WHITEPAPER

Beyond connectivity: diversifying revenues with non-telco partners

Published by

MOBILE WORLD LIVE

In partnership with

CIRCLES

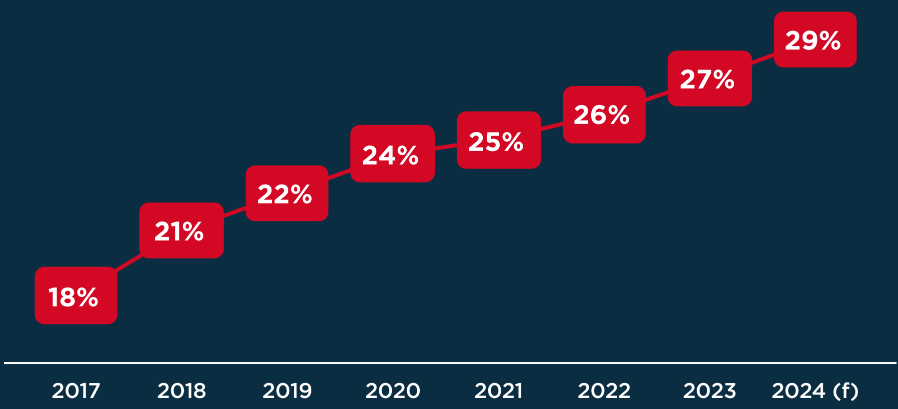
Prologue

Operator revenue growth and innovation strategies are continuously evolving to counter the slow growth environment and move to a more diversified topline. A number of major operators have adjusted their growth strategies to facilitate their transformation from traditional telecommunication companies to digital telcos, sometimes called techcos. This transition involves offering an increasing and diverse array of digital services for both B2B and B2C sectors.

While these individual services may generate lower revenues compared to connectivity—the average non-core contribution is now 27% across the largest tier 1 telcos—the move is important to generate ROI on 5G investments and, in particular, to support competition for enterprise business. There is also a clear rationale to diversify on the consumer side. Telcos that have long depended on **connectivity** as their core revenue driver have expanded into **embedded connectivity**, integrating network access directly into devices, vehicles, and industrial applications to create seamless, always-on solutions.

While this has unlocked new enterprise and IoT opportunities, it is not enough. Connectivity—whether traditional or embedded—faces pricing pressures and commoditization over time, limiting long-term growth potential. To sustain profitability and differentiation, telcos must push beyond embedded connectivity into higher-value services, such as AI-driven automation, network-based security, and end-to-end digital ecosystems that leverage 5G, cloud, and edge computing. The ability to monetize these advanced capabilities will determine their success in capturing new revenue streams and enhancing customer lifetime value in an increasingly competitive market.

Telcos make around 25-30% of their revenue in services beyond core connectivity



Source: GSMA Intelligence based on company reporting

The revenue diversification efforts are expected to progress, creating opportunities for partnerships with network vendors, systems integrators, and hyperscalers. The increased use of advanced AI offers further capabilities to the service strategy. In the B2C sector, cloud/mobile gaming, extended reality (XR), and fintech are anticipated to continue growing. The connection between innovation in connectivity, devices, and digital services is likely to strengthen, considering that mobile devices are a major platform for consuming entertainment content and digital services.

Network APIs and developer partnerships for their monetisation are also important. The Open Gateway initiative has now secured support from 75% of operators covering 75% of telco sector market share. Notably, China and the Asia-Pacific region represent the largest concentration. Market activity in Southeast Asia indicates a network effect at play: the acknowledgment that regional business success with APIs relies on developers having access to a larger platform to monetise across their end customers.

Moving beyond connectivity

So you want to be a techco

The recent wave of telcos looking to transform themselves into techcos is actually a variation on a familiar theme in the mobile world for some time now: telcos need to expand revenue opportunities beyond the traditional connectivity model. The rise and success of OTT apps has pointedly demonstrated that digital services are the way forward.

This, in turn, requires telcos to undergo digital transformation themselves to become as agile and flexible as the digital apps leveraging their platforms. In other words, making the transition from telco to techco requires an infrastructure and IT setup that enables fast innovation at scale, with a sustainable cost structure.

This also requires a highly-tuned customer-centric mindset that enables techcos to engage and delight customers with stickier services that encourage new subscribers to join and existing subscribers to stay.

Simply put, the ideal techco goes beyond being just a telecom service provider—it evolves into a lifestyle brand, seamlessly integrating into people's daily lives with offerings across financial services, entertainment, gaming, shopping, and travel.

