

The End of the Beginning

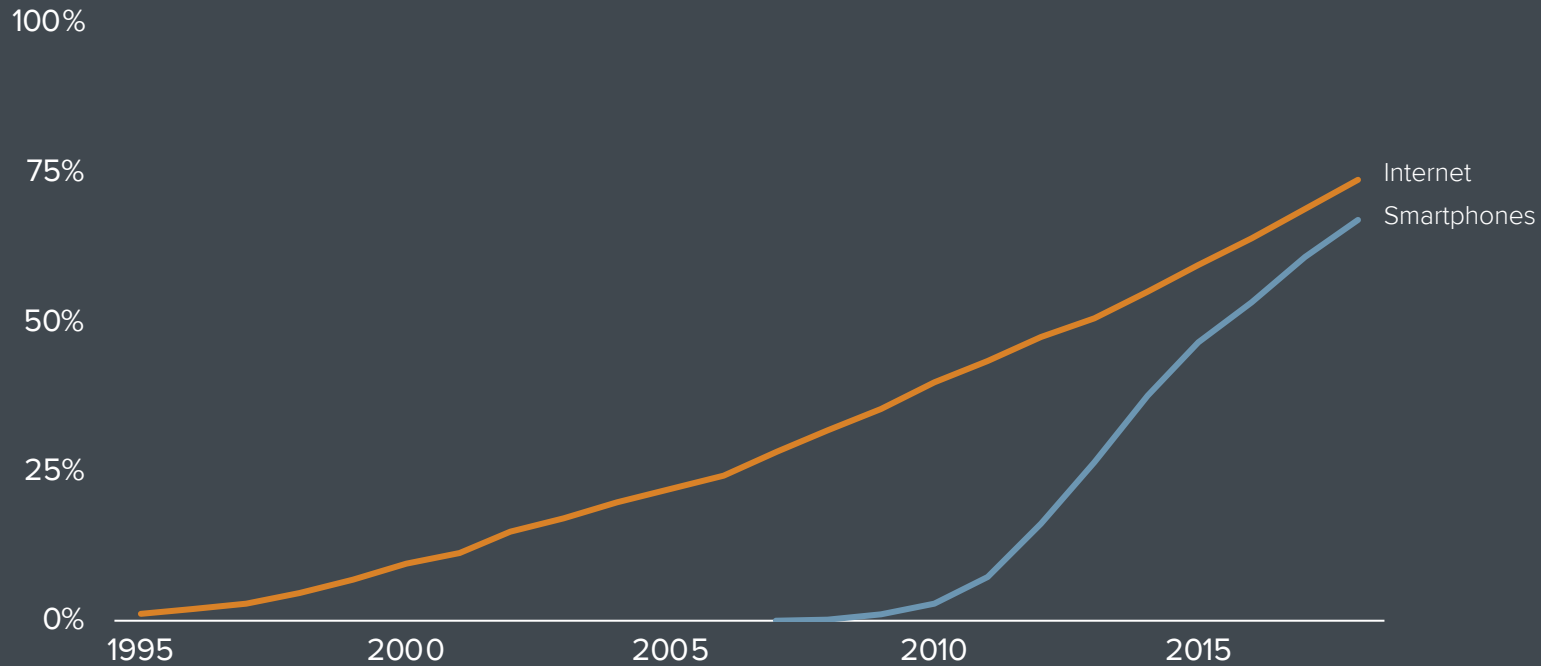
Benedict Evans

November 2018

www.ben-evans.com

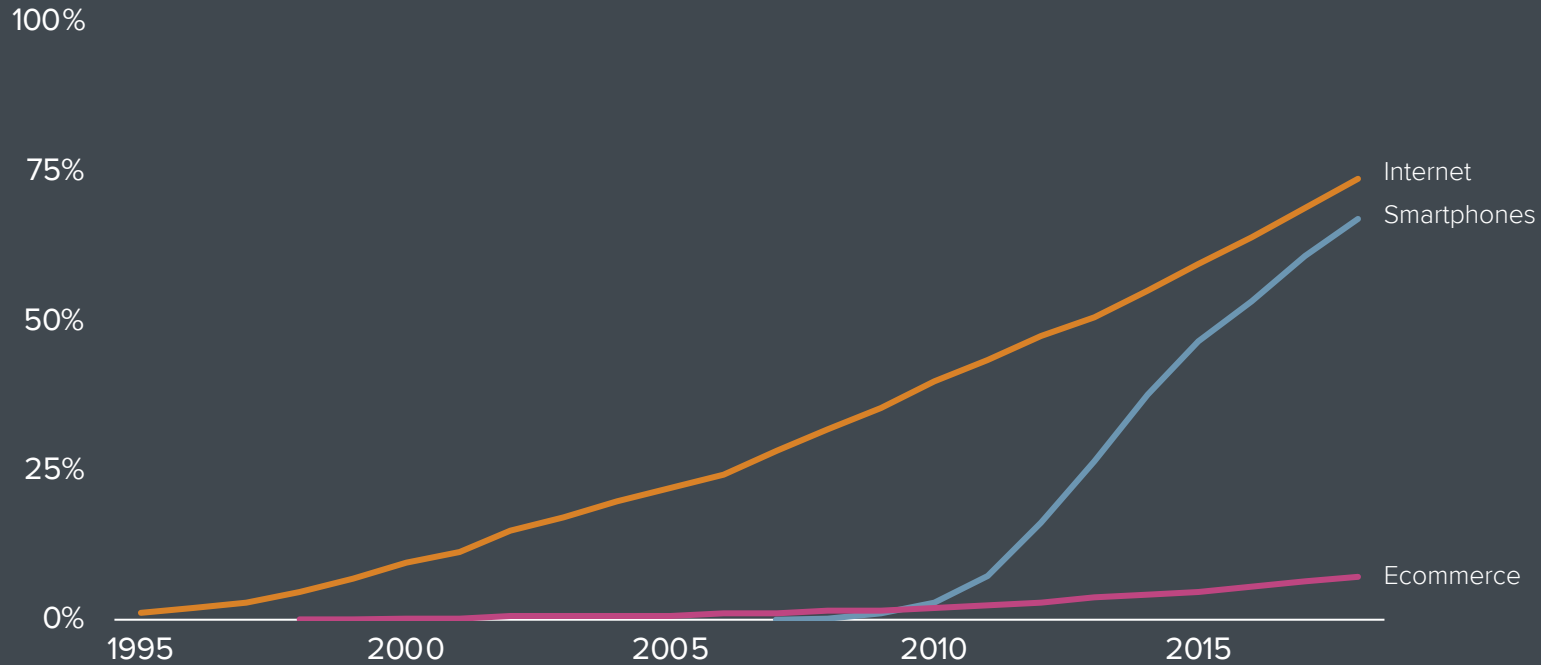
The end of the beginning

Global adult penetration



The end of the beginning

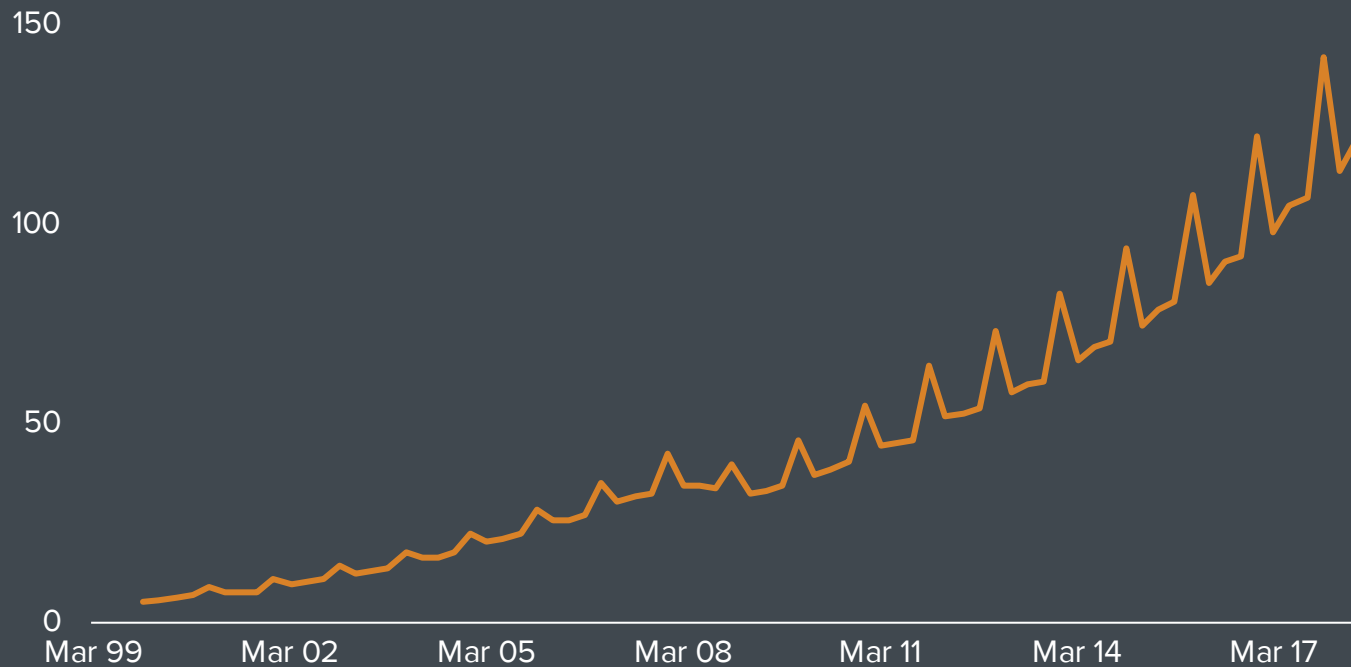
Global penetration





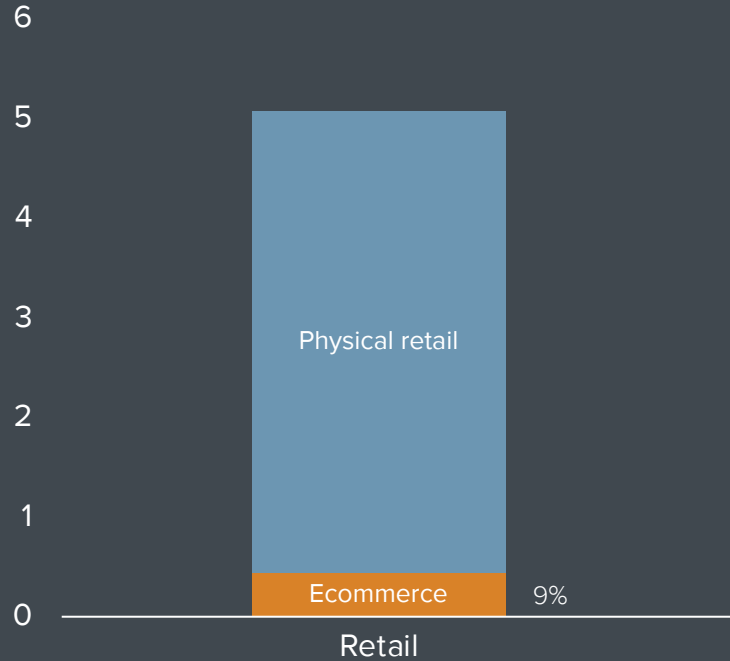
Ecommerce is big in dollar terms

Quarterly US ecommerce revenue (\$bn)



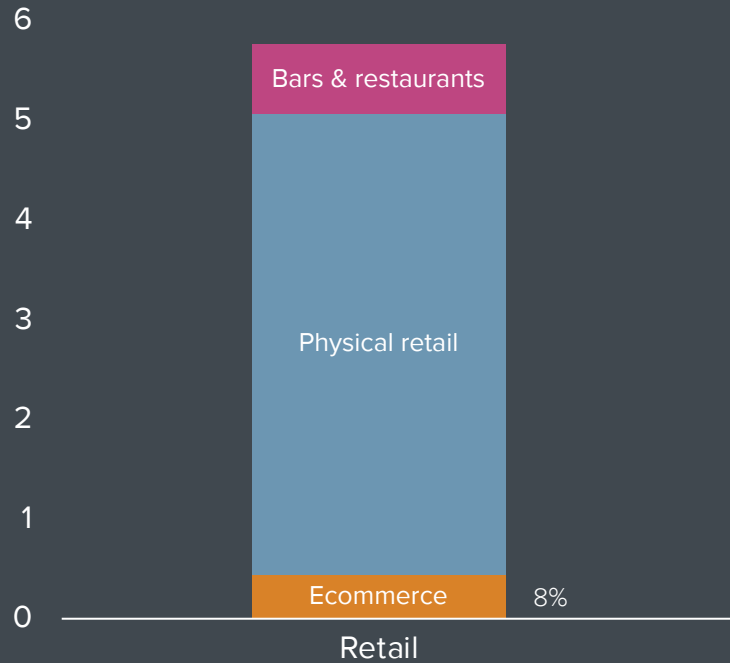
But still only just reaching 10% of US retail spending

US retail spending, 2017 (\$tr)



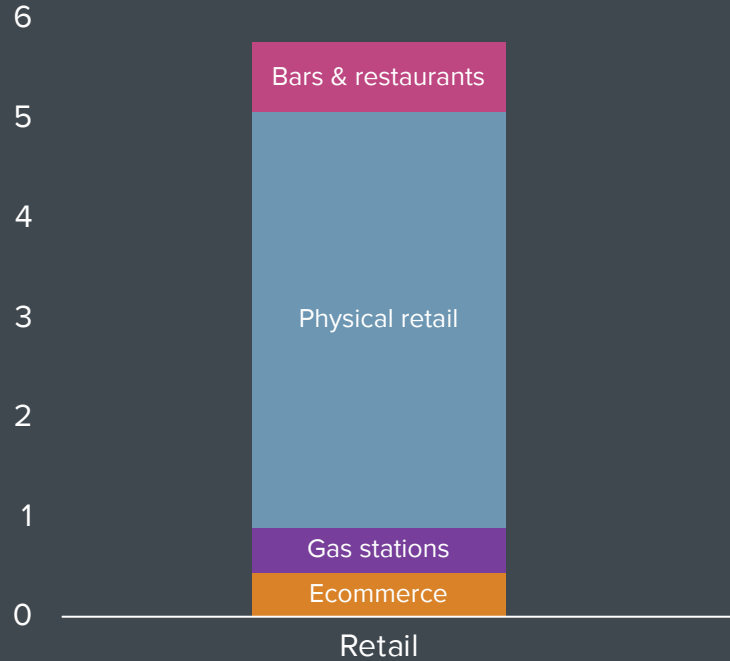
Now add restaurants....

US retail spending, 2017 (\$tr)



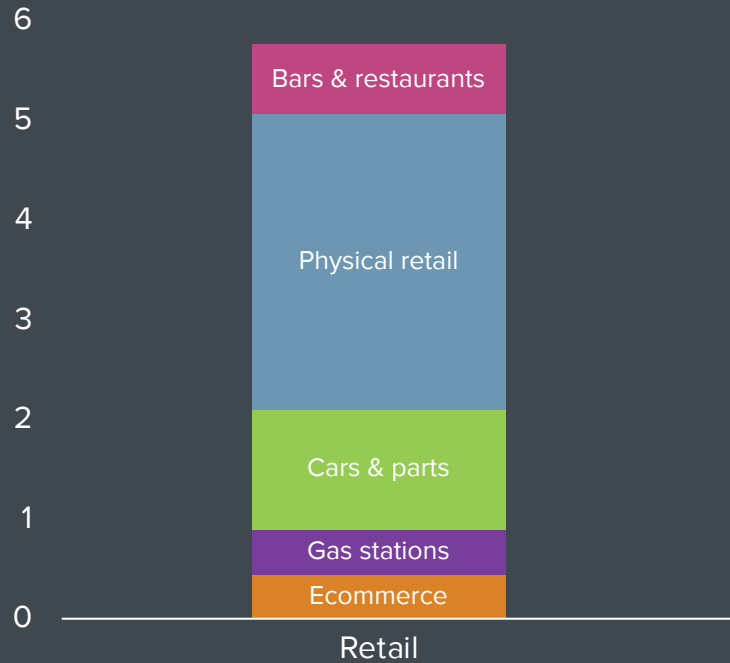
And think about what happens to gas stations

US retail spending, 2017 (\$tr)



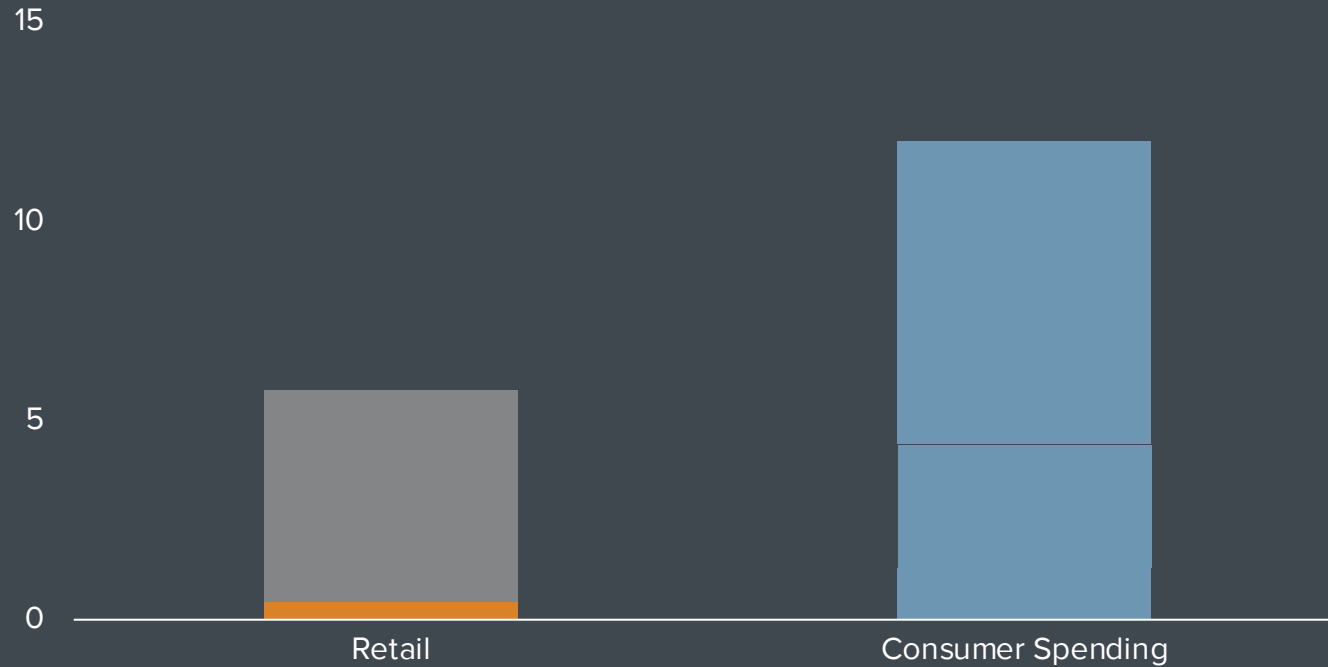
And the \$1.2tr spent on cars

US retail spending, 2017 (\$tr)



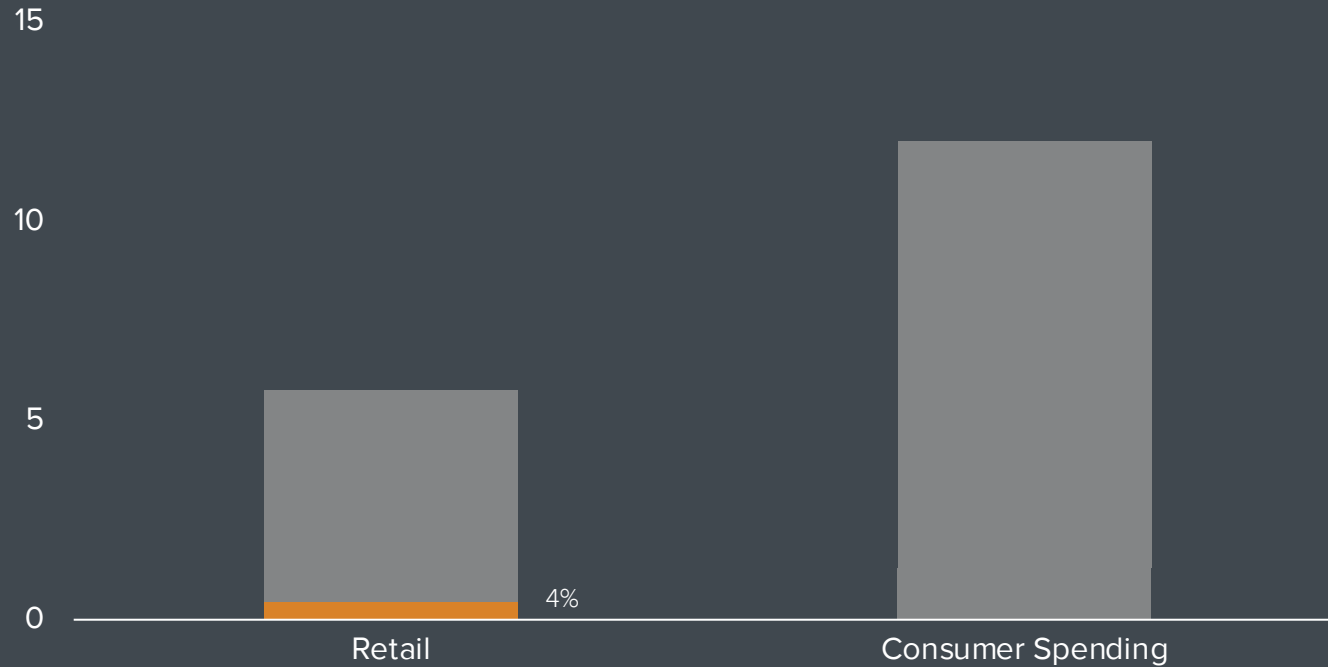
Meanwhile, there's more than just retail

US spending, 2017 (\$tr)



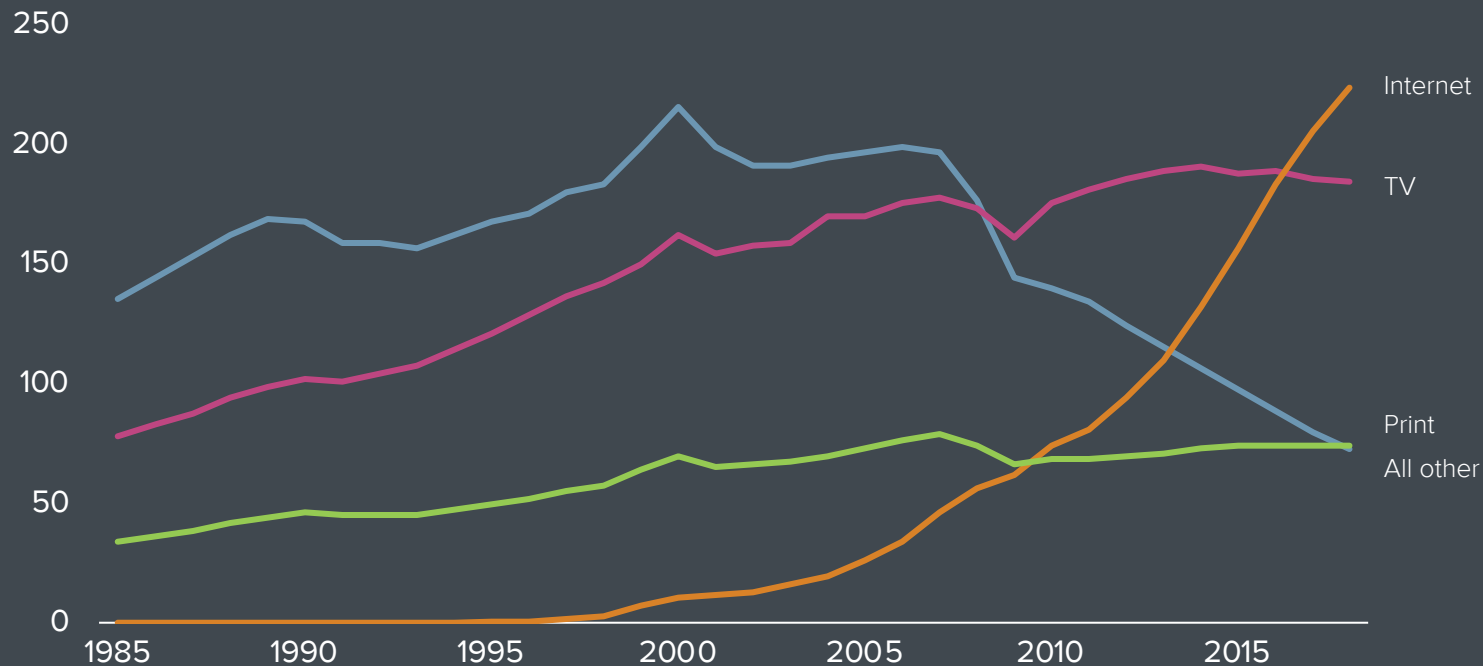
What's the opportunity?

