# HOW TELCOS MUST CAPITALIZE ON THE SUPER BUNDLING OPPORTUNITY

Whitepaper Prepared by Juniper Research

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# 1. The Future of Super Bundling

## 1.1 The Subscription Business Model

The subscription business model has become increasingly popular amongst service providers, due to its ability to provide more predictable revenue. Customers also benefit from the subscription model as it provides access to content, replenishment of basic goods, and curation of personalized experiences. This whitepaper will delve into the growth of subscription services and their categories. The paper will also discuss how service providers, particularly telcos, can capitalize on the growth of subscription services by offering Super Bundling services to mobile subscribers.

Juniper Research, in partnership with Bango, has conducted research to identify the top three categories for subscriptions in 2023. These include digital video, digital music, and physical goods boxes. By 2026, it is expected that there will be over 790 million subscriptions to digital video, over 810 million digital music subscriptions, and over 920 million subscriptions to physical goods boxes.

In the digital subscription economy market, the 'piggyback problem' is a term used to describe the discrepancies between the owners of subscriptions versus the people who use the subscription. It has been a major problem for streaming services such as Netflix, as many customers avoid paying for a Netflix subscription by using family and friends' accounts. However, it is important to note that our forecast methodology takes into consideration the number of paid subscriptions that service providers gain revenue from. Our forecasts do not take into account 'piggyback' actions where multiple people access a single subscription. This is done for accuracy.

The growth of the subscription market is significant, with a 495% increase in market value from 2018 to 2026. There is a massive opportunity for telcos to capitalize on this growth by offering Super Bundling services to their mobile subscribers. Super Bundling services consist of a single payment to a telco for multiple subscription services. This will provide benefits to consumers such as easier management of subscriptions and fewer card-on-file payments throughout a billing period.

### i. The Data Methodology

Juniper Research ensures credibility for this whitepaper by sourcing data from its extensive research on the subscription market. We are a leading analyst firm in the technology sector, with a proven track record of providing reliable data and analysis to their clients.

Juniper Research has forecast the number of subscribers and the number of subscriptions for each key subscription vertical. Where we believe the average length of subscription to be less than a year, Juniper Research has forecast less than one subscription per subscriber per annum. We then provide the typical revenue for an annual subscription for each category, excluding any trial periods that are typical in the sector. This will provide an approximation of markets where short-term and easily cancelled subscriptions are common.

Juniper Research has drawn from a wide variety of sources to come to our subscriber numbers for each category. Juniper Research has then forecast subscription revenue only in this forecast. Where services offer additional purchases outside of a recurring subscription (such as individual audiobook purchases in addition to a book-a-month type subscription), these have not been forecast.

## 1.2 The Future of Subscriptions

The subscription business model is being ever more widely adopted amongst service providers, owing to its greater predictability for revenue. However, it also provides substantial benefits for consumers. In broad terms, there are three key factors that have driven subscription services:

- Access – Access subscriptions are some of the most popular in the digital marketplace, based on the premise that once customers pay for a subscription, they then have access to all of the content. This has often been the case for digital platforms, such as Netflix, and non-digital platforms emulate this by offering their members cheaper process on items and personalized benefits.
- Replenishment – Replenishment subscriptions are aimed at providing a continuous restock on necessities and frequently used goods, such as toilet roll or shaving razors. Replenishment subscriptions are often applied to lower-priced items and will usually need to encourage subscribers to purchase goods beyond the basics of the subscription provided in order to be profitable.
- Curation – Curation subscriptions offer examples of both new products or highly personalized experiences in sectors such as food, apparel, and beauty. These subscriptions often contain a process whereby a customer will pay a fee to receive a number of pre-selected items.

**Digital Music**: This includes music streaming services such as **Spotify, Apple Music, and Amazon Music**.

**Video Streaming**: This includes video streaming services such as **Netflix, Amazon Prime Video, and Disney+.**

**Video Games**: This includes subscriptions to access video game content including **Xbox Games Pass, PlayStation Plus, and EA Play.**

**Digital Spoken Word**: Subscriptions to premium content such as podcasts and audiobooks, including service such as **Supercast.**

**Delivery Services**: Solutions for the regular delivery for food or nutrition services on a subscription basis, such as **Amazon Prime and Deliveroo**.

