



**MANAGED PAYMENT SERVICES OFFER
A FASTER ROUTE TO MARKET FOR
TELCOS AND MERCHANTS**



by **docomo** digital

TAPPING INTO NEW REVENUE OPPORTUNITIES

Introduction

With growing revenue declines in the core connectivity services, mobile network operators face pressure to play a vital role in the increasingly digital lives of their customers.

The “convergence 2.0” is happening in the categories like fixed-mobile bundles, Pay TV and content, automated home, health and wellness, and digital commerce. Progressive operators invest in creating digital ecosystems with digital and physical goods, loyalty programs, and a wide range of payment options, all presented to consumers through native direct-to-consumer app and web experiences.

Demand for streaming video, audio, and gaming subscriptions alongside in-game content and productivity app downloads remains significantly higher than before the pandemic first emerged.

Operators can capitalize on that trend by helping sellers distribute content to a broader audience via their mobile networks, including their large subscription bases in multiple geographies, and taking a percentage of each successful transaction completed via direct carrier billing (DCB).



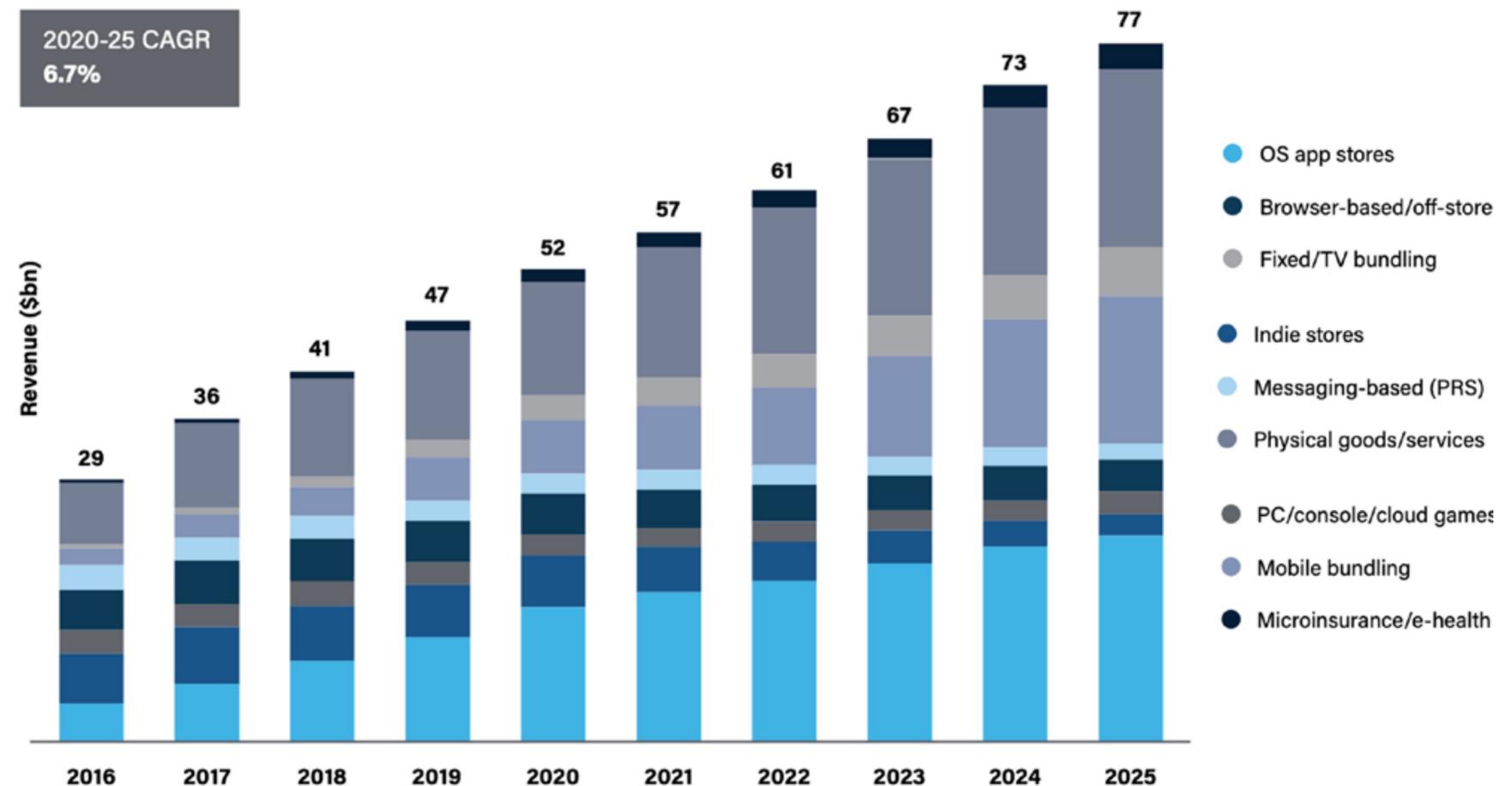
THE INCREASING ROLE OF DIRECT CARRIER BILLING

