Arthur D Little

Telecommunication, Information,
Media & Electronics

Cloud from Telcos: Business distraction or a key to growth?

Open action point: Make Cloud a sustainable growth reality for Telcos!

Content

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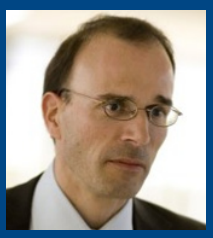

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Executive summary

Cloud revenues are significant in every market and growing in healthy double-digit terms. Even though the Cloud market is still nascent, there are already a plethora of service providers dividing this revenue, exploiting the freedom of OTT plays. However, there is a significant market need for local (national) capability combined with the benefits of Cloud services. Telecom operators, with their extensive trusted commercial relationships, local infrastructures and customer management capabilities, are well positioned to fill this gap. Through multiple assignments, Arthur D. Little has developed and successfully applied a comprehensive Cloud services model to turn aspirations in the air into solid business on the ground.

Despite enabling the internet, telecom operators are far behind in exploiting it. More focus is required on a broad range of key success factors to make Cloud services from telecom operators sufficiently attractive – from strategic positioning to service design to Go-To-Market approaches.

Combining conventional Telco business with the opportunity that Cloud brings to transform the richness of their service offerings – Cloud is a must for telecom operators. However, thus far, Telcos generally have achieved only small inroads in the Cloud and current approaches, while defendable, may not achieve sustainable or sufficient scale positions. In this report, Arthur D. Little shows how telecom operators have the right "DNA" and assets to be a significant force in the Cloud and how a practical strategy and structured approach will deliver the key success factors and make Cloud services an essential business reality for Telcos.

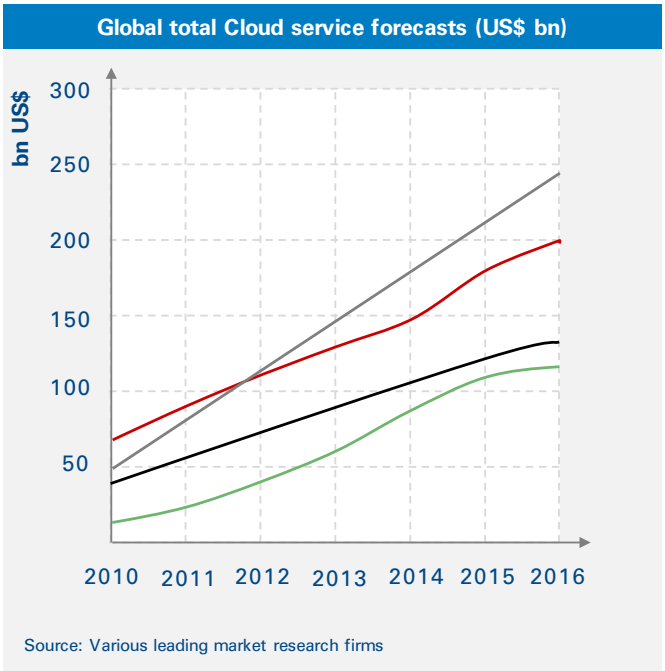
Introduction

Cloud services revenue is rather opaque, but estimated to be approximately US$75 billion in 2012 and is expected to continue at an impressive growth rate of approximately 30 percent CAGR (Figure 1). Cloud services offer a pay-as-you-use economic model, which is attractive in the current investment-shy economic reality. The maturation of the technology and the resolution of issues, such as security, all further support the notion of strong growth and a lasting positive trend. Arthur D. Little sees a logical and technical case for Cloud services to reach at least 10 to 15 percent of total classic ICT spending, which today is approximately US$3.6 trillion a year globally. This case is based on a combination of osmosis from own IT to a hybrid of own and Cloud IT, plus additional revenues from the new services made possible with the Cloud architecture, which should be the increasing focus of telecom operators.

Cloud blurs the boundaries between ICT players, making it easier to enter new parts of the value chain, replacing or shifting an increasing proportion of classic ICT, and represents a significant opportunity for telecom operators to apply their "as-a-service" competences in the automated provision of technology to mass markets and leverage their extensive customer relations in paid-for services. Cloud computing or rather Cloud services also represent an opportunity for telecom operators (Telcos) to significantly enhance, extend and diversify their portfolio beyond connectivity. It is also an opportunity (perhaps duty) to revitalize the connectivity business with its, at best, flat revenue prospects for the foreseeable future (Figure 2).

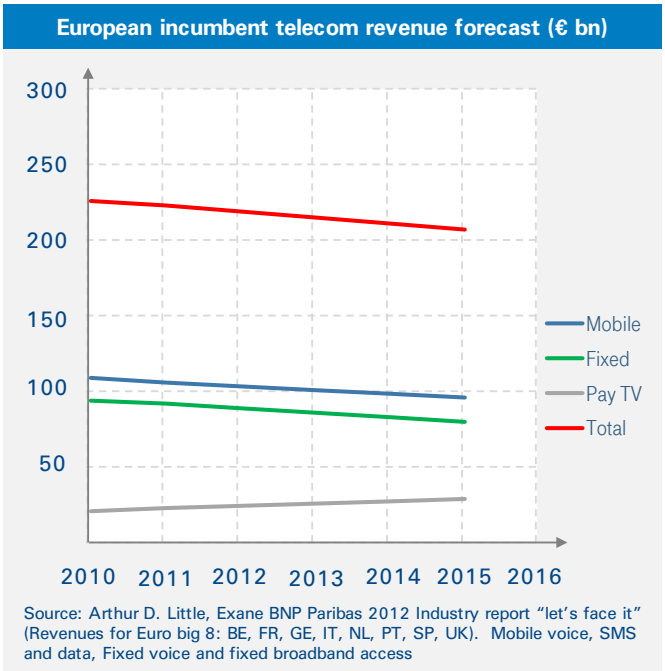
Telcos have the right "DNA" to be successful in the Cloud. However, Over-The-Top players (OTTs) currently dominate as they rapidly offer completely new services, often re-writing classic business models and disrupting established value chains. The Cloud is a busy place with many highly innovative and fast-moving providers unconstrained by expensive networks and geographically defined businesses.

