WHITEPAPER

# Cloud Services in the Telecommunications Market

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## Remaining profitable in the new world of global competition

Across the globe, mobile network operators are experiencing an overall erosion of profit margins. In several cases operators such as Orange and Vodafone, compete through strategic differentiation and invest in new services to attract and retain new customers. This investment has a negative impact on profits. In other cases, operators compete with a cost-leadership strategy to capture market share and retain cost-focused customers. This inevitably results in competitive price wars bringing pressure to overall revenue.

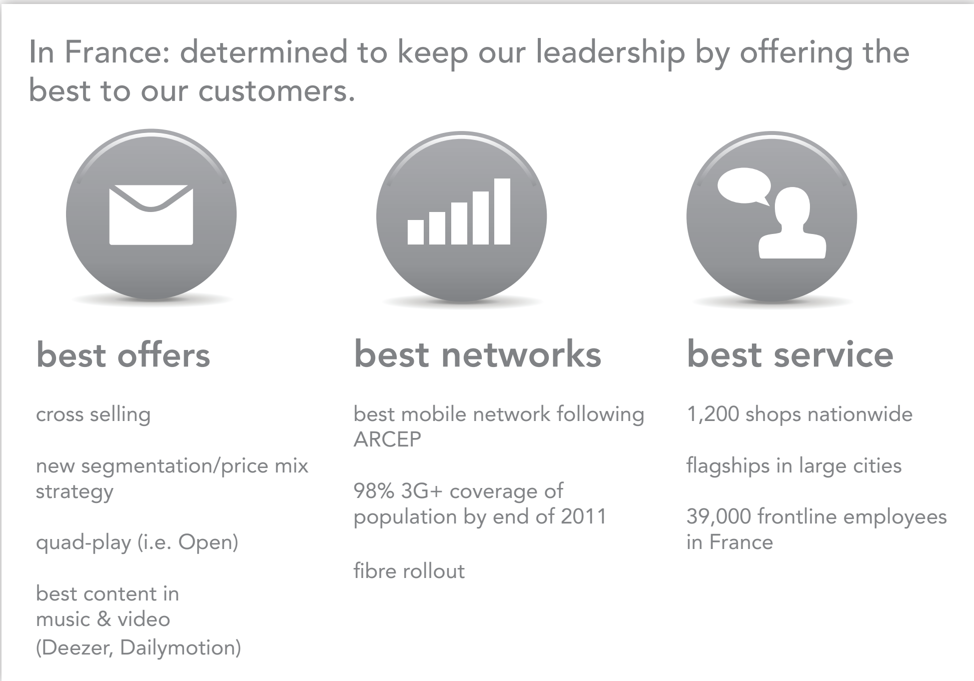


Figure 1 - Source: Orange Group investor day, May 31 2011, Paris

To add to the complexity of the mobile network operators' business, the very nature of their relationships with consumers has undergone a dramatic change. At one time, the operator was able to claim a de-facto ownership of the customer with strict controls on pricing and services offered. But today, the Telco market is increasingly dictated by consumers' adoption of new technologies and over the top services that are readily available. The combination of these changing behaviours and increased competition has sent operators looking for ways to attract and retain new customers while maintaining sustainable profit margins.

AcisionCloud
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As Vodafone Group states in their Financial Report for the year ending on 31 March 2011: *"As part of our strategy we will continue to offer new services to our existing customers and seek to increase non-voice service revenue as a percentage of total service revenue. However, we may not be able to introduce these new services commercially or may experience significant delays due to problems such as the availability of new mobile devices, higher than anticipated prices of new devices or availability of new content services. In addition, even if these services are introduced in accordance with expected time schedules, there is no assurance that revenue from such services will increase ARPU or maintain profit margins."*

The development of Cloud based services is a business innovation with the potential to remove or alleviate the operator's pain points. Cloud-based offers are normally characterised as standardised capabilities delivered as-a-service via Internet technologies in a self-service mode with a pay-per-use business model. The capabilities may be distinct services, entire software packages or infrastructure capacity. For the mobile network operator, an area of particular interest is to consume value added services using the so-called cloud as the delivery model.

The utilisation of Cloud-based offerings provides the operator with a number of significant benefits. The typical cloud based service offer ties service utilisation with service costs. This converts operational expenditures into an elastic expense that accurately tracks utilisation and resulting revenues thereby offering a predictable margin of profit. And because Cloud Services are independent of the operator's network, up to 80% of the hidden product lifecycle costs such as monitoring, support, upgrades and maintenance are completely eliminated.

## Growth challenges – The mobile industry has the largest potential of all

Throughout the history of mobile communications, mobile network operators have successfully addressed a number of game changing developments in terms of technology used and changing subscriber behaviours. For example, the sending of simple text-based messages from one phone to the other has grown into being one of the industry's primary revenue drivers. At the end of 2010, there were at least an estimated 5 Billion mobile phones in the world and more than 6 Trillion text messages were sent between them (Source: International Telecommunication Union October 2010).

