

# telesperience

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Enhancing the customer experience using  
convergent customer management

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# 1 Sponsor's message

The number one customer management issue for CSPs surveyed by Telesperience was lack of customer management consistency across channels. This is not surprising given the fact that many service providers are struggling with legacy infrastructure where sales, customer management, BSS and OSS systems have grown up as discrete systems – each with their own 'language'. Even when integrated, each domain has a different way of defining customers and accounts resulting in a large potential for disconnects between systems, a situation which has a negative impact on the customer experience as well as business and marketing agility.

In fact, Telesperience research shows that 82% of CSPs surveyed reported that a sub-optimal customer experience was driving up churn rates and operational costs, while affecting competitive positioning all of which result in lost revenues. Customers expect consistency meaning access to the same services and applications, same customer information and same offer presentation regardless of access point: IVR, Web, call centre or device. To ensure this fundamental customer expectation - a single, complete, real-time subscriber view of customer data is essential. Such a view is only achievable if there is unification of all customer, product and order information across an operator's ecosystem; all pieces must 'speak the same language' and describe the customer in the same manner.

To obtain this competitive advantage, BSS/OSS capabilities – from marketing, sales and customer management through to policy management, charging and billing – need to be provided as a unified whole. This means a single code base, with all functionality built around a single data model (built to support all aspects of convergence), supported by a single product catalog and with a single operations, maintenance and security approach across the whole solution. And in a world requiring real-time usage monitoring, real-time marketing and real-time subscriber-centric policy management, clearly this unified approach to BSS/OSS must also sit firmly in the network – to the level of call/session control and packet inspection. Only this approach enables Active Customer Management: the ability to manage all customers consistently and in a real-time, interactive manner regardless of how the customer chooses to pay for services or interacts with the operator. This new paradigm is intended to provide consistency for data access, data management, product offers, etc.

As the only unified comprehensive solution in the market to align sales, marketing, customer management, ordering, billing, real-time rating and charging in a manner that enables Active Customer Management, the Comverse® ONE™ Billing & Active Customer Management solution, is a strategic asset for optimal customer management, targeted marketing, competitive differentiation and growth enablement, both today and into tomorrow.

For additional information and enquiries on the Comverse ONE Billing & Active Customer Management solution please visit: [www.comverse.com](http://www.comverse.com).



Alice Bartram, AVP Marketing,  
Billing & Active Customer Management



## 2 Definitions and key concepts

### What is customer management?

CSPs increasingly identify just two intimately-connected core processes in their business: one of these is customer management and the other is service management.

Telesperience defines customer management as all the processes, software and resources needed to attract, retain, support and manage customers across the entire customer lifecycle. This encompasses but extends beyond what has traditionally been called 'customer care' and 'customer relationship management' to other important areas of operational and business activity that affect the customer experience including ordering, billing & payment, policy control and sales & marketing.

In contrast, service management refers to all the processes, software and resources required to create, deliver and assure telecom services – a process that is itself being increasingly driven and informed by the customer management process, as CSPs transform from resource providers to customer-centric service providers.

### What is convergence?

Telecoms convergence can infer a large number of things. In telecoms we talk about convergence of networks, payment and billing options, channels, customers, roles, services, IT systems, data, companies within a group, departments, and industries.

In this paper we consider how to use a converged customer management solution, driven by BSS unification, to deliver a better customer experience. This involves a number of what have historically been seen as discrete systems and processes, and a variety of convergence modes. However, the aim is to provide a, consistent, satisfactory, intentional and proactive experience for customers, with the goals of retaining more customers, attracting new ones and increasing profitability.

### Why is convergent customer management needed?

Maturing telecoms markets are becoming increasingly competitive and are experiencing, or rapidly moving towards, market saturation. The revenues from traditional telecoms services are also declining and competition continues to challenge profit margins. As a result, the commercial emphasis in telecoms is changing from providing network capacity, resources and simple services, to providing a much larger number of more complex services at commercially acceptable rates. In order to differentiate themselves and remain competitive, CSPs are re-examining the economics and commercial realities of service provisioning and are refocusing their attention on customers and their expectations.