Figure 1: Market forecasts from leading research firms



Source: Various leading market research firms

Figure 2: European incumbent TelCo revenue forecasts

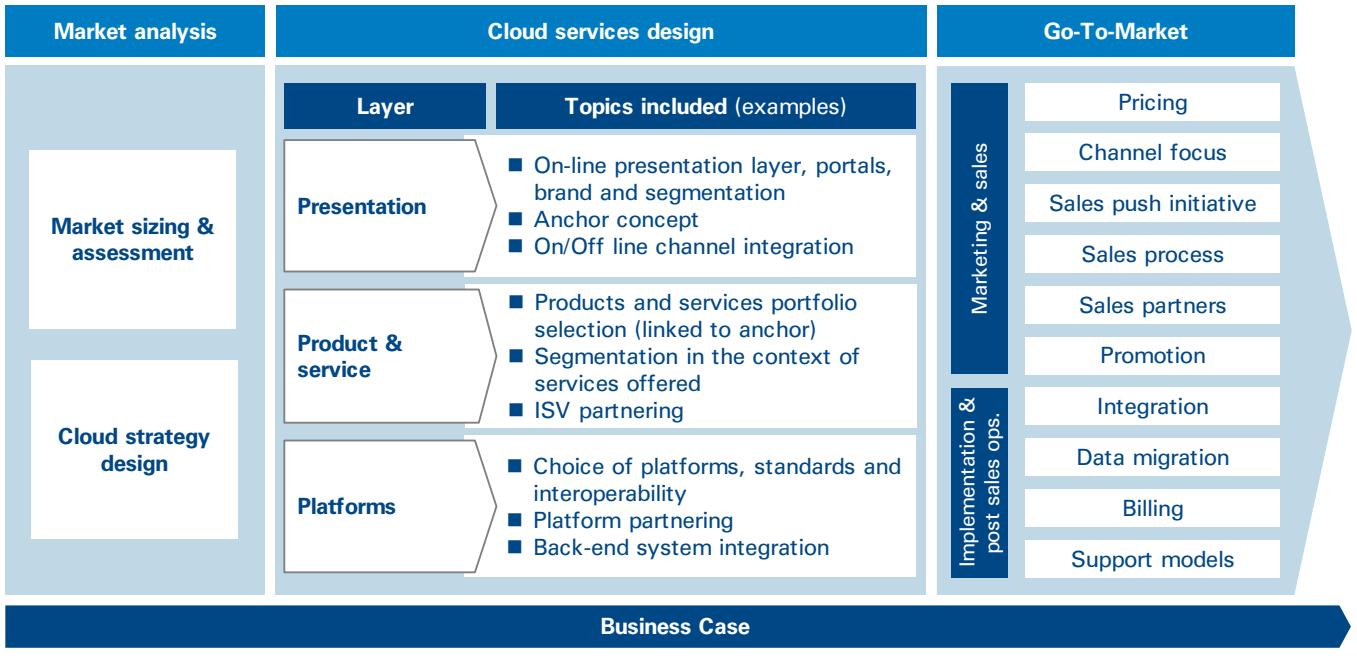


Source: Arthur D. Little, Exane BNP Paribas 2012 Industry report "let's face it" (Revenues for Euro big 8: BE, FR, GE, IT, NL, PT, SP, UK). Mobile voice, SMS and data, Fixed voice and fixed broadband access

Over the past two to three years, we have seen most major Telcos launch and/or acquire broad Cloud Service portfolios, such as Verizon's acquisition of Terremark, Centurylink's acquisition of Savvis, as well as the Telefonica, Orange and Deutsche Telekom launch of Cloud services targeting in particular the Small to Medium Enterprise (SME) segment. Nearly all major Telcos are now offering Cloud services, but many industry observers question how Telcos will gain and maintain advantageous Cloud value propositions relative to the mega OTTs? Or how (if at all) Telcos can leverage their core network assets for Cloud services? Behind closed doors, questions may be raised about the scale of Cloud revenues, the margins possible, sustainability and their significance in future Telco product and service portfolios.

Leveraging the "Technology-as-a-service" nature of Cloud services, Telcos can have a realistic chance of sustainable and significant positions in the Cloud value chain. To unravel the opportunities and resolve the challenges, Arthur D. Little has developed a straightforward Cloud services design model, which provides a structured approach to turn ambitions in the Clouds into solid business on the ground. The model covers the complete journey from strategic evaluation and positioning, to services design to the Go-To-Market model (Figure 3). We have applied this model in multiple assignments – rather in iterative than waterfall mode – to rapidly develop a complete Cloud services offering or assess the completeness of already launched offerings seeking more traction in the market. In this report, we make the case that Cloud services should be a top-level priority for Telcos, but note many current approaches fall short of what is needed to become significant and sustainable forces in the Cloud. We outline a number of key success factors to form a comprehensive framework for Telcos to move into and excel in Cloud services.

Figure 3: Cloud services design and Go-To-Market model



Telcos need to be in the Cloud – but where?

Cloud revenues are already significant and continue to rise faster than anything else on the Telco radar. A handful of global internet / OTT players dominate the market and the rest is divided among an endless long tail of small solution providers – all of them offering every perceivable function seemingly either cheaply or for free. Where can Telcos usefully participate and make business in the Cloud?

Assessing the strengths and weaknesses of the internet and OTT players gives an indication of where Telcos should focus. Geographically unconstrained internet players can offer their solutions via the internet to anyone and everyone, giving them both the economy of scale advantage and the highest attraction power for application developers to rapidly enrich their app or solution portfolios. In terms of weakness, internet players are not geared for, nor want to afford, the cost of anything local. It is easier for them to provide a micro-niche solution used / sold only five times globally than it is to deal with a high volume common problem locally. A second constraint they face is that in certain application areas and use cases, they have limited or reduced control of their end-to-end solution performance.

As a result, Telco Cloud strategies need to focus on the words "local" and "end-to-end solution performance". In addition, strategies need to draw from the changing landscape of devices, the shift from thick to thin client architectures, the increasingly flexible and mobile working behavior, the rising desire for device independent and seamless access to media, shared content and a massive increase in applications that people (and machines) choose to use. The example of CloudOn with its content and apps in the Cloud incorporates many of these trends.