US spending, 2017 (\$tr)



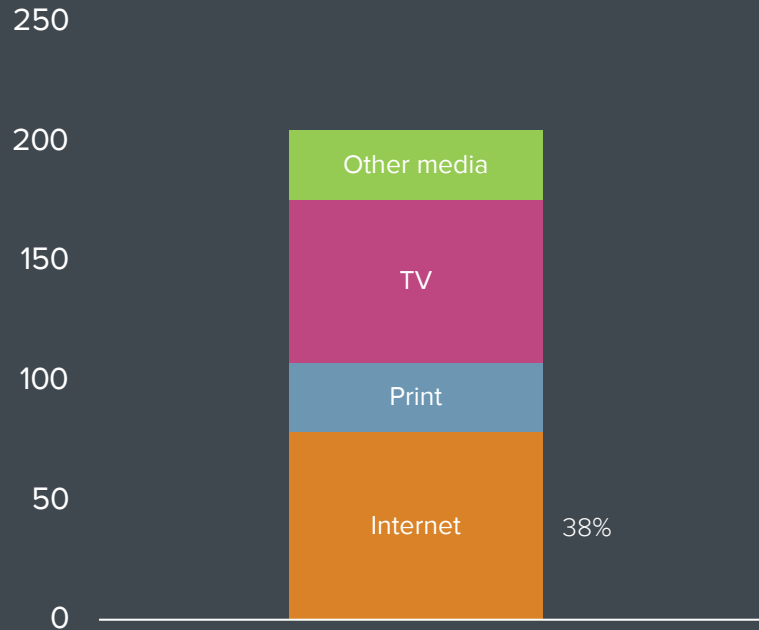
Digital advertising also looks big...

Global advertising, 2018 dollars (\$bn)



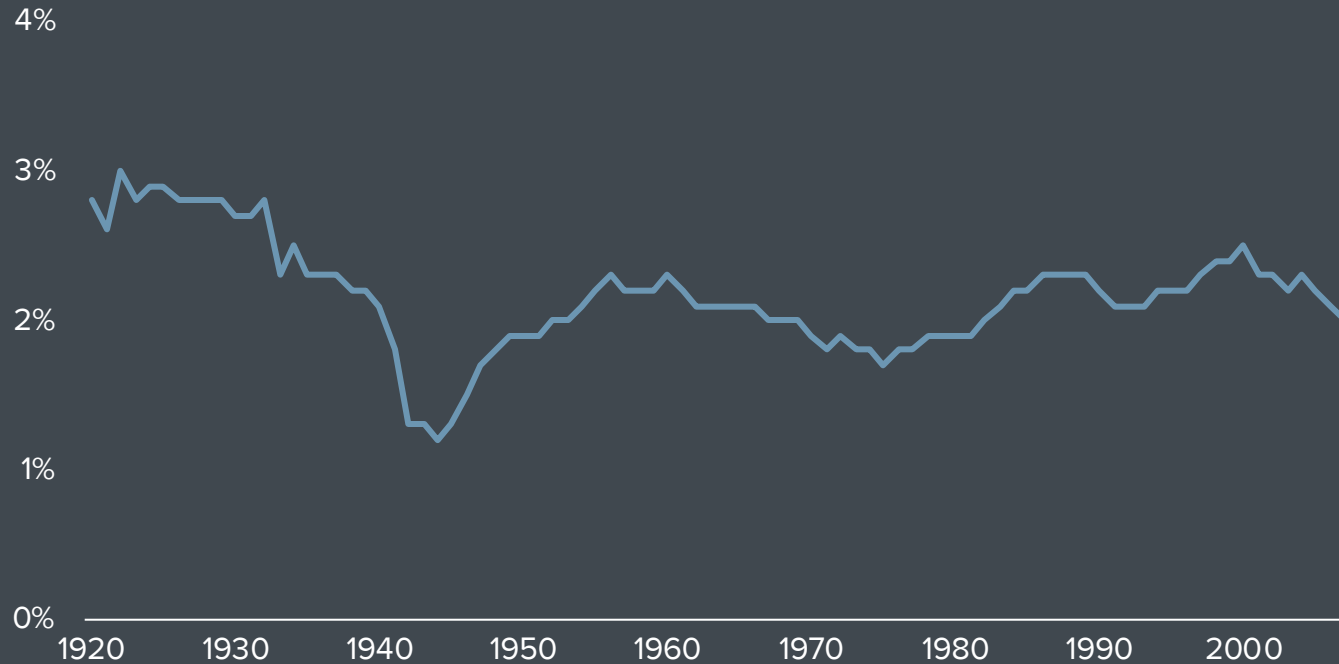
Internet is now the largest segment of US advertising...

US advertising, 2018 (\$bn)



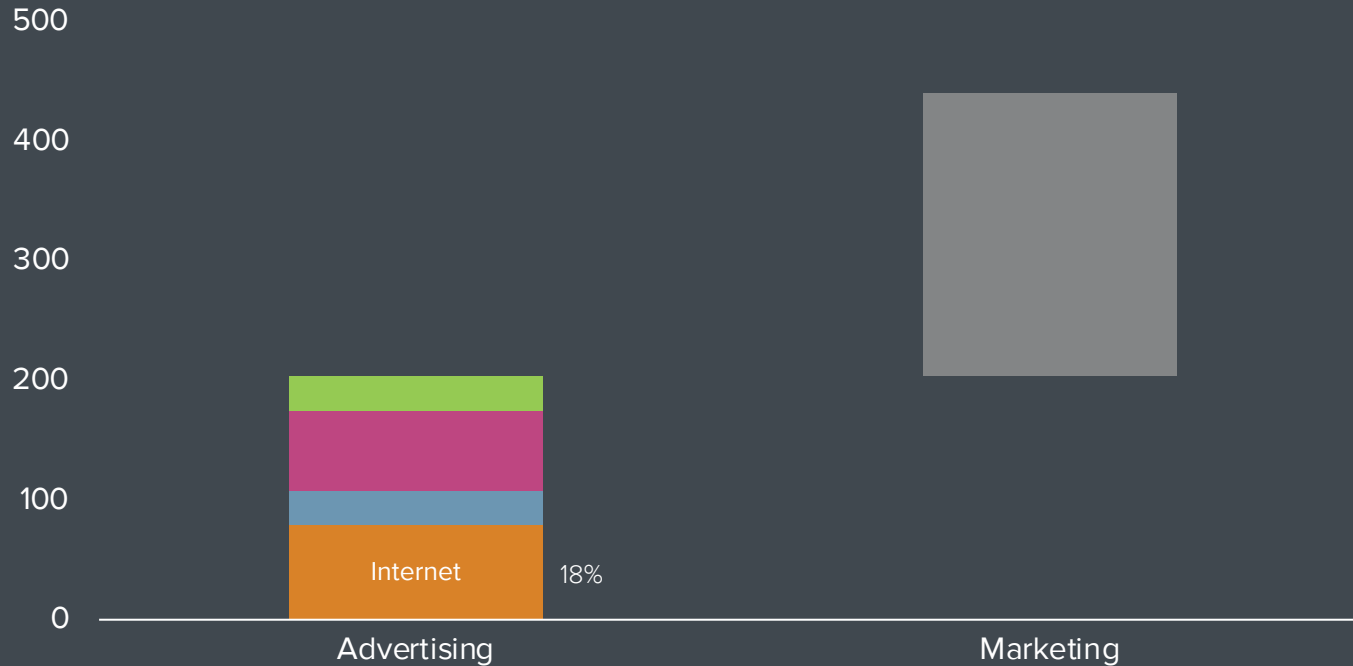
And advertising doesn't change much

US advertising as % US GDP



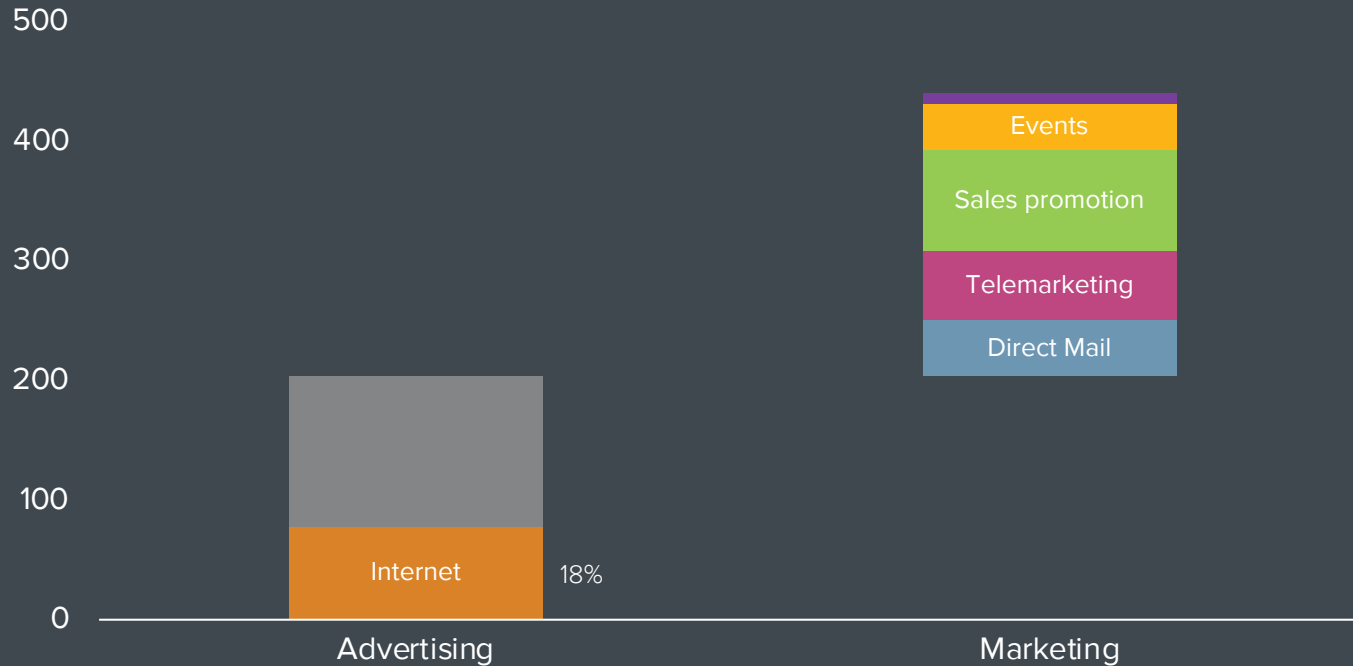
But what about marketing?

US advertising and marketing, 2018 (\$bn)



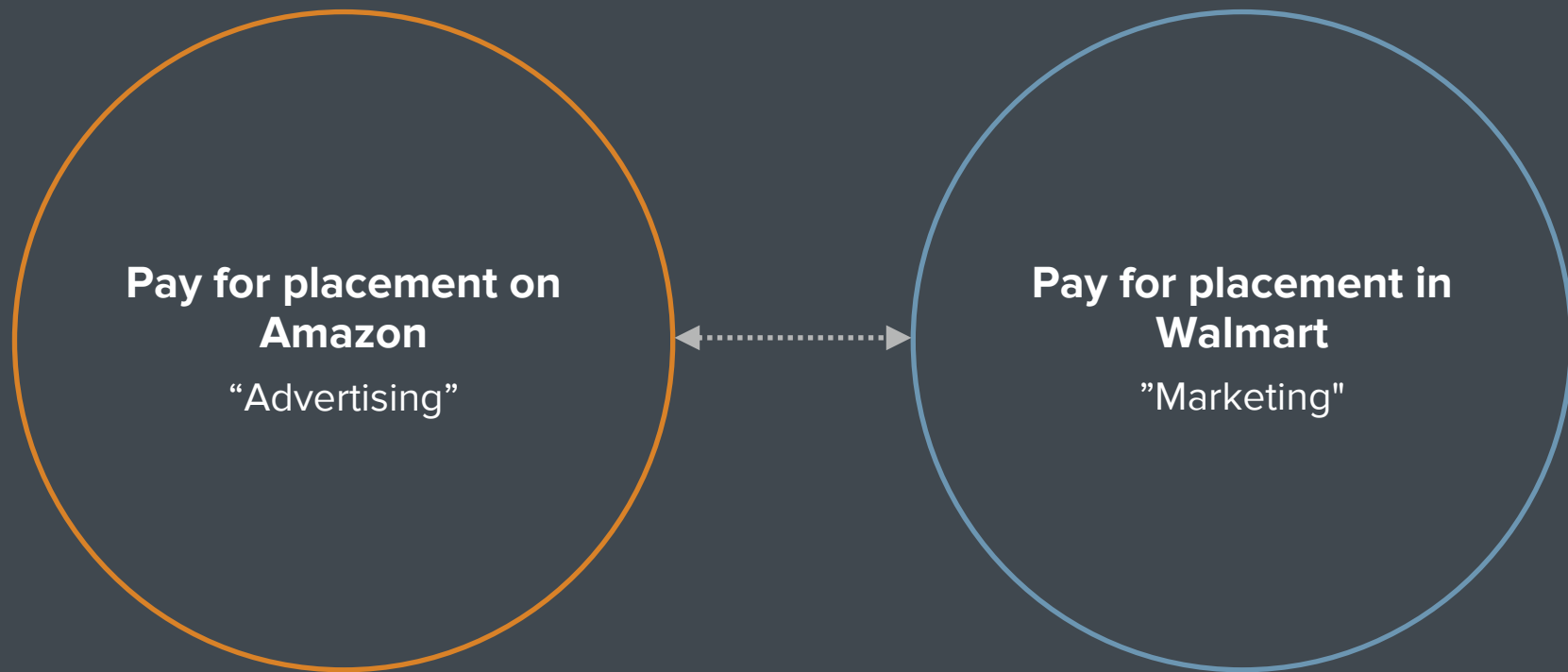
But what about marketing?

US advertising and marketing, 2018 (\$bn)



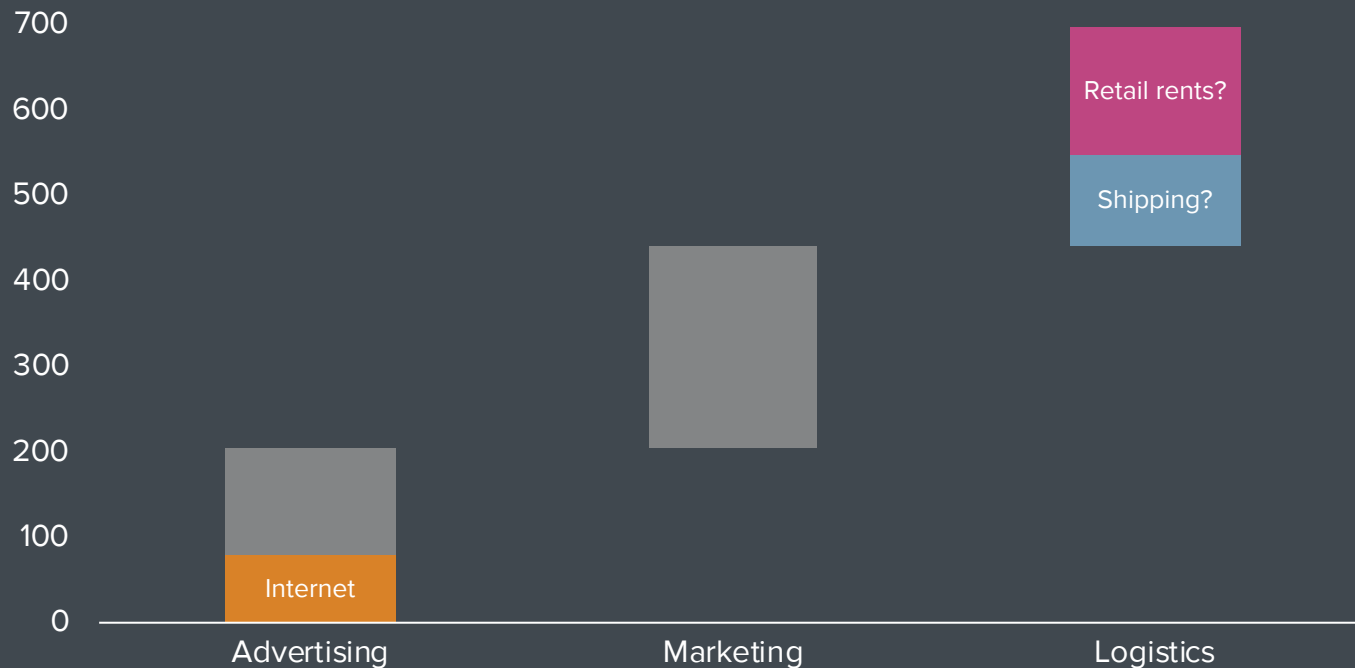
Reaching customers

Old definitions, new use cases



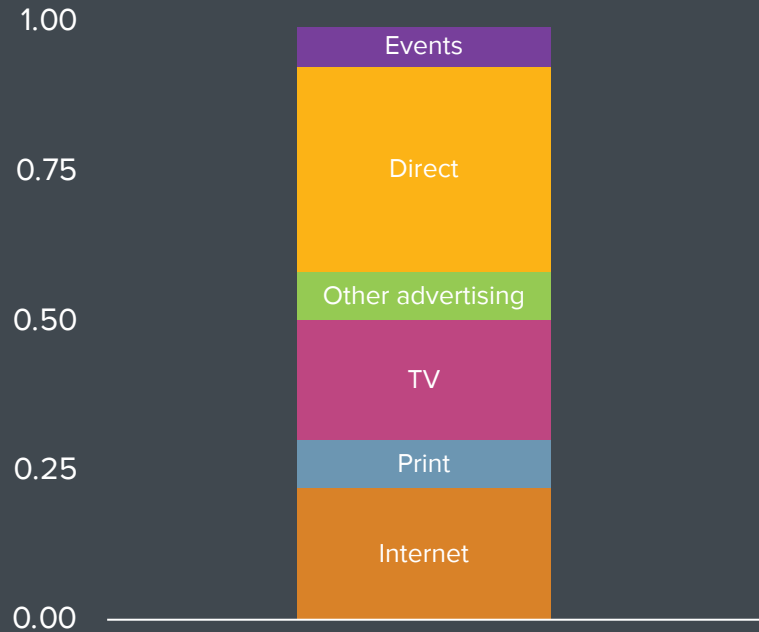
And what do you really pay to reach a customer?

US budgets, 2018 (\$bn)



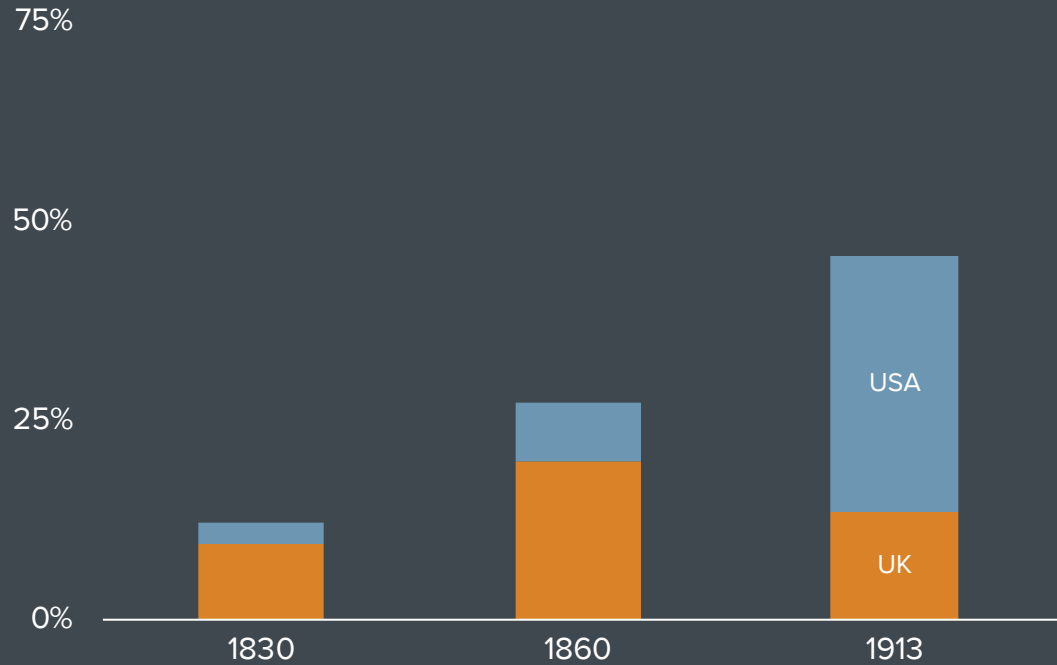
Globally, \$1tr is spent on “what should I buy?”