This so-called 'customer-centricity' places customers at the heart of telecoms service provisioning and, by explicitly focusing on customer expectations, is having profound impacts on the internal organisation of CSPs and the way in which they do business. Now everything within the CSP needs to work efficiently to help them understand customer expectations and deliver against these rapidly and effectively. Business models, processes and supporting solutions are being transformed as a result.

The telecoms industry is transitioning from a paradigm of well-understood business models and services to one where one of the few certainties is the inevitability of change. Even though business models are still evolving, CSPs now have to make vital investment decisions in order to support service volumes and complexity, rollout new services (and tear them down) quickly and at low cost, and become more responsive to customer expectations. Customers are already demanding more from their service providers: they are no longer willing to wait for services to go through a long design-and-test phase; they want more choice over what they consume, and when and how they pay for it;

they also want to be able to frequently change the services they consume using a channel that is appropriate for them at the time they want to do it.

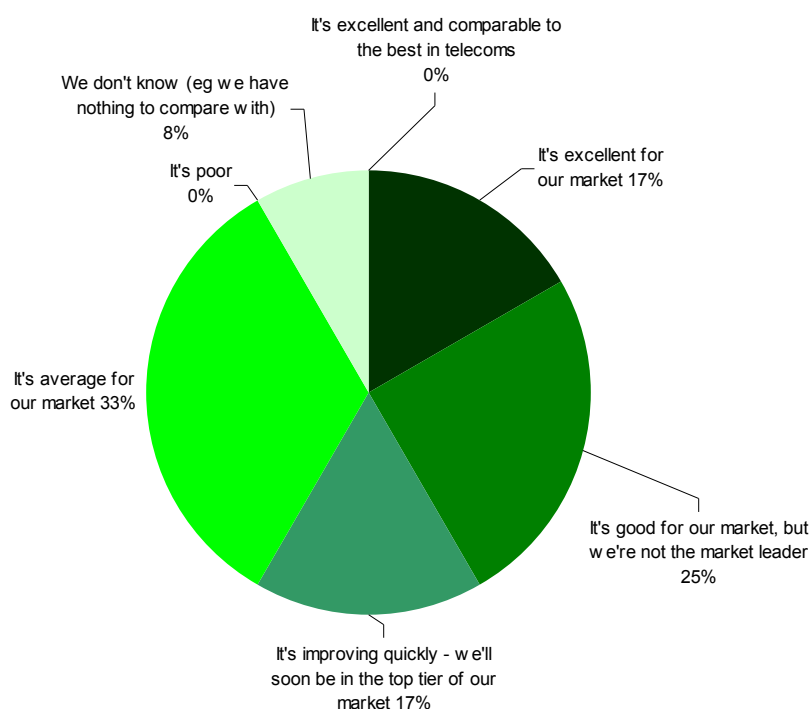
These new requirements create significant challenges for legacy infrastructure, which was built to support a very different business paradigm. Tactical investment decisions and M&A activity have resulted in many established CSPs inheriting an overly complex and stovepiped infrastructure that simply cannot cope with the demands now being placed on it and which has significant capability gaps. Higher operational costs, a sub-optimal customer experience, lack of adaptability and slower time-to-market for new offerings are the result. Ultimately, CSPs will differentiate themselves on the capability and agility of their IT systems. A sub-optimal customer management solution will lead to the inability to compete effectively with competitors that do have an effective IT infrastructure.

### 3 A sub-optimal customer experience has negative impacts on both customers and CSPs

#### Most CSPs think they could improve their customer experience

The customer experience is extremely important to today's CSPs. Telesperience research has found that 92% of CSPs have identified the customer experience as either vitally or very important to their business. Despite this, most CSPs think they could improve their offering, as shown in Figure 1, with only 17% telling us their customer experience was excellent for their market and none believing it was in the top tier in the world.