This rich and increasingly complex digital environment does not lend itself to domination or ownership by Telcos, but rather to being the enabler of simplicity, seamlessness and enhanced (application) function and performance. Indeed, as Telcos continue to invest in each successive network technology (LTE and fiber currently) with challenging prospects of monetizing the technical advances, more time, money and effort needs to be invested in providing or enabling superior function and performance of what people do on and with the networks.

Cloud services from Telcos provide a key opportunity to move up the value chain from the inevitable utility business of networks and connectivity. Telcos will eventually have to decide between this utility business model or an innovative services model. Cloud, which is the useful integration of computing with networking, is the most viable and fastest growing opportunity.

Telco Cloud strategies thus need to build upon aspects of Cloud that usefully differentiate themselves from the global internet players, that focus on the value of integrating networks with computing, exploit the end-to-end solution performance possible with such integration and exploit local (national) assets. These strategic themes point to a number of levers for Telco success in the Cloud:

1. Bring Telco services and Cloud together online and gathered around functional anchors for Cloud services
2. Develop or acquire functional content to deliver more valuable products and services from Telcos such as:
   - Solutions requiring or thriving on real time, low latency and ultra-thin client architectures
   - Seamless multi-media collaboration and device agnostic mobility
3. Make the network count from basic bundling to technical enhancement via:
   - Application functional enhancement by network enabled contextual awareness
   - Controlled / ensured app performance with integrated network control
4. Exploit local assets with smart Go-To-Market models and online automation

Lever #1: Move Telco services online around a strong anchor

Many industries, such as retail, banking, travel and airlines, have found very practical ways to use the internet to improve the services they offer. For example, the airline industry offers online check-in and sends a boarding pass to a mobile phone, all made easier with a stored profile associated with their frequent flyer schemes. Their off-line product, air travel, is enhanced with a smart online presentation connected to their Cloud-based and other services. This improves the customer experience in the form of faster check-in, and enables the airline to improve operations in the form of streamlined physical facilities at hundreds of airports.

By comparison, Telco's product offerings are still largely controlled by the Telcos on behalf of their customers, despite being more obvious candidates for online management and configuration, at a great cost to the Telcos and also increasingly to the frustration of customers who want to manage and personalize their services. Cloud services make configuring a virtual private data center as easy as it is to download and configure an application on a mobile phone, but basic telecom services remain largely beyond user control.

The airline example also gives another clue to what is missing – an Anchor – something functionally useful to the customer, which regularly draws them to a "place" and preferably is offered for free. An anchor forms the perfect place to offer, sell and run Cloud services, and to link or up-sell to other established or new product and services. The best examples of anchors include e-mail products, Unified Communications, Collaboration and Cloud storage, many of which have already been dominated by OTTs and global non-Telco ICT players (Figure 4). However, Telcos need to develop their anchor(s) as their current core products are no less respectable candidates for Cloud as air-travel, shopping or bank accounts.

