

Boku

FY20 results

Evolving to address wider e-commerce market

Boku reported strong results for FY20, with adjusted revenue and EBITDA growth of 20% and 106% respectively. The Payments business benefited from increased consumer demand during the pandemic, while the Identity business had a more difficult year. Trading year to date has been strong for both businesses and management is confident of meeting expectations for FY21. We have made minor changes to our FY21/22 forecasts. The evolution of the platform to address the wider alternative payments market provides upside potential to our forecasts and the share price.

Year end	Revenue (\$m)	EBITDA* (\$m)	Diluted EPS* (c)	DPS (\$)	P/E (x)	EV/EBITDA (x)
12/19	50.1	7.4**	1.2	0.0	201.2	87.4
12/20	56.4	15.3	3.2	0.0	75.4	42.4
12/21e	66.5	17.7	3.2	0.0	76.8	36.5
12/22e	77.8	21.0	3.9	0.0	62.4	30.8

Note: *EBITDA and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. **Excludes one-off revenue recognition.

Adjusted EBITDA growth 106% in FY20

For FY20, Boku reported adjusted revenue growth of 20% (Payments +27%, Identity -23%), of which 11% was organic. Adjusted EBITDA grew 106% (organic growth 86%) with margin expansion of 1.9pp to 27.1%. The Payments business benefited from strong demand for digital content as consumers looked for entertainment during lockdown. The Fortumo acquisition has performed in line with expectations, contributing revenue of \$4.5m and EBITDA of \$1.5m in H220. The Identity business suffered from reduced supply from US carriers and difficulties signing new business due to COVID-19, but reduced its EBITDA loss from \$5.3m to \$3.9m. The delay in reaching break-even prompted a goodwill impairment of \$20.8m, but management is confident that this business is back on a growth trajectory now that international data supply is available.

Evolving into mainstream payments platform

Management is evolving the business from its core direct carrier billing (DCB) focus to encompass a wider range of mobile-centric next-generation payment methods. This expands the addressable market from digital content to the whole e-commerce market (c 20x larger). The move to support digital wallets as an alternative payment mechanism is the first step in this process, with 13 accounts going live in FY20. The focus for FY21 will be on growing the number of live wallet connections and converting recent Identity contract wins to revenue.

Valuation: Sum-of-parts suggests upside

Valuing the Payments business alone using the average FY21e EV/EBITDA multiple for its peer group results in a per share value of 197p, providing upside to the current share price. The Identity business could provide further upside – including it at its unimpaired cost would take the per share value up to 203p.

Software & comp services

22 March 2021

Price **174.0p**
Market cap **£501m**

\$1.39:£1

Net cash (\$m) at end FY20 49.0

Shares in issue 287.7m

Free float 93%

Code BOKU

Primary exchange AIM

Secondary exchange N/A

Share price performance



%	1m	3m	12m
Abs	12.3	21.7	225.2
Rel (local)	10.6	17.4	137.1
52-week high/low		174p	58.5p

Business description

Boku operates a billing and identity verification platform that connects merchants with mobile network operators in more than 80 countries. It has c 300 employees, with its main offices in the US, UK, Estonia, Germany and India.

Next events

H121 trading update July 2021

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Investment summary

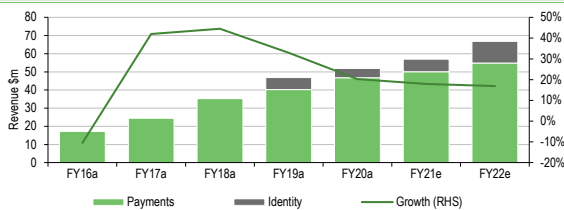
Helping merchants to grow and protect their businesses

Boku has developed and operates a platform that connects merchants with mobile carriers and digital wallet providers. This supports mobile commerce through the following routes: direct carrier billing (DCB, which serves as an alternative payment method for companies selling digital content), digital wallets, and identity verification services (which enable merchants to sign up and transact with users while meeting regulatory requirements and avoiding fraud). Key investment considerations include:

- Boku's platform is built to scale; additional transactions can be processed at minimal marginal cost giving Boku the flexibility to offer attractive pricing and providing strong operating leverage.
- The DCB business is well established with more than 200 carrier connections in more than 80 countries. While DCB is often used in markets where credit/debit card ownership is low, Boku is more focused on developed markets, where the ease of setting up and making DCB payments is a powerful tool for attracting customers to digital content merchants.
- Boku has signed up major merchants in key digital content categories, for example Apple and Microsoft for app stores, Spotify for music, Netflix for video streaming, Facebook and Sony for games. By focusing on the largest merchants in each category, it can more efficiently scale as transaction volumes grow.
- The company should see growth from its existing merchant base over the next three years, as they execute their geographic roll-out plans and as consumers continue to adopt digital content via app stores, merchant websites and subscription services such as music or video streaming.
- Boku has expanded the payment types it can process to include digital wallets and is actively looking at other alternative payment methods where its merchant relationships and customer service give it a competitive edge. This expands the addressable market to include the whole e-commerce market (c \$4.2tn) as opposed to that for digital content only (c \$230bn).
- By offering identity verification services, Boku has further widened its addressable market, providing support to areas such as banking, remittances, mobile payments, on-demand services and government services.

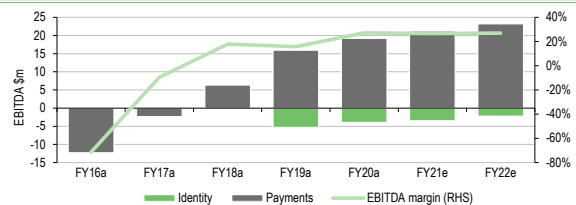
FY20 results show benefits of platform approach

Exhibit 1: Revenue progression, FY16–22e



Source: Boku, Edison Investment Research. Note: FY19 revenue excludes \$3.26m one-off revenue.

Exhibit 2: EBITDA progression, FY16–22e



Source: Boku, Edison Investment Research. Note: FY19 EBITDA excludes \$3.26m one-off revenue.

Boku had already reported headline figures for FY20 in January. Excluding the one-off revenue of \$3.255m in FY19, the group saw revenue growth of 20% (Payments +27%, Identity -23%), organic revenue growth of 11%, adjusted EBITDA growth of 106% (organic +86%, Payments +51%) and normalised operating profit growth of 156%. COVID-19 was generally positive for Payments demand, as more people purchased digital content while locked down, whereas for the Identity business, the picture was more mixed. Certain customers (eg ride sharing) saw lower demand and it was more difficult to sign new business. On the cost side, the company benefited from lower

travel and marketing costs in both divisions. We forecast normalised group EBIT margins to grow from 20.5% in FY20 to 20.9% by FY23e and we forecast continued growth in cash over the next three years. For normalised EPS we forecast a CAGR of 10% in FY20–22e.

Payments supports valuation; Identity provides upside

On P/E multiples, Boku is trading at a premium to the average of payment processor peers and identity management peers, but is trading at a large discount to payment peers on an EV/Sales and EV/EBITDA basis. However, we believe that the investment Boku is currently making in the Identity business is masking the performance of the Payments business. As the two businesses have different growth and profitability dynamics, we take a sum-of-the-parts approach to assign value to each separately. For the Payments business, we use an FY21e EBITDA multiple of 35.0x, the average of its payment processor peers. For the Identity business, we use the cost of the acquisition of \$25m (3.6x FY21e revenue) to reflect the fact that the business is currently loss-making. This generates an equity value for the group of \$813m or 203p per share, compared to the current share price of 174.0p. Excluding the Identity business entirely, the group would be worth \$788m or 197p per share. Key catalysts for the share price would be evidence of resumption of growth in the Boku Identity business, new major merchants signing up in either business and a growing contribution from the wallets service.

Factors influencing growth and profitability

As well as the usual risk factors relating to competition, regulation and the company's technology platform, we see potential for merchant-related factors to influence our forecasts and the share price, both on the upside and downside. For existing merchants, this includes the pace of roll-out to new carriers and countries, the adoption of wallets as a payment mechanism, the rate of growth in the underlying adoption of digital content, the competitive positioning of major merchants, customer concentration, and the fact that some contracts contain short notice periods. We note that while our forecasts include a certain level of growth from new merchant wins, we have not factored in any major new merchant wins; these could add materially to our earnings forecasts.

Company description: Payment and identity solutions

Boku's technology has been developed to support mobile commerce, which takes advantage of the more than five billion global mobile phone subscribers. Boku developed and operates a platform to support DCB; this platform has connections to more than 200 mobile network operators (MNOs) and more than 500 merchants, enabling those merchants to offer their customers DCB as a payment option. Boku manages the payment transactions on behalf of the MNOs and merchants but, more importantly, provides a route to market to a section of consumers who may be more difficult to reach via traditional customer acquisition methods. Boku has seen rapid growth in transactions processed via its platform and we believe this growth should continue as more carriers and merchants join the network. The company consolidated its position in the DCB market with the acquisition of Fortumo in mid-2020.

Boku has taken steps to leverage the network of connections it has developed between MNOs and merchants, initially developing an identity verification product in house before acquiring a US-based provider of identity verification services at the end of 2018. The company is also expanding the number of payment types it can process, starting with digital wallets and considering other alternative payment mechanisms such as direct-from-bank and buy-now-pay-later.

Boku: A short history

Boku was founded in 2008 by Mark Britto, Erich Ringewald and Ron Hirson. In 2009, Boku acquired DCB companies Mobilcash and Paymo, and shortly after launched its DCB service. The first

product was Boku Checkout, which enabled a consumer to enter their mobile phone number as a payment credential – this would then add the cost of the items acquired to the consumer’s mobile phone bill or reduce their pre-paid credit. This was popular with gamers, as it enabled them to pay for games on their PCs, social gaming on Facebook and multi-player online games. In 2012, Boku acquired Qubecell, an Indian DCB company, which gave the company access to Indian MNOs and, more importantly, development resource. With the signing of Sony as a merchant in 2013, Boku enabled purchases to be made from games consoles. In 2014, Boku acquired Mopay, its main competitor, for \$24m. In 2015, Boku launched its second product, Boku Account, which provides the phone equivalent to ‘card on file’, supporting upgrade and repeat purchases. In 2016, the company launched Boku Acquire, which supports the bundling of additional products and services within a subscriber’s carrier plan. Boku listed on AIM in November 2017, raising £15m at 59p per share and placing an additional £30m of shares. On 1 January 2019, Boku acquired Danal, a US-based provider of identity verification services, for \$25.1m. On 1 July 2020, Boku acquired Fortumo, an Estonia-based DCB provider, for up to \$41m. The company has c 300 employees, with its main offices in the UK, US, Germany, Estonia and India.

Growth strategy: Evolve into mainstream payments platform

Boku’s mission is to grow, monetise and secure transactions for billions of consumers around the world. It aims to do this by building the company into a mainstream fintech payment platform specialising in mobile-native next-generation payments, while also providing a comprehensive network of mobile identity data to secure online transactions.

In the short to medium term, the company should benefit from the network effect in its DCB business and the growing contribution from digital wallets. In the longer term, it should see growth from the development of its identity solutions and the addition of new alternative payment types. With a wide network of carriers and a growing number of digital wallet providers connected to the platform, this offers an attractive way for merchants to access new customers. In turn, as more merchants sign up, it makes the Boku platform more attractive to carriers and wallet providers. While Boku has c 500 merchants using its platform, we expect that the majority of revenue will come from a small number of large merchants. We see growth from the following factors:

- connecting more carriers with existing merchants;
- adding more merchants;
- adding more payment types (eg wallets);
- growth in demand for digital content;
- growth from existing DCB connections; and
- expansion of the Identity Solutions business to new geographies and merchants.

Management: Strong background in payments

The members of Boku’s board and senior management team have many years of experience in the payments industry. Non-executive chairman Mark Britto is chief product officer at PayPal. CEO Jon Prideaux’s previous experience includes roles as the deputy CEO at SecureTrading (a privately owned payment processor) and as EVP of marketing at Visa Europe. CFO Keith Butcher previously held the role of CFO at Optimal Payments, which became Paysafe, and DataCash Group, which was acquired by Mastercard. Stuart Neal, previously CFO, now heads up the Identity business. Jon and Keith are supported by chief operating officer Chris Newton-Smith, chief business officer Mark Stannard and chief product officer Adam Lee. Non-executive directors Dr Richard Hargreaves, Stewart Roberts and Charlotta Ginman bring experience in venture capital investing, the payments industry, technology and telecom companies and AIM companies.

Payment solutions: DCB and wallets

Boku's original focus was on the direct carrier billing market. This is still the main revenue and profit generator for the group, but the company now also supports digital wallets as a payment mechanism that merchants can offer to their customers.

DCB market drivers: Smartphones, digital content, ease of use

The DCB payment method uses a consumer's mobile bill (pre-paid credit or post-paid monthly bill) as the means to pay for digital content or services. The market started before the widespread adoption of smartphones with the provision of premium SMS. DCB then evolved as a way to pay for products on PCs, mainly computer games. It offers a good way to make smaller payments as these typically do not hit carrier monthly credit limits and it provides a simpler way to pay for things than repeatedly having to enter card details. Smartphones enabled a new market: digital content consumed and paid for on the mobile. Having a simple, frictionless way to pay is even more important on a phone. Typical content that is paid for with DCB includes games for computers, consoles and phones, music, video and apps.

Based on data from Worldpay, the DCB market makes up less than 1% of the total e-commerce payments market by value of transactions processed. According to estimates from Ovum (now Omdia) in 2019 (source: Boku annual report), the DCB market processed transactions worth \$26bn in 2018 and this is forecast to grow to \$49bn by 2023 (CAGR 13.5%). We summarise below the key benefits of DCB for consumers, merchants and MNOs.

- **Consumer – frictionless payment method.** DCB provides a payment method to consumers who are concerned about the security risks of using their card online or do not want the inconvenience of entering card details every time.
- **Merchant – cheaper customer acquisition channel.** Through one connection to Boku's platform, a merchant can access a large number of carriers and their subscribers; there is no need for the merchant to connect individually to each carrier. This gives merchants access to a market that might not otherwise buy their products. This also explains why they are willing to offer DCB despite its high cost compared to card payments, as they view the fees as a combination of a payment processing fee and customer acquisition cost. Billing success rates tend to be higher than with cards, as there is the ability to retry a consumer when they have topped up their credit, and phones do not suffer from expiry dates. Active monthly users have grown from 17.8 million at the end of 2019 to 28.8 million at the end of 2020 (or 24.2 million excluding Fortumo users), with 25.9 million new users signed up in FY20. On average, a merchant moving onto Boku's platform can expect to see a 20% uplift in volumes.
- **Carrier – one connection to access incremental revenue opportunities.** Through one connection to Boku, a carrier can support a variety of merchants and drive incremental revenue streams. The carrier can typically earn 5–15% of the transaction value for delivering customers to merchants. Offering subscription services as part of a bundled contract can also increase subscriber retention.