**Physical Good Boxes**: Subscriptions for the regular delivery of physical goods, such as hygienic products. Services include **Apron and HelloFresh.**

**Fitness & Wellness**: Subscriptions for digital services in the health and wellbeing space, including meditation apps, digital content on health and online wellbeing services, such as **Calm and Headspace**.

**Mobility-as-a-Service**: Subscriptions to multimodal transport services in which a user pays a recurring fee for access to transport rather than multiple one-off fees, such as **Uber One**.

**Productivity:** Solutions such as **Microsoft 365** and other productivity tools are offered on a subscription basis.

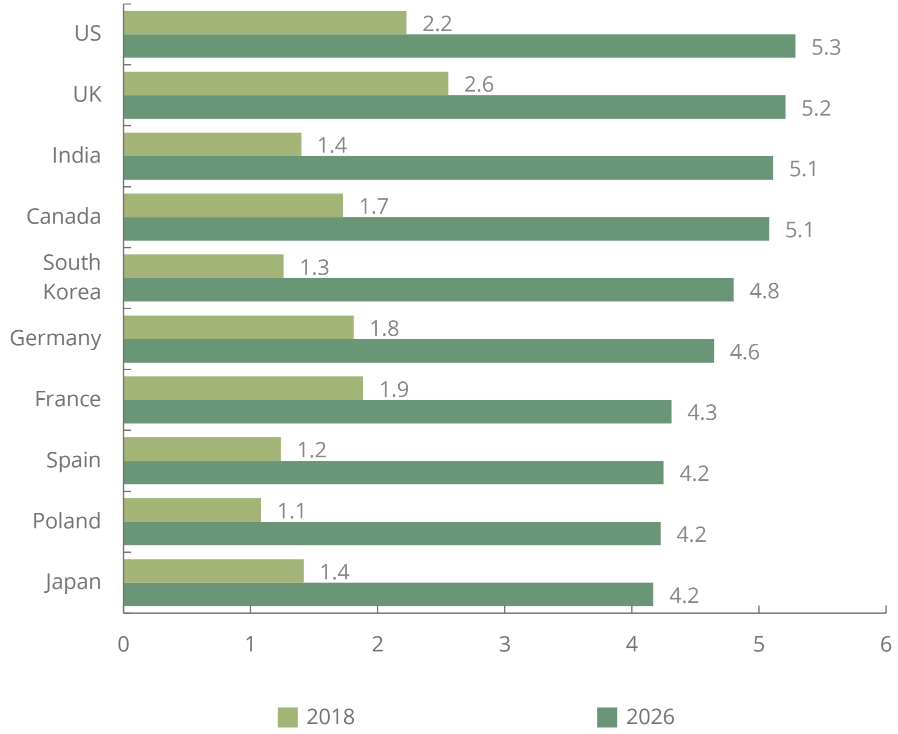
**Social & Education:** Educational software, such as **Duolingo**, and examples of premium social software can be offered via a subscription.

**Security:** Solutions, such as **Norton**, are offered for a monthly fee.

## 1.3 The Movement to Subscription Services

As an increasing number of subscriptions proliferate for users, there is expected to be a significant amount of growth of adoption of new services that implement a subscription-based service. The top 10 countries for growth are outlined below in figure 1.1.

*Figure 1.1: Average Number of Subscriptions per Adult in 2018 & 2026, Split by the Top 10 Countries*

