

Bango Strategy day

30 January 2017 - London, UK

The opportunity

Bango strategy

Business model

Future





Ray Anderson
Chief Executive Officer



David Sear
Chairman and
Non-executive Director



Rachel Elias-Jones
Chief Financial Officer



Martin Rigby
Non-executive Director



Anil Malhotra
Chief Marketing Officer



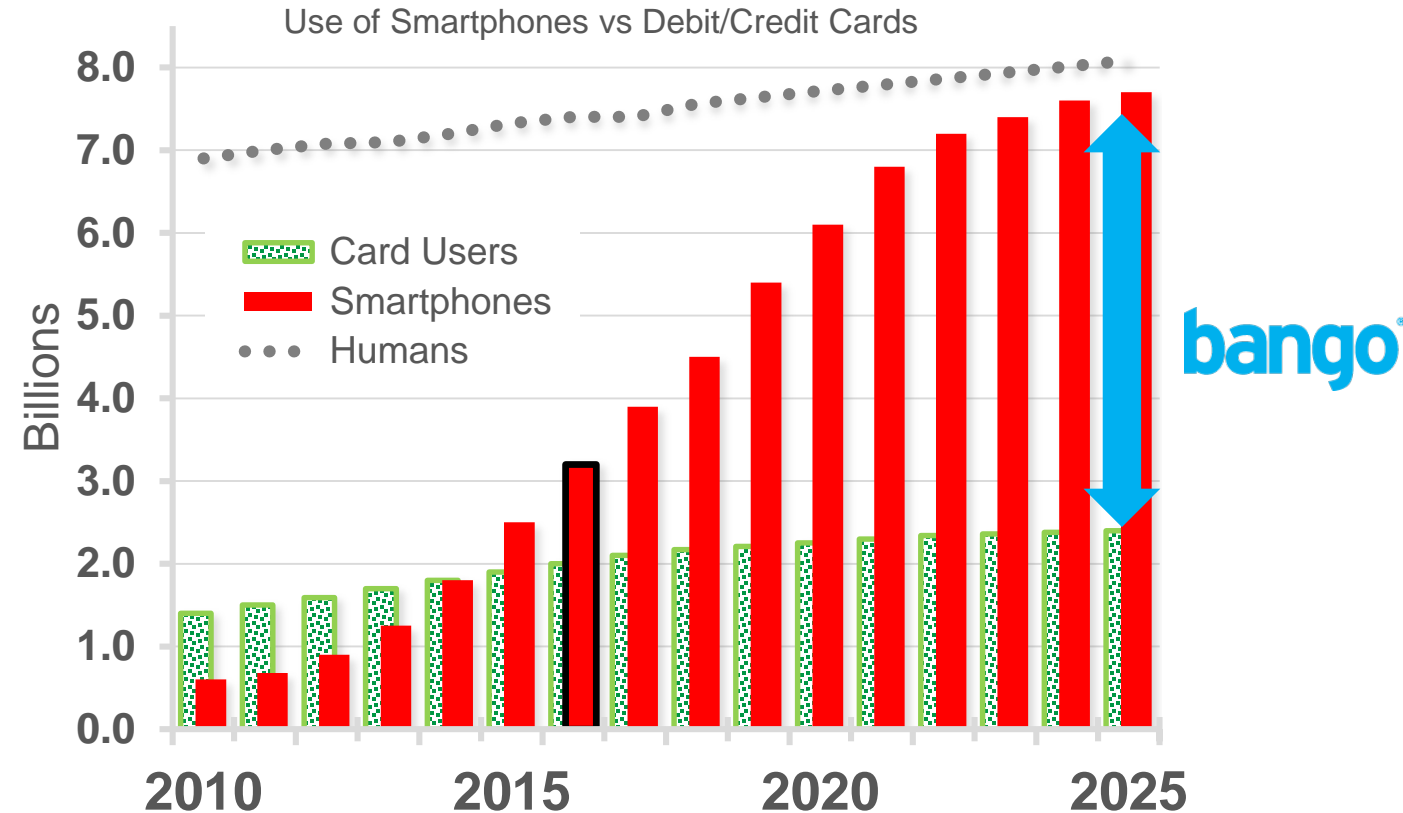
Gianluca D'Agostino
Non-Executive Director

- Introduction
- Global payments trends and the market opportunity
- Bango strategy and technology – a winning combination
- Business model – profit and operational gearing
- Outlook and longer term opportunities
- Q&A
- Closing remarks
- Live demos & drinks reception

Session 1: Global payments trends and market opportunity

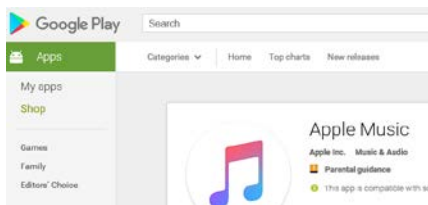
Anil Malhotra, Chief Marketing Officer

- Smartphones:
On track to take the internet to more than 7 billion humans
- 1st generation internet payment methods are not keeping pace
- New payment methods such as DCB and stored value wallets are filling the gap left by the legacy industry
- Huge opportunity to provide easy access to these payment options
- Bango saw this opportunity in 2001



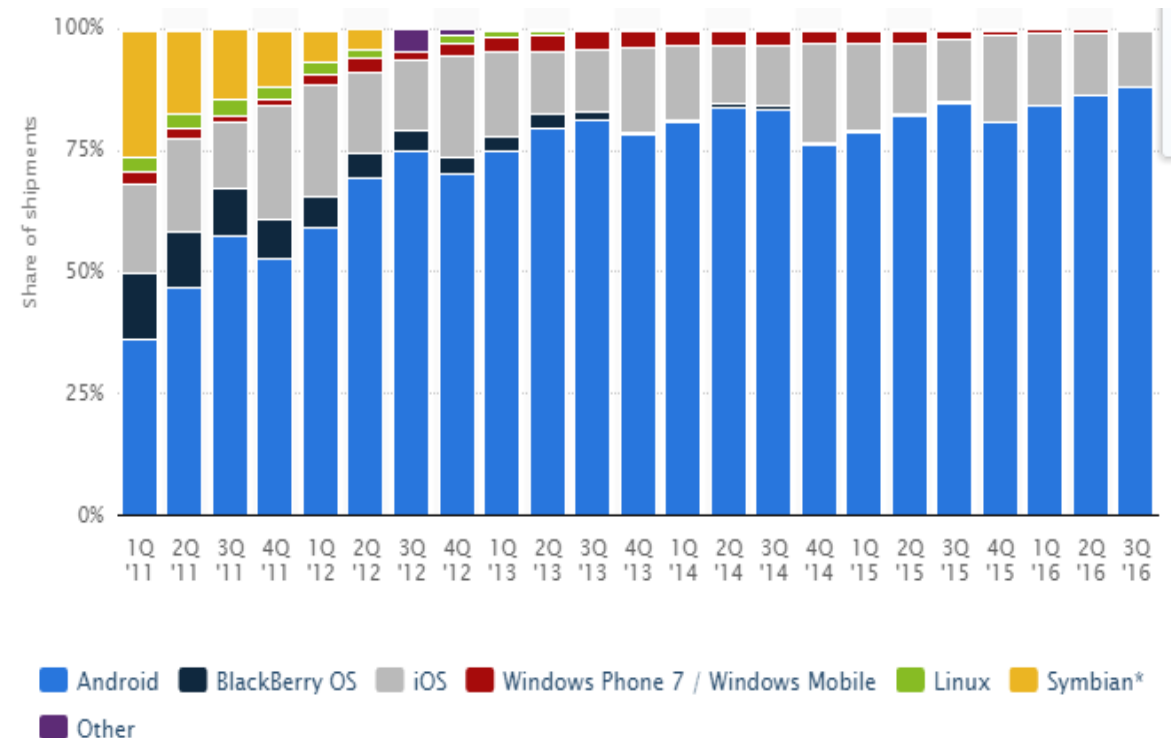
Sources: Ericsson, Geohive, Statista

- Pervasive in every market, dominant in many
- Android is an open platform for developers, advertisers, payments and OEMs
- Major internet companies focus on Android
- Even Apple supports Android users