Competitive differentiation

Connectivity has long been the foundation of the mobile network industry, and in many ways, it still is — every cutting-edge app, service, and digital platform we rely on today would be useless without a network to power it. However, while connectivity remains the backbone of the mobile ecosystem, its value as a revenue driver has diminished over time.

Over the years, connectivity has become increasingly commoditized. Every operator offers it, with differentiation largely limited to speed, coverage, and price. As a result, mobile ARPUs have struggled to grow. GSMA Intelligence reported a **12% drop in global ARPUs between 2015 and 2020**, and while the 2024 Ericsson Mobility Report indicates some recovery, growth has been modest—just **1.7% CAGR per year**, much of which has been offset by inflation and rising operational costs.

Compounding the issue, most mobile markets are already saturated, with penetration rates exceeding 100% even before factoring in IoT connections. Simply adding more subscribers is no longer a viable growth strategy. At the same time, raising prices in an ultra-competitive market is risky — it often leads to customer churn rather than meaningful ARPU gains.

Faced with these challenges, mobile operators are actively exploring new revenue streams — not just to **differentiate themselves** but to **drive greater customer spending** through value-added services, strategic partnerships, and innovative digital offerings beyond traditional connectivity.

Revenue diversification

Mobile operators have understood for years that each generation of mobile network technology creates an opportunity for new revenue streams. This has especially been the chief attraction of 5G beyond the superfast data speeds.

Much of the focus has largely been on the opportunity for enterprise services, which remains a largely untapped dollar for mobile operators. However, 5G use cases such as private 5G, IoT and Industry 4.0 promise to change that.

Nonetheless, the fact of the matter is that even as new enterprise customers adopt 5G services in some form or other, the consumer market is still expected to be the largest mobile revenue base for operators for some time yet, so there's still plenty of incentive to not only maintain but grow that consumer base.

The challenge – as mentioned above – is that there's precious little consumer growth to be gained from the standard voice/data connectivity packages and bundled triple/quad-play services telcos already offer. Consequently, it will have to come from innovations beyond the traditional connectivity model.

So where will that growth come from?

Consumer expectations are changing: Generation D

The answer can be found by looking at what consumers want from mobile services now, and what they're willing to pay for. As the world becomes increasingly digital, consumer behaviours are rapidly evolving. One of the fastest-growing consumer segments is 'Generation D' – digital natives with digital-centric mindsets that demand seamless, personalized experiences across every touchpoint. Generation D consumers value immediacy, transparency, and innovation, which is reshaping expectations across industries.

Moreover – and this cannot be overstressed – this is not a niche segment. Generation D represents 40–60% of the population and contributes up to 70% of market value. Winning them is essential for sustainable growth.

Brands that want to engage Generation D must be agile and customer-centric, adapting to their need for instant, frictionless, and hyper-personalized interactions. This also requires brands to adopt sophisticated digital strategies – like those offered by Circles' platform and products – that enable seamless, data-informed experiences that fuel rapid growth, deep loyalty, and long-term revenue opportunities.

For telcos specifically, this means shifting from being simple connectivity providers to becoming integral lifestyle enablers for an increasingly digital-savvy customer base. This shift not only helps diversify consumer revenue streams, but also nurtures and encourages customer loyalty.

This matters because brand-switching is common in the telco space when your main business model is connectivity and the main differentiator is price. Becoming a digital lifestyle brand gives telcos the opportunity to offer stickier services, thus raising the churn barrier and deepening the digital moat for consumer engagement. That in turn results in more users with higher frequencies of engagement and more opportunities for diversified ARPUs.

Choose your partners

Telcos have long discovered that offering new services often requires partnerships with other companies who have the expertise and flexibility that in-house service development often lacks.

And as the name of the game is revenue diversification, it follows that the partner base should be equally diverse. Developing a lifestyle brand enables telcos to touch upon the various aspects of their customers' daily lives that may not have anything to do with telco services – airlines, banks, retailers or TV stations, for example. Consequently, partnering with companies outside the usual telco domain is essential to revenue diversification.

Establishing Non-Telco Partnerships

Embracing the digital lifestyle

The consumer shift toward a digital lifestyle presents a significant opportunity for telcos to expand beyond their traditional business models by bundling lifestyle services. The demand is clear — and other industries are already capitalizing on this trend.

Take the banking sector, for example. Like telcos, banks are seeking new ways to increase revenue and enhance customer retention. UK-based neobank Revolut has successfully integrated lifestyle services into its offerings, providing customers with bundled access to NordVPN, Financial Times, and MasterClass subscriptions.