Figure 1 How good do CSPs think their customer experience is?



Source: Telesperience 2010

#### A wide range of factors affect the customer experience

A sub-optimal customer experience means CSPs are failing to deliver against their customers' expectations, which in a competitive market means they are likely to churn to competitors. Eighty-

three per cent of CSPs we spoke to reported that a sub-optimal customer experience was driving up their churn rate. As shown in Figure 2, however, a sub-optimal customer experience also drives up operational costs, affects the CSP's competitive positioning and results in lost business opportunities.

CSPs recognise that a wide range of processes, systems and resources affect their customer experience and thus need to be included within the discipline of customer management. They also recognise that customer expectations are no longer static but are continually changing. When we asked them what they thought contributed to a sub-optimal customer experience in their organisation, the most frequently-cited problem was lack of cross-channel consistency (see Figure 3). In fact, the root cause of most of the issues they identified as contributing to a sub-optimal customer experience are failures or capability gaps in customer management systems (including ordering, rating & charging, billing & payment, policy controls and sales & marketing). In contrast, only 8% of CSPs thought that network problems were contributing to a sub-optimal customer experience in their company.

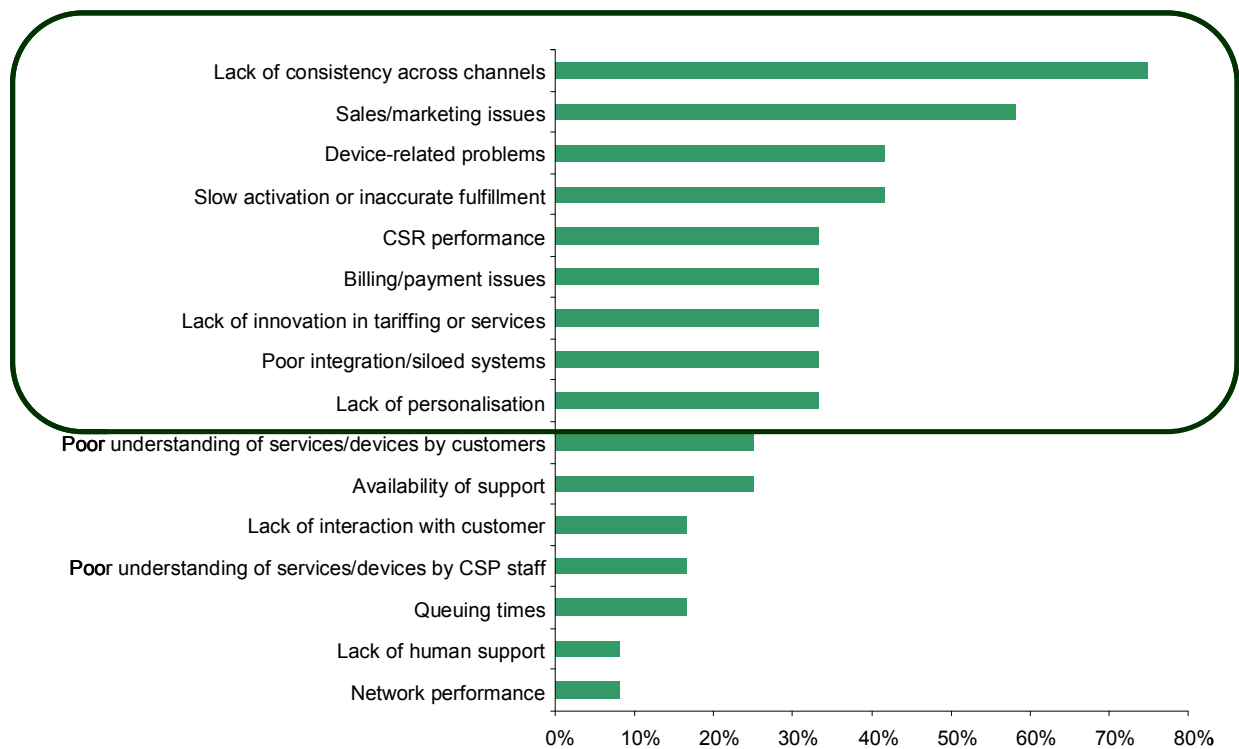
Figure 2 **A sub-optimal customer experience increases costs and leaks value from the CSP**



