

Technology, Media & Telecommunications

Winning in telecom CX

Digital natives have redefined customer expectations. With a customer led, customer experience transformation, incumbent telcos can rise to the challenge.

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This is a critical moment for the global telecom industry. With the rise of 5G networks, coverage and speed are increasing rapidly in all markets. It is becoming extremely difficult for operators to differentiate, leading to the commoditization of connectivity, fierce competition, and eroding margins. Against this backdrop, customer experience (CX) is emerging as the primary competitive differentiator.

Digital natives like Amazon, Apple, Netflix, and Uber have redefined customer expectations by offering simple, intuitive, and personalized interactions, leading to impressive customer experience ratings. While telco customers are also using digital channels far more often than they did pre-pandemic, they frequently find themselves disappointed by the experience.

Telcos' failure to deliver excellent digital service hurts their bottom lines in multiple ways, most significantly through customer acquisition and retention. Across sectors, a majority of online customers abandon their shopping carts if the checkout process is too difficult or time-consuming.

Critically, improving customer experience is not simply about retooling front-end digital service. To meet the demands of the moment and be well-positioned for the future, telcos should ensure the transformation changes every part of the customer experience and delivery, from the front to the back of the organization, with an eye toward true customer-centricity. In a previous perspective, a McKinsey team described the elements of CX reinvention, including formulating design principles and capabilities in line with CX ambitions (aspire), translating these into an actionable CX blueprint (architect), and bringing the redesigned organization to life through systematic change management and an effective day-to-day operating model (act).¹ This article focuses on the latter two elements for telco operators wanting to break from the pack and win in CX.

Creating the “wow moments” needed to win

Traditionally, telcos have sought to improve CX through reactive interventions. They have used data to conduct research on customer experience, then assessed that data and adjusted their approach over time, with the goal of reducing customers' call frequency.

Next-generation CX replaces this slow and reactive approach with one that is simple, predictive, and proactive in order to create genuine service differentiation.² This involves combining customer, operational, and network data to create highly personalized, relevant experiences in real time. By using data to predict customers' needs, operators can proactively address issues and create exceptional “wow moments” across all channels and at each step of the customer journey, offering the same quality of experiences as digital natives.

Underpinning this change is a new level of data-led insights powered by advanced analytics (AA) and AI (see sidebar “Feeding the telecom CX predictive engine”). While operators may already collect many forms of data, much of it is underutilized or fragmented. What has been used has been largely focused on sales and retention, rather than holistic CX improvement, meaning a substantial amount of CX value is not being realized.

With enhanced data and advanced analytics, operators can anticipate looming problems and intervene to prevent them. Operators can identify and address problems remotely, before the customer has noticed, and communicate using the quickest, most efficient channel. For example, smart modems detecting intermittent home WiFi can trigger an in-app message that either directs a customer to a 60-second self-help video or offers a scheduled call-back from a support technician, and all of this can occur before the customer has even noticed the spotty service. Experiences like these can make customers feel well cared for and

¹ Oliver Ehrlich, Harald Fanderl, David Malfara, and Divya Mittagunta, “How the operating model can unlock the full power of customer experience,” McKinsey, June 28, 2022.

² Varun Atre, Julian Raabe, Tim Schenk, and Rohit Sood, “Simple, predictive, proactive, responsive: The future of customer operations,” December 7, 2020, McKinsey.

Feeding the telecom CX predictive engine

To enable the predictive and proactive support that is critical for next-generation telecom CX success, an AA ‘brain’ uses a range of data inputs to create new insights about the customer. Those inputs include the following:

- **Customer demographics**
 - Age, address, occupation
- **Household lines and products**
 - Lines, products, contracts, service history (incl. trouble tickets/faults)
- **Billing data**
 - Monthly bill, size/frequency of top ups, people-sharing products, acquisition cost
- **Engagement data**
 - Marketing history, call center data, browsing activity
- **Usage data**
 - Consumption of voice / data / SMS / TV / VAS (Value added service)
 - Split by time, direction, source, cluster
- **Advanced data**
 - Geospatial displacements, off-site browsing data, friend circle behaviors
- **Network and device data**
 - Site registries, network performance, device performance, CX, connection fails, upcoming maintenance tasks
- **Current channel performance**
 - Opex by channel, CSAT (Customer Satisfaction) by channel, volumes by channel

increase retention, especially at critical moments like soon after onboarding or near contract renewals.

