

Wholesaling the Cloud

Carriers can increase cloud revenue through
wholesale channels

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Summary

In brief

To expand the overall cloud opportunity, telcos should sell cloud services on a wholesale basis to reach small and medium enterprises (SMEs) that fall outside the reach of their direct sales and support teams. Wholesale cloud services leverage existing assets without incurring significant additional capex, enabling them to deliver larger margins. Working with channel partners further extends telcos' expertise and can drive incremental revenue. Many carriers have already developed or acquired cloud capabilities; spreading those expenses across a larger customer base reduces per-customer cost.

Ovum view

- **Cloud services represent a growing opportunity.** At this time, cloud services contribute a small percentage of telco sales. However, the segment is poised to increase as more SMEs turn to cloud services to drive growth and improve efficiency.
- **Selling cloud services to intermediaries strengthens the wholesale offer.** Most intermediaries have high-value customer bases to protect and grow; telcos should offer wholesale cloud services to help their intermediaries respond to these clients' need for cloud capabilities.
- **Selling wholesale cloud solutions helps justify capex investments.** Selling cloud services (whether internally developed or purchased) through the wholesale channel helps telcos cost-justify network investments, systems, and processes.
- **Selling cloud services can expand wholesalers' total addressable market.** Wholesale cloud offers can help establish new intermediary relationships with hardware and software distributors, ISPs, and smaller telcos that want a fast go-to-market route to the cloud arena while minimizing investments in infrastructure.

Recommendations

- **Offer cloud services on a wholesale basis.** Build a suite of wholesale cloud services based on the evolving cloud services aimed at enterprises.
- **Use cloud services to expand your business and that of your channel partners.** Selling existing cloud services through the wholesale channel enhances the relationship between carrier and intermediary, allowing both to increase revenue.
- **Support channel partners.** Wholesalers must put in place partner programs that buttress their intermediaries' responses to demands for cloud services from SME customers.
- **Improve wholesale customer performance using wholesale cloud.** Wholesale cloud services allows intermediaries to move from a capex to opex business model, which enables them to better keep up with changing technology.

Wholesale cloud value proposition

Why wholesale cloud services

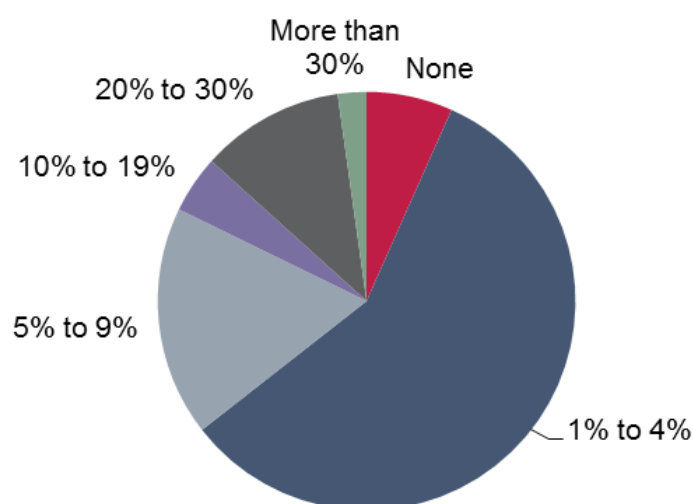
Although cloud services are still in a nascent stage that do not contribute greatly to overall telco revenue (see Figure 1), they represent a fast-growing and increasingly complex sales opportunity. In a recent survey-based study of international telecoms carriers, Ovum found that enterprises employ different cloud types for different workloads. Managing multiple clouds – encompassing private, public, and hybrid clouds – requires end-to-end cloud service visibility that spans enterprises' and third parties' data center and network assets. To address those needs, enterprises increasingly consider cloud service providers with combined data center and networking orchestration skills as their trusted brokers across hybrid clouds (see *Cloud-Network Orchestration: The Rising Priority in Enterprise Purchasing*).

To support large enterprises as well as medium-sized and smaller business customers, telcos should explore a wholesale strategy that complements their retail tactics for cloud services. Doing so enables their wholesale customers to meet growing demand from those SMEs.