Global sales & marketing, 2018 (\$tr)



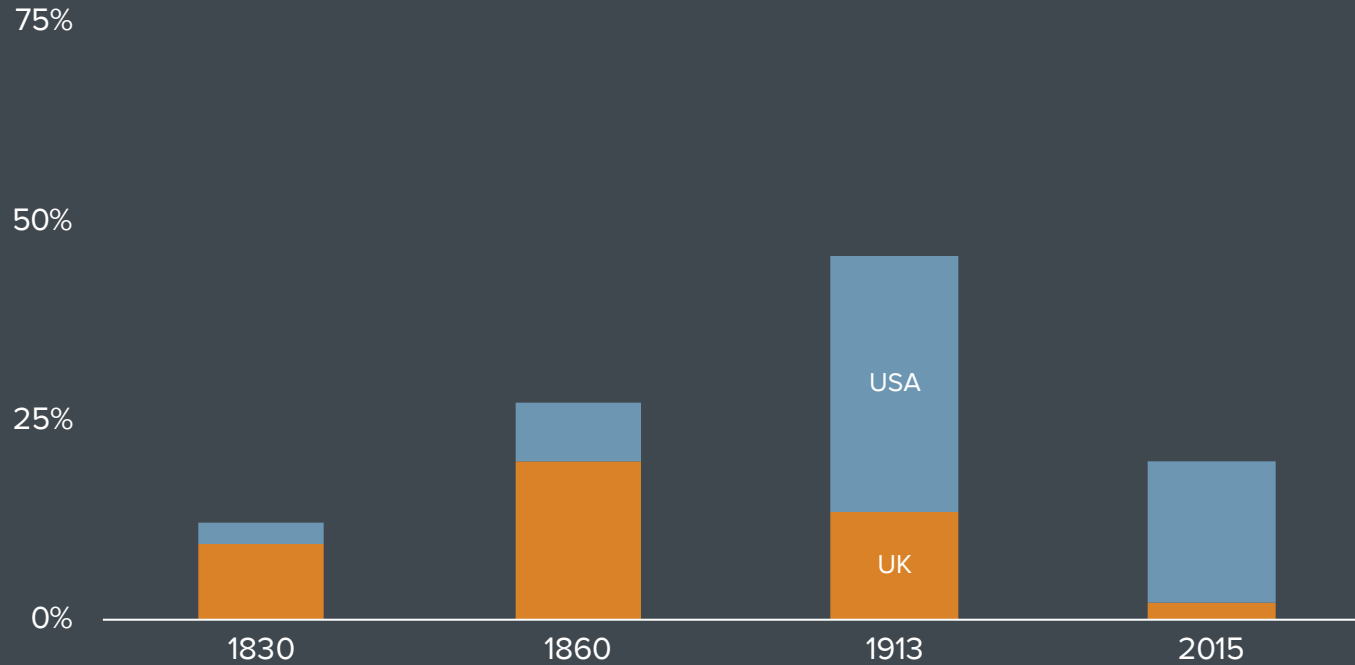
The spread of industrialisation

Global manufacturing production



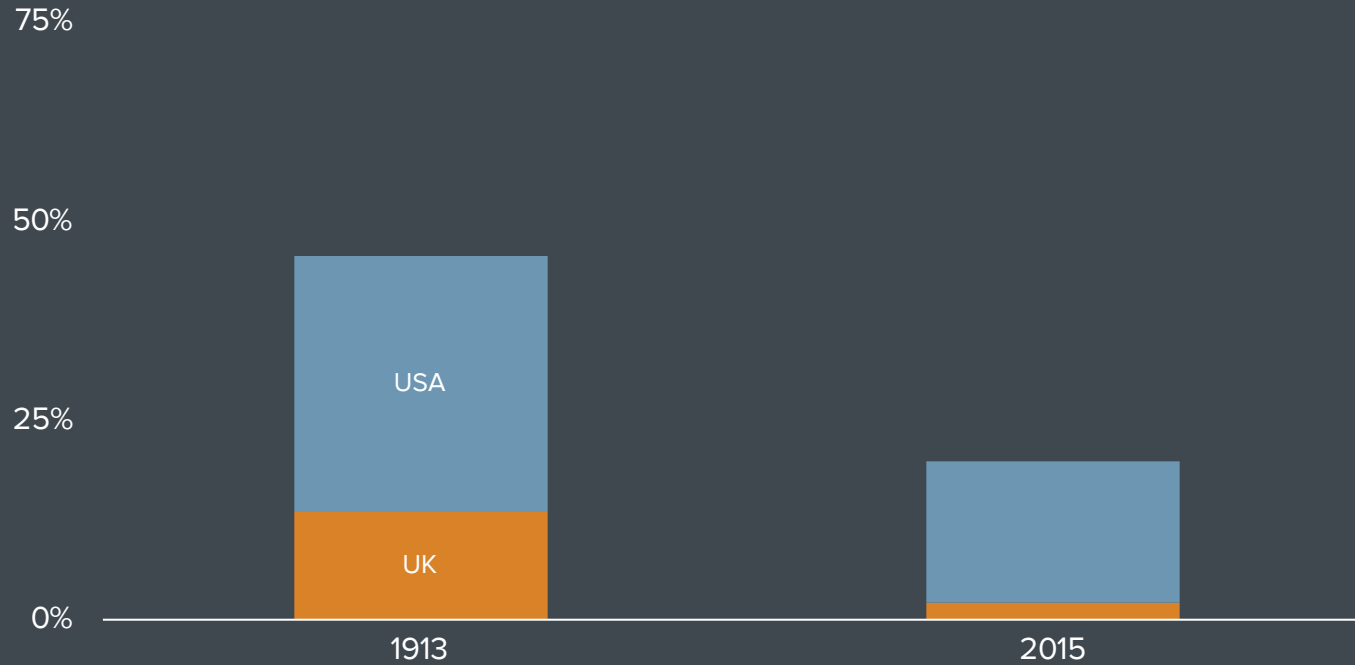
The spread of industrialisation

Global manufacturing production



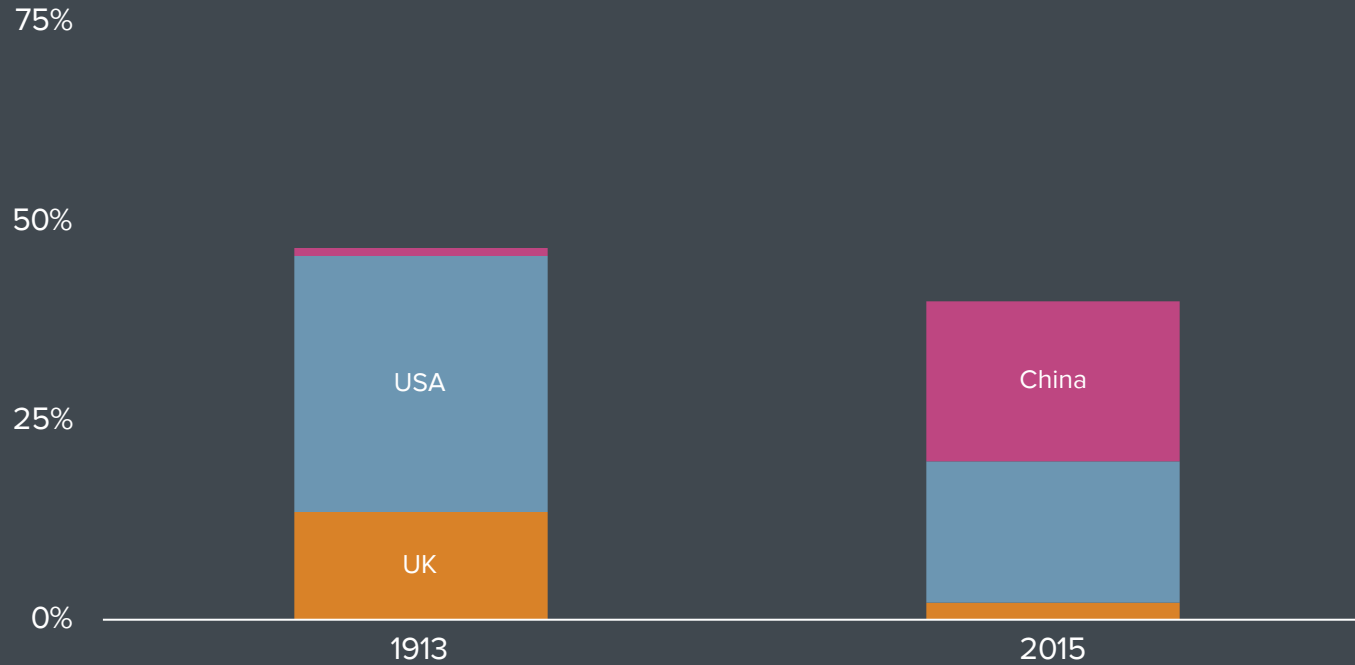
The spread of industrialisation

Global manufacturing production



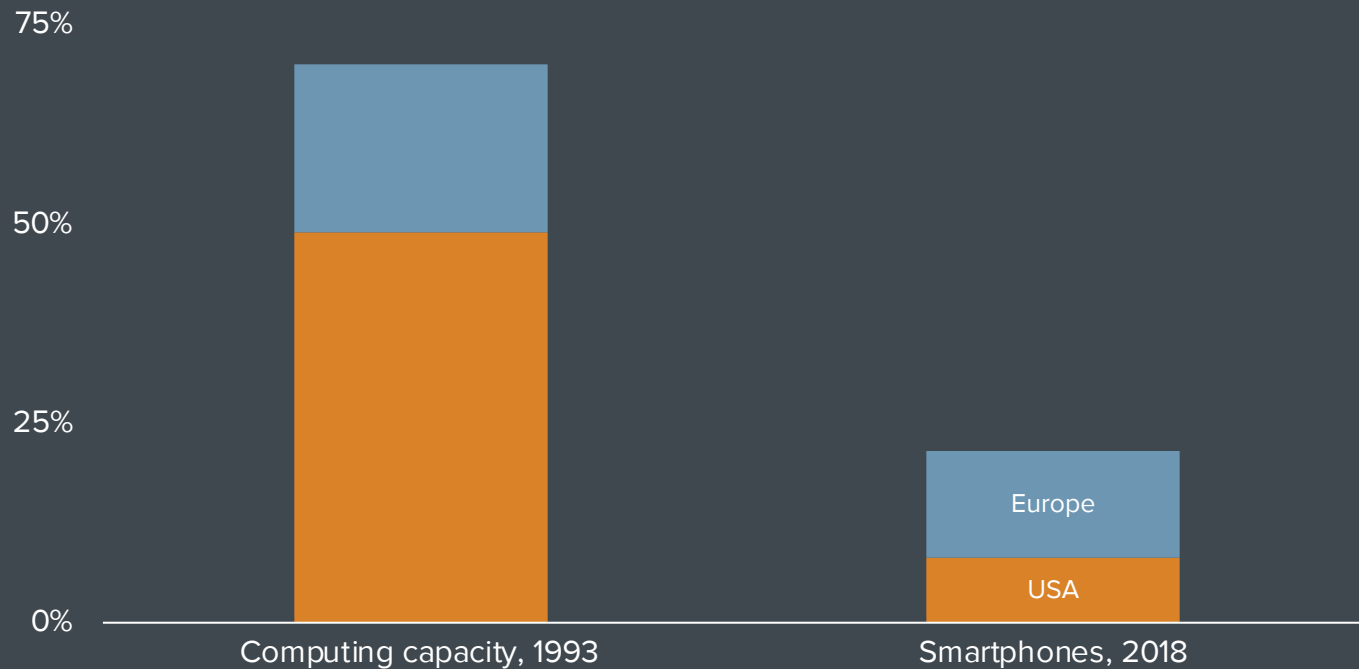
The spread of industrialisation

Global manufacturing production



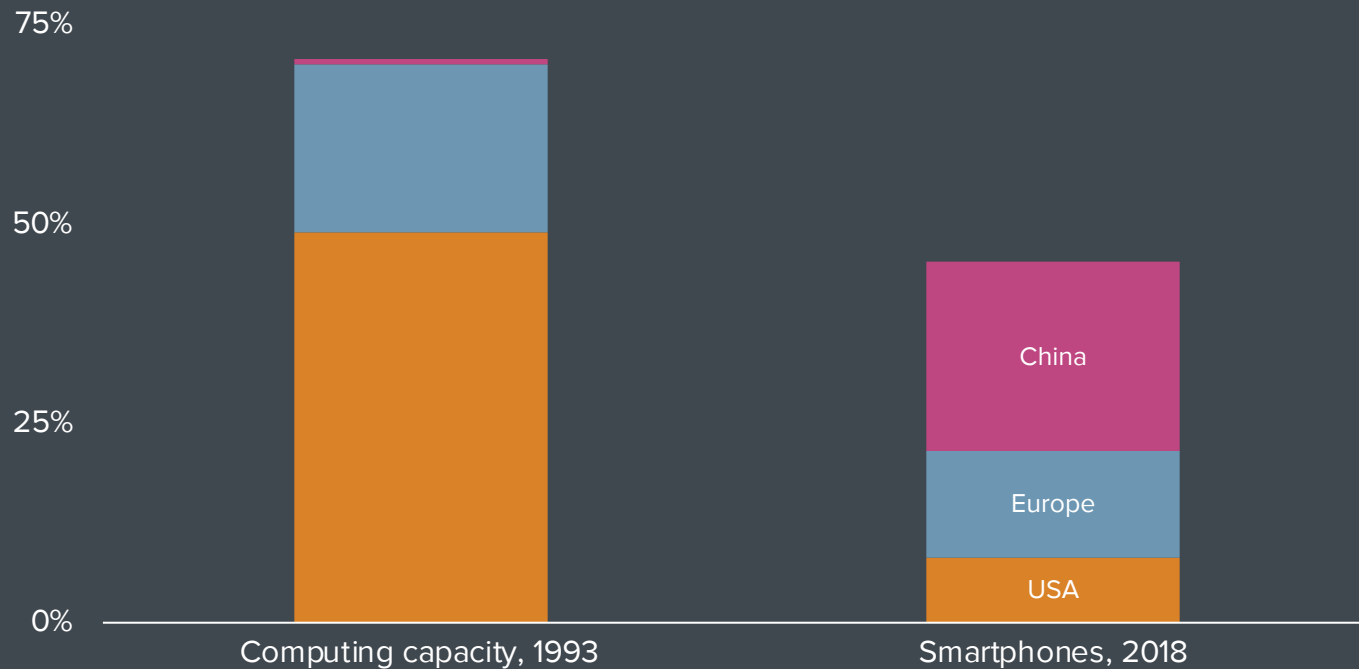
The spread of computers

Global installed base



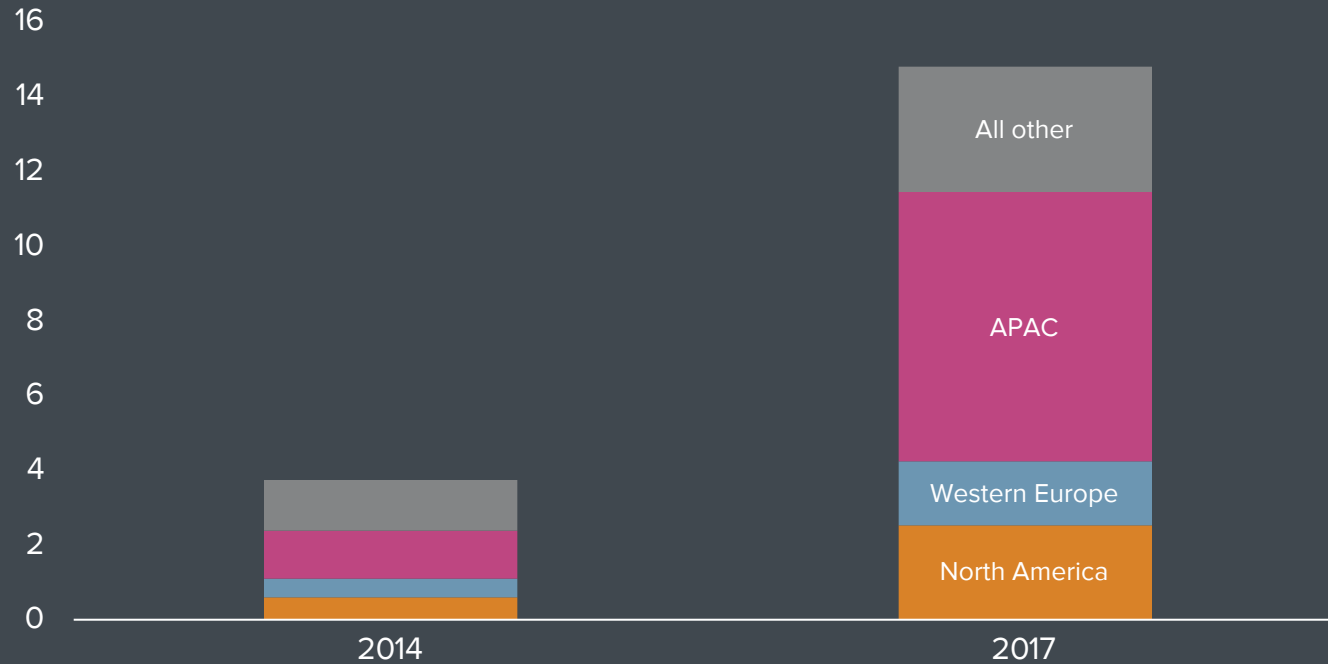
The spread of computers

Global installed base



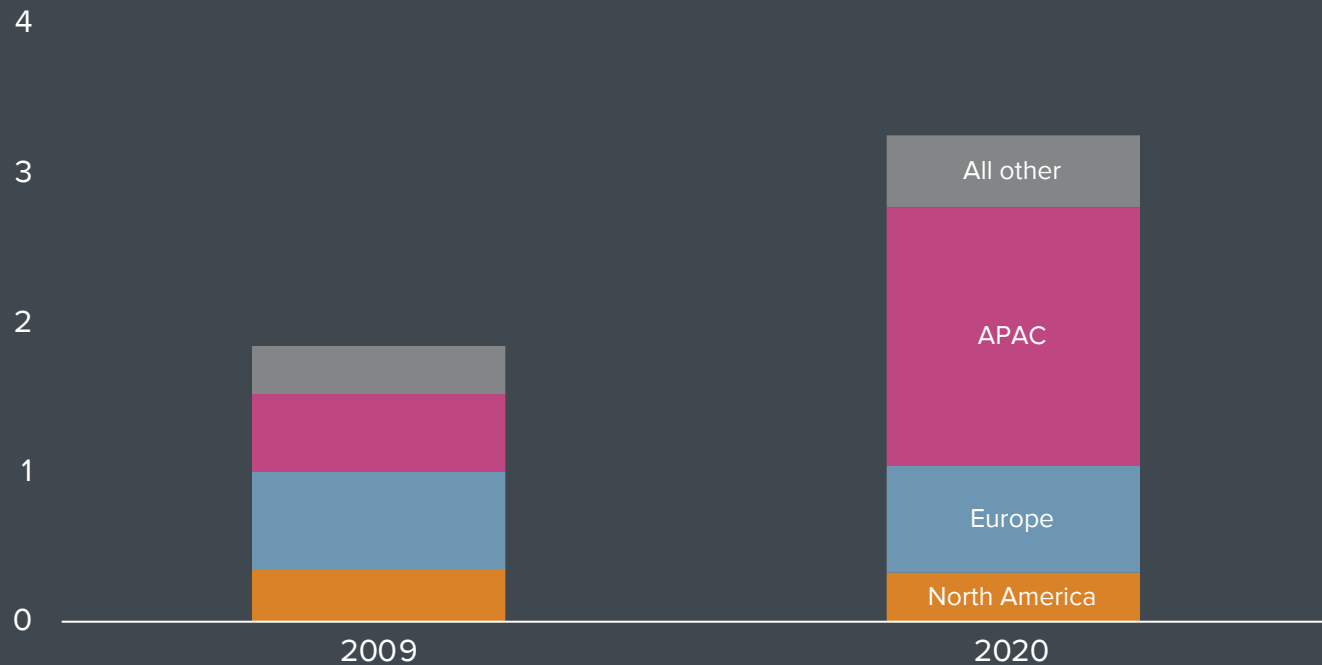
The spread of use

Mobile data traffic (exabytes/month)



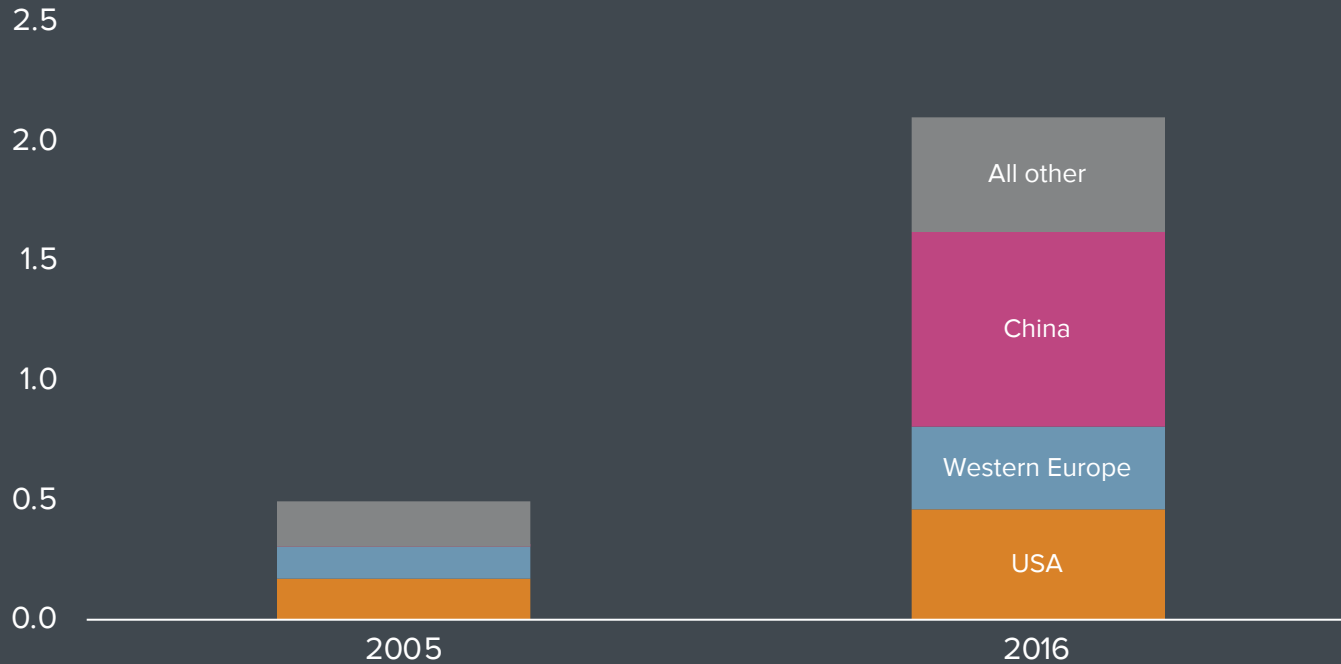
The spread of spending power

Global middle class* (billions of people)



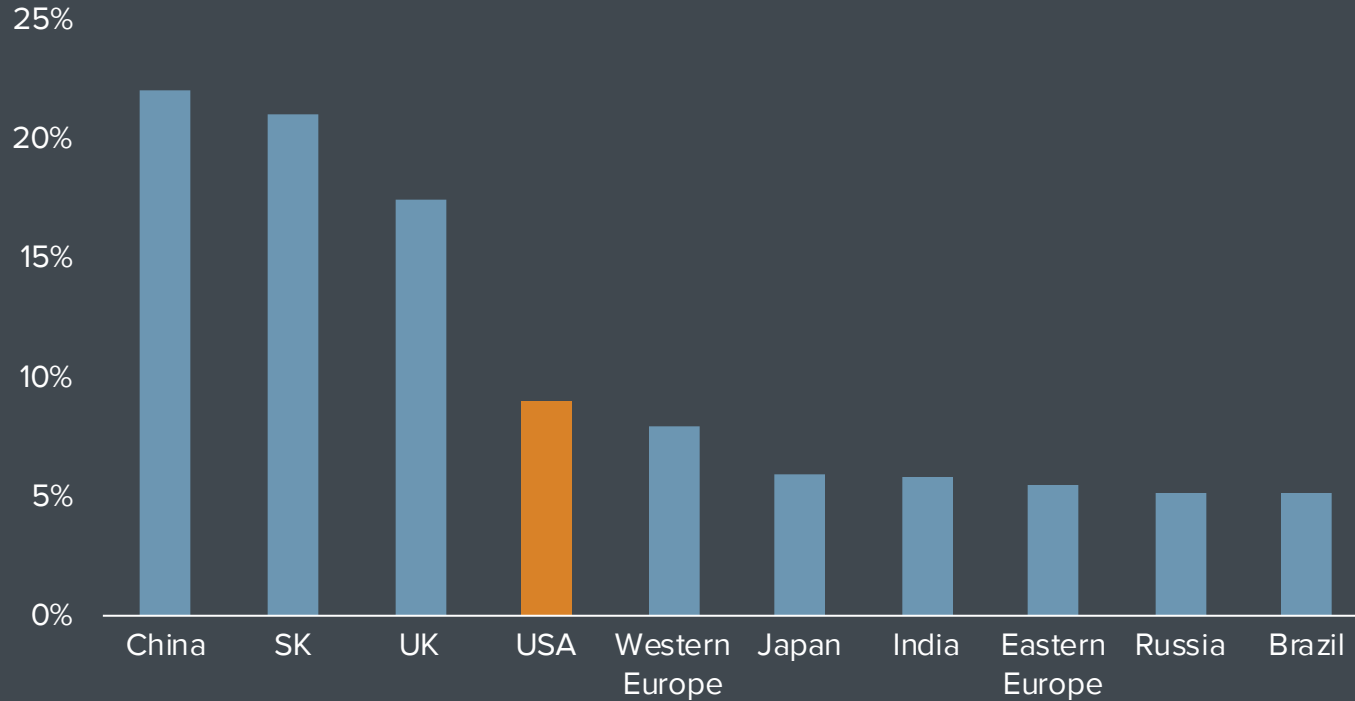
And the spread of spending online

Global ecommerce (\$tr)

