



Fast and Furious: The Race is On For the Future of Mobility

Anthony Schiavo

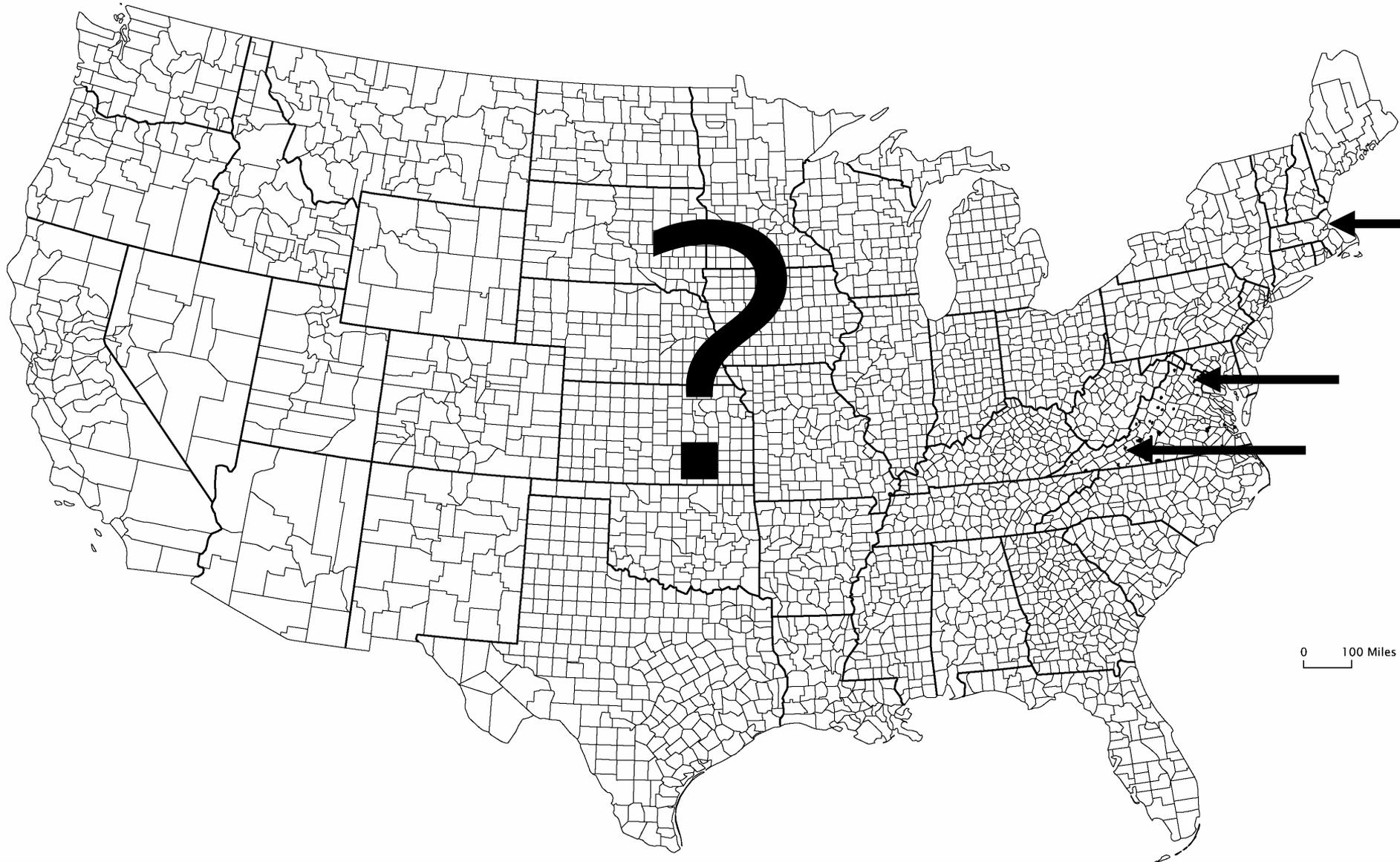
Analyst, Lux Research

April 5th, 2017



luxexecutivesummit

Boston • April 4-6, 2017



Agenda

- › A brief history of mobility

What is mobility?