We believe that telcos will miss a significant business opportunity if they are unable or unwilling to develop their own cloud offerings. These telcos need to find wholesale or white-label cloud services they can bundle and sell on to meet their retail customers' demand. Finding a suitably experienced wholesale partner is a way for intermediaries to share skills, risks, and benefits

Figure 1 shows the proportional revenue of cloud services to the 45 international telecoms carriers surveyed in Ovum's Telecom Cloud Global Insights Survey that wholesale cloud services. Note that the revenues indicated include direct and indirect sales.

Figure 1: Approximately what proportion of your company's total revenue do cloud services currently represent?

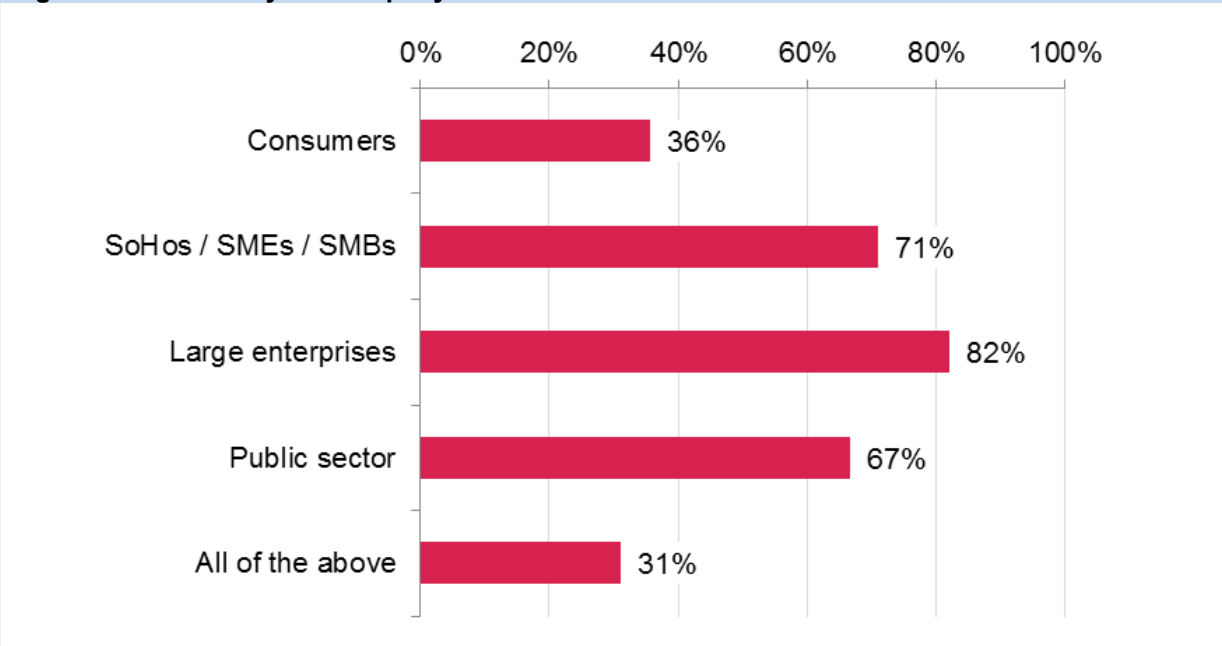


Source: Ovum, n = 45

(Please refer to this report's Methodology section for details about the survey we used to acquire this data.)

Figure 2 shows the variety of customer types to which telcos sell both wholesale and retail cloud services.

Figure 2: Who does your company sell cloud services to?



Source: Ovum, n = 45

To expand the overall cloud opportunity, telcos should sell wholesale cloud services to intermediaries that can reach SMEs that fall outside the reach of their direct sales and support teams. Wholesale cloud services leverage existing assets without incurring significant additional capex, which can enable them to deliver higher margins. Working with their channel partners further extends telcos' expertise and can drive incremental revenue.