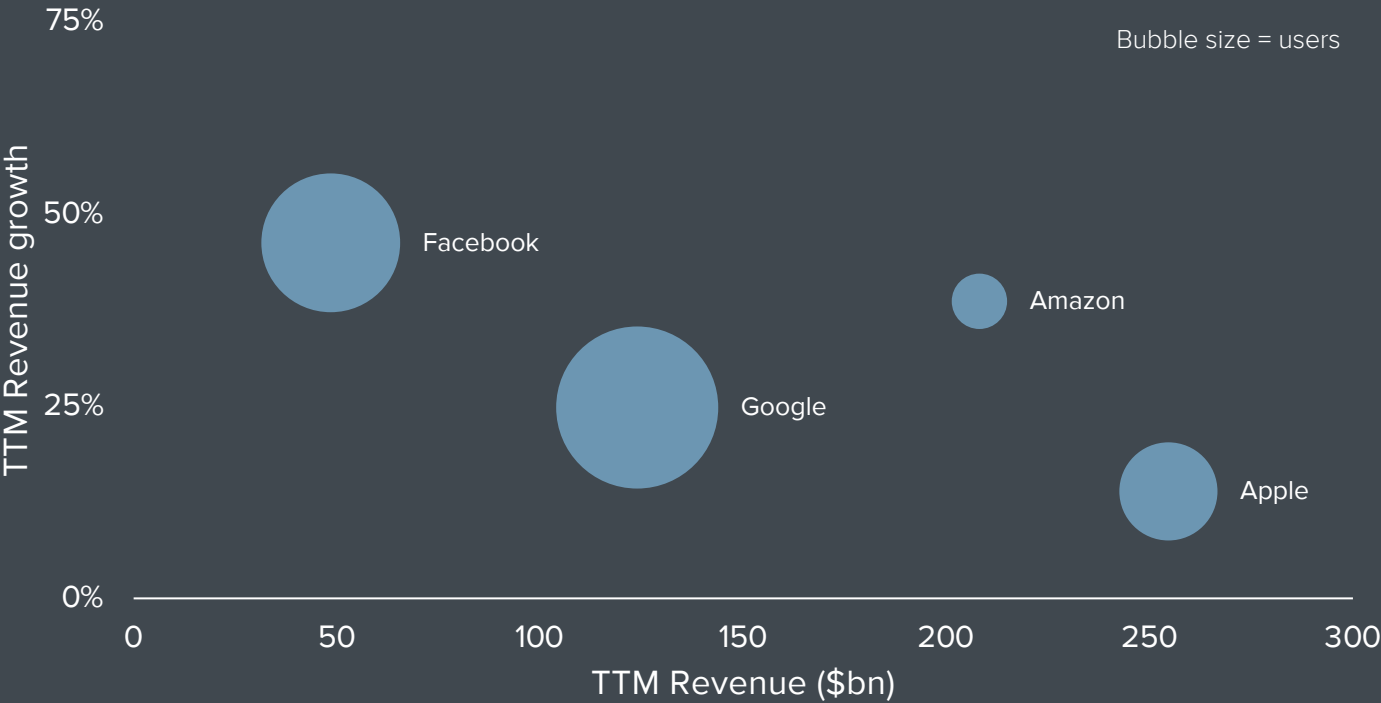


USA in the middle of the pack

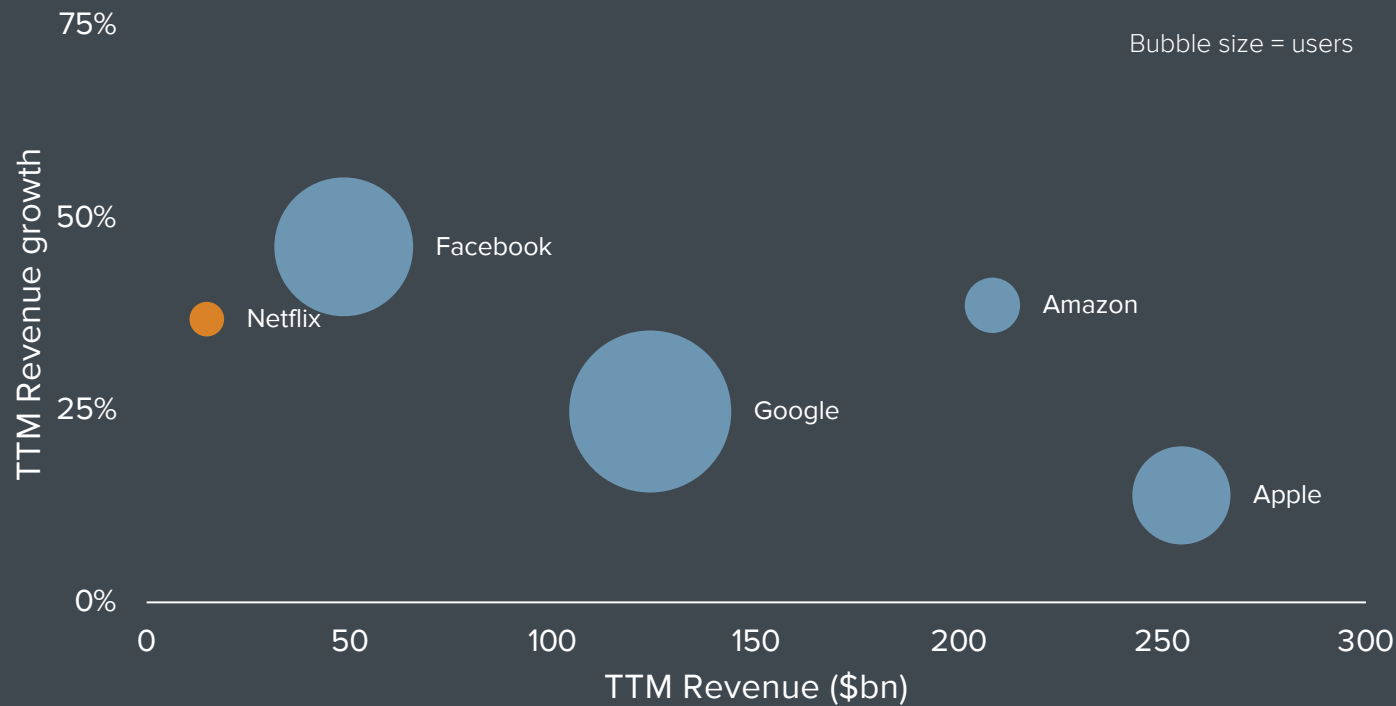
Ecommerce share of retail spending, 2017



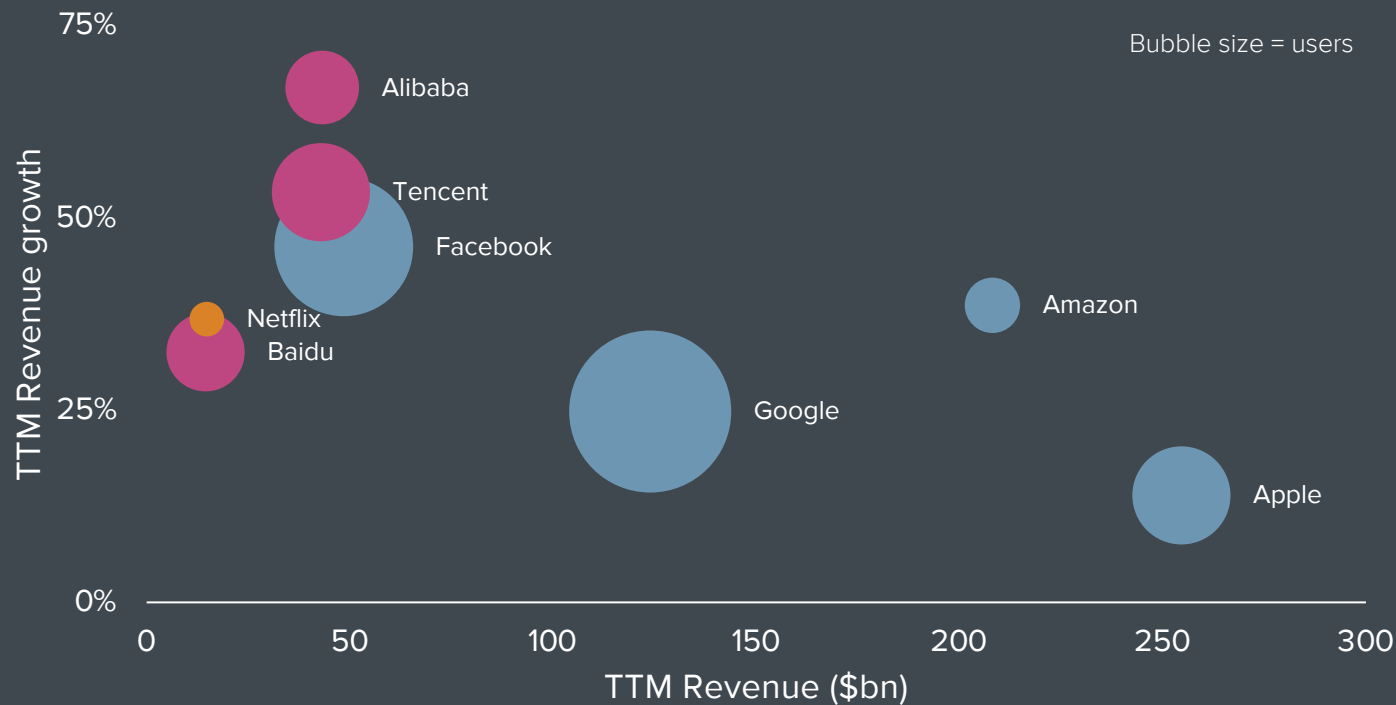
Global company creation



Global company creation

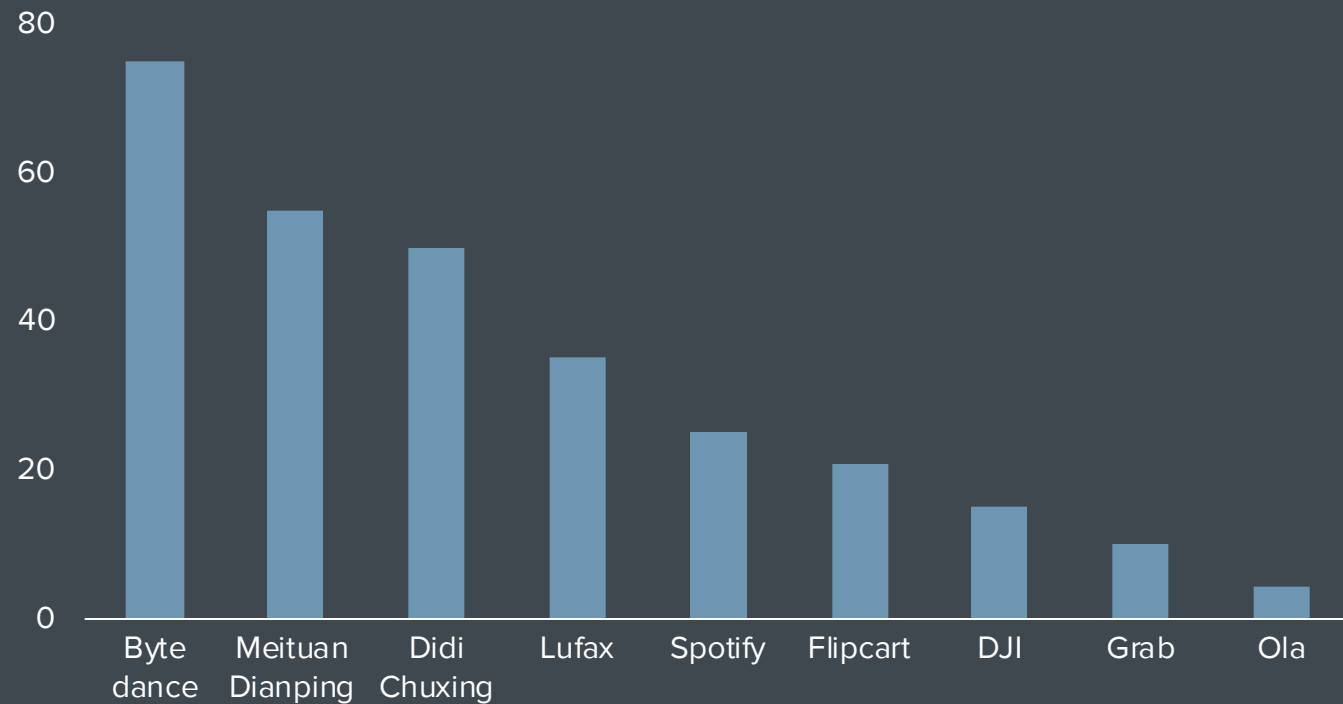


Global company creation



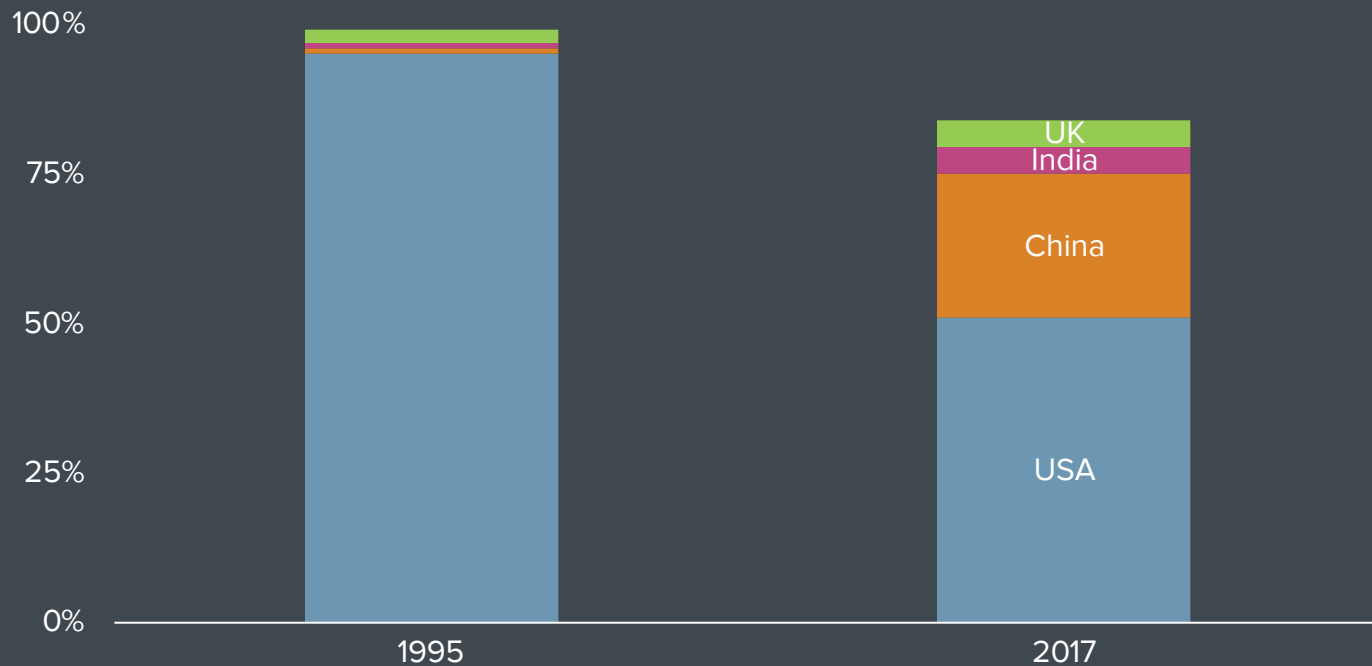
Unicorns are born outside Silicon Valley!

Last reported valuation (\$bn)



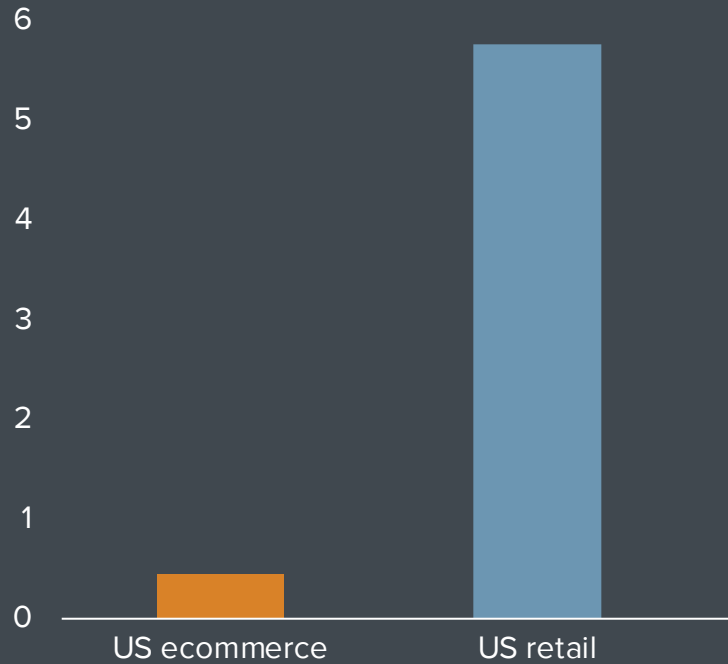
Venture spreads outside the USA

Share of venture investment by value



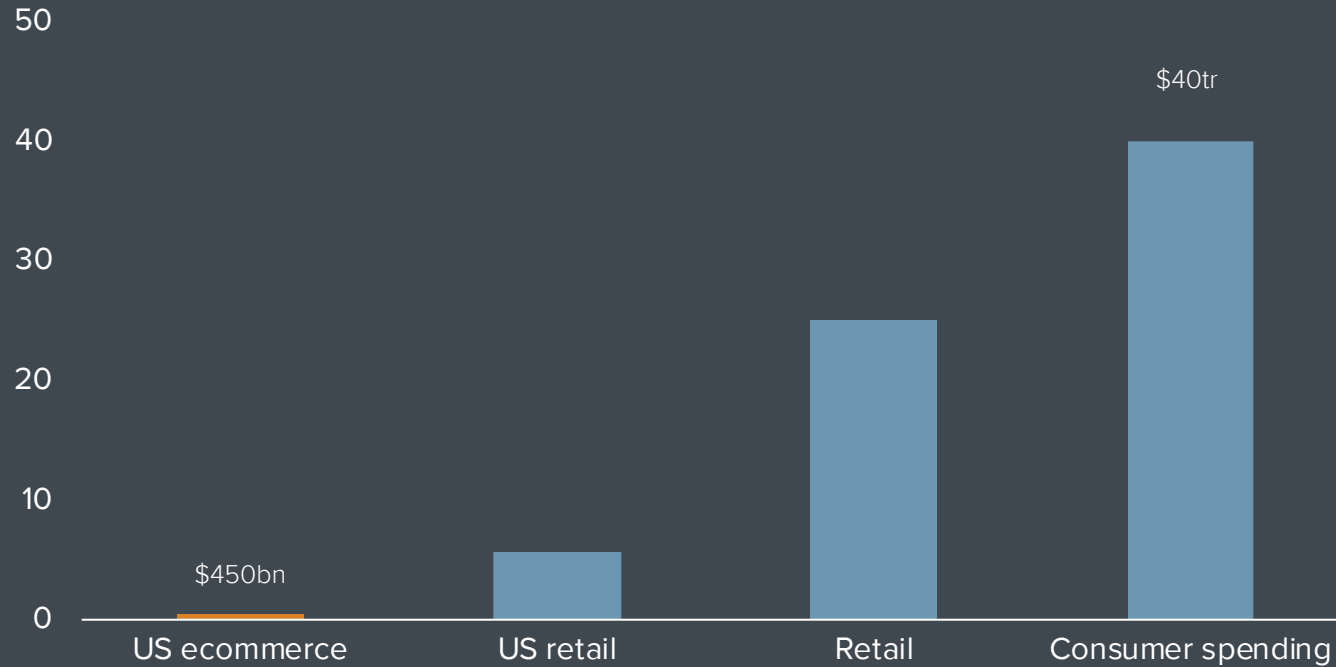
What's the opportunity?

Market size, 2017 (\$tr)



What's the opportunity?

Market size, 2017 (\$tr)



From easy to hard?