➤ Mobility: Getting people somewhere, when they need to be

The three pillars of mobility

› Mobility: **Getting** people somewhere, **when** they need to be

How?



› **How**: The physical system that transports you somewhere

When?



› **When**: The time you spend in transit, and the time you leave

Where?



› **Where**: Your destination or destinations

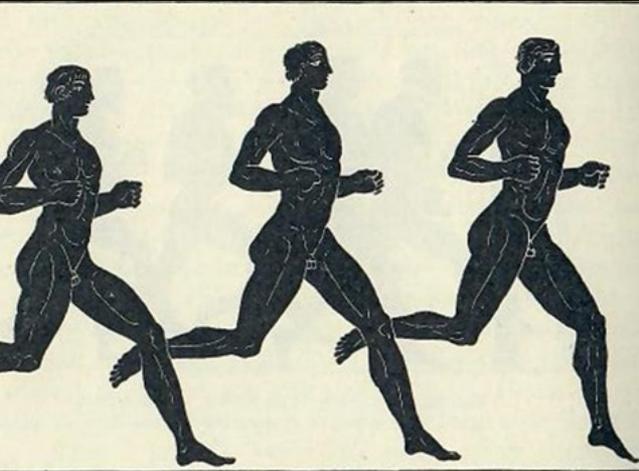
Mobility is plagued with problems



Mobility is a trillion dollar problem – and a trillion dollar opportunity



Innovation in “how” is slow going



Business model innovation in mobility solves problems much faster.....



.....And scares the sh*t out of established companies



"We are disrupting ourselves, we're not trying to preserve a model of yesterday" – Mary Barra, GM CEO

"If this industry wants to avoid its own "Kodak Moment," we must balance incremental progress with true disruption."
-Thomas Enders, Airbus CEO



Everyone is throwing money at new business models



GM invests \$500 million in Lyft, sets out self-driving car partnership

Volkswagen Pours \$300 Million Into European Uber Rival Gett

Uber rival Grab raises \$750 million in new funding round



Jay-Z backed JetSmarter raises \$105 million to become Uber for private jets

But major players don't want mobility to change

*"It's about taking the core business and keeping that really strong, while also at the same time growing the services side."
Ford CEO Mark Fields*



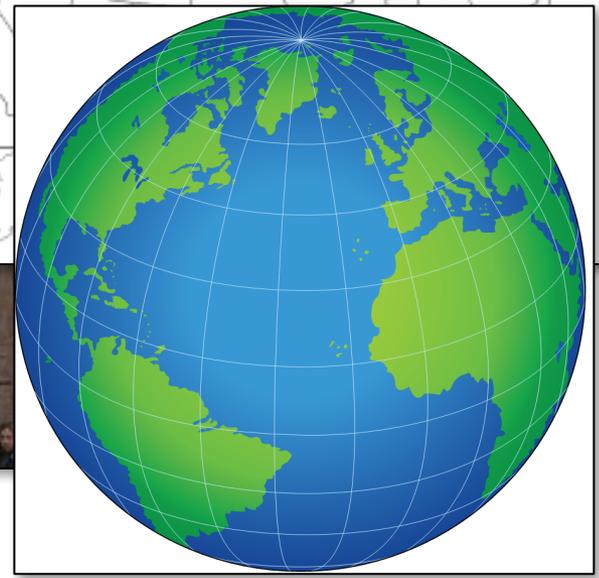
Agenda

- › A brief history of mobility

Agenda

- › A brief history of mobility
- › The new mobility model

The history of mobility was about more decisions



The history of mobility was about more decisions

How?



When?