CenturyLink provides one example of a telco leveraging its cloud technology platform to address both retail and wholesale customers. CenturyLink's Wholesale Markets Group offers the Cloud Reseller program that gives CenturyLink's wholesale customers access to all its retail cloud services and features.

However, when selling wholesale versions of enterprise services, telcos must establish a clear distinction between retail and wholesale customers to prevent internal sales conflicts. In Ovum's recent survey of cloud-selling telcos, most respondents said more than 10% of their cloud revenues came from indirect channels (see Table 1).

Table 1: How do different sales channels contribute to your cloud revenues?

Answer options	None	1 – 9%	10–29%	30–49%	50%+	Responses
Online sales (self-serve portal, cloud marketplace)	11	21	3	5	0	40
Direct sales (field, store, telemarketing)	1	10	6	8	18	43
Indirect sales (resellers, integrators, other)	0	12	16	9	4	41

partners)						
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Source: Ovum, n=44

Of course some carriers (e.g. TeliaSonera International Carrier) intentionally do not offer wholesale cloud services because they do not want to compete with customers that sell their own cloud services.

Benefits to wholesalers

Selling cloud services through the wholesale channel helps telcos cost-justify network investments, systems, and processes. Many carriers have already developed or acquired cloud capabilities; spreading those expenses across a larger customer base reduces the per-customer cost.

Additionally, extending the cloud reach through channels takes advantage of partner contacts and expertise to expand the carriers' addressable market.

Why provide wholesale cloud

Increased revenue and profit is, of course, the primary reason to provide any service, including selling cloud services to intermediaries. Because most intermediaries have high-value client bases to protect and grow, telcos should offer wholesale cloud services to help their customers respond to these clients' need for cloud capabilities.

Additionally, wholesale cloud can extend the providers' relationships with traditional telco segments as well as with resellers within their existing wholesale customer base. Wholesale cloud offers can also contribute to establishing new intermediary relationships with hardware and software distributors, ISPs, and smaller telcos that want a fast go-to-market route to the cloud arena without investing in infrastructure.

With cloud services, wholesale telcos can expand the types of intermediaries in their value chain. Beyond the traditional varieties of carriers, integrators, and resellers, wholesale carriers can now aim at:

- enterprise service providers
- cloud brokers and other cloud service providers
- intermediaries requiring specific cloud solutions
- providers seeking low-risk, low-capex entry into the cloud market with partner support
- integrated service vendors
- M2M companies
- web and content creators and distributors
- retailers
- service providers seeking new annuity revenues to upsell to clients and prospects.

Telcos can also sell cloud services directly to wholesale customers for their own internal cloud needs.

Benefits to wholesale customers

A wider range of intermediaries are likely to be attracted to wholesalers that can speed their time-to-market and deliver SLAs, service management portals, and technical sales as well as marketing support. Wholesale cloud services deliver a wide range of benefits to wholesale customers:

- Create new revenue streams
- Move from capex to opex models
- Take advantage of flexible pricing structures and their suppliers' geographic reach
- Avoid platform obsolescence
- Deploy new technology faster
- Gain flexibility and reliability
- Improve productivity
- Deliver a wider range of features
- Improve management for the carrier and its customers.

From another economic point of view, using cloud services also offers some protection against the ups and downs of customer demand and market cycles. Wholesale customers can expand their cloud infrastructure to meet current conditions without having to cut work forces or idle/write off equipment.

"Pay-as-you-go" price structures allow wholesale customers to buy the cloud capabilities they need when they need them. Most of the carriers we interviewed for this report allow their wholesale customer to pay only for what and how much they use. This gives customers access to completely monitored and maintained cloud infrastructure with little or no up-front investment. Because the wholesale telco must already keep its networks up to date, secure, reliable, and redundant, they can thereby reduce intermediaries' barriers to entry into the cloud environment.

Additionally, customers of wholesale cloud can select from a wide range of cloud services that can be used independently or integrated with each other. These cloud services include:

- infrastructure-as-a-service (IaaS) – e.g. storage, connectivity, network infrastructure
- platform-as-a-service (PaaS) – e.g. servers, databases, development tools
- software-as-a-service (SaaS) – e.g. applications such as CRM, email, and unified communications
- service management and monitoring
- remote backup and recovery.

