Research Report

Customer experience management framework: how to retain subscribers and improve customer loyalty

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Customer experience management framework: how to retain subscribers and improve customer loyalty

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What is customer experience management?

- Customer experience management is the ability to understand customers’ needs and to translate this understanding into solutions. In the telecoms market, the focus is on the delivery, support and billing of voice, video and application data.

- Customer experience management processes must:
  - listen to the voice of the customer (for example, through one-on-one interviews, surveys and social media)
  - identify problems
  - resolve problems and issues
  - monitor and track improvements at each customer touchpoint
  - measure business impact (through metrics such as Net Promoter Score (NPS), churn and revenue growth).

- Customer experience metrics must measure and report on three phases of the customer lifecycle:
  - join – the process of ordering a service
  - on-board – the process of activating and training the customer to use the service
  - support – the process of resolving problems in the delivery of services including accurate billing.
Customers and suppliers’ perceptions of the customer experience may not align, and ecosystem complexity makes it difficult to assess

- NPS and internal benchmarking indices can improve how CSP employees interact with customers.

- Customer experience measurement can be divided into two broad categories.
  - **Outside-in**: NPS and customer satisfaction surveys measure and report customers’ perception of products and services. Such KPIs are indicators of propensity to churn and the influences customers have on others to join or leave.
  - **Inside-out**: Examples include order-to-provision, first-contact resolution, long-tail re-callers (for example, more than three calls) and churn-rate metrics.

- Customers form perceptions when they interact with employees, IT systems and services at different lifecycle phases, including:
  - commitment phase
  - order-to-fulfilment process
  - self-service and multi-channel customer interaction
  - accuracy of bill
  - quality of service
  - availability of service.

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The customer lifecycle journey comprises five phases, but long-term relationships are influenced by the join, on-board and support phases.

**Inquire and evaluate**
- Online, window shop, talk to family/friends

**Join**
- Technician visits home, go to store, self-serve

**On-board**
- Set up services, payment, training

**Support**
- Web chat, online communities, call centre

**Renew**
- Proactive contact, confirm, promote relevant new offers
NPS is a leading indicator of customer churn and profitability

*Figure 4: Experiences that increase or decrease Net Promoter Score [Source: Analysys Mason, 2013]*

- **Increases NPS**
  - Technician arrives at scheduled time
  - Problems are resolved on the first call
  - Excellent online forums
  - Bills are automatically credited for service disruption
  - SMS texts are received to warn of a network outage

- **Decreases NPS**
  - Too many options in IVR
  - Repeat calls to agent with no problem resolution
  - No option for self-service
  - Customer does not understand bill
  - Poor coverage
  - Dropped calls

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NPS is an indicator and does not tell the entire story

- Most CSPs use NPS as a key external performance metric to assess how the customer views the company.
- Some CSPs also use NPS to determine compensation of senior management – bonus and performance reviews.
- However, the NPS does not tell the entire story because it:
  - uses an 11-point scale that measures only three high-level ratings
  - gives no indication as to which specific parts of a business are performing poorly.
- Internal metrics provide greater clarity and precision.
- Customer satisfaction metrics answer questions such as the following.
  - Do customers get the product or service that they wanted at the time they requested?
  - Was the product or service easy to use?
  - Was the product or service reliable?
  - Was the customer charged the price that the salesperson pitched?
  - Can customers get the support they need quickly and efficiently?

Figure 5: Indicative range of NPS by industry sector [Source: Analysys Mason, 2013]
Churn rates in Western Europe have not improved during the past 3 years and average 25% annually.

- **Drivers of churn include:**
  - pricing pressure
  - number portability
  - MVNO entrants
  - joint ventures (such as Everything Everywhere in the UK)
  - user demand for faster mobile broadband access (LTE)
  - network quality
  - SIM unlocking.
Measuring and then managing improvements for each customer interaction yields higher customer satisfaction

Figure 9: Methodology for managing the customer experience [Source: Analysys Mason, 2013]
Software systems must be aligned to improvements in the customer experience

Figure 10: Obstacles to a positive customer experience [Source: Analysys Mason, 2013]

- Silo systems inhibit the order-to-activation process
- Complex service orders require human intervention
- Customer data is not shared across departments within a CSP
- NOC dashboards are green, but call-centre load increases
- Internal KPI metrics do not increase NPS/CSAT scores
- Employee incentives are not aligned with customer experience metrics

Key: CSAT = Customer Satisfaction Index; NOC = network operations centre.
Key software components are used to improve the customer experience

Figure 11: CEM touchpoints mapped to Analysys Mason’s software market taxonomy [Source: Analysys Mason, 2013]
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Factors contributing to churn in the mobile market

- Of smartphone customers who plan to change network provider in the next 6 months, 23% cited poor network coverage as the main reason, while 19% mentioned reliability.
- The quality of the network, and the flexibility and affordability of data packages are key drivers for capturing smartphone customers. These should be major themes for operators’ marketing campaigns targeted towards smartphone users.
- All operators in Europe offer the most popular handsets and differentiation is based on mobile data and content bundles. This explains why our respondents did not cite handset availability as a major factor in driving their intention to churn.
- Nonetheless, device subsidies and financing plans still have a significant role to play and operators should not ignore their role as a device distribution channel.

