The future of CSPs' digital experience: mobile apps, virtual assistants and augmented reality

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Communications service providers' (CSPs') focus on customer experience and digital engagement has risen sharply over the past decade, driven by changing customer behaviour and the need to reduce support costs, as well as for competitive reasons. Digital customer experience was a priority that many CSPs chose to address before transforming other functional systems, even before the COVID-19 pandemic. However, CSPs often overlooked their customer engagement systems in the past and instead directed investments towards improving network coverage and monetisation. The result is a collection of legacy systems that inhibit CSPs' support of new, digital engagement models.

An important part of CSPs' strategy to enable a truly modern digital experience lies in transforming these legacy customer engagement systems; this calls for an extensive process redesign and a radical overhaul of the traditional approach to data science to make provisions for machine learning and artificial intelligence.

In the next decade, CSPs will move away from disparate monolithic stacks that delay the time to market, and towards cloud-based delivery models that are cheaper to deploy and encourage experimentation with different engagement models. Leading CSPs in many markets are already making this move. CSPs' spending on software-as-a-service (SaaS)-based customer engagement solutions is expected to grow at a CAGR of 12% between 2018 and 2022, while their spending on virtual assistant solutions is expected to increase at a CAGR of more than 42% during the same period.

CSPs that are prepared to make extensive changes to their legacy process and systems frameworks will be well-positioned to take advantage of the 'new digital normal' in the medium term. We therefore believe that CSPs should:

- prioritise investments in the design and development of a mobile app that can become the central hub for all future customer engagement
- develop virtual assistant technologies because these are set to become an important channel for engagement in the medium term, especially with the younger demographic
- plan for augmented reality (AR)-based experiences, which will become important for care and engagement.
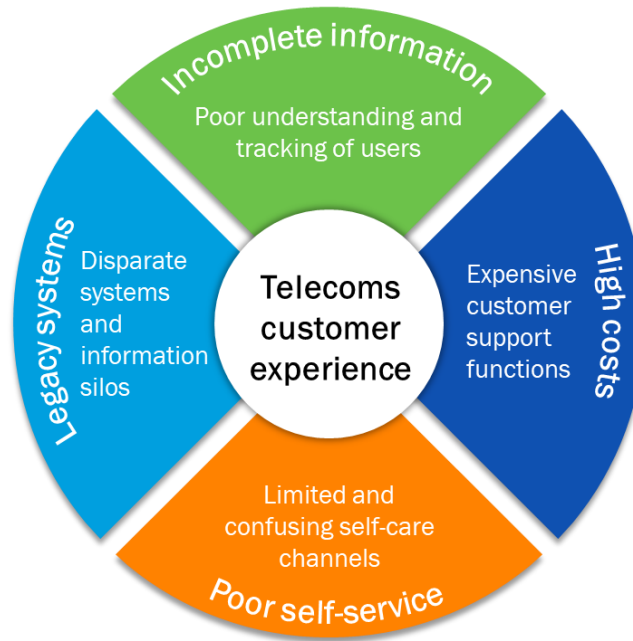
Customer experience is limited by past investments and requires an extensive overhaul

Customer engagement and experience were not considered important issues as recently as the mid-to-late 2000s, because most CSPs were focused on network capacity, coverage and monetisation. This was partly because CSPs were still in a growth phase and network quality was considered to be the most important (if not the only) differentiator. However, CSPs' approach to customer service began to shift in the 2010s as growth in the number of mobile subscribers tapered off and the penetration of mobile services exceeded 100% in some regions. At the same time, the business environment was transformed due to increased competition from digital-native companies and OTT providers, which affected traditional CSPs' revenue. Most importantly, customers'

behaviour and expectations underwent a dramatic change, partly thanks to customers' experience of engaging digitally with digital-native companies.

Customer experience is now a strategic priority for most CSPs, and it is a popular starting point for digital transformation projects. However, CSPs are considerably behind digital natives when it comes to offering seamless digital engagement, despite the increasing emphasis on customer experience. Figure 1 captures the primary factors that limit CSPs' ability to swiftly transform their customer experience.