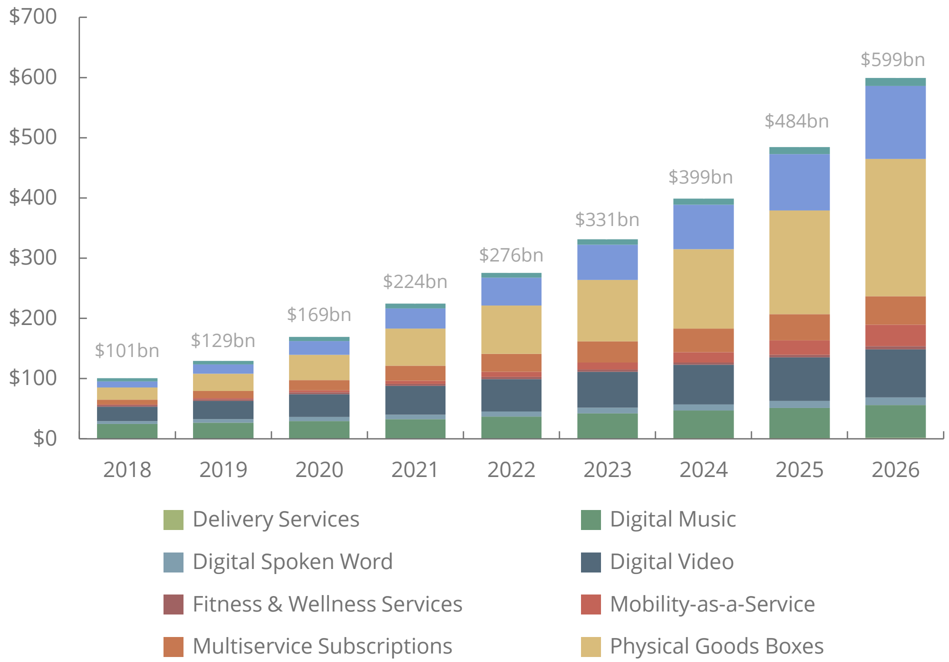



*Source: Juniper Research*

**In the US, the average adult had two subscriptions in 2017, however this will increase to nearly five subscriptions per adult by 2026.**

In 2018, there were an estimated 1.3 billion subscriptions to services such as digital music, streaming services, video game subscriptions and delivery services. However, by 2026, this is expected to rise to over 4.2 billion. This represents a growth of over 210% over eight years.

*Figure 1.2: Global Subscription Market Value ($bn) 2018-2026*




*Source: Juniper Research*

As can be seen from figure 1.2, the overall market value of subscriptions is increasing, growing from just over $100 billion in 2018 to nearly $600 billion by 2026. This represents a significant market growth of 495% over eight years. This growth of the subscription market value is driven by the continued migration of services that were once offered as a one-off fee to a subscription model; offering service providers a more efficient model to manage cash flow in the short term.

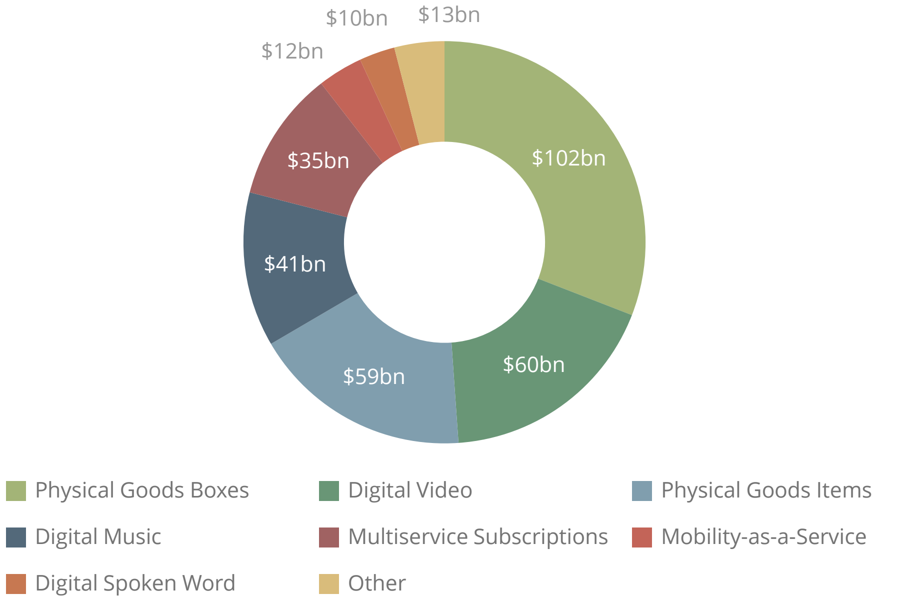
*'However, there is one evident takeaway: there are obvious and immediate opportunities for telcos to capitalize on this growth. This will be done by offering Super Bundling services to mobile subscribers.' – Sam Barker, Head of Analytics & Forecasting at Juniper Research*