Figure 12: Key factors other than price that drive respondents to want to change network provider in the next 6 months, by device type [Source: Analysys Mason, 2013]¹

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1 Question: “Why do you plan to change your mobile phone provider?”; n = 551. For further details, see Analysys Mason’s The Connected Consumer Survey 2013. Available at www.analysysmason.com/cc-survey-2013.
Consumers’ loyalty is driven by their own experience and influenced by friends and family

- Apple’s NPS is high, driven by the usability of products, superior customer service, good in-store interaction, and innovation (the ‘cool’ factor).
- Google and Facebook’s scores are driven by innovation and ‘free’ services.
- The NPS ranking of mobile CSPs is influenced by network quality and the availability of latest handsets. Factors such as locking devices to the network, complex billing tariffs, and insufficient support contribute to lower NPSs.

Figure 13: Indicative NPS by company [Source: Analysys Mason, 2013]
Generational groups communicate differently

Figure 14: Customer preference (indicative) for sales and support communication channels by generation [Source: Analysys Mason, 2013]
CSPs can apply best-practice methods by collaborating with their key suppliers in each of the five phases of the CEM lifecycle.

Figure 15: Customer experience management lifecycle [Source: Analysys Mason, 2013]

<table>
<thead>
<tr>
<th>Business functions</th>
<th>Customer experience measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate</td>
<td>Survey</td>
</tr>
<tr>
<td>Demand</td>
<td>First time right</td>
</tr>
<tr>
<td>Acquire</td>
<td>Bill statement clarity</td>
</tr>
<tr>
<td>Deliver</td>
<td>KPI/SLA</td>
</tr>
<tr>
<td>Invoice</td>
<td>End-to-end quality of service</td>
</tr>
<tr>
<td>Collect</td>
<td>Survey</td>
</tr>
<tr>
<td>Assure</td>
<td></td>
</tr>
<tr>
<td>Retain</td>
<td>Customer lifetime value</td>
</tr>
</tbody>
</table>
## Efforts to improve the customer experience should focus on five principles

Figure 16: Five key principles of improving the customer experience [Source: Analysys Mason, 2013]

<table>
<thead>
<tr>
<th>Business goal</th>
<th>Recommendation</th>
<th>Business outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve customer intimacy</td>
<td>CSPs must drive a change in the organisation to put the customer first. Intimacy requires an understanding of how the customer feels and rates each interaction in the relationship.</td>
<td>Customers start promoting products and services.</td>
</tr>
<tr>
<td>Reduce churn</td>
<td>Reduce customer churn by focusing on operational improvements in call centres and service monitoring.</td>
<td>Higher NPS and increased profit.</td>
</tr>
<tr>
<td>Offer the customer choices to interact</td>
<td>Customers prefer self-service support via many channels (such as web chat or mobile). CSPs should implement a multi-channel approach.</td>
<td>The cost of support will decrease.</td>
</tr>
<tr>
<td>Get it right the first time</td>
<td>CSPs should clearly articulate the offer, fulfill the order once, and solve the problem quickly.</td>
<td>Quality of service will improve and the cost of support will decline.</td>
</tr>
<tr>
<td>Keep it simple</td>
<td>Services are becoming more complex. CSPs must ensure that departments and partners effectively collaborate.</td>
<td>Revenue will increase and the cost per transaction will decrease.</td>
</tr>
</tbody>
</table>
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The ‘join’ process focuses on new or add-on services

- The conceptual architecture of a multi-channel operation with cross-channel consistency is shown in Figure 17. Customers (or prospects) interact with the CSP through several channels, including self service (mobile, websites, IVR, kiosk or social networking application), talking with a customer sales representative, interacting with a retail store employee or communicating with a channel partner. In all cases, the same personalised offers are available to customers through an enterprise-level product catalogue and personalisation recommendations loaded into software that serves as the channel co-ordination layer.

- Personalisation recommendations come from personalisation policies, matched to subscriber data and product catalogues.

- The channel co-ordination layer provides uniformity of experience. It ensures that each customer has access to the same products and services in the same way, and has a co-ordinated shopping cart. This enables CSPs to have all the relevant information that they need about consumers at any part of the marketing and sales process.

Integration with the billing and service fulfilment back-office systems supports the immediacy of the experience. Questions of availability, prerequisites and bundling options can be answered immediately through any channel. When the time comes for the order to be processed, it can be immediately checked for errors and implemented automatically and expeditiously.
Multi-channel marketing, sales and service, integrated with self-care support, bring large benefits

- Many leading retail enterprises provide an excellent online customer experience. For example, Amazon provides recommended offers and enables users to search and purchase a product, complete the transaction quickly, and track the order. Real-time assistance during the process is easily available via click-to-call technology.

- CSPs have a long tradition of using a customer contact centre channel for marketing, sales and service interactions. What was lacking was an equivalent effective ecommerce capability. However, CSPs can now use off-the-shelf platforms to provide personalised, configurable, online information and ordering capabilities.

- Demand is growing for these capabilities. More than 20% of telecoms customers want to use online systems as their primary means of ordering new services and devices.

- Adopting a configurable, easy-to-navigate ecommerce multi-channel strategy can:
  - increase traffic by more than a third
  - increase conversion of visitors to customers by 16%
  - increase online orders by more than 50%
  - greatly reduce the cost of processing online orders.

