



FINANZIERUNGSAGENTUR FÜR
Social **ENTREPRENEURSHIP**



CASE STUDY SOCIAL ENTREPRENEURSHIP: SCALE-UP OF A SOCIAL INNOVATION

Business Plan, Social Impact, Financing



- Summary
- The social problem and the solution
- The market
- The Business model and the status quo
- Successes and facts
- The social impact
- The distribution model / growth plan
- The social entrepreneurs and their mission
- The supporters / investors

Summary: First dockless electric bicycle sharing system in the world

Combining electric and free-float sharing will boost cycling as a real mainstream alternative for the car, by making it accessible to a larger group of people and to be used for longer distances. Billy-cycling addresses the environment, health and economic consequences of pollution and congestion caused by motorized transport within cities.



- Urban congestion and pollution are among the main challenges on the liveability and economies of many cities worldwide (including Brussels) who are nearing complete mobility gridlock.
- Emissions of GHG and fine particles by motorized transport in towns is also a threat on the health of citizens and a major contributor to global warming.
 - these problems have become close to unbearable: wasted idle car time and stress in traffic jams, noise, road rage, smog, no parking, damaged urban landscape, fines and other costs of car, sedentariness, ...
 - The average commuter in Brussels easily wastes 2-to-4 hours of his family time in traffic every week.
- The private and social costs of congestion and pollution on environment, health and economy are well researched. Association of city smog with heart disease, strokes, respiratory illnesses and cancers is proven.
- The adverse impact on mental health and social life is also documented, and the negative effect on cities' economies by lost time and increased cost of doing business is staggering. The mobility of people and the related traffic, especially within inner cities, is by far the main cause of congestion and the biggest generator of emissions.

The social problem ...

Economic impact of congestion in Europe

\$23 bn

Economy-wide direct and indirect
private costs to households

\$47 bn

Social costs of CO₂ emissions -
equivalent in monetary terms



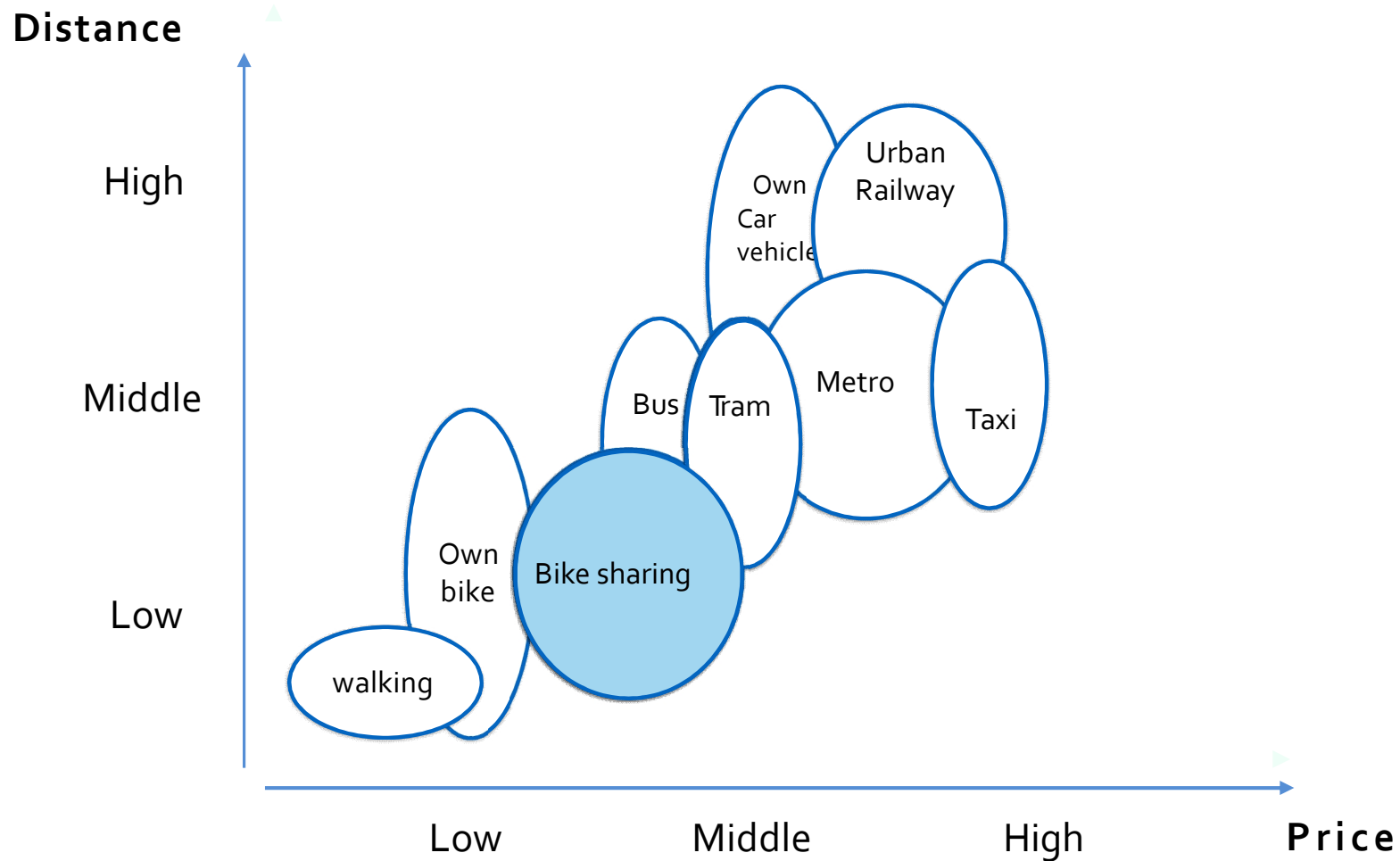
- New modes of transportation, mobility models and habits have emerged as solutions in the last decades: increased usage of public transport, car sharing, ride hailing, car-pooling, electric cars, and in particular use of bicycles and electric bikes.
- In the last 10 years, fixed-station bicycle sharing has emerged as a solution for short and medium distances in cities (for example Villo! in Brussels, Velib' in Paris)
- Technologies have continued to mature and become more affordable: connected locks; geolocalization; fleet management apps; electric powering; battery autonomy and power . This has enabled the emergence in the last 2-3 years of new models of cycles sharing that offer greater experience in terms of ease of use and lightness, and more flexibility in terms of drop-off, distance, and speed: free-floating traditional bikes, station-based electric cycles, and more private models. Free-floating electric scooters (e.g. CityScoot in Paris or Scooty in Brussels) and bicycle sharing are now booming.



