

EPISODE
379



ARE DRIVERLESS CARS FINALLY READY?

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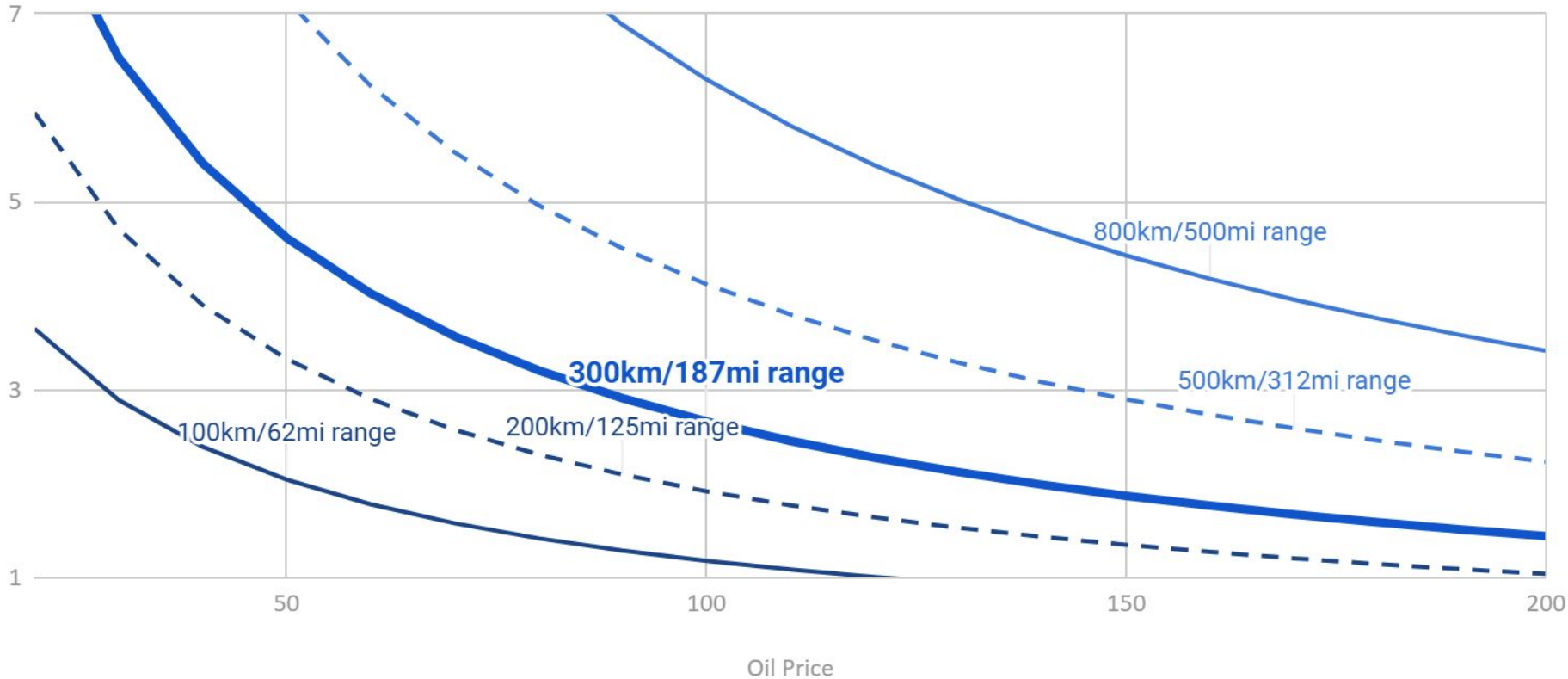
Agenda:

- Tesla Launch
- Google 250,000 trips per week
- What does the path look like
- EVs
- Economics
- Naysayers