Similarly, mobile-first services such as digital payments, food delivery, and ride-hailing — along with super apps that combine all three and more — have demonstrated how mobile platforms can drive digital innovation. The real challenge for telcos is not just entering this space but positioning themselves as indispensable players within the broader innovation ecosystem.

Put simply, if non-telco digital businesses can build and scale these services independently, what incentive do they have to collaborate with telcos? The answer lies in how telcos can leverage their networks, data, and customer reach to offer unique value that goes beyond connectivity.

Benefits for partners

For a start, telcos have far more to offer the digital services market than just a pipeline of potential customers. They also have:

- Direct access to an existing user base in the millions
- A well-established billing infrastructure that makes it easier for those customers to subscribe to additional services and be charged through their normal billing mechanism
- Massive amounts of data on customer behaviour from both the network and the partner's mobile app that can be crunched using AI and machine learning models to create personalized offerings and new services
- Open network APIs made available via the Open Gateway framework that partners can access to develop apps and services that harness the power of the mobile network
- A trusted relationship with customers enabled by KYC

Every one of these capabilities enables the rapid onboarding of new partners into a lifestyle brand. In many markets, potential partners may face significant challenges in launching a new digital service or app independently — often to the point where the perceived risks outweigh the potential benefits. What they need is a partner with deep local market expertise and a trusted customer base. Telcos offer exactly that, along with direct connectivity and a well-established billing infrastructure, making them valuable enablers for digital service expansion.

Benefits for telcos

Becoming a lifestyle brand requires more than having something partners need – telcos must also discern which lifestyle apps and services best match that brand and their customers' expectations (not to mention what their customers would be willing to pay extra for), and which apps and services benefit the most from having a mobile operator partner.

The answer will naturally vary from one telco to the next and one market to the next, but a starter pack of digital lifestyle services could include:

- **Entertainment:** this is arguably the most established category of non-telco partnerships, with telcos striking bundling deals with popular video and music streaming services like Netflix and Spotify, as well as cloud gaming services
- **Health and wellness:** apps and services for fitness tracking, telemedicine, and mental health services
- **E-commerce:** Telcos can integrate shopping platforms into their bundles or offer exclusive discounts via partners
- **Financial Services:** Another hot item in the mobile space, whether it's adding easy payment options for online and offline purchases or offering banking and financial-related services like microlending and microinsurance
- **Education:** Telcos can offer self-improvement tools by partnering with online learning platforms like MasterClass and Coursera, or language apps like Duolingo

Notice that each one of these examples does three specific things:

1. Offers something of value to customers of both telcos and partners
2. Creates new revenue streams for telcos (for example, bundling entertainment services can potentially boost subscription fees, while offering financial services could generate transaction-based revenue)
3. Increase the stickiness of mobile plans, with customers being less likely to churn when their mobile service provider offers value-added services they use daily

The end result is the creation of bundled plans that enable operators to charge premium rates and diversify their revenue streams.

Challenges and solutions

Naturally, it sounds a lot easier than it is in real life. As mentioned earlier, telcos have been chasing the basic idea of bundled digital services to offset declining connectivity ARPUs for years. On the bright side, many telcos have learned from experience to identify the key challenges to such partnerships and what needs to be done to solve them.

Know their pain points

For a start, telcos really need to understand the particulars of non-telco sectors they want to engage with. Each potential new partner comes with its own industry-specific ecosystems, pain points and expectations on outcomes, which will differ from one market to the next. For example, a digital bank in Japan has different priorities than a digital bank in Pakistan. To be a valuable partner for such companies, telcos must have a rich understanding of their partners' needs and pain points before they can offer a viable solution to address them.

The importance of NPS

Past experience with walled-garden offerings over the years have made it clear to telcos that there's a fine line between stickiness and customer lock-in, where customers feel trapped within the ecosystem rather than served by it. This is largely a matter of customer engagement, keeping tabs to ensure they're delighted by the offerings available to them and responding quickly when they're not. This is where tools like Net Promoter Score (NPS) become essential to monitoring the customer experience and understanding what is delighting them, what isn't, and how the telco can respond.

Backend stack: defrag or replace?

Digital transformation for telcos ideally involves transitioning from legacy BSS architectures to modern, digital BSS platforms that are service-agnostic and designed to support new products and services — including those from external partners — with minimal disruption to existing processes.