Intermediaries can pick and choose the scale and scope of the services they bring to market and can extend their portfolio to meet their customers' developing requirements.

Intermediaries' choices

Some wholesale carriers provide their intermediaries with applications catalogs and on-demand "stores" along with portals they and their clients can use. Most of the interviewed wholesale carriers also provide automated operations and billing systems.

Wholesale customers using multiple cloud suppliers can take advantage of the flexibility of service and provider choice. For example, they may want to use different telcos' cloud architectures and service bundles to serve different customer types.

Cloud customers can also choose to match their suppliers' variety of support models to address their clients' requirements. They can resell to clients directly or work with their suppliers' technicians when necessary to complement in-house expertise.

For example, BT points out that all its hosted communications services are built into the BT strategic voice architecture that delivers carrier-grade resilience and security to its wholesale customers. It can

provide full white-label options “resulting in faster time to market, reduced commercial risk, a more compelling proposition for end customers, and therefore stronger and more sustainable revenues and cash flow” for the intermediary.

The go-to-market and customized support capabilities of a wholesale cloud provider are very important to some wholesale customers with high-value client bases to protect and grow. Fast and accurate provisioning improves intermediaries’ and their customers’ success.

Accommodating existing infrastructure

Value-added services that complement the wholesale cloud could produce additional revenue as well as help carriers improve their relationships with wholesale customers. Some wholesale carriers will accommodate their intermediaries’ existing virtual and physical computing infrastructure by helping to migrate it to the cloud. Additionally, wholesalers could work with intermediaries on a consulting basis to help set them up on the cloud. Once set up, customers can do everything else themselves. Wholesalers may also allow their wholesale customers to transfer their existing software and applications licenses (i.e. from specific vendor partners) to the wholesale cloud computing infrastructure.

With cloud the link between wholesaler and intermediary grows closer – customers can rely on their cloud provider as a trusted advisor on cloud-related subjects from technology through sales. An example of this comes from Verizon Global Wholesale (VGW), which calls its approach “workload-centric.” VGW provisions the services and the level of management the customer wants including, potentially, completely outsourcing the infrastructure. This frees wholesale customers to focus on their clients and applications.

Wholesale cloud services

Wholesale cloud solutions vs. enablement

Not every wholesale carrier delivers a complete cloud solution, but each one can enable its customers to create a cloud capability of their own. To enable intermediaries’ cloud offers, wholesale carriers leverage their underlying infrastructure so customers can combine network elements such as capacity, servers, storage, and hosting facilities to deliver individual services, a suite of select capabilities, or an entire wholesale cloud (see *Wholesale’s Role in Enabling the Cloud*).

Using existing network capabilities, wholesale carriers can sell separate cloud elements that enable intermediaries to include the following basic capabilities in their cloud services:

- 24×7 monitoring and management
- Guaranteed capacity and security
- Service management
- SLAs that match network performance and customer requirements.

Just as with selling a complete cloud solution, selling individual enablers contributes to a greater return on investment across the wholesaler’s business by increasing the number of potential customers, and it extends the range of established wholesale services available to intermediaries.

Level 3 does not currently offer wholesale cloud services in North America. However its content delivery network (CDN) reseller program falls into the wholesale cloud enablement space. Within CDN

for wholesale, Level 3 offers Internet localization and edge caching to carriers, ISPs, and other service providers. The carrier works with cloud services vendors (e.g. Microsoft Azure, Google, HP Helion, and Amazon Web Services) to optimize private interconnection offerings; it sometimes works through third-party data centers and other aggregators to facilitate connections to many cloud services.