For content acquired from an app store using DCB, a typical revenue split could see the app developer earn 70%, the app store 15%, the carrier 12% and Boku 3%. Both the merchant and the carrier benefit from a material proportion of the value of the content sold. Boku's margin will vary in size depending on the work undertaken to enable the payment (see page 16 for further detail on the business model).

Boku's DCB payment solutions

The tables below show the products available to merchants and the features available with each product. Boku signs up merchants through a direct sales approach.

Exhibit 3: Product range

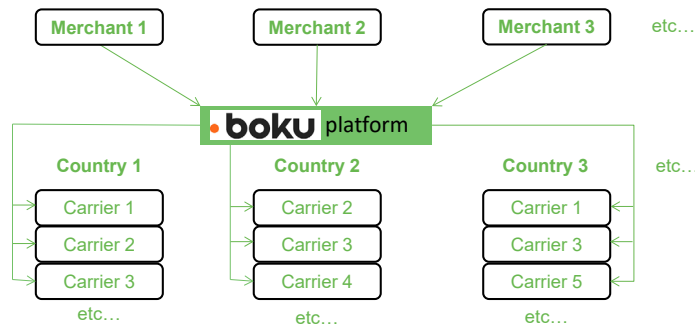
Product	Functionality
Boku Checkout	The first product launched by Boku; integrated into the MNO's billing system. When a consumer reaches the payment page for an online merchant using Boku Checkout, they are presented with the 'pay by mobile' option, which allows them to charge the cost of the item to their mobile phone bill (pre- or post-paid). Once the consumer has entered their mobile phone number, they are sent a text message asking them to confirm the transaction.
Boku Account	Deeper integration with the MNO, connecting to the operator's identity verification systems. Provides 'phone number on file' capability, like the 'card on file' functionality offered by many online retailers. The consumer follows the same process as for Boku Checkout, but in this case the phone number is used for all subsequent purchases without confirmation needed from the consumer. It is particularly useful for merchants who want to improve their activation rates, eg merchants offering freemium subscription services can use Boku Account to capture consumer payment details at the start of the relationship, making the step to upgrading to a paid subscription easier.
Boku Acquire	Supports operator-led customer acquisition; enables carriers to bundle third-party products and services into their plans. For example, several operators provide free trial periods of Apple Music or Spotify as part of a monthly plan that will hopefully result in a subscriber signing up for the paid service after the trial period.

Source: Boku

Building Boku's M1ST Payment Network

Exhibit 4 shows how the platform works. The merchant makes its connection to Boku's M1ST (mobile first) Payments Network. Carriers separately connect in via APIs and integrate with their own billing systems; this process can take three to six months. This tends to be done on a country-by-country basis within a carrier group. Boku and Fortumo combined have connections to more than 200 carriers in over 80 countries.

Exhibit 4: Connecting to the Boku platform



Source: Edison Investment Research

Typically, a merchant specifies which carriers it wants in which geographies and will develop a roll-out plan with Boku. In some cases, Boku suggests to merchants that certain carriers should be considered. Boku will also suggest merchants to carriers.

The platform was using two data centres; it is currently in the process of migrating both data centres to cloud-based infrastructure (AWS). One data centre has already been moved to the cloud and decommissioned, the other will be completed in 2021.

Regulatory considerations

Operating globally, Boku comes under the remit of a number of different regulatory regimes. It must also comply with anti-money laundering regulations in the countries in which it operates. DCB tends to be exempted from money transmission regulations as long as transaction limits are respected. As Boku is expanding its offering to alternative payment methods, it is going through the process of obtaining the necessary licences in the territories in which it plans to operate.

Acquisition of Fortumo cements leading position

In July 2020, Boku acquired Fortumo,¹ a global DCB provider based in Estonia. This cemented Boku's position as the leading DCB provider. Fortumo has built up a network of 280 carrier connections in 80 countries, with most merchants using its platform based in Europe and Asia. It has tended to focus on supporting small to medium-sized enterprises (c 400), although it does also work with large merchants such as Amazon, Epic Games, Google, Spotify and Tencent. Fortumo's platform provides self-service capabilities for merchants resulting in a much lower onboarding cost. Boku has typically focused on fewer, much larger merchants which require customisation of the service in return for providing high transaction volumes. The combined entities are now able to service all types of merchant efficiently. Boku is keeping Fortumo as a standalone business, retaining the current management team and the brand.

Playing to both entities' strengths, the Boku platform in the US is focused on customised work for strategic merchants and expanding into local payment methods. The Fortumo platform in Europe is focused on DCB bundling solutions and expanding its business with smaller merchants. A connector has been built between the two platforms so that merchant and carrier connections can be shared.

DCB by end-market

Boku has been successful in signing up the largest merchants in the main digital content categories. In some cases, Boku is the sole DCB provider. In others, the merchants split the carriers across two or more DCB providers. In the table below, we summarise the main content categories, the size and growth potential of each category, and Boku's position within it. We also include merchants working with Fortumo where relevant.

Exhibit 5: Digital content addressable market and customers					
Digital content	App stores	Games	Music	Video	Other
Type of content	All content acquired in app stores, eg apps, games, music	Games played on PCs, consoles, mobiles	Music streaming services	Video on demand services	e-books, parking apps
Market size/growth	2020 revenues: App Store \$72bn, Google Play \$39bn (source: Sensor Tower); total app store revenues \$143bn (Source: App Annie)	Est \$175bn in 2020 (+20% y-o-y); CAGR 9.4% 2018-23 (source: NewZoo)	Est \$23bn in 2021; CAGR 9.7% 2021-25 (source: Statista)	Est \$59bn in 2020, CAGR 12.8% 2020-25 (source: Statista)	N/A
Merchants	Apple App Store, Google Play, Microsoft Store	Sony, Microsoft, Activision Blizzard, Epic Games, Riot Games, Tencent Games, Xsolla, Pearl Abyss, Facebook, Antstream	Spotify, Apple, Deezer, AWA	Netflix, Apple, ALTBalaji, ByteDance (TikTok), Amazon Prime, iQIYI, DAZN	Legimi
Comments	Sole provider to Apple (to date) covering 48 countries and 114 MNOs.		Spotify & Apple combined have > 50% of paid subscriber market	Market is more fragmented than streaming so expect Boku to have a portfolio of video streaming merchants	

Source: Edison Investment Research

Competitive landscape

Boku competes with several third-party DCB operators as well as with carriers connecting directly to merchants to provide DCB. We would expect more carriers to migrate to the third-party model to access merchant connections more easily. The table below summarises the main third-party operators.

¹ [Consolidating the carrier billing market](#), 22 June 2020

Exhibit 6: Competitive environment – third-party DCB operators

Competitor	Ownership	Background
Bango	AIM listed; market cap £167m	Key merchants include Amazon, Google, Microsoft and Samsung. CY20 end-user spend £1.9bn/\$2.4bn.
Dimoco	Private	Was a mobile messaging company; acquired Italian DCB OneBip in 2016. Focused on Europe and Latin America.
Docomo Digital	NTT Docomo	IT subsidiary of NTT. Also provides marketing and consulting services. Connected to >200 carriers. Any merchant wanting to connect to NTT Docomo has to connect into the Docomo Digital platform. Note that Boku supports NTT Docomo's carrier billing for Apple, Sony and Spotify. Docomo Digital processed transaction volumes of \$3bn+ in 2019.