### 1.3.1 The Biggest & Fastest-growing Subscription Categories

Juniper Research has identified the top 3 categories for subscriptions in 2023. They are ranked and evaluated below:

1. Digital Video: One of the first services to move to a subscription model; enabled by the roll-out of high-speed Internet access, streaming service providers such as Netflix and Amazon are able to offer platforms that require minimal investment. We estimate that, by 2026, there will be over 790 million subscriptions to these kinds of services.
2. Digital Music: A well-established subscription service that has been bolstered by the support of all stakeholders. Key services such as Apple Music and Spotify are already offered by telcos to new subscribers or upgrading subscribers via carrier billing. However, in the future, telcos should be looking to include this as part of a Super Bundling offer. By 2026, there are expected to be over 810 million digital music subscriptions worldwide.
3. Physical Goods Boxes: The boxes span a wide variety of use cases, although they often comprise delivery of recipes for food boxes or hygiene products. These have become increasingly popular owing to better transport delivery networks and investment into products that can keep produce fresh. By 2026, there are anticipated to be over 920 million subscriptions globally.

*Figure 1.3: Global Subscription Market Value ($bn), Split by 8 Key Categories in 2023*




*Source: Juniper Research*

*Note: Multiservice subscriptions include services that cannot primarily be attributed to any of the other sectors.*

Mobile games are also predicted to be a key element to subscription packages in the future. These services can often be mobile centric, as smartphones become the primarily used device for users. Indeed, smartphones are now used for streaming music and video, and we are seeing a rise in subscriptions for mobile games, including Apple Arcade and Google Play Pass.

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# 2. The Super Bundling Opportunity

### 2.1.1 Solving an Administrative Nightmare for Mobile Subscribers

Telcos must capitalize on the aforementioned growth of subscription service revenue growth by offering Super Bundling services to their own mobile subscribers. Super Bundling consists of:

*Services offered by telcos that enable mobile subscribers to adopt, manage, and cancel a multitude of subscription services, and pay for them in a single payment to a telco.*

There are many aspects in which Super Bundling can provide benefits to consumers, and telcos must position themselves as the 'bridge' between mobile subscribers and service providers to capitalize.

These are shown below:

The average user will have access to multiple accounts. With this comes the need to manage subscriptions with multiple vendors:

- Various card-on-file payment dates. For mobile subscribers, it is important to easily manage subscription services. However, without Super Bundling, this needs to be done on a service-by-service basis. This also means multiple card-on-file payments throughout a billing period. Super Bundling will enable these payments over a single payment to be made once in the billing period, to the telco.

- Having to speak to different service providers to create, manage and cancel subscription services. With the addition of a Super Bundling digital platform, this administrative nightmare becomes much easier to manage by centralizing all management functionality.

The emergence of Super Bundling will place these responsibilities with the operator. The mobile subscriber does not have a direct payment relationship with any of the service providers, but uses a telco to act as a single point of contact for mobile subscribers.

The onus is on the telcos to offer these services to maximize benefits for their mobile subscribers. The first step to achieve this is creating the tools for subscription management for the subscribers.

*Figure 2.1: Key Global Average Subscription Adoption Data per User per annum, 2023 & 2026*


*Source: Juniper Research*

As can be seen in figure 2.1, there will be considerable growth in subscription adoption. Indeed, when you consider that this is an average, there will certainly be demand for Super Bundling services that centralize the management of subscription-based services. Super Bundling stores will act as a storefront for subscription services to operators and will be a contributing factor to this growth of subscriptions over the next four years.

### 2.2 How Super Bundling Benefits Telcos

Super Bundling is an opportunity that many telcos must consider, given the current climate in the telecommunications industry. Declining ARPU (Average Revenue per User) and increasing customer acquisition costs are leaving telcos in a position in which they must innovate their services. Super Bundling is an immediate opportunity to tackle these issues.