Electric Vehicle Battery Payback Period: US Average Consumer

Years

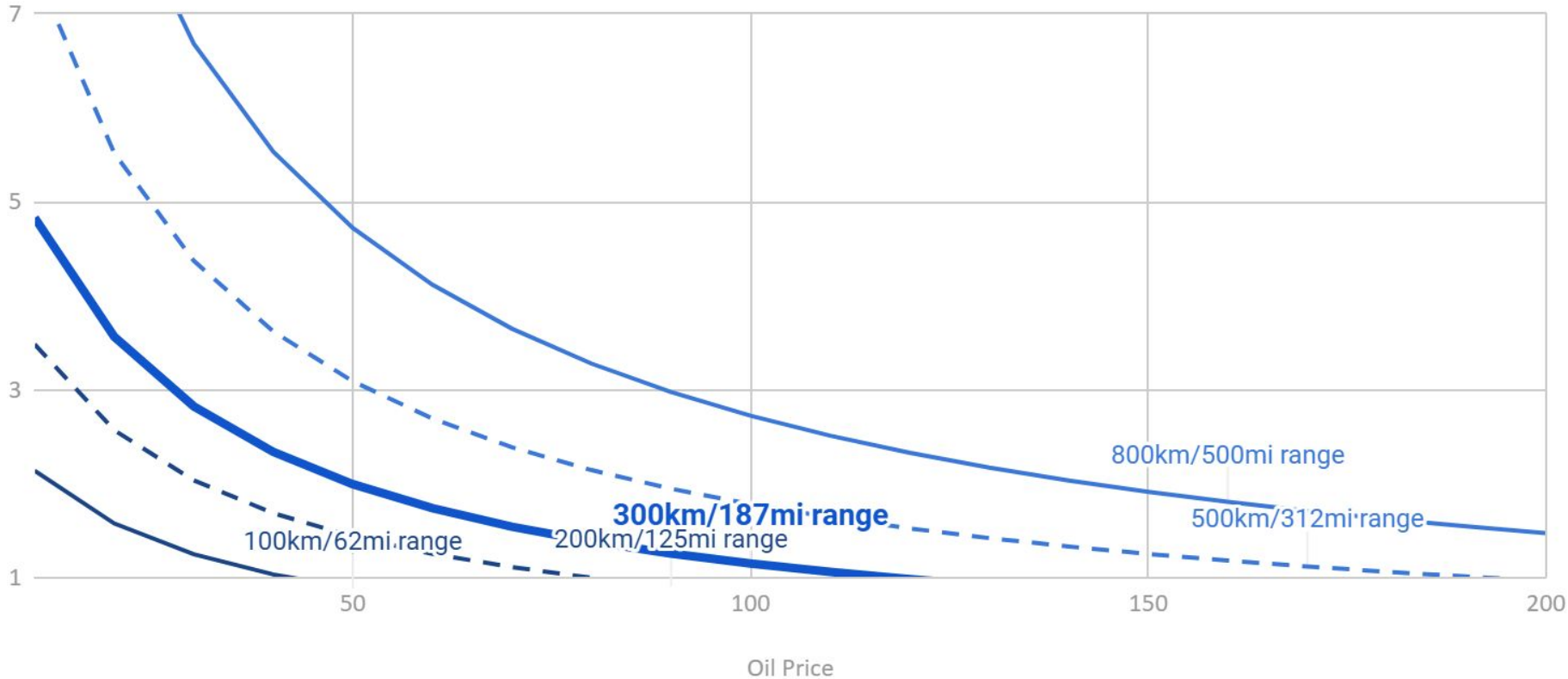
Source: Nucleus Wealth, BNEF, Lazard



Electric Vehicle Battery Payback Period: US 31,000mi/50,000km per year

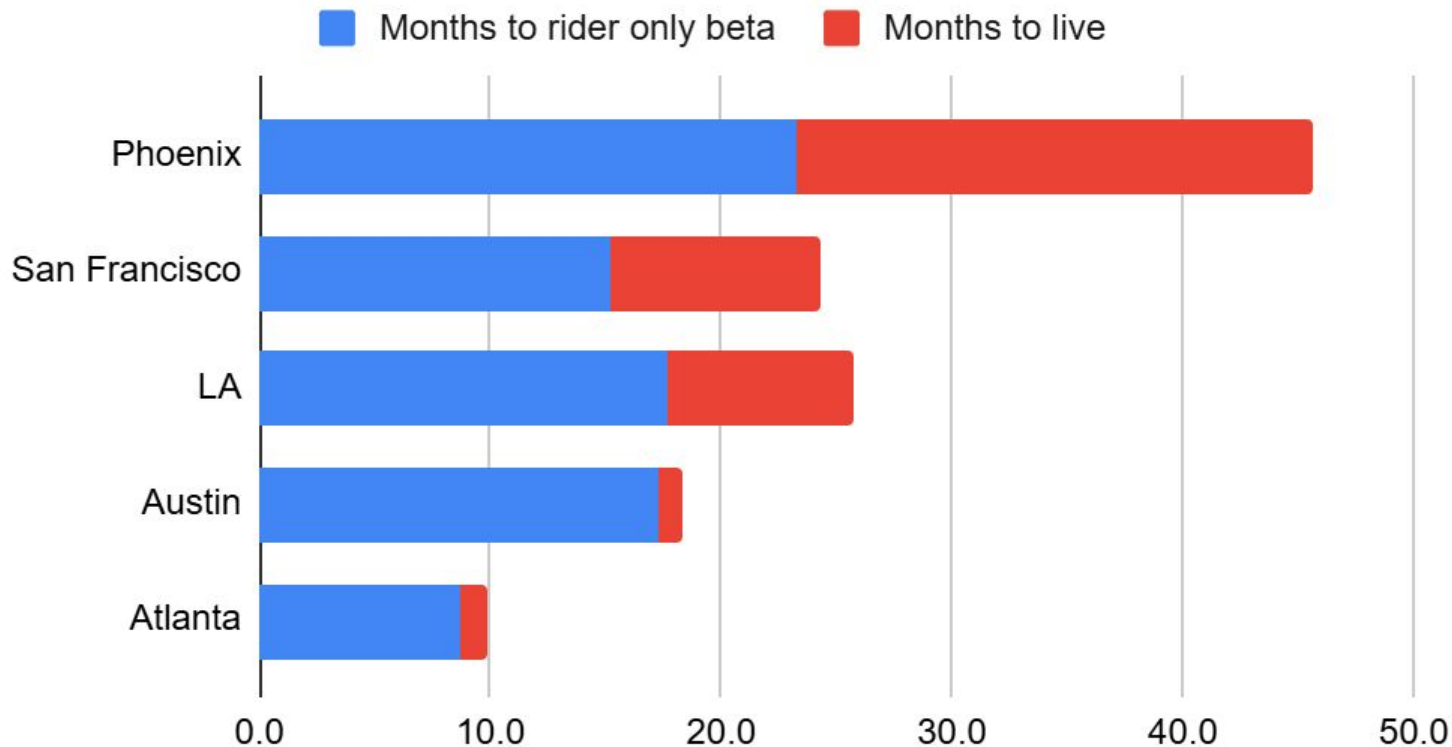
Years

Source: Nucleus Wealth, BNEF, Lazard





Waymo rollout:


- Months from start to live





Choose themes to screen from your portfolio away from (i.e. remove stocks)


Climate Change



War



Human Rights



Health


Vices


Animal Rights


Religion


Asset Class


Thematic


Climate Change

- ☐ No Fossil Fuels (Worst Offenders) ⓘ
- ☐ No Fossil Fuels (Any) ⓘ
- ☐ No Coal Seam Gas or Fracking ⓘ
- ☐ No Nuclear Power ⓘ
- ☐ No Old Growth Forest Logging ⓘ