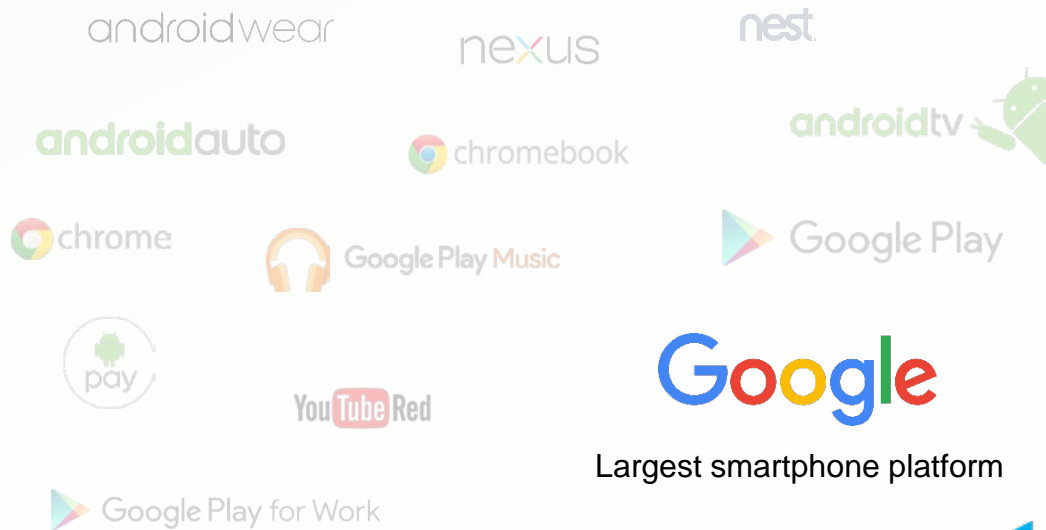


- In 2016, 6 out of 7 smartphones were Android

(Gartner 2016, first three quarters shipments)



Android is a key enabler for global partners



Largest smartphone platform



Largest online retailer and media giant



Largest device manufacturer

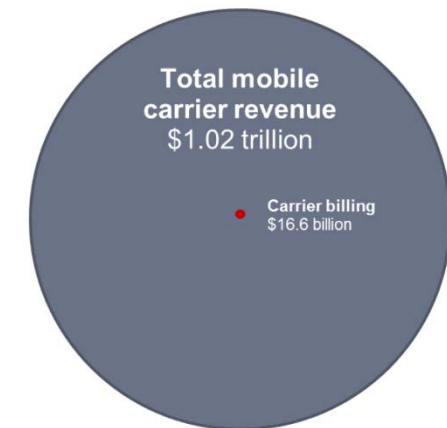
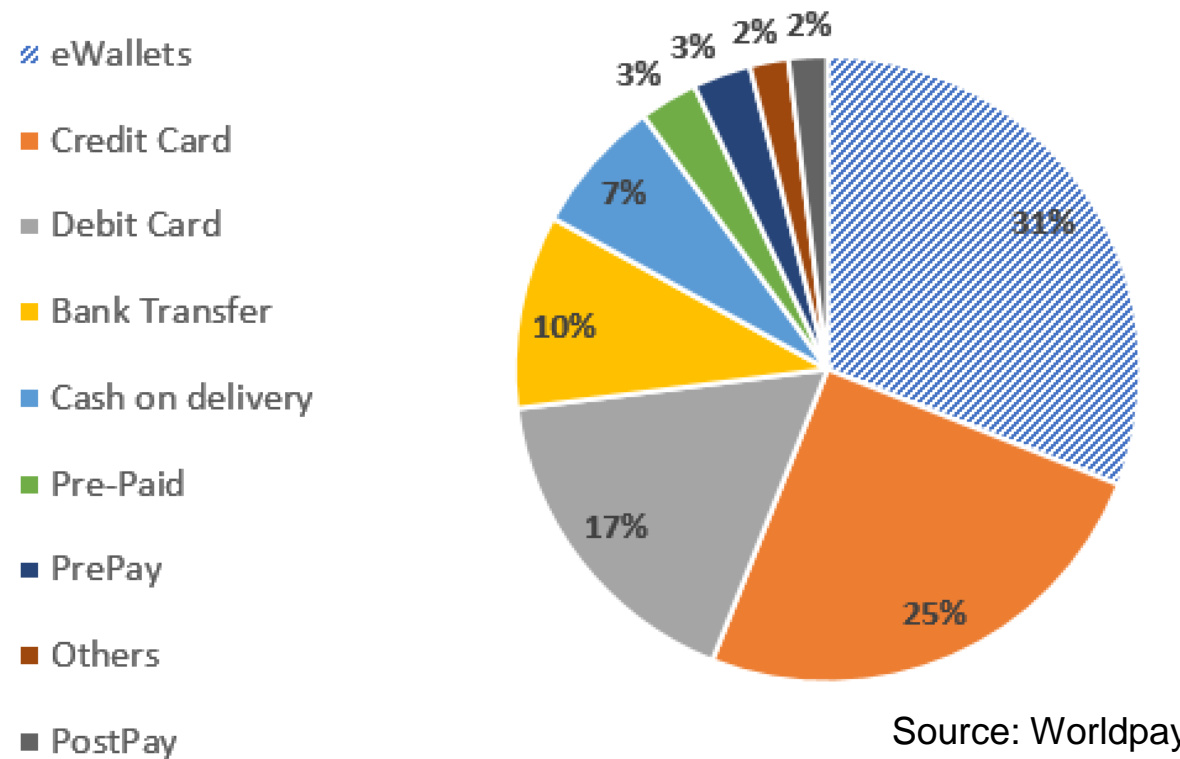


Largest PC, office and gaming company



- Fragmentation has slowed emergence of mobile services

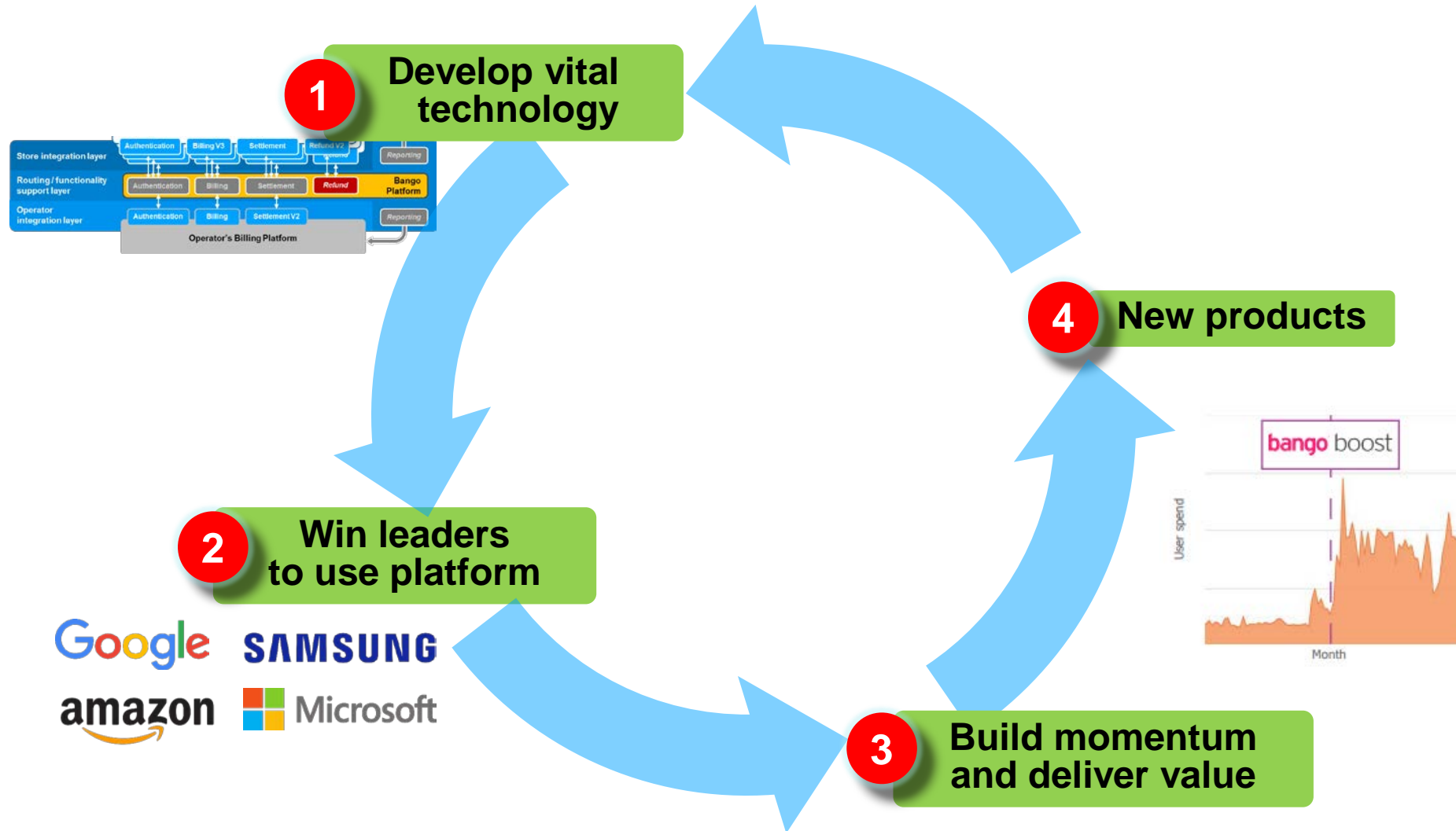
Share of eCommerce Spending (worldwide)

