



Aalto University

# Infusing Customer Insight into Digital Retail



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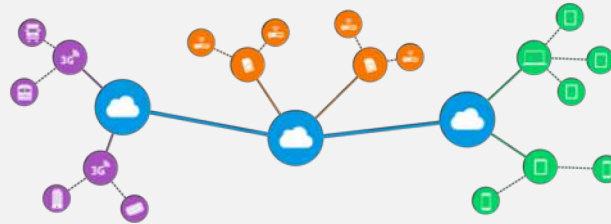
## Research interests and areas:

- Platform Economy
- E-Commerce
- Strategic Management
- Customer Behavior
- Information Systems

## Platform economy and retail digitalization



## Managing customer insight



## Platform mediated work and entrepreneurship



# Agenda for this morning

## 1) Digital retail

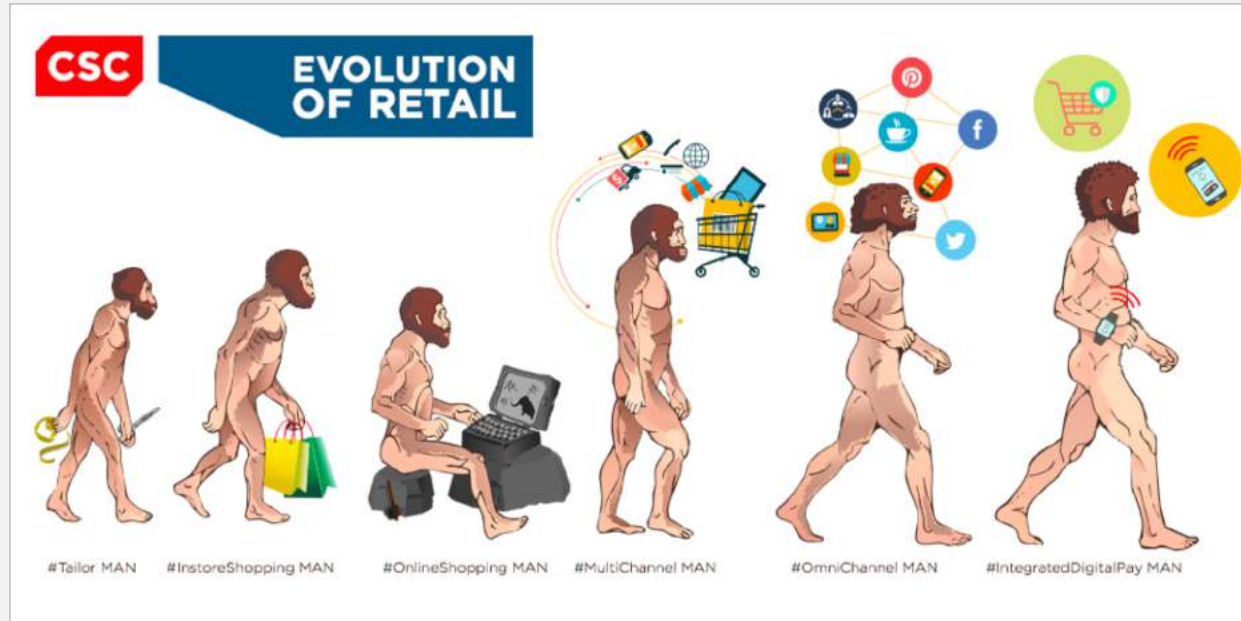
- *What are the current trends shaping the retail sector and customer behavior?*
- *What is the role of customer insight in retail today?*

## 2) The Platform Economy and Retail

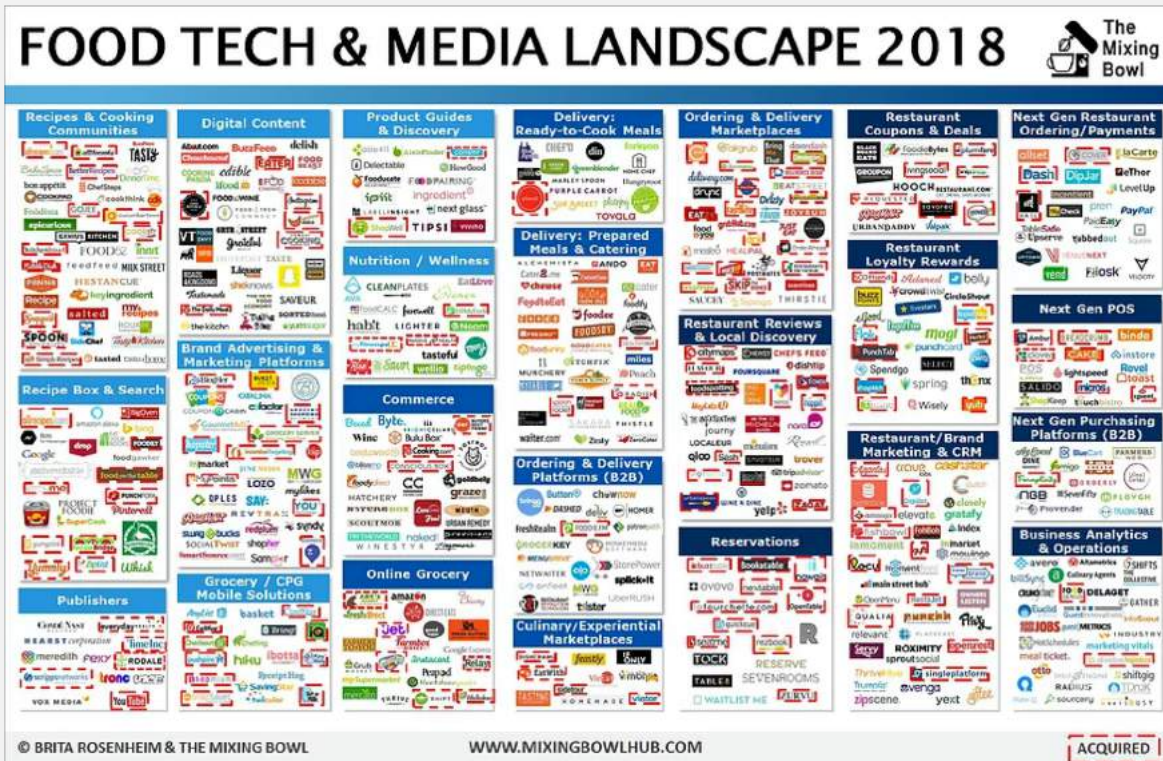
- *Why are digital platforms increasingly popular amongst consumers?*
- *How do platforms built their competitive advantage on the use of customer insight?*

# Digital Retail

# Retail has undergone a major digital transformation during the past century



# Accordingly, many are trying to "grab" a share of the retail value chain



# Most importantly, customer insight has been infused into retail business



*“Supply-driven”* retail



*“Demand-driven”* retail



*“customer experience, in addition to a value proposition centered on **large selections, customization, convenience, customer engagement, and price**, has become the deciding factor for success in the sector.”*

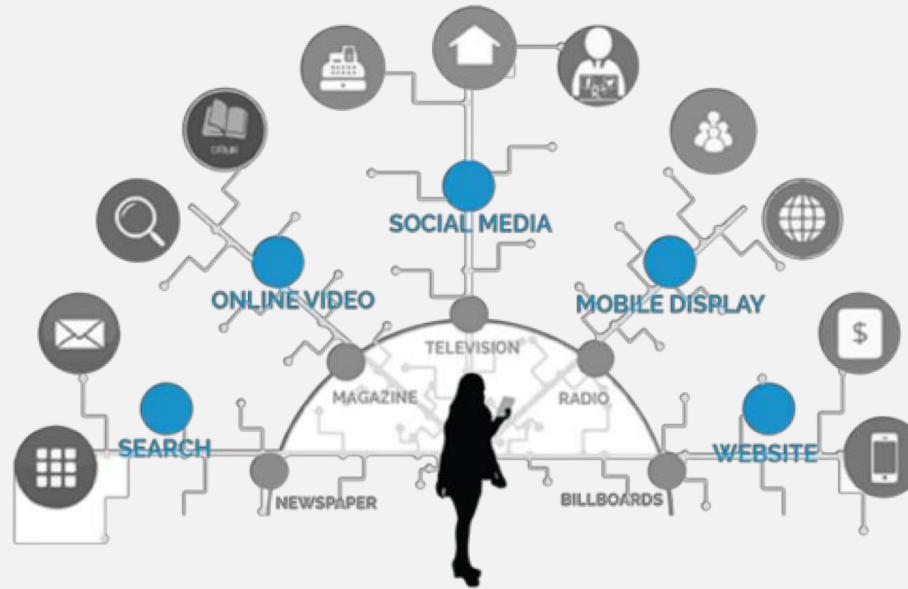
(Hänninen, Mitronen & Kwan, 2019)

# Digitalization is enabling customers to fulfill different consumption needs



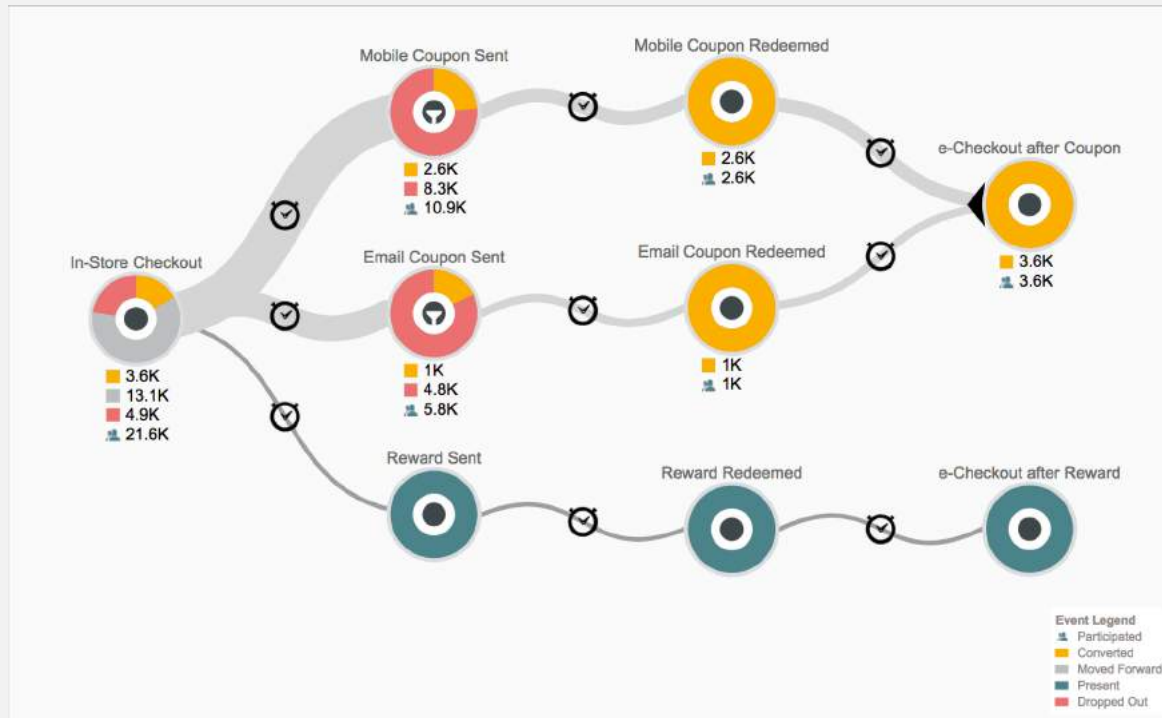
Bemis Company (2018)

# As such, customer journeys are increasingly complex



Smartrevenue

# This makes managing customer experience extremely complicated



Pointtillist

# A large innovation has been the use of customer data to understand needs of individual customers

Segmentation



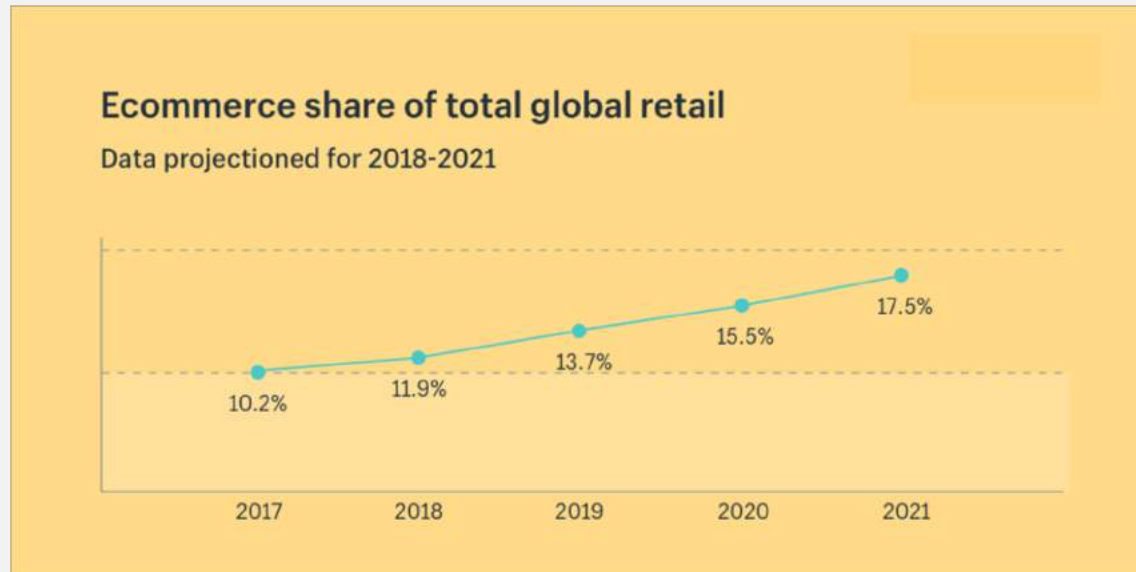
VS

Individual needs





# Online retail is enabling customers have increasingly personalized shopping experiences



Shopify



# At the same time digital business models have raised expectations of customer experience to new heights





# For example, DTC business models enable customers to bypass the retailer



## DIRECT-TO-CONSUMER APPAREL & ACCESSORIES

**WOMENSWEAR**  
 REFORMATION CUYANA WILDFANG  
 JUSTFAB DOW & DRAPE  
 POLLS KILL MAIYET  
 ELOQUI ModCloth

**MENSWEAR**  
 INDOCHINO BONOBOS TRUMAKER  
 FRANK & OAK chubbies  
 MIZZEN+MAIN MTAILOR  
 MACK WELDON Tucker Blair

**ACTIVEWEAR**  
 cotopaxi Outdoor Voices  
 RHONE

**CHILDREN'S WEAR**  
 primary

**UNDERWEAR & LINGERIE**  
 McJannet Tommy John ADORE ME  
 THIRDLOVE NAJA LIVELY

**COSMETICS**  
 PINROSE STOWAWAY  
 PHAR Glossier.

**ACCESSORIES & LEATHER GOODS**  
 RADEN WARBY PARKER AWAY BAUBLEBAR

**PERSONAL CARE**  
 LOLA Ritual HARRY'S

**SHOES**  
 M. GEMI allbirds  
 bucketfeet JACK ERWIN GREATS

**GENERAL APPAREL**  
 GRANA EVERLANE MINISTRY CBINSIGHTS

# Example. P&G and DTC competitors



# Brands are engaging digital solutions to create more experiential business models



Samsung

# Thus, digital technologies will further reshape the retail landscape in the future

## RETAILERS CITE THE TECHNOLOGY TRENDS SHAPING THE FUTURE PERCENTAGE OF RESPONDENTS PLANNING INVESTMENTS BY 2021



**2021 70%**

### INTERNET OF THINGS

Giving a digital voice to people, processes and things to improve the customer experience, enhance supply chain visibility and expand revenue opportunities.



**2021 68%**

### MACHINE LEARNING / COGNITIVE COMPUTING

Analytics and predictive models to help retailers personalize customer experiences and enhance inventory demand, forecasting and visibility.



**2021 57%**

### AUTOMATION

Automation for packing and shipping orders, inventory tracking, checking in-store inventory levels and assisting customers in finding items.

Forbes (2017)



# Some frontrunners have been able to use technology to rejuvenate their business



Rapha, Brewer St.



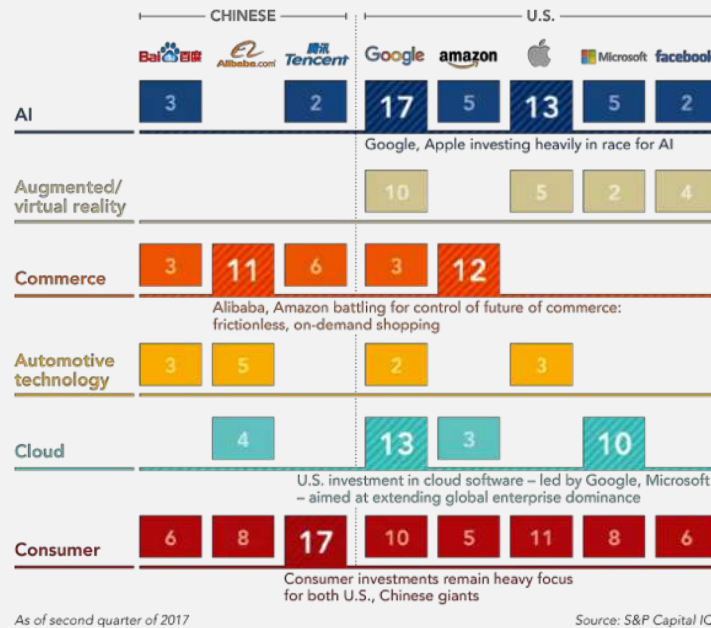
Nike Town, Oxford St.



Primark, Oxford St.

# However, particularly the digital "giants" are also ready to make the leap to future technologies

Number of acquisitions, private placements by Chinese, U.S. internet titans since 2012



# In the future technology, data and customer understanding are largely present in retail business models



Alibaba Group

# Thus, traditional players need to react and stay on top of the competition

**Macy's is making a move that signals the death of department stores as we know them**

Mary Haddonby | CNN Business | 7/16/2018, 11:48 AM



Macy's is shrinking some of its stores, according to a new report.

- Macy's is shrinking some of its less productive stores and cutting back on staff.
- CEO Jeff Gennette told *The Wall Street Journal* that he planned to cut down on merchandise so that these smaller locations require fewer employees and that he hoped a more curated assortment would create a better shopping experience for the customer.
- Macy's has used a similar strategy in the past to stave off store closings.

Macy's has a double plan to boost sales in its less successful stