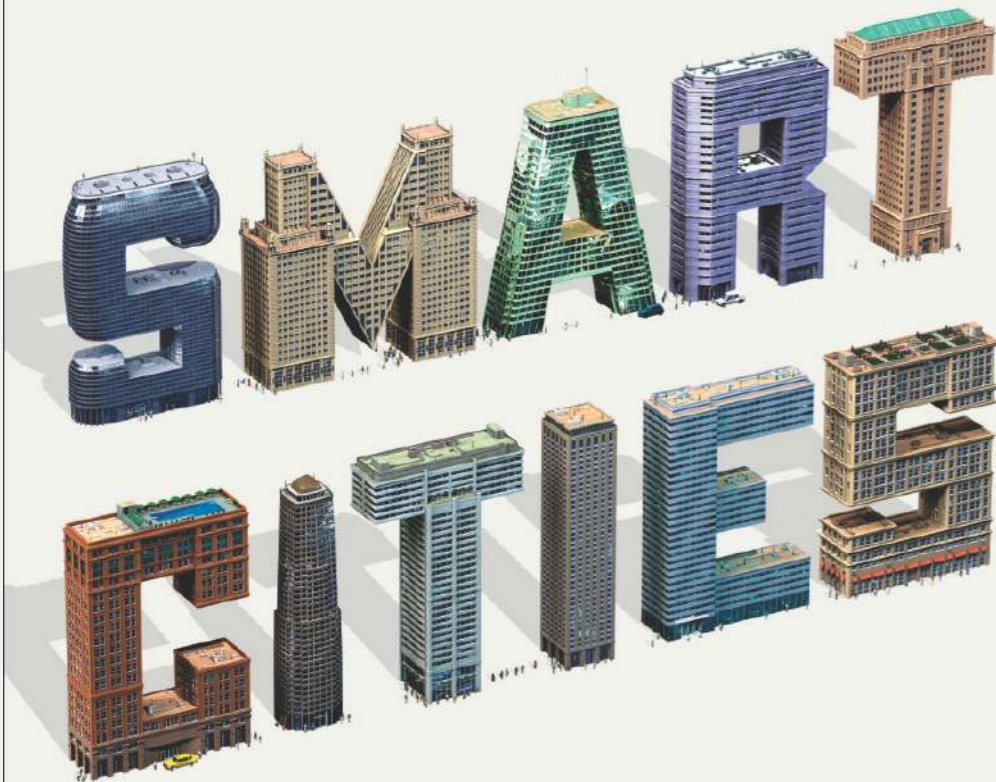


BIG DATA, CIVIC HACKERS, AND THE
QUEST FOR A NEW UTOPIA



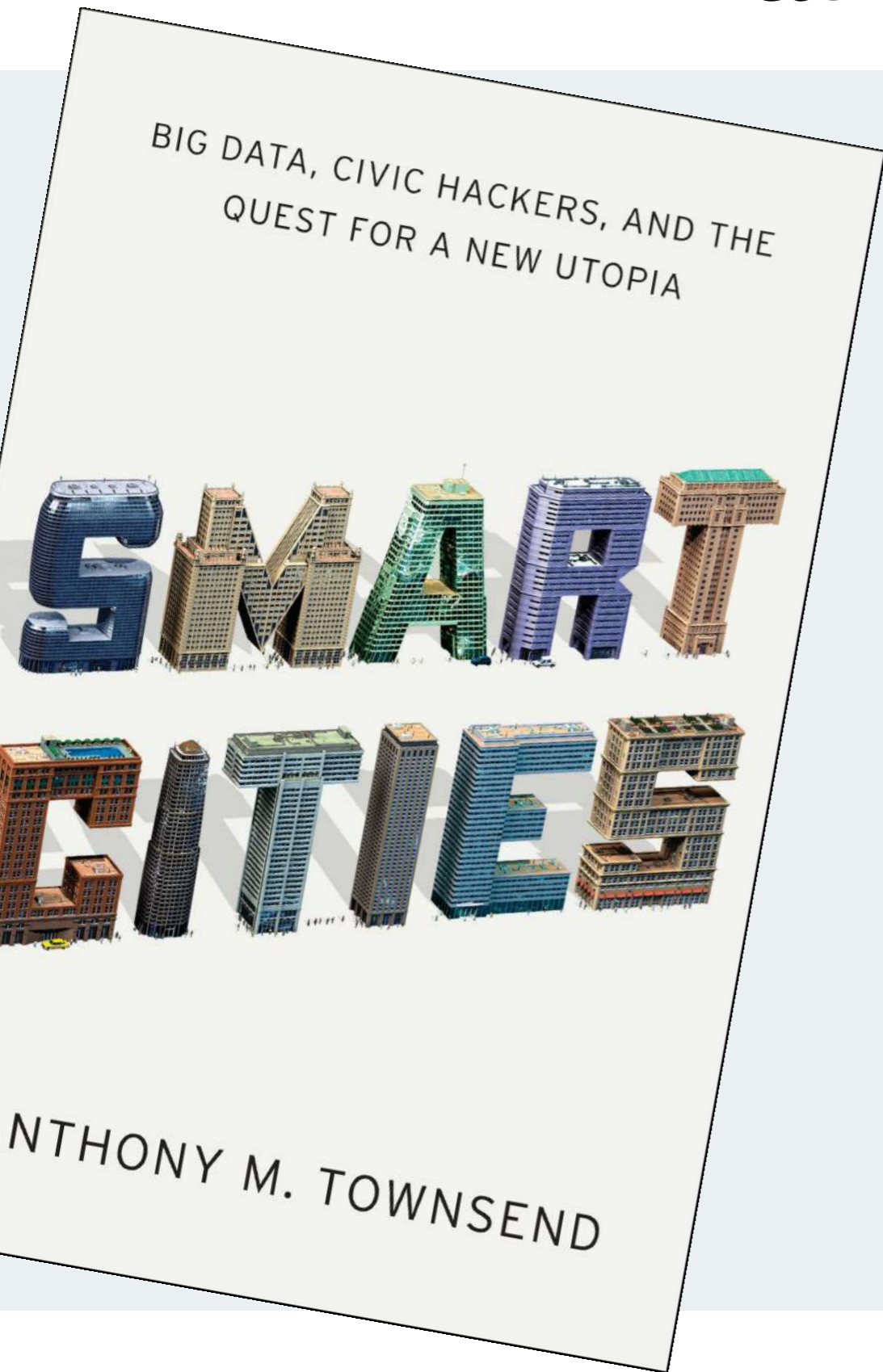
ANTHONY TOWNSEND

GHOST ROAD

BEYOND THE
DRIVERLESS CAR

ANTHONY M.
TOWNSEND

What are smart cities?



A planner's definition
“communities where government, business, and citizens are using digital technology to address timeless urban problems.”

They move.






They inform.



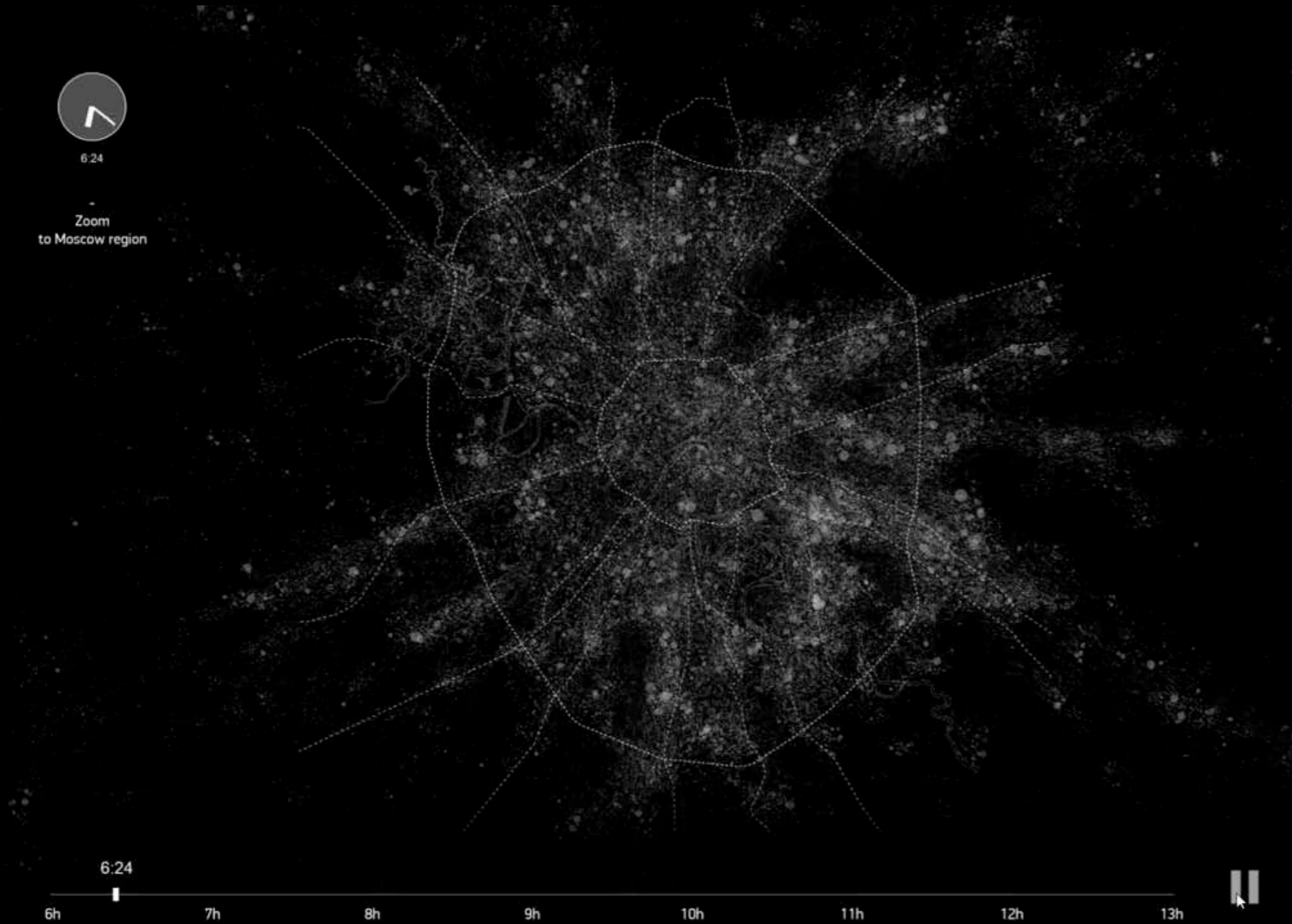
They advise.



**Subway service
suspended.**



They observe.



| PYC | ENG

| General description | Methods of data processing



Dot

Each dot shows a mobile device. For each moment of time an exact location of a dot is shown.

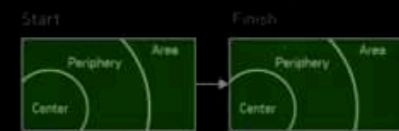


Line

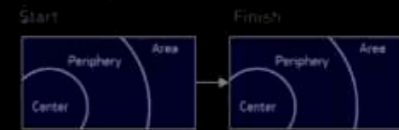
Each line shows a move of a group of mobile devices. For each moment of time the routes that started at this time are shown.

Press on starting and finishing zones

Route 1



Route 2



Additional filters

When the filter is off all possible variants for certain metric are shown

Trajectory type

Direct

Indirect

Traffic through the center of Moscow instead of short connections

Journey time

Less than

30 minutes

30 minutes

and more

habidatum



They spy.



They spy.



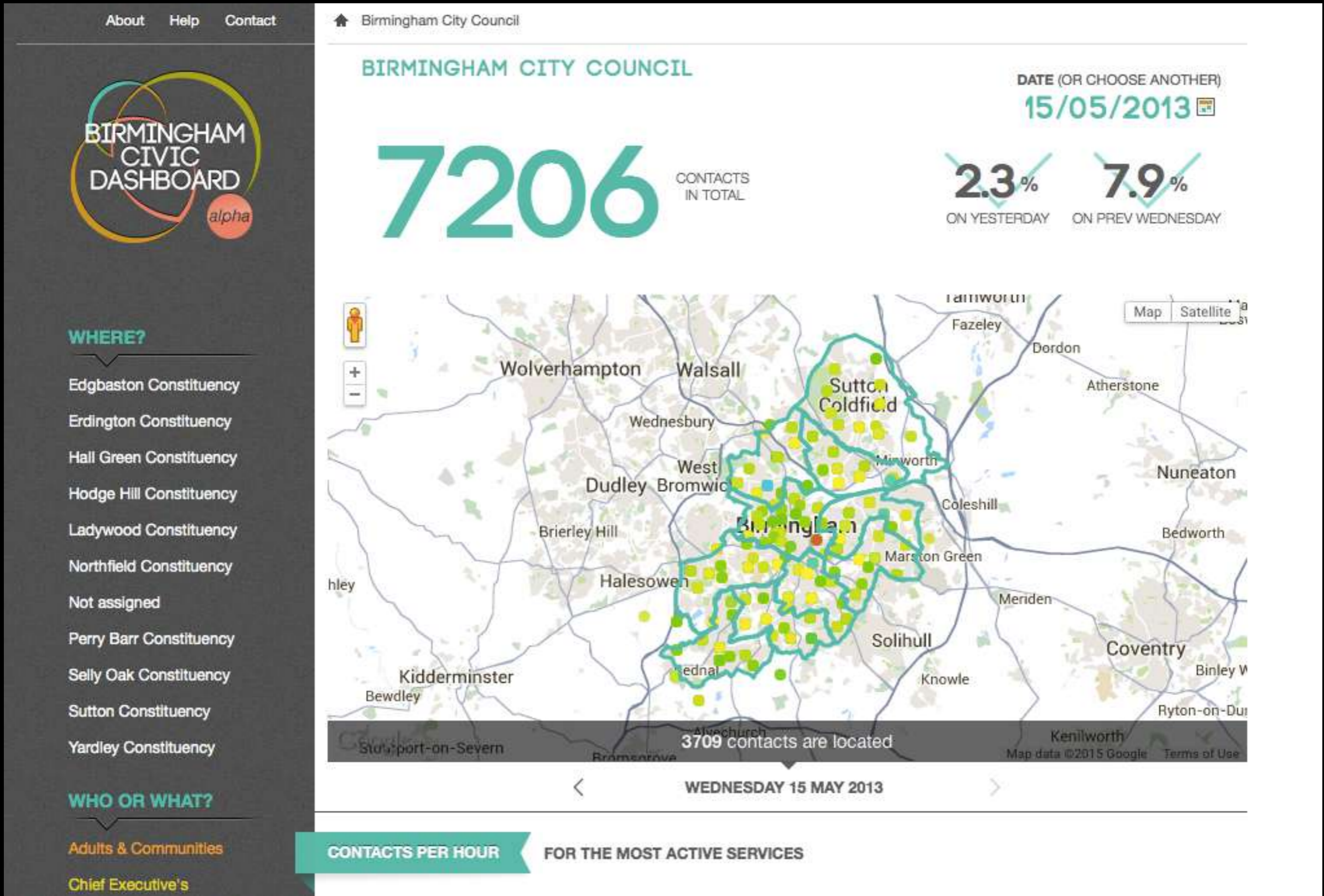
They regulate.



They maintain.



They reveal.



They reveal.



Olaf Koens
@obk



[Follow](#)

Brilliant! Activists in Saint-Petersburg flushed GPS-trackers through their toilets. Track that



RETWEETS
2,897

FAVORITES
1,423

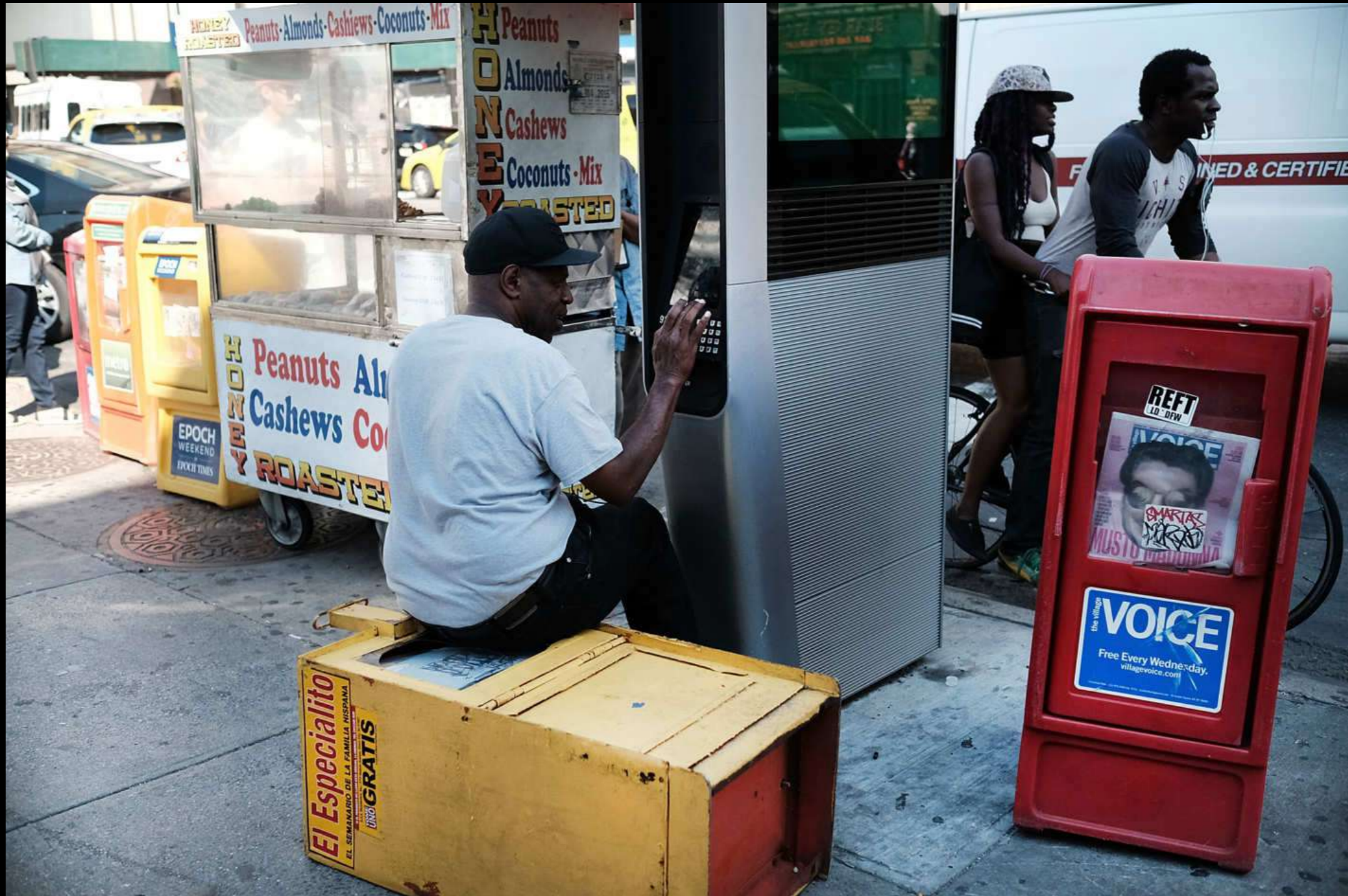


9:18 AM - 16 Nov 2014

They serve on-demand.



But they don't serve everyone in the same way.





co op
Welcome to Monkston Park

ESTIGE
BARBERS

Please wait here

STARSHIP

Hungry? I can help
robotdelivery.co.uk

I deliver shopping
robotdelivery.co.uk

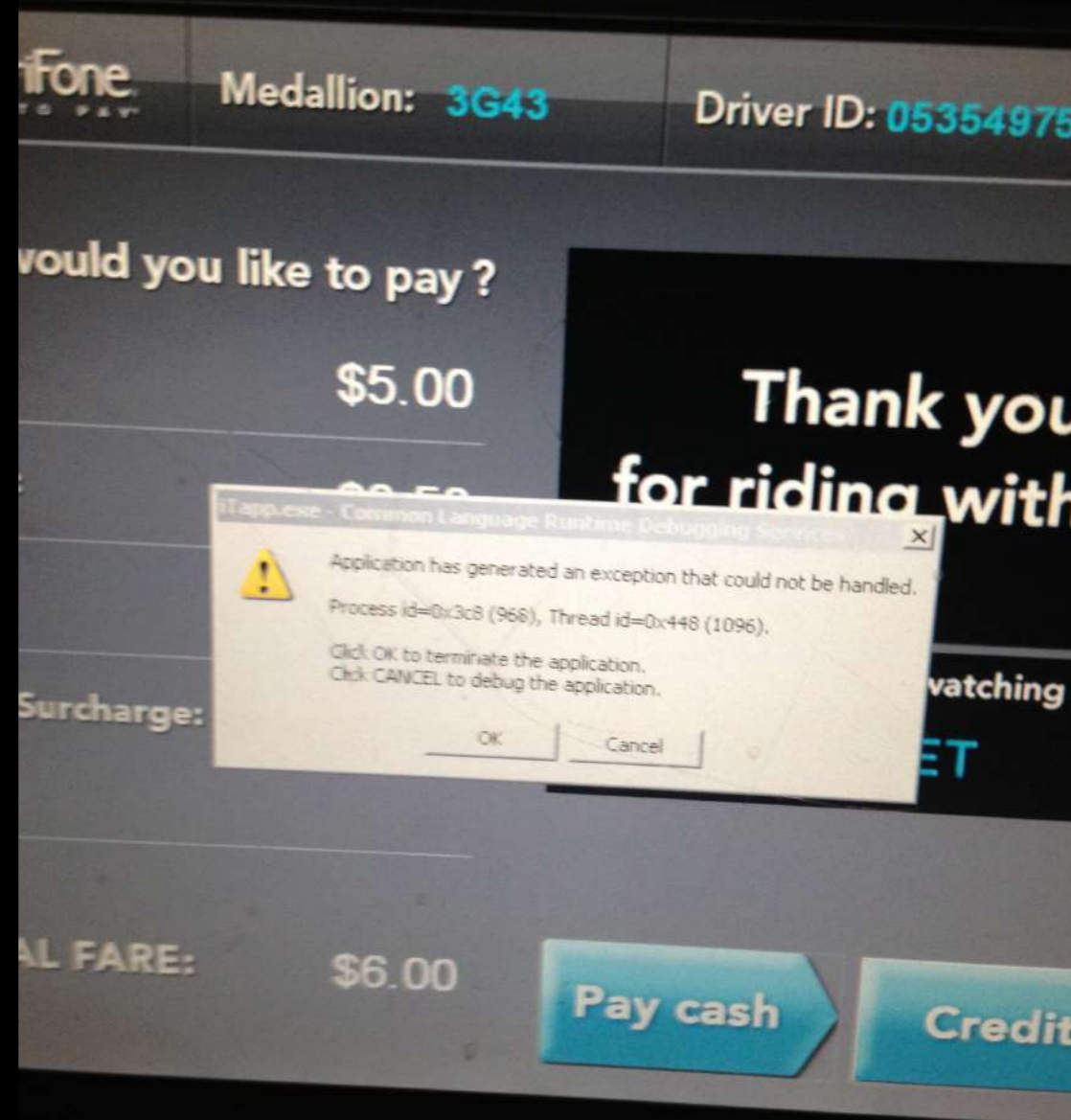
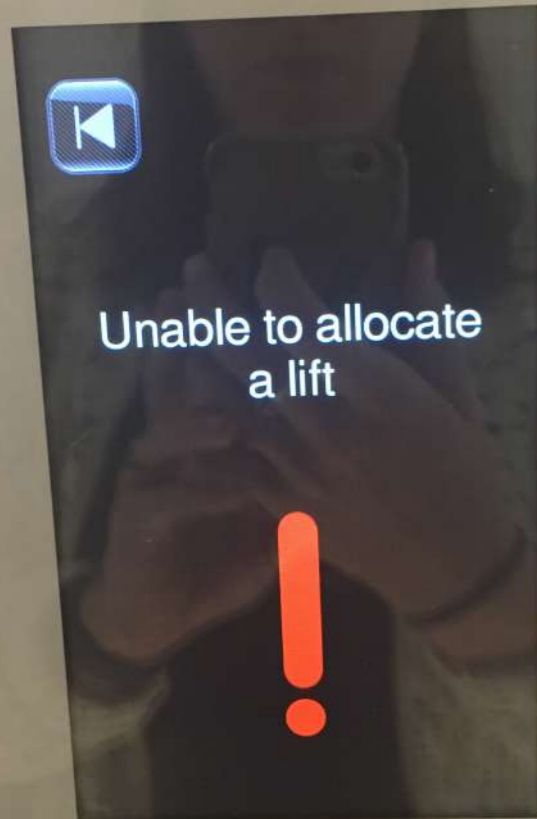
They delight.



They delight.



Sometimes they are really dumb.



"The great enemy is complexity, measured in lines of code, or interactions."

— Ellen Ullman, The New York Times

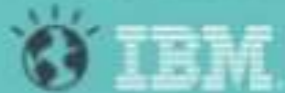


There are no overnight successes.



Buildings
bring down
their own
energy costs.

Energy costs and consumption fell over 10% when IBM helped homes in Washington State talk straight to the grid.
ibm.com/smartplanet



Drivers can
see **traffic**
jams before
they happen.

IBM helped drivers predict traffic with 80% accuracy to anticipate and prevent congestion.
ibm.com/smartplanet



ALSO IN 2008...

Tech companies package a top-down vision of smart.



Why now?

2008 was the turning point.

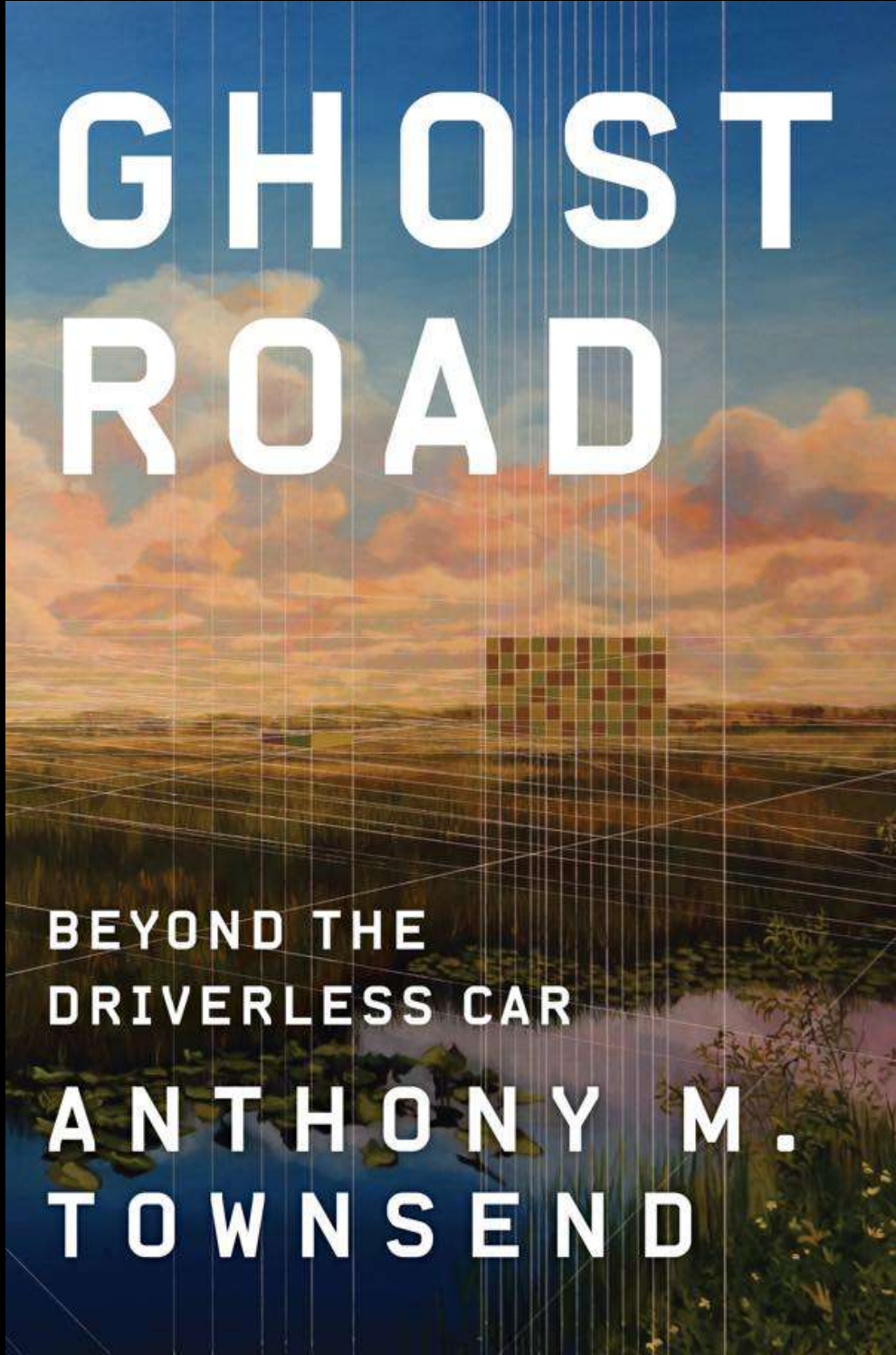
\$1.56 trillion (2014 forecast)

~2-3% of global infrastructure spending

this ratio of smart same at urban scale

~2-3% of a district infrastructure cost

~2-3% of building construction cost



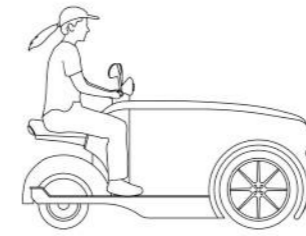
GHOST ROAD

BEYOND THE
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ANTHONY M.
TOWNSEND

- 3 big stories about the future of automated mobility:
- Specialization
 - Materialization
 - Financialization

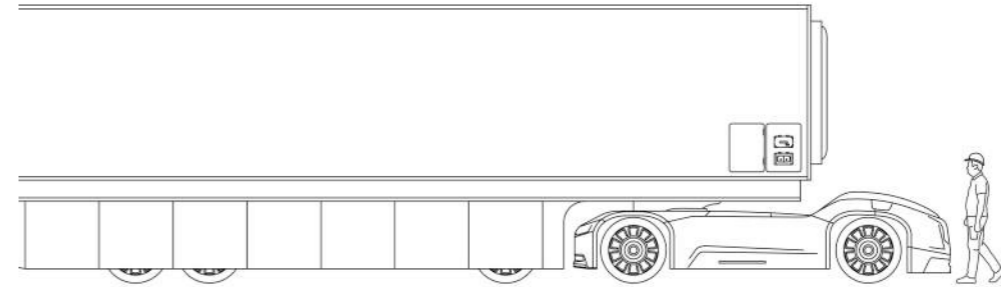
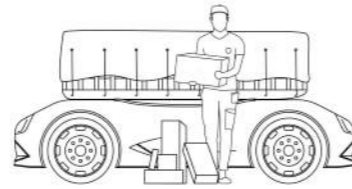
Specialization



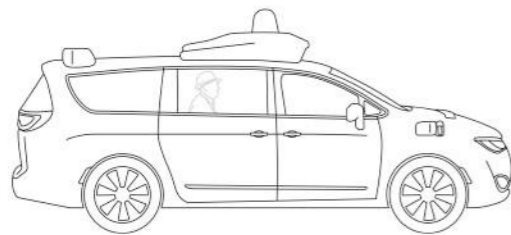
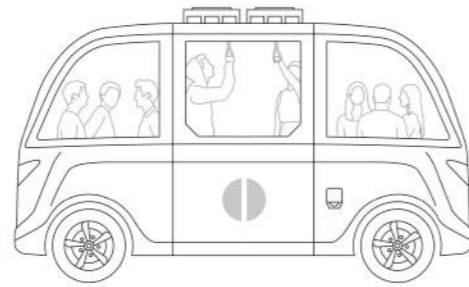
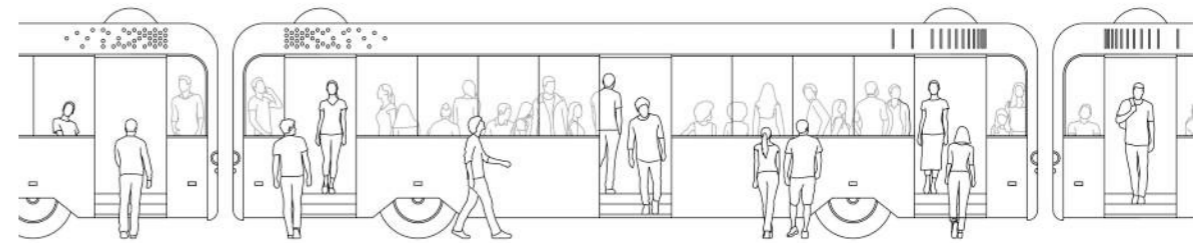
rovers



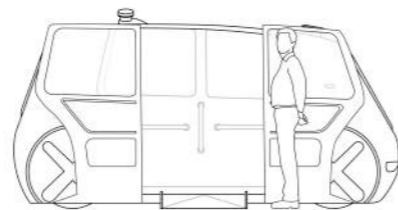
conveyors



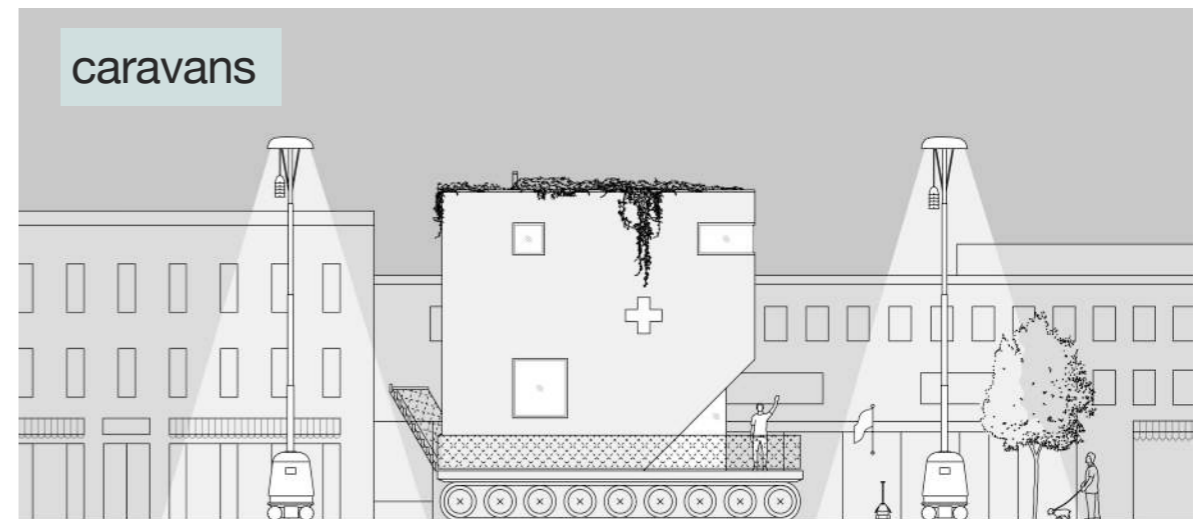
soft trains



taxibots

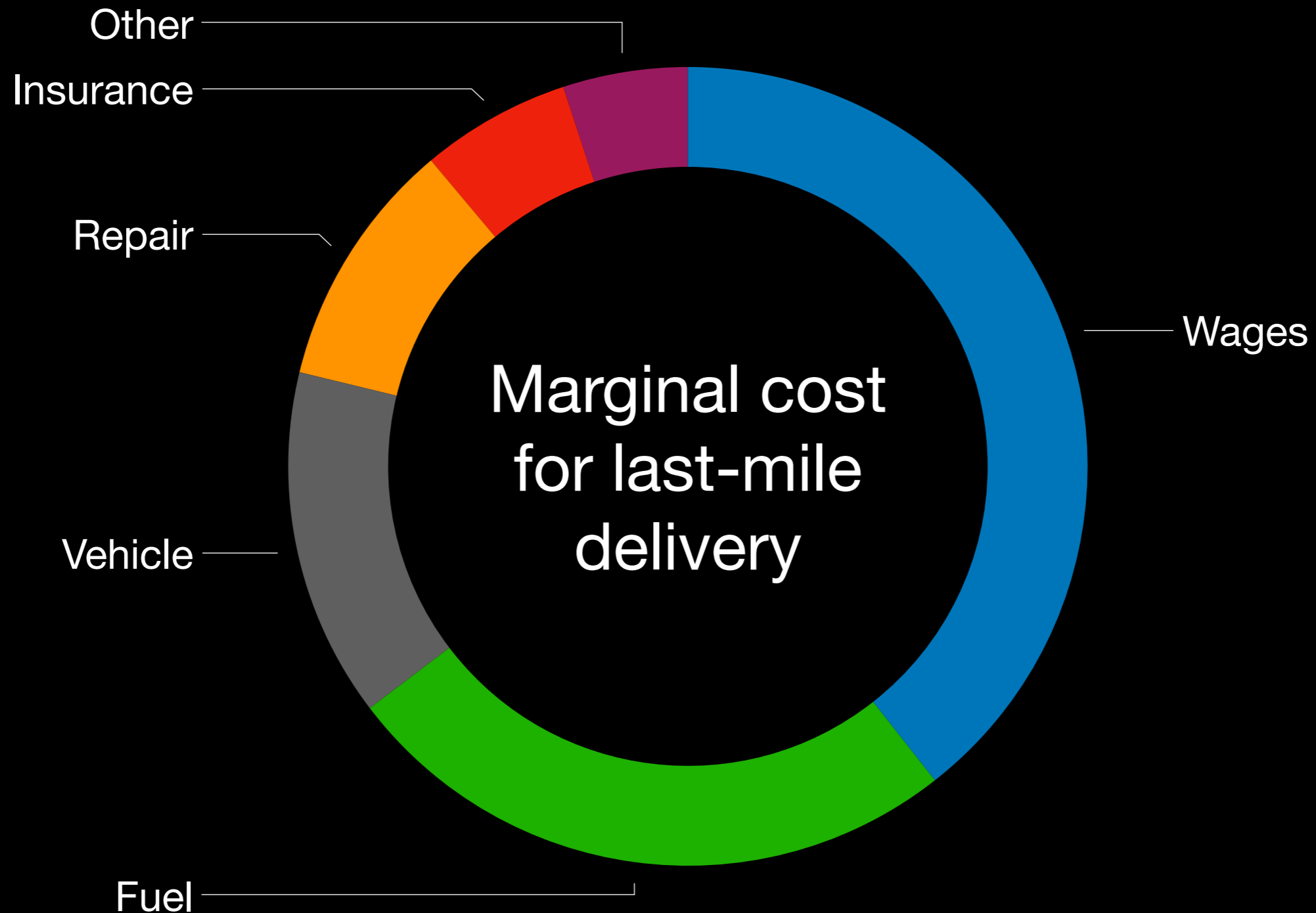


caravans



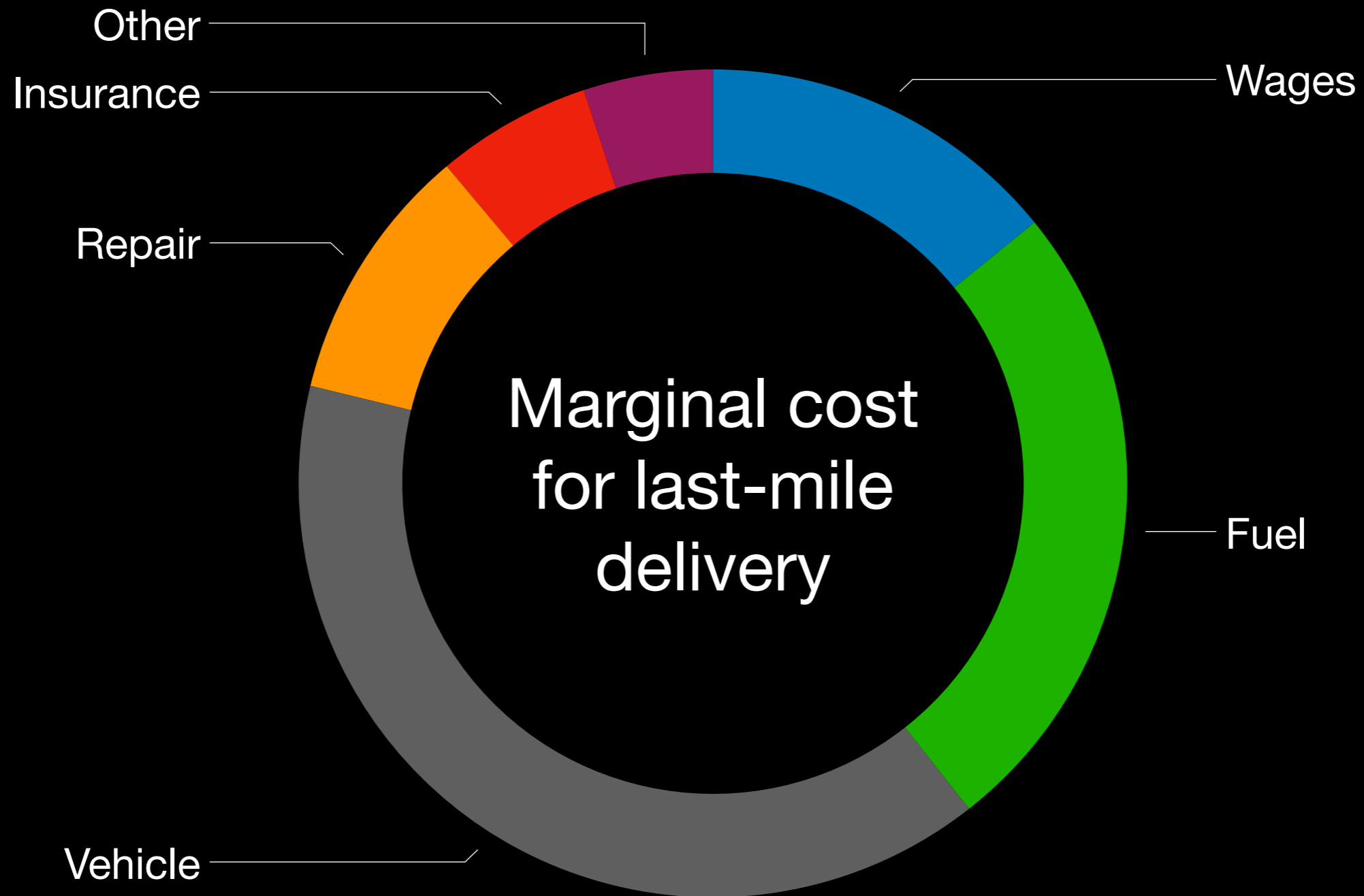
Materialization.