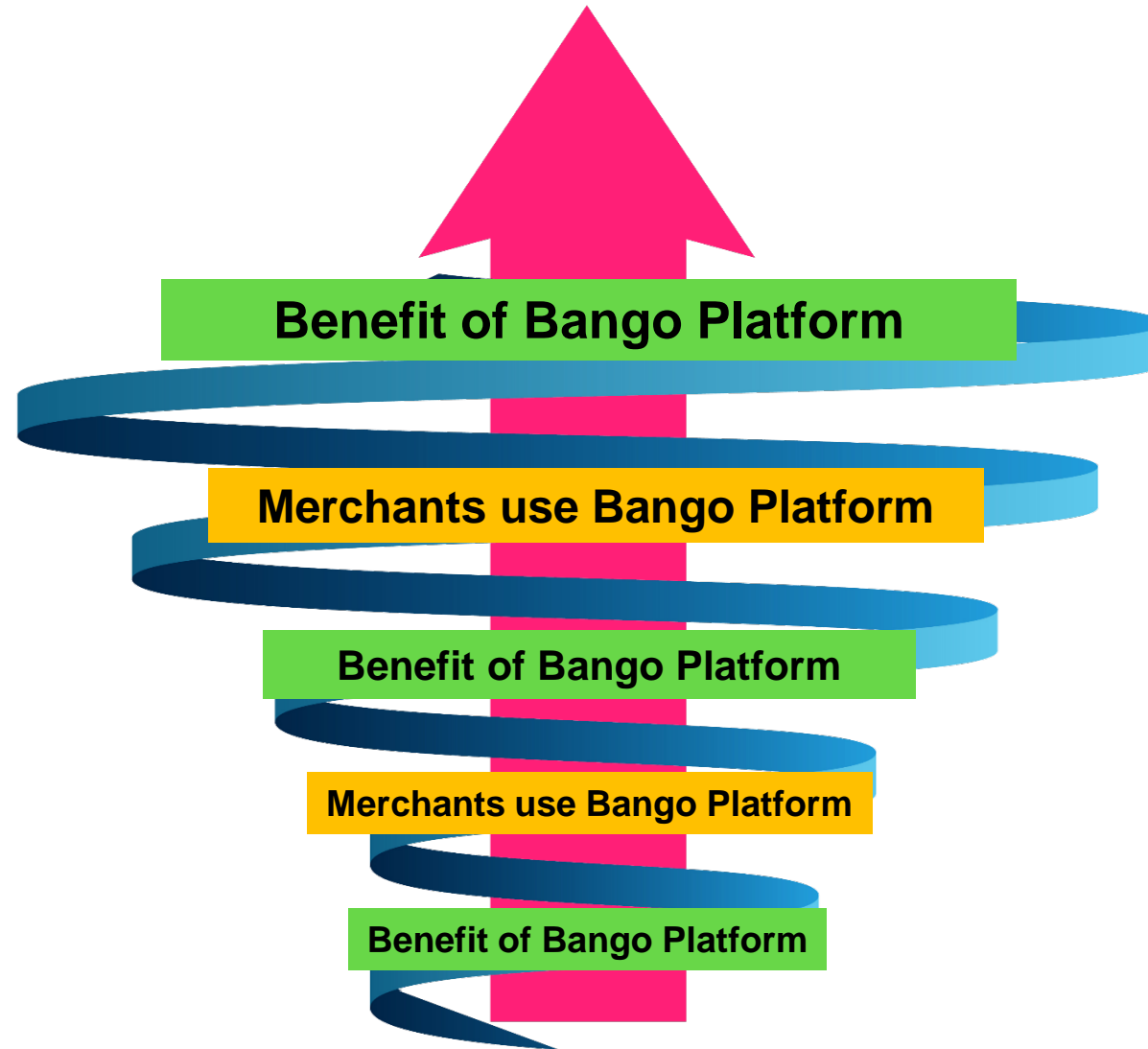


Source: Ovum, 2016: *Mobile operators could clinch \$142bn in m-commerce revenue by 2020 if they push aside barriers*

Session 2: Bango strategy and technology

Ray Anderson, Chief Executive Officer

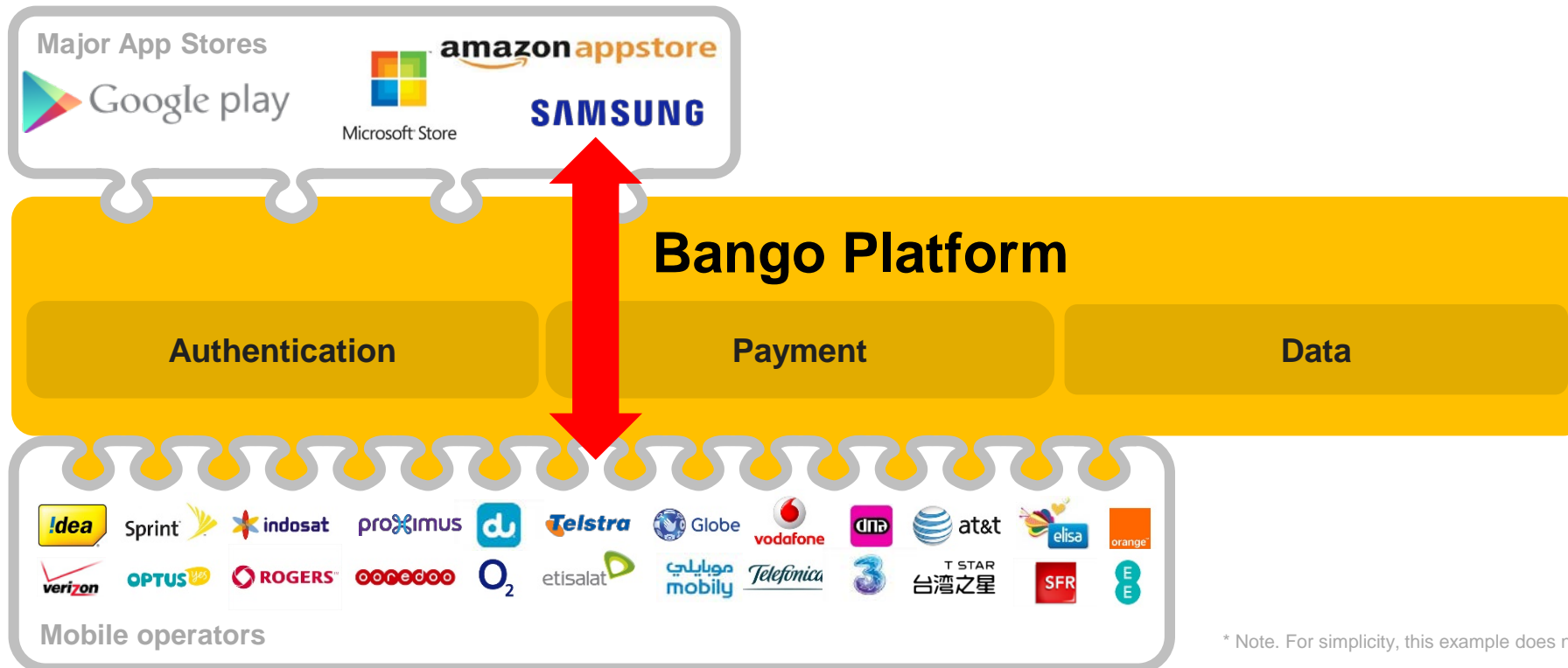




- **5th generation platform**
 - Focus and expertise applied over 10 years
 - Powerful API – acclaimed by major merchants
 - Patented Billrank and authentication systems
 - Server resident configuration model
 - Configuration and template driven smart interfaces
 - Configure, don't integrate
- **Robotization** of dozens of key financial & operational functions to eliminate error and cost as volumes scale up
- **Architecture** to leverage commodity hardware and noSQL systems – very low cost
 - Taking volume from \$2Bn to \$3Bn EUS expected to cost less than \$30,000 (<0.03% of \$1Bn)
- **Security** – “tokenized design” with extensive segregation