**Negative consequences most commonly cited by CSPs**

Source: Telesperience 2010

Figure 3 CSPs recognise that a wide range of factors contribute to a sub-optimal customer experience



Source: Telesperience 2010

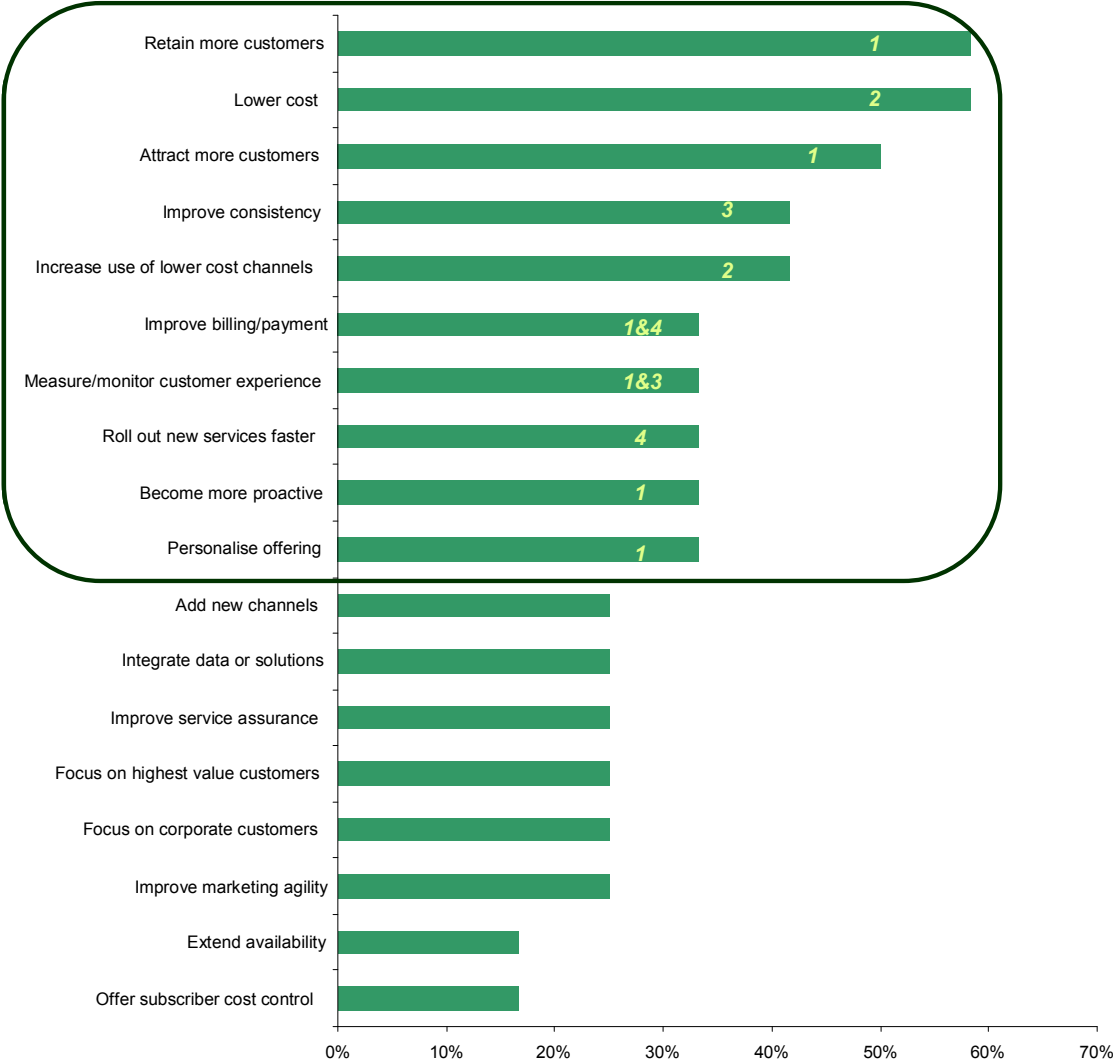
## 4 Using convergent customer management to deliver commercial success