- However, having multiple channels available to a customer increases the complexity of interacting with the CSP. Customers expect that product and service information will be consistent across all channels, and they expect an enterprise-level shopping cart and a consistent buying experience. With over half of customers moving from one channel to another during the product selection and purchase process (for instance, from an online session where they research what is available, to checking recommendations, to talking to a customer service agent, to visiting a retail store for final device selection and pickup), such uniformity is critical to high-quality interactions.

- CSPs that have already implemented ecommerce and multi-channel consistency capabilities have found that enhancing their channels to serve the customers as individuals can significantly enhance revenue (with up- and cross-selling opportunities) and increase customer retention rates.

- The key is to provide a dynamic, relevant, personalised sales experience through all available channels, allowing a consumer to select the channel that they feel is most appropriate at the time. Today’s operational challenge is to tie all the systems and channels together to serve each customer when and where they interact – using any channel at any time – and to manage the complexity of the myriad offers and options.
The ‘on-board’ process focuses on service fulfilment activities

The first step in the on-board process is to take the order and decompose it into products and services.

To achieve high NPS scores, the order must be fulfilled the first time. For example, in residential broadband services the technician must have the physical inventory on the truck, be on time, and qualified to handle obstacles that include building construction and outside plant facilities.

Orders from CRM or subscriber management systems are passed to customer order orchestration systems that decompose complex, multi-product orders and orchestrate the overall order.

Sub-orders are passed to multiple service fulfilment technology stacks for further decomposition, management, design and assign, and activation. Some sub-orders go to the systems of partner CSPs or third-party vendors.

Activation systems are directly interfaced with customer order orchestration (or order management (OM) systems) when a simple activation is required.

The BSS and OSS components each need data about the products and services required to fulfil the orders. This is stored in multiple product catalogues, federated or manually synchronised.
The on-board process also involves billing and account management activities

- Convergent billing (also known as convergent charging) can be used in two types of scenario.
  - The use of a single billing system for both prepaid and postpaid services. These may include fixed-line services as well as mobile. The primary driver for this is reducing costs of established systems.
  - In the support of convergent or hybrid services that enable postpaid subscribers to top up service plans with real-time purchases such as additional bandwidth, access to content or speed boosts.

Figure 19: Revenue management deployment scenario [Source: Analysys Mason, 2013]
The ‘support’ process focuses on call centres and operations

- The support phase consumes the greatest share of capital investment in the CEM budget because of the volume of inquiries into the call centre and the importance of maintaining network quality of service. Actions that will contribute to a positive outcome include:
  - resolve customer problems more quickly and improve customer service
  - link customer data with real-time service usage and performance data
  - implement multiple channels of communication
  - understand problems reported in the call centre
  - understand traffic patterns that lead to churn, which is the first step to avoiding churn of high-value customers
  - identify potential 3G customers, allowing CSPs to prioritise particular geographical areas when rolling out a 3G network
  - identify and categorise customers who have more than one SIM, enabling CSPs to target them with specific marketing campaigns.

Figure 20: Call centre and operational deployment scenario [Source: Analysys Mason, 2013]
A direct correlation can be drawn between customer satisfaction and the quality of service that the network is able to deliver

Figure 21: Voice and data services and the customer impact based on exceeding network delay values [Source: Analysys Mason, 2013]

<table>
<thead>
<tr>
<th>Service</th>
<th>Network quality of service KPI</th>
<th>Customer impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>50–100ms delay per packet. Must guarantee bit rate.</td>
<td>High</td>
</tr>
<tr>
<td>Streaming</td>
<td>1–5ms delay per packet. Must guarantee bit rate.</td>
<td>High</td>
</tr>
<tr>
<td>Web page</td>
<td>2–10 second delay.</td>
<td>Medium</td>
</tr>
<tr>
<td>P2P</td>
<td>Best effort. Usage of network resources based on available capacity.</td>
<td>Low</td>
</tr>
</tbody>
</table>

- **Voice**: customers will experience gaps and voice clipping when network delay exceeds 100ms.
- **Video streaming**: customers will experience pixellation and/or frame freezing when network delay exceeds 5ms.
- **Web page**: customers will experience slow page refresh times or no updates when network delay exceeds 10 seconds.
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Market maturity model of CEM deployments

Figure 22: Types of CEM implementation [Source: Analysys Mason, 2013]

- **Basic**
  - Same individual looks like two different customers in different business units. Customer-initiated request for support or new services.

- **Bronze**
  - Self-service, web chat, and early notification of service disruptions by CSP.

- **Silver**
  - Customer details known by CSR and systems provide complete lifecycle of customer interactions across the entire business for orders, billing and trouble tickets.

- **Gold**
  - Analytics and personalised support, including offering relevant product and services based on socioeconomic status. Customers have a positive experience and promote products and services to other people.
### Use cases

<table>
<thead>
<tr>
<th>Join</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-board</td>
</tr>
<tr>
<td>Support</td>
</tr>
</tbody>
</table>
Use case: Telefónica in Argentina uses Alcatel-Lucent Motive to simplify activation and management of complex residential broadband services

Problem statement

- Telefónica is the largest integrated CSP in Spanish–Portuguese-speaking countries and provides local, domestic long-distance and international fixed-line telephone services, Internet, mobile and pay-TV services to more than 300 million customers in Latin America (LATAM).