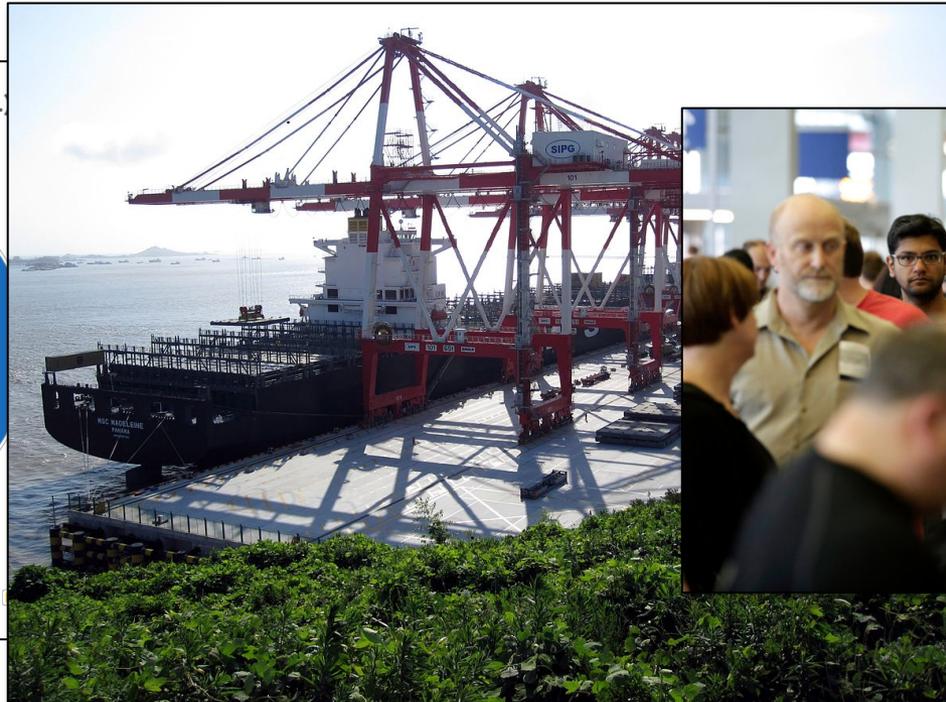
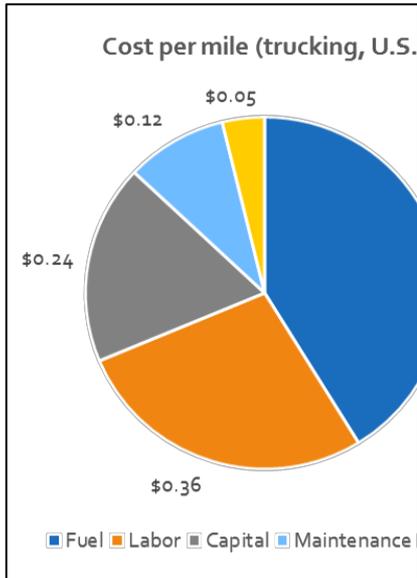
Where?



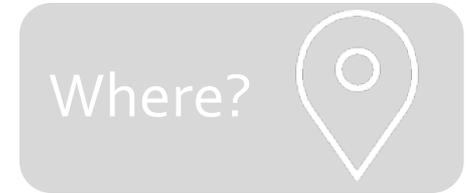
New business models are taking control of decision-making