As we all sheltered in place during the pandemic, direct carrier billing revenues experienced a real spike in transaction volumes as existing users purchased more digital OTT services and in-game merchandise. And most importantly, a wave of new users discovered the convenience and security of DCB for the first time.

Analysts at research firm Omdia project that carrier billing is going to grow at a compounded annual rate (CAGR) of almost 7% over the next five years, from US\$50bn in 2020 to around US\$80bn in 2025.

Growth continues to be driven by leading app stores, games, streaming and entertainment, and bundling. As we all sheltered in place during the pandemic, direct carrier billing revenue experienced a real spike in transaction volumes. Existing users purchased more online games and streaming services, and most importantly, a wave of new users discovered the convenience of carrier billing for the first time.

Global Carrier Billing revenue, by segment, 2016-25



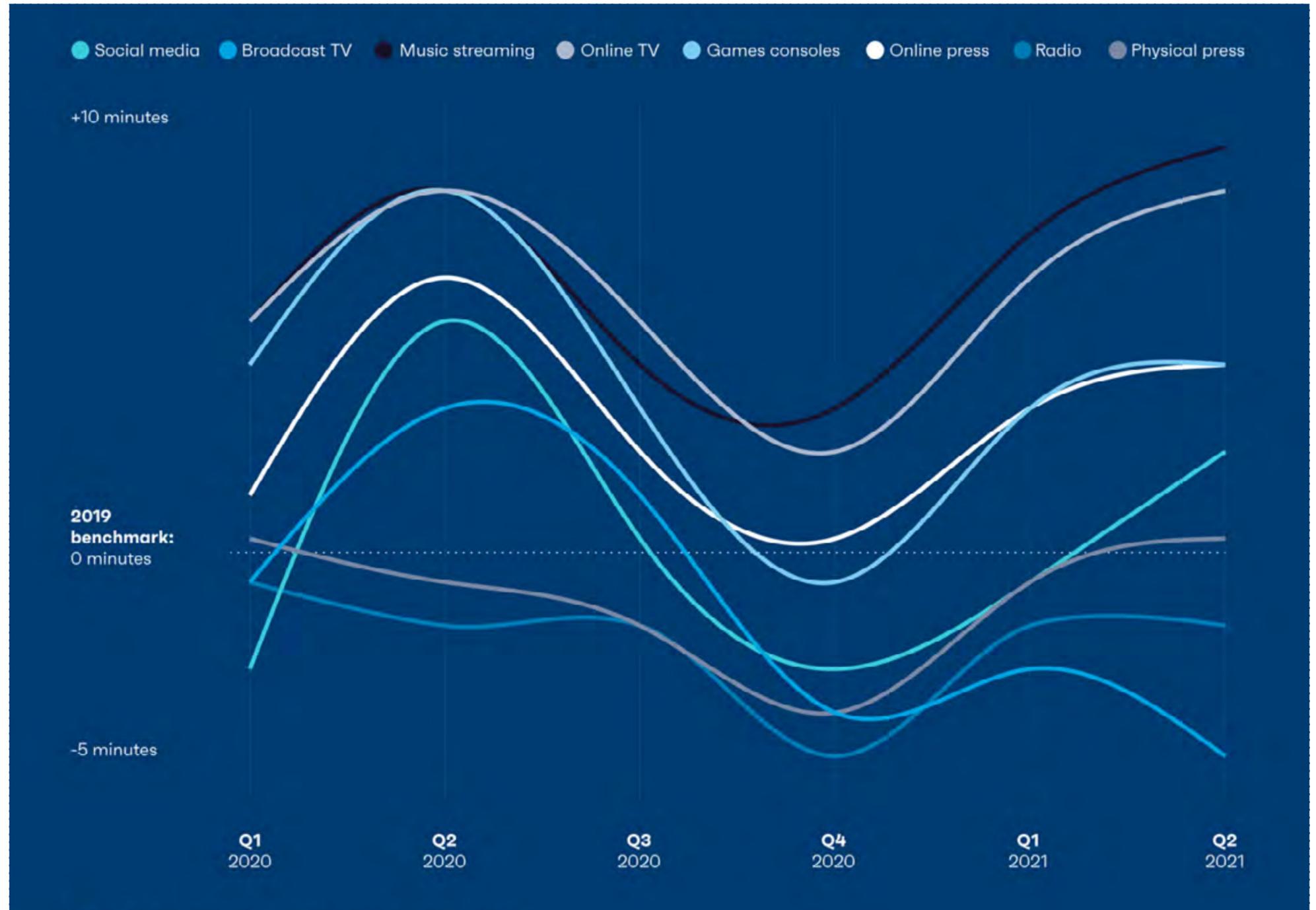
Source: Omdia's Global Carrier-Billing Forecast: 2020-25