Figure 4: Presentation layers with anchors vs. classic web shops

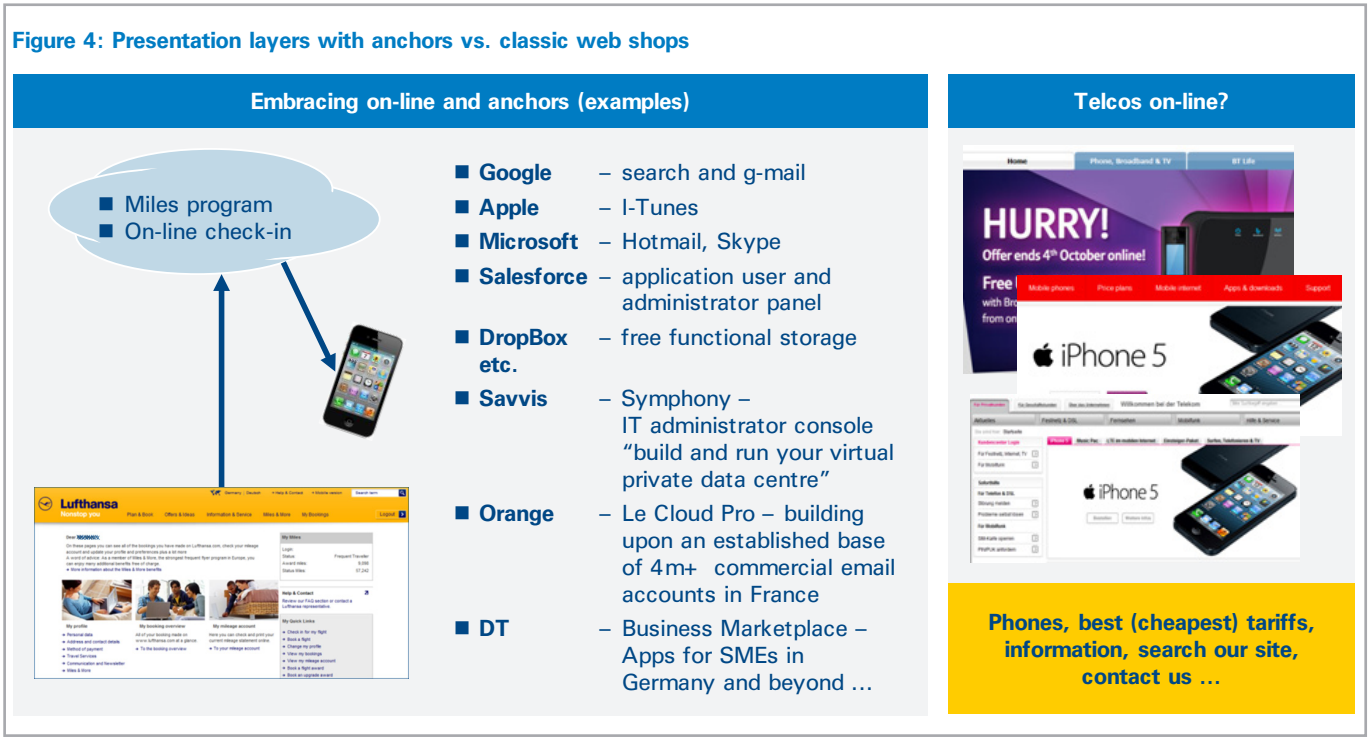


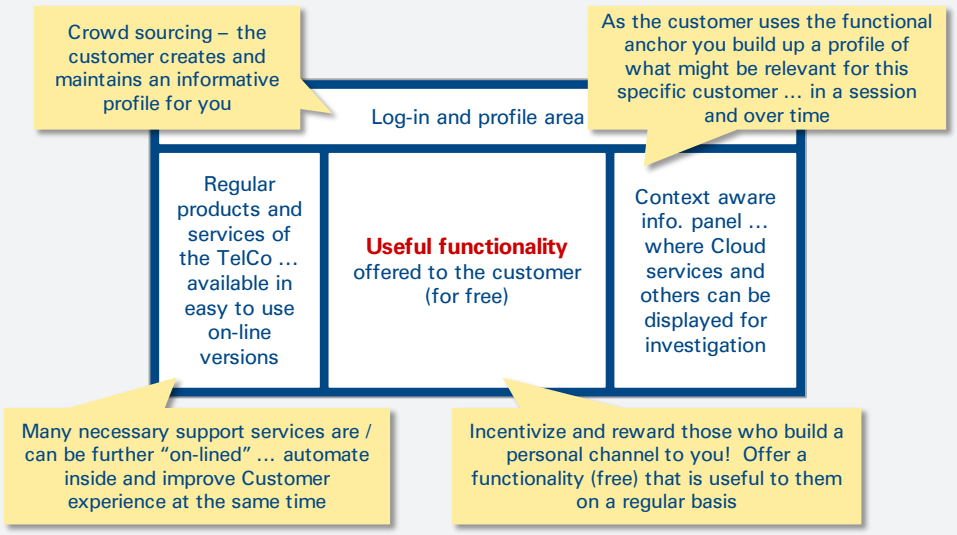
Figure 5: Anchor concept and basics

Anchor definition

- A place customers **willingly and regularly come to** … and where Cloud services offer a natural fit / advantage
- Often a "for-free" function (e.g. DropBox, Linked-in etc.)
- A "paid for" for business oriented anchor
- A log-in and profile is key … incentivize a one-to-one channel built by your customers

Source: Arthur D. Little

Anchor basics



The choice of anchor will vary across segments from private to small business, to larger businesses and enterprises. Important features of anchors are a login, a profile and a level of personalization offered to the customer. Successful anchors result in a highly personalized channel being established and maintained between the service provider and each customer – and built by the customer. The basics of the Anchor are illustrated in Figure 5.

Telcos need to create their anchor as a launch point for Cloud services, and relying on a web page within their corporate site is not enough. A functional online feature with a user name, login and profile is required. The choice of anchor will influence how an array of Cloud services can be most usefully offered and how best to present them in terms of branding and bundling. Other important considerations are the level of self-service or customization that can be done and what additional, perhaps off-line, activities need to be built up to support the complete purchase cycle.

Lever #2: Develop or acquire content for sustainable positions in the value chain

When selecting or designing a Cloud product and services portfolio, Telcos need to decide whether to acquire or develop their own content. One option is for the Telco to merely resell well-known applications, which can usually be purchased from a software or Cloud service provider directly, with thin margins. Otherwise, the Telco can invest into niche applications perhaps with app-to-app integration where margins are healthier, but sales volumes are smaller in the long tail of, especially SME, customer requirements (Figure 6).

Telcos mostly start by assembling a range of "me too" ubiquitous apps and infrastructure-related services, such as office apps, storage, unified communication solutions, etc. These services are usually coupled with back-end integration to billing systems for convenient "add to bill", and presented on an app web shop. To speed time to market many wholesale Cloud platform providers exist that can aggregate many apps and offer them in white label fashion to the Telco and importantly allow (force) the Telco to focus on leveraging their valuable customer relationships and develop their IT sales and provision channels.

This solution forms a reasonable one-stop shop and is a good starting point, but hardly astonishes potential customers or investors. The fundamental value and opportunity Telcos need to monetize is their strong customer relationships in paid services, trusted local (national) facilities, such as data centers, and their ability to provide a face to an otherwise faceless and remote trust to the Cloud. This is especially important for the SME segment, which sits between private consumer acceptance of global OTT Cloud and large enterprises familiar with multi-national computing. Successfully exploiting this local capability, extensive contractual relationships and national customer care / support is sufficient to hold a viable position in the resell of third party capabilities / apps. It is also an opportunity for the Telcos to facilitate an ecosystem in the sale and support of services, especially to the SMEs with their variety of needs and often very local IT support arrangements. If Telcos offer functionally rich Cloud platforms that enable these local IT providers to scale their businesses, then they too will become willing participants in the Cloud ecosystem with Telcos, not against them. The value chain upon which this proposition rests is shown in Figure 7 overleaf.

