
How Telkomsel transformed to reach digital-first consumers

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A 26-year-old telecom incumbent seized an opportunity to reinvent itself—and attract its next generation of customers.

By 2024, if all goes according to plan, a pair of submarine cables will connect the west coast of the United States with Indonesia for the first time. Built by Facebook with help from Google, the cables could boost data capacity to southeast Asia's largest economy by 70 percent.

The project, which is still subject to government approval, would be a boon to Indonesia's connected users, who are among the savviest in the region and beyond. Indonesians buying and selling goods and services online account for some \$32 billion annually, forming a sector that has emerged as a major driver of local manufacturing and jobs. Today, the nation comprises the fastest-growing population of smartphone users in the world.

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Telkomsel has been an engine of that growth. The world's seventh-largest mobile operator and the largest in Southeast Asia, the mobile-communications provider has been central to the creation of a sustainable, inclusive digital economy for Indonesia's nearly 200 million internet users. It has dramatically increased Indonesia's broadband access, helped small and medium-sized enterprises (SMEs) digitize, and led the nation's transition from 3G to 4G before becoming the first operator to launch 5G there in May 2021.

Telkomsel has long recognized the value of continuous innovation. When it looked to ensure its platform would remain the primary way its customers engage with the world—and win a new generation of customers—the 26-year-old incumbent decided to embark on a big, bold transformation.

A plan to transform

The move wouldn't be easy, but Telkomsel felt it had an obligation to its customers, who had come to rely on the provider's ability to meet their digital demands. So the organization called on a cross-functional team of data-domain experts from [QuantumBlack](#) and venture builders, designers, and strategy consultants from [Leap by McKinsey](#) to initiate a large-scale digital program aimed at reinventing the way customers experience Telkomsel in daily life.

As it laid its analytics foundation, Telkomsel knew it had to engage and strengthen its relevance with Indonesia's Gen Z, the country's second-largest consumer segment. The average data-hungry Gen Z consumer in Indonesia spends 8.5 hours a day on their phone, using it to digitally meet various lifestyle needs.

The program was built on three core pillars. Telkomsel wanted to build a new data analytics platform to better understand its customers and drive personalization; create and launch new businesses to reach underserved consumers; and launch a new digital channel that would streamline and simplify the way customers engage with Telkomsel's services.

Understanding customers

Telkomsel's leaders knew that providing customers with the best products and services would require putting data to smart use. The company developed new analytics capabilities that allowed it to enhance customers' experiences and start the journey toward hyper-personalizing its services.

Telkomsel began by building a new platform that contains more than 9,000 data points for each consumer, which was fully modular and reusable across business units. This gave the company a single, near-real-time view of customer behavior that could be used to improve experience across the entire consumer journey, from marketing and customer service to network operations, back-office support, and more.

The platform was supplemented by AI-driven tools to help better understand consumers' needs and priorities across thousands of customer microsegments.

They also moved from manual data uploads to automated data pipelines and quality checks, which improved data quality and speed, and enabled more accurate and faster decision-making.

The platform was supplemented by AI-driven tools to help better understand consumers' needs and priorities across thousands of customer microsegments. Every month, Telkomsel runs more than 50 analytical models, based on supervised and unsupervised machine learning techniques, to identify the right way to interact with their customers and offer them propositions that are most relevant to them.

The move toward hyper-personalization has allowed Telkomsel to better tailor their offers for customers. Today, these services and offerings already account for 50 percent of the telco's overall revenues.

Launching new businesses

As it laid its analytics foundation, Telkomsel moved to engage and strengthen its relevance with new consumer segments. For instance, the company needed to enhance its relevance to those underserved by traditional home broadband infrastructure. They also wanted to reach Indonesia's Gen Z, the country's second-largest consumer audience, which spends [8.5 hours a day on their phone](#) to digitally meet various lifestyle needs.

In order to move at their desired speed, Telkomsel would need to launch new brands and value propositions, which would require them to embrace a different culture, agile ways of working, and a fit-for-purpose technological stack through new business-building. In the end, they launched two new brands.

Orbit: Expanding connectivity for underserved segments

Designed for simplicity and efficiency, Orbit offers data packages without long-term subscriptions, creating more economic flexibility.

Even as Indonesia rapidly digitized, fixed broadband access was not uniform, with just 15 percent of households using it to get online. To provide wireless connectivity to those who lacked fixed broadband, Telkomsel built and launched a new business called Orbit, which provides customers with a home router that uses 4G mobile cellular services instead of fiber optics.

Designed for simplicity and efficiency, Orbit offers data packages without long-term subscriptions, creating more economic flexibility. It includes a mobile app to check usage, top up on data, and manage router settings, such as parental controls.