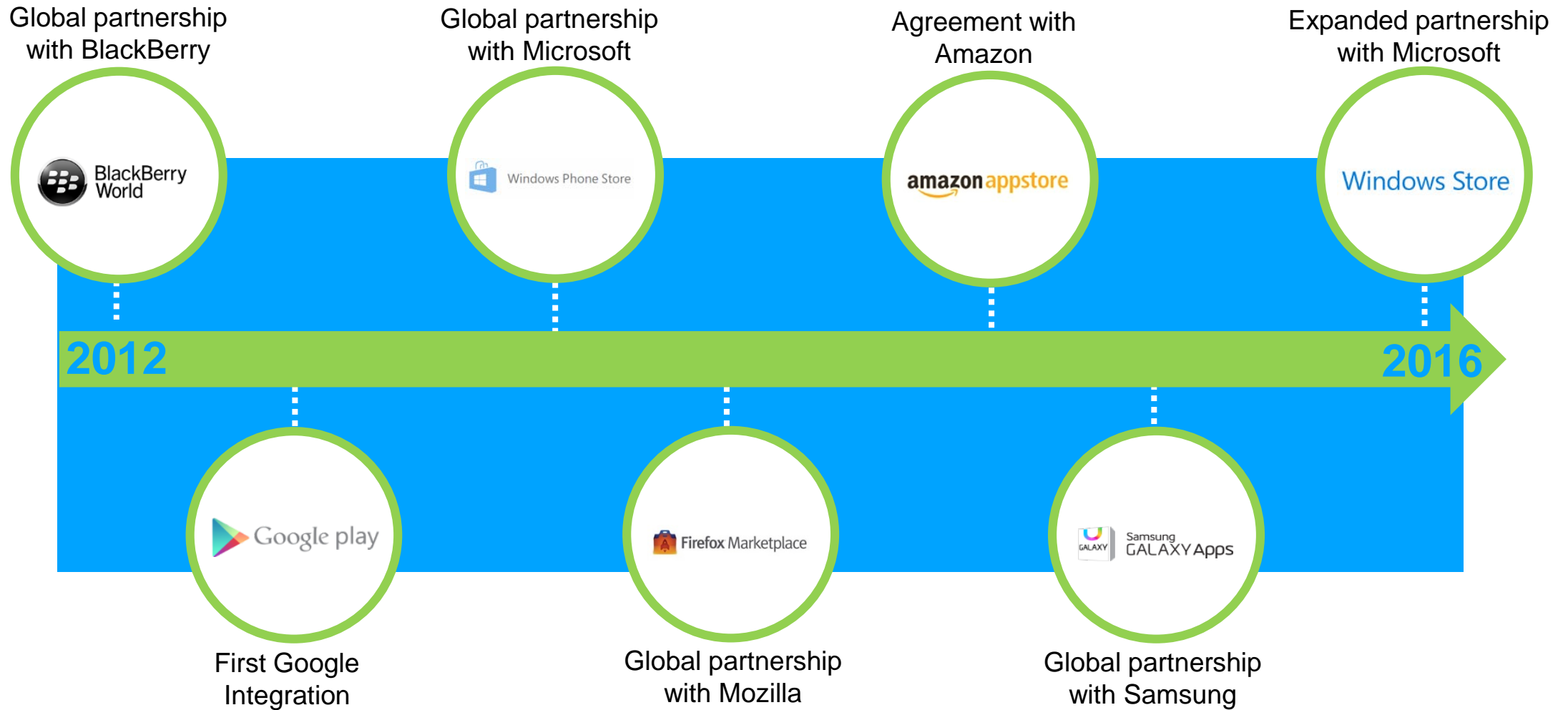
Phase 1: Establishing platform advantage

- The Bango Platform can offer services that no merchant can alone
- User authentication and payment capabilities can be uniquely shared across merchants
- Operators can innovate without being slowed by merchants



* Note. For simplicity, this example does not list all possible API integrations made on either side

Phase 2: Win leaders to the Bango Platform



"Bango offers a sophisticated platform for launching, managing and growing carrier billing."





“Bango Boost revealed detailed insights about our customers and their unique spending habits. It enabled us to maximize carrier billing revenues and customer experience”



Platform building is a team sport

- As more adopt the Bango Platform, the more powerful the Bango Platform becomes for all

Enabling an open ecosystem

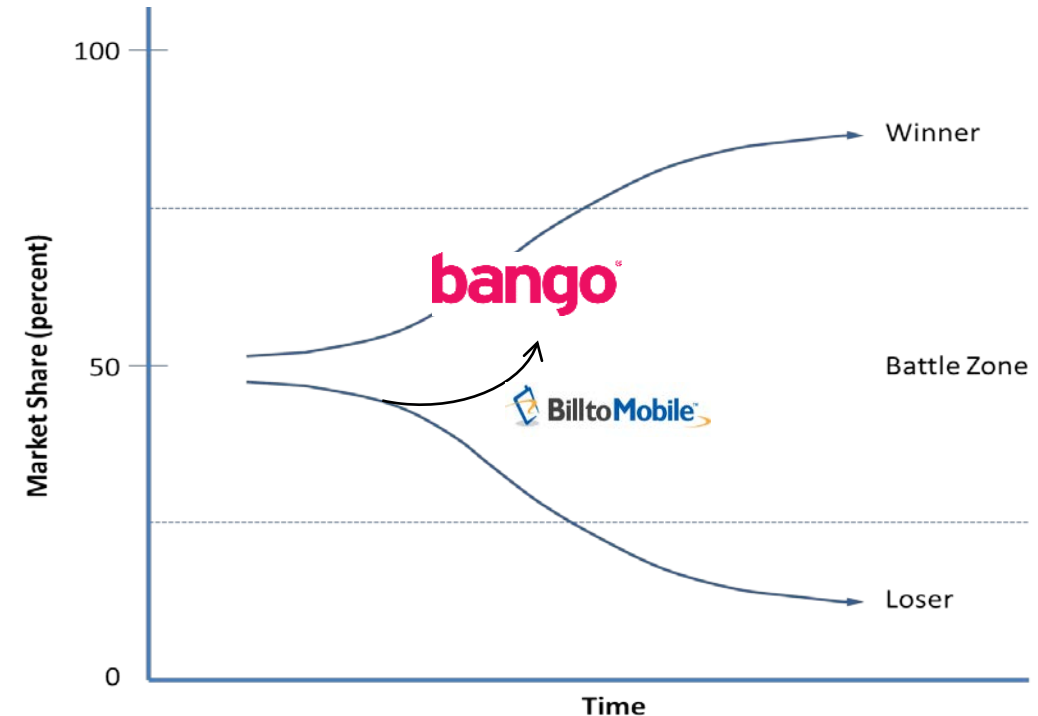
- Bango is not only concerned with the core technology and open API, it is open to supporting complementary businesses and products

Building alliances

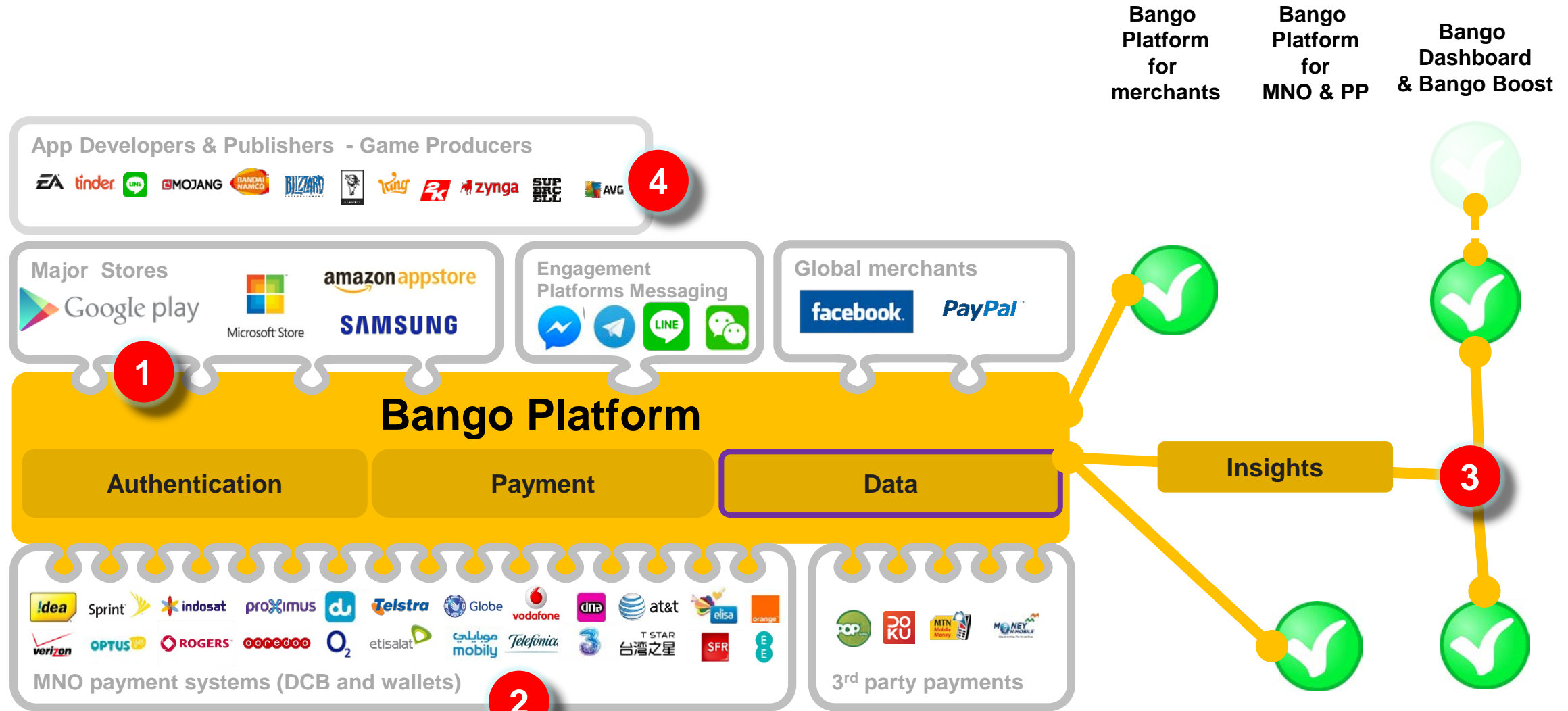
- Market acceptance takes time and resources not achieved alone. Most standards come from start-ups that are adopted by goliaths