a new generation of 'public transport'

Shared, free-float and electric bicycles is inclusive and extends the accessibility of cycling as daily mean of transport to a much larger proportion of citizens, incl. importantly on gender and to less fit people: no helmet nor permit required; no storage needed; no maintenance skill; affordability; occasional usage; suitable for short-to-long distances

The market I - Transportation niche



The market II - Bike Sharing: evolution and facts



White Bike Amsterdam

IT -Systems ?

Free-floting regular bikes

(Ofo, Mobike, Gobeebike, O'bike, ..)

Free-ftoating e-scooters

(City scoot, Emio Felyx, ..)

1965

1995

Copenhagen coin-deposit system

1998

2007
Vélib'

2014

Smartt multimodal system

Fixed-station e-bikes

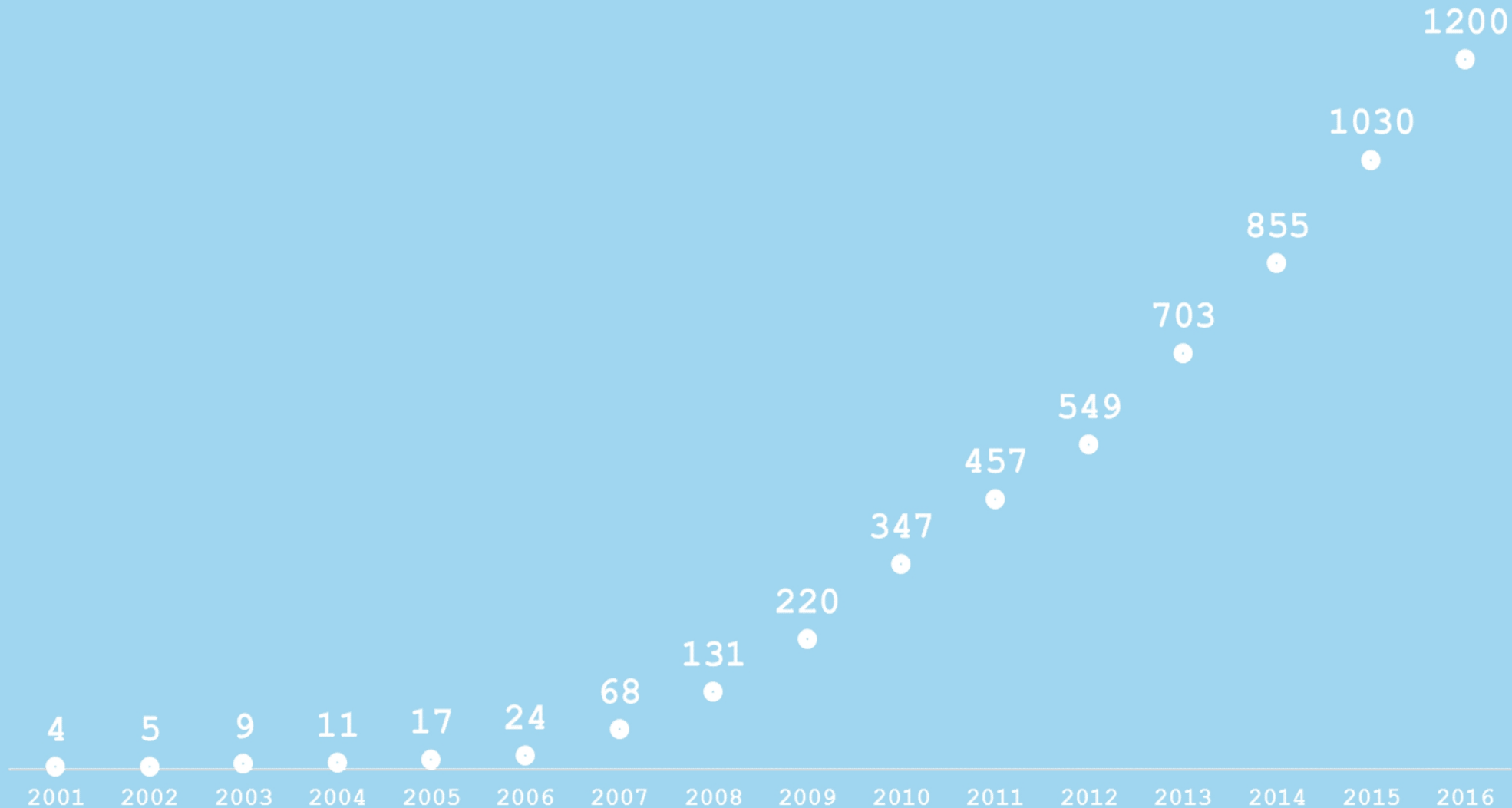
(Smoovengo, Bicimad, Jump)