- In Argentina, Telefónica needed a software solution that would transform its whole approach to broadband customer care and drive measurable cost savings in support and service processes. Telefónica wanted to deliver ‘ready-to-use’ broadband services, make it easy to provision value-added services, improve service quality and reduce churn.

Implementation approach

- Alcatel-Lucent deployed a suite of products from their Motive software set in an attempt to produce a view of the entire service chain, from customer premises equipment (CPE) and customer PCs through the network backbone right to the service platform. The call-centre agents would then be able to see all configurations and inconsistencies between different platforms or elements in the network, and rapidly correct whatever parameters were incorrect.

- Motive products used in the solution: Motive Self-Service Manager, Motive Customer Service Manager and Motive Home Device Manager.

- Automated self-help tools with a virtual assistant for activation, support and maintenance of broadband services with guided resolution of common technical problems.

- Deliver broadband service intelligence to help desk personnel related to PC and CPE configuration issues.

Benefits

- Incoming calls to technical call centre reduced by 60%.

- Faster first-call resolution of customers’ problems by help-desk agents.

- Easier management of CPE such as DSL modems, routers, residential gateways, IP set-top boxes (STBs) and other devices.

- Reduced field support and truck rolls.

- Faster deployment of complex services including triple-play and fixed mobile services.

- Improved ARPU and measurable opex.
Customer experience management framework: how to retain subscribers and improve customer loyalty

Use case: Telekom Malaysia delivers high-speed broadband services using out-of-the-box OSS/BSS

Problem statement

- Telekom Malaysia had just eighteen months to implement a new high-speed broadband network, along with a set of BSS and OSS processes and systems to support the new services. Because of this short timescale, the CSP adopted an approach where it transformed its operations around new system capabilities based on ‘greenfield’ and ‘out-of-the-box’ principles, and had its systems integrator establish, operate and then transfer the resulting operations and systems.

Implementation approach

- The project had three phases. During the first, from April 2009 to January 2010, Telekom Malaysia implemented the basic consumer services. The second phase followed in July 2010 when the CSP launched enterprise, government, wholesale and worldwide services. The third phase involves releasing additional services and capabilities every 6 months.

- Telekom Malaysia approached the scheme as a greenfield project and implemented the full suite of Oracle BSS/OSS solutions for CRM, billing, order fulfilment, service activation, integration, portals and service delivery platforms. As far as possible, these components were implemented out of the box, minimising legacy integrations and customisation.

- A new logical inventory solution based on Telcordia Granite was implemented alongside the established Clarity inventory system for outside plant and legacy inventory. Intec, an incumbent system, provided the mediation and inter-carrier billing functions. EMC’s Ionix was chosen for the fault management function, while decisions about performance management functions were deferred to a later time.

- Telekom Malaysia selected Accenture as the main systems integrator, under an ‘establish–operate–transfer’ model. Using this model, Accenture established the initial operations and system functions, operated the systems until they were stable and transferred the operations to Telekom Malaysia’s staff via ongoing training programmes. Oracle was also involved in the project to ensure features of the software product suite were maximised and the solution aligns with Oracle’s roadmap.

Benefits

- Telekom Malaysia has seen clear benefits of using an out-of-the-box single vendor OSS/BSS solution. It is able to offer a consistent customer experience during the join and on-board processes.
Use case: Belgacom uses improved order processing techniques to improve customer experience

Problem statement

- Belgacom’s business operations increased in complexity following the roll-out of new order processing systems and processes. This led to increased errors caused by the customer care agents’ lack of familiarity with the systems following the operational change, which in turn needed greater support to help care agents to handle complex order processing interactions.

Implementation approach

- To simplify order processing, Belgacom worked with the Amdocs Workforce Performance & Learning Services team to deliver the improvements in operations and customer service.
- To help agents handle more processes and complex customer interactions, and learn about new products and services faster, Belgacom implemented Amdocs Online Performance Support (Amdocs OPS), which guides agents through key points in business transactions by providing timely and context-sensitive support on the desktop or retail screen.
- Amdocs OPS provides immediate, individualised online access to Belgacom’s full range of corporate knowledge, data, images and tools, as well as assessment and monitoring systems to enhance agent performance.
- Amdocs OPS automatically identifies the exact stage in the process that an agent has reached, then analyses the data entered and delivers the information required to complete the task. By following a predefined script and providing tools and tips to guide the agent to correctly capture the data, Amdocs OPS advises the agent on methods and procedures that are derived from the current context of the order.
- The solution works with any language – Belgacom uses Dutch, English, French and German. Amdocs OPS recognises whichever language is appropriate for each customer and automatically loads it for that interaction.

Benefits

- The solution has reduced the learning curve for new functionality because it activates itself on the user application. As a result, agent productivity and job satisfaction has increased. In addition, the number of error-free orders increased by 50%. Amdocs OPS is also helping Belgacom bring products to market faster.
- A customer might order two pieces of equipment, such as an STB and a modem. If different pick-up points are allocated for each product, this might block an order and lead to no delivery for the customer. Using Amdocs OPS, Belgacom created an alert that warns about the conflict, thus preventing a failed order.
Use cases

Join

**On-board**

Support
Use case: Orange România uses a USSD-based customer self-care solution to deliver better on boarding processes

**Problem statement**

- Orange România's subscriber numbers were increasing and the CSP needed an efficient customer-care strategy that was not only more customer friendly than previously but also low cost. Research had shown that its customers did not like IVRs and an increase in staffing levels in its call centres was an expensive proposition.