Cost vs. Price

- Winning platforms deliver value but keep costs down to enable scale. Bango has a lean and focussed business model to gain adoption



Phase 4: Adding new capabilities and products

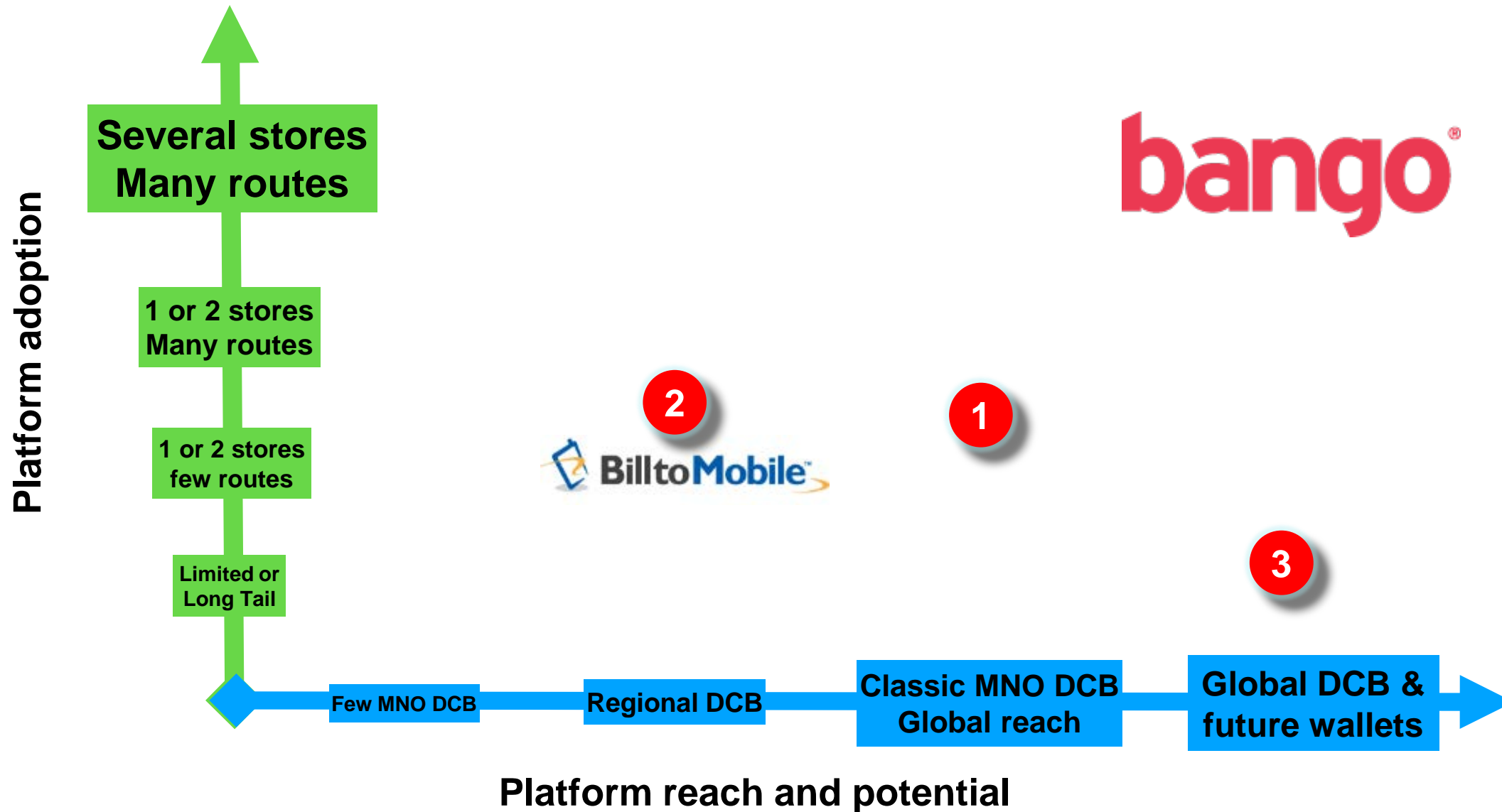


A large iceberg floating in a blue ocean under a cloudy sky. The visible tip of the iceberg is on the left, while the much larger, submerged part extends across the bottom half of the image. The water surface is slightly wavy.

Bango Platform for DCB
Bango Platform beyond DCB
Bango Boost

Products improving user experience
Products improving risk management
Products improving customer care
Products enabling peer to peer
Products enabling micro-loans

- Bango Platform can deliver valuable insights and functionality that are impossible for others to offer
- Bango customers and partners get an ecosystem that benefits everyone
 - Commonality
 - Access to skills
 - Lower costs
- The Bango Platform enables partners to scale with more sales and lower costs
- The Bango Platform is a base for new innovations as the business model succeeds