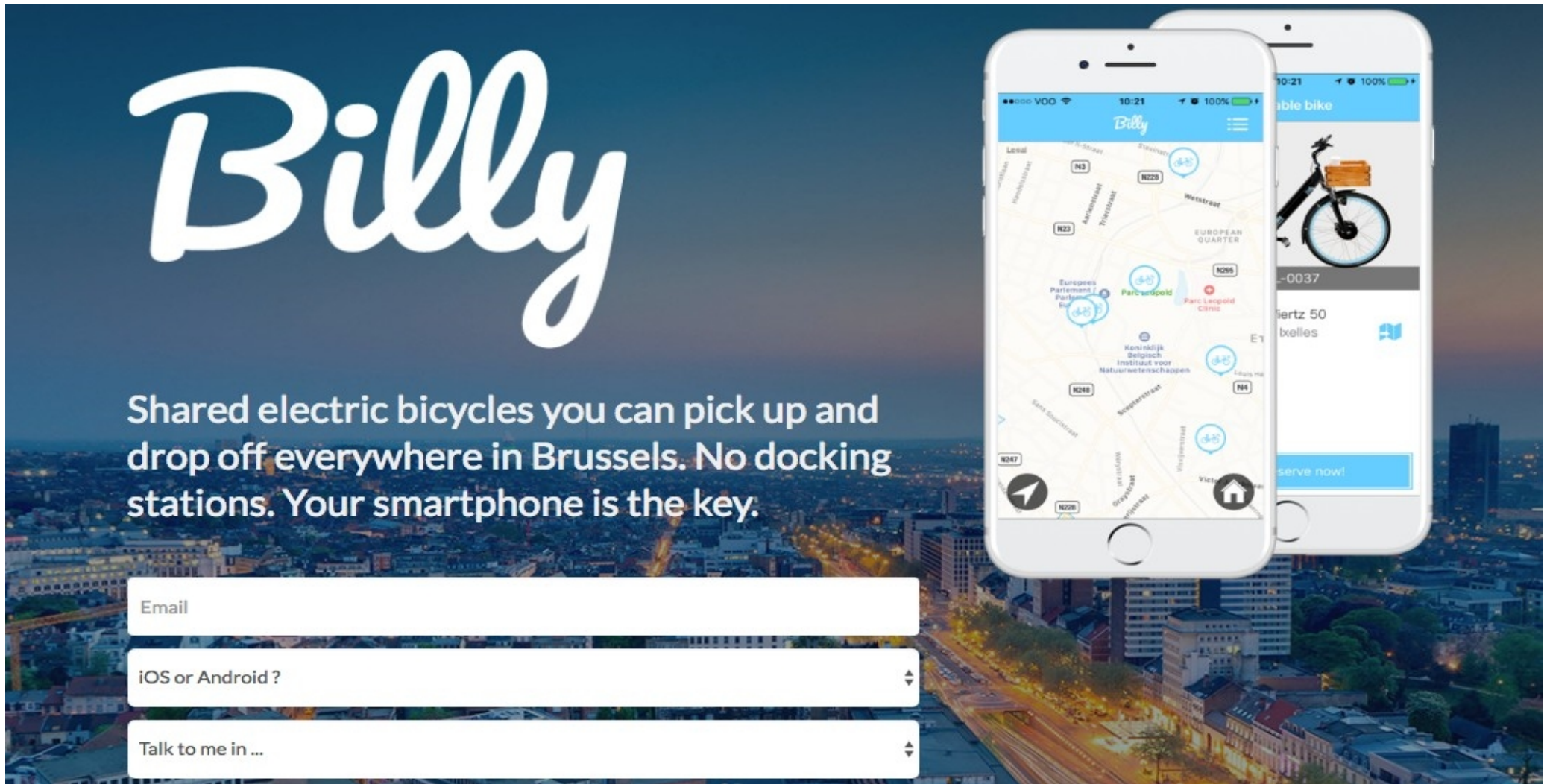
2017

Free-ftoating e-bikes

(Billy, Smide (45 km/h) Urbee (semi freefloat)

Bike sharing systems worldwide





Billy

Shared electric bicycles you can pick up and drop off everywhere in Brussels. No docking stations. Your smartphone is the key.

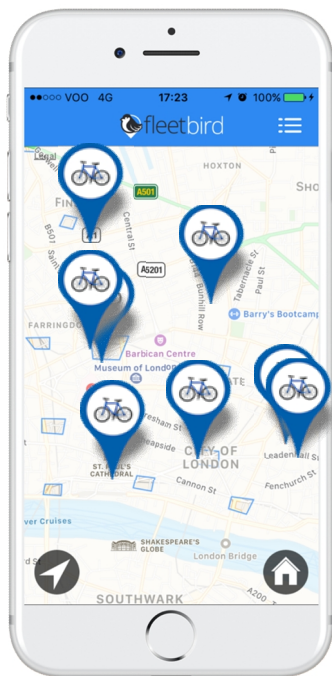
Email

iOS or Android ?

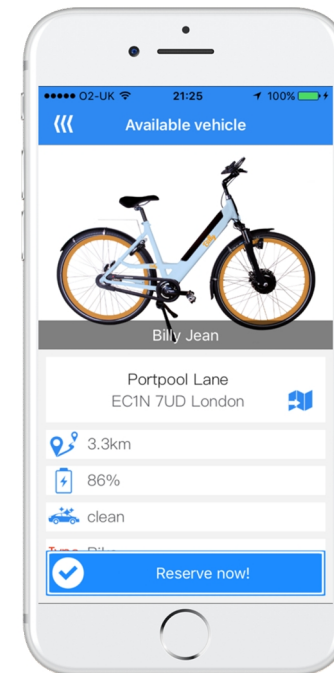
Talk to me in ...

The advertisement features a dark blue background with a cityscape at night. On the right, two smartphones are shown. The front phone displays the Billy app's map interface, which includes a search bar, a list of nearby bikes, and a 'serve now!' button. The back phone shows a bike's details, including its model, year, and a 'serve now!' button. The Billy logo is prominently displayed in the top left corner.