First 20 years

Things that work with low penetration and little capital

Low touch goods

Selling tools

Information arbitrage

Next 20 years

Things that need high penetration and lots of capital

High touch goods

Full stack

Information businesses

New problems: restaurant listings to restaurant delivery



Low capital needs

Selling tools

Information arbitrage

High capital needs

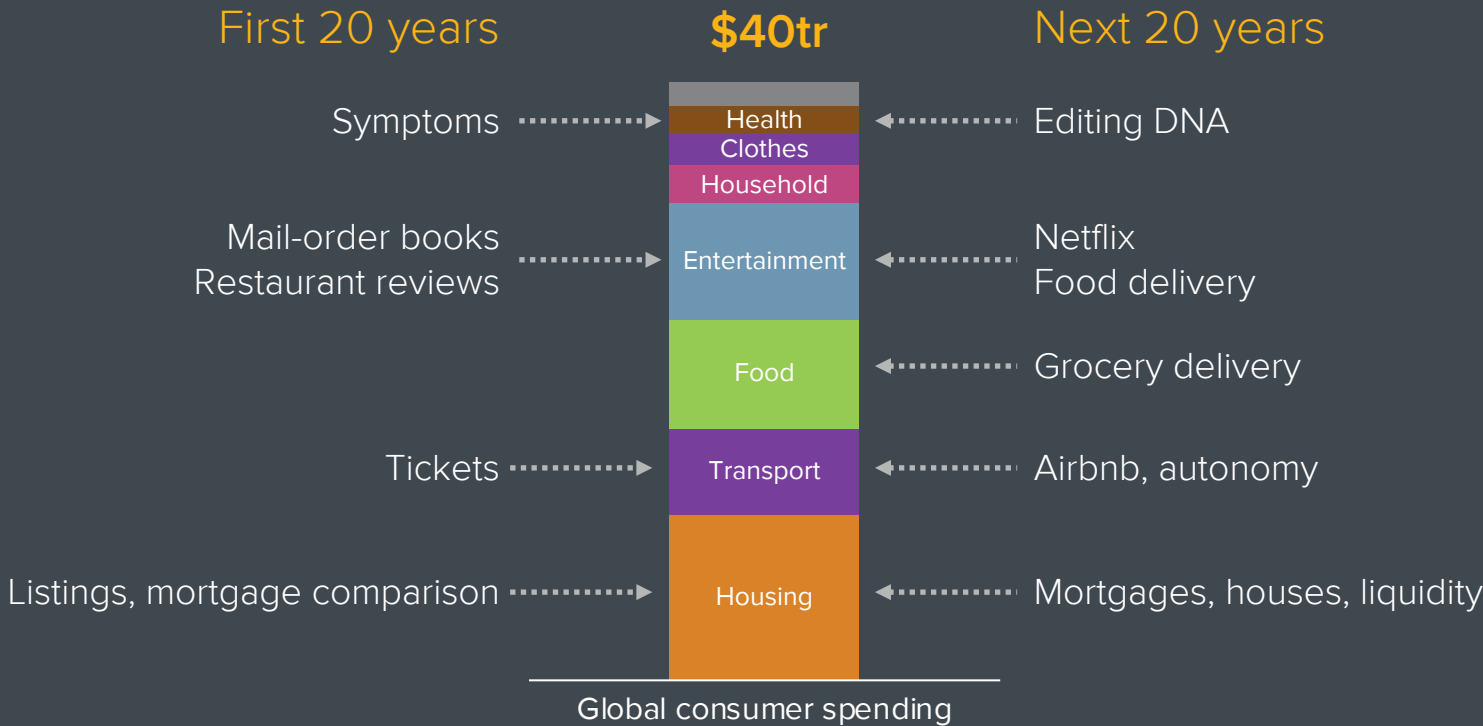
Building the full stack

Information as system

New problems

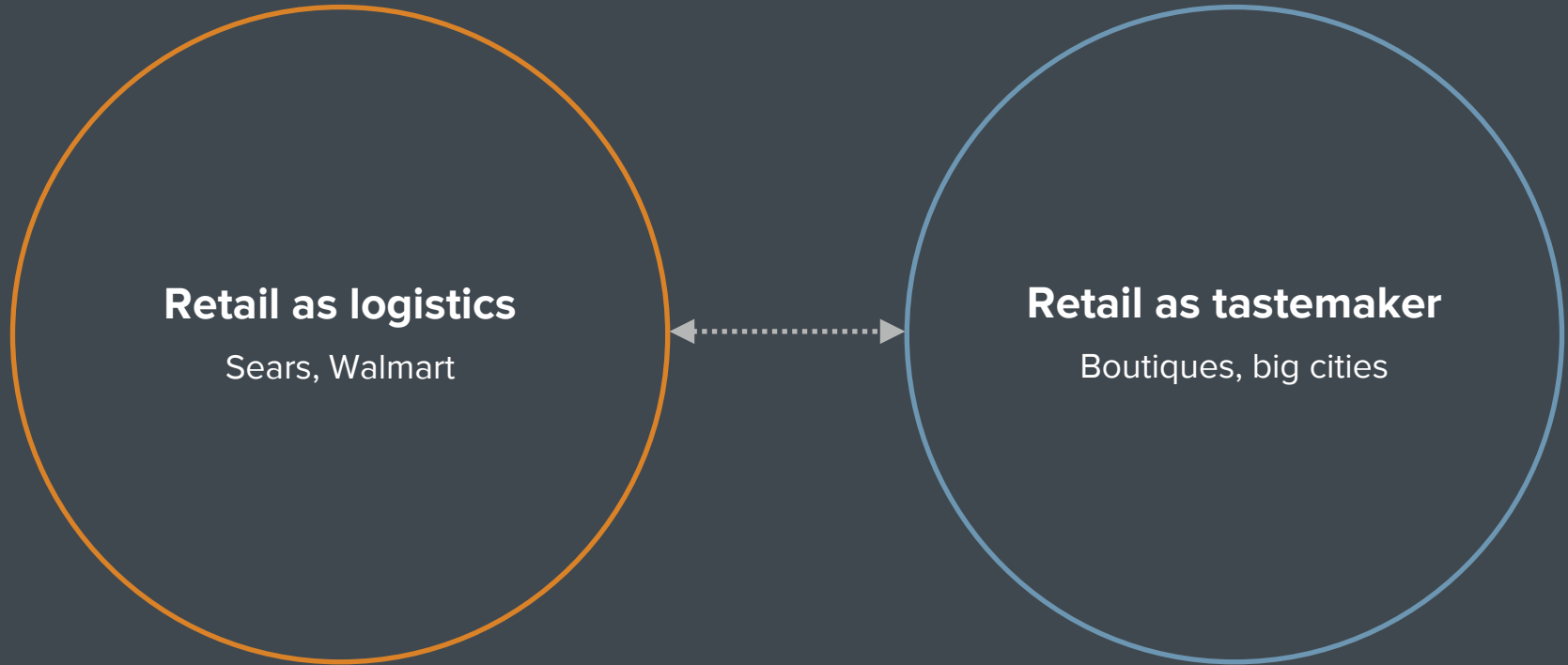


New problems



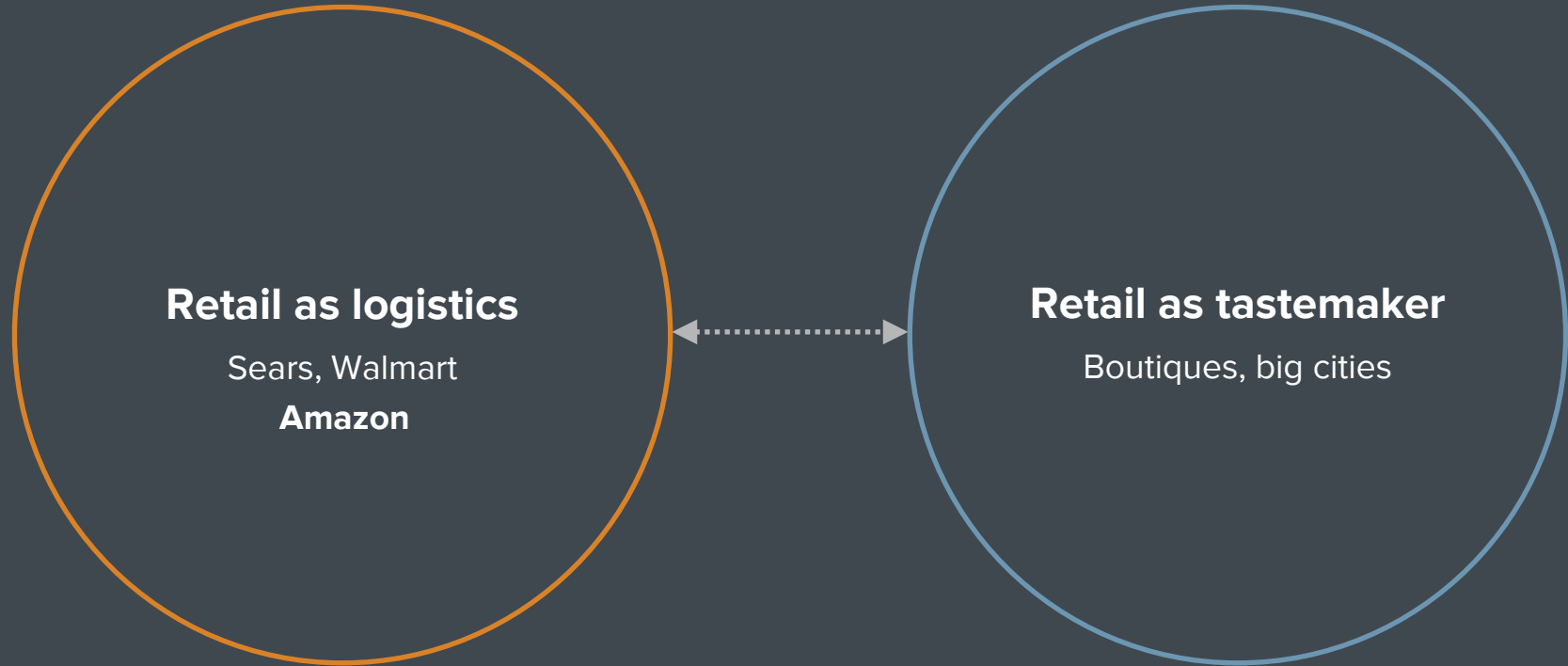
Two models of retail

Packets versus preference



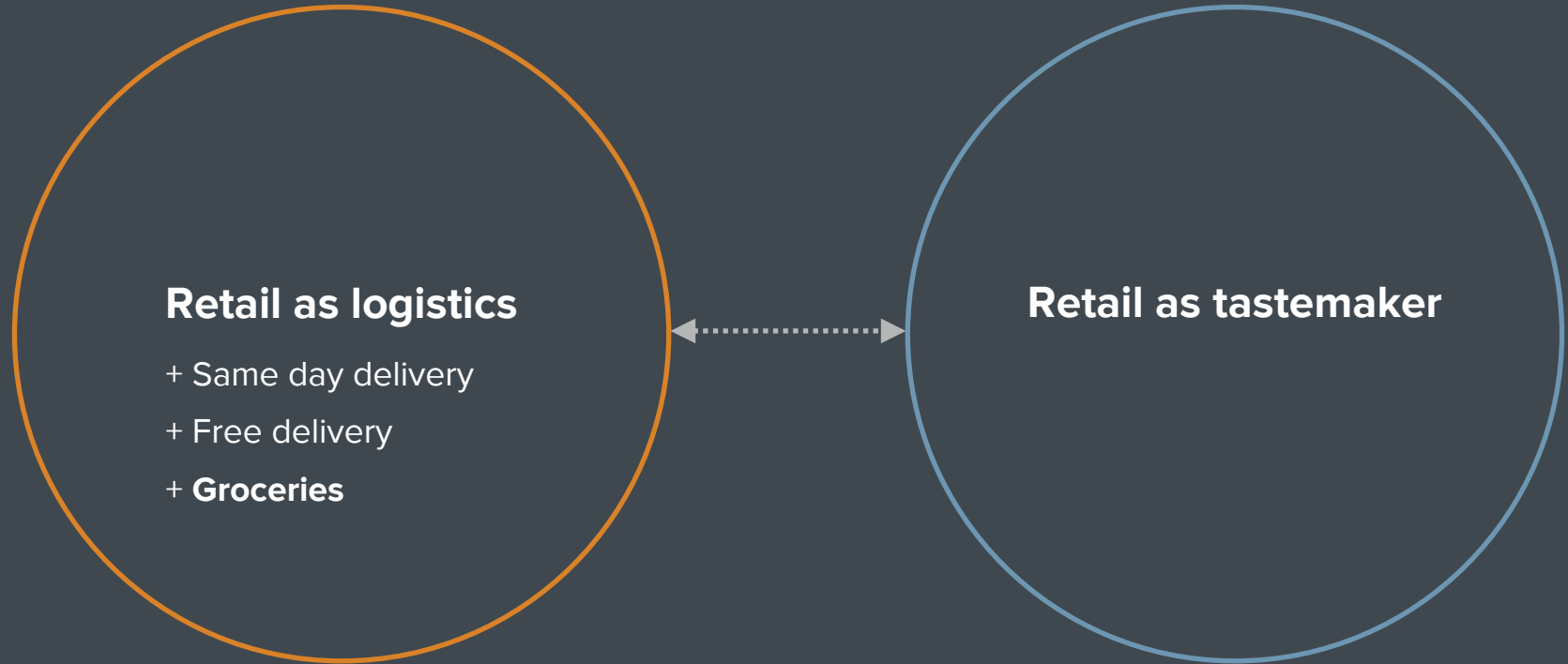
So far, the internet has mostly tackled logistics

Packets versus preference



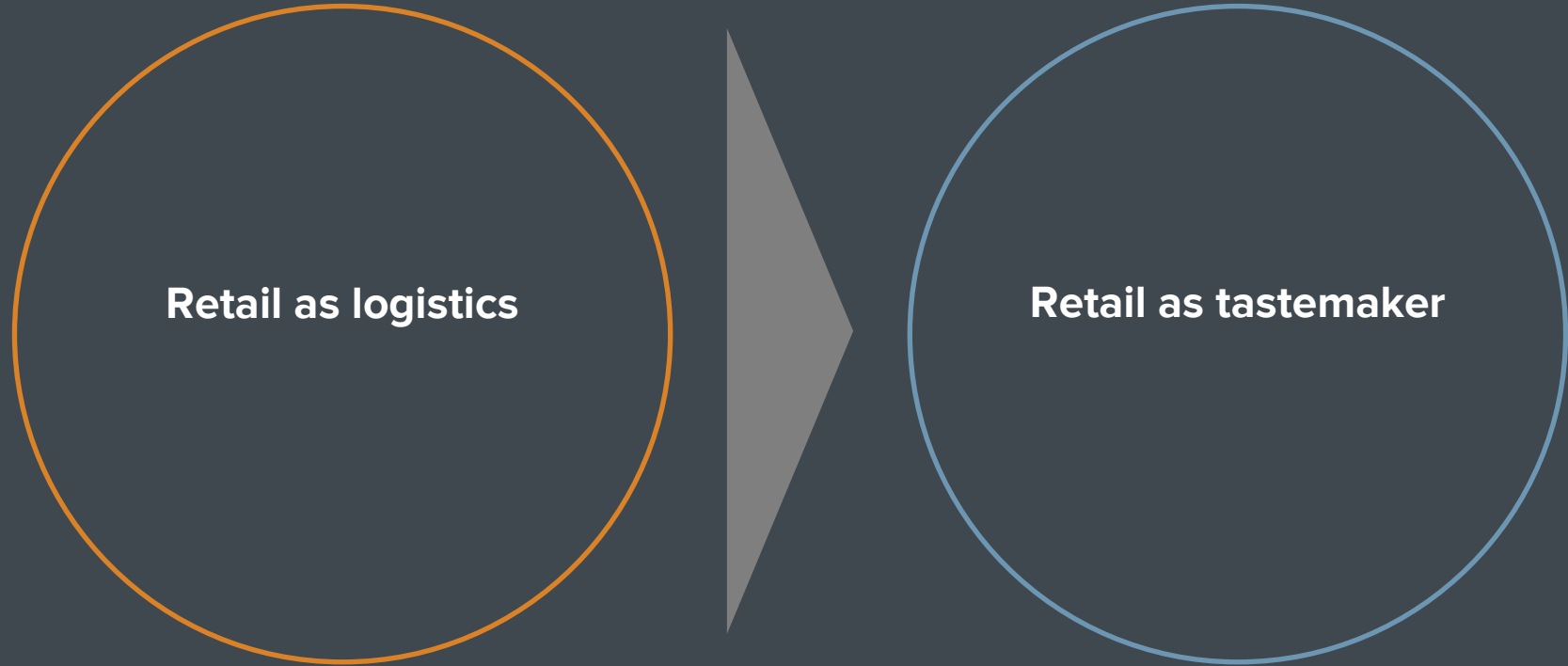
New waves of logistics

Packets versus preference



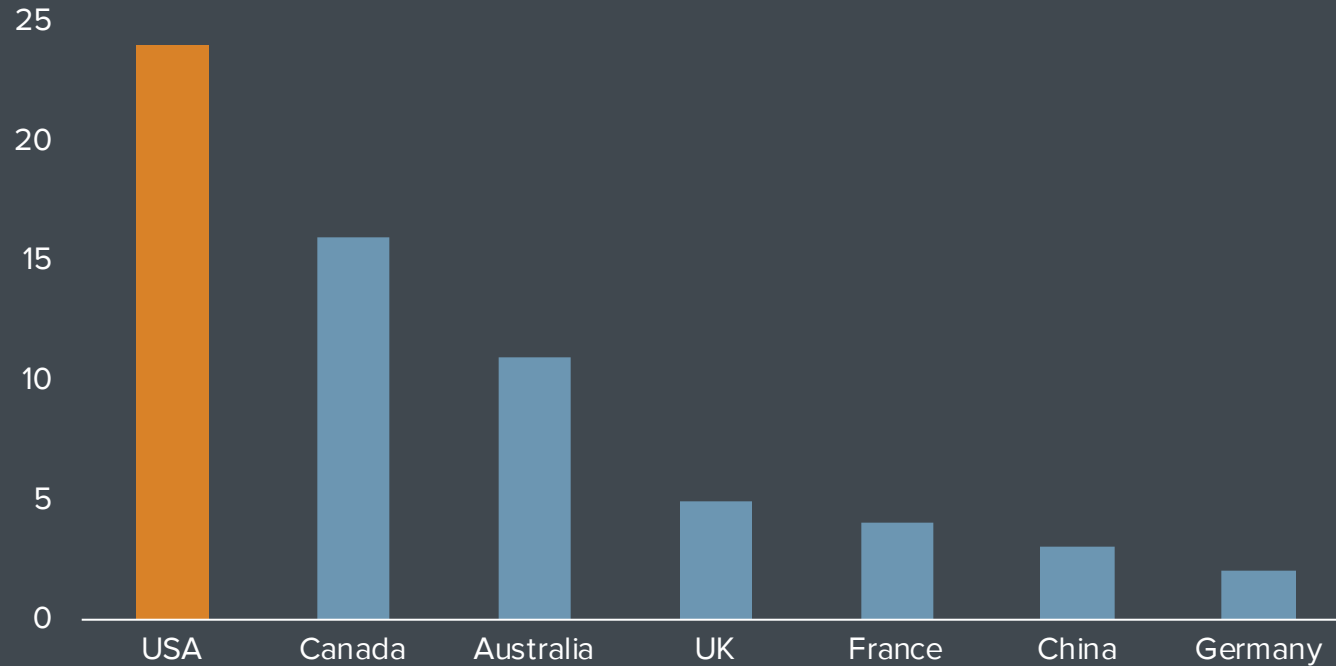
And pushing into new kinds of decision

Packets versus preference



(All of which will affect the USA more than most...)

Retail square feet per capita, 2017



“Ecommerce is asset-light”



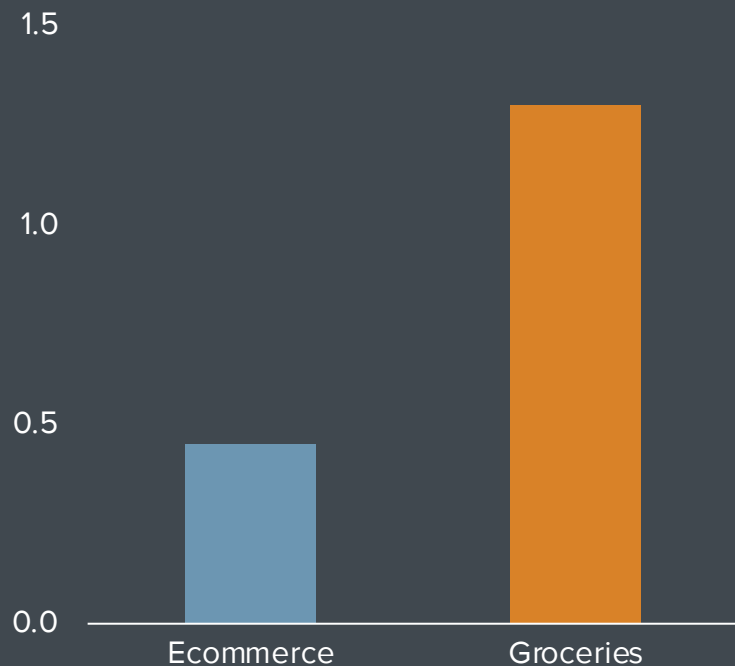
Amazon business plan, 1994:
“No warehouses, no stock, no shipping”

“Ecommerce is asset-light”



New problems: groceries

US market size, 2017 (\$tr)



Groceries breaks the Amazon model,
and the whole ecommerce mode

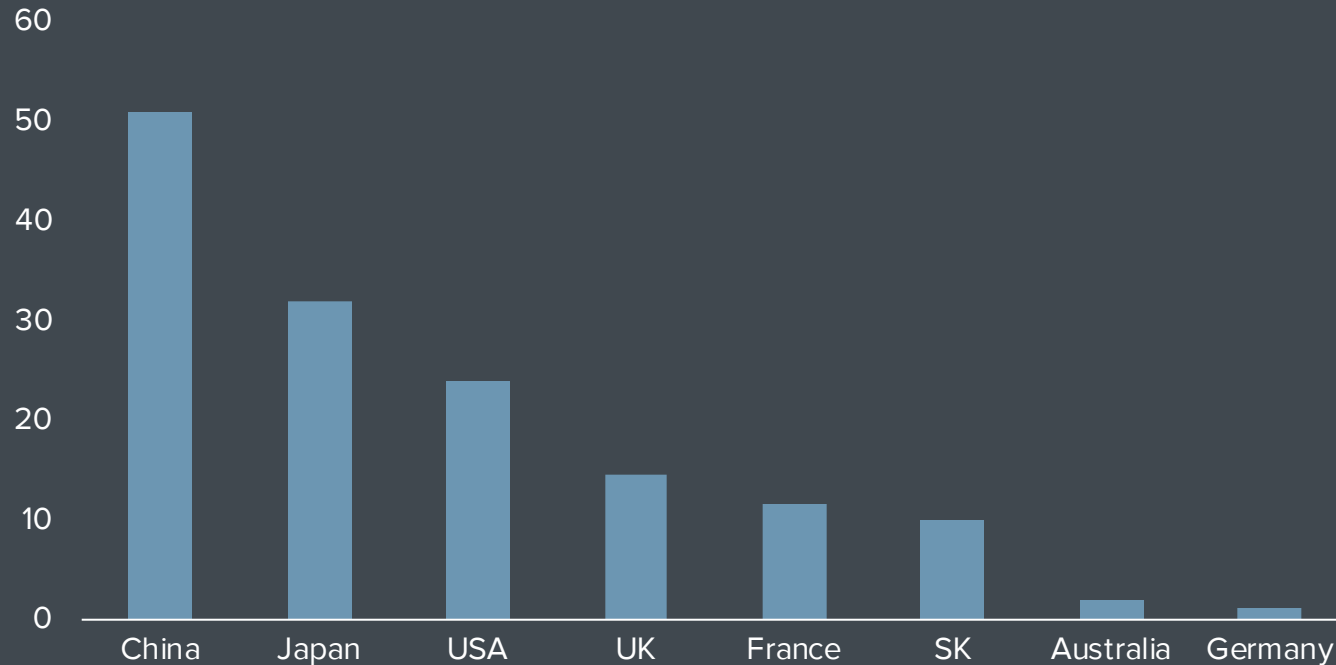
Can't be bolted onto a commodity
logistics platform

Needs a whole new platform

But so big it's worth it

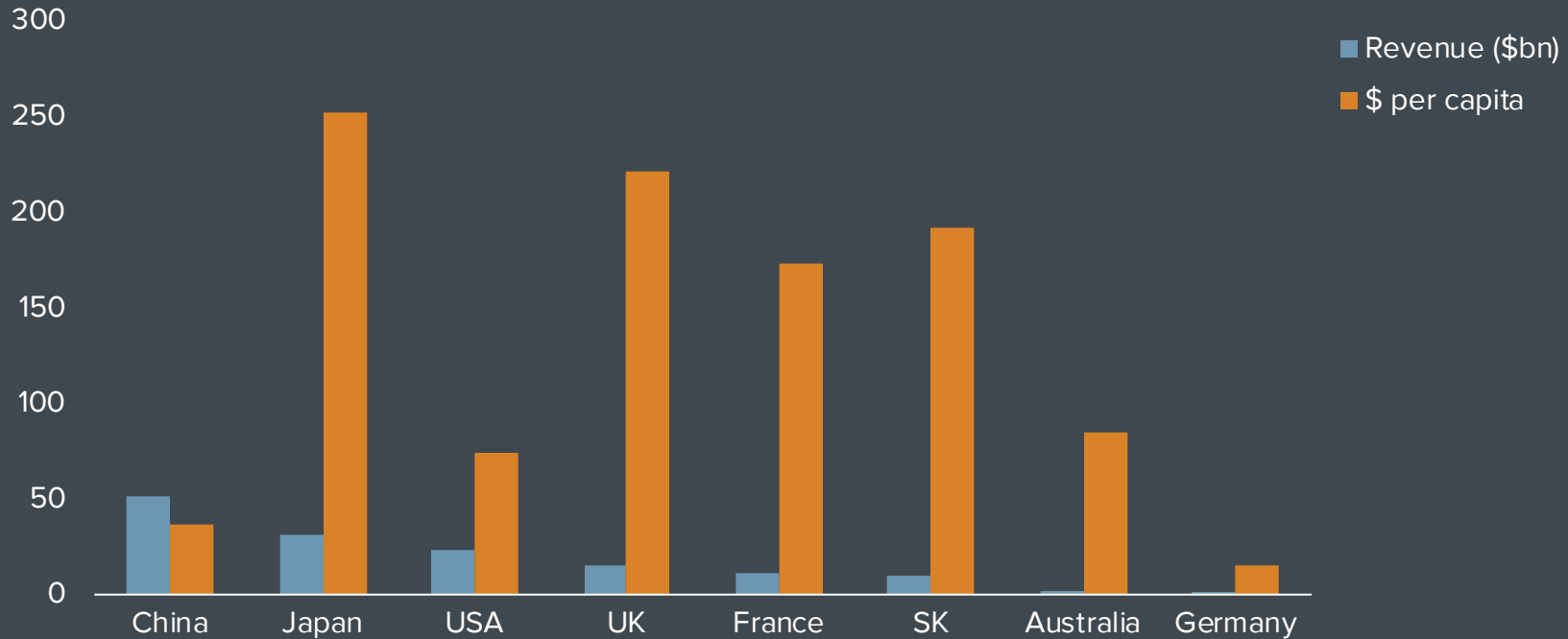
(And the USA is behind, again)

Online groceries, 2018 (\$bn)



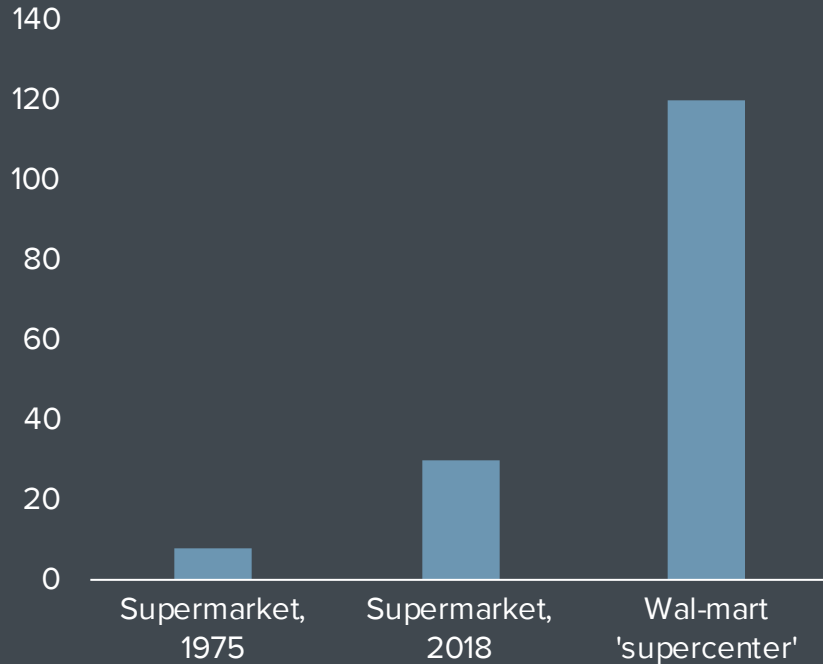
(And the USA is behind, again)

Online groceries, 2018



More interesting: changing groceries

Items stocked (000)



Different buying journeys mean different baskets

Different brands, SKUs and SKU counts

Shift from advertising to marketing?