Session 3: Business model

Growth factors

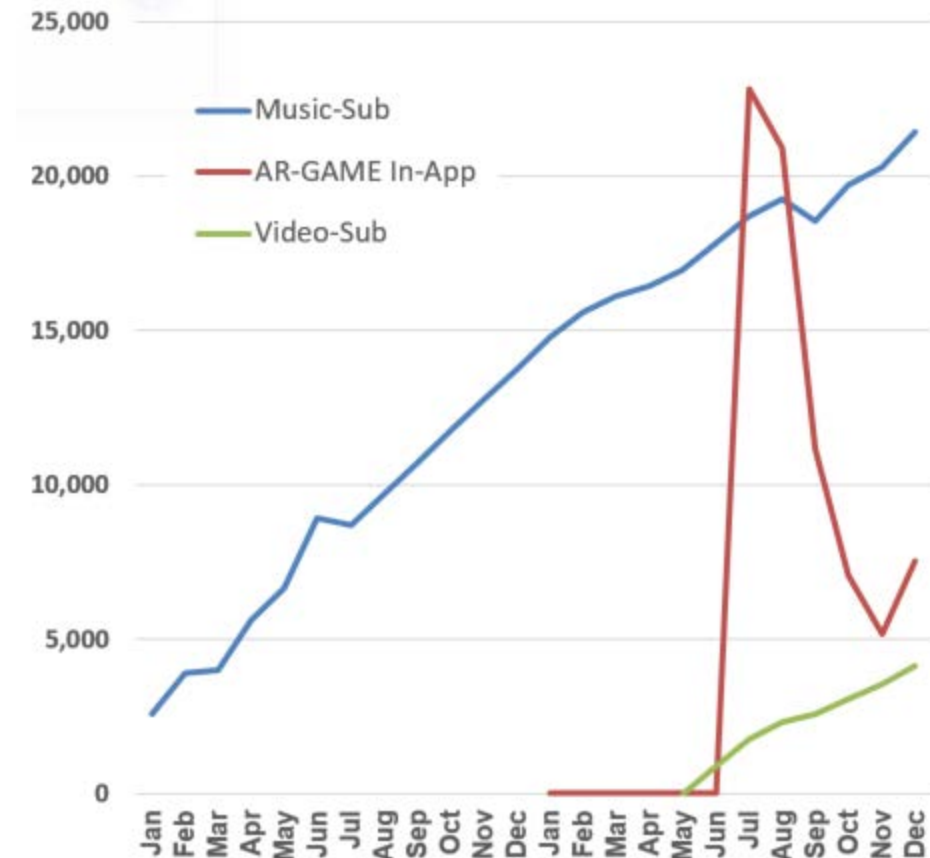
Revenues and profitability

Rachel Elias-Jones, Chief Financial Officer

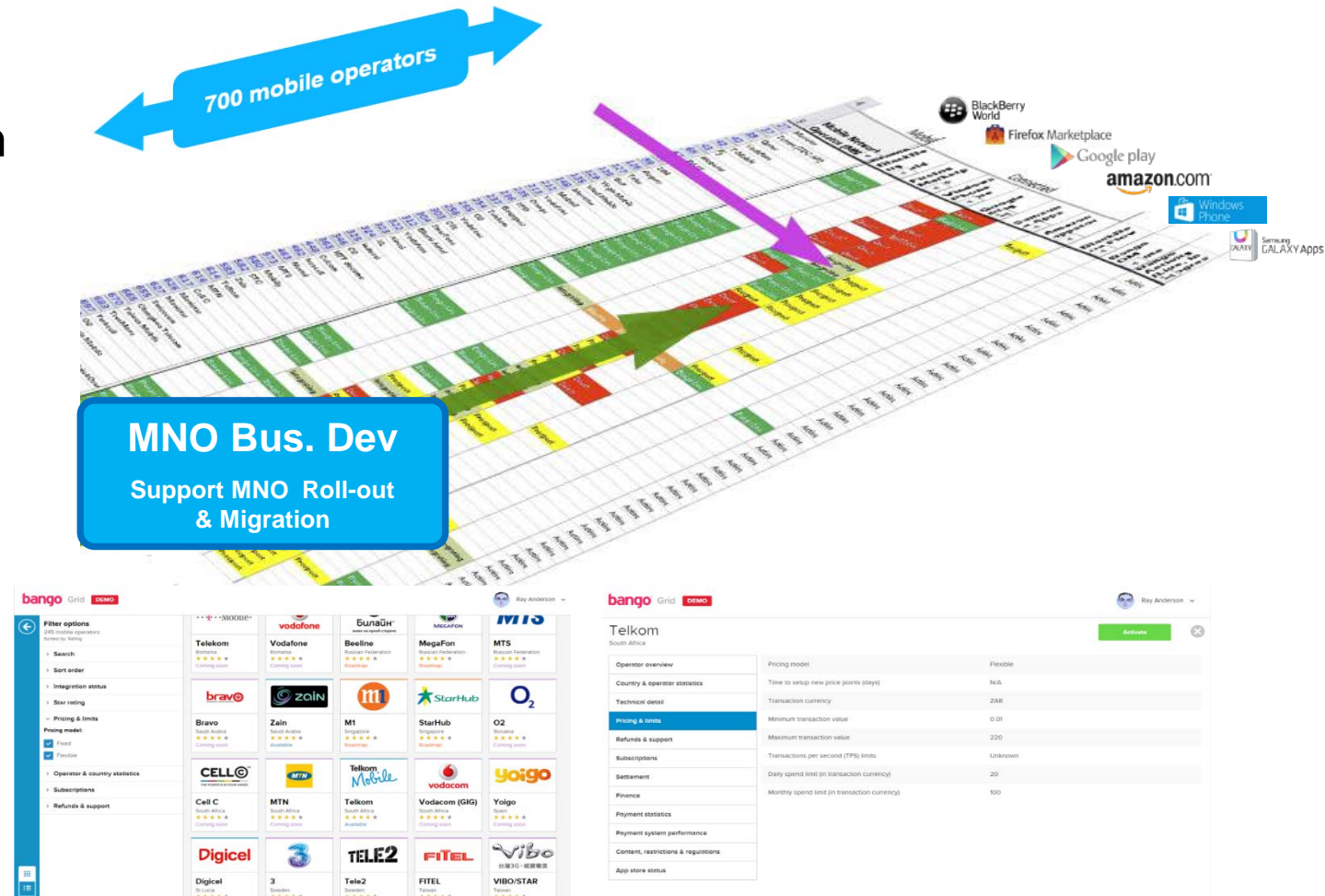
- More users
 - 3 billion more smartphone users added over the next 4-5 years
 - more smartphone users buying for the first time
- More content
- More payment routes
- More merchants

- New services and innovations launching every month
- Classic in-app solo (Candy Crush)
- Social games (Clash of Clans)
- Magazine, Book, TV-shows
- Subscription music services
- Subscription Video Services
- Alternate reality games (Pokémon Go)

New service user traction examples 2015-2016
Users paying in a month (count – not spend)
Source Bango data: Single small MNO. App Store.



- 700+ possible routes for each merchant
- Bango MNO Business Development team
 - supports merchant BD team
 - advises MNO on Bango capabilities
 - encourages migration to Bango from direct or integrators
- Shares opportunities via Bango Grid



More payment routes: MNO benefits

bango®

isalat	MTN	روشن Roshan	WASCEL	AMC
alat	MTN	Roshan	Wasel	AMC
odafone	DJEZZY	mobilis	Ooredoo	Andorra
lafone	Djezzy	Mobilis	Ooredoo	Andorra
LIME	Apua	LIME	Claro	Movistar
e	APUA	Lime	Claro	Movistar
5	Orange	Viva Cell-MTS	MIO	SetarNV
iline	Orange	Viva Cell-MTS	MIO	SetarNV
Mobile	Azercell	AZTRANK	bakcell	Nar Mobile
obile	Azercell Tele...	Aztrank	BakCell Tele...	Nar Mobile
zoIn	airtel	Banglalink	Citycell	Grameenpho...
1	Airtel	Banglalink	Citycell	Grameenpho...
LIME	SUNBEACH	DIALOG	life:)	MTS
e	Sunbeach	DIALOG	Life	MTS
igicel	SMART	BEL BENIN	glo	Libercom
icel	Smart	BBcom	Glo	Libercom
LLONE	Bhutan Telec...	Tashi Cell	Entel	NuevaTel PCS
ular One	Bhutan Telec...	Tashi Cell	Entel	NuevaTel PCS
Mobile	HT ERONET	M.tel	Be Mobile	Mascom
Mobile	HT Eronet	M.tel	Be Mobile	Mascom
claro	nextel	oi	POP Recarga	Sercomtel
ro	Nextel	OI	POP Recarga	Sercomtel Ce...

bango®

bango® grid

bango® boost

bango® dashboard



“Bango impressed us with their platform architecture, simplicity of integration and credibility as the market leader.”

Idea Cellular



Tencent 腾讯

 zalando

 DIGEO

NETFLIX

 cimpress™

 Rakuten

vivendi

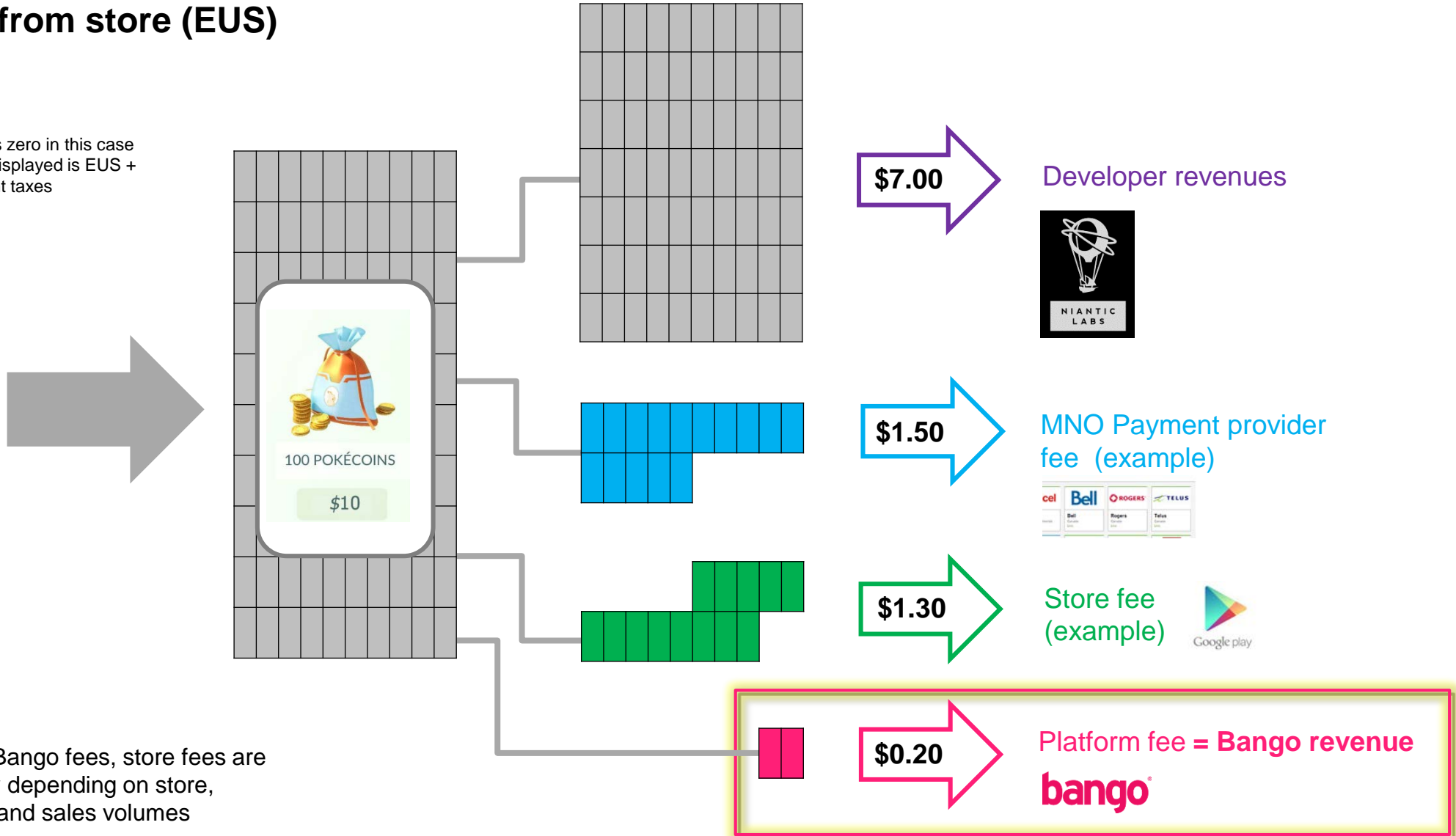
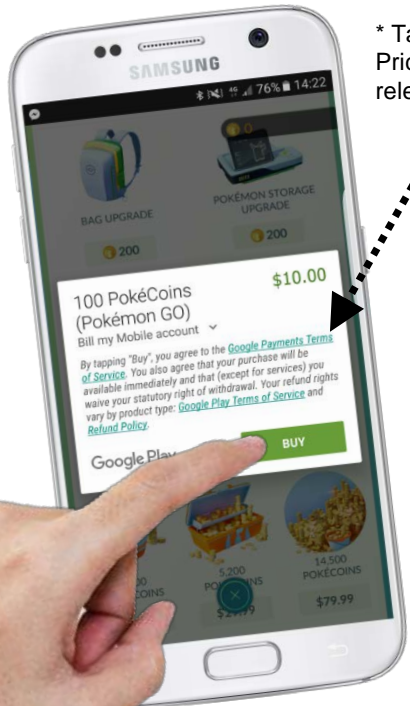
 OUTFIT7