Naysayers:

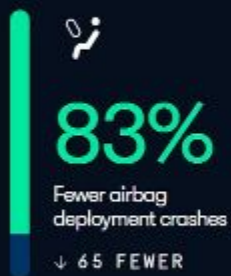
- Using Uber as example
- Dusted 100s of bns with nothing to show for it
- Cleaning cost will kill them
- Cars are part storage locker
- Cost of oversight
- People step in front of cars

Players:

- Waymo (Google / Alphabet)
- Tesla
- Amazon (Zoox)
- GM (Cruise) largely folded
- Chinese car companies

Safety:

In San Francisco and Phoenix the Waymo Driver had:



compared to a human driving the same distance in these cities.

Economics:

- Car hire companies are happy to rent a car to users for \$60 a day with about a 75% utilisation rate = \$45 a day to the car company. Let's call that the capital cost of a car.
- Now let's add a third to the cost to cover the battery and the driverless technology – puts us back at \$60 per day.
- Given its driverless, it can operate for 24 hours a day – but call it 15 hours to take into account time to charge the battery, cleaning, slow periods, servicing and to make the math easier.
- So, the car owner needs to make \$4 per hour to make a return.
- Assuming 1.5 trips per hour (roughly the average), add in electricity costs, 10% to the booking company and about \$3.00 per trip is the end cost to the user.

Economics:

Operating Expenses

Not having a driver significantly lowers OpEx. Take a look at Uber:

- Uber claims that its drivers get roughly 70% of the ride fare whereas drivers claim they get about 50% of the ride fare;⁵
- Uber's cost of revenue is about 16% of gross bookings, and their cost of operations and support is about 1.8% of of gross bookings;⁶

Waymo Car cost:

- Currently Jaguar. So more expensive.
- Zeekr, roughly \$40k
- Sensors: could be as low as \$3k, probably \$10k
- Computer: probably in \$5k-\$15k range
- Integration costs: probably \$2k-\$20k
- All up probably \$50-100k.

What does it mean for cars:

- Ride share / taxis. Do you replace the driver and the company gets all the profits
- Or is it a land rush, funded by investors, cheap as possible.
- One driverless taxi replaces 5-10 cars
- Don't care about brand...
 - Running costs low, repair costs high.
- Halve the revenue to the sector
- Land cost. Cities. Suburbs. Exurbs. Transport.
- Parking
- Car size?

Personalise Your Portfolio

Screens

You can exclude the below to customise your portfolio

Climate Change	War	Human Rights	Health	Vices
Animal Rights	Religion	Asset Class	Thematic	

- No Fossil Fuels (Worst Offenders) ?
- No Fossil Fuels (Any) ?
- No Coal Seam Gas or Fracking ?
- No Nuclear Power ?
- No Old Growth Forest Logging ?

Tilts

You can add the below to customise your portfolio

Investment Style Factors	Climate Change	Technology	
Consumption	Commodities	Military	GICS Sectors

- Quality Stocks ?
- Value Stocks ?
- Growth Stocks ?
- Defensives ?



Personalise your portfolio now >



Build Your Portfolio

Need help with this page?  Video Tutorial

Account Selection

Investment Choice

Risk Profile

Build Your Portfolio

Ethical Overlay

Review

Applicants


Bank Details


Compliance


Final Review


Portfolio Tilts



Quality Stocks 

Value Stocks 

Growth Stocks 

Oil & Gas Stocks 

Gold Stocks 


Agribusiness 


Large Technology Stocks 

Cloud Computing Stocks 


Robotics/AI 

Video Gaming 

Cybersecurity 

Clean Energy 

Defensives 


Battery Supply Chain 

Nuclear Power 


Defense Contractors 


Travel 

Luxury Goods 


Logistics 

Global Communication Services 

Global Consumer Discretionary 

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Global Financials 

Global Health Care 

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