New kinds of decision

Packets versus preference



The internet lets you buy anything you could buy in New York.

It doesn't let you shop the way you can shop in New York.

Bringing tastemaking to the internet



Things that shouldn't work



Fashion

“Online? Really?”



Warby Parker

“Glasses?
Showrooms?!”



Cosmetics

“Makeup you
haven't tried?!!”

What have we really done so far?

First 20 years

Ecommerce

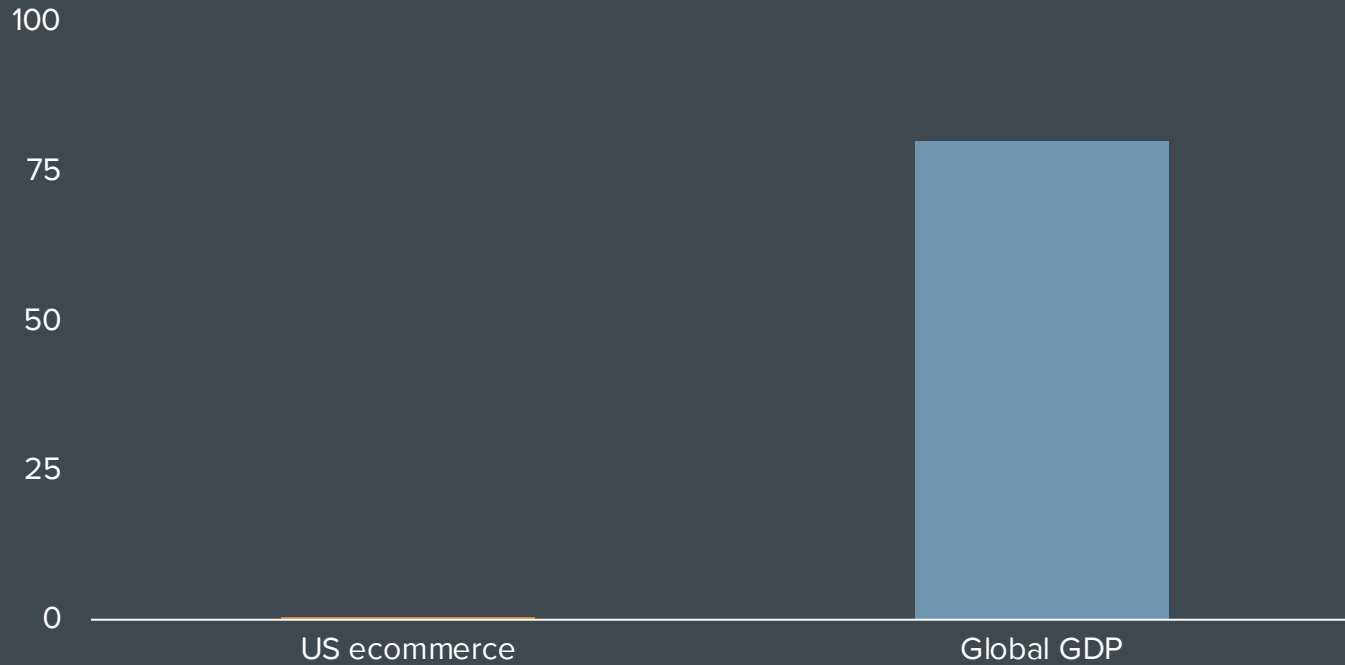
Advertising

Next 20 years

Everything else

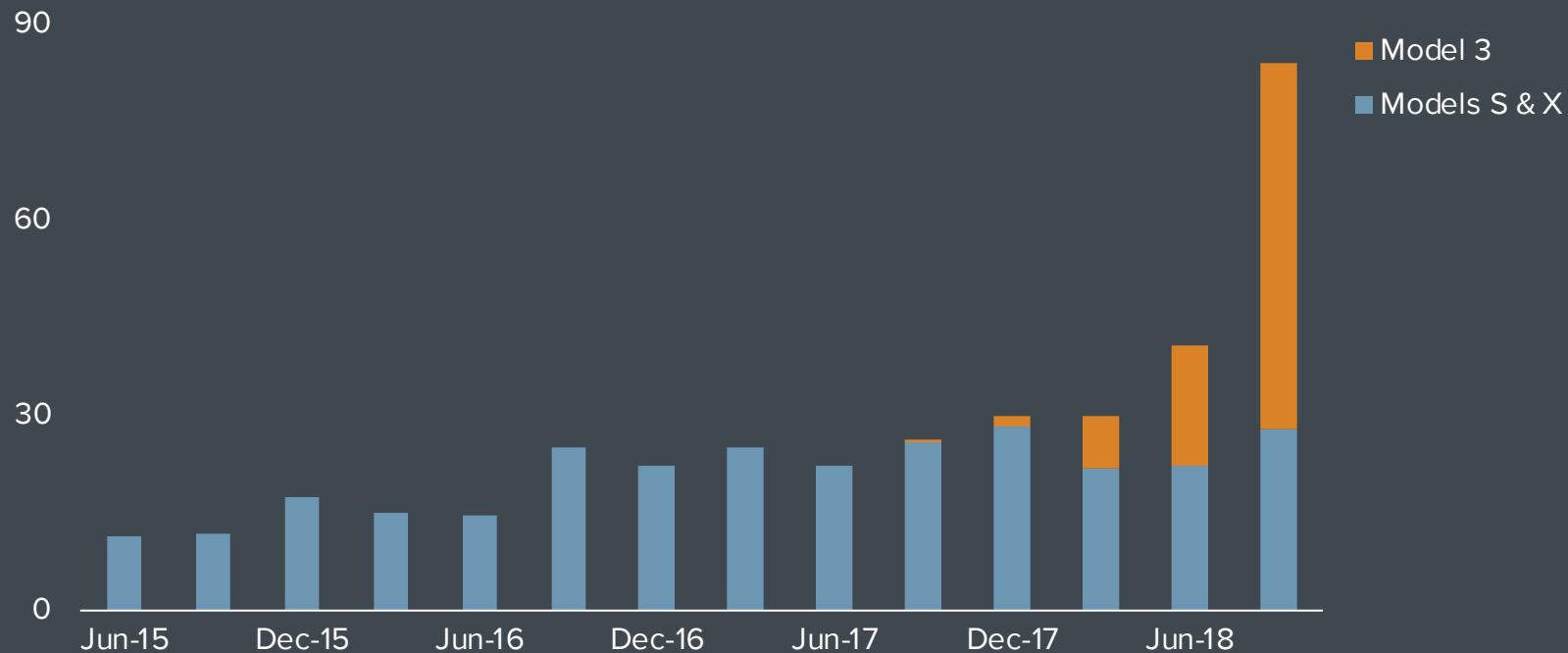
What's the opportunity?

Market size, 2017 (\$tr)



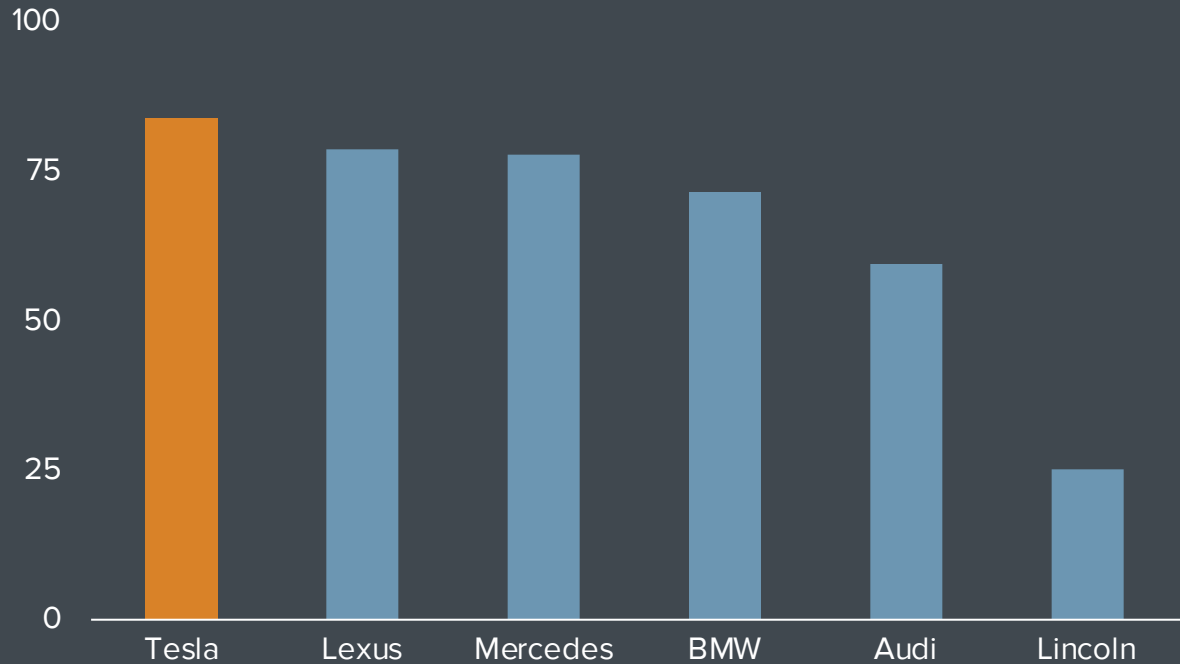
Tesla eats cars?

Quarterly unit deliveries (000)



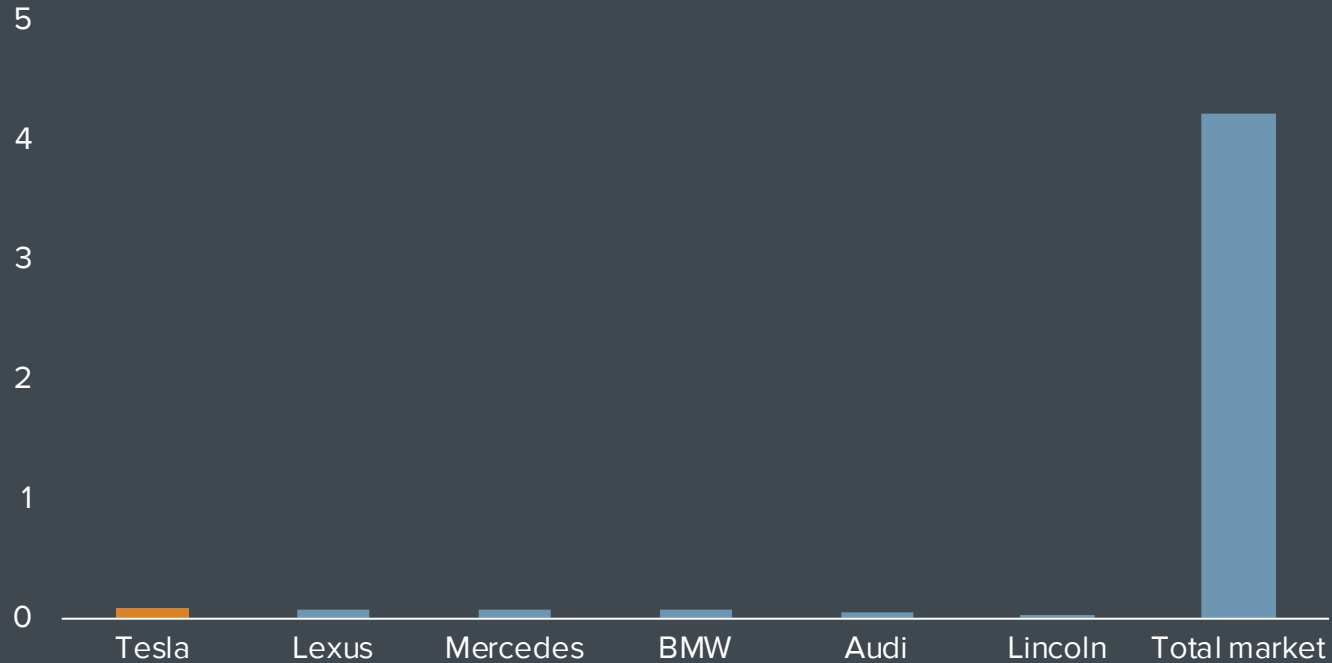
Tesla eats cars?

Q3 2018 US car sales (000)



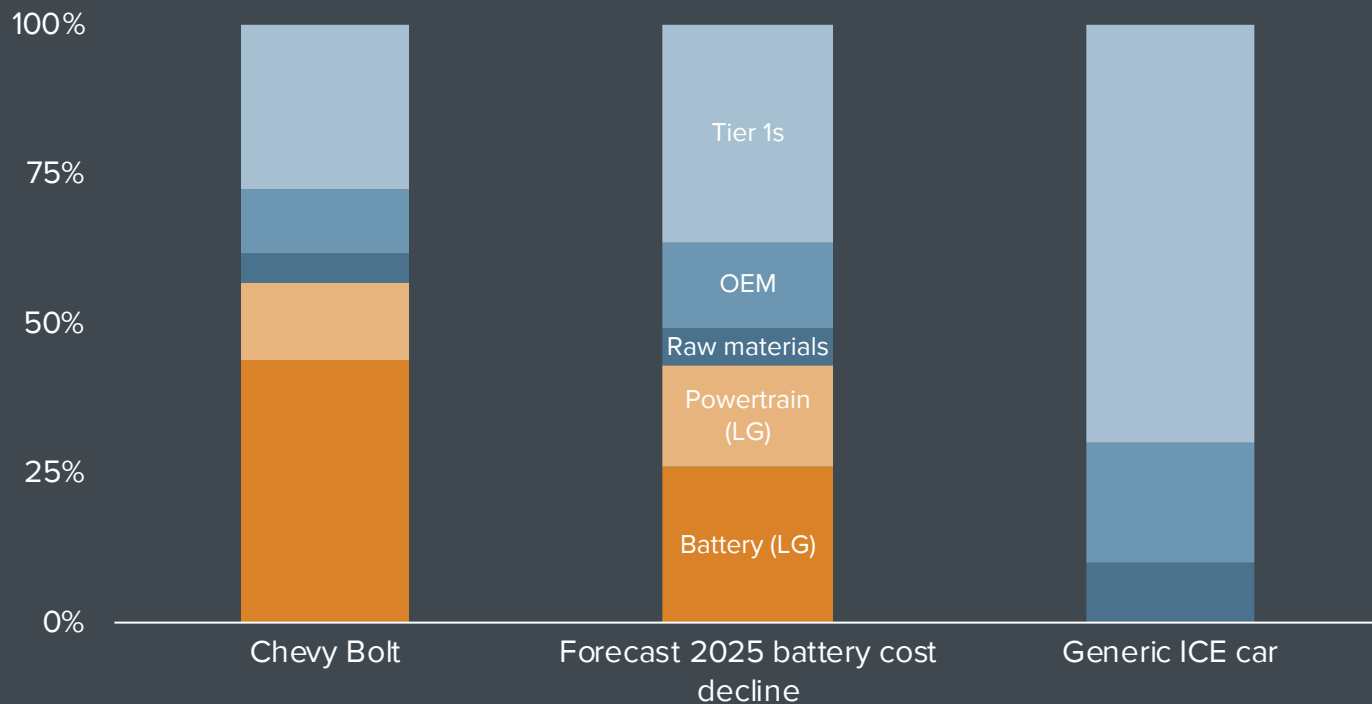
What's the real opportunity?

Q3 2018 US car sales (m)



More interesting: software and silicon eat cars

Component cost share



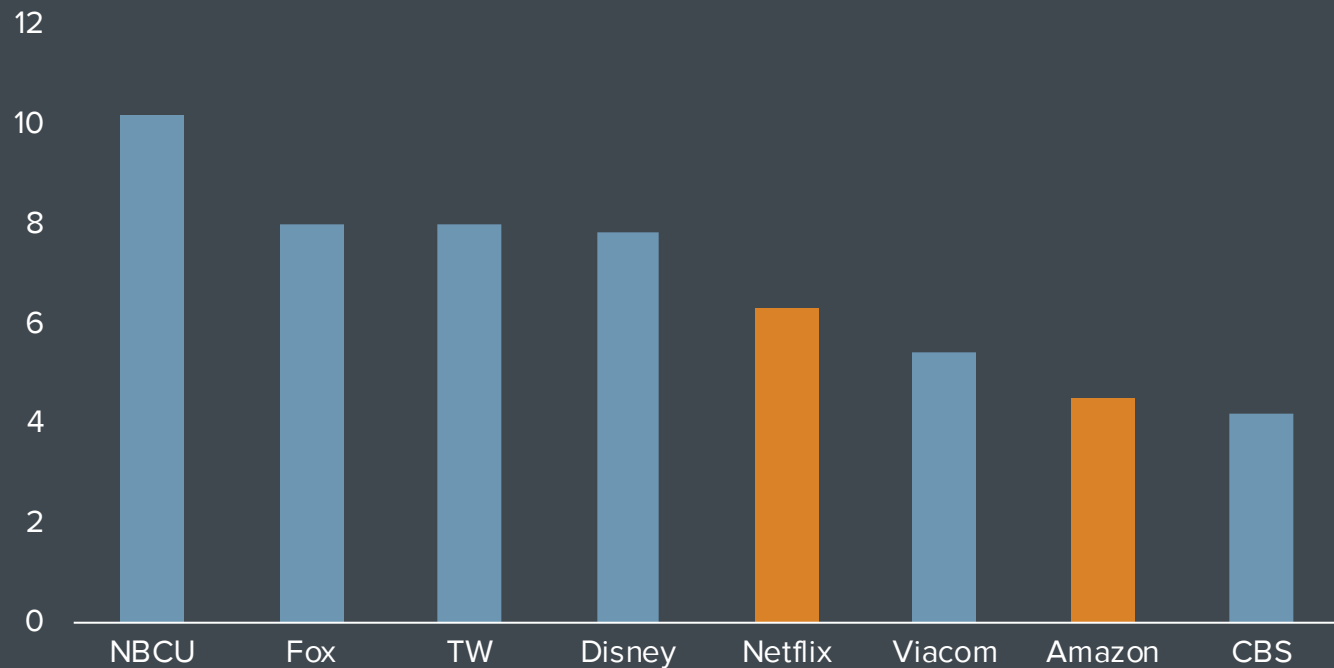
More interesting: changing what cars are

Software and batteries are unbundling cars and car journeys



Software eats TV?

Non-sports programming spend, 2017 (\$bn)



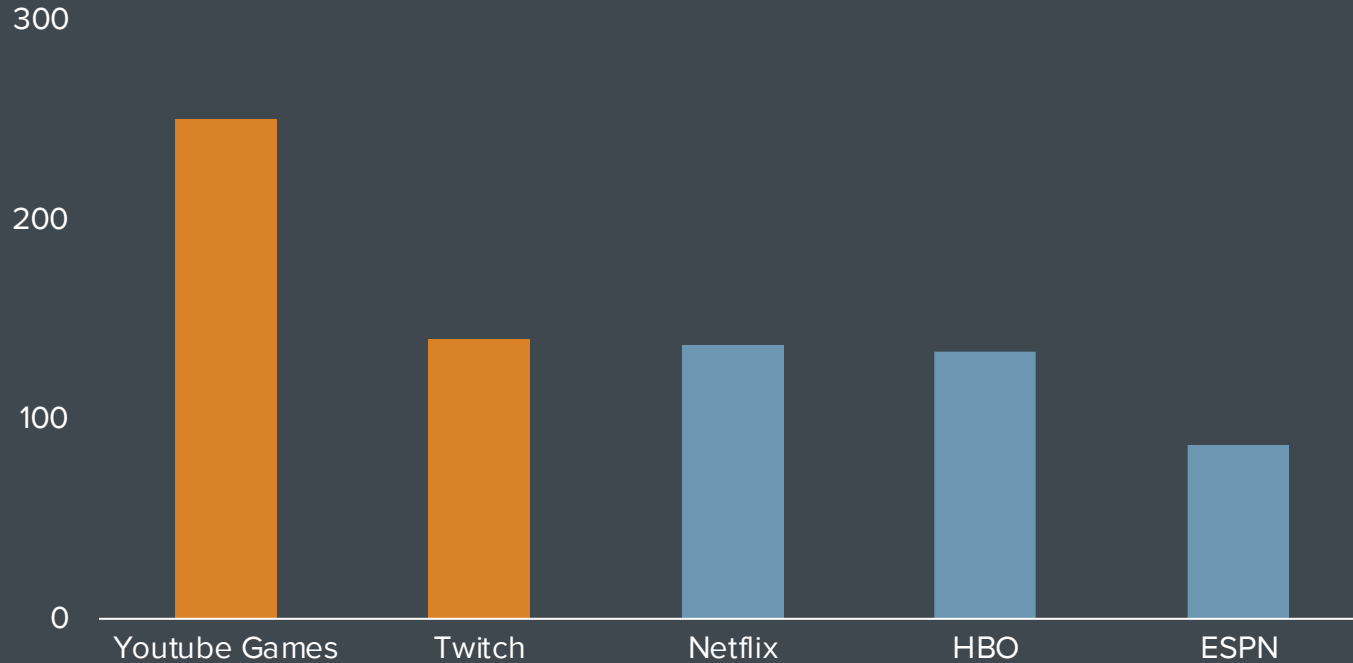
Is Netflix a threat?

“Is the Albanian army going to take over the world?”