Source: Edison Investment Research

Growth strategy for DCB solutions

The company believes it has a good medium-term growth opportunity from its **existing merchant base**, mainly through connecting them to more potential consumers. The decision on who to connect to tends to be merchant led, particularly with merchants like Apple, which decide where they want to offer carrier billing, but Boku also suggests new connections to merchants, both in terms of new countries or adding carriers in existing countries. Boku notes that on average, merchants have only 32 live carrier connections, highlighting the scope to grow connections per merchant. In FY20, Boku added 69 new Boku Account connections, of which 53 were for major merchants.

The company could also benefit from **consolidation in the carrier billing market**; it has already acquired Fortumo and could benefit from carriers switching all their business to one DCB provider.

Growth in the **adoption of digital content**, eg music streaming, should drive growth in transactions. In addition, it can take 20 months for a merchant to see optimal adoption from existing carriers; initially only new users will be using the service, but as existing users' cards expire, they are made aware of the DCB option. Better understanding of the risk profiles of subscribers can enable MNOs to lift monthly credit limits and therefore drive increased transaction volumes.

The company will also continue to sign up **new merchants**, with a particular focus on those that have a strong position in their given market.

Wallets: Using the platform to offer another form of payment

As DCB operates at a higher cost than other payment mechanisms such as debit cards, the company believes that there is a natural ceiling on the size of the DCB market, estimating that it is unlikely to exceed a 15–20% share of checkout. Considering that the digital content market was estimated to be worth \$208bn in 2019 (source: Statista), this would equate to a maximum total addressable market of c \$42bn. Consequently, Boku is keen to use the platform it has built to provide additional services to merchants and has identified the digital wallet market as attractive. According to data from Worldpay, digital wallets (eg PayPal, Alipay, Apple Pay) have overtaken card payments as the most common method of payment online, used for 44.5% of online transactions by value in 2020, compared to 38.4% for cards. This offers a two-fold benefit for Boku: the company has the potential to win a greater share of the digital content checkout. In addition, it opens up the addressable market for Boku to include all e-commerce, as opposed to just the digital content that can be acquired using DCB. In the same way that digital content merchants use Boku as a combined customer acquisition tool and payment processor, we expect offering wallets as an alternative payment mechanism will appeal to global merchants wanting to access consumers in regions with strong wallet usage such as South-East Asia. Conversely, using Boku should be attractive to wallet operators wanting to attract new merchants.

In North America and Europe, digital wallets such as Apple Pay, Google Pay and PayPal are growing in popularity. In Asia, where consumers are less likely to have debit or credit cards, digital wallets were used to make more than 60% of e-commerce payments in 2020. Popular wallets in

Asia include Alipay, WeChat Pay, Paytm, GoPay and GrabPay. These wallets are not standardised and are settled locally in the wallet’s local currency – Boku is able to help merchants by dealing with this complexity. The ideal merchant for Boku typically has cross-border sales, a dedicated payments team and limited existing wallet coverage.

Starting in FY19, Boku has developed a service to match wallet providers with merchants. In FY20, Boku processed transactions from 13 accounts with 11 wallets in seven countries. In the table below, we show the wallets that Boku is live with (ie merchants are using). Merchant launches include a Sony and Spotify.

Exhibit 7: Live wallet/merchant connections			
Wallet provider	Boku live	Wallet provider	Boku live
AlipayHK	Hong Kong	KakaoPay	South Korea
Dana	Indonesia	OVO	Indonesia
GCash	Philippines	PayMaya	Philippines
GoPay	Indonesia	rabbit LINE Pay	Thailand
GrabPay	Singapore, Malaysia, Philippines		

Source: Boku

The company has already contracted with 45 wallet providers and its focus in FY21 will be to increase the number that are live with merchants from the current 11. While the initial wallets were all based in Asia, more recent contracts cover wallet providers in Latin America, Europe and MEA (Middle East & Africa). To date, Boku has tended to cross-sell the wallet service to its existing DCB merchant base, but it expects to sign up its first wallet-only merchants in FY21.

The company competes with the traditional payment processors such as Worldpay and Adyen. Management believes that it has now built up a larger roster of wallet providers than the competition, with an optimised user experience and the ability to manage recurring transactions. It is also willing to work with merchants so that the wallets integrate with their processes, rather than the other way round.

Boku intends to evolve from being a platform that supports DCB to become a mainstream fintech payment platform specialising in next-generation payments. Offering digital wallets is the first step in this process. The company is also considering other fast-growing alternative payment methods such as direct-from-bank and buy-now-pay-later, as these tend to be local forms of payment with little standardisation, and as such, are complex for merchants to offer as payment mechanisms.

Identity solutions

Boku started developing identity-based services in FY18. At the beginning of 2019, it acquired Danal,² a US provider of mobile identity solutions. The Danal business has since been rebranded as Boku Identity.

Identity solutions based on mobile data

Online services such as e-commerce, banking, credit checking or payment processing need to be able to verify a user’s identity for a number of different processes including account registration, account log-ins, profile changes, support calls and high-value transactions. Verifying a user’s identity online requires access to a number of different types of data. This can include government-issued ID data such as passports, ID cards or driving licences, but is also likely to include other sources of data, including the data held by mobile carriers. Mobile carriers hold a range of information on subscribers that broadly falls into three categories: data on the identity of the subscriber; data relating to the account held by the subscriber; and data on the subscriber’s device

² [Accelerating mobile identity offering](#), December 2018

or SIM and activity on the network. The advantage of using data held by carriers is that it tends to be updated in real time, and therefore provides dynamic data.

Exhibit 8: Subscriber data held by mobile carriers

Identity attributes	Account attributes	Network attributes
<ul style="list-style-type: none"> ■ Full name ■ Address ■ Email address ■ Mobile number ■ Age 	<ul style="list-style-type: none"> ■ Active/inactive ■ Pre- or post-paid ■ Lost/stolen ■ Current tenure ■ Last top-up date ■ Line type: fixed/mobile/VOIP 	<ul style="list-style-type: none"> ■ IMEI ■ IMSI ■ SIM change ■ Device change ■ Call forwarding ■ Location

Source: Edison Investment Research

Danal was predominantly focused on US operators and developed products which make use of data from the carriers. Since acquisition, Boku has refined the product offering to leverage carrier unique capabilities (Exhibit 8). Boku Identity customers (new customers in bold) include **FIS**, getaround, Gojek, **LexisNexis**, MoneyGram, Nextdoor, PayPal, Square, the US internal revenue service, Uber and Western Union. The business sells directly and via channel partners including Experian, Fiserv, G&D, **Global Data Consortium (GDC)**, neustar and TransUnion.

Exhibit 9: Boku Identity products

Product	Detail
Boku Verify	Verify user supplied information to streamline signup and reduce fraudulent accounts
Boku Authenticate	Verify the user device to eliminate account takeover.

Source: Boku

Benefits offered by Boku Identity solutions

Boku Identity offers a simpler customer enrolment process and ongoing fraud detection for merchants. Using a Boku Identity solution removes the need for a merchant to send SMS one-time passwords (OTPs) to verify that a user is who they say they are. Not only is this important in terms of friction (the Boku verification service can save c 30 seconds compared to the SMS OTP process), but it also avoids the risk of SS7³ attacks, which can lead to account takeover. From a carrier’s perspective, identity verification services offer an incremental revenue stream.