This data-led approach also enables operators to identify and address small issues before they grow into larger problems. For example, small dropouts on a street, identified in network data patterns, may lead an operator to proactively resolve the small faults before more customers are affected. This minimizes both engineer callouts and CX damage.

In cases where predictive and proactive service is not possible, and the customer does need to initiate

contact, the same data can be leveraged to create a “white glove” responsive service experience. Well-equipped agents in assisted channels, as well as chatbots and banners in digital channels, can leverage all available data to personalize and expedite customer resolution based on a deep understanding of the customer’s needs. This enables better first-call resolution (FCR) rates and reduces the number of times customers must be transferred between departments. Critically, this outcome requires upskilling service teams and moving away from a “widget mindset” towards a “service first mindset” that also improves employee engagement.

Two pathways to simple, predictive, proactive customer service

Globally, we see two different approaches to embedding more customer-centricity: embarking on an end-to-end transformation to improve each customer experience and interaction, and launching a digital native subsidiary to quickly drive CX improvement, often under a new brand. The decision to choose one approach over the other can be influenced by a range of internal and external factors, including the competitive landscape, impact on customer value and promise, and IT stack flexibility.

The good news is that both strategies—with the right conditions, methodologies, and focus—can lead to success, with multiple benefits to customer experience, cost, and risk reduction. Both strategies require a deliberate focus on creating simple, predictive, and proactive customer interactions to enable these trifold benefits.

In a previous perspective, we explored the digital native approach in depth, detailing best practices for building for simplicity from products and journeys to operations and a state-of-the-art IT stack.³ In this piece we explore the end-to-end, service delivery-focused transformation approach. While this is a more complex path, it also has the potential to capture the greatest value.

Ingredients for success

There are four key ingredients for successful customer-led CX transformation:

1. End-to-end redesign of service delivery
2. New business insights enabled by data, analytics, and AI
3. Refined commercial model to capture new CX-generated value
4. Broad cultural transformation and investment in frontline CX capabilities

1. End-to-end redesign of service delivery

A truly end-to-end approach to customer journey transformation is a significant pivot for many incumbent telco operators. Telcos commonly focus CX efforts either on optimizing a customer-friendly front end, or on digitizing the back end. However, they rarely naturally link the two effectively, because many things can “get in the way.” To create an entirely customer-centric organization, these journeys must be enhanced end to end—leveraging data and analytics to identify and eliminate customer pain points and create an experience that meets the promise of simple, predictive, and proactive CX. End-to-end, customer-led CX transformation encompasses all customer-facing, back-office, and support functions, engaging each to orient the organization toward a customer-first mindset.

A US operator realized the upside of this comprehensive approach. It was losing half a million subscribers each quarter, which prompted its new CEO to launch an end-to-end, customer-led transformation focused on predictive CX. The operator examined its entire organization to identify customer pain points, then introduced radically simplified offerings, network improvements, and pervasive cultural shifts that put customers front and center. Within several years, the operator went from customer service laggard to CX leader, with best-in-class churn rates.

One European telco had a similar experience. It was suffering from widespread customer dissatisfaction with the broadband installation process, resulting in increased service cancellations. Its average call rate of 0.6 calls per customer per month was far more than the industry average. This came at an enormous financial expense to the company and compounded the CX problem, as call center inquiries often end in frustration. After launching several pilot projects to identify the optimal installation process, the telco embarked on an end-to-end process of reinvention for customer journeys. With a single, cross-functional team having full ownership of this end-to-end customer journey,

³ “A battle plan for telcos’ digital-attacker brands,” March 7, 2021, McKinsey.

employees were empowered to resolve the full range of issues by leveraging the best combination of data and analytics to create an enhanced experience across all channels.