Figure 6: Application dilemma

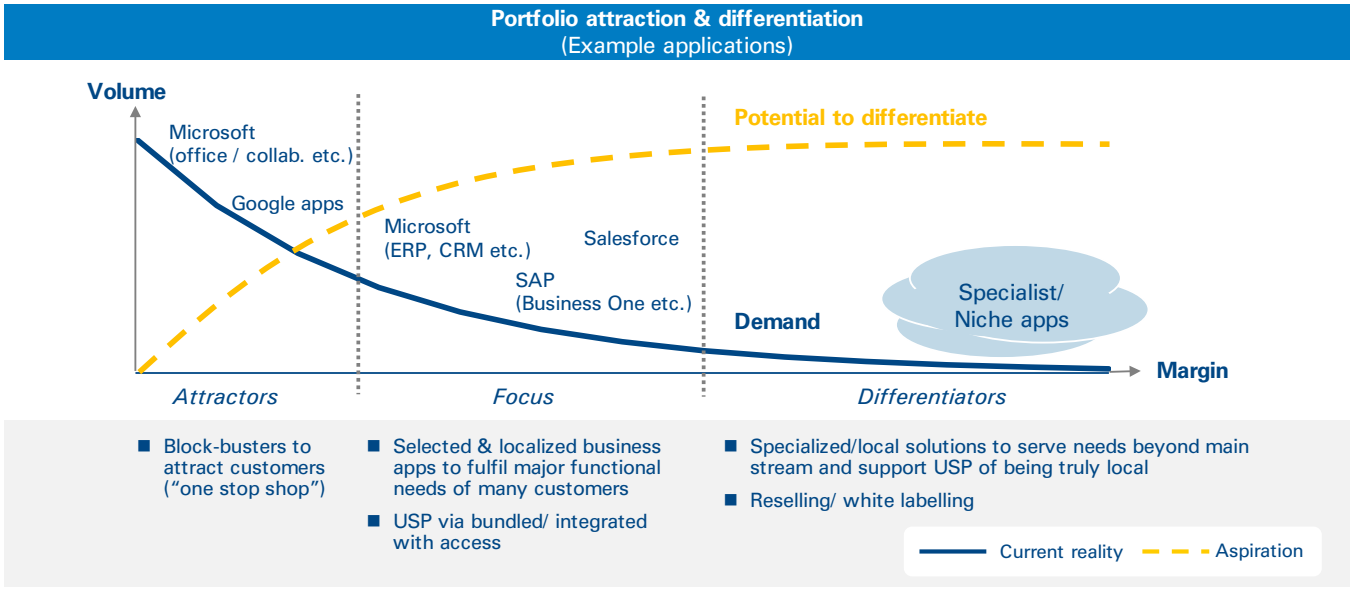
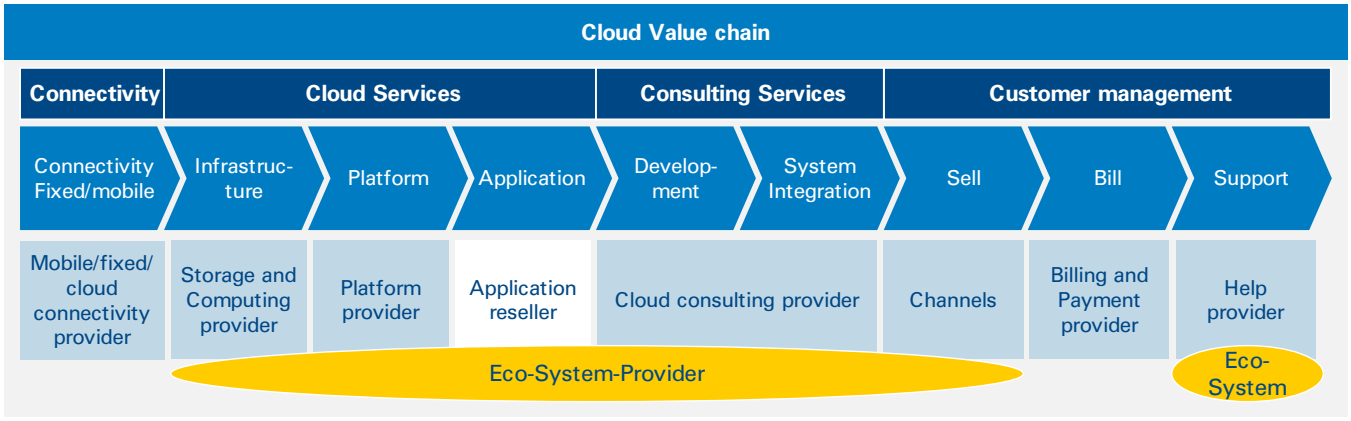


Figure 7: Cloud value chain, TelCo positions and eco-system opportunities



At a national level, however, there will be more than one Cloud service provider that can claim these capabilities, and the application developers will naturally want to sell their offerings to the widest market possible. Cloud service margins will remain thin relative to current core Telco connectivity services. Telcos that want higher margins need to be able to better understand and meet customer needs. Those seeking higher margins have to offer more and better solutions to end customers, either through smart integration of third party apps and services into their network capabilities or through acquisition of specific functionality.

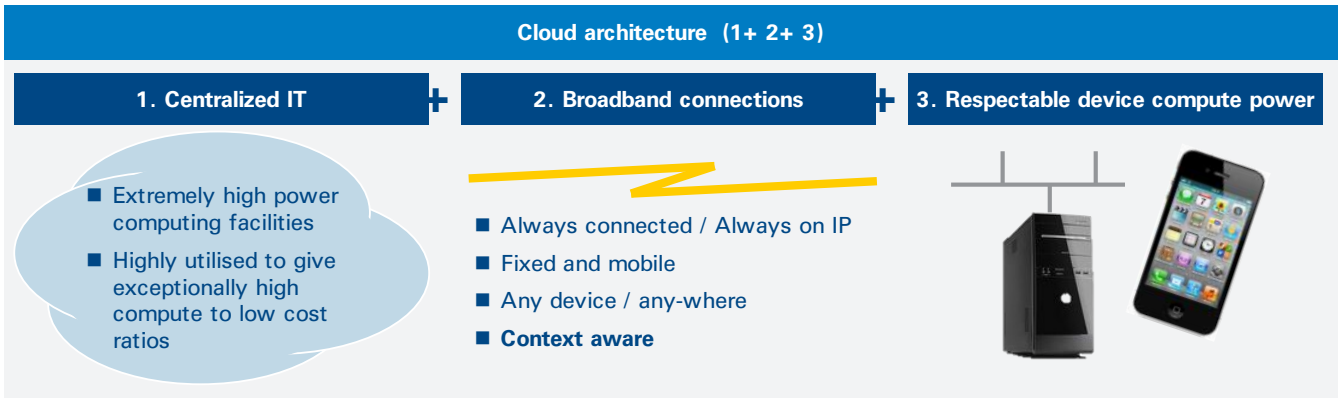
Telcos could reconsider their involvement in device design. Home and office devices increasingly carry embedded web servers (EWS), such as Network Added Storage (NAS), Printers, etc. Configured by Telcos in partnership with these device manufacturers, these devices and their EWS form an ideal platform to create solutions in our increasingly digital lives at home and at work. In this way, Telco Cloud services can seamlessly extend own premise IT solutions into Cloud services, complementing, enhancing and extending the end-customer's own IT function and performance. Be it in the home, SoHo or SME segments, the EWS can be a useful Trojan horse that, if smartly developed, would become welcomed by customers (rather than held in suspicion) because of the ease in which they create and manage solutions for individual needs. Indeed the sustainable value position for Telcos may be becoming the supplier of easy to use, yet sophisticated ICT solutions and digital services generally.