Telesperience asked CSPs what their top customer management goals were for 2010-11. We found that the top three goals were to retain more customers, to attract new customers and to lower their costs. These were closely followed by improving consistency and - another cost-control measure - increasing the use of low-cost interaction channels. The top ten customer management goals (see Figure 4) that CSPs reported address four main issues:

1. retaining and attracting customers
2. lowering costs
3. creating a consistent customer experience
4. maximising revenues.

A convergent customer management system supports these four goals and delivers a wide range of benefits to CSPs, helping them optimise their customer experience and retain value within the business (see Figure 5).

Figure 4 Key customer management goals 2010-11



Source: Telesperience 2010

Figure 5 Scenario 2: BSS/OSS Convergence is a vital component of commercial success – value is retained by the business



Source: Telesperience 2010

### Helping CSPs retain and attract customers

A convergent customer management system driven by BSS/OSS unification supports the goal of retaining and attracting customers in a number of ways. Using a converged system closes capability gaps in the customer management infrastructure as all systems utilize the same complete and real-time data, business logic and processes. This approach provides the agility required to deliver new service features that differentiate the CSP's offering and are appealing to customers. An example would be the combination of policy control technology with convergent charging to improve spending controls for when customers are roaming. Convergent charging also provides greater choice to customers - enabling them to decide whether to prepay, postpay or paynow for services subject, of course, to the established policies of the CSP. A convergent system also provides the customer with access to the same real-time comprehensive account information which can be made available to the customer via their preferred channel.

At the data layer, realtime data integration and a single data model have a role to play in reducing mistakes and the need for customers to repeat information – both of which are major sources of customer dissatisfaction. Integrated data also supports personalisation, tailored offers, and helps CSPs become more proactive in their dealings with customers.

### Helping CSPs lower their costs

Telesperience found that for 92% of respondents reducing costs was a driver for them to improve their customer management. Some 67% of CSPs reported that sub-optimal customer management was inflating their customer support costs. Increasing competition, margin pressure and the current economic climate are just three of the reasons why CSPs need to review their operational costs.

Legacy infrastructure can be very expensive to maintain, while also not being as efficient or fully functional as a modern convergent infrastructure. There are many reasons why this is the case: legacy solutions may be based on expensive-to-maintain hardware, licence costs may be high due to system duplication, and the customer management process may involve considerable manual intervention. A convergent system enables CSPs to save money by replacing expensive hardware, consolidating software, reducing the requirement for manual intervention, and because it is far cheaper to maintain and operate. Increased automation and easily configurable solutions lower the cost of supporting customer management significantly, and free up skilled staff from day-to-day operations allowing them to be redeployed where they can add value.

By also including customer self-service in the converged customer management infrastructure, CSPs can drive down call centre costs significantly.

### **Helping create a consistent customer experience**

Seventy-five per cent of CSPs said that lack of cross-channel consistency was a major contributor to a sub-optimal customer experience and 42% said a key goal for them this year was to improve the consistency of their customer experience.

Converged customer management can help CSPs achieve this goal in a number of ways. Firstly, a unified customer view helps CSPs deliver a consistent experience to customers across multiple channels (Web, IVR, POS, device, and call centre), removing the need to repeat information and reducing mistakes caused by poor integration between stovepiped systems which means not all customer data is visible or is not available within a reasonable timeframe.