More time than ever before is spent in mobile apps, reaching 4.8 hours per day in the top mobile-first markets. Social platforms, streaming audio and video, and gaming have surpassed the time spent on any other category. Consumers are migrating their attention and wallets to mobile as over \$320,000 flowed through the app stores every minute of 2021.

Our business observed increased purchase volumes in the range of 5% to 30%, depending on the country and the network operator. And in terms of new users, globally across our connections, we observed a 10% increase during the pandemic about a year ago, with the most substantial increases coming in Asia and Latin America in terms of unique new users.

There has been increased activity, especially in games and streaming video, as merchants rushed to take advantage of this particular moment by adding carrier billing as a check-out option.

How time spent per day has changed during the pandemic



Source: GWI Core Q1 2020-Q2 2021 | Base: 769,532 internet users aged 16-64 across 43 markets | Question: On an average day, how long do you spend...

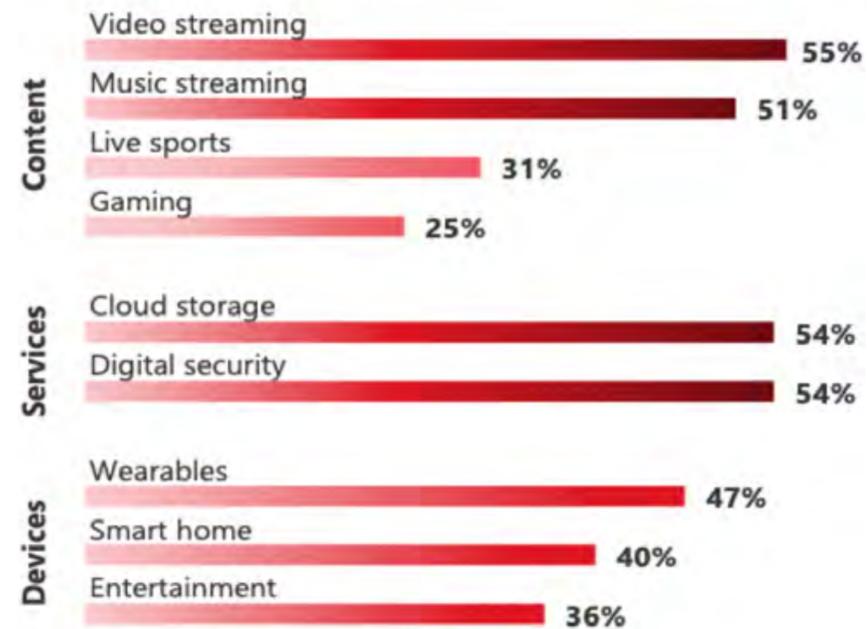
Carrier billing enables these merchants to engage with new customers in new markets.

Examples from DOCOMO Digital's business include recent launches with leading brands Razer in gaming and Storytel in audiobooks. In addition, we are now seeing merchants from new categories express interest in carrier billing – in the fitness space, ed-tech and productivity tools like photo editing – all starting to ask questions to understand better the benefits of adopting carrier billing as a payment method.

Today carrier billing accounts for less than 5% of network operator revenues. Although from a small base, its growth rate is high, outstripping core voice and data-driven growth over the next five years.