Shown below are some key benefits that telcos will gain from launching Super Bundling services:

### 2.2.1 Easier Customer Acquisition

Super Bundling provides a great value proposition for subscribers by centralizing the management of subscriptions services. As outlined in section 1, the average consumer is taking on a greater number of subscriptions; a trend that is anticipated to continue over the next four years.

As the cost of acquiring new subscribers increases, telcos are investing in new services and products that can attract potential new customers, either first-time mobile subscribers or subscribers from competing operators. Based on the rise of subscription services, telcos must be prepared to offer Super Bundling to capitalize on this growth. They must position themselves as the 'link' between mobile subscribers and subscription-based services by providing their subscribers with:

- The ability to manage multiple subscriptions (and the ability to add existing subscriptions to a Super Bundling offer).
- A digital platform in which their mobile subscribers can easily add a subscription to their Super Bundling account autonomously.
- An easy method to cancel an existing subscription in their Super Bundling account.
- Trial periods for subscription services.

If these services can be demonstrated to mobile subscribers, then there will be a more compelling reason to subscribe to the specific telcos network (if other mobile services match the subscriber's expectation).

### 2.2.2 Increased Customer Retention and Reduced Churn

Akin to attracting new subscribers is the ability to retain current ones. Much of the same reasoning applies; by offering a highly valuable service option to existing subscriptions, the value of the overall subscription itself increases. However, these must be demonstrated to existing subscribers through advertising campaigns and subscriber education.

*'Super Bundling provides an excellent opportunity for telcos to increase customer retention and acquisition, and reduce churn to competitors. Ensuring the library of subscriptions available over the Super Bundling service is abundant will be the key way to maximize the benefits of offering a Super Bundling service to subscribers' – Anil Malhotra, Chief Marketing Officer at Bango*

In addition, telcos can also work with subscription service providers to devise offers that can firstly, encourage existing users to take up Super Bundling services, and secondly, increase the value of their relationship with their network operator.

### 2.2.3 Brand Strength and a Reputation for Innovation

Offering a service as innovative as Super Bundling will also boost a telco's reputation amongst subscribers. This can have added benefits such as:

- Word-of-mouth advertising. This is invaluable to all businesses in all industries. Given that an individual typically has a single telco service provider, getting positive feedback through word-of-mouth advertising provides a great platform for growth.
- Increasing mobile subscribers' willingness to explore further value-added services. With an improved reputation, consumers will be far more willing to

explore future services launched by the operators. Operators can use Super Bundling as a platform to further differentiate themselves from a sole connectivity provider to a more technology/service-oriented service provider.

### 2.2.4 Offer Operator Subscriptions via Subscription Bundling

By setting up a portal to manage subscriptions, operators will provide a platform in which other services – provided by the operator itself – can be located. These can include areas such as roaming packages and deals for increased data. This becomes especially pertinent when prepaid subscribers are prevalent on an operator's networks as this enables subscribers to add new services to an account autonomously.

However, it is evident that telcos are in different positions, and Super Bundling will provide varying benefits. A key distinction to be made is the splits between post-paid and prepaid subscribers; post-paid subscribers are ideally fitted to Super Bundling notions as they already have a monthly billing relationship with operators.

However, the prepaid subscriber market must not be discounted. Indeed, it can be used as a tool to motivate prepaid subscribers to migrate to a post-paid subscription. Additionally, a Super Bundling platform can be used to assist prepaid subscribers to manage the various aspects of their account.

## Past

One-off transactional fees for digital content or physical goods.

The user will own a copy of the content or the physical device. There are no recurring costs, however there will be no expansion of additions to the service or product bought.