**Implementation approach**

- Orange wanted to deploy a single self-care system that would have the same access mechanism for prepaid and postpaid customers, but differentiated service menus.
- The CSP wanted to offer premium services to prepaid customers, but also wanted to provide dedicated offerings to postpaid subscribers. Additionally, it needed the system to be open for future enhancements to offer value-added services.
- Orange deployed Orga Systems’ USSD messaging platform wIQ as a convergent customer self-care system.
- The wIQ platform offers customers a way to interact with Orange using USSD codes. By pressing ‘*100#’ on their mobile phones, customers can get a complete menu of services.

- After a 4-week period for installation and testing, the service was launched as a promotional campaign highlighting how easy it is to use the new service.
- Orange uses the same customer-care solution for different services for prepaid and postpaid customers.
  - Prepaid services include changing tariffs, favourite numbers, roaming, bonuses, mobile data services and voice mail.
  - Postpaid services include additional services such as the Orange Thank You set, favourite numbers, prepaid top-ups and international calls.

**Benefits**

- In the 2 months after launch, the number of people using the self-care solution reached 240 000, and the number using it purely for MMS activation reached 120 000.
- Orange România achieved quantifiable cost savings from a reduced number of calls to call centres and reduced use of IVRs.
Use case: Brasil Telecom improves its service provisioning cycle time by rationalising systems and processes

Problem statement

- In the increasingly competitive Brazilian telecoms market, Brasil Telecom had to consolidate a disparate set of ten provisioning systems into a single OSS with integrated order management, inventory management and activation.

- The OSS had to be capable of provisioning new data services as well as support voice and service convergence.

Implementation approach

- Brasil Telecom adopted a three-pronged approach.
  - It built an OSS blueprint architecture that could scale and support multiple domains and services.
  - It selected product vendors and SI partners.
  - It embarked on a programme to rationalise and modernise the products and services, as well as reduce cycle times of provisioning and activation.

- It selected three Oracle products. Oracle ASAP enabled it to accelerate service roll-out and reduce activation cycle times. Objectel provided Brasil Telecom with a centralised network repository helping network engineering teams and minimising costs. Oracle Provisioning enables effective management and faster delivery of next-generation converged services.

Benefits

- Automating the activation processes enabled the CSP to significantly reduce order fallouts, which were previously manual or semi-automatic.

- After finalising the blueprint architecture and selecting the suppliers, Brasil Telecom completed the implementation in three parallel streams – CRM, Oracle suite and Enterprise Application Integration.

- The programme was supported by senior management and managed as an organisation-wide project because it affected multiple departments such as network operations, customer care and sales.

- After 4 weeks of completing the implementation, Brasil Telecom decreased provisioning cycle times for IP services by 45% and ADSL services by 83%.

- The CSP was able to improve customer experience by addressing customer issues more efficiently, which was possible because of the significantly improved efficiency and accuracy of the on-board processes.

- Brasil Telecom’s data communications revenue increased by 23% in one year, and achieved a net revenue increase of 1.6%.
Use cases

Join

On-board

Support
Use case: a European mobile operator made annual cost savings of EUR5 million in first-call resolution

Problem statement

- A surge in the use of smart devices and apps is causing complex support issues such as an increasing number of support calls and longer handling times related to mobile data services.
- The CSP needed to improve first-call resolution for mobile data services.
- For the CSP, 7% of calls pertaining to mobile data received by customer care were escalated from first-line to second-line support and 50% of those calls (3.5% of total calls) were further escalated from second-line to more expensive third-line support team. On average, each call took approximately 12 minutes.

Implementation approach

- The CSP engaged a vendor to perform a detailed analysis of the types of issues that were reported to the first line, and the type of information that would be required to fix those issues.
- Using analytics, the network information was sourced, processed and presented in a way that the first and second line teams could better understand and use it to resolve customer issues more efficiently.
- The CSP deployed a network analytics solution to gain a real-time view of consumer behaviour including apps, devices, locations and service types.

Benefits

- The project was completed within 6 months. The solution empowered support teams with more-detailed customer experience metrics in real time such as throughput performance, network alerts and handset issues.
- The solution achieved a 50% reduction (3.5% instead of 7% previously) in calls escalated from first-line to second-line support, and a 71% reduction (2.5% instead of 3.5% earlier) in calls escalated from second- to third-line support.
- The CSP was able to reduced call resolution times to 8 minutes, a saving of 4 minutes or 33%.
- The strategy delivered annual cost savings of EUR5 million in reduced resource requirements on a subscriber base of about 10 million customers.
Use case: Sprint’s mobile self-service system aims for seamless integration and handoff across customer touchpoints

Problem statement

- Sprint wanted to provide a convenient way for customers to self-manage their accounts and increase loyalty to the brand. In addition, it needed a way to reduce its customer support costs.
- To accomplish these goals, Sprint wanted to create a sophisticated system for self-care for both the mobile and fixed business channels, with the aim of providing as uniform an experience as possible among the various customer interaction channels, yet with user interfaces that were the best for each channel.