Current core cloud services

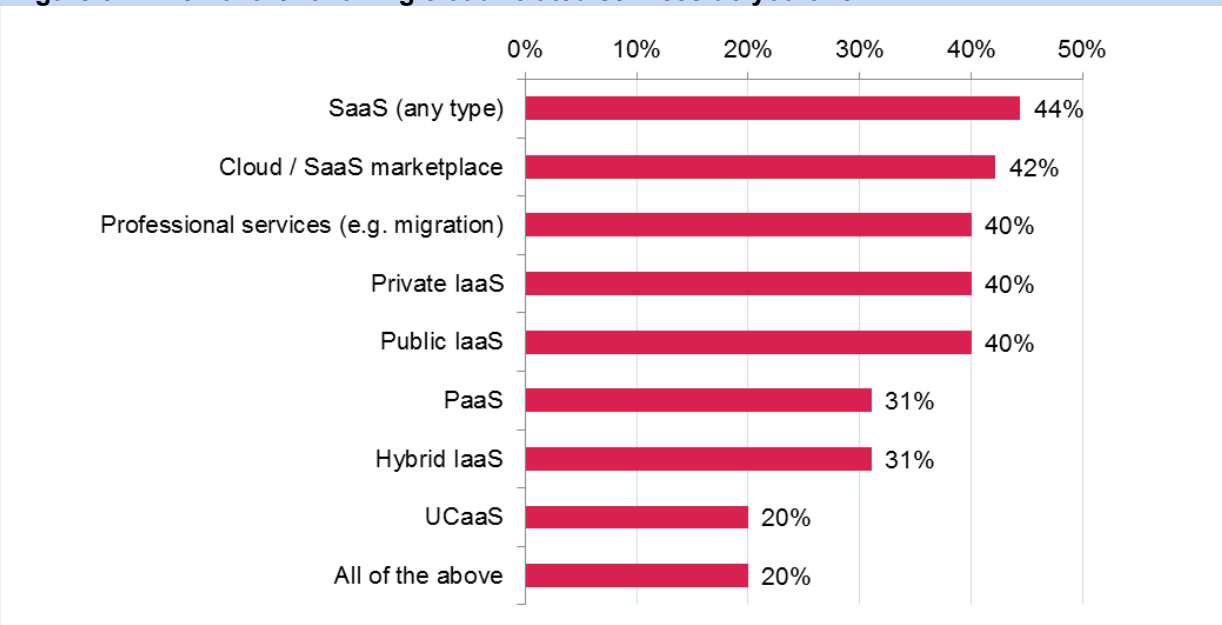
Our survey data (see Figure 3) shows that the major cloud services wholesale carriers currently offer include:

- SaaS – e.g. applications and billing and operations support systems
- cloud service marketplaces – an automated portal allowing customers to acquire the cloud services they want when they want them
- professional services – e.g. initiating service (i.e. on-boarding), migration
- IaaS – e.g. private, public, and hybrid infrastructure architectures
- PaaS – e.g. servers, databases, development tools
- unified communications-as-a-service – e.g. VoIP, conferencing, remote Centrex.

Additionally, 40% of the wholesale carrier respondents also offer cloud-related professional services, which we believe is extremely valuable to wholesale customers establishing an outsourced cloud solution or a hybrid cloud linking their own infrastructure to that of their wholesale cloud provider.

Some telcos offer their wholesale cloud customers a “marketplace” where they can use portals to select, order, provision, manage, and maintain their cloud services.

Figure 3: Which of the following cloud-related services do you offer?



Source: Ovum, n = 45

Examples of wholesale cloud offers

Selling through its Global Channel Reseller Program, Amazon Web Services (AWS) offers an extensive set (more than 40 according to AWS) of global compute, storage, database, analytics, application, and deployment services. These products enable wholesale customers to address their

clients' needs for web and mobile applications, data processing and warehousing, archiving, and storage.

AT&T calls its enterprise cloud solution NetBond, which it describes as "network-enabled cloud." It also sells NetBond to wholesale partners, providing a good example of a carrier spreading its investment expenses across its entire customer base. Although it does not white-label NetBond, intermediaries can resell any of its individual functions. NetBond's cloud functions include storage, computing, applications, and desktop management. The AT&T cloud also leverages its essential network capabilities including MPLS, VPN, Ethernet, hosting, mobility, voice, unified communications, and storage.