Generating revenues and profits

Typical app store DCB revenue split

\$10.00 purchase from store (EUS)

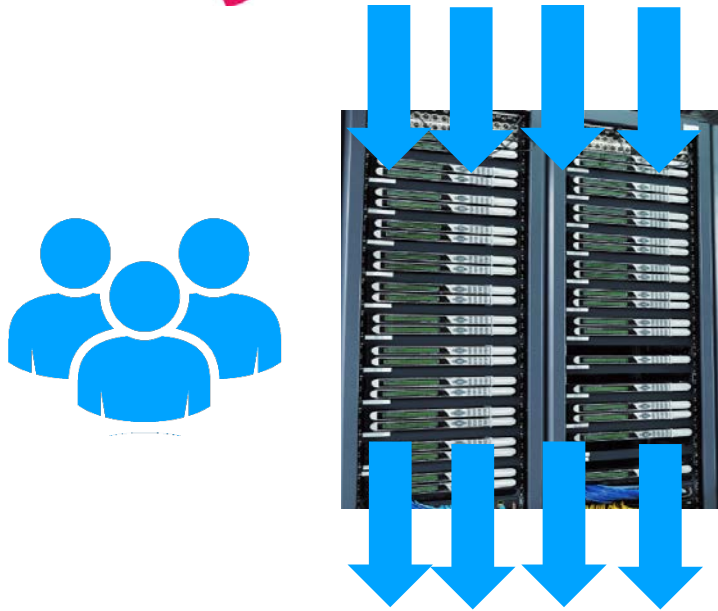
* Tax is zero in this case
Price displayed is EUS +
relevant taxes



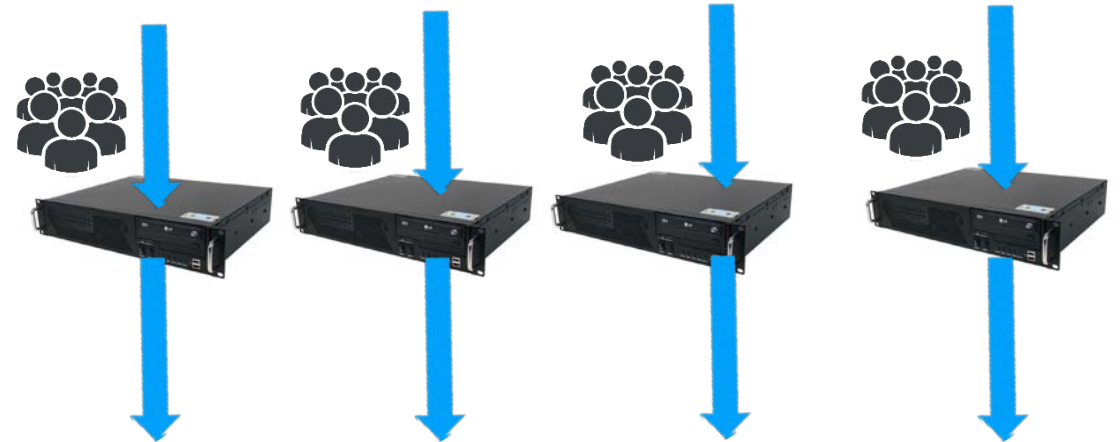
Important: MNO fees, Bango fees, store fees are illustrative and may vary depending on store, market, type of product and sales volumes

- Typical app store model – almost all contracts to date
 - Revenue is transaction fee based on % of End User Spend (EUS)
 - Volume based so that fee % reduces at higher volumes
- Alternative model
 - Revenue is per transaction (high value or using authentication)
- Success based model
 - Revenue is share of additional EUS due to Bango Boost faster growth

Technology led platform model



People led integrator model

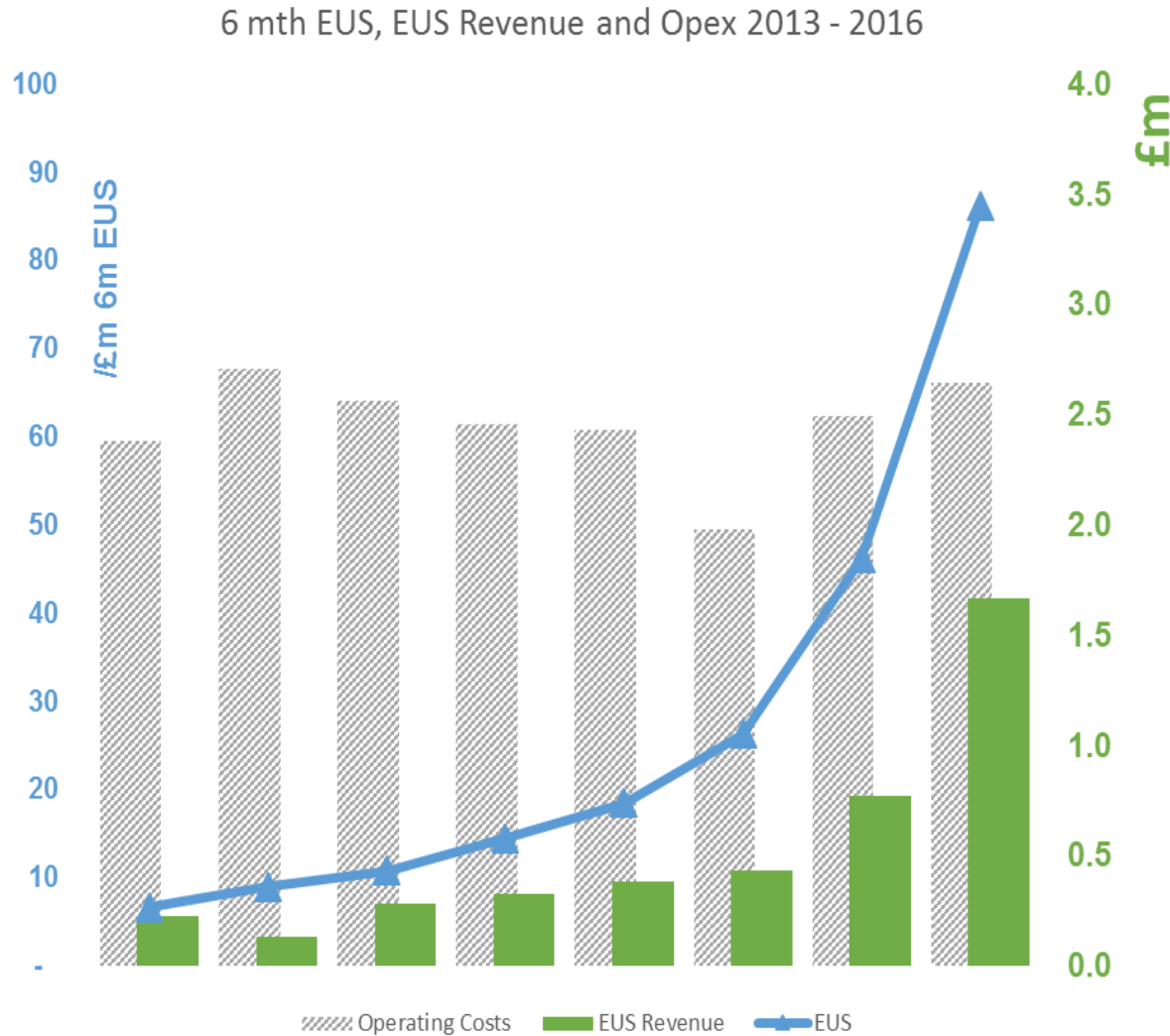


- Bango technology enables integrate once, activate many
- Self serve and configuration driven to cut time and cost
- Fully scalable as the market expands