Billy is introducing the first free-floating connected electric bike sharing model. Once the Billy app is downloaded on one's smartphone and a quick and easy registration is made, users can easily search and book, unlock and ride the electrical powered Billy bikes to wherever they'd want within the coverage area. Using an intuitive and simple-to-use free app to open the lock, start usage and drop-off wherever their destination is.



Find



Book

The type of bike has been selected by Billy for the balance between its robustness and its lightness and style. Billy has been working since the beginning of 2017 on upgrading the bikes with software and hardware adapted to its service.

The product

- Battery 36V - 13,6 Ah = 60 km autonomy
- 3 speed gear hub = Hills without breaking a sweat
- Front engine - 250W = Assistance up to 25 km/h
- Bluetooth lock = keyless opening and closing
- GPS + GPRS/GSM device = localize bicycle and monitor battery level
- Android & iOS app: Sign up, localization, reservation, rental, unlocking, locking, payment, overview and customer support
- Back-end: Fleet management, CRM, invoicing, theft alarm, back log



Business model III - Pricing / revenue model

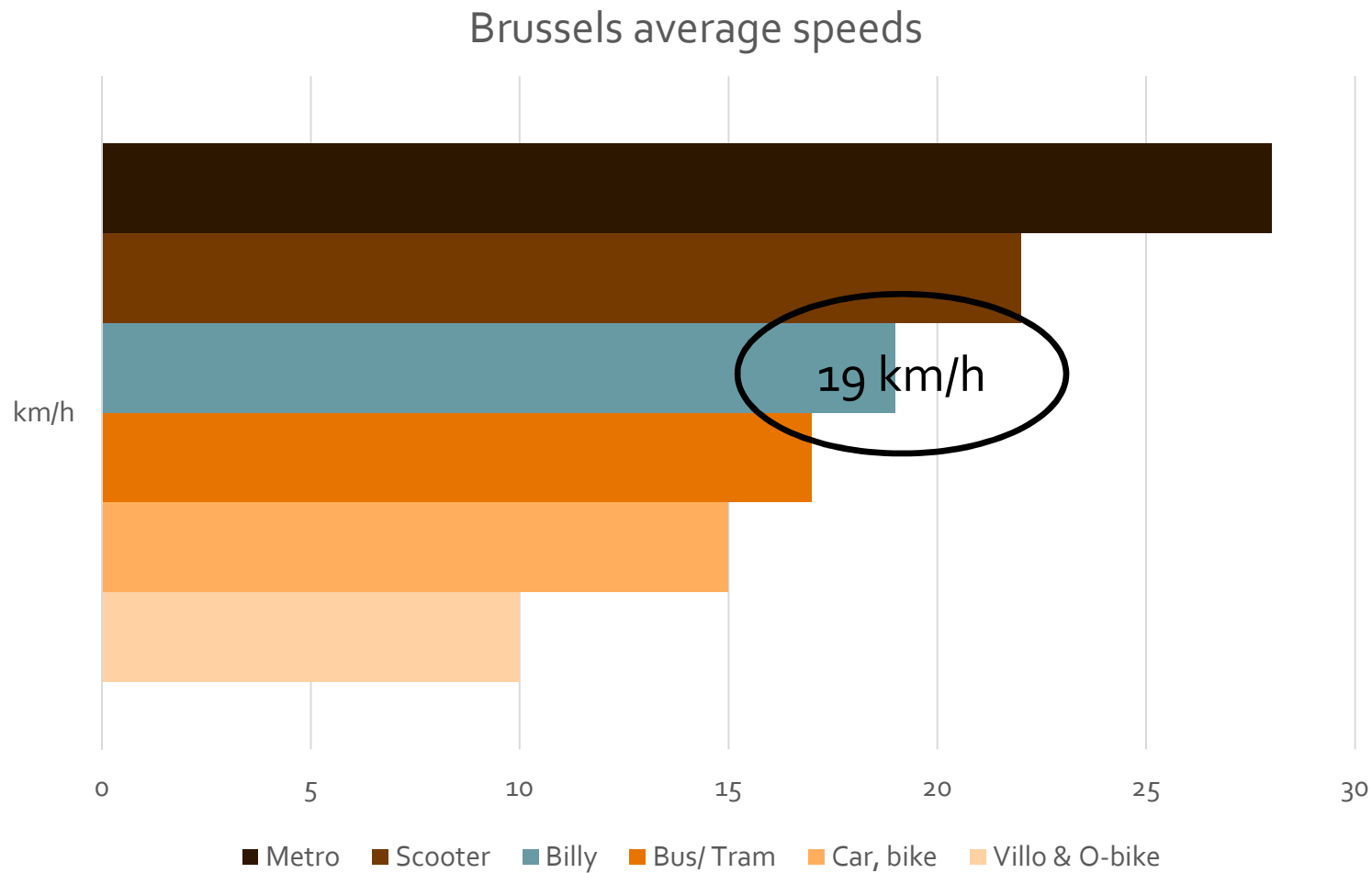
Billy's revenue model is based on a simple usage fee of €0,15 per minute. Compared to other with models with fixed stations, the free-float model is more asset- and maintenance-light. Recharging is actually done by swapping the batteries when they reach a 20% charging level. This task will be performed by a continuously rotating staff, who will also perform light maintenance and repairs on the fleet. Billy's e-bikes will be available within an average reach of 300m.





