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## Let's Get Digital: Enriching CX with Data Analytics

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The value of good CX has long been recognized, but nothing has sparked fundamental change in CX approaches as much as the COVID-19 pandemic. A shift to remote practices across all elements of society has permanently changed consumer behaviors and expectations, increasing their appetite for digital. So, not surprisingly, a recent survey conducted by [Capgemini](#) revealed that 41 percent of telcos claimed improving online customer experience is now their top priority.



Offering customers a seamless, intuitive online experience is essential for telcos looking to thrive in the digital era. Providing a personalized, flexible and convenient service that guarantees customer satisfaction is the goal for all service providers, but what technology should they adopt in order to make it a reality?

### Starting off on the right foot

Increased consumer demand for digital technology has forced companies to change how they connect with their customers to keep up with the market. Digital technologies that were once a temporary measure are now permanent features and technologies that were in their primary stages are becoming more familiar. [GSMA Intelligence](#) identified that although eSIM adoption increased throughout 2021, 2022 will be a year of more widespread usage; it's estimated that more than 500 million smartphone connections will use eSIMs globally by the end of this year.

Embedded SIMs, or eSIMs, improve digital customer onboarding by eliminating the need for a physical plastic SIM card. They take the network authentication credentials that have previously been held on the physical SIM card and download them to the mobile device via the Internet.

This facilitates a frictionless customer onboarding process, helping to improve CX right from the customer's first interaction with their service provider.

Implementing eSIM capabilities facilitates digital onboarding by completing everything from identity verification and subscription management right from the customer's device, without the need to visit a physical store or wait for a SIM card via the mail. eSIMs also offer greater service provider flexibility for customers. Because several subscriptions can be activated on one device simultaneously, customers can switch between providers as required. This feature is particularly useful for regular travelers, allowing them to change operators depending on their region without the frustrations of storing several plastic SIM cards and switching them manually.

## Diving deeper into eSIM choice

For operators looking to differentiate their digital CX, the benefits of adopting eSIMs are clear. eSIMs streamline the onboarding process, drastically cutting the time taken for customers to set up their subscription. But there's an additional choice that service providers need to make: QR code or in-app eSIM provisioning?

When the Global System for Mobile Communications Association (GSMA) first accepted the use of consumer eSIMs in 2016, its regulatory standards were based on provisioning eSIMs using QR codes. Using this method, customers scan the QR code onto their device to trigger eSIM activation. Although the QR code solution improves CX compared to physical SIM cards, it still presents CX challenges. Customers need two devices to complete the scanning process, which complicates eSIM activation for those on the move and requires more time and effort, creating unnecessary friction for customers.

There is another choice, however, which service providers looking for a frictionless CX should consider. In-app eSIM provisioning uses a very specific application programming interface (API) layer between the mobile app and the device to provision SIM credentials without the use of a QR code. This means that customers can activate their subscription in as little as 20 seconds with just one tap. The speed and simplicity for the customer when onboarding in this way means that in-app eSIM provisioning is the gold standard for telcos that value an enriched CX.

In an industry like telecoms where churn rates are higher than average, ensuring that this first interaction between the customer and their operator is positive is a key differentiator for telcos. And adopting a digital onboarding process, powered by eSIM technology, is an enabler of satisfaction.

## Valued, loyal customers

Enriching customer experience right from the beginning is important but maintaining a positive brand sentiment is essential. A survey conducted by [Accenture](#) revealed that 77 percent of telecoms customers are happy to switch to another operator at any point. As an industry, telecoms is not known for brand loyalty, so it's important for telcos to know how to use CX to retain their customers.

The answer lies in personalization. Customers want to feel like individuals that the brand they choose really understands, as opposed to just another number in a database. Service providers need to make their customers feel valued by knowing what they need and what they want. Personalization can be anything from custom offers to birthday messages or rewards based on customer usage patterns. But to do all of this, telcos need data.

Technology customers have always been concerned about how companies capture and use their data. The media is rife with reports of data privacy breaches and disastrous scenarios that have resulted in a customer's data falling into the wrong hands. And this isn't exclusive to telcos—all technology companies are battling the same resistance when it comes to acquiring customer data.

Perceptions of data usage, however, are changing as the public learns about how companies use their data in a positive way. The [Deloitte Digital Consumer Trends](#) survey revealed that the number of people concerned about how companies use their data fell by 50 percent between 2018 to 2020. And when we look at public attitudes toward data usage within the telecoms industry, consumer concern is even lower.

According to [a survey conducted by Formation](#), 81 percent of consumers will share basic personal information in exchange for a more personalized customer experience. The tides are turning, and consumers are more willing to share their data with telcos. With consumer cooperation on the rise, it's important for telcos to have the technology in place to get the most out of this data to enhance CX.

## Data, data, everywhere

Telcos have historically struggled to deliver personalization to their customers due to data inaccessibility. The quantity of data that telcos have access to isn't the problem. Data is abundant from systems that handle everything from billing to customer relationship management. But because these systems have developed independently, their data stores have accumulated in silos. So, collecting uniform data sets and creating actionable insights remain challenges.

Telcos have all the data they need to offer their customers a personalized service, but they struggle to bring everything together because of variations in data structure. More recently a new data management tool has become popular, known as a Customer Data Management (CDM) platform. CDM platforms aggregate all an organization's customer data to create a uniform, accurate and centralized view of the customer in one system that is responsible only for completing personalization activities.

## Unlocking value

Aggregating data into one system allows telcos to see all the information they have on their customers in one place—including internal data like customer profiles, billing data, call records, usage patterns and browsing history, as well as unstructured data from external sources like

customer social posts. Once this data has been gathered, telcos can run sophisticated machine learning (ML) algorithms to identify patterns that appear across their entire customer base.

Typically, six months of customer data is required for an ML engine to start making predictions but once acquired, it can be used to identify patterns in how customers behave. For example, if there is a certain behavior pattern that customers tend to make before leaving their service provider, ML can identify existing customers that are exhibiting that same behavior and are at risk of churning.

Identifying potential customer losses before they churn allows telcos to intersect and work to prevent the churn by triggering a set of actions, like a special offer, to uncertain customers. Artificial intelligence (AI) is used to rectify the solution in a timely way by sending a message to the customer advising them that they have earned an exclusive offer due to their previous loyalty, for example.

This enriches CX by offering a personalized predictive service. A recent [McKinsey report](#) revealed that 93 percent of businesses use surveys as their primary measure of CX performance but only six percent were confident in this method's efficacy. By using data in the right way, telcos can gain actionable insights into their customer base to better understand their needs, both on an individual level and collectively, to pre-empt problems in the customer journey. For CX, this is extremely beneficial, ensuring that telcos meet the needs of their customers and tend to their frustration before they become dealbreakers.

To deliver exceptional CX at every step of the customer journey, from onboarding to subscription management and troubleshooting, telcos should create a comprehensive technology stack with several microservices to integrate eSIM capabilities, ML and AI to offer their customers a tailored, unique experience. Telcos need a seamless CX to remain relevant in our increasingly digital world. Customers want it and technology can provide it, so it's time for telcos to deliver for the benefits to all.