US mobile carriers have come in for criticism for selling subscriber data to third parties. The Boku Identity products are designed such that no personally identifiable data leaves the carrier, and consent from a subscriber is required before their data can be verified in this way. The carrier typically provides Boku with a yes/no response or a score.

Competition

In the US, Boku’s largest competitor is Prove (previously called Payfone). Prove is privately held; the company raised \$100m in 2020 in a round led by Apax Digital. In Europe, TeleSign, a subsidiary of wholesale telecoms provider BICS, has a range of mobile identity solutions.

Growth strategy for Boku Identity

McKinsey estimates that the identity verification-as-a-service market was worth \$10bn in 2017 and expects a CAGR of 9–15% to reach \$16–20bn by 2022. The highest growth region is Asia, where identity data can be harder to come by, and more customers are mobile-first, particularly in countries where a large proportion of the population does not use credit cards or is unbanked.

³ SS7 attacks take advantage of the weakness in the design of the Signalling System 7 network protocol used by network operators, in order to intercept communications.

Boku was attracted to Danal because of its technology (products and patents) as well as its multinational customer base. Boku management believed that the Danal business had been constrained by a lack of sales resource as well as limited network coverage outside the US. Since the acquisition, the company has boosted the Identity business's sales resource and account management function, and moved Stuart Neal (previously CFO) over to head up the division. Through the course of 2019 and 2020, the division built up its network of carriers to gain access to data on an international basis and now has agreements with more than 200 carriers in 60 countries. The business was held back from late 2019 as some US carriers chose not to supply their data, but recently Boku has been re-established as technical provider to all US carriers. This means that Boku will be able to operate in the US in a similar way to the transaction business model within the DCB business (see Appendix on page 16 for detail).

In FY21, the business will be focused on connecting merchants, including those recently signed, to the international supply of data.

Financials

For details on the business model, please see Appendix on page 16.

Review of FY20 results

Exhibit 9: FY20 results highlights						
\$m	FY19a	FY20e	FY20a	Diff	y-o-y	
Payment revenues	43.5	51.1	51.2	0.3%	17.8%	
Adjusted Payment revenues	40.2	51.1	51.2	0.3%	27.4%	
Identity revenues	6.7	5.2	5.2	-0.5%	-22.5%	
Total revenues	50.1	56.3	56.4	0.2%	12.5%	
Total adjusted revenues	46.9	56.3	56.4	0.2%	20.3%	
Gross profit	44.6	50.8	51.5	1.3%	15.5%	
<i>Gross margin</i>	<i>88.9%</i>	<i>90.3%</i>	<i>91.3%</i>	<i>1.0%</i>	<i>2.4%</i>	
Payment EBITDA	15.9	18.8	19.2	2.2%	20.3%	
Adjusted Payment EBITDA	12.7	18.8	19.2	2.2%	51.1%	
Identity EBITDA	(5.3)	(3.8)	(3.9)	2.7%	-26.0%	
Total EBITDA	10.7	15.0	15.3	2.1%	43.2%	
<i>Payment EBITDA margin</i>	<i>36.7%</i>	<i>36.7%</i>	<i>37.4%</i>	<i>0.7%</i>	<i>0.8%</i>	
<i>Identity EBITDA margin</i>	<i>-79.2%</i>	<i>-73.2%</i>	<i>-75.6%</i>	<i>-2.4%</i>	<i>3.6%</i>	
<i>EBITDA margin</i>	<i>21.3%</i>	<i>26.6%</i>	<i>27.1%</i>	<i>1.9%</i>	<i>5.8%</i>	
Total adjusted EBITDA	7.4	15.0	15.3	2.1%	106.2%	
<i>Adjusted EBITDA margin</i>	<i>15.8%</i>	<i>26.6%</i>	<i>27.1%</i>	<i>1.9%</i>	<i>11.3%</i>	
Normalised operating profit	4.5	11.4	11.6	1.5%	156.0%	
<i>Normalised operating margin</i>	<i>9.0%</i>	<i>20.3%</i>	<i>20.5%</i>	<i>0.3%</i>	<i>11.5%</i>	
Reported operating profit	(0.9)	2.0	(16.7)	-954.3%	1791.7%	
<i>Reported operating margin</i>	<i>-1.8%</i>	<i>3.5%</i>	<i>-29.6%</i>	<i>-33.1%</i>	<i>-27.9%</i>	
Normalised PBT	4.1	10.6	11.0	3.5%	167.3%	
Reported PBT	(1.3)	1.2	(17.3)	N/A	N/A	
Normalised net income	3.2	8.5	8.8	3.5%	170.7%	
Reported net income	0.4	1.1	(18.8)	N/A	N/A	
Normalised basic EPS (\$)	0.013	0.031	0.032	2.0%	143.9%	
Normalised diluted EPS (\$)	0.012	0.029	0.032	10.8%	166.8%	
Reported basic EPS (\$)	0.001	0.004	(0.069)	N/A	N/A	
Net debt/(cash)	(32.6)	(50.4)	(49.0)	-2.7%	50.2%	
TPV* (\$bn)	4.97	6.85	6.85	0.0%	35.6%	
Take rate	0.81%	0.75%	0.75%	0.00%	-0.06%	

Source: Boku, Edison Investment Research. Note: *Total payment volume.

In Exhibit 9 we have presented the results to show both reported and adjusted revenues and EBITDA for the Payments division and the group as a whole; adjusted metrics and our normalised

profitability numbers exclude the \$3.255m one-off revenue reported for FY19. All discussions of performance in FY20 are in comparison to adjusted metrics.

Boku issued a trading update in January⁴ – reported results were slightly ahead of our forecasts at the EBITDA level mainly due to upside from the Payments business. The **Payments** business grew revenue 27% y-o-y (16% organic growth plus \$4.5m contribution from Fortumo (consolidated from 1 July 2020)). Adjusted EBITDA for the Payments business grew 51% y-o-y to €19.2m (39% organic), highlighting the scale benefits of this business and the \$1.5m contribution from the higher-margin Fortumo business in H2. The **Identity** business declined 23%, partly due to COVID-19 restrictions making it harder to sign new business and partly due to reduced supply from carriers in the US. The EBITDA loss reduced from \$5.3m in FY19 to \$3.9m in FY20, helped by lower travel and marketing costs because of COVID-19 restrictions. Group adjusted EBITDA increased 106.2% y-o-y, highlighting the strong operational leverage of the business. Normalised operating profit was 156% higher y-o-y and normalised diluted EPS increased 167% y-o-y. Exceptional items include a €20.8m goodwill write-down (see below), \$1.4m in acquisition-related expenses and a \$1.0m currency gain.

As a result of revenue performance for the Identity business coming in below the expectations management had at the date of acquisition and the break-even date being pushed out, the annual goodwill impairment test based on expected future cash flows resulted in a write-down of \$20.8m (goodwill was reduced from \$23.6m to \$2.8m). We note that the impairment test discounted cash flow analysis used explicit forecasts for four years before reverting to a terminal value – this is possibly not a long enough horizon to capture the potential profitability of the business.