BT uses its complete product set to offer a hosted communications portfolio to businesses ranging from SMEs through to enterprise and government via its channel partners and resellers. Hosted services that BT and its wholesale customers can integrate into solutions include:

- SIP trunking
- IP telephony
- unified communications
- contact center applications that can be bundled with inbound services.

It also sells its channel customers hosted Centrex, Avaya Cloud Solutions, and inbound services. These customers can also bundle BT's IP Exchange and CPE.

Deutsche Telekom (DT) National Wholesale offers its carrier customers cloud services they can use to create new offerings, manage customers, or sell additional products (e.g. backups, load balancing, consulting, and traffic management). With DT National's Wholesale cloud technology, carrier customers can participate in cross-selling large access or transport products that leverage its cloud's VM, HP, and NetApp platforms. DT National Wholesale target customers include carriers that don't want to invest in virtualizing old IT structures or that want to retire old data centers. Most of its customers have some cloud expertise and infrastructure but need assistance to meet market demand and create competitive differentiation.

Telecom Italia (TI) Sparkle calls its white-label cloud platform YourCloudStore and targets hardware and software distributors, IT systems integrators, VARs, ISPs, and smaller telcos that sell to SMEs. YourCloudStore enables wholesale customers to integrate their existing portfolio of services quickly and inexpensively with TI's IaaS and SaaS infrastructure. Sparkle's wholesale IaaS addresses requirements from virtual machines to complex designs that enable applications (e.g. e-commerce and business support systems) its customers can use to solve their clients' problems. It complements the IaaS portfolio with an expanding SaaS portfolio that will allow wholesale customers to resell a growing number of prepackaged, industry-specific solutions that Sparkle plans to expand over time.

Cloud service differentiators

We see a range of differentiators among wholesale cloud providers. We believe some basic business acumen will help wholesale cloud carriers to differentiate themselves from competitors. Wholesale cloud carriers must understand each customer's requirements and the tools available from their service catalog that will specifically address those needs. Cloud services increase in flexibility every day, and so does end-user demand for new ways to use them. To succeed, cloud wholesalers must continuously invest in expertise and infrastructure to keep pace.

Other differentiators wholesale cloud carriers can adopt and adapt to their specific target markets include:

- professional services (e.g. assistance with migration of applications and data to the cloud)
- technical and go-to-market teams that can assist intermediaries with their cloud offers
- training and advice on what to sell, to whom, and how to sell it.

Wholesale cloud strategies

White-labeling cloud services

Our research indicates that telcos offering wholesale cloud have different opinions about white-labeling their products. AT&T absolutely does not; AWS does. Others, including BT and TI Sparkle, white-label their services and as branded services they can jointly sell with their wholesale customers.

Two white-label examples

BT Wholesale Hosted Centrex (WHC) is the carrier's white-label unified communications service. It eliminates the need for its customers' clients to maintain a physical PBX and enables IP communication from the cloud. This solution allows resellers to use their own brand to sell to their SME and corporate customers. For resellers that aim at the mid-market and enterprise segments, BT offers branded solutions (e.g. Avaya Cloud Solutions) to meet market requirements.

TI Sparkle's white-label cloud platform, YourCloudStore, combines the carrier's global infrastructure with a virtual environment that supports the channel in selling and provisioning fully white-labeled IaaS solutions to SMEs worldwide.

Partnering to provide cloud services

Wholesale cloud services have to be adaptable to a variety of customer needs: they must be low-touch for customers targeting low-value, high-volume accounts while providing a great deal more hand-holding, if necessary, for high-value clients of wholesale intermediaries. Although carriers have wide ranges of cloud-related skills and capabilities (i.e. from none to some), few have all they need to keep up with the rapidly evolving scope of cloud services. Finding suitable matches in an increasingly diverse group of potential wholesale partners is an established way to develop, launch, support, and market cloud services. Working with partners also provides a way to share risks and benefits.

Partnerships enable telcos offering wholesale cloud services to meet a greater range of requirements than they could alone. As we've written before (see *Partnering for Wholesale Success*), partners of wholesale carriers play a key role in helping them get to market faster, more efficiently, and with a larger number of solutions.