- Jeffery Bewkes, CEO Time Warner, 2010

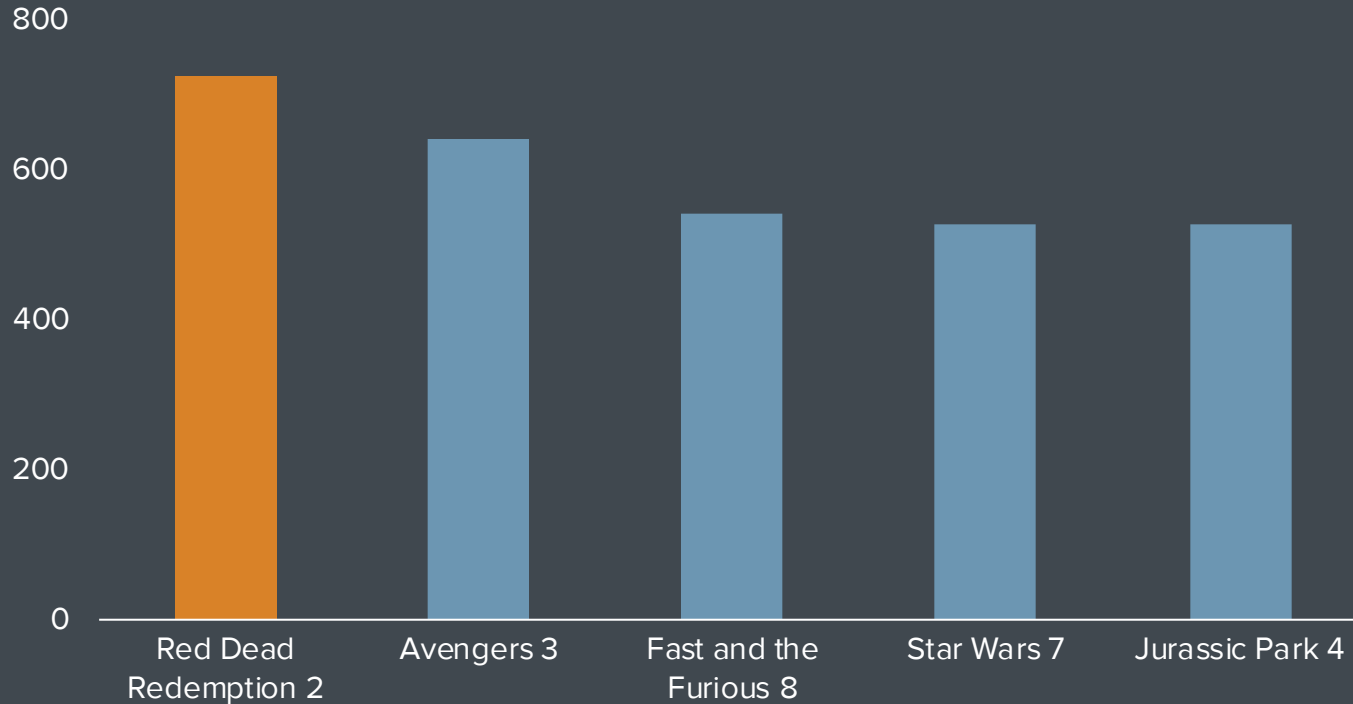
More interesting: what is TV?

Global audience, 2018 (m)



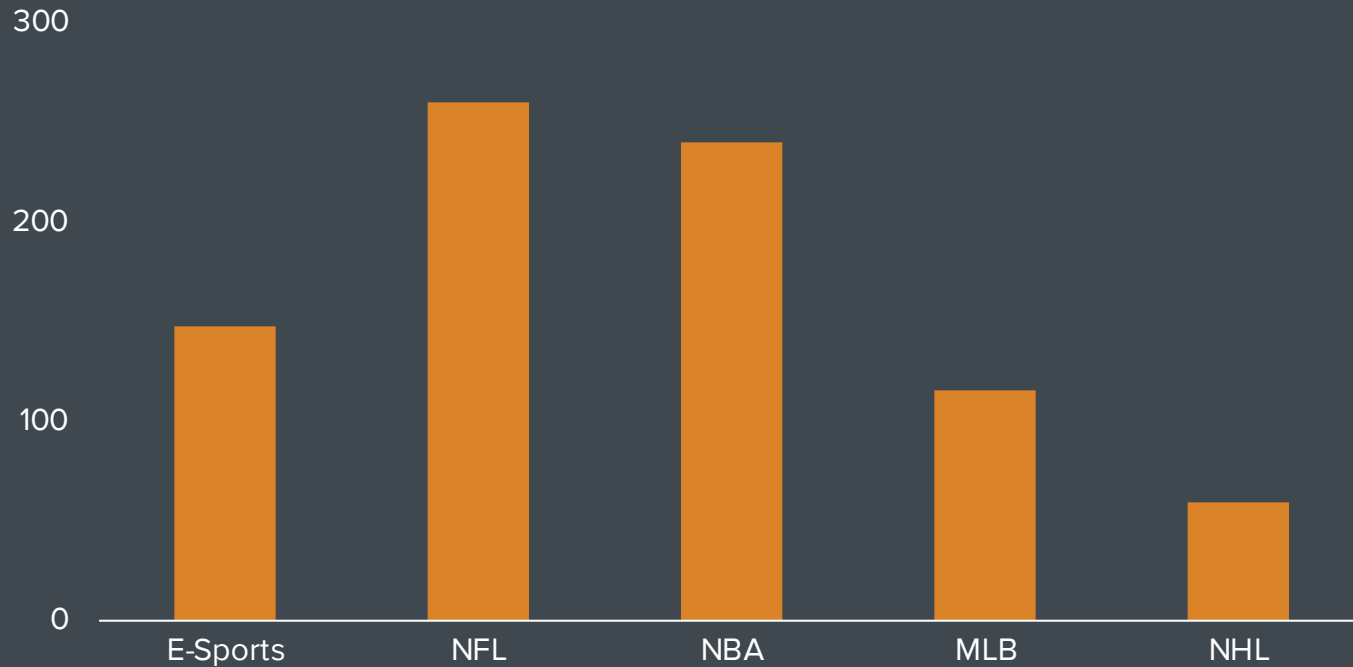
More interesting: what's an 'opening weekend'?

Record global opening weekend sales (\$m)



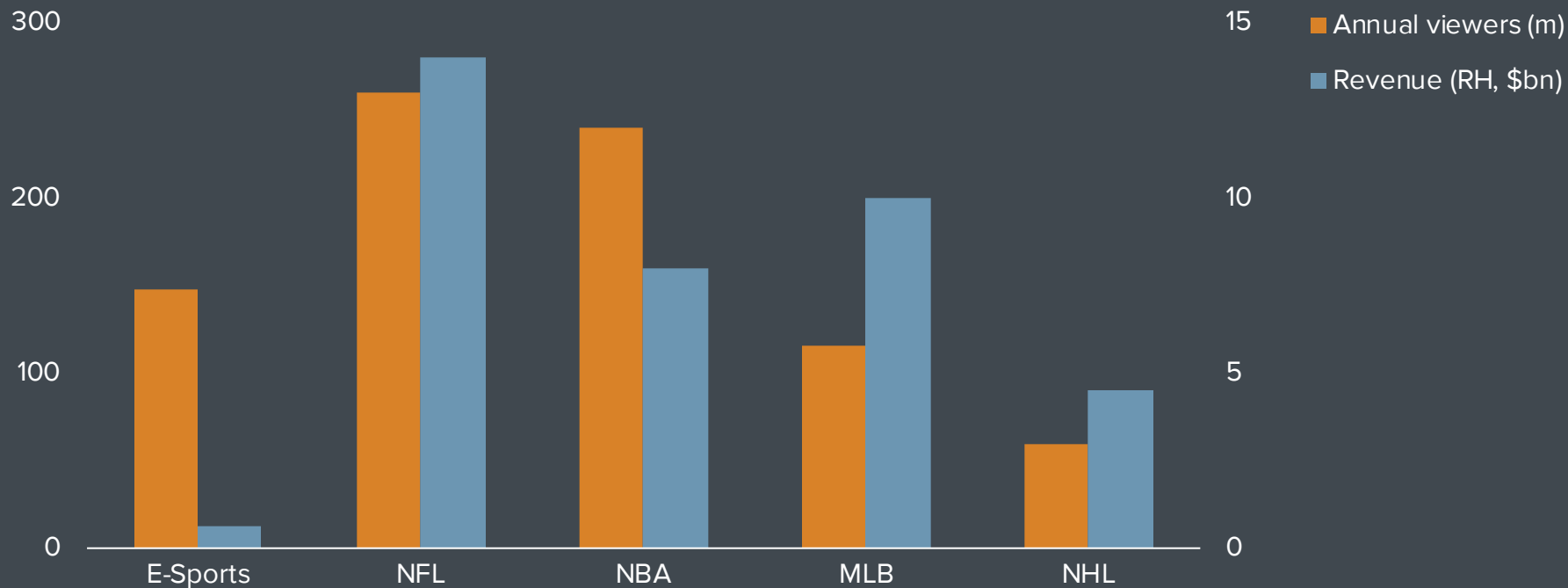
E-sports are big...

Annual viewers, 2017 (m)



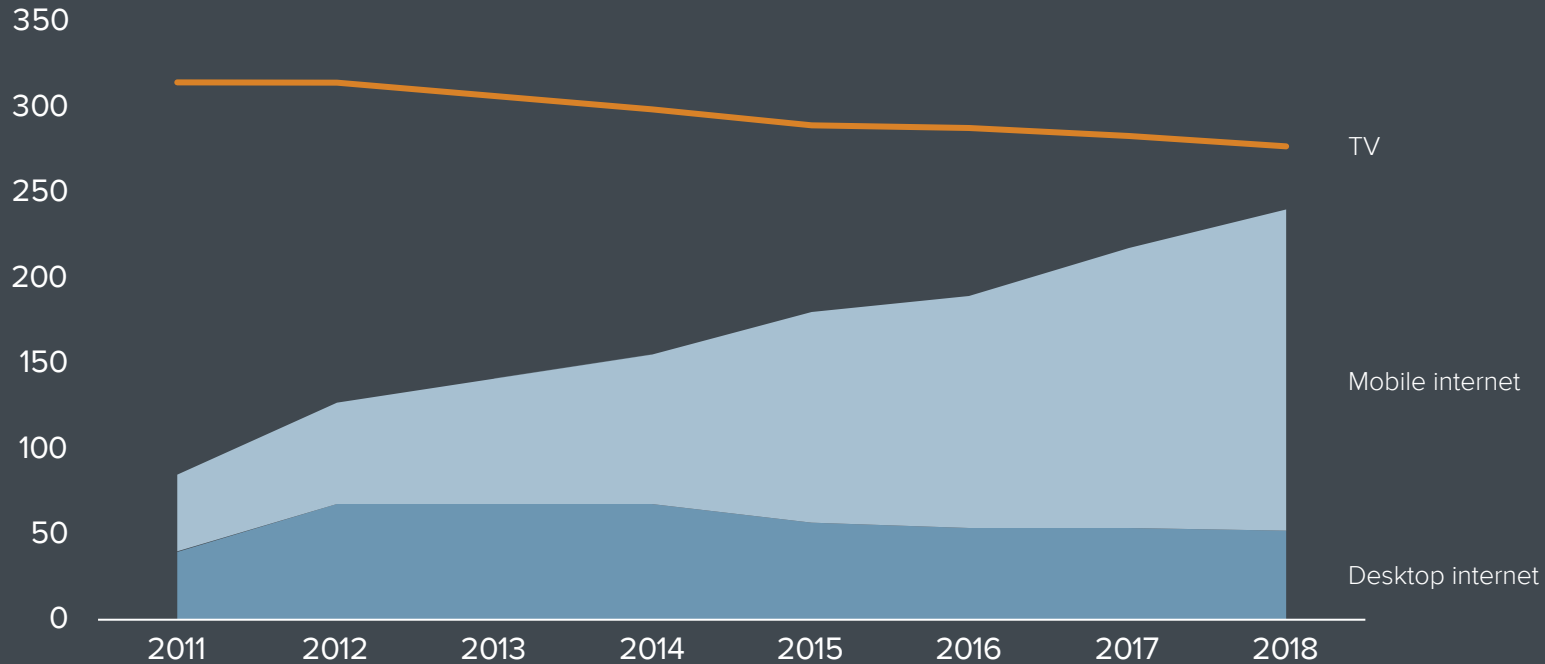
But the money is not, yet

Annual viewers and revenue, 2017

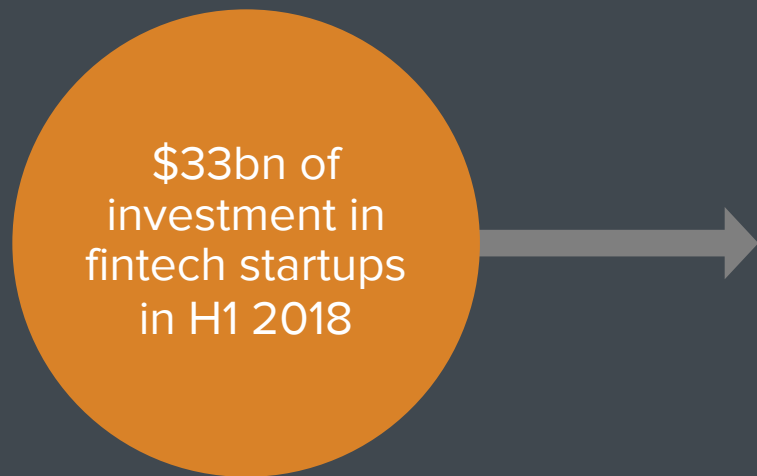


And where is that viewing going?

Average daily minutes of consumption per person, USA



Software eats money?



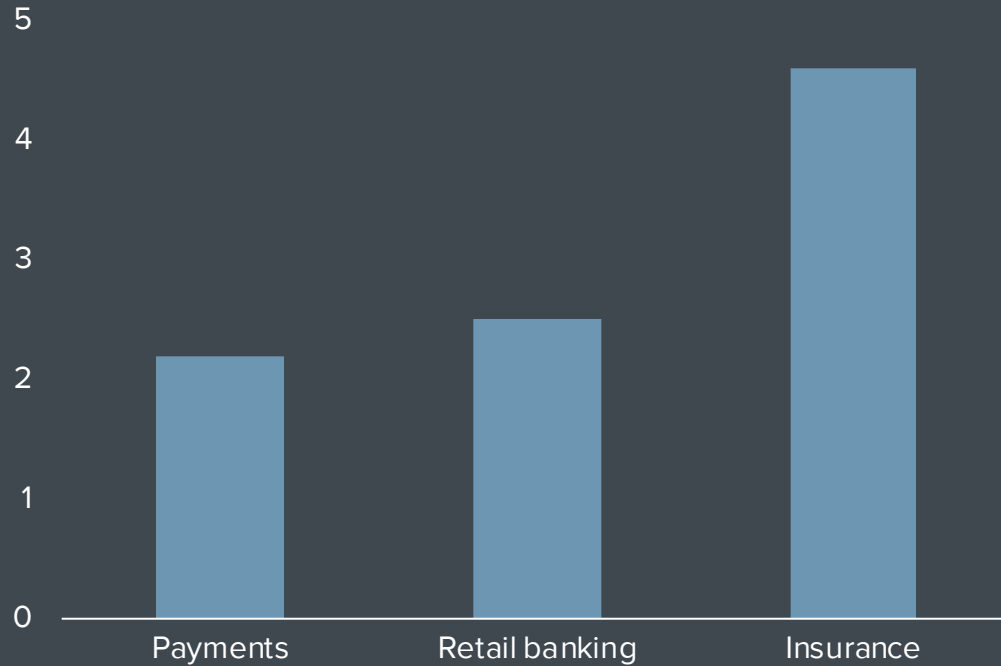
Old: price comparisons (lightweight, information arbitrage)

New: credit scores (information processing, full stack)

Just scratching the surface

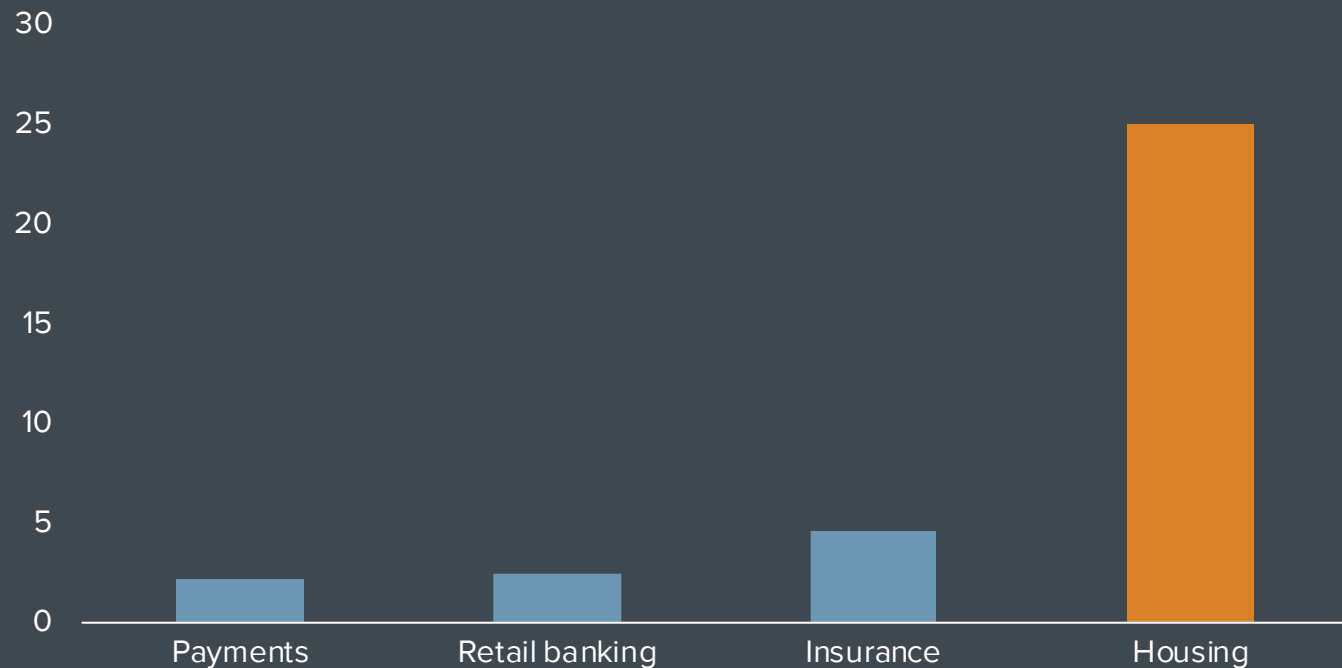
What's the real opportunity?

Global market size, 2017 (\$tr)



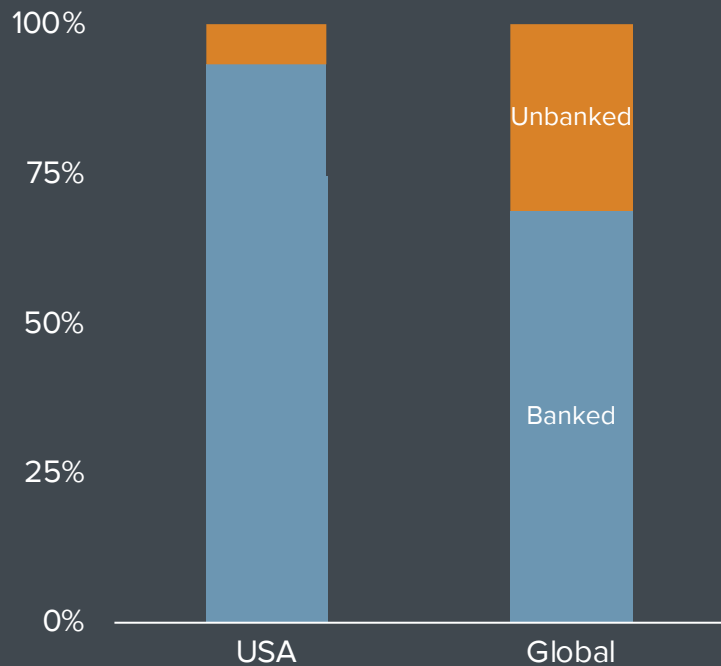
There's a lot of money in money

Global market size, 2017 (\$tr)



And yet lots of people untouched

Global population, 2017

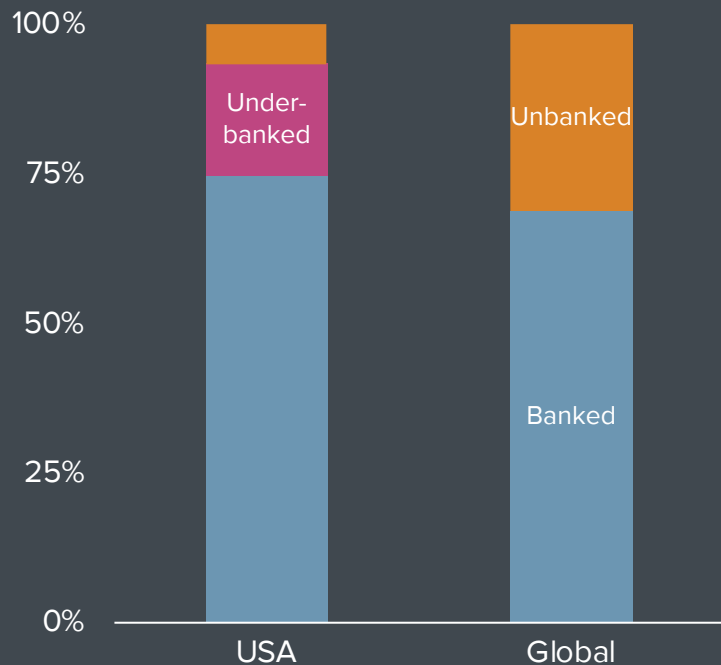


Different customers, different needs

Totally new models to address these people

And yet lots of people untouched

Global population, 2017

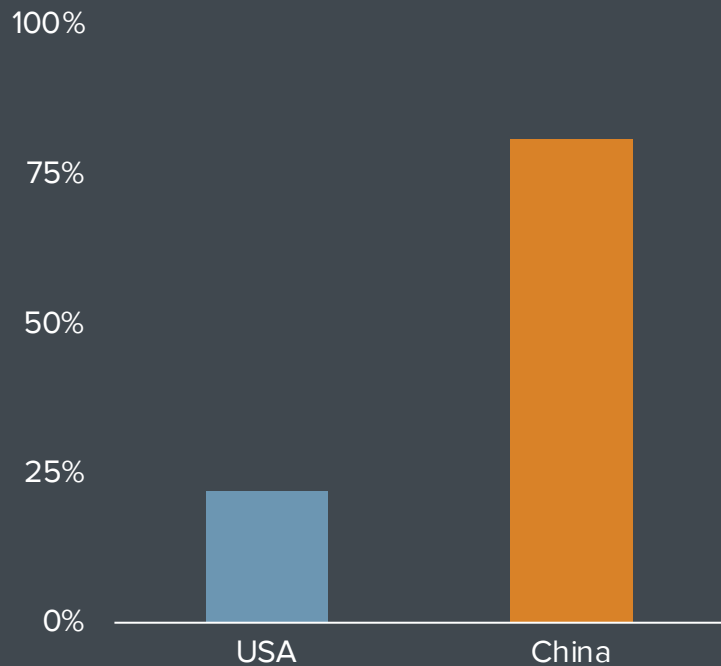


Different customers, different needs

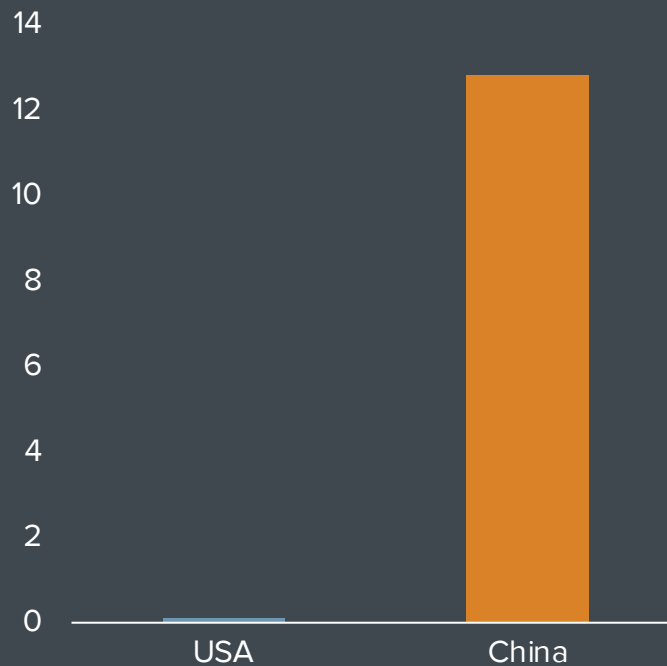
Totally new models to address these people

(and the USA is behind)

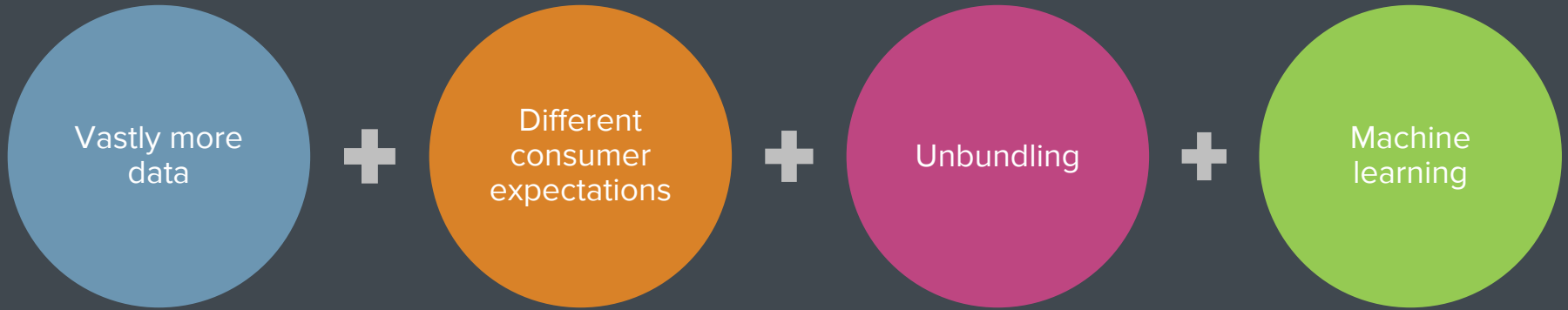
Mobile payment penetration, 2018



Mobile payment value, 2017 (\$tr)



New kinds of solution



Software eats death?