The last mile is the last barrier to e-commerce domination.



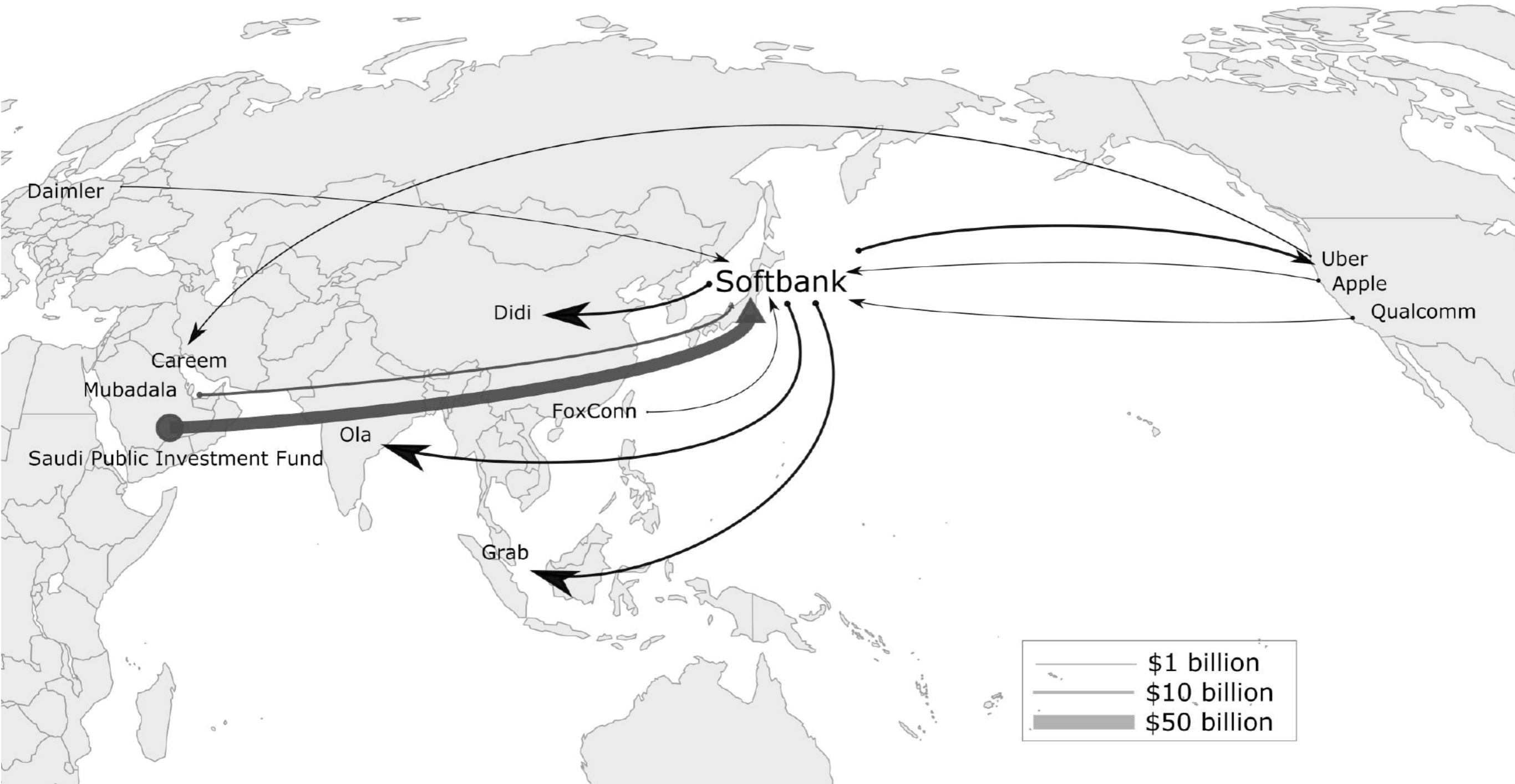
Materialization.

The last mile is the last barrier to e-commerce domination.



Financialization.

We've never seen control of urban mobility consolidated on a global scale.



Forecasts

Dive in the Horizon Scan by exploring six big stories on the future of urban tech.



Supercharged Infrastructure

Urban systems converge into a deep, actionable web.



Wild & Well

Urban design taps life science to improve well-being.



Resilient Corridors

Sustainable neighborhoods scale up.



Dark Plans

The chaos of urban life gives way to an algorithmic hum.



New Screen Deal

Inclusive innovation strikes back at surveillance capitalism.



Urban Innovation Industrializes

Big business cracks the code of the city.



TELEOPERATION. From self-driving to stealth driving.

Supercharged Infrastructure

Urban systems converge into a vast, actionable web.

Will teleoperated vehicle fleets and robot swarms define the “new normal”?

Wild + Well

Urban design taps life science to improve well-being.



Managing the microbes in workplaces.



Taking vertical farms to scale.

Will bioengineers be as important as structural engineers for buildings of the future?

Urban Innovation Industrializes

Big business cracks
the code of the city.

Where will companies find
large-scale, real-world testbeds
for urban tech innovation?

Berlin Urban Tech Republic @ Tegel Airport