Even Telcos following an acquisition strategy, buying their way into Cloud service volume and higher margins, need to find ways to usefully combine the acquired capabilities with their established core assets to solve more end-user use cases. After all, shareholders can buy directly into Cloud growth stories and customers can already buy those stand-alone Cloud services without the Telco owning them. Telco M&A departments might usefully search in areas such as real-time voice and video analytics and low latency applications. There are a vast number of young start-ups in these areas and their Intellectual Capital could be smartly integrated in Telco Cloud back-ends and network assets to exploit the rising sophistication of sensors and interfaces on (especially mobile) devices, resulting in enrichment of the app function run in the Cloud and the results consumed at the device.

The Telco differentiator from OTT / non-network Cloud service providers will come from convincing bundling and functional combination of their networks and the Telcos' Cloud offerings. In its simplest form, this is price and bill bundling, but for sustainable differentiation this needs to extend into functional and performance enrichment of the applications themselves with network capabilities and network information.

Lever #3: Make the network count

Figure 8: The Cloud services architecture



The Cloud services architecture consists of super-compute power and efficiency in the core, fast and low latency IP access and respectable compute power at the terminal device (Figure 8).

Leaders in the Cloud thus far have been successful with combinations of core and device, such as Salesforce, with their well-chosen focus on CRM as SaaS run in the core, or Apple with their famous Core plus device architecture. These OTT successes have left the connection as a mere bit-pipe. It remains to be proven if Telcos can effectively differentiate their Cloud services with their networks. While bit-pipes are essential and a key enabler to wide adoption of Cloud services via high availability, high speed and low latency connections, Telcos have so far struggled to capture value from what goes over their wires or radio waves. How can the Telcos monetize their all-essential connection?

Telcos can and need to create functional enhancement of apps. The key here lies in "context aware networks" where the information the Telcos have, such as customer location, usage, device type and situation, can be used to enhance the application function. Surveys of top benefits from Cloud applications (Figure 9) indicate that Telcos should focus on the most attractive opportunities, such as businesses seeking multi-site and mobile workforce enablement, ultra seamless collaboration and simplified access to applications and data from multiple devices.

With Context aware networks capable of enhancing application function, the Telcos need to work with Independent Software Vendors (ISVs) to create those applications that feed off and gain functional and performance enhancement from network context information. With all three components of the Cloud services architecture working in integrated fashion, there are vast opportunities to create smart and valued solutions for everyday life and work.

As an example, there are already many OTT companies offering real-time voice recognition and translation, enabling multi-lingual conference calls. Telcos have long offered the ability to call someone, anywhere. The technology is here now to extend this to anyone, anywhere, in any language (perhaps the first functional upgrade in the telephone service since its conception in 1876!). In a Cloud architecture, such a service could be better offered as an integral part of the Telco infrastructure with their global connectivity and billing interoperability than by OTTs, which do not have such infrastructure nor so convenient per call billing and have less control of network quality and performance parameters vital to make these services work really well.

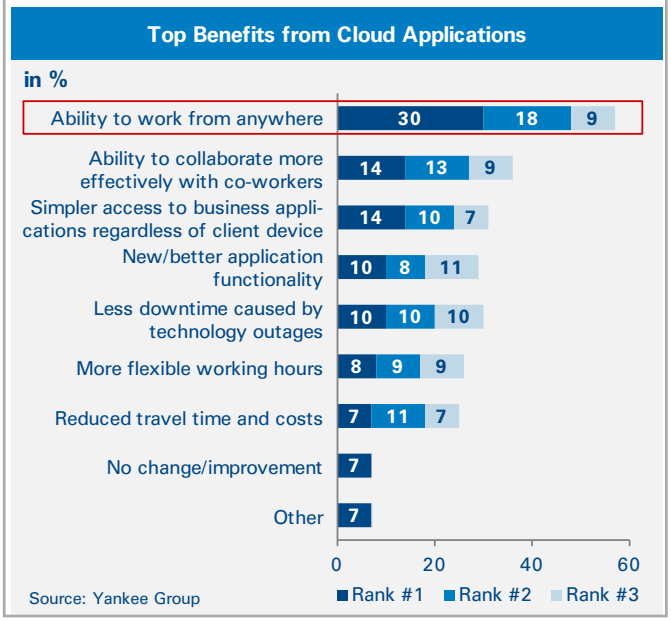
Telcos have always obediently invested enormous sums in each successive network technology, but the return on investment of each generation of technology decreases due to the declining value of connectivity. As Telcos continue to invest in LTE and fiber there is an increasing need and responsibility to develop

value from what goes over these faster networks. As the strategic differentiation between networks reduces, the need to differentiate service and network control rises. The network enabler layer becomes increasingly valuable to Telcos.

Quality-Of-Service, which differentiates best endeavor from graded service levels between Cloud apps and devices, should be high on the list. There is an increasing need to offer service levels for real-time sensitive applications, which rightfully should pay for privileged treatment. Take the simple example of Skype or FaceTime, currently hoping for sufficient resources for good customer experience while 60 percent of the local access network resources are being consumed by volume intensive, but delay insensitive, free video downloads.

The enabling layer will over time provide a library of network APIs, which may be either monetized directly to 3rd parties or indirectly through the enhanced function of Cloud services provided by the Telco. At both the service component and network resource control layers, the focus should be on open standards. Deutsche Telekom's decision to opt for Openstack for its Business Marketplace was the right direction, and more recently Openstack got a further endorsement from Redhat in their decision to adopt the standard in their family of Open source services. Even though such open standards are still emerging, they head towards greater inter-operability and transportability – key drivers for Cloud adoption as nearly all users of Cloud services will do so in a hybrid combination of own IT and multi-supplier Cloud services. Opportunities abound for Telco equipment vendors to work with Telcos to achieve functionally rich and inter-operable enabling layers in an affordable way, as NGNs are progressively rolled-out.