A particular advantage of a converged system is that it ends the artificial divide between prepaid and postpaid customers, as processes are streamlined, allowing services to be rolled out to all customers irrespective of the payment method they select. A converged system supports billing for all services on a single bill and/or prepaid statement, and enables customers to choose and change between payment modes (prepay, postpay and paynow) as suits them, rather than this being pre-determined by the network or service. This delivers much greater control and convenience for customers, while enabling CSPs to benefit from incremental revenue.

### **Helping CSPs maximise revenues**

A convergent customer management system enables CSPs to optimise their revenue opportunities by maximising transactions and the ARPU from new services. It delivers an efficient order-to-cash cycle, allowing CSPs to effectively target new services according to the preferences and behaviour of customers; it supports customer self-service; and, by employing policy control technology, it enables realtime credit controls to be implemented, which helps reduce revenue leakage.

An efficient, modern customer management system significantly speeds the time-to-market for new services, and allows CSPs to rollout and tear down services quickly and cost-effectively. This supports the CSP's ability to benefit from time-limited opportunities and helps make niche services profitable.

## **5 Delivering convergent customer management**

### **CSPs can choose an implementation mode that suits them**

Whether a CSP is rolling out a greenfield implementation, or is replacing some or all of its legacy infrastructure, taking a convergent approach to customer management offers a wide range of benefits. Some CSPs have taken a "big bang" approach to back-end transformation; but there are many more that have chosen a phased approach. For those choosing a phased approach, there are several entry

## Enhancing the customer experience using convergent customer management

points to deploying a convergent solution, allowing CSPs to start with a particular set of customers, services or network and then progressively extend the scope of the convergent solution.

Some service providers start such a convergence programme by implementing a solution to support a subset of customers, such as high-ARPU, multi-service customers; others phase their move to a convergent system by service offering, channel or payment type.

### **Case study: Telenet deploys Comverse ONE for realtime charging for DTV and mobile services**

Telenet is using realtime billing as the entry point for implementing a convergent infrastructure. It selected a convergent billing and customer care system Comverse ONE, provided by NY-based Comverse Technologies. Telenet Executive Vice President Technology & Solutions Jan Vorstermans commented on the announcement of the contract: "Convergent real-time rating and billing uniquely gives us the ability to use one system to manage all subscribers consistently, regardless of payment or service type, as well as accelerate the launch of new offers and promotions. It gives Telenet the flexibility for key differentiation through personalization and bundled offers across fixed and mobile services."

A phased approach reduces the risk to the CSP and shortens the time-to-benefits. However, it is important to note that a solution chosen to support converged billing, for example, should be designed to be convergent from the outset, as it is costly and impractical to try to re-engineer a postpaid billing system into a convergent solution, or likewise to add postpaid functions to a prepaid solution.

To successfully implement a phased move to a convergent solution requires a CSP to develop a strategic plan containing a roadmap to convergence. This obviates the inconvenience and expense of tactical investments that will subsequently need to be replaced.

### **Don't underestimate data level challenges**

If you have a complex legacy infrastructure then you will likely be faced with significant challenges at the data layer. Data-level audits often reveal considerable duplication (which leads to operational inefficiency and inflated costs) and much worse data quality than was anticipated. Pruning back the data before migrating it to the new target system is advisable, as is using a single data model from the outset.

A single data model will streamline business logic, and ensure consistent terminology and data semantics. Ultimately, this will not only make the customer management process more efficient, but will also increase the velocity and reduce the TCO of rolling out and maintaining a converged solution, and rolling out new services based on this solution. Solving data-level issues is also a critical step towards effective customer self-service; while customer data integration is a facilitator of analytical business initiatives such as business intelligence.

### **Solve the politics and get cross-organisational support**

Do not underestimate the political and organisational challenges presented by a convergence programme. Traditionally, for example, prepaid billing was handled by the network group; postpaid billing by the IT group. These groups have different skillsets, priorities, terminologies and cultures, which can prevent co-operation. This challenge needs to be addressed, however, because in future all parts of the organisation will need to work together in order to deliver against customer expectations and business goals. As a process, customer management spans many business activities that may previously have been functionally separate. If these processes are to be optimised then the staff who support and understand them will have to work together as well. Some operators have addressed this problem by creating convergent teams.