Implementation approach

- Sprint used a mixture of home-grown systems and commercial software. Originally, the Sprint mobile web portal at sprint.com was only for Sprint customers with particular handsets. It provided basic services such as checking minutes-of-use information, viewing one’s plan and paying bills.
- In 2009, Sprint used a software tool to optimise the company’s website for a wider variety of mobile devices. Sprint also created specialised self-care apps for devices running on Android, BlackBerry, iOS and WebOS.
- Later, it launched a mobile version (m.sprint.com) of its website for WebKit-based browsers, which are standard on most smartphones. In April 2011, Sprint added self-service capabilities to this version of the mobile site. The growth of m.sprint.com was supported by integration with Sprint mobile apps. Customers could then use a smartphone app (or other interface) and seamlessly move to a mobile-optimised version of the sprint.com website for more-complex transactions.
- It then deployed a commercial best-in-class digital platform to optimise and rationalise the interface among all of the different channels, but allow easy customisation where necessary.

Benefits

- The self-care platform has dealt with a significant increase in transactions that otherwise would have driven calls to Sprint’s customer care service.
- Mobile traffic to the sprint.com website has increased to 30% of the total, versus about 15% a year ago.
- Nearly 90% of this traffic comes from smart devices. Sprint plans to provide more information and self-service capabilities to users of such devices.
Use case: U.S. Cellular links network quality of service to customer satisfaction and employee performance

Problem statement

- U.S. Cellular believes that customer experience is important. It wanted to provide the assurance to its customers that the service will connect them the first time, retain the call or data connection and be a high-quality experience.
- The CSP wanted to enable its operational teams to proactively discover and troubleshoot network issues, in order to reduce churn and improve customer satisfaction.

Implementation approach

- Call quality and experience is on the top of customer’s minds while deciding on a CSP. Recognising this, U.S. Cellular places significant importance on the service quality.
- To make sure that the company delivers on its promise, the performance of every employee in the networks organisation is linked to network QoS parameters such as dropped calls and voice quality.
- To measure these metrics for both network and employees at a regional and switch level, U.S. Cellular deployed Alcatel-Lucent’s 9900 Wireless Network Guardian (WNG).
- The tool enables U.S. Cellular to perform traffic monitoring, network performance monitoring and behavioural analysis.
- Using probing technology, the tool monitors both the RAN and the IP core and performs real-time subscriber-level comparative traffic analysis between RAN and IP core.

Benefits

- Before Wireless Network Guardian was installed, the CSP used a disparate set of products that were not functionally built for the task at hand, increasing the cycle time to correlate issues and discover an issue. Within 2 weeks of using the WNG, U.S. Cellular was able to gather significant amounts of useful traffic data that had not been possible earlier.
- Even though U.S. Cellular is not able to quantify the benefits of using rich network data, the qualitative benefits are clear. Post implementation, U.S. Cellular’s customer satisfaction ratings have gone up, because of improved call quality. Customer survey ratings such as the one published by JD Power show that the tool is helping U.S. Cellular to shorten the time it takes to respond to issues and be more proactive.
Use case: Vodacom uses Genesys Social Engagement Software to manage growing social media presence

Problem statement
- In delivering a social media strategy, Vodacom found that many interactions required prompt responses on issues that were outside its area of expertise. As a temporary solution, the customer services team created manual service requests for each social media posting and routed them to the appropriately skilled people.
- With a rapidly growing social media customer base, Vodacom needed to automate its responses to social media interactions.

Implementation approach
- Vodacom viewed the social media as just another channel, but real-time reporting and skills-based routing apply as they do to other channels. A posting on a website is only part of a customer interaction. The CSP realised the need for an integrated approach to handling all interactions. The key requirement for the social media monitoring solution was the ability to apply uniform routing, reporting and management across all channels.
- Specifically, the CSP wanted to integrate social media interactions with skills-based routing, case classification, escalation rules to manage SLAs, reporting and business intelligence.
- Vodacom already uses the Genesys Customer Interaction Management (CIM) platform in its established contact centres to handle more than 16 million calls per month.
- Extending this relationship, it deployed Genesys Social Engagement, which offers out-of-the-box integration with Genesys CIM, and Facebook and Twitter, Vodacom’s primary social media channels.
- Vodacom now maintains a universal queuing strategy, with a single view of the customer and consistency across channels, including social media.

Benefits
- Real-time visibility of customer interactions across touchpoints, with the ability to move interactions started on Twitter or Facebook to other channels. For example, an agent can offer a web call-back for an interaction started on Facebook, or directly email the customer, without losing context or data.
- Improved efficiency in responding to social media queries with consistent business rules applied to social media interactions and the ability to use blended agents for social media interactions.
- Expanded choice of channels for customers and better scalability for a growing social media presence.
Use case: TDC (an MVNO) in Denmark gains a unified view of the service usage and profitability of its fixed–mobile business customers

Problem statement

- TDC needed to better understand and manage the performance and usage of services in order to improve customer experience. Additionally, it wanted to optimise the business performance to ensure customer profitability across the fixed–mobile converged solution.
- TDC wanted to monitor service quality and proactively avoid churn because business customer churn can potentially reduce total revenue by several percent.