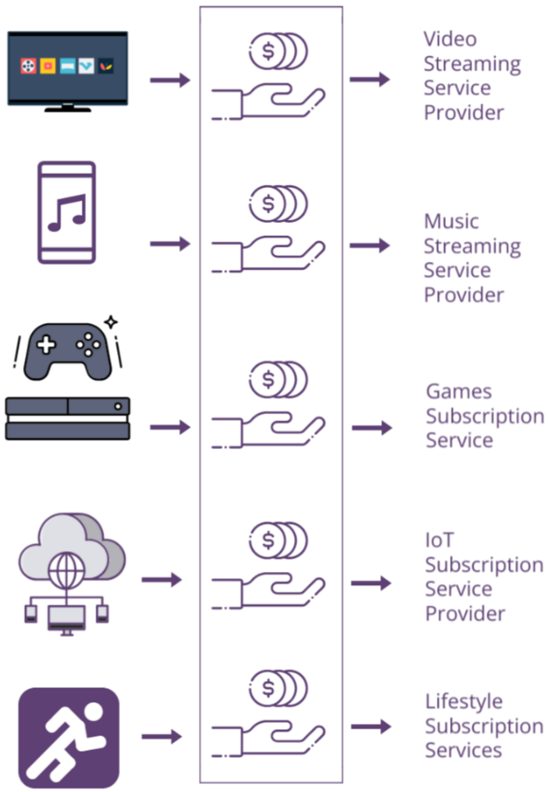
Music was often delivered on physical copies, such as CDs.

TVOD (transactional video on demand) enabled users to purchase films, but was limited to a single platform.

Video games purchases were locked to a single account and could not be shared.

## Present

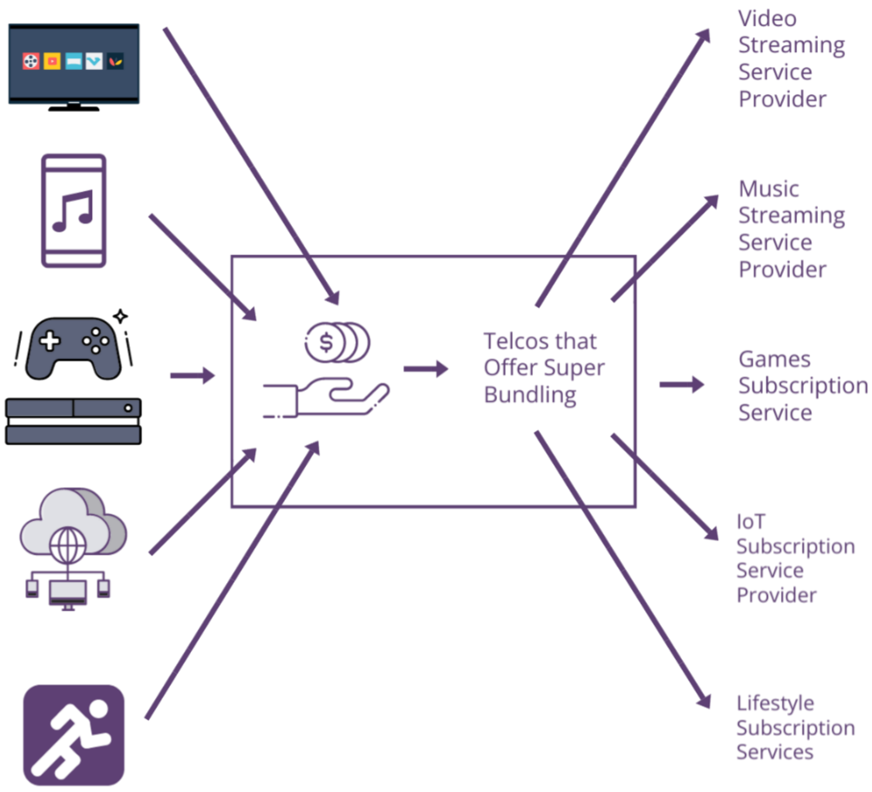
Subscription fees for continuous access to content or the regular delivery of physical goods.




At present, users are required to make individual payments to each service provider, most often across different dates.

## Future & Super Bundling

Moving subscription under a single payment to a single provider means less management of payments for users and increased visibility.




Here, the telco can act as the bridge between their subscribers and multiple service providers that offer subscription-based services.

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# 3. Bango & Super Bundling

## 3.1 Bango & Super Bundling

### 3.1.1 Corporate Information

Bango is a UK-based mobile payments and data insights provider, focused on large-scale merchants. Founded in 1999, Bango was an early mover in the mobile payments market, offering the browse-and-buy model between 2001 and 2005. It was in 2005 that Bango was floated on the London stock exchange.

