossfire. Instead of trying to out-cloud the behemoths, becoming a me-too provider or doing nothing, is there another strategy that makes sense?

To answer this question, consider the core strategy followed by the behemoths. They all offer consumer cloud storage. These services are generally not profitable on a standalone basis. But they are viewed as highly strategic by these companies. Why? They use their personal clouds as loss leaders to attract and retain users to their ecosystems.

These personal clouds are considered to be highly successful based on metrics such as registered and active users. These user adoption figures are proxies for the loyalty power of these services. As retention is one of the most important objectives of operators, this strategy also makes sense for them.

Note that it is not enough to offer a cloud service on a standalone basis. The key is to integrate the service with other offerings. This is how companies leverage their strengths and expose users to related products i.e. it is today's online version of cross- and up-selling. It encourages interaction with a company's other products, and gives customers an important reason to keep buying from the company. Operators have the same need and opportunity.

Operator Cloud Services Opportunity

What cloud services should operators offer? There are several. This blueprint describes these opportunities and how operators can capitalize on them.

A survey of providers reveals that they are offering several revenue-generating cloud services, including:

(1) **Mobile backup**. Apple and several mobile operators make hundreds of $millions per year offering cloud-based mobile backup to ensure that users do not lose important content on mobile devices.

(2) **Mobile security**. Some operators generate tens of $millions annually with bundles of mobile security that include cloud storage, anti-virus and mobile insurance. A bundling approach provides superior value to consumers and makes things easier to buy than purchasing them a la carte.

(3) **Personal cloud**. A personal cloud not only preserves user content but makes it easy to access and share across devices, computers and social networks.

(4) **Cloud file sync & share**. This is a business-class service in an operator context of selling mobile services to SMBs and enterprises.

(5) **Family safety**. Smartphones allow the location of family members to be continuously monitored and reported on for safety purposes.

(6) **Internet of Things (IoT)**. Operators are increasingly looking to offer IoT services for homes, vehicles and businesses. The cloud is a natural place to store, process and disseminate IoT data.

(7) **SIM clouds**. Some providers use a SIM cloud that acts as an upgrade path for SIM users by storing their SIM contacts in the cloud for use on smartphones.

Should operators offer all of these? No. But it suggests that rather than offer one service, operators are better off offering services for different market segments. The diversity of the list suggests that what works for one operator in one area of the world is likely to be different elsewhere. What is key is that operators pick-and-choose the services that make the most sense for their situation. A one-size-fits-all cloud approach is unlikely to work in any situation.

Our company has worked with dozens of operators worldwide to launch cloud services for more than two billion people. Some services have been highly successful while others were not. What are the main differences and lessons between these successes and failures?
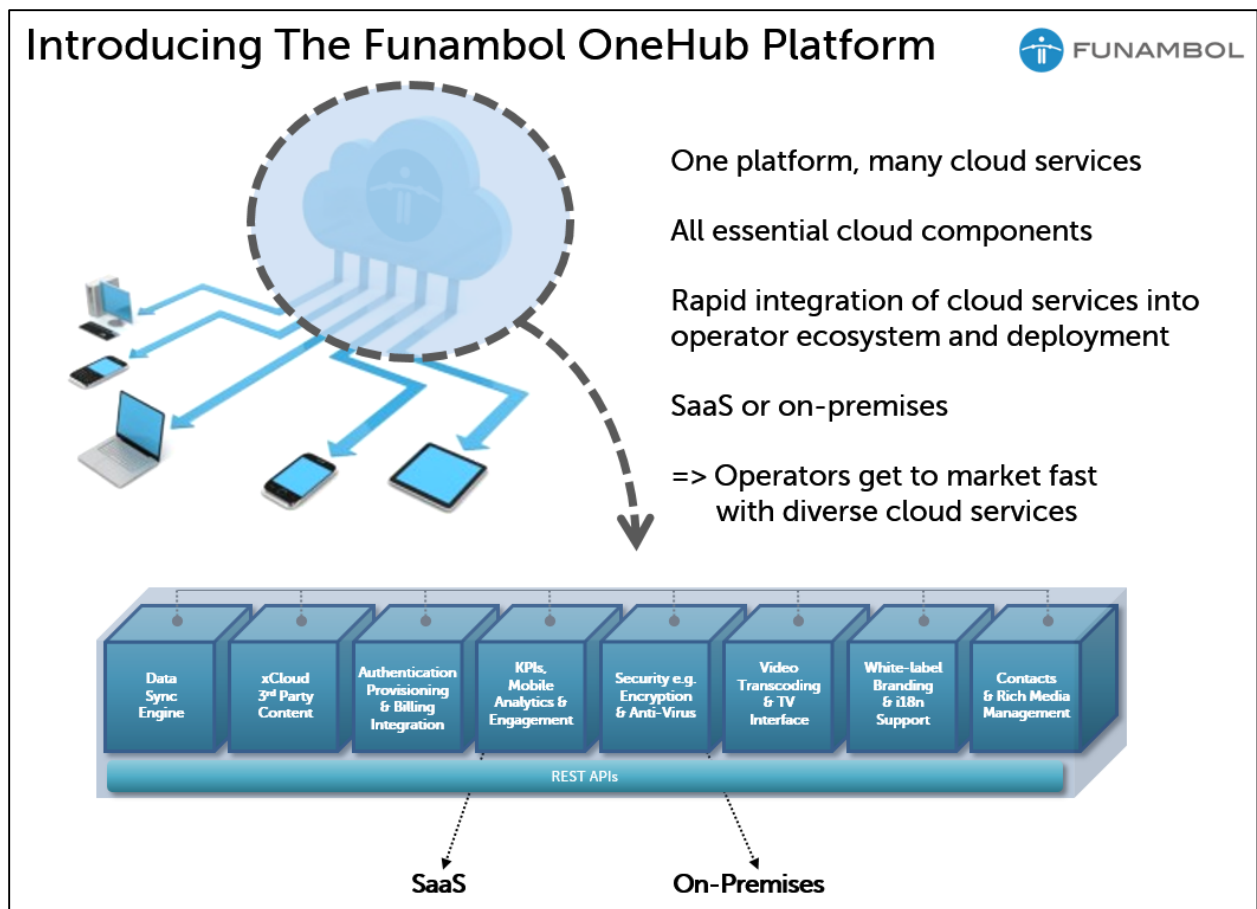
The top-line observations are that:
- over-the-top cloud services fail to generate significant revenue for operators
- using a hodgepodge of unrelated cloud point solutions is similarly ineffective
- integrating cloud services into an operator's ecosystem is essential
- adapting to an operator's market conditions is paramount
- leveraging best practices for marketing and sales makes the difference