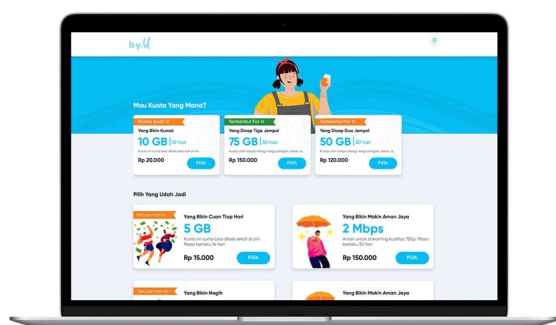
Orbit has doubled its one-year customer acquisition goal, with more than 35 percent of customers joining from its referral program, a testament to its popularity and market demand. Today, Orbit is seeing 20 percent month-over-month growth.

By.U: Reaching Generation Z

Fifteen months after launch, by.U had nearly 2 million subscribers, was delivering increased customer satisfaction, and had a market-leading net-promotor score.

Telkomsel didn't have the kind of brand association among the digital natives it wanted to serve and delight. A cross-functional team of product managers, customer design experts and venture builders developed, built, and launched by.U, an all-digital telco experience. The platform allows users to select a pre-paid SIM card that arrives at their doorstep, activate their number remotely, manage top-ups and quotas, make payments, and more.

By.U was built at pace. The team created a series of social-media tests to observe click-through rates on certain features, which allowed the team to develop and tune the minimum-viable product quickly. When Telkomsel beta-launched the brand, they quickly had 30,000 customers join the waitlist.



A look at by.U, which reached its one-year customer acquisition goal in six months.

The brand reached its one-year customer acquisition goal in half that time. Fifteen months after launch, by.U had nearly 2 million subscribers, was delivering increased customer satisfaction, and had a market-leading net-promotor score. And to help ensure innovation continued post-launch, the by.U team established an agile-organization structure.

Simplifying and enhancing engagement

The app has 24 million monthly active users (MAU), a tenfold increase over the previous app.

The goal of Telkomsel's third pillar could be simply stated: to make customers' interactions with the company as seamless, convenient, and personalized as possible. But it was complicated to achieve.



All aboard: Recruiting digital talent to sustain innovation

Telkomsel knew that technology was only one part of the transformation equation. Without the right skills and talent in place, no data or digital platform—no matter how powerful—would perform to potential or withstand technological evolution. They also saw the potential in this partnership to help cultivate digital skills in Indonesia's workforce, strengthening a commitment to building a center of excellence for Indonesian digital talent.

They launched a new, agile recruitment process to attract, onboard, and train 40+ of Indonesia's strong digital talent across data science, software engineering, product ownership and UX design.

This entailed a whole new talent management approach – reinventing employer branding, carving out career paths for new profiles like data engineers and translators, and establishing an in-house academy for upskilling existing analytics professionals.

Over the course of several months, Telkomsel hired candidates across 12 newly created digital and data analytics roles, and set up seven cross-functional agile squads to catalyze the adoption of new ways of working. The end-product was a data management platform and new businesses - made in Indonesia, for Indonesians, by Indonesians.

Customer experience around digital payments became seamless, while an ecosystem with digital-retail partners let Telkomsel

Customers redeem loyalty points for products. Elsewhere, gamification mechanics allowed customers to earn badges that qualified them for free data allowances. The app also enabled access to new digital services, including video and gaming, and easier access to e-payment options through services like LinkAja, GoPay, OVO, Dana, and ShopeePay.

Inside the company, its most enduring returns may also be among its least tangible. An emerging culture of innovation and agility; new capabilities and competencies; a new confidence in taking bold leaps through new ventures; and a commitment to long-term, sustainable transformation.

All of this meant serving customers in more dynamic, exciting, and tailored ways. Today the app has 24 million monthly active users (MAU), a tenfold increase over the previous app.

Such traits, for example, enabled Telkomsel to help its customers through COVID-19. They quickly ensured their customers had fully-remote, digital services at their fingertips, and they were able to offer new packages that were tailored to what their customers needed and could afford at any given time.

What this means for customers

The telco industry is essential to our modern economies, enabling nearly every facet of remote connectivity, from online meetings to e-commerce to telehealth. It's a sector in which it can feel like there's little room for failure—and perhaps not always enough room for innovation.

Telkomsel's story is proof that innovation is not just valuable but critical; and that it can pay off when an organization commits to transformation at every level. Its digital journey has touched the lives of hundreds of millions of Indonesians, through personalization at-scale to enhance the experience of all its customers, new brands tailored to its digital-first users, and a new app that adds convenience to customers' daily lives.