In practice, however, this transformation is far more challenging than it sounds. While telcos benefit from an established billing infrastructure, that infrastructure has evolved over decades, accumulating layers of complexity as new services and features were added. The result is a "spaghetti architecture"—a fragmented, fragile, and tangled system that is nearly impossible to unravel without creating new issues.

Many solutions claim to streamline and modernize legacy backend systems, but the reality is that migrating to next-generation architectures can be a long, difficult, and painful process. For many telcos, the only practical way forward is a clean-slate, greenfield approach — abandoning the outdated legacy stack in favor of a new architecture purpose-built for the digital era.

The idea of replacing a billing stack can be daunting — after all, it's the backbone of a telco's revenue engine. However, for true digital transformation, it is often the only viable path. And, as we will explore, this transition is not only possible but has already been successfully achieved by forward-thinking telcos.

Combining BSS with customer insights

An ideal techco BSS isn't just digital and flexible—it's also powered by customer insights, enabling the rapid creation and onboarding of new services.

For example, Circles offers a cloud-native, end-to-end integrated SaaS platform that goes beyond a digital BSS. It includes a consumer mobile app and an associated consumer data platform that delivers critical behavioral insights. By combining this with its own experience as an operator, Circles empowers partners to quickly configure and launch new services with minimal friction.

A key enabler of this agility is Circles' Xplore Innovation Engine — a dedicated tool designed to help telcos and their partners discover, test, and implement innovative customer engagement strategies. Built specifically to address the telecom industry's unique challenges, the Innovation Engine acts as a sandbox for:

- Identifying new market opportunities
- Deploying and testing minimum viable products (MVPs) with real-time customer feedback
- Refining MVPs based on insights and scaling successful elements.

This approach provides a low-risk path to service innovation, allowing telcos to adapt quickly to market shifts and evolving customer demands. In practical terms, this means new services can be launched within 30 days, with actionable customer insights available in just 90 days — enabling faster, data-driven decision-making and accelerated growth.

Partnerships aren't easy

The concept of partnerships outside the telco domain has been around for years, but many telcos have learned the hard way that such partnerships don't always work, even if they look good on paper. Here are some recent examples of how non-telco partnerships have gone wrong.

1) Prioritizing Lifestyle Services Over Existing Customer Needs

Failure: Some telcos rush to introduce lifestyle and digital services without first addressing the core needs and pain points of their existing customer base. This can result in low adoption rates and customer churn, as the new offerings fail to resonate with their primary audience.

Example:

- Vodafone 360 (2009-2011) – Vodafone attempted to launch an all-in-one social hub with messaging, maps, and cloud storage. However, it ignored core customer preferences in favor of a feature-heavy platform that was cumbersome, lacked integration with major social networks, and failed to provide a compelling reason for customers to use it over existing apps.

Lesson: Telcos should first enhance and optimize their existing services before introducing lifestyle offerings. Any diversification strategy should be customer-driven, not just innovation-driven.

2) Launching Offerings Without Technical Readiness (Spaghetti Architecture & Legacy System Limitations)

Failure: Many telcos operate on highly fragmented legacy systems built over decades, making it difficult to integrate new digital services. Without proper modernization, these systems slow down innovation, create technical bottlenecks, and increase costs.

Example:

- T-Mobile USA's 2000s CRM Overhaul Failure – T-Mobile attempted to revamp its CRM system but underestimated the complexity of its legacy infrastructure. The project resulted in massive delays, customer service disruptions, and escalated costs, forcing a rollback to the old system.
- Telefónica's Digital Transformation Struggles – Telefónica aimed to modernize its IT and BSS systems to support new digital services but faced years of delays due to the complexity of transitioning away from legacy infrastructure.

Lesson: Telcos must prioritize backend transformation before launching new digital services. Investing in modular, cloud-native, and API-driven architectures prevents technical roadblocks.

3) Lack of Product-Market Fit (Launching Services Without Validating Demand)

Failure: Some telcos introduce new services without proper market research or testing consumer demand, leading to low adoption and financial losses.

Example:

- AT&T's Mobile TV Service (2007) – AT&T launched a mobile TV service assuming customers wanted live television on their phones. However, high subscription costs, limited content, and the rise of on-demand streaming (YouTube, Netflix) made the service irrelevant. The offering was discontinued.
- Telstra's Health Tech Ventures – Telstra invested heavily in Telstra Health, expecting to dominate digital healthcare in Australia. However, the company struggled with integration challenges, unclear product-market fit, and slow adoption.