Balance sheet and cash flow

The company ended FY20 with a gross cash balance of \$61.3m (excluding restricted cash) and a net cash balance of \$49.0m (excluding lease liabilities of \$3.2m). As the cash balance very much depends on the timing of payments from carriers and to merchants, the company measures its average cash balance in a given month as this is more representative of the true cash position. In December 2020, the average daily cash balance was \$46.7m, compared to \$22.4m in December 2019. Excluding the timing effects of merchant/carrier payments, the company generated operating cash flow before working capital movements of \$11.5m, up from \$6.1m last year.

The company noted that as Fortumo performance has been in line with expectations to date, it is therefore unlikely to reach the maximum earnout of \$5.4m. This amount was transferred to escrow and the company has recorded a receivable of \$2.16m to reflect the reduction in the estimated amount payable.

Outlook and changes to forecasts

Management commented that trading so far this year has been in line with expectations. Regarding the two platforms, the company expects to invest in the US platform to add support for the features non-digital merchants require and to invest in the European platform to improve the bundling offer. We have made minor changes to our forecasts for FY21 and FY22 to reflect the purchase accounting for Fortumo and to reflect slightly higher amortisation from capitalised development costs in FY22.

⁴ [Payments demand drives strong finish to FY20](#), 12 January 2021

Exhibit 10: Changes to forecasts

\$m	FY21e				FY22e			
	Old	New	Change	y-o-y	Old	New	Change	y-o-y
Payment revenues	59.5	59.6	0.1%	16.4%	65.7	65.8	0.2%	10.3%
Identity revenues	6.9	6.9	0.0%	33.4%	12.0	12.0	0.0%	73.9%
Total revenues	66.4	66.5	0.1%	17.9%	77.7	77.8	0.1%	16.9%
Gross profit	59.2	59.1	0.0%	14.9%	67.2	67.0	-0.3%	13.3%
Gross margin	89.1%	88.9%	-0.1%	-2.3%	86.5%	86.1%	-0.4%	-2.8%
Payment EBITDA	21.3	21.2	-0.5%	10.6%	23.3	23.2	-0.6%	9.3%
Identity EBITDA	(3.6)	(3.5)	-4.1%	-10.7%	(2.2)	(2.2)	0.0%	-37.0%
Total EBITDA	17.7	17.7	0.2%	16.1%	21.1	21.0	-0.6%	18.4%
Payment EBITDA margin	35.8%	35.6%	-0.2%	-1.8%	35.5%	35.3%	-0.3%	-0.3%
Identity EBITDA margin	-52.8%	-50.6%	2.2%	25.0%	-18.3%	-18.3%	0.0%	32.2%
EBITDA margin	26.6%	26.6%	0.1%	-0.4%	27.2%	27.0%	-0.8%	0.3%
Normalised operating profit	13.5	13.5	0.0%	16.7%	16.8	16.2	-3.3%	20.1%
<i>Normalised operating margin</i>	<i>20.3%</i>	<i>20.3%</i>	<i>0.0%</i>	<i>-0.2%</i>	<i>21.6%</i>	<i>20.9%</i>	<i>-0.7%</i>	<i>0.5%</i>
Reported operating profit	6.6	5.1	-22.3%	-130.5%	10.9	7.8	-28.3%	53.2%
Reported operating margin	9.9%	7.7%	-2.2%	37.3%	14.0%	10.0%	-4.0%	2.4%
Normalised PBT	12.2	12.2	0.0%	11.5%	15.6	15.1	-3.4%	23.0%
Reported PBT	5.3	3.8	-27.7%	-122.1%	9.7	6.6	-31.5%	73.4%
Normalised net income	9.8	9.8	0.0%	11.5%	12.5	12.0	-3.4%	23.0%
Reported net income	4.8	3.4	-27.7%	-118.3%	8.2	5.6	-31.5%	63.8%
Normalised basic EPS (\$)	0.034	0.034	0.0%	6.2%	0.043	0.042	-3.4%	23.0%
Normalised diluted EPS (\$)	0.032	0.032	0.0%	-1.8%	0.040	0.039	-3.4%	23.0%
Reported basic EPS (\$)	0.017	0.012	-27.7%	-117.5%	0.029	0.020	-31.5%	63.8%
Net debt/(cash)	(42.7)	(59.7)	39.7%	21.7%	(63.8)	(80.2)	25.8%	34.4%
TPV (\$bn)	8.08	8.09	0.0%	16.3%	9.15	9.15	0.0%	13.1%
Take rate	0.74%	0.74%	0.00%	-0.01%	0.72%	0.72%	0.00%	-0.02%

Source: Edison Investment Research

Sensitivities

Our forecasts and the share price will be sensitive to the following factors:

- **Pace of growth from existing merchants:** this will depend on the rate at which merchants complete their roll-out plans, the pace of growth of paid-for digital content, the competitive positioning of major merchants and the adoption of wallets as a payment mechanism.
- **Customer concentration:** we estimate that customers contributing over 10% of revenues will make up close to half of revenues in FY21–23. The loss of any one major merchant could have a material impact on revenues and profitability. In addition, some of the contracts between Boku and merchants or carriers have short notice periods.
- **Data protection and robustness of the platform:** any loss of customer data or significant downtime for the platform could negatively affect the company's reputation and lead to additional costs in terms of fines and litigation.
- **Competitive environment:** Boku's platform needs to remain competitive with respect to other third-party DCB providers and identity verification service providers, as well as carriers that connect directly with merchants. The company will also need to stay abreast of changes in the payment market where it is has started expanding its service offering to encompass alternative payment methods.
- **Regulation:** changes to money transmission, privacy or anti-money laundering regulations in the countries in which Boku operates affect revenue generation or increase the cost base.
- **Acquisition:** integration and growth of the acquired Identity and Fortumo businesses could vary from our expectations.

Valuation

Exhibit 11: Peer group financial metrics

	Share price	Market cap	EV	Rev growth			EBITDA margin			EBIT margin		
		List ccy	Rep ccy	LY	CY	NY	LY	CY	NY	LY	CY	NY
Boku	174.0	501	647	20.3%	17.9%	16.9%	27.1%	26.6%	27.0%	20.5%	20.3%	20.9%
Adyen	1991	60,566	57,792	32.7%	46.4%	38.5%	57.3%	61.0%	62.4%	52.9%	57.7%	59.1%
Bango	216	162	161	30.7%	20.8%	26.0%	37.5%	30.6%	33.5%	16.2%	13.9%	19.7%
Worldline	73.98	20,728	24,983	7.9%	102.0%	8.0%	26.9%	25.1%	27.2%	20.1%	17.9%	19.9%
FIS	145.84	90,585	105,576	21.5%	8.7%	7.8%	41.9%	44.6%	46.0%	33.9%	36.3%	38.3%
Fiserv	124.12	83,093	103,870	(3.7%)	8.8%	7.3%	39.9%	41.4%	42.9%	31.4%	34.4%	35.9%
Global Payments	215.43	63,604	71,466	47.1%	12.2%	9.6%	45.0%	47.3%	48.2%	39.7%	42.5%	43.4%
PayPal	249.31	291,986	287,967	20.7%	19.8%	20.6%	28.6%	29.2%	29.3%	25.1%	25.9%	26.6%
Square	243.36	110,635	109,833	317.5%	44.9%	18.8%	5.0%	5.3%	7.0%	4.9%	5.0%	6.1%
Average Payment Processors				59.3%	32.9%	17.1%	35.2%	35.6%	37.1%	28.0%	29.2%	31.1%
Average Payment Processors excl. Square				22.4%	22.4%	31.2%	16.8%	39.6%	39.9%	41.4%	31.3%	32.7%
Equifax	172.57	21,017	23,753	17.7%	7.5%	6.1%	34.9%	33.7%	36.8%	28.7%	23.7%	26.8%
Experian	2501	22,942	36,085	6.5%	2.3%	8.9%	34.8%	34.2%	34.9%	26.6%	25.0%	26.0%
GB Group	837	1,644	1,650	38.7%	7.1%	0.7%	26.0%	26.4%	24.4%	24.1%	23.6%	21.4%
TransUnion	88.50	16,877	19,931	2.3%	5.4%	7.7%	38.5%	39.0%	39.9%	32.1%	29.2%	30.4%
Average ID management				16.3%	5.6%	5.8%	33.5%	33.3%	34.0%	27.9%	25.4%	26.2%