In 2022, Bango reported revenue of $28 million, up from $20.7 million. However, there was a rise in administrative expenses, leading to a loss of $1.4 million. The rise in administrative expenses owes to the acquisition of the global payments business NTT DOCOMO. This acquisition will help Bango gain further dominance in the global carrier billing and emerging bundling sector.

*Table 3.1: Bango's Financial Snapshot ($m), 2019-2021*

| | 2020 | 2021 | 2022 |
|---|---|---|---|
| Revenue ($m) | $15.7 | $20.7 | $28.5 |
| Administrative expenses ($m) | $13.7 | $18.9 | $30.3 |
| Operating Profit ($m) | $1.6 | $0.5 | -$1.4 |

*Source: Bango*

Since its establishment, Bango has received $40.8 million in funding. The majority of this came from post IPO (Initial Public Offering) equity, raising 35.4 million between 2013 and 2020.

Bango has four offices globally, comprising its headquarters in the UK, and regional offices in California, Tokyo and South Korea. Through these, it provides its services in 50 countries.

### 3.1.2 Bango & Super Bundling

The Bango DVM (Digital Vending Machine) is deployed by resellers (e.g. telcos, utilities and retailers) that want to attract and engage more customers by bundling third-party subscriptions with their first-party services. Resellers have a trusted billing relationship with millions of subscribers, a key benefit to merchants looking for new customers, and merchants have exciting content that helps those resellers differentiate their services.

Market leaders, including Liberty Global, Verizon & BT, use the Bango DVM to create, launch and manage dozens of subscriptions including Netflix, HBO, Amazon Prime, Microsoft 365 & Xbox Game Pass, Duolingo, Calm, Peloton, McAfee and other subscription services for their customers.

Bango provides telcos with the information and solutions to enable them to become a bundling and resale provider, one that stands out amongst the competition for delivering an unbeatable customer experience.

Bango Payments connects online app stores and content providers to over 4.5 billion users across the globe. The world's leading online businesses, including Amazon, Google and Microsoft, use Bango Payments technology to provide new ways to pay that are fast, simple and secure.

Uniquely, Bango gives merchants and payment providers data insights that deliver a better user experience and help acquire more paying customers. Bango processes over $8 billion of payments every year across multiple merchants and markets, Bango acquires information about payment behavior and preferences that is analyzed to produce insights that deliver more sales.

Increasingly, telcos (as well as other 'utility' service companies) are using the appeal of entertainment and lifestyle services to attract and retain customers. Previously, one or two subscription services were offered, but a growing number of telcos are focusing on meeting consumer demand for more subscription services and becoming the single platform to help consumers manage those subscriptions. The Bango DVM enables the world's leading telcos – including Verizon, T-Mobile, BT & Liberty Global – to offer their customers dozens of subscription services bundled with their own first-party services. These global leaders power growth for Bango by moving the market in the direction of 'Super Bundling' and by positioning Bango technology as the de facto standard for powering this business. In addition, these telcos act as a 'merchant magnet', bringing additional merchant relationships to the Bango Platform. Once a merchant is integrated to the DVM, any telco connected to Bango can then offer these services to their own customers, driving additional growth. Growth in this business is generated by onboarding new DVM customers and by existing customers moving up through the license fee tiers. Each time a consumer subscribes to a service through a Bango DVM-powered offer, this uses up one entitlement. In this way, a single consumer subscribing to many services through the DVM will use up multiple entitlements. Using unique data insights generated by the Bango Platform, Bango helps DVM customers acquire new subscribers more quickly, scaling them through the entitlement tiers faster. For example, knowing a consumer spends money in a basketball game, means they are a good target for an NBA subscription offer; knowing a consumer already has Netflix, Disney and HBO Max indicates that offering them a music streaming service, rather than another TV/movie service, is more likely to be successful.