Figure 1: The primary factors affecting customer experience in the telecoms industry
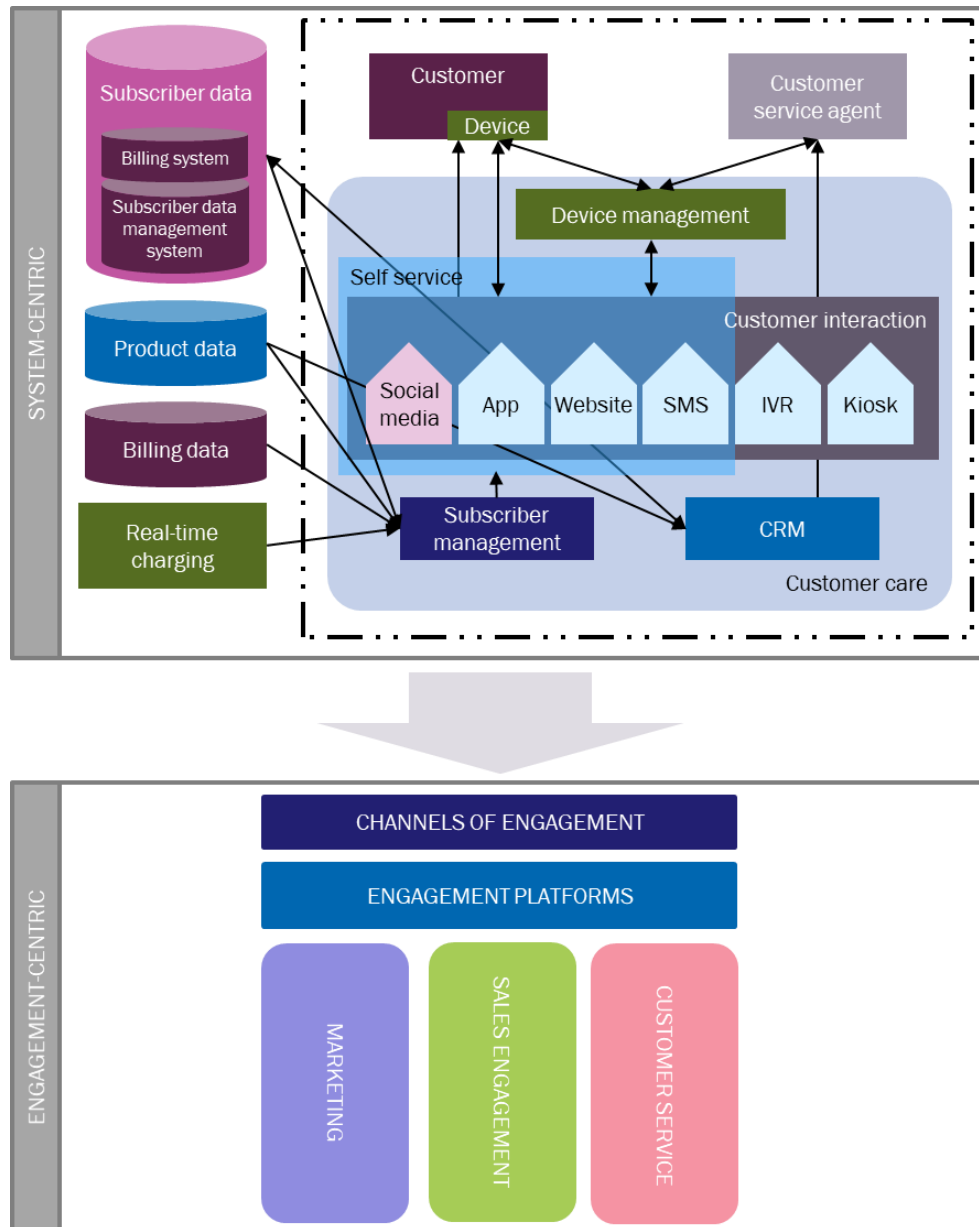

Source: Analysys Mason, 2020

CSPs' traditional models for engaging with their customers are under review because of changing operating environments. CSPs are responding to these changes by:

- moving from a system-centric approach to an engagement-centric approach (Figure 2)
- shifting to SaaS delivery models (our research shows that systems delivered using SaaS will account for over 25% of CSPs' spending on customer engagement by 2025)
- emphasising design-led engineering: CSPs should work to make the customer journey seamless and intuitive, and remove ambiguity and confusion from all interactions.

Figure 2: Overview of CSPs' shift from a systems-centric approach to an engagement-centric approach

Source: Analysys Mason, 2020

CSPs should focus on three key technologies to transform the customer experience

CSPs are expected to experiment with an array of digital engagement functions to transform the customer experience, but there are three key technologies that will make the biggest impact.

- **Mobile app.** The most successful digital industries have adopted a mobile-app-first approach to customer engagement. Recent consumer research data suggests that the time spent on the mobile app is a strong indicator of customer satisfaction. This means that CSPs should expand the capabilities of their apps to drive greater traffic and deeper engagement.

- **Virtual assistants.** Virtual assistants, such as voice bots, are a relatively new phenomenon, but they have made a profound impact on consumer preferences in recent years, primarily due to the growing popularity of Alexa, Google Assistant and Siri. The adoption of virtual assistants is set to increase over the next few years; this will help CSPs to drive deeper engagement, especially with the younger demographic. Virtual assistants are also quite cost-efficient and can be as much as 95% cheaper than having a live agent.

- **Augmented reality (AR).** In AR experiences, virtual images or objects are projected into the real environment to help consumers to visualise them in the real world. This leading-edge technology will take time to develop and apply, but it is set to be the next big trend in consumer digital experiences throughout the next decade.

CSPs' shift to fully digital engagement is a key factor in the digital transformations that account for one of the defining telecoms industry trends of this decade. Digital customer engagement is shifting from being an important concern to becoming a critical operations issue, now amplified by the COVID-19 pandemic. CSPs are already paying attention to digital transformation; now the key is to focus on the approaches that will have the greatest impact on success.[1]

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[1] This article has been extracted from Analysys Mason's whitepaper The future of telecoms customer experience: intelligent, personalised and data-driven.

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