- Estimate \$30,000 extra opex to lift capacity from \$2Bn to \$3Bn EUS/yr

(2016 EUS was \$0.2Bn – GBP2.3m EUS Revenues)

- The technology is deployed across all active routes, so adding new routes adds EUS at no platform opex
- Creating an industry standard means integrations become faster, increasing speed from commercials to launch
- Experiences and insights shared through Bango Dashboard and Bango Boost so customers can self serve



- Opex costs have remained stable from 2013-2016
- EUS tripled in FY2016
- Highly scalable platform processing increasing EUS for leading stores
- Bango Platform currently able to process over \$2b EUS
- Additional EUS generates revenue which drops through to gross profit

Summary and outlook

Anil Malhotra, Chief Marketing Officer

Platform technology

- Used by the global leaders
- Accelerates organic growth
- Easy for Bango partners to connect to new customers
- Partners understand benefits of platform

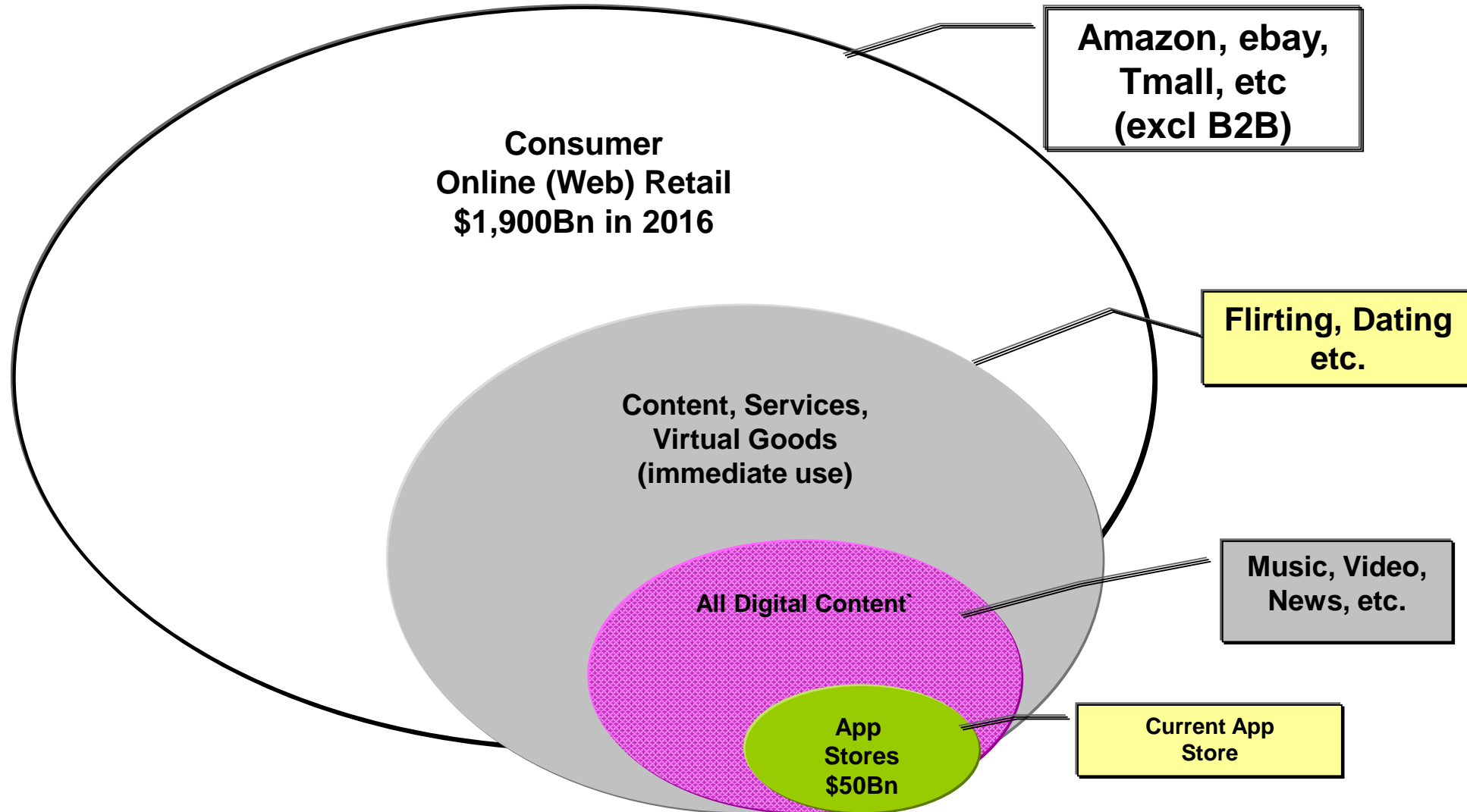
Business model

- Platform leverage = low cost operation
- Every \$ added to EUS = gross profit
- Close to profitability
- Capitalize on \$\$\$BN opportunity

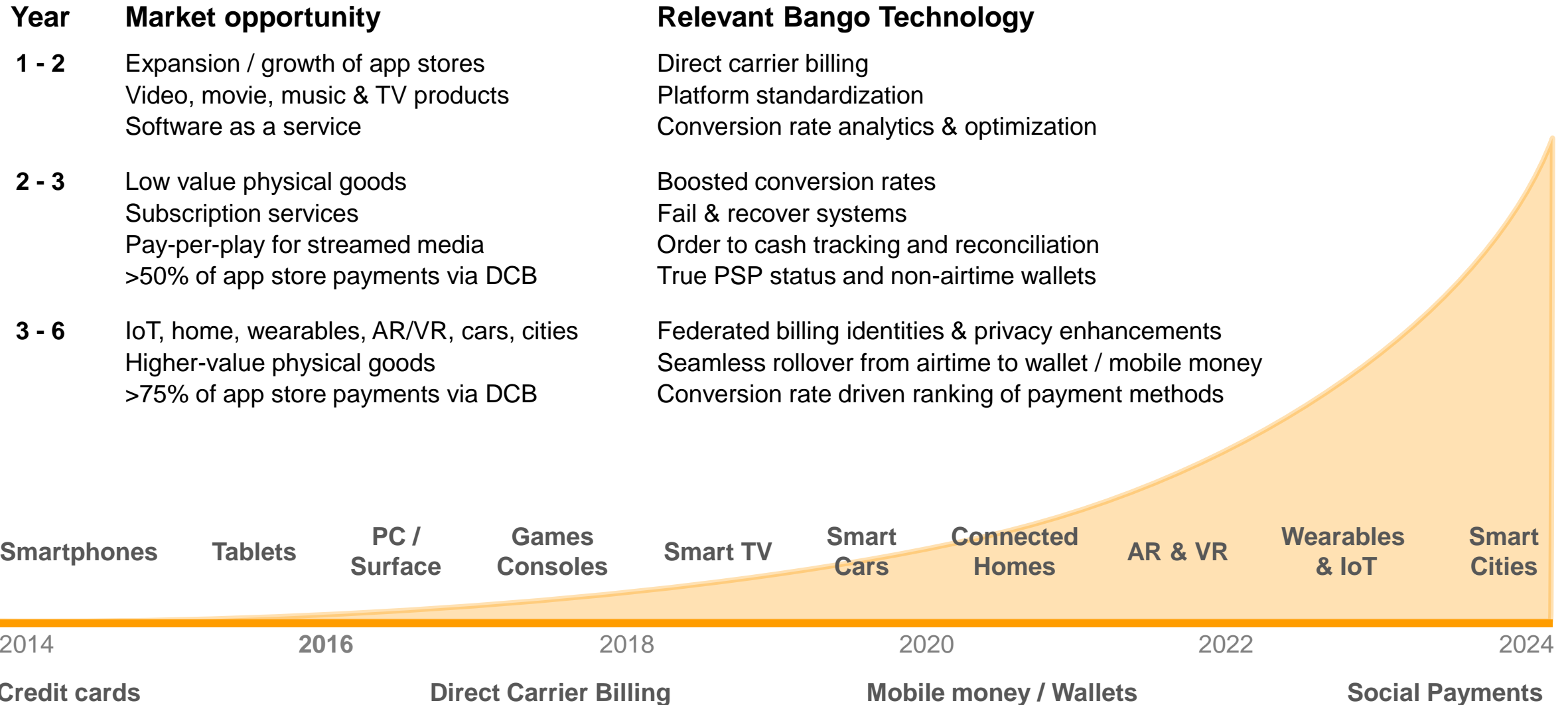
Market dynamics

- Increase in users, devices and billing providers
- Content owners / developers want to reach everyone
- Same Bango Platform deployed for all products and services
- Uniquely positioned in market to achieve scale

The opportunity is beyond digital content



The opportunity is even bigger than smartphones



Q&A