### i. Key Benefits

- Merchants and online stores connect once to the Bango Platform to activate hundreds of payment providers in over 75 countries.
- Bango reaches more customers through card payments by offering charge-to-bill (eg direct carrier billing and broadband billing), mobile wallets and other high-growth, high-penetration payment methods.
- Payment providers integrate with Bango once to multiply the use of their payment method with the world's leading online stores and merchants.
- Increasing the number of paying customers by applying Bango data insights, and maintaining long-term relationships with customers.
- Optimizing payment performance through Bango innovations, like predictive authorization technology, which maximize subscription take-up and longevity.
- Companies can access real-time data from Bango Dashboard to learn how their payments business is growing, to analyze payment performance and track the fast-selling products and the rising stars.
- For merchants and for payment providers, connecting to Bango is easy. Opening up unlimited payments reach and capitalizing on advanced technology captures more successful payments for businesses.

## Case Study: Verizon +play

verizon

+play is an online platform, offered by Verizon, that enables mobile subscribers to manage their subscription-based streaming services. Offered to subscribers through My Verizon, they are able to subscribe to, and manage subscriptions across the following areas:

- Entertainment
- Audio
- Gaming
- Fitness
- Music
- Lifestyle

The service is currently offered at no extra cost to the existing mobile subscription to Verizon and its services. Special offers are available on a subscriber-by-subscriber basis, including trial periods, limited-time discounts, one-time offers, and seasonal offers. By consistently updating the library with new offers and content, Verizon is able to refresh the value proposition of +play over time.

To enable these subscriptions, Verizon subscribers are offered a direct-to-consumer platform that they can log into with existing account details to set up +play. It is not available through any app stores.

The aggregation platform is capable of the following:

- Notifying users when a more cost-efficient price for an existing subscription becomes available.
- Providing billing updates and payment activity.
- Managing account changes.
- Updates for new content.

### Juniper Research's View

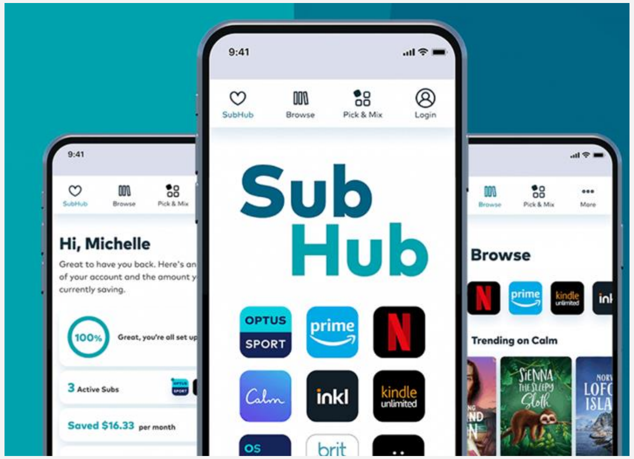
Notably, Verizon is one of the largest network operators in the world, and works in the US; a country amongst the largest adopters of subscriptions services in the world. In turn, Verizon is well placed to capitalize on its early-mover advantage in the Super Bundling space.

With major subscription service providers based in the US (Netflix, Apple, Microsoft etc), Juniper Research expects Verizon +play to be amongst the leading subscription bundle platforms over the next five years. With over 140 million subscribers in the US, there is also a substantial addressable user base in which Verizon can expand its services to in the future.

## Case Study: Optus SubHub

Optus provides a Super Bundling service of its own: SubHub. The platform offers Optus subscribers the option to add various streaming services to its mobile subscription, and a platform to manage these subscriptions. SubHub continues to add new services regularly some of the services that are available now include Netflix, Amazon Prime, Paramount Plus, Microsoft 365, Calm and Binge. Optus SubHub is not available to prepaid customers.

*Figure 3.3: SubHub from Optus*




*Source: Optus*

The Super Bundling service is exclusive to Optus' mobile subscribers, further increasing its value.

SubHub is offered at no extra cost to subscribers. Customers can log in via their standard log in details and build their subscription packages as they wish.

### Juniper Research's View

Optus is the second largest operator in Australia, acting as a wholly owned subsidiary of Singtel. The company is amongst the first telcos to offer Super Bundling through its service, SubHub. To capitalize on the growth of subscription bundling, Optus is expected to continue growing its subscription library to further increase the value of a SubHub subscription.

To accomplish this, SubHub must look to expand the subscriptions over its platform to include more services outside of digital content provision. As mentioned previously, services such as goods boxes and fitness and wellness subscriptions will provide an added bonus to any subscription bundling service.