Operators can capitalize on OTT and Gaming brands by helping sellers distribute content to a broader audience via their mobile networks, including their own large subscription bases in multiple geographies, and taking a percentage of each successful transaction completed via direct carrier billing (DCB).

Consumers most interested in video/music streaming, cloud storage & digital security



Source: GSMA intelligence



THE BEST DCB SOLUTION IN THE MARKET

Payment service providers like DOCOMO Digital offer several benefits for MNOs looking to expand their merchant ecosystem and quickly start collecting revenue from different sources via App Stores, bundling deals, value-added services (VAS), over-the-top (OTT) subscriptions, or non-digital goods for example.

That includes providing a **single point of integration that standardizes the onboarding process** in line with operator guidelines. Once the first merchant is set up, others can be immediately and automatically added whenever required. Customised options are also available to accommodate individual service provider specifications and branded checkout experiences.

As a modular, microservices-based solution, DOCOMO Digital's payment services platform **simplifies integration by creating a single application** as a suite of small services which use lightweight, technology-agnostic protocols to communicate with the underlying infrastructure.



Consequently, it can be easily **integrated into MNO's existing core infrastructure**, reducing deployment costs and removing the complexity that would otherwise be involved.

That ease of integration **speeds up time-to-market for both telcos and merchants**, with additional application programming interfaces (APIs) that link both parties' systems, subsequently handling the subscription/bundling management functions and broker charges between them.

DOCOMO Digital also handles **merchant settlement and reconciliation reports** – including automated subscriber refunds and compensation reports – which have previously proved difficult for telcos to process promptly.

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Operators can selectively approve or block individual services through the management and reporting dashboard, which gives additional insight into billing performance and user activity from one month to the next. Support and maintenance resources included in the managed services contract also offer technical assistance to keep management and billing systems running smoothly to minimize any lost fees due to downtime.

There are other advantages for merchants beyond access to telco subscriber bases which run into millions of potential customers for their goods and services. For example, they don't have to spend time developing their own APIs to interact with telco systems. They can work with companies like DOCOMO Digital, which already have much experience facilitating digital payments for telcos and merchants and have specific knowledge of local markets where legislation governing financial transactions can vary considerably from one country to the next.



DOCOMO Digital's Managed Service Platform is already used by multiple MNOs worldwide. It can be enhanced with the company's fraud management and bad debt solution which uses advanced machine learning (ML) algorithms to protect operators from mobile payments fraud by identifying unusual behaviour and attack patterns in real-time.

The need to meet national and regional rules on the purchase of digital and physical goods is a critical issue for telcos. However, many are also concerned about the processing and storing of customer data in off-premise systems operated by third-party payment providers.

As such, payment service providers need to reassure their telco customers that their hosting facilities operate in full compliance with data protection frameworks such as the European Union's General Data Protection Regulation (GDPR) while simultaneously demonstrating that the managed

services model (a combination of upfront implementation fees and subscription charges) provides better value for money compared to the telco man-hours typically involved in the installation, configuration and maintenance of in-house systems to do the same thing.



All forms of managed service invariably provide the organizations leasing them with the common benefits associated with outsourcing responsibility for the system, process, application, and infrastructure provisioning and maintenance to a third-party provider.

Managed payment platforms like DOCOMO Digital's have been finely tuned to meet the specific needs of telcos, however, by making in-app purchase flows for digital services seamless and quick for subscribers.

In maximizing the convenience and minimizing the effort that operators expend negotiating and managing their merchant relationships, they also provide a solid foundation to quickly expand DCB revenue and sustain a steady subscriber base by making it easy for consumers to purchase the goods and services they increasingly want.



ABOUT US

DOCOMO Digital is the international payments business of NTT DOCOMO. We partner with carriers, merchants, OTT services, app stores and payment providers in both developed and emerging markets around the world. We solve for the challenges of customer acquisition and retention, regulation, and complexity for our partners with alternative payment methods such as direct carrier billing and digital wallets. With teams based in 15 countries, we enable our partners to grow their digital services revenues while enhancing the customer experience for their users. Our robust managed services platform and coverage across carriers and the most locally relevant payment methods enable faster time-to-market, especially for streaming, gaming, e-commerce, and productivity application providers.

For more information, visit www.docomodigital.com or find us on [LinkedIn](#).



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