Brussels: 120km²
1,1 Mio. habitants

1st Billy area: 12km²
150 bikes – 500 Beta users

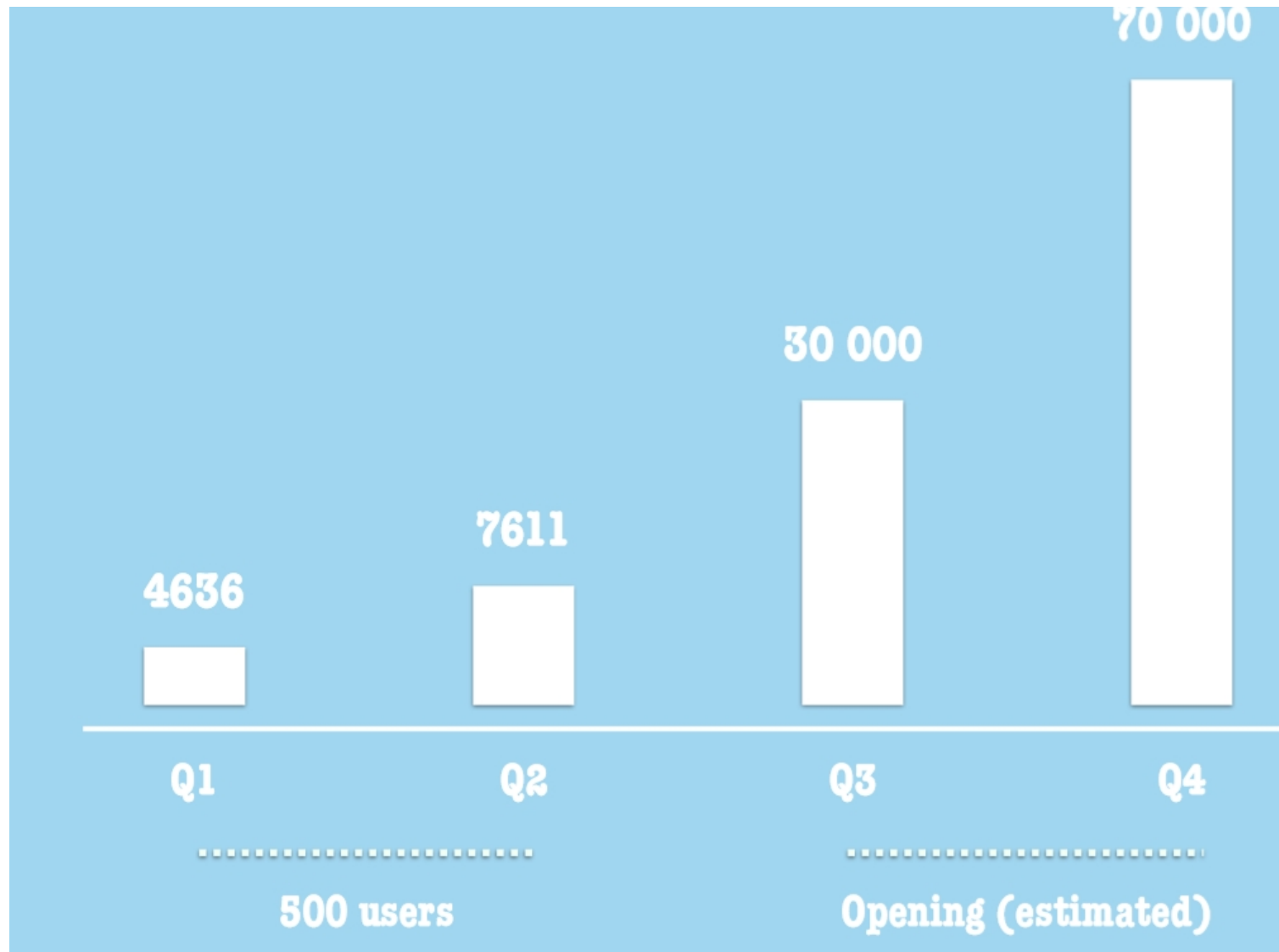


Brussels shared alternatives:

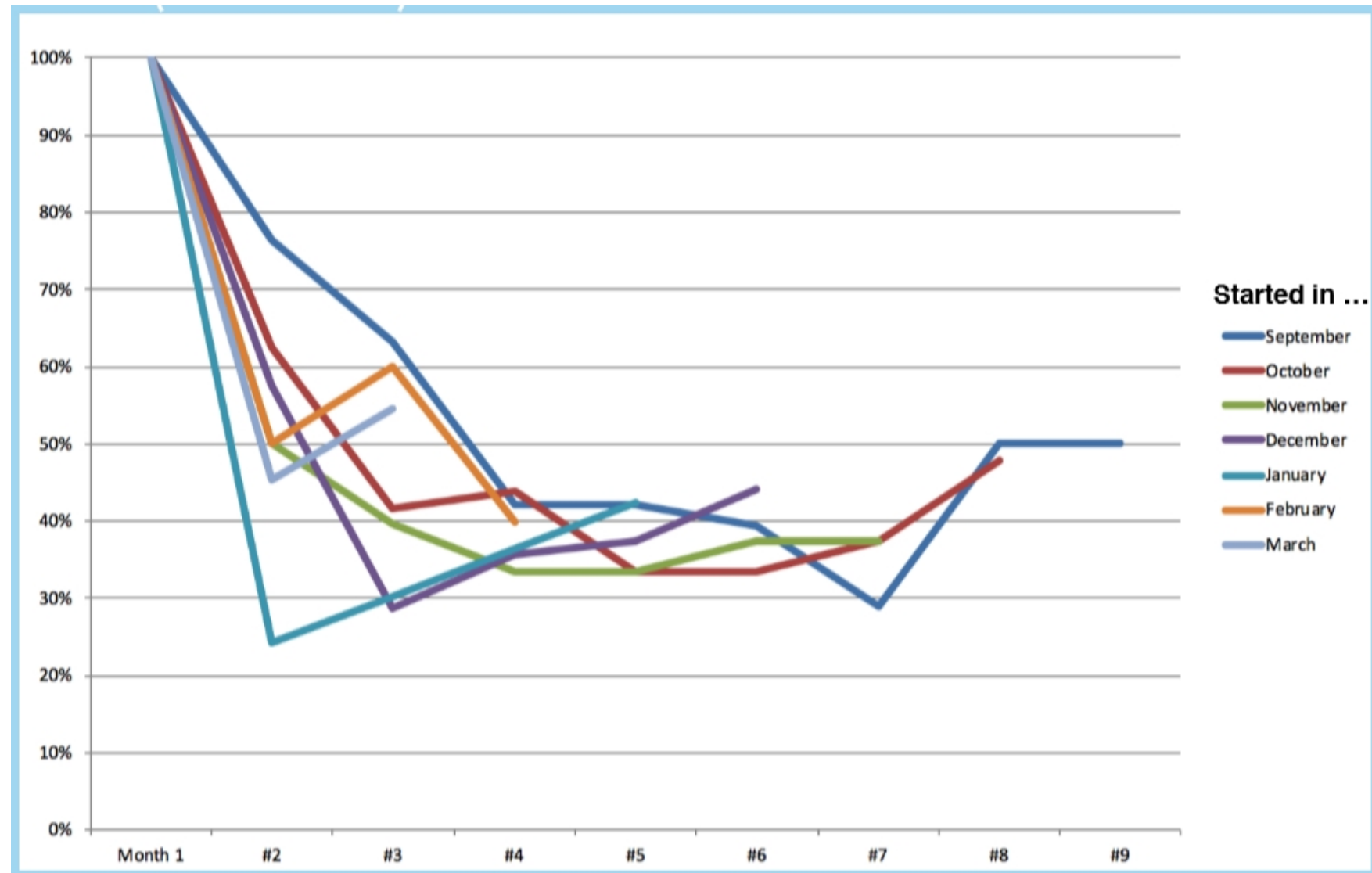
Alternatives	Km/h	€/min	Min for 3 km	€ for 3 km
Drive now	15	0,33	12	4
Scooty	22	0,25	8	2
Billy	19	0,15	9	1,4
Villo!	13	0	14	0