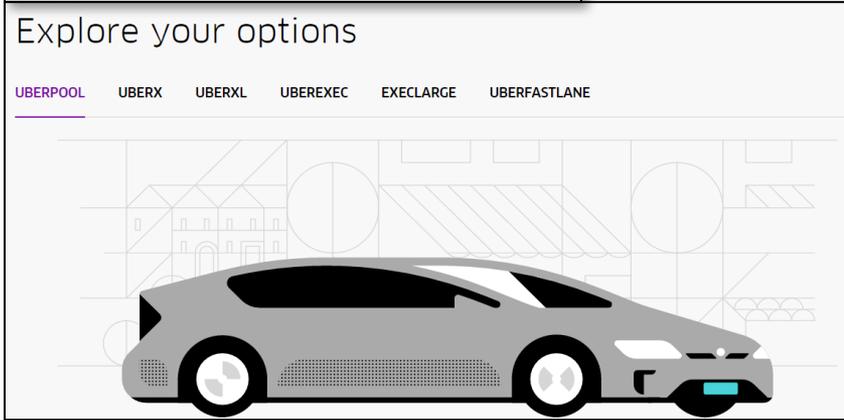
Giving up control = solving problems



Uber means giving up control of how

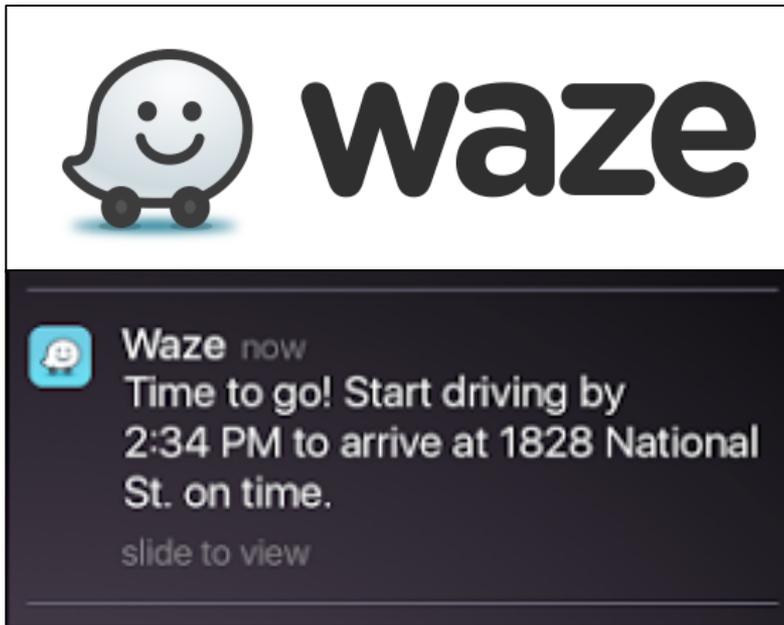
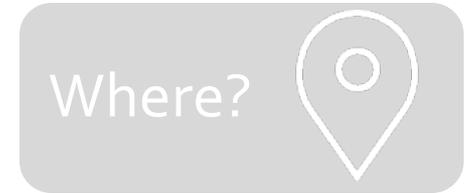


UBER



- Uber decides which **car** and driver will take you

Waze tells you when to go



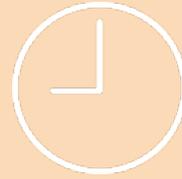
- Uber decides which **car** and driver will take you
- Waze decides **when** you leave

Budget airlines take control of where

How?



When?



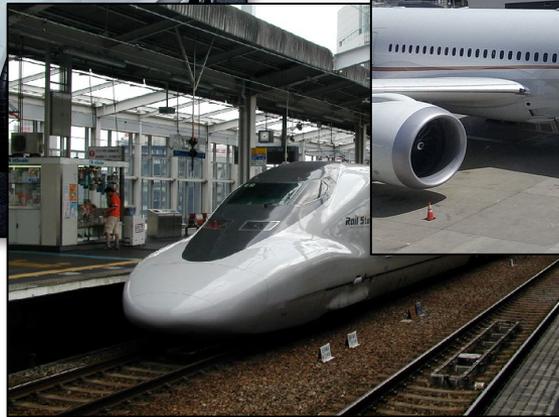
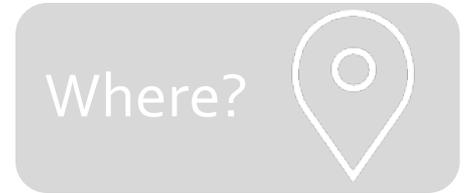
Where?