Figure 9: Top benefits from Cloud applications



Lever #4: Develop a local presence, sold and managed online

Compared to the single-step sales process associated with most Telco connectivity products, IT solutions classically require a multi-step, consultative sales process. While this can be tolerated for high-value bespoke ICT solutions to enterprise customers, the smaller unit value of Cloud services to higher volume segments cannot afford elaborate off-line tailoring. In the case of Cloud services, which are well-suited to the full spectrum of segments, decisions have to be made concerning what can be done online, what has to be offline and how best to support (automate) as much of the offline process as possible. The basic dividing point is the formality in which IT (and Cloud) services are acquired. Figure 10 shows this formality "gear change" in the context of the presentation, services and platform layers.

When designing Cloud services, it should be a mandatory design rule that the complete experience for end-customers and the service provider is an easy to use and automated process from 'offer' to 'provision' to 'run' the service. This design rule has to be taken into account while designing each layer, from presentation to the functional content of the products, to requirements of platforms. The better the product is designed, the easier the Go-To-Market (GTM) model will be.

For the highest volume Private segment, OTT players have defined online marketing and sales. At the other end of the segmentation scale, Telcos and System Integrators are well versed on consultative sales processes to the enterprise segment. In the middle, however, lies the attractive SME segment, which spans high volume attributes of consumer with complex requirements of enterprises, making the GTM design for Cloud to SMEs a key to margins.

An extensive framework for Cloud Go-To-Market (GTM) design is shown in Figure 11 overleaf. This covers segmentation, portfolio design through to design of the channels that take the Cloud services to market. There is a wide-range of options, and decisions have to be consistently taken to reduce complexity in the GTM process that would otherwise steal profitability.

Figure 10: Formality of ICT acquisition in context to the three layers

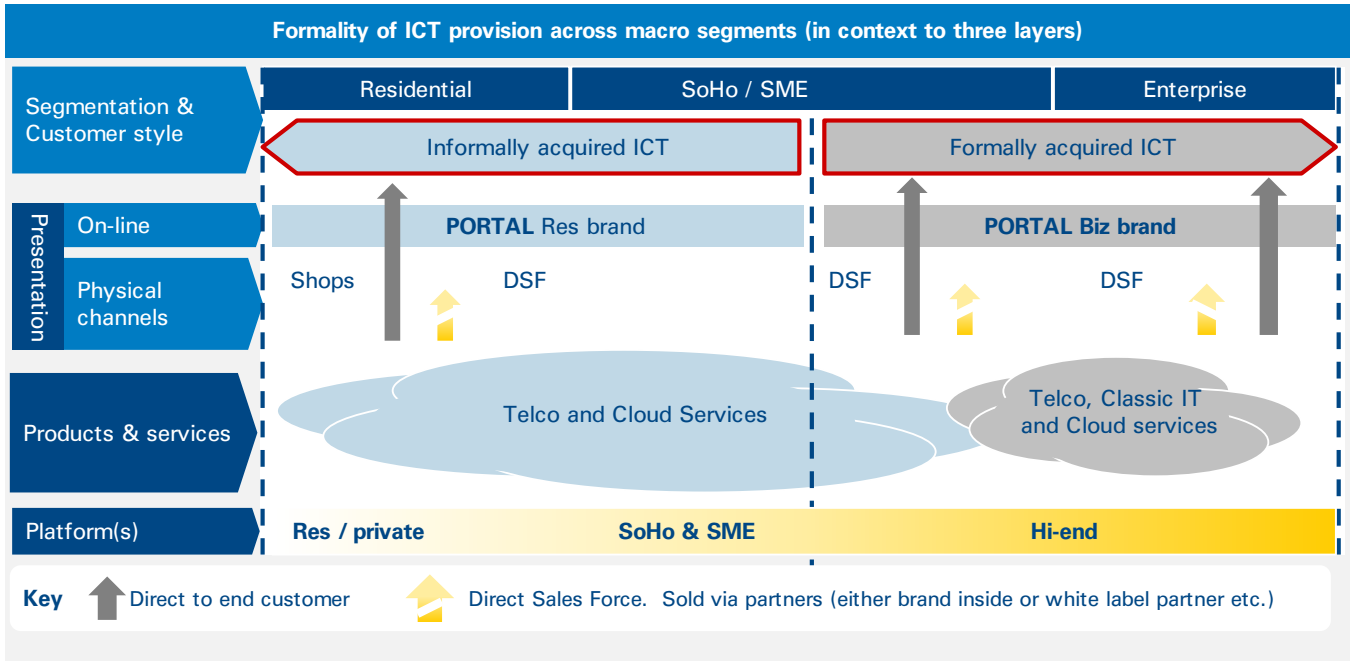


Figure 11: An end-to-end Go-To-Market model and indicative option space

GTM layer		Indication of the "Option Space"			
Segmentation	Target group	Private / residential	SoHo	SME	Enterprise
		Industry segments	Company size segments	Events	Business characteristics
	Focus realiz.	Focused products		Focused channels	
	Needs addre.	Needs /use cases	Connected sites	Customer contact	Connected value chain
		Mobile workers	High security	Lean structure	1 stop shop
	Brand	Own	White Label	Co-branded	Reselling
Products	Products	SaaS	PaaS	IaaS	BPaaS
	Scope (ISVs)	Own		Third party	
	Bundle	Basic services	Personal applications	Horizontal applications	Vertical applications
	Customization	Standard products	Configuration	Customization	
	Provisioning	Product launch	Billing	Provisioning	Service management
Sales channels	Sales push init.	Generate new leads	Improve lead conversion	Upsell customers	Cross sell customer
		Retain customers			
	Channel focus	DSF	HW vendor	SI	Software vendor
		Telco dealers	Online sales		
	Sales process	Multi-phased sales	Single-phased sales	Simplistic partner mgmt	Partner mgmt program
		Partner sales			
	Partner selection	Service quality	Business stability	Reputation	Market reach
		Willingness	Target segment	Product range	

Source Arthur D. Little

Using this framework, Arthur D. Little has surveyed a global sample of Telcos active in Cloud services and identified key success factors, and mapped out typical or common issues.