Source: Edison Investment Research, Refinitiv (as at 17 March)

Exhibit 12: Peer group valuation metrics

	EV/Sales		EV/EBITDA		P/E		FCF yield	
	CY	NY	CY	NY	CY	NY	CY	NY
Boku	9.7	8.3	36.5	30.8	76.8	62.4	2.0%	3.2%
Adyen	59.9	43.2	98.1	69.3	142.6	100.7	0.9%	1.1%
Bango	10.9	8.7	35.7	25.9	58.6	43.2	1.9%	2.5%
Worldline	4.8	4.5	19.2	16.4	30.5	25.8	3.1%	3.7%
FIS	7.7	7.2	17.4	15.6	23.0	19.9	4.1%	4.9%
Fiserv	6.9	6.4	16.6	14.9	22.9	19.4	5.2%	6.0%
Global Payments	9.4	8.6	20.0	17.9	27.1	23.4	3.7%	4.2%
PayPal	11.2	9.3	38.3	31.8	54.7	43.4	2.2%	2.8%
Square	8.0	6.7	152.0	95.9	198.3	129.3	0.4%	0.8%
Average Payment Processors	14.9	11.8	49.6	36.0	69.7	50.6	2.7%	3.3%
Average Payment Processors excl. Square	15.8	12.5	35.0	27.4	51.3	39.4	3.0%	3.6%
Equifax	5.4	5.0	15.9	13.7	26.8	21.9	2.5%	4.7%
Experian	6.8	6.3	19.9	17.9	34.3	30.0	4.7%	4.5%
GB Group	7.7	7.7	29.3	31.5	39.8	42.9	2.6%	3.1%
TransUnion	7.0	6.5	17.9	16.2	27.0	23.8	3.4%	3.8%
Average ID management	6.7	6.4	20.7	19.8	32.0	29.7	3.3%	4.0%

Source: Edison Investment Research, Refinitiv (as at 17 March)

On P/E multiples, Boku is trading at a premium to the average of payment processor peers and identity management peers; on an EV/Sales and EV/EBITDA basis it is trading at a large discount to payment peers. However, we believe that the investment Boku is currently making in the Identity business is masking the performance of the Payments business.

As the two business have different growth and profitability dynamics, we take a sum-of-the-parts approach to assign value to each separately. Looking at the **Payments** business on its own, we forecast that it will generate EBITDA margins in line with its peer group so we use an FY21e EBITDA multiple of 35.0x, the average of its payment processor peers (excluding Square). For the Identity business, we use the value of the acquisition of \$25m; this is conservative compared to peer valuations but reflects the fact that the business is currently loss-making. Boku paid the equivalent of 3.6x FY21e sales for the Identity business, while established identity management businesses are trading on EV/sales multiples of 5.3–7.6x for FY21e. Although the company took a goodwill write-down in FY20 for this division, management has confirmed that it expects revenue to accelerate from the current level as it activates the merchants that recently signed up. It is worth

bearing in mind that the DCB business took many years to reach break-even. For the historical financials to which we have access, Boku was loss-making at the EBITDA level from FY14 to FY17, with revenues growing from \$18.3m to \$24.4m over the same period, and we would expect that the company was loss-making for the period before that since its launch in 2008.

This approach generates an equity value for the group of \$813m or 203p per share, compared to the current share price of 163.95p. Excluding the Identity business entirely, the group would be worth \$788m or 197p per share, still well ahead of the current share price. As the company reports more material progress from digital wallets, this could provide upside to our forecasts.

Appendix

Business model

Revenues

For **DCB**, Boku offers two models to merchants, either settlement or transaction.

- **Settlement:** Boku sits between the merchant and carrier, collects payment from the carrier and passes it on to the merchant. The amount paid to the merchant is net of both the carrier's and Boku's fees. As Boku manages the cash flows, it is able to earn a higher margin (take rate) on each transaction processed, although it has implications for working capital management.
- **Transaction:** The carrier pays the merchant directly, net of their fees. Separately, Boku invoices the merchant for its fees. The only cash flow for Boku in this case is the receipt of its fees. As there is less involvement from Boku, it earns lower margins on these transactions.

Historically, Boku signed up most merchants on a settlement basis; the settlement margin is a multiple of the transaction margin. Some of the more recent merchants have contracted on a transaction basis and are driving the bulk of the TPV growth. Therefore, revenue growth has lagged TPV growth due to the lower margins earned under the transaction model. The mix of settlement versus transaction volumes will depend on new merchants' choice of business model and the growth of volumes from existing merchants. The recently acquired Fortumo bills most merchants on a settlement basis, although the large app stores use the transaction basis.

For **Identity Solutions**, Boku charges on a per-transaction basis, or for monitoring services, by user.

Cost of sales

For **DCB**, cost of sales is only a small proportion of total costs and mainly consists of the cost of messaging subscribers. For **Identity Solutions**, cost of sales consists of the revenue share with MNOs. There are minimum revenue guarantees in place with some MNOs; as volumes increase above the minimum level, this should provide upside to gross margins.

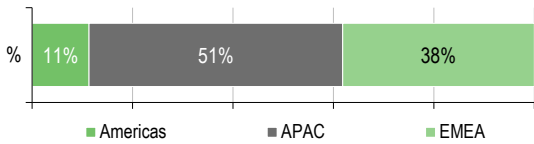
Working capital

Under the DCB settlement business model, Boku receives cash from the carriers before it pays it across to the merchants, hence it operates a negative working capital model. Under the transaction model, the company records its fees in accounts receivable, and is paid according to the merchant's payment schedule. The Identity business invoices merchants for the transaction or monthly monitoring fees and pays over the revenue share to the carriers once merchants have settled their invoices.