2. New business insights enabled by data, analytics, and AI

End-to-end CX transformation also requires creating a comprehensive, integrated data lake. Using this data, operators can create a series of “propensity models” to determine which individual customers are likely to call (or be so frustrated they don’t even call) in reaction to an incident affecting that single customer or the whole network. Operators can conduct thorough root cause analyses to fully understand the whos, whens, and whys around these calls.

By using advanced analytics to identify customers who are likely to report certain issues, telcos can shift their operating models towards resolving certain issues predictively, before the customer reports or even notices them, and others proactively, by reaching out to customers before they call to complain.

The predictive engine also gives the operator valuable insights into its own operations, as anything discovered for predictive or proactive work can be then synced into reactive channels. In one example, call center agents equipped with this information did a better job informing and assisting customers.

Embedding advanced analytics throughout an organization is time-consuming, but it is possible to capture a series of meaningful, quick wins early in the process. Quick wins can immediately generate substantial savings, allowing the effort to become at least partially self-funding. They can also serve as proofs of concept, to convince the broader organization of the value of data and analytics.

For example, by using static analysis to define triggers correlated to poor CX, a portion of calls can be prevented and instead addressed through lower-cost, self-serve channels. A Polish operator went this route, proactively targeting customers who were likely to experience a bill shock, based on real-time triggers and a simple extrapolation

of data usage early in the billing cycle. The telco also started proactively targeting customers who had just received unusually high bills. Customers likely to experience bill shock received one of three types of text, based on a series of simple flags connected to their accounts:

- Multiple warnings about potential data over-usage with hints on how to lower daily consumption (at 50 percent, 80 percent, and 95 percent of data allowance used)
- Offer to upgrade data package to prevent extra charges
- Offer with a roaming package after landing in a new location

Those already reeling from bill shock received one of two types of text:

- Offer to upgrade data package without extra charge from previous cycle, with one click
- Offer of a call-back from a call center agent, to explain the situation and discuss potential ways forward

These texts significantly decreased the number of inbound interactions related to bill shocks, increased shifts to higher priced packages, and, in the long term, lowered the churn risk within this customer segment.

Once propensity models are in place, the scope of predictive and proactive activities can be widened and assisted channels can be added to the mix. For customers in the top unit of predictions, outbound calls are often justified. For instance, one European operator drew on advanced analytics to predict and anticipate customer concerns specifically related to broadband issues. New rapid diagnostics tools quickly identified the root causes of connectivity problems, and customers were alerted to self-serve options allowing them to resolve problems with a few clicks and swipes.

Because all relevant information was flowing freely among the involved parties (including customers,

call center agents, and technicians), problems were resolved more effectively. Within six months of the first successful pilots of proactive and preventive interventions, customer satisfaction scores rose 15 points and churn fell 40 percent. These gains were even more pronounced among new customers in their first month after product activation. Nowadays, around 40 percent of all fixed broadband technician appointments are booked in a fully automated way, with no agent interaction.

3. Refined commercial model to capture new CX-generated value

Historically, some operators have prioritized financial investment based on easier to quantify metrics such as weighted average cost of capital (WACC) and return on investment (ROI) rather than CX, which can be relatively difficult to link clearly to top-line growth or cost prevention.

End-to-end CX transformation requires changing this mindset based on clear assessment of both long-term and short-term benefits, and refining commercial models accordingly. Ultimately, predictive customer experience and return on investment should be mutually reinforcing, making

the portfolio of initiatives designed to drive customer experience largely self-funding.

Confusion matrix-based analysis is useful when evaluating decisions around proactive and predictive customer care. By examining recall, precision, and accuracy rates, operators can optimize their customer segmentation for proactive versus reactive treatment, while minimizing cost to serve (see sidebar “Determining which customers can benefit from proactive service”).