Even when telcos acquire cloud capabilities (e.g. Verizon's purchase of Terremark and CenturyLink's purchase of Savvis in 2011), they still need partners to help them meet the needs of wholesale customers that must deal with retail clients' growing demand for complex solutions.

Some partnerships announced during 2014:

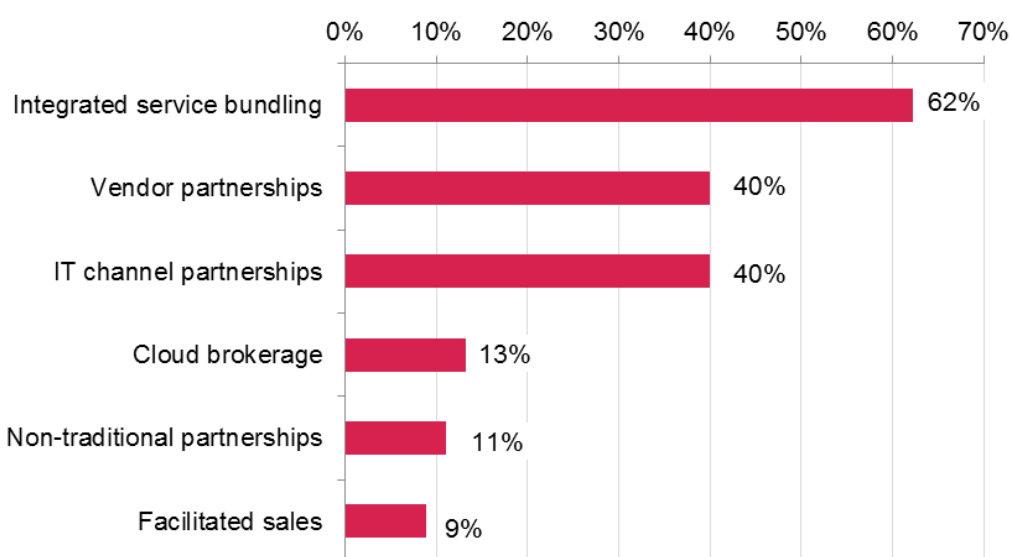
- Pacnet and China Telecom partnered to offer data center and cloud services in Chongqing. According to China Telecom the partnership combines the two carriers' network coverage with a tier-3 data center service provided by a locally based regional data center company.
- AT&T expanded its network-enabled ecosystem by working with market players such as Microsoft, Amazon Web Services, Salesforce.com, IBM, CSC, and Equinix.
- AT&T and AWS started working together to enable AT&T NetBond customers to establish high-performance, secure connections to AWS.
- BT and Avaya signed a five-year agreement enabling BT Wholesale to deliver Avaya's Unified Communications and Contact Center applications as a cloud service to mid-market and enterprise customers via the indirect channel.

In addition to service and technology partnerships, wholesale cloud carriers also partner with their channel participants to speed their times to market. In our survey we asked wholesale cloud carriers which go-to-market strategies they plan to invest in over the next two years. We gave them these choices:

- Non-traditional partnerships (e.g. banks, accountants, trade associations)
- IT channel partnerships (e.g. resellers, VARs, distributors)
- Vendor partnerships (e.g. software and hardware vendors, integrators)
- Cloud brokerage (e.g. online marketplace of own and third-party services)
- Facilitated sales (e.g. dedicated contact center staff for conversion/on-boarding)
- Integrated service bundling (e.g. cloud, voice, data bundles)
- Other (which no one chose).

Figure 4 indicates that integrated service bundles of cloud, voice, and data was the most frequently selected investment target. In many cases delivering such bundles will require channel partners knowledgeable about technology that can complement the telcos' capabilities.

Figure 4: What go-to-market strategies will your company invest in over the next two years? Choose the top two



Source: Ovum, n = 45

AWS provides a good example of the way a wholesale cloud supplier can leverage resellers and partners to extend its reach and expertise with complementary capabilities. AWS manages a Channel Reseller Program enabling Amazon Partner Network (APN) Consulting Partners to resell and manage AWS services for enterprise clients.