- ✓ 9000 leads captured on a waiting list
- ✓ 0 € marketing effort yet
- ✓ Closed Beta – 500 active users
- ✓ 15.000 rides since october

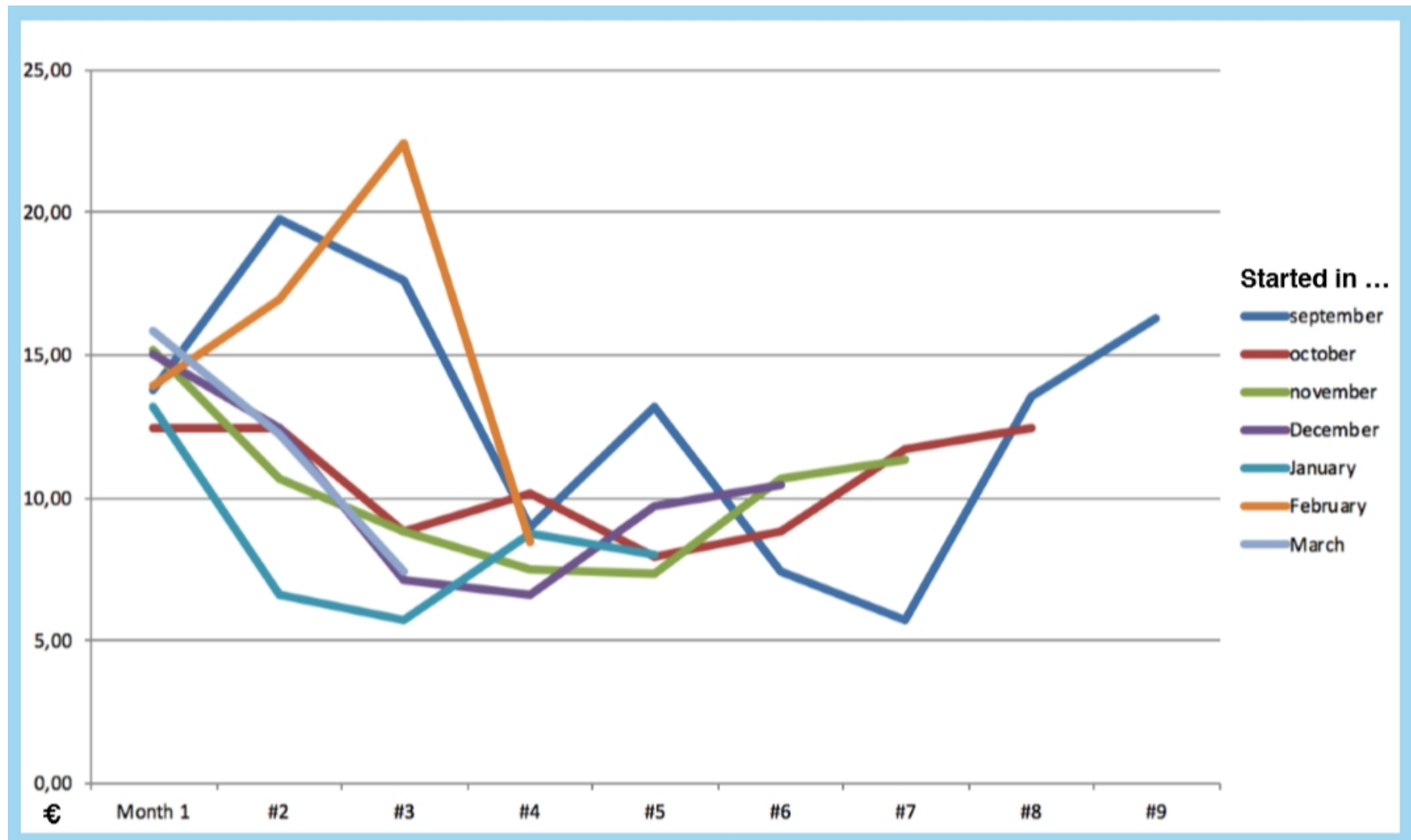
Rides in 2018



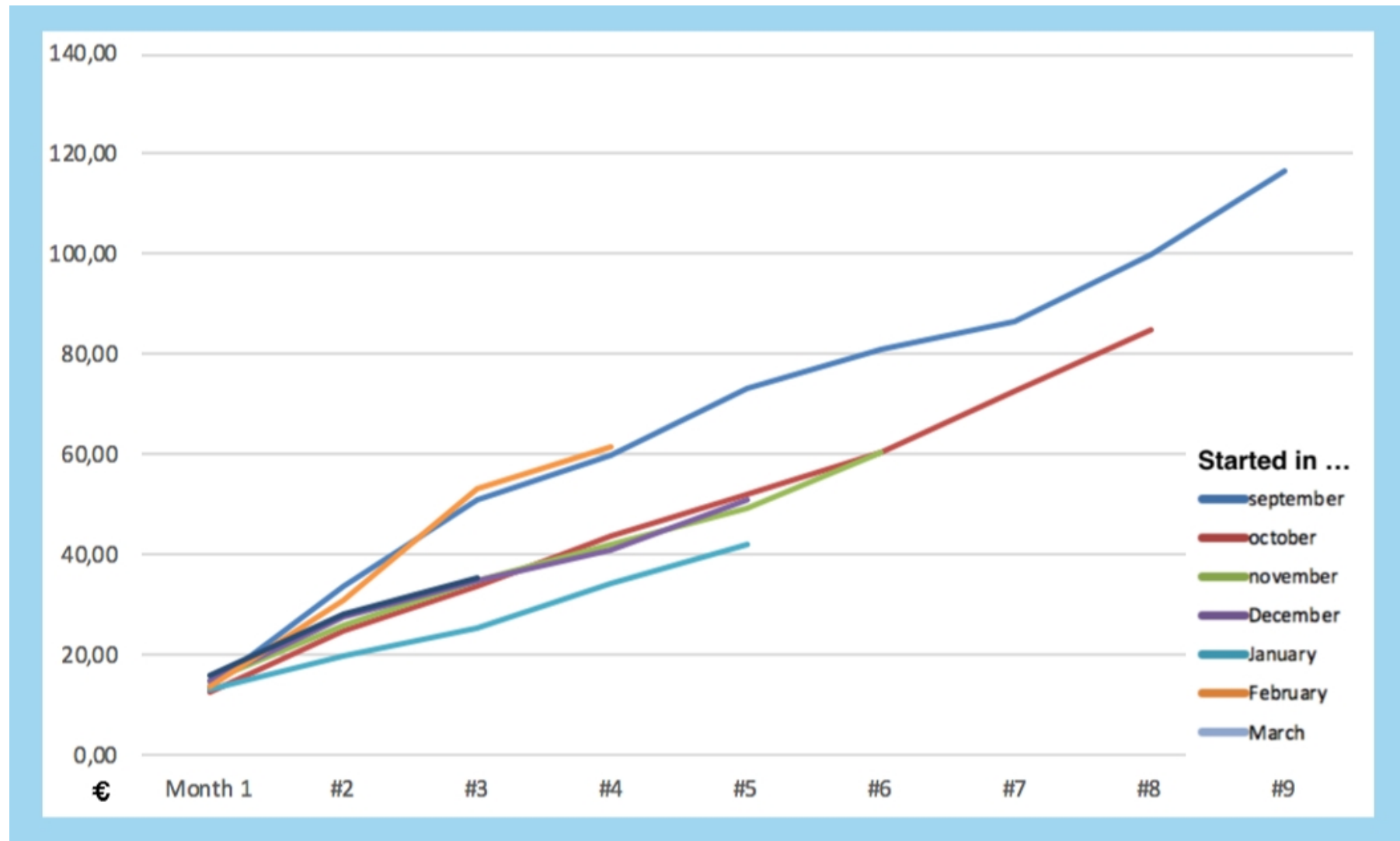
User chord (until May)