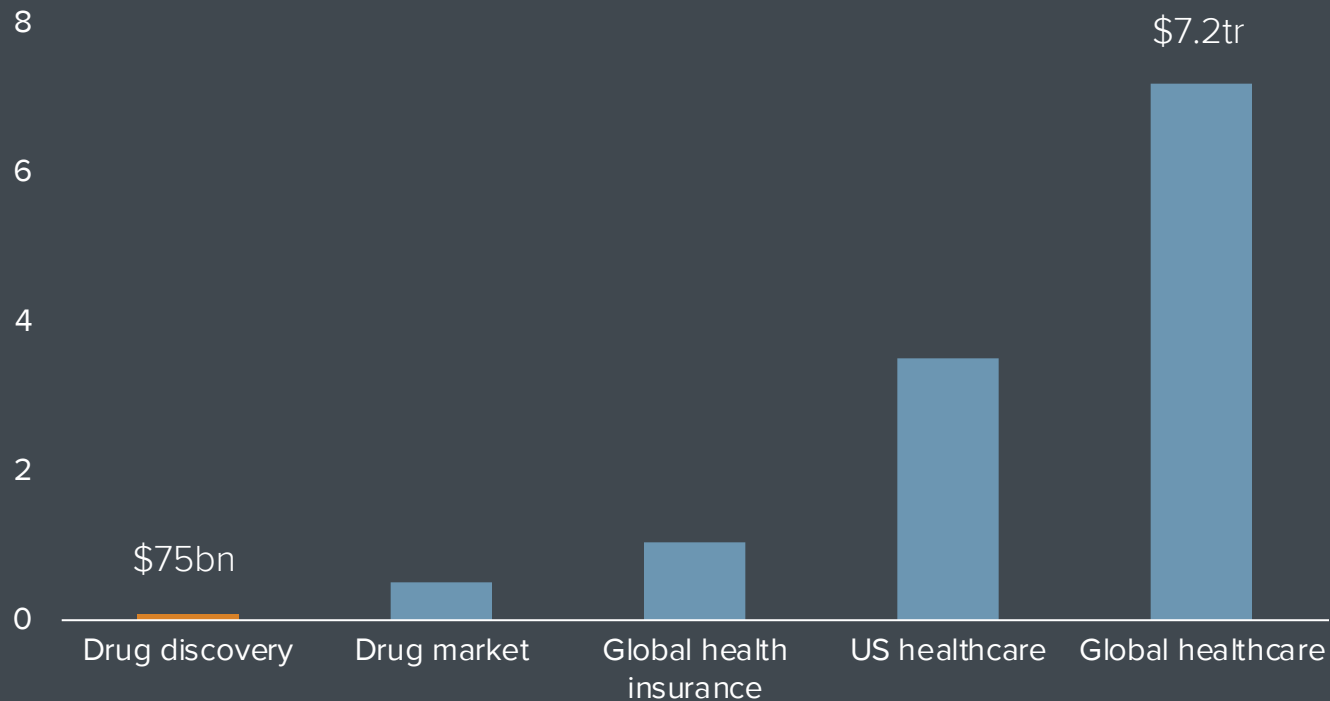
Machine learning transforms discovery

Social and wearables transform trials

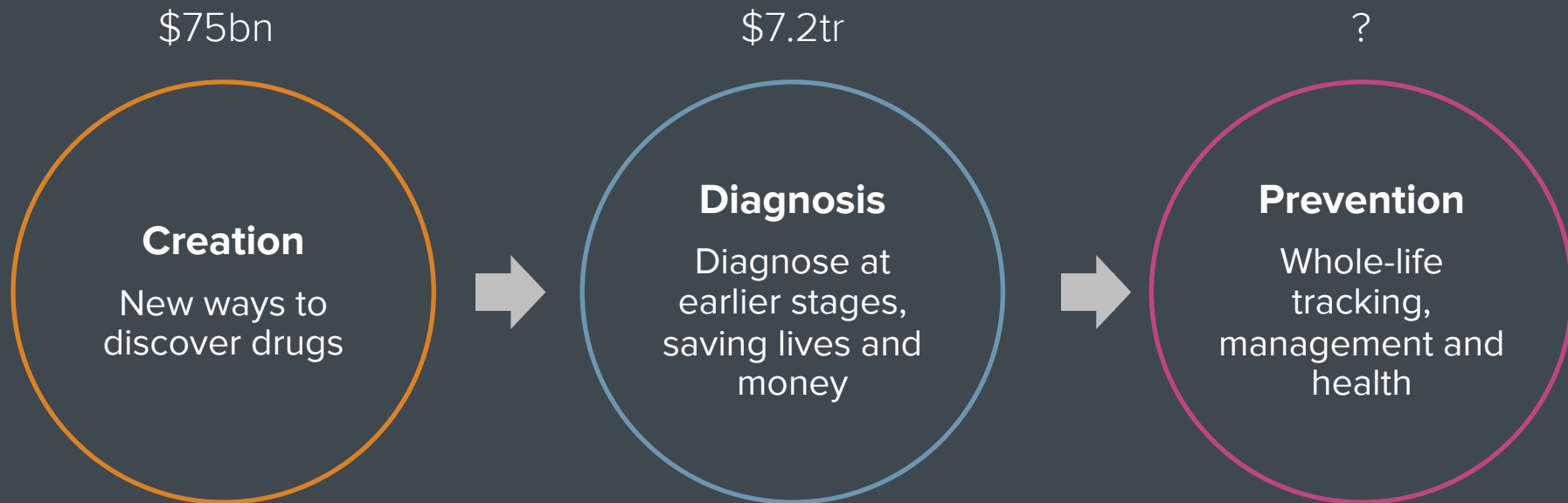
Programming genes and cells means new kinds of cure

What's the real opportunity?

Annual spending, 2017 (\$tr)



More interesting: software changes what bio can address



\$7.2tr is spent on healthcare

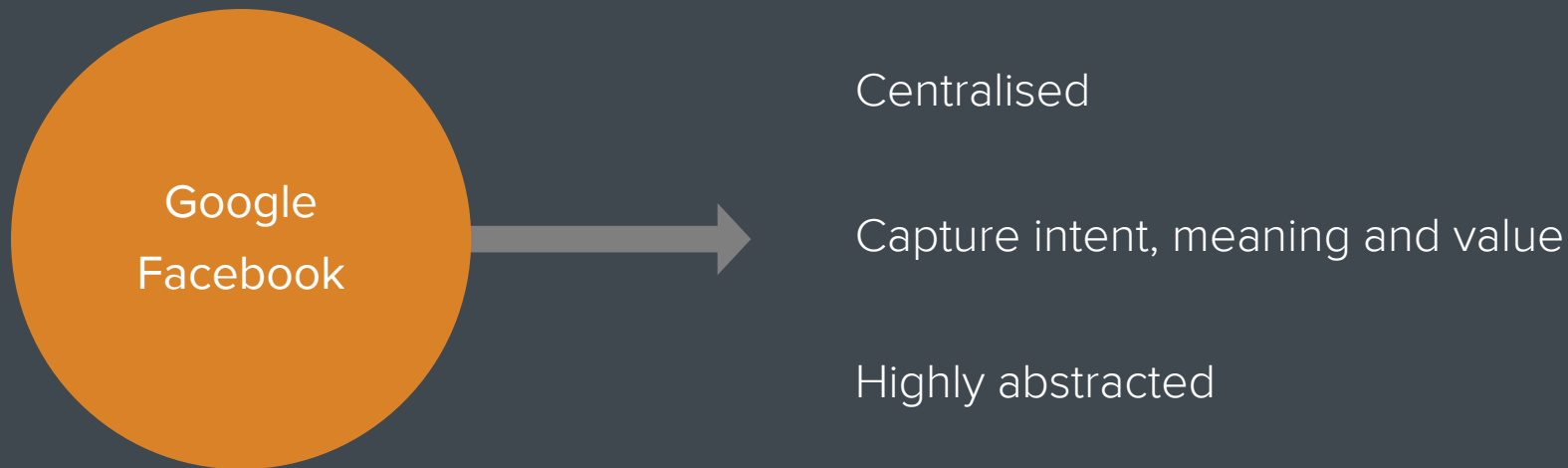
But what's the total cost of being sick?

And what's the value of not getting sick?

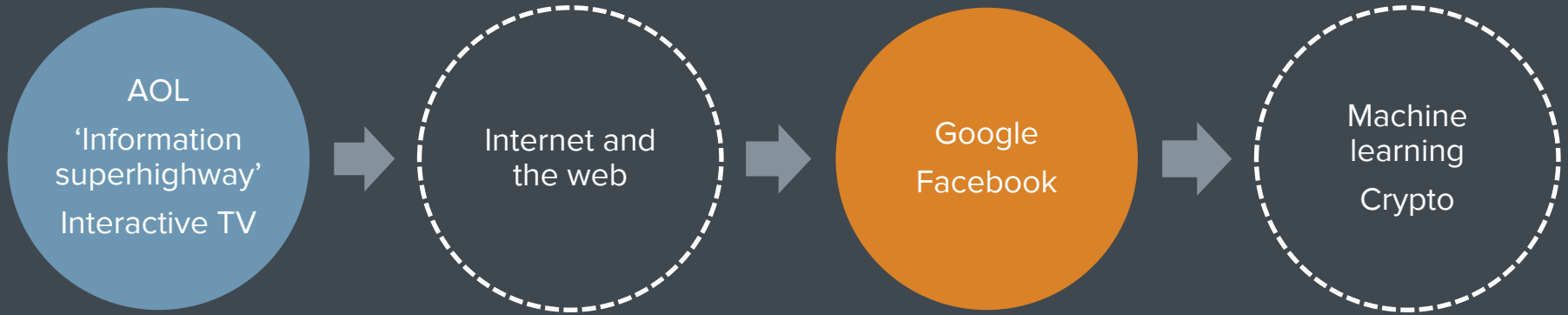
Organising the internet



Organising the internet



Organising the internet



What is this?



Old: abstraction and extrapolation

Google

It's on pages that
say "Wishbone"
and "Hans
Wegner"

Facebook

People who like
furniture shared
links to this

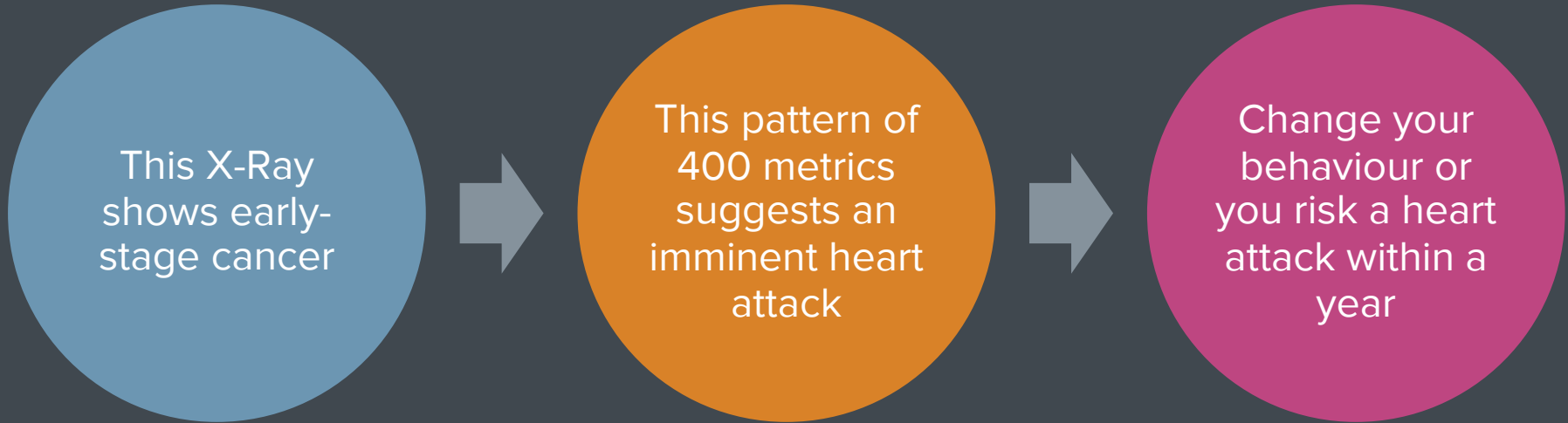
Amazon

It's a SKU. I don't
understand the
question

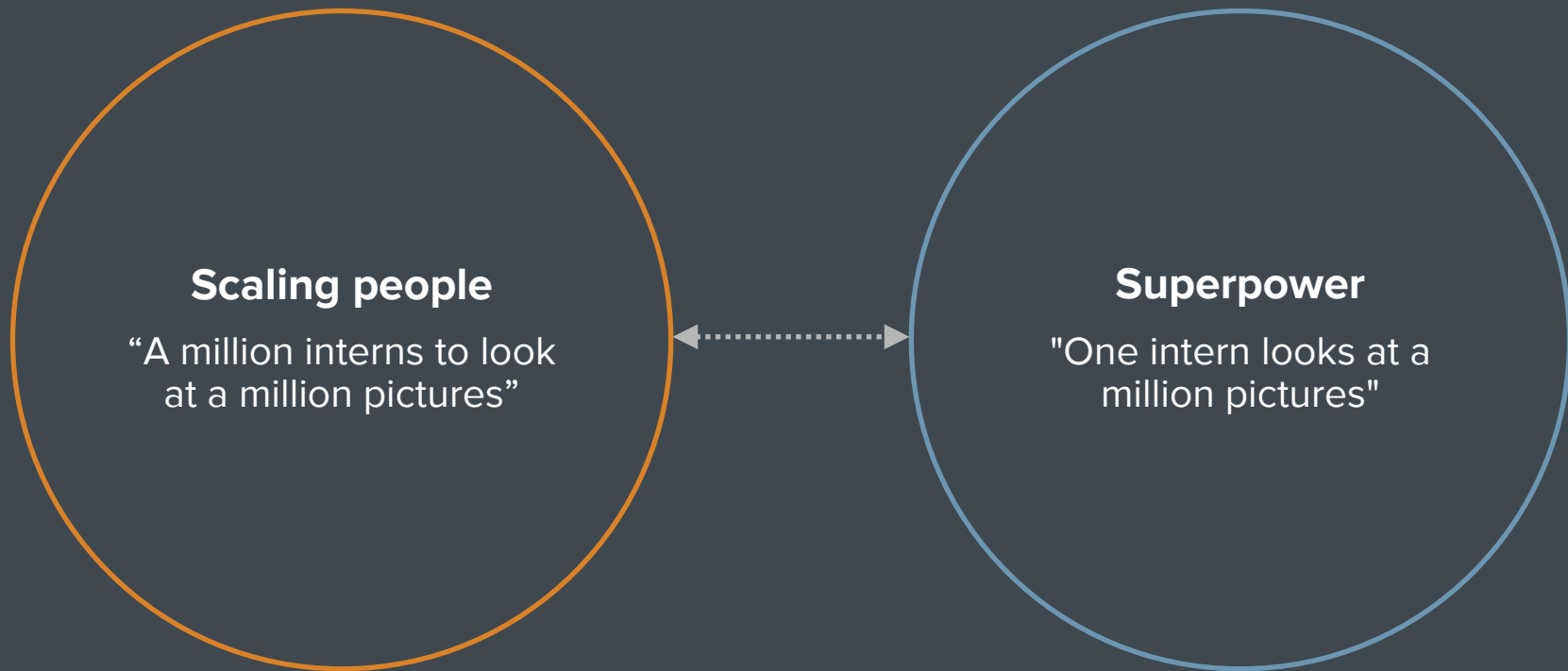
New: levels of meaning



And not just about consumer



Machine learning as tools to scale people



Crypto?

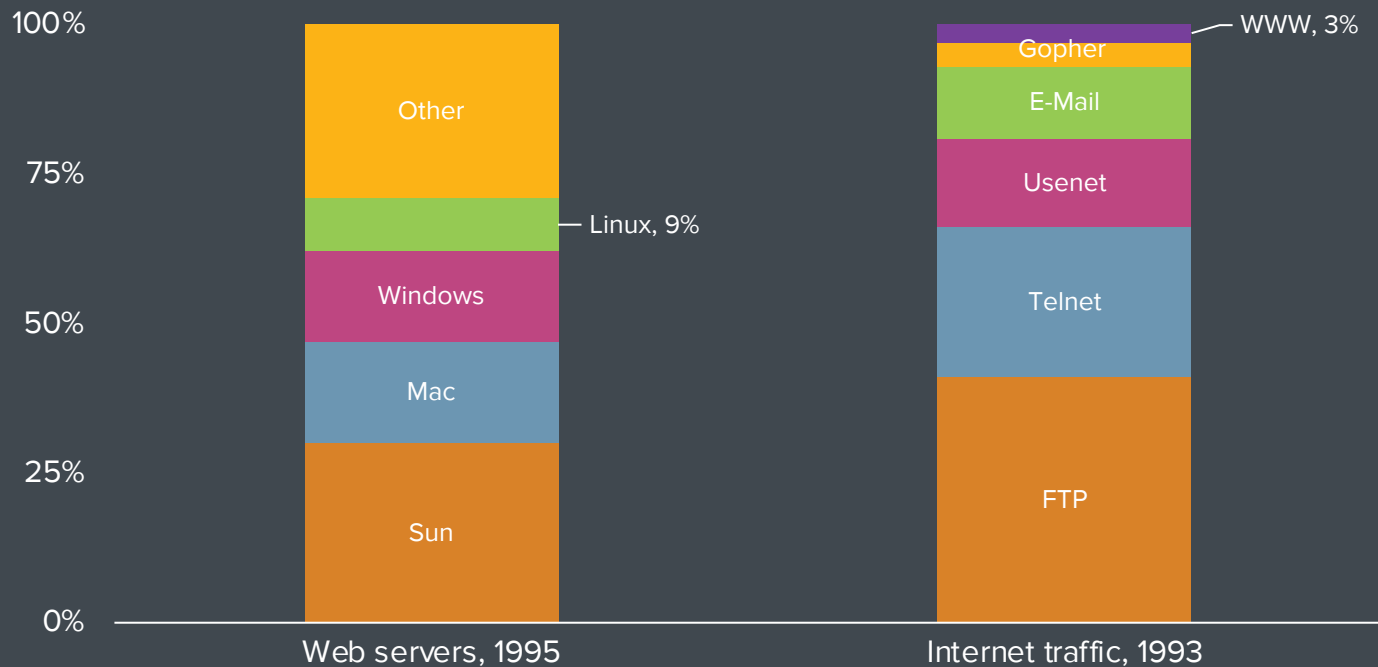


1993: “Why does ‘the internet’ matter?”

Distributed, decentralised,
permissionless network where anyone
can build applications

What applications?

Early share in tools and application layers did not last

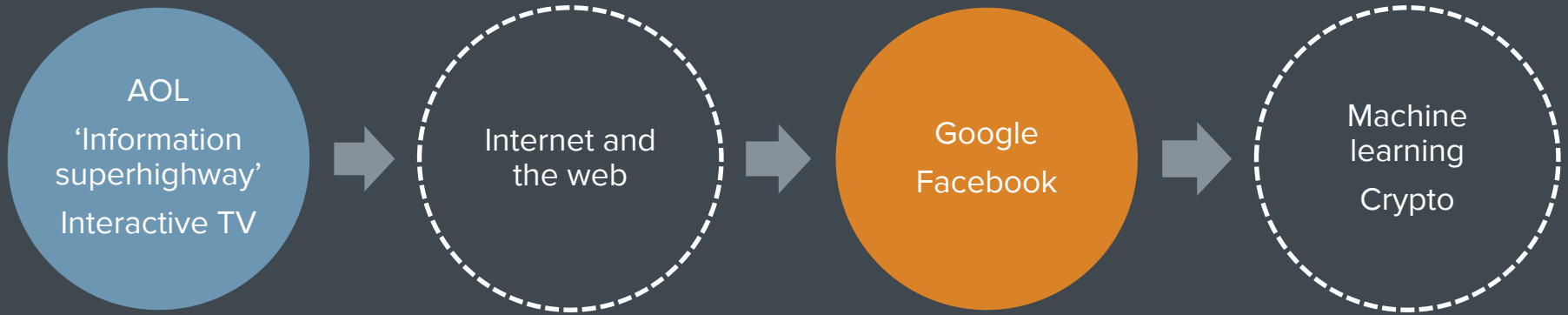


2018: “Why does ‘crypto’ matter?”

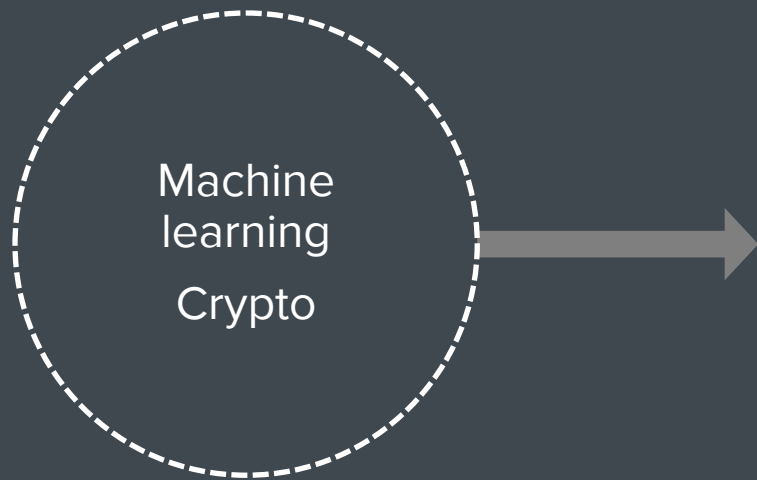
Distributed, decentralised,
permissionless network where anyone
can build applications

With native trust, value exchange and
payment

Organising the internet



New organising layers



New ways to find meaning and intent

New ways to build networks connecting desires, behaviour and value

Decentralised and permissionless

(And a market reset)



“I sell books”



“I sell books”



“I sell whatever I want”