Although obvious and well understood, people issues continue to be a major cause of delays, cost overruns and the derailing of convergence projects.

**Invest in a solution that has a broad range of capabilities today and is flexible enough to cope with the demands of tomorrow**

Your business will literally depend on your customer management system working well across different channels, payment types, services and technologies. The vision of customer management may be well developed but the solutions market is still relatively immature. Few solutions have the broad range of capabilities needed to tie together sales and marketing support, convergent billing, customer care, product and service management, self-service technology and so on. CSPs should ensure that their chosen solutions provider has a development roadmap that fits with their own vision of how the market is likely to evolve. The chosen solution should be flexible enough to cope with change and this will be facilitated by a well-designed architecture and data model. Once deployed CSPs should aspire to be relatively self-sufficient, as if they need to return to the vendor each time they need to make a change to the system this will inflate costs and slow time-to-benefits.

**Choose a solution that is fast and easy to deploy, look for a vendor and SI that have already deployed a similar solution**

CSPs do not have years to design and deploy a new converged solution because they need the benefits delivered by a converged customer management solution now. This argues strongly against bespoke development or extensive customisation of solutions and favours a solution that can easily be configured to support a CSP's needs. Successfully deployed convergent customer management solutions are still relatively unusual – particularly for larger CSPs. Of the CSPs we spoke to as part of the research for this paper, none had a single convergent customer management solution, but instead they ranged from those with 2-10 solutions to those with more than 30.

Vendors and SIs that have a track record of successfully deploying convergent solutions therefore possess insight and expertise that should be valued. This knowledge and hard-won experience will enable CSPs to avoid the pitfalls and deliver a successful deployment.

## Conclusion

The telecoms market is changing rapidly, creating new commercial and customer imperatives. Legacy customer management infrastructure, however, was designed for a different business paradigm and is now inhibiting CSPs from delivering against their customers' expectations.

Convergent customer management solutions deliver against CSPs' key customer management goals. They will help CSPs retain more customers, attract new customers, lower their costs and improve the consistency of their customer experience.

CSPs urgently need to streamline and simplify their customer management processes and systems, fill their capability gaps and tackle long-standing data-level issues that continue to undermine their commercial goals. Ignoring the problem will not remain a viable strategy. To remain competitive the 75% of CSPs that acknowledge they are not the customer experience leader in their market need to move from trailing the best-in-class to leading the pack. *It is not necessary to attempt a "big bang" transformation in order to start benefitting from convergent technology. Less risk-averse companies can transition to a convergent customer management infrastructure using an entry point that is convenient and appropriate for them by using a convergence roadmap which supports a phased approach to convergence.*

## ***Acknowledgements***

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## ***About Telesperience***

Telesperience is a UK-based telecoms analyst firm focused on how technology impacts both the commercial and customer experience. It is wholly-owned by Babworth Ltd, a provider of research, publications and writing services to the global Internet, Communications and IT markets.

The scope and focus of Telesperience is as follows:

- the commercial telesperience – to analyse how key IT technologies impact on telecoms service providers' businesses
- the customer telesperience - analysing how key IT technologies impact on the end customer experience.

Telesperience was founded in 2008 by an experienced team of telecoms IT analysts who wanted to provide a more convergent view of the telecoms market, focusing on business and customer issues. We consider where the problems lie with legacy technology, and how companies can transition to provide a more positive telesperience for their customers and a more profitable business for themselves.

Telesperience's opensource research programme relies on the goodwill of companies who fund research in order to make it free at the point of delivery. We endeavour to ensure that our research remains objective and independent – the steps we take to do this are outlined on our website, but the most significant is using experienced and respected analysts who have a track record within our industry. Report sponsors are always acknowledged, so readers are aware who is funding the research programme.

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