Reinventing the taxi business model

Contribution to the 8th IRU International Taxi Forum Cologne November 2nd 2018

Prof. Richard Darbéra (CNRS)

A business model for the taxi of the future ?

Probably not one single model but several ones

- Very much constrained by the present structure of the industry
 - A structure differing from one country to the other and even between cities in the same country
- Also conditioned by the different regulatory policies that will be pursued by the various local governments

But similar challenges posed by disruptive technologies

- Internet, 4G networks, GPS, International Social Networks
- All this embodied in one small piece of technology: the smartphone
 - Including a video recorder

And the subsequent development of the app-based Commercial Transport Intermediaries (CTIs)

Traditional taxi operational functions and responsibilities

	Integrated companies or fleets	Booking platform companies	Licence owners	Drivers
Driver recruitment	Х	Х	Х	0
Driver training	Х	X-0	X-0	0
Dispatch	Х	Х	0	0
Record keeping	Х	Х	Х	Х
Vehicle ownership	Х	0	X-0	O-X
Vehicle maintenance	Х	0	X-0	O-X

• Source: adapted from Schaller [2015, p.12]

Present and future regulation

Because of these technological revolutions, the regulation that still protects taxi companies from competition now rests upon shaky economic justifications, except, perhaps, for some niche markets

- See my presentation at the 5th International IRU Taxi Forum
 Cologne « The end of the taximeter or the end of the taxi » 2012
- Quantitative regulations
 - For safety and enforcement constant monitoring by GPS (as for New York City Yellow Cabs) is cheaper
- Fares set by governments
 - Apps make fare competition possible, even surge pricing (within limits)

Three major changes in the taxi industry

1 Technology revolution with the smartphone.

- Geo-location of both customers and drivers
- Instant data transmission and lots of added services
- Including a possibility for the disgruntled customer to post a video on the internet
- 2 Network economy as exemplified by Google, Facebook, Amazon
- Need to pass through those companies to access to clients as more and more people use them as the first step of any query
- **3 Venture capital economy.**
- No notion of short-term profitability
- Allows to buy customers and drivers for several years as exemplified by Amazon and Uber

The consequences of these changes are far reaching

The first consequence is that technological entrance barriers have been removed:

- No need for any costly equipment on board in each vehicle
- No need to compete for limited radio frequencies
- And the new technology is scalable

	Traditional taxi	App-based platforms (CTIs)	CTIs' Comparative advantage over traditional taxi
Labour	Generally full time	Flexible and part time	Better adapted to fluctuating demand
Vehicle equipment	Taxi meter, rooftop sign, colour	Smartphone	Cheaper
Dispatch	Call centre	Server	Cheaper and faster
Optimization	Drivers experience	Algorithms	More efficient and surge pricing

The consequences of these changes are far reaching

The second consequence is that new competitors have no short-term profitability constraints

- Venture capital economy
- There is a global taxi market in which the winner takes all ???
- And the new technology is scalable

The third consequence is that the taxi industry can no longer operate as an independent business without close links to other networks

• A growing part of the business (1/3 ?) will be intermediated because people connect to Facebook, to TripAdvisor, to AirBnB, or to Google Maps

Complementary strategies for taxi companies

- Jointly build some international organization with a strong network and a strong brand.
- ... to become a valuable potential partner for Google or for TripAdvisor
- Develop a common app with constantly updated services and capabilities
- ... to compete with the sophisticated apps of the other global CTIs
- ... to analyse the big data produced for back office research
- For traditional taxi companies: exploit their comparative advantage in the subsidized contract market.
- ... stemming from trust, reliability and capacity to manage a diversified fleet

Business models and access to 4 scarce resources

1 The customer base

- 1. **the linked customers**, i.e. the ones that are familiar with smartphones, internet, and pay with bank cards,
- 2. **the disconnected** ones, by choice if they do not want to be traced or by constraint if they have no smartphone or bank card
- 3. the tourist unfamiliar with the local services available
- 4. **the subsidized customers**, i.e. those whose mobility is encouraged by public agencies.

2 The drivers

• Not necessarily a scarce resource, unless taxi companies need trusted drivers or if local authorities resort to barriers to entry to protect labor

3 The vehicles

• No longer a scarce resource except if their number is capped by local authorities to ration space and fight congestion

④ Space

9

 Definitely a scarce resource in urban areas and in specific places of high demand like airports, train stations, or stadiums after a game

A business model for each regulatory framework

In cities where capping is still considered as the best way to fight congestion

- Licence owners will keep a comparative advantage vis-à-vis global CTIs
 - Priority access to airports and train stations as well as a monopoly on the street hailing market.

In cities introducing efficient congestion pricing

• The dominant business model might be the one of the global app-based CTI

In major cities tourists constitute a substantial part of the taxi market

• Global CTIs and the taxi companies that are affiliated to an international network have a competitive advantage

In the subsidized transport market

• Traditional taxi companies that have built a trusted relationship with both their drivers and their institutional customers have a comparative advantage over global CTIs

Thank you for your attention

Richard Darbéra Darbera.cnrs@free.fr