- Uber decides which **car** and driver will take you
- Waze decides **when** you leave
- Ryanair controls your intermediate **destinations**

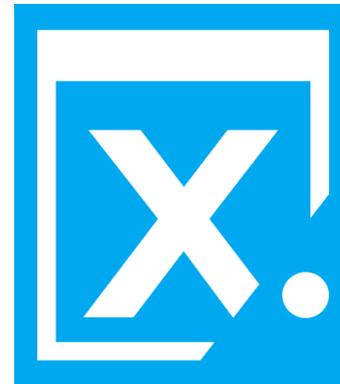
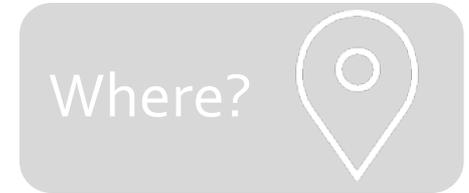
What happens when we stop making decisions?

Future of How



➤ Fully integrated mobility sourcing

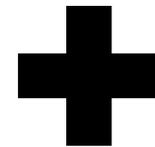
Future of When



› Timing-based price incentives

› Automated scheduling

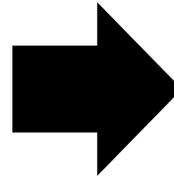
Future of Where



› Shared spaces

› Automated scheduling

The future of transport is decision-free and intermodal



- Giving up decision-making makes people resemble packages – largely passive actors in a mobility system
- It also paves the way for intermodal mobility, which combines personal transport and shipping

Agenda

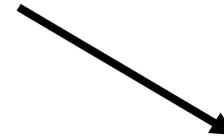
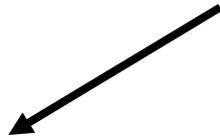
- › A brief history of mobility
- › The new mobility model

Agenda

- › A brief history of mobility
- › The new mobility model
- › Personal mobility, post-decisions

Amazon is far more than just a book retailer

amazon

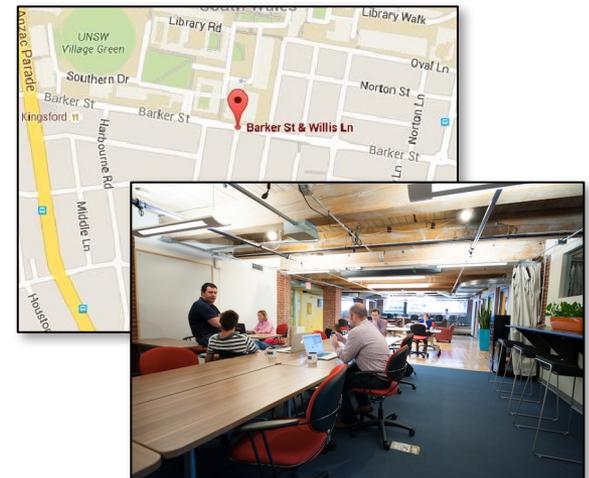
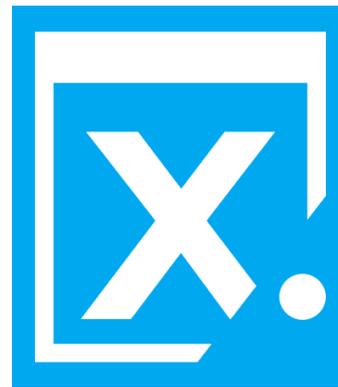


Expect integration across business models and asset classes

How? 

When? 

Where? 



Amazon combines shipments and has begun ridesharing delivery

About Combined Shipments

When possible, items from multiple orders will be combined into the same package.

This helps packages and orders.



Scotch Heavy Duty Shipping Packaging Tape, 1.88 x 800 Inches (142)
by Scotch

★★★★☆ 1,055

\$2⁷⁸ Add-on Item

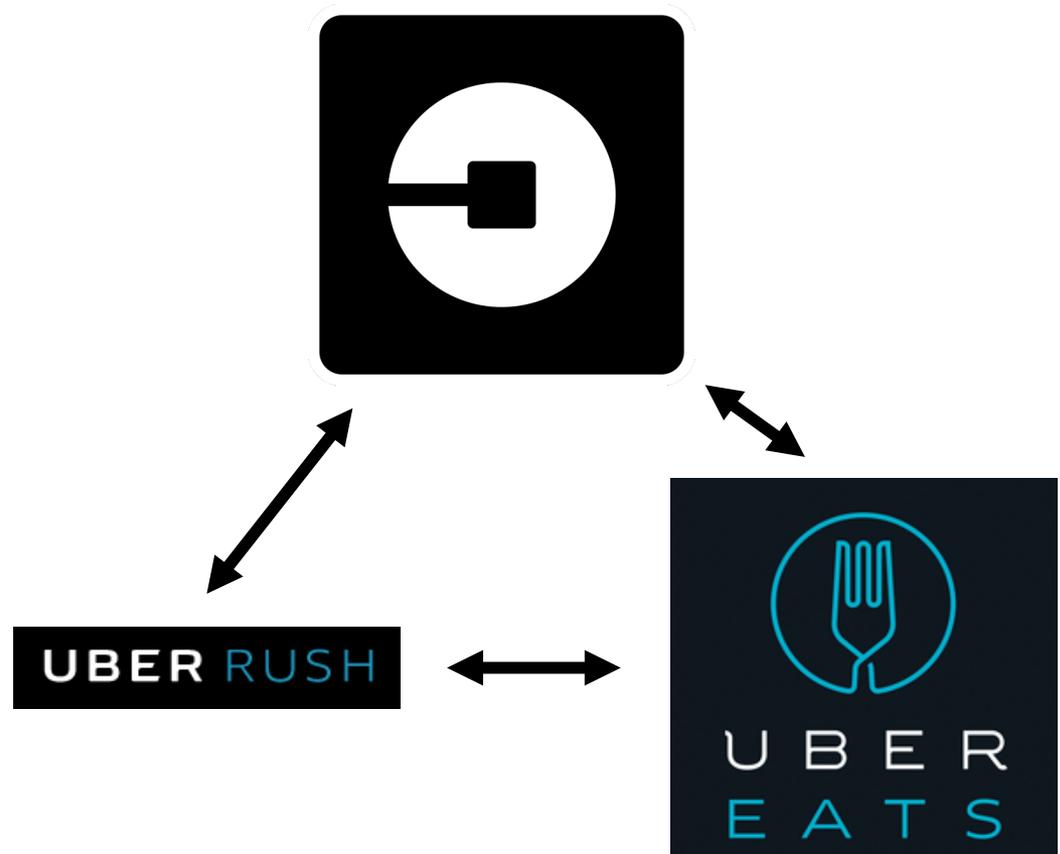
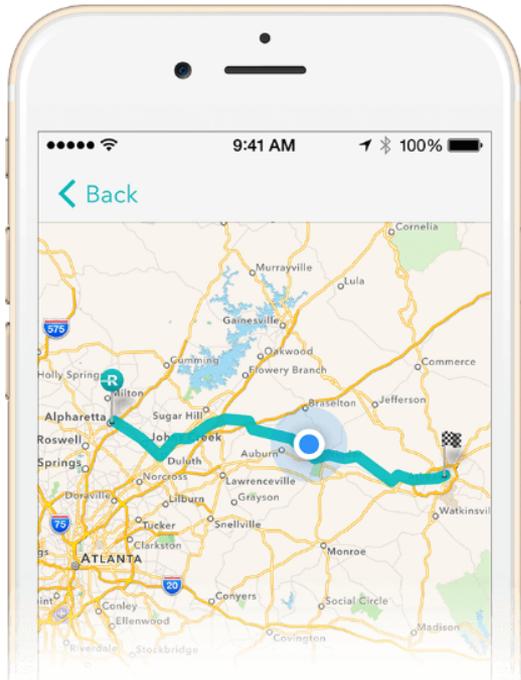
Add to a qualifying order to get it by **Wednesday, Mar 22**.
FREE Shipping on eligible orders

More Buying Choices
\$2.16 (99 new offers)

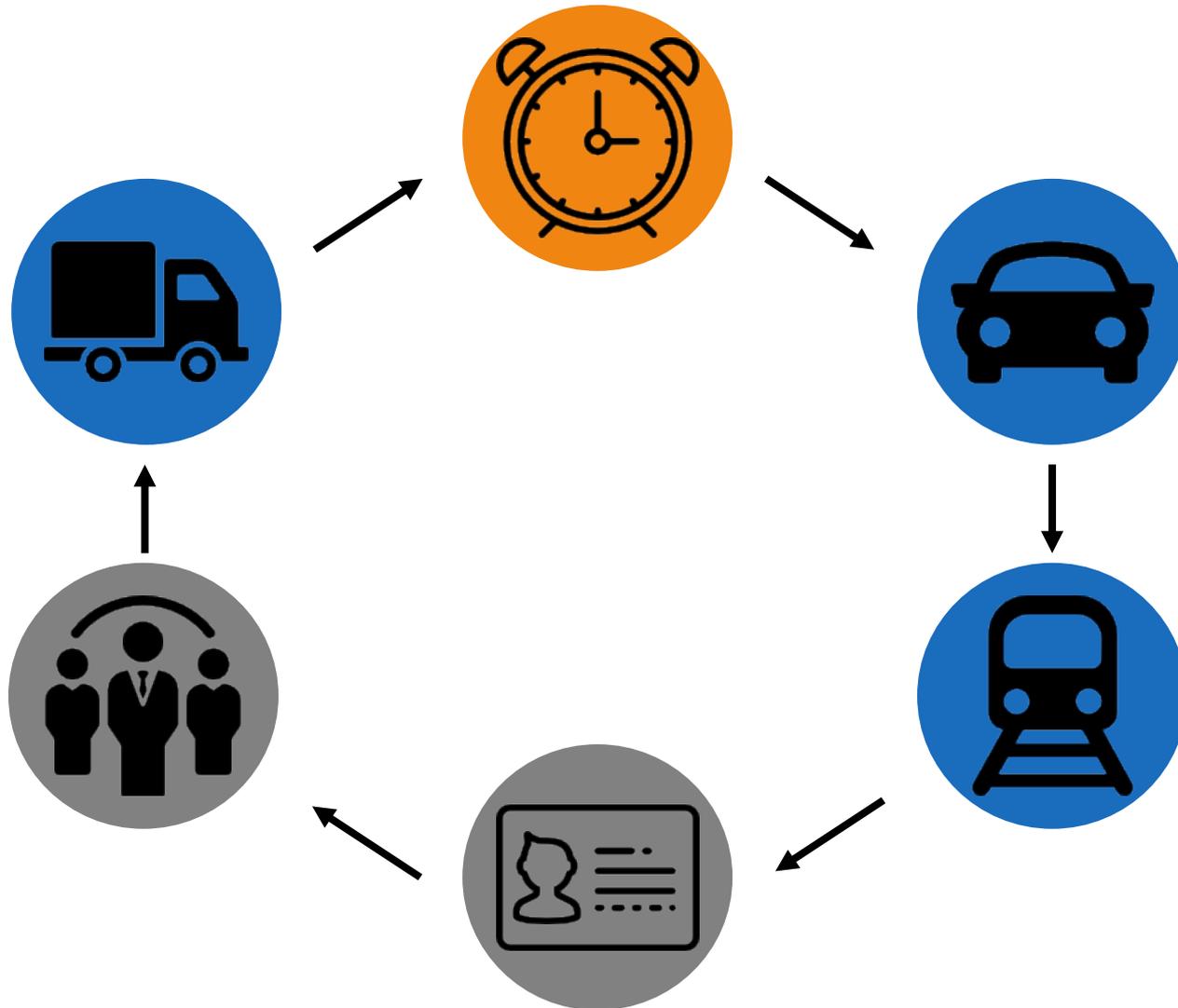
amazon FLEX 

Amazon Rolls Out Delivery Ride-Sharing System

Intermodal transport is fast becoming a reality

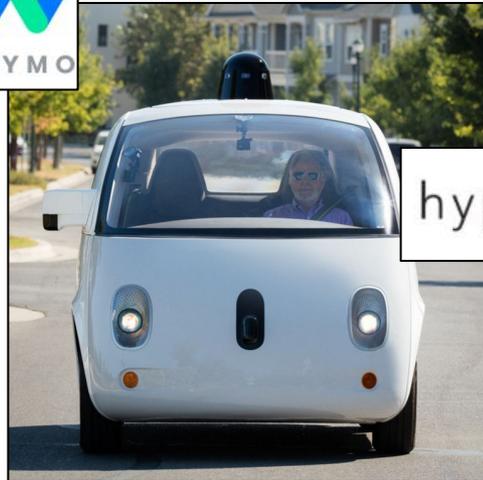


Bringing it together – mobility without decisions



Emerging mobility technologies accelerate this process by improving connectivity, efficiency, and interoperability

amazon



hyperloop | one



So what does this mean for key stakeholders?

OEMs

HONDA

AIRBUS



BOEING

VOLVO

Software



IBM

Google



Electronics

SAMSUNG



Velodyne

Operators



DELTA

CSX
TRANSPORTATION

amazon

Consumers need to be clear-eyed about what they are giving up – and how much

Uber knows where you go, even after ride is over



Uber devises secret Greyball tool to evade officials

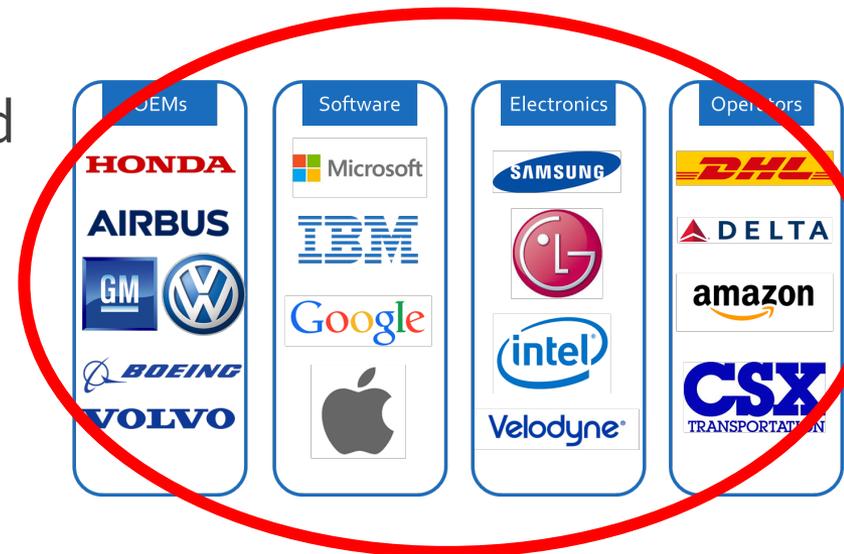


IBM-Blockchain / car-lease-demo



Outlook: Winning the race for new mobility

- Start thinking about how, when, and where.
- Decision making technology will make personal mobility like logistics and shipping.
- Build partnership networks – the future of mobility is too connected for anyone to go alone.
- Any company that employs human beings is a testbed for mobility solutions.





Thank you



Anthony Schiavo

Analyst, Lux Research

anthony.schiavo@luxresearchinc.com

Icons by Freepik & Madebyoliver, from flaticon.com