Exhibit 13: Financial summary

	\$m	2017	2018	2019	2020	2021e	2022e
31-December		IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT							
Revenue		24.4	35.3	50.1	56.4	66.5	77.8
Cost of Sales		(2.3)	(2.5)	(5.6)	(4.9)	(7.4)	(10.8)
Gross Profit		22.1	32.8	44.6	51.5	59.1	67.0
EBITDA		(2.3)	6.3	10.7	15.3	17.7	21.0
Normalised operating profit		(4.0)	4.8	4.5	11.6	13.5	16.2
Amortisation of acquired intangibles		(1.3)	(1.3)	(1.6)	(2.2)	(2.9)	(2.9)
Exceptionals		(2.2)	(1.4)	(0.3)	(21.1)	0.0	0.0
Share-based payments		(1.5)	(4.6)	(6.8)	(4.9)	(5.5)	(5.5)
Reported operating profit		(9.0)	(2.4)	(4.1)	(16.7)	5.1	7.8
Net Interest		(2.4)	(0.6)	(0.4)	(0.6)	(1.3)	(1.2)
Joint ventures & associates (post tax)		0.0	0.0	0.0	0.0	0.0	0.0
Exceptionals		(17.1)	0.0	0.0	0.0	0.0	0.0
Profit Before Tax (norm)		(6.4)	4.3	4.1	11.0	12.2	15.1
Profit Before Tax (reported)		(28.5)	(3.0)	(1.3)	(17.3)	3.8	6.6
Reported tax		(0.1)	(1.3)	1.7	(1.5)	(0.4)	(1.0)
Profit After Tax (norm)		(4.8)	3.4	3.2	8.8	9.8	12.0
Profit After Tax (reported)		(28.7)	(4.3)	0.4	(18.8)	3.4	5.6
Minority interests		0.0	0.0	0.0	0.0	0.0	0.0
Discontinued operations		0.0	0.0	0.0	0.0	0.0	0.0
Net income (normalised)		(4.8)	3.4	3.2	8.8	9.8	12.0
Net income (reported)		(28.7)	(4.3)	0.4	(18.8)	3.4	5.6
Basic average number of shares outstanding (m)		150.3	217.1	246.8	273.8	287.6	287.6
EPS - basic normalised (\$)		(0.03)	0.02	0.01	0.03	0.03	0.04
EPS - diluted normalised (\$)		(0.03)	0.02	0.01	0.03	0.03	0.04
EPS - basic reported (\$)		(0.19)	(0.02)	0.00	(0.07)	0.01	0.02
Dividend (\$)		0.00	0.00	0.00	0.00	0.00	0.00
Revenue growth (%)		42.0	44.5	42.2	12.5	17.9	16.9
Gross Margin (%)		90.7	92.9	88.9	91.3	88.9	86.1
EBITDA Margin (%)		(9.5)	17.9	21.3	27.1	26.6	27.0
Normalised Operating Margin		(16.5)	13.7	9.0	20.5	20.3	20.9
BALANCE SHEET							
Fixed Assets		26.9	23.0	52.2	69.8	67.1	62.8
Intangible Assets		25.8	22.5	46.8	65.6	63.2	59.9
Tangible Assets		0.4	0.3	3.5	3.8	2.8	1.8
Investments & other		0.7	0.3	1.8	0.5	1.1	1.1
Current Assets		79.3	84.0	89.2	155.2	199.2	237.4
Stocks		0.0	0.0	0.0	0.0	0.0	0.0
Debtors		59.1	51.7	53.6	92.5	127.1	146.0
Cash & cash equivalents		18.7	31.1	34.7	61.3	70.7	89.9
Other		1.4	1.3	0.9	1.4	1.4	1.4
Current Liabilities		(78.0)	(79.6)	(81.8)	(139.7)	(173.2)	(197.2)
Creditors		(75.5)	(77.4)	(78.0)	(136.8)	(171.7)	(195.7)
Tax and social security		0.0	0.0	0.0	0.0	0.0	0.0
Short term borrowings		(2.5)	(2.2)	(2.1)	(1.4)	(1.4)	(1.4)
Other		(0.0)	0.0	(1.7)	(1.4)	(0.0)	(0.1)
Long Term Liabilities		(0.2)	(0.8)	(2.6)	(13.6)	(12.4)	(11.1)
Long term borrowings		(0.0)	0.0	0.0	(10.8)	(9.6)	(8.3)
Other long term liabilities		(0.1)	(0.8)	(2.6)	(2.8)	(2.8)	(2.8)
Net Assets		28.0	26.6	57.0	71.8	80.7	91.8
Minority interests		0.0	0.0	0.0	0.0	0.0	0.0
Shareholders' equity		28.0	26.6	57.0	71.8	80.7	91.8
CASH FLOW							
Op Cash Flow before WC and tax		(2.3)	6.3	7.4	15.3	17.7	21.0
Working capital		1.0	7.2	3.0	20.1	0.4	5.0
Exceptional & other		(5.5)	0.2	(1.3)	(3.8)	0.0	0.0
Tax		0.0	(0.2)	(0.1)	(0.3)	(1.0)	(1.0)
Net operating cash flow		(6.8)	13.5	9.0	31.3	17.1	25.0
Capex		(0.3)	(0.3)	(2.1)	(3.4)	(3.2)	(2.8)
Acquisitions/disposals		0.0	(0.2)	(0.7)	(36.6)	0.0	0.0
Net interest		(0.9)	(0.6)	(0.4)	(1.0)	(1.2)	(1.1)
Equity financing		19.8	0.5	0.6	26.2	0.0	0.0
Dividends		0.0	0.0	0.0	0.0	0.0	0.0
Other		(1.1)	0.2	(1.5)	(2.6)	(2.1)	(0.6)
Net Cash Flow		10.6	13.1	4.857	13.8	10.6	20.5
Opening net debt/(cash)		9.9	(16.2)	(28.9)	(32.6)	(49.0)	(59.7)
FX		0.4	(0.5)	(1.1)	1.3	0.0	0.0
Other non-cash movements		15.1	(0.0)	(0.0)	1.2	0.0	0.0
Closing net debt/(cash)		(16.2)	(28.9)	(32.6)	(49.0)	(59.7)	(80.2)

Source: Boku, Edison Investment Research

<p>Contact details</p> <p>Second floor 9 Orange Street London, WC2H 7EA UK www.boku.com</p>	<p>Revenue by geography</p>  <table border="1"> <thead> <tr> <th>Geography</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Americas</td> <td>11%</td> </tr> <tr> <td>APAC</td> <td>51%</td> </tr> <tr> <td>EMEA</td> <td>38%</td> </tr> </tbody> </table>	Geography	Percentage	Americas	11%	APAC	51%	EMEA	38%												
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<p>Management team</p> <p>CEO: Jon Prideaux</p> <p>Jon joined Boku in 2012 and was appointed CEO in 2014. Jon has more than 25 years of payments experience: he was an early Visa Europe employee, where he started Visa Europe's e-commerce division. He served on the board of EMVCo, was the chairman of the Compliance Committee and a member of Visa's Global Product and Brand Councils. After leaving Visa in 2006, Jon served as deputy CEO for SecureTrading, where he doubled transaction numbers and quadrupled profitability. He then led a management buy-in at Shopcreator, an e-commerce software platform.</p>	<p>CFO: Keith Butcher</p> <p>Until his appointment as CFO in October 2019, Keith was an independent non-executive director and chairman of Boku's Audit Committee from the company's admission to AIM in 2017. Keith has had considerable experience as a listed company CFO and of online payments businesses, including six years as CFO of AIM-quoted online payments company DataCash Group during its period of rapid growth and ultimate sale to MasterCard. More recently, he was CFO of LSE-listed payments company Paysafe Group (formerly Optimal Payments). Keith was awarded Finance Director of the Year at the Quoted Company Alliance Awards (QCA) 2014.</p>																				
<p>Non-executive chairman: Mark Britto</p> <p>Mark founded Boku after six years as the CEO of Ingenio, which he led to a 2007 acquisition by AT&T. Prior to Ingenio, Mark spent four years as SVP of worldwide services and sales at Amazon.com. His first start-up, Accept.com, was bought by Amazon.com in 1999 and served as the primary backbone of Amazon's global payments platform. Mark is currently EVP chief product officer at PayPal.</p>																					
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