Implementation approach

- TDC wanted to link usage of its different services to a single profile of the customer. Its aim was to deliver a unified view of its business by combining product, billing, traffic and customer data, enabling the performance measurement of the delivered business services by customer. TDC wanted to deploy a single OSS reporting system to achieve this.
- TDC chose an adjunct OSS system – Aito Technologies’ Customer Experience Analytics commercial software platform. The expectation was to gain near real-time visibility and control of the business at a customer level. Other vendors deployed the network DPI probes.
- Aito combined data from TDC’s CRM, billing and network management systems – covering tickets, prices, traffic data, handsets, fault codes, locations and customer data – and produced a holistic unified data model.
- The solution provides regular unified reports for all business lines to senior management, sales and marketing, delivery, finance, legal and product management departments within TDC. These automated reports provide detailed information about customers’ behaviour and their product and service usage – including top customers, revenue, profitability, volumes, service levels and service reliability.

Benefits

- Improved profitability from being able to manage the business more efficiently as a result of instant access to key business indicators. TDC can optimise packaging, tariffs and pricing based on actual service consumption and revenue.
- Cost savings and improved operational efficiency with access to information that was not freely available before; using Aito CEA has significantly reduced requests for bespoke and ad-hoc reports from across the organisation.
- By delivering the reporting data via its customer portal, TDC is able to provide service-level reporting for mobile customers as a value-added service, TDC has increased customer satisfaction and reduced churn.
Use case: EITC (du) uses ‘emotional signature’ to better understand the causes of low NPS

Problem statement
- du had experienced a decline in its NPS during a period of 9 months. It wanted to discover and analyse the underlying causes of this decline.
- As part of this analysis, du found that customers are increasingly using the Internet to plan their purchases. Customers preferred web chat to the mobile phone channel, because the former solution puts the customer in control. du found that customers are increasingly less loyal as the availability of information improves.

Implementation approach
- While NPS is a good measurement tool, it does not expose the causes of a low score. du looked at its customers’ emotional engagement – ‘emotional signature’ – to uncover the rational and emotional drivers of the experience, and the conscious and unconscious drivers of value.
- du implemented a new customer experience strategy based on seven key aspects.
  - Putting customers at the core of its business strategy.
  - Defining four pillars for its ‘customer delight’ vision: fresh, simple, personal and helpful. du mapped out the customer journeys for the entire customer lifecycle.
  - Transforming its employee culture into one of innovation centred around customer experience. du rolled out an enterprise-wide social networking platform based on Yammer, which enabled employees to collaborate on improving the customer experience.
  - Cultivating design thinking in the organisation – new workspaces and design studios for better collaboration and changing mindsets.
  - Transforming processes and systems – flexible customer processes, as well new technology investments in operational excellence, customer interaction excellence and effective decision making.
  - Aligning digital strategy with all stages of customer journeys.
  - Adopting robust KPI measurement techniques. Customer experience metrics were built into the bonuses of senior management.
Use case: Belgacom uses a robust change management programme to deliver a better customer experience

Problem statement

- Belgacom was formed by the merger of several companies including Telindus. The combined entity was not able to provide a consistent customer experience because of the challenges it faced in integrating the workforces and business processes. As a result, its NPS gradually declined.

Implementation approach

- Belgacom embarked on a company-wide transformation programme to achieve its CEM objectives.
- It set out three key messages – Belgacom would provide its customers with a ‘premium product experience’ in a ‘friendly’ and a ‘simple’ way.
  - The premium product experience would be innovative, stable and available all the time, and would have user experience at its core.
  - Its employees would be always available, have a ‘friendly’ attitude towards its customers and offer fast service.
  - ‘Simple’ would be characterised by clear pricing, and products that are easy to install, configure and use.
- It launched the ‘Simple and Friendly’ programme in 2009. The key features were:
  - an endorsed long-term vision
  - active support from top management
  - a clearly structured plan on process, software systems and people
  - focus on engaging employees – embedding the customer experience in the culture of the organisation
  - communication with customers.
- New ‘simple and friendly’ customer journeys were defined along the touchpoints leading to significant simplification and the redesign of end-to-end processes.
- KPIs were built as a combination of internal and external scores on various operational metrics, which translated to personal objectives. Equal weight was given to the five pillars – Web; distribution; install and repair; usage; and customer service. Belgacom aims to embed customer experience metrics in the bonus KPIs of employees.
- A dashboard on the CSP’s intranet was used to communicate the performance figures on a monthly basis.
Use case: UPC cablecom improves NPS and reduces churn by improving operational processes at each customer touchpoint

**Problem statement**
- UPC was performing poorly on all KPIs such as first-contact resolution, customer satisfaction, NPS, churn and delivery time. Its inside-out approach had led it to overspend in operations with mediocre results while reducing sales, marketing and product management budgets. Its customer perception was at an all-time-low in 2009.

**Implementation approach**
- UPC instituted a new framework for improving customer experience with the following key components.
  - UPC employees, including senior management, to personally meet customers to solicit feedback and ideas for improvement.
  - Conduct surveys and focus group discussions on key topics.
  - Communicate effectively – internally with employees and externally with customers.
  - Develop structured and automated customer surveys and measurements.
  - Link KPIs to the bonus payments of all employees.
  - Celebrate success.