A Platform Approach To Cloud Services

If operators should not employ OTT or disparate cloud solutions, what should they do?

Operators can maximize their cloud potential with a platform approach. A platform lays the foundation for a broad array of services. A standards-based platform can plug into an operator's infrastructure and position them to leverage new cloud technologies and cost savings. Instead of reinventing the wheel whenever an operator wants to introduce or update a service, a platform provides the important components for cloud services, such as user authentication, provisioning and billing integration, analytics, security and more. This enables an operator to get-to-market quickly with best-in-class cloud services that can be adapted for the operator's needs. In brief, a platform approach saves time and money, and allows operators to nimbly act on their cloud opportunities.

While a platform approach is essential, not all cloud service platforms are created equal.

Introducing The Funambol OneHub Platform

One platform, many cloud services

All essential cloud components

Rapid integration of cloud services into operator ecosystem and deployment

SaaS or on-premises

=> Operators get to market fast with diverse cloud services

| Data Sync Engine | xCloud 3rd Party Content | Authentication Provisioning & Billing Integration | KPIs, Mobile Analytics & Engagement | Security e.g. Encryption & Anti-Virus | Video Transcoding & TV Interface | White-label Branding & i18n Support | Contacts & Rich Media Management |

REST APIs

SaaS   On-Premises

The Funambol OneHub platform allows operators to go to market rapidly with best-in-class cloud services such as:

- personal clouds for consumers
- business clouds for small & medium businesses (SMBs)
- family safety clouds for households
- IoT clouds for sensor-driven automation
- SIM clouds for feature phones

The platform is extensible for offering other services that operators may want to offer. It is modular and contains these components used by cloud services:

- Data sync engine to keep mobile devices and computers in sync with a user's cloud account
- xCloud to enable 3rd party content from cloud drives and social networks to be in a user's cloud
- Authentication, provisioning & billing integration with an operator's systems
- KPIs and mobile analytics and engagement to foster user adoption
- Security, such as encryption and anti-virus
- Content transcoding and TV support
- White-label branding and internationalization support
- Contacts and rich media management

The platform has a modern architecture and is standards-based to snap into an operator's existing infrastructure. It provides a robust set of REST APIs so that important aspects of the platform and services can be accessed from and integrated with an operator's other systems. The platform and its services can be deployed using a Software-as-a-Service (SaaS) model or reside on the operator's premises.

Conclusion

It may be healthy skepticism to question if an operator can compete in today's cloud services market. The evidence strongly suggests that operators can succeed if they follow this blueprint. Operators should offer a suite of revenue-generating cloud services that are integrated with their other services. This should include a personal cloud service that acts as a loss leader. Operators should use a platform approach for flexibility, rapid time-to-market and cost economies. The platform should take advantage of the latest cloud technologies to make these readily available for an operator's subscribers.

For more information about how Funambol can help operators realize their cloud service ambitions, visit www.funambol.com or contact the Funambol sales team at http://funambol.com/sales.php.