Lesson: Telcos should pilot new services, gather customer feedback, and validate demand before scaling. A data-driven approach ensures new offerings align with market needs.

Case Studies – Non-Telco Partnerships

The good news for telcos aspiring to be techcos is that none of this is theoretical – it's already happening today. The following three case studies illustrate how telcos have established non-telco partnerships and how each market opportunity is shaped by the partnership itself.

Case study 1 – KDDI / Povo2.0: Launching new products and services in the face of competition

In 2020, Japanese operator KDDI found itself facing the prospect of more competition after new regulations were enacted. The second-ranked telco decided the way forward was to specifically target Japan's digitally savvy mobile consumers with a new digital mobile experience that offered them a superior choice to other offerings. The challenge was how to do this quickly, given the complex state of KDDI's legacy BSS and customer engagement infrastructure.

To that end, KDDI decided to adopt a clean-slate approach. Rather than rely on its legacy systems, it leveraged Circles' digital telco platform to launch its 5G digital mobile brand, Povo 2.0. The platform was integrated into KDDI's network from Circles' headquarters in Singapore in 16 weeks, and enabled KDDI to not only reduce opex, but launch Povo 2.0 faster.

Povo 2.0 brought the digital world's "freemium" business model to mobile users. Povo 2.0 enabled customers to create their own personalised plans by selecting and purchasing their favourite "toppings" (such as sports streaming service DAZN, for example).

The Circles platform enabled Povo 2.0 to launch new products and services within weeks, dramatically accelerating processes that would traditionally take months. This includes offerings developed with non-telco partners, such as its recent collaboration with the Lawson convenience store chain, where data rewards and top-ups are seamlessly integrated into the retail experience. For instance, Povo 2.0 users automatically receive a 100MB data top-up upon entering a Lawson store, enhancing both customer engagement and brand loyalty.

Povo 2.0's success as a digital brand and its ability to delight customers is reflected in its NPS, which has consistently been 50 points higher than the competition for the past three years.

Case study 2 – PTCL-Ufone / Onic: A new digital brand for a new generation

In Pakistan, e& International, Pakistan Telecommunications Company Limited (PTCL) and Circles have created a successful digital native brand called "Onic" that provides travel and dining benefits though partners such as ride-hailing app Careem (which offers ride discounts to Onic users) and premium subscriptions to food delivery app FoodPanda.

What's notable is how Onic adds these kinds of non-telco partnerships onto its digital platform that began as a way to offer a more intuitive and easier digital customer experience. This was a radical proposition in Pakistan's mobile consumer market, which was primarily cash-based, with just two major operators with creaky legacy billing infrastructure offering mobile data plans that were basically fixed data bucket tiers.

Onic introduced a radically different approach—an all-digital experience where customers can manage everything through an app-based dashboard, from customizing their plans to activating a SIM or eSIM in just five minutes. Instant customer support, with response times under ten seconds, further enhances the user experience. Beyond simplifying and personalizing mobile services, Onic also challenges the cash-first mentality by offering a seamless, digital-first alternative that is both convenient and efficient.

The same SaaS platform enabling this new way of engaging customers also enables Onic to establish strategic lifestyle partnerships and launch new services quickly, which means more diversified revenue streams beyond connectivity. Onic has formed 15 digital partnerships and launched over 100 new product features since 2023.

The results so far speak for themselves. In its first year, Onic reported 2-3x ARPU growth above the industry standard, 100% adoption of digital payments (in a cash-dominated market), 56% share of gross digital adds and 17% adoption of eSIMs where the market average is well under 5% for both.

Case study 3 – AT&T Mexico / Wim: Competitive differentation and market opportunity

The case of AT&T Mexico perhaps best exemplifies the necessity of competitive differentiation and looking beyond the pure connectivity model. In a market that consists of over 100 MVNO brands, AT&T was presented with the challenge of standing apart from the crowd.

The key opportunity there lay in the vast potential for Mexico's digital market, which industry forecasts expect to grow US$$71 billion by 2028. AT&T decided that holistic disruption would be key for any telco wanting to get a share of that digital pie.

The telco also realised that the digital opportunity was shaped by two key factors: (1) an exponential increase of digital buyers to fuel the digital economy, and (2) rising customer expectations driven by major tech companies like Netflix, Google, etc.

As such, AT&T Mexico concluded that it would not only need to focus on building unique customer value propositions and a differentiated digital experience via targeted and innovative channels (such as eSIM, for instance), but also partner with non-telco players to create a comprehensive ecosystem of digital offerings.