This reseller program aims at systems integrators (SIs), managed service providers (MSPs), IT solution providers, digital agencies, and VARs that offer professional services and managed services on AWS. Its channel reseller partners include a range of companies that can add value to the AWS offers and then sell them to their customers. The program enables APN consulting partners to include professional services and management of end-customer AWS deployments. AWS channel resellers own the customer experience from end to end for their AWS-based offerings. Some notable partners include Capgemini, Cognizant, Wipro, Unisys, 2nd Watch, CSS Corporation, Datapipe, and Smartronix.

Market outlook for wholesale cloud services

Wholesaler plans for development

Our research shows that cloud services are an important focus for carriers selling retail cloud services. In virtually every case, development investments in cloud can be better justified when there are retail and wholesale customers.

Among the developments we expect to see from cloud purveyors aimed at retail and wholesale customer segments are:

- increasingly sophisticated cloud solutions for both retail and wholesale customers
- more integrated bundles of cloud services aimed at specific end-user businesses and verticals
- new support offers and tools for channel partners including consulting, portals, and marketing support
- continued network investments that benefit retail and wholesale sales.

Examples of coming developments

AT&T expects to meet its wholesale customers' need for connections that deliver greater security and flexibility to meet their clients' requirements.

AWS developments aim at enabling its partners and resellers to grow their businesses by using AWS to provide value-added services and solutions to end customers. During November 2014, AWS announced a number of new and enhanced benefits for APN partners including the APN Premier Consulting Tier. It will be available during 2015 and focuses on AWS's SIs and professional services firms with the largest, most sophisticated practices that are deeply invested in AWS's platform.

BT Wholesale plans to create new bundles that improve integration and flexibility for its cloud customers. It will also add new features and functions to make doing business quicker and easier for both resellers and end users. Like AWS, BT intends to improve channel support programs.

CenturyLink plans new offers that its cloud resellers can bring to market, including disaster recovery as a service (DRaaS) based on capabilities from its acquisition of DataGardens. It will continue

investing in and improving its on-boarding activities to better position resellers to sell its white-labeled cloud services to their customers.

Sparkle says it will evolve its wholesale cloud offer on two levels:

- adding infrastructure and software capabilities (e.g. additional hypervisors, local applications)
- integrating more telco services from its standard portfolio.

Right now, VGW focuses on selling wholesale cloud to other carriers, but as that business gains momentum it wants to expand beyond that segment to focus on the resale model. Tactics will include giving its channel partners the support and tools necessary to improve their marketing and sales capability.

Appendix

Methodology

The analysis in this report is based on in-depth research into the current state of wholesale cloud offers. This research included detailed interviews with eight of the leading wholesale suppliers in Europe and North America. Survey data came from Ovum's Telecom Cloud Global Insights Survey of 135 international telecoms carriers, all of which provide cloud services. For this report, we used the responses from 45 carriers that said they sell cloud services to the "wholesale (other telcos/ICT supplier)" market segment.

Our analysis is supported by a continuous program of primary and secondary research into the wholesale telecoms market around the world. That process includes briefings with a wide range of telecoms service providers, wholesale competitors, suppliers, and customers as well as reviews of publicly available primary and secondary sources.

Further reading

Cloud-Network Orchestration: The Rising Priority in Enterprise Purchasing, TE0005-000672 (December 2014)

2015 Trends to Watch: Cloud Computing, IT0022-000207 (November 2014)

Telcos: Rethinking Cloud Partnerships and Strategy in Asia-Pacific to Seek New Group, TE0005-000645 (September 2014)

"Level 3 and Alianza sell their first Carrier Cloud Voice Solution," TE0012-000511 (June 2014)

Wholesale Case Study: CenturyLink Builds a National Wholesale Carrier, TE012-000458 (October 2013)

On the Radar: Elephant Talk, TE012-000453 (July 2013)

Wholesale's Role in Enabling the Cloud, TE012-000444 (June 2013)

"New channels bolster carrier sales objectives," TE012-000451 (March 2013)

Partnering for Wholesale Success, TE012-000408 (June 2012)

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