- UPC defined KPIs for each customer touchpoint in each stage of the customer lifecycle value chain. UPC defined these stages as: get attracted, buy, delivery, install, product use, get help and change, get invoiced and terminate.
- The KPIs were: first-contact resolution, long tail re-callers, customer satisfaction, call-centre touchpoint satisfaction, NPS, churn and delivery time.
- After every transaction, the company sent out text message questionnaires. In one such example, UPC sent out 1.6 million messages and received 200,000 responses.
- All KPIs were aggregated on a rolling 4-weekly basis and reported through a customer experience dashboard on a weekly basis.
- The dashboard was published to the entire company on a weekly basis and successes were externally communicated to the customers.
- During the 4-year period from 2009 and 2012, UPC improved in every KPI, and increased customer numbers.
Executive summary

Market drivers

Business environment

Use case studies

Vendor analysis

Recommendations

About the authors and Analysys Mason
Vendor rating criteria

- We have rated vendors according to the following ratings that are based on our analysis of commercial deployments, product portfolio and size of business.
  - **Leader** – Deployed in most Tier 1 and 2 CSPs in different regions of the world and recognised as a leader in our market share reports.
  - **Challenger** – Deployed in Tier 1 and 2 CSPs in only a few regions of the world and not recognised as a market leader in our market share reports.
  - **Niche** – Limited deployments in some regions of the world and still developing a channel to market in regions where it has no presence.
  - **New entrant** – Limited deployments and still building a market presence. Most companies have entered the market within the past 3 years.
  - **Not present** – Not aware of any commercial deployments.
## Vendor capabilities [1]

Table 3: Supplier rating of product and service expertise by software segment [Source: Analysys Mason, 2013]

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Order orchestration</th>
<th>Service activation</th>
<th>Quality of service</th>
<th>Flexible rating and charging</th>
<th>Customer self care</th>
<th>Workforce optimisation</th>
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**Key:** ○○○○○ = not present; ●○○○○ = new entrant; ●●○○○ = niche; ●●●○○ = challenger; ●●●●● = leader.
## Vendor capabilities [2]

Figure 23b: Supplier rating of product and service expertise by software segment [Source: Analysys Mason, 2013]

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Key: ○○○○○ = not present; ●○○○○ = new entrant; ●●○○○ = niche; ●●●○○ = challenger; ●●●●● = leader.
## Vendor capabilities [3]

Figure 23c: Supplier rating of product and service expertise by software segment [Source: Analysys Mason, 2013]

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Recommendations for CSPs

- CSPs should **understand the business outcomes of customer experience management** in specific areas of their business before investing.
  - For example, focusing on call-centre operational improvements and service monitoring can reduce customer churn by 50 basis points (0.5%).
- **Identify specific customer experience measurement points** in the join, on-board, and support phases and develop an implementation plan that achieves specific improvements in 3 months.
- **Correlate business outcomes** such as NPS and customer retention performance results with changes implemented with internal systems in the join, on-board and support phases.
- **Select suppliers that have demonstrated successful deployments** with clients that sell similar products and services.
- **Avoid putting too much weight on NPSs** and balance customer feedback with one-on-one interviews and other feedback techniques such as surveys sent via text message.
- **Increase lock-in.** Mobile CSPs can reduce churn by increasing the strength of their link to subscribers – for example, by encouraging take-up of service bundles, multi-device tariffs, group or family plans and lengthier contracts. This is probably the most straightforward strategy and the one with obvious appeal.
- **Increase customer satisfaction.** Poor customer care is often cited as a major cause of churn. Improving customer care can potentially reduce the direct costs of retention (device subsidies and tariff discounts) by 30–40% in comparison with price discounting alone.
- **Introduce reward schemes.** Schemes such as top-up rewards, and points-based and event-based offers have a part to play in reducing churn, although imitation offers from competing CSPs dilute their impact.
Executive summary

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About the authors and Analysys Mason
About the authors

Patrick Kelly (Research Director) sets the direction for Analysys Mason’s Telecoms Software research stream, which focuses on identifying the rapidly growing segments in the telecoms software market and providing forecast and market share data by region and service type. He has produced research on policy management, cloud computing, LTE and mobile backhaul, IP next-generation service assurance, and customer experience management. Patrick is a frequent speaker at industry and user group conferences. He holds a BSc from the University of Vermont, and an MBA from Plymouth College.

Anil Rao (Analyst) is a member of Analysys Mason’s Telecoms Software research team, focusing on the Service Assurance, Infrastructure Solutions, Service Delivery Platforms and Telecoms Software Strategies programmes. He has more than 10 years’ experience in the telecoms industry, working in systems integration and service delivery with major Tier 1 mobile and fixed-line operators, and independent software vendors. Anil joined Analysys Mason in early 2012. He holds a BEng in Computer Science from the University of Mysore, and an MBA from Lancaster University Management School.
About Analysys Mason

Knowing what’s going on is one thing. Understanding how to take advantage of events is quite another. Our ability to understand the complex workings of telecoms, media and technology (TMT) industries and draw practical conclusions, based on the specialist knowledge of our people, is what sets Analysys Mason apart. We deliver our key services via two channels: consulting and research.

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Alongside our standardised suite of research programmes, our Custom Research team undertakes specialised, bespoke research projects for clients. The dedicated team offers tailored investigations and answers complex questions on markets, competitors and services with customised industry intelligence and insights.

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