Common issues show that classic Telco segmentation is too blunt for effective Cloud segmentation, especially in the SME segment, where so many Telcos place their current focus. On-line presentation and self-management capabilities are way behind OTT consumer oriented offers. Product and service portfolios are largely undifferentiated, the products are or appear more complex and/or more expensive than OTT equivalents, and so far they do not exploit core Telco network assets to offer something to offset the seemingly higher complexity or cost. Channels are offline, consultative in nature and bleed too much margin.

Conversely, key success factors have been identified and many leading Telcos in the Cloud are actively developing their GTM approaches – some through their acquisitions and others through more organic strategies. A brief summary of winning factors is shown in Figure 12 overleaf.

Current online Cloud portals are generally inadequate for business segments and, as a consequence, direct sales with classical IT consultative processes are deployed, which is too expensive. By contrast, OTTs have proven the online model works for simple Cloud products and they have already achieved high volume membership and (gradually) sales as well. As previously discussed, creating a strong anchor is key to building successful online channels. Within the global survey of leading Telcos in Cloud, there is a consensus that as much of the offer to run process needs to be done online, that products need to be simplified and, for the more sophisticated business solutions, online mechanisms can support (make efficient) the remaining essential offline activities. Finally, specially trained telesales teams can complement and steer expensive direct sales force activities to significantly lower the cost-per-sale statistic.

Figure 12: Headline key success factors in Go To Market models

GTM layer	Key success factors
Segmentation	■ Sophisticated (highly granular) needs based / use-case segmentation ■ Vertical industry focus used to define both specific needs as well as broad horizontal needs ■ Use of different segmentation methods when designing each layer of the GTM model (e.g. when designing products and when designing channels)
Products and services portfolio	■ Use case and solutions mentality used in designing / selecting applications, cloud functions or services ■ Design for on-line suitability across the entire purchase and operate life-cycle (ease of sale & ease of use) ■ Focus on standard products with few well selected self configuration options to avoid complexity of unconstrained customisation ■ Build upon open standards based platforms and an isolation layer to often complex / legacy Telco back-end systems
Channels	■ Design for an all on-line approach and use the on-line capabilities as the basis for off-line / Direct Sales Force processes leading to better cross channel integration (on-line, call centre, shops and own and partner channels) ■ Build new channels for new sales as well as up-selling of existing services in existing channels ■ Be prompt in building / up-grading a partners program and have a solid perspective of Telco part in the value chain when defining associated revenue shares and sales incentives schemes

Source: Arthur D. Little global survey of Go-To-Market models of leading TelCos in Cloud services

Conclusion

Cloud services already represent a significant market that is growing quickly. A gap exists between global internet giants and a long tail of small providers where local (national) customer requirements are not served. This is a key space that Telcos are well positioned to fill. Considering the near- and mid-term outlook for Telcos, especially in Europe, making a success in the Cloud should be a Telco priority.

Current Telco Cloud strategies, while defendable starting points, are generally insufficient to create sufficiently attractive, large enough or fast enough traction. Acquisition strategies appear more convincing than just organic development. Telco strategies should also focus less on new cheaper ways to get classic IT and focus more on new solutions and further functional and performance enablement of a vast and growing volume of sophisticated ICT, created by ecosystems beyond Telco control. Telco core assets and strengths lie in their networks, but these alone are not destined to maintain the industry in the fashion it once enjoyed. Combining Cloud computing and networks, and making the networks count, is the path for Telcos to be a significant force in the Cloud and more importantly to return to growth. Many successes will be characterized by enablement, ecosystem forming, open standards, interoperability and partnerships.

Telcos are behind in exploiting the internet they enable and need to significantly improve online presentation to enable customer control, configuration and building of their own solutions. Strong anchors need to be developed that exploit and connect with Telco core assets – their networks. This implies better (simpler) product design and offering modular functionality that enables customers and, in the case of SMEs, their local IT partners to build their solutions from Telco-provided components.

While some advocate deeper vertical segmentation, there are others who question the practicality or profitability of Telcos serving a high volume of niche solutions. Telco strengths – their DNA – lie in high-volume generic solutions and componentization of capabilities is probably a better way to serve niches. Individualization of solutions needs to exploit online enabled crowd techniques using the Telco provided service components and enablers.

Telco focus on the SME segment is logical and wise, but current GTM approaches are not scalable or sufficiently agile to compete with the OTTs and their online consumer-oriented methods. Such methods need to be appropriately grafted and applied in the business segments to support and enhance efficient execution of being the local Cloud provider. Further, Telcos should not dismiss the mass market, consumer and household segments, as lost to the OTTs. The world and everyone in it is becoming more IT savvy and more IT consuming. Telcos should apply their mass production of technology credentials in these segments too.

If this is done then Telcos can enjoy a significant and sustainable position in the Cloud. While Telcos are unlikely to monopolize the Cloud, gaining a sustainable position as the last mile, final integrator and enhancer of most if not all locally consumed digital services will be a new basis for growth in the telecoms industry. Those that master it will have the choice to be a viable network operator AND a higher growth and dynamic services business. Those that fail or choose not to move to the Cloud will have no choice but to make business in an increasingly commoditized and undifferentiated connectivity business.

Acronyms

BPaaS	Business Process as a Service
CAGR	Compound Annual Growth Rate
CRM	Customer Relationship Management
DSF	Direct Sales Force
ERP	Enterprise Resource Planning (software)
EWS	Embedded Web Server
GTM	Go-to-Market
HW	Hardware
IaaS	Infrastructure as a Service
ICT	Information and Communications Technology
IP	Internet Protocol
ISV	Independent Software Vendors
LTE	Long Term Evolution
M&A	Mergers and Acquisitions
NAS	Network Added Storage
OTT	Over The Top players
PaaS	Platform as a Service
SaaS	Software as a Service
SI	System Integration
SoHo	Small Office/Home Office
SME	Small and Medium Enterprises
USP	Unique Sales Proposition

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