In Q4 2024, AT&T Mexico partnered with Circles to leverage its platform for the launch of Wim, a digital lifestyle brand that combines data connectivity with premium memberships to Amazon Prime, Paramount+ streaming, and the airline lounge access app Lounge Key.

By focusing on hyper-personalization, attracting high-value customers, and driving digital engagement, AT&T Mexico aims to expand its subscriber base by 5 million and increase ARPU by 71% over the next five years, from the 2024 industry average of $US8.40 to $US14.40.

Conclusion

Balancing Innovation and Customer-Centricity in Telco Partnerships

Service and revenue diversification remain strategic imperatives for major operators as they seek to counteract slow growth in mobile and fixed connectivity while expanding their footprint in the digital ecosystem. By moving up the value chain into digital services, platforms, and applications, telcos aim to capture new revenue streams. However, despite progress, services beyond connectivity — while significant — have not yet been transformative in driving overall revenue growth, typically contributing around 30% of total revenue, with annual increases of only 1-2 percentage points.

At the core of any successful diversification strategy is the ability to leverage scale, network infrastructure, and extensive customer touchpoints across consumer and B2B segments. Telcos offer inherent advantages to potential partners, including established customer relationships, sophisticated billing infrastructure, and regulatory expertise. Additionally, shifting customer engagement to digital channels (web and app) provides telcos with new opportunities to increase service adoption and reduce operational costs. However, success depends not just on offering digital services, but on giving customers a compelling reason to engage with these platforms.

A pragmatic approach to partnerships requires a deep understanding of industry-specific pain points and a clear articulation of mutual benefits. Telcos must carefully assess what partners bring to the table and align these capabilities with their own core strengths.

Key elements of effective partnerships include:

- **A Strong Value Proposition** – Telcos must clearly demonstrate how a partnership drives efficiencies, enhances customer experience, and unlocks new revenue streams. Without this, partnerships risk being driven by trend-chasing rather than meaningful, sustainable impact.
- **Co-Innovation and Seamless Integration** – The ability to co-develop and integrate services efficiently is critical. Telcos should establish frameworks and tools that simplify collaboration, allowing partners to quickly launch and refine offerings within their ecosystem.

While partnerships between telcos and vertical industries hold great potential for driving growth and innovation, they must be rooted in strategic alignment rather than fleeting trends. A common pitfall is overemphasizing future potential at the expense of immediate customer needs. Long-term success hinges on mastering the fundamentals — understanding customer segments, defining clear differentiation, and ensuring customers see tangible value in these new services.

Ultimately, true diversification isn't just about adding more services —it's about creating value in a way that makes customers willing to pay for them. By balancing innovation with customer-centric execution, telcos can move beyond traditional connectivity, build sustainable new revenue streams, and solidify their role as digital enablers in an increasingly connected world.

Founded in 2014, Circles is a global technology company reimagining the telco industry with its SaaS platform, helping telco operators launch and operate successful digital brands. Today, Circles is partnering with operators in 15 countries across 6 continents with the mission to deliver digital experiences to millions of people through our businesses. With Circles.Life, our digital lifestyle brand, we empower and delight customers across the world by offering digital experiences that go beyond traditional telco services. Circles is backed by global investors such as Peak XV Partners (formerly Sequoia), Warburg Pincus, EDBI and Founders Fund – renowned institutions with a track record of backing category creators.

Find out more at www.circles.co

Mobile World Live is the premier destination for news, insight and intelligence for the global mobile industry. Armed with a dedicated team of experienced reporters from around the world, we are the industry's most trusted media outlet for breaking news, special features, investigative reporting, and expert analysis of today's biggest stories.

We are firmly committed to delivering accurate, quality journalism to our readers through news articles, video broadcasts, live and digital events, and more. Our engaged audience of mobile, tech and telecom professionals, including C-suite executives, business decision makers and influencers depend on the unrivalled content and analysis Mobile World Live provides to make informed business decisions every day.

Since 2016, Mobile World Live has also had a team of in-house media and marketing experts who work directly with our brand partners to produce bespoke content and deliver it to our audience in strategic yet innovative ways. Our portfolio of custom work - including whitepapers, webinars, live studio interviews, case studies, industry surveys and more – leverage the same level of industry knowledge and perspective that propels our newsroom.

Mobile World Live is published by, but editorially independent from, the GSMA, producing Show Daily publications for all GSMA events and Mobile World Live TV – the award-winning broadcast service of Mobile World Congress and home to GSMA event keynote presentations.

Find out more at www.mobileworldlive.com