Using advanced analytics, operators can calculate customer lifetime value (CLV) and use this as a basis for decision-making. CLV takes into account the mid-to long-term value that each customer generates for the business, combining a) longevity, b) revenues generated by specific telco services, and c) cost to serve.

CLV modelling enables rich scenario planning by assessing how certain actions and events impact customer value for each individual customer in the long run. This approach allows operators to quantify the value from such non-commercial events and prioritize those actions, holistically generating

Determining which customers can benefit from proactive service

A confusion matrix, visualized as a table with four different combinations of predicted and actual values, is a useful construct for determining whether customers should be approached proactively with an outbound call. Iterative tuning of the model parameters improves predictive power over time.

- True positive: Model prediction was accurate. An inbound call was correctly expected, and proactive intervention made financial sense and improved customer experience.
- True negative: Model prediction was accurate. The customer did not call in, as predicted. No proactive intervention was made, resulting in a net-zero cost.
- False positive (type 1 error): Model prediction suggested an inbound call, which did not occur. Unnecessary cost was generated through a proactive intervention that did not pre-empt any inbound interactions.
- False negative (type 2 error): Model prediction suggested that an inbound call would not occur, but it did. This was a missed opportunity, as proactive intervention could have prevented the call and been more cost effective.

maximum uplift in value and user experience. Ultimately, the goal is to bring sales and service recommendations together, forming one always-on “next best action engine.”

This allows for constant CLV optimization: operators can delay upselling and cross-selling activities until after value-destroying service issues are resolved, while also knowing which customers do not need such proactive care. This is only possible when the decision-making engine knows exactly who needs to be contacted, how, and when; leveraging all household-level insights, channel preference predictions, and reach rate optimization models. The most advanced global players are currently entering this level of sales and service interaction.

4. Broad cultural transformation and investment in frontline CX capabilities

Cultural transformation is an underpinning of end-to-end customer journey redesign. To truly create “wow moments” for customers, cross-functional teams with a variety of skill sets must work in sync. Customers must be recognized across multiple channels, any necessary handoffs must be as seamless as possible, and decision-making should be agile and responsive.

While many telcos have started experimenting with pockets of agility and cross-functional teams, these practices are still not the industry-wide norm. Breaking beyond business unit silos remains a substantial challenge for operators, but enhanced transparency and dissemination of customer experience outcomes (predicted and actual) across all departments can accelerate cultural change.

To achieve success, squad members should focus on driving the vision by seeking to create value and to learn as much as possible through rapid, iterative deployments. To be effective, squad members must be free to act within clear boundaries and be rewarded for results. This requires a broader cultural shift, away from a mindset that values risk-averse,

safe, and protocol-driven habits and toward one that prioritizes innovation, courage, and a willingness to take on challenges. Team members’ incentives must be aligned through clearly defined targets and refreshed on a regular basis.

Budgeting processes should be updated to reflect these new ways of working. In agile delivery, it is common to fix time and budget and prioritize granular scope packages within these fixed limits. In accordance with this, telcos would budget tribes, rather than projects or epics. Tribes’ Quarterly Business Review memos would track strategy and progress, reflect on what has been done in the past quarter, outline the direction for the next quarter, and elaborate on key dependencies with other tribes or units.

Cultural transformation requires a different approach to talent. Employees should be well-rounded professionals. They should be able to creatively problem solve and innovate, adapt to changing technologies, and bring a broader range of expertise. Of course, such talent is difficult to find, recruit, and retain, particularly in the current environment. However, fostering a healthy culture within a flat organization built on empowerment, encouraging an entrepreneurial mindset, and delegating decision-making to an operative level are important first steps toward success.

As operators seek to meet customer expectations that have been thoroughly redefined by digital natives, we believe they will capture the most value by embarking on a full, end-to-end customer-led CX transformation. This is an ambitious task, requiring a transformation of service delivery; new business insights enabled by data, analytics, and AI; a commercial model capturing the value generated by improved CX; and meaningful cultural change. While this may not always be easy, it is worth the effort.

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