Monthly revenue per user

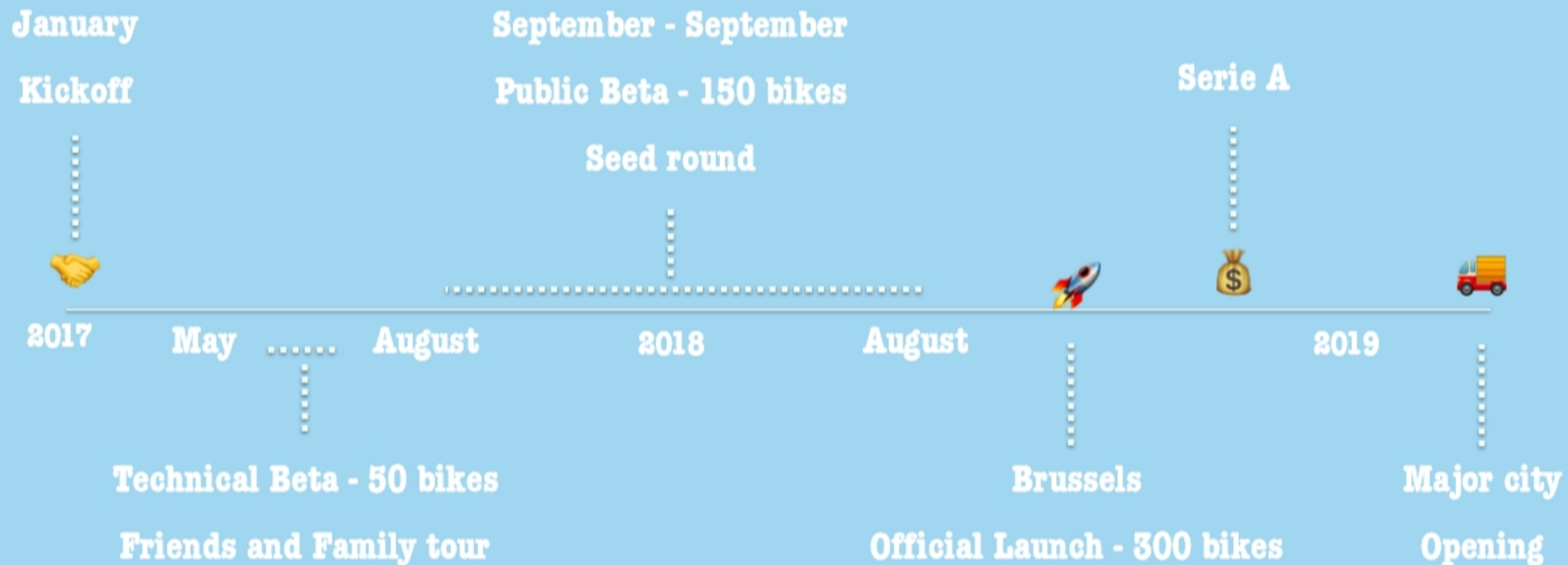


Cumulated revenues



- Bike break even point: 1,7 rides / day / bike
- City level break even point: 2,3 rides / day / bike
- Average usage: 0,24 rides / day / users
- For 300 bikes, Billy needs 3000 users to break even

Billy has developed – and fully own the IP –
Both „brain“ of the bike (GPS) and the E-Bike



Successes after one year



- ✓ Full operational experience
- ✓ Average usage: 0,24 ride/day/user
- ✓ Own GPS and E-bike developed
- ✓ 475k EUR raised
- ✓ Ready to scale up
- ✓ 2 majors cities + 2 medium cities
- ✓ 2 million rides in total within 18 months
- ✓ Recognized as the mail European player

Ford → Gobike

BMW → Drive now

Uber → Jump

Mercedes → Car2go

Europcar → Uber, Scooty

D'leteren → Poppy

PSA → Free2move, Traveler car

...

Strength

Lean approach Product-
Market fit

Opportunities

First-mover
In-love citizens

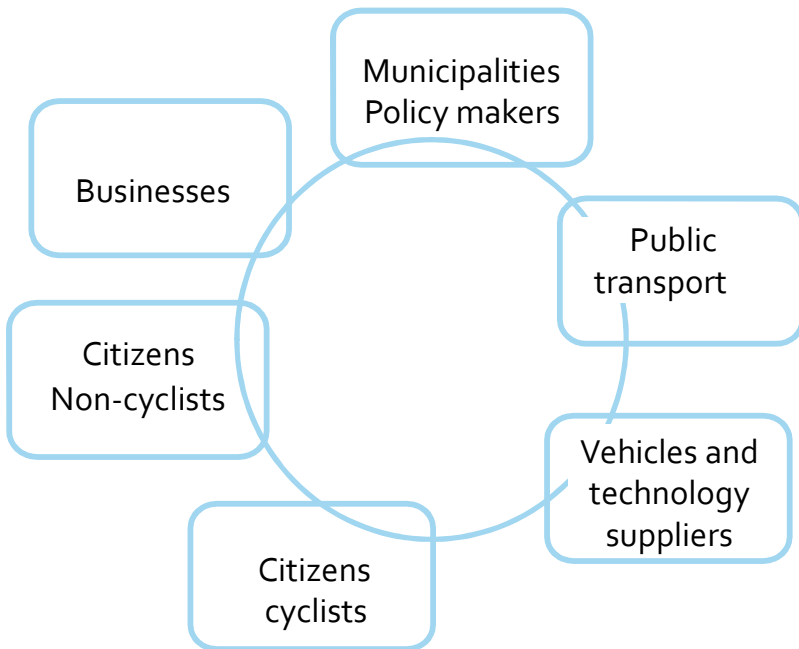
Weaknesses

Cost of swap
Financial Back-up

Threats

Slow expansion

Stakeholders



Financial benefits for the EU

More than Co2



€ 513 billion

Environment + Climate:	€15	Economy:	€63
Energy and resources:	€3	Technology + Design :	€20
Health :	€192	Time + Space :	€131
...		...	

Guillaume (32) and Pierre (27) formulated the idea of Billy end of 2016 and decided to launch it together in January 2017. Pierre and Guillaume are driven to offer to Brussels citizens a new joint experience of lifestyle mobility with a sense of individual freedom.



Pierre is a self-made entrepreneur, with particular expertise in marketing and internet, having among other launched his own advertising agency.



Guillaume started entrepreneurship right after his business school degree, including with experience as Co-founder/CEO of Djump (ridesharing) and Django (carpooling, now Commuty).

3 Mil. € Serie A round for

- ✓ 2/4 Key profile recruitment
- ✓ 1/4 paid acquisition
- ✓ 1/4 Tech development + other costs

In H1 2017 Billy raised €175k in convertible loans from private investors and from a leading player in the Belgian mobility market, funding the soft launch and enabling a larger public test with 150 bikes. To grow its fleet to 400-500 bikes for full launch in April 2018 and to adapt and grow its team accordingly, Billy was looking to raise money in October 2017. The management was looking for equity financing via capital increase.

With the support of FASE **EUR 300k** have been invested in Billy

Investors

Sociaal Investeringsfonds SOIF van De Punt: The fund invests capital and supports the social enterprise with access to networks and know-how.

Trividend: The Flemish participation fund for the social economy has invested more than EUR 4.2 million since it was founded in 2001.

2 private Business Angel



The Financing Agency for Social Entrepreneurship GmbH (FASE) was launched by Ashoka, to make growth for social enterprises financially viable. FASE allows co-investments by impact investors and philanthropists through an open pipeline of investment ready social entrepreneurs, and develops innovative financing models specifically suitable for social enterprises. The objective is to create an ecosystem for the financing of social enterprises.

FASE

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