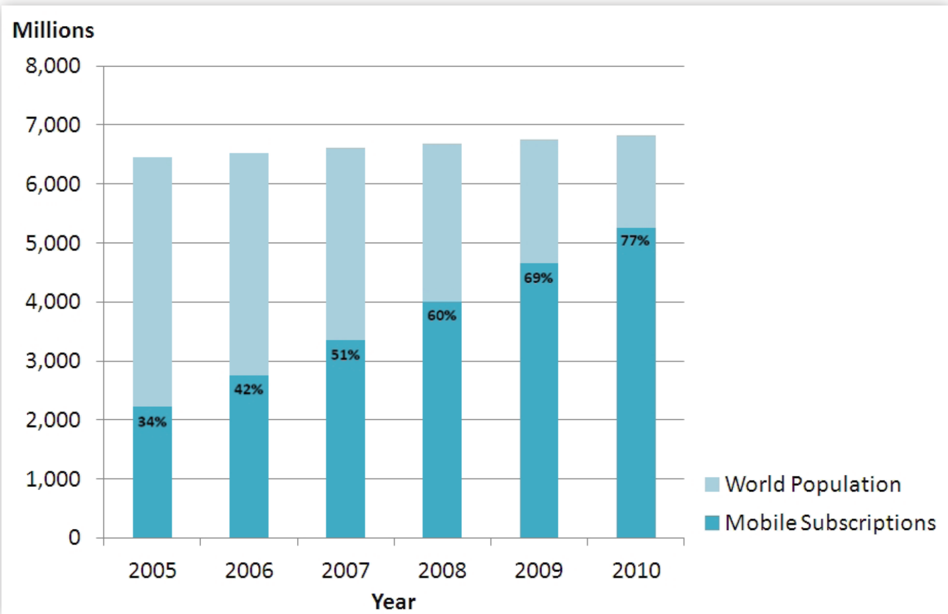


Figure 2 - World populations and connections

With the advent of increasingly powerful smartphones and the introduction of affordable mobile Internet access for these very same phones, a new opportunity has arisen for others to enter the market. Now parties other than the operators can provide services directly to the consumer via their over-the-top offerings.

The increasing sophistication of the mobile consumer has caused operators to become far more aggressive in their search for market differentiation. Heated competitive battles have developed on prices, devices and services. Competing with device differentiation is a rare opportunity with the latest being AT&T's deal with the Apple iPhone. This came at a high cost though with a tremendous investment required from the operator and compounded with the standard business risk. Competing on price differentiation is often successful in the short term but drives down margins and influences consumers into becoming increasingly price sensitive rather than being value conscious. Competing on service innovation is the Holy Grail for operators although the return on investment is difficult to ascertain for new services or services with an as-of-yet limited proof of success. Moreover they require a high level of organisational activity before hitting the market.

## Advantages of delivery from the Cloud – Let the innovation work for the operator instead of against

The delivery model via the Cloud brings a number of important advantages that nullify or greatly reduce the impact of issues plaguing the introduction of new services in the Telecommunications market. The key aspects of a Cloud-based offering of any kind are:

- **Elastic capacity**
- **Self-service**
- **Pay-as-you-go**
- **Multi-tenant**
- **Virtualised**

These factors contribute to a delivery model which shows scalability, reliability and operational ease. All of which are crucial when talking about a Telco-grade service. Add to the factors above, revised business models address return-on-investment challenges. Taken together, elastic capacity and pay-as-you-go means a minimisation of capital investment to bring a new service to life plus a cost base which will be in step with revenues. This protects the margins and assures that newly launched services are financially successful.

The era of launching individual blockbuster revenue generating services such as voice calling or text messaging has been replaced with an era where consumers demand service personalisation. The telecommunications consumer now wants services that can be tailored to their lifestyle. For the mobile network operator, there are many services out here that that address this consumer need, but the majority of those services will never reach a mass-market saturation point. However, taken together the aggregate revenue adds significant volume to top-line growth. The difficulty for the operator is managing the impact of launching multiple niche services on company profitability.

When a new service is introduced to the market, it goes through several phases of adoption. Technological enablement is one of the first steps, but the quality of service promotion and user experience combined with appropriate pricing determines a very large extent of the subsequent and ultimate level of service adoption.

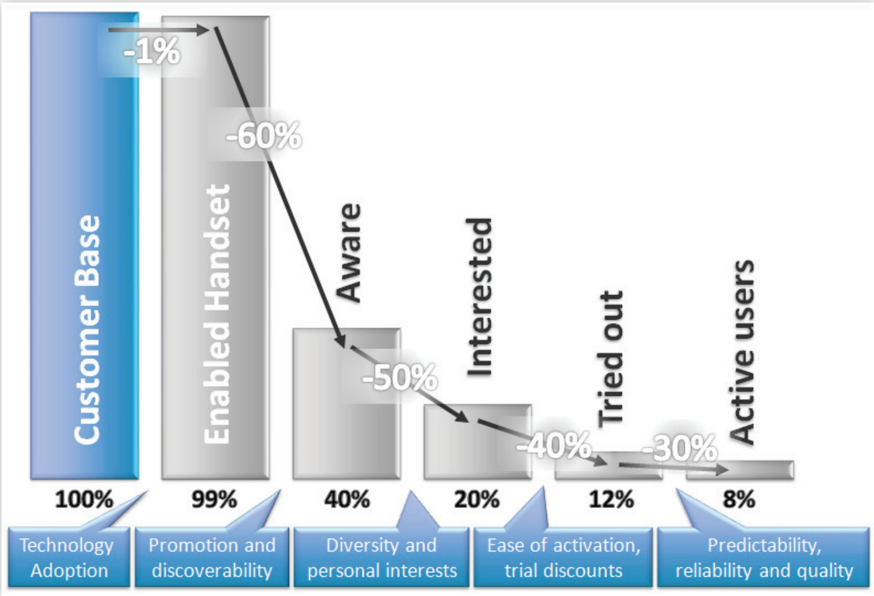


Figure 3 - New service adoption funnel

Services with large-volumes and known adoption curves are good candidates for capital investments, as Acision's business in messaging platforms can attest to. These core systems support the heart of the operator's revenue generating services. Over the years, the functionality of these services has been extended with new offerings such as message personalisation that provide significant niche value. Acision has combined the functional value of these extensions with our proven market experience and a commercial vehicle via the Cloud for a compellingly profitable service offering.

## Telco specific implementations – Making the right choices for success

The cloud services delivery model provides the operator with the opportunity to completely change their traditional service offer behaviours. Whereas before it may have taken years to progress from initial business case to service launch, now the operator can access a new service and launch as quickly as it takes to create marketing materials. Combine this service flexibility with business flexibility such as revenue share arrangements, or charging per transaction or per subscriber and it is easy to see that the cloud services deliver model can radically change how an operator provide  services to the market.

However, operators must exercise a bit of caution in selecting a cloud based Value Added Services supplier. What may look appealing on paper may not always translate into the ability to deliver the real potential of Cloud-based services. Suppliers must not only have an intimate knowledge of the telecommunications industry but also a deep understanding of how mobile services function in the real world when successfully adopted by large numbers of consumers. The Telecommunications industry has specific requirements and technical specifications for architectural design, scalability, reliability and security that are different than other industries. Plus each mobile network, geographic region and specific technology have intricacies with particular protocols and interactions that are vital to assure that everything functions together. Also, regulatory requirements for legal interception and retention of data are wide spread and varied. This rich body knowledge is not easily gained while maintaining a high level of industry compliance. Therefore choose a cloud based VAS supplier that offers in-depth telecommunications skills as well as the capabilities to provide compelling new services that will help consumers improve their lives, make them more efficient, connect them with other people, are fun and easy to use.

Acision has a rich body of experience deploying messaging systems and innovations around the globe. This experience includes routine market research providing insight into market demand and consumer interest. This makes it possible to help the operator to prioritise services and correctly bundle or price the offerings.

### User interest in personalised services

| | |
|---|---|
| • Block SMS/MMS from certain people | 60% |
| • Store valued messages online | 58% |
| • Forward SMS/MMS to other numbers/email | 53% |
| • Auto-sign ongoing messages | 50% |
| • Auto-reply incoming messages | 38% |

Business

Youth

Parents

Figure 4 - Acision research, conducted Worldwide ( n=1000 | Nov. 2009)

When delivering new services from the Cloud, it is imperative to be able to provide two-way scalability. This means that the systems residing with the operator network must be able to efficiently handle core traffic as well as the newly added traffic, while at the same time the cloud must scale in lock-step as traffic increases. Only vendors such as Acision with a formidable installed base of reliable platforms can truly bring the expected quality of experience for a suite of Telco niche services from the Cloud.

Acision's Cloud services offering will evolve into a complete library of services or service store, where service packages can be consumed on-demand and on a pay-per-use basis. Select Innovation Partner provided services will also augment the service store to provide a complete end-to-end service offering that is ready for market with operator specific branding. With a complete services store fully managed by a single reliable supplier, operators can appreciate lower overall product risks and operational expenditures.

## Conclusion – Telecommunications in a competitive but profitable era

New Telco grade services delivered from the Cloud dramatically lowers the business risk for operators, as operating costs are in-line with service usage uptake. Margins are also protected, which is essential in these tough times where operators are joined in the competitive arena by over-the-top players. Finally, all of this drives operator relevancy in times of an absence of new killer value-added services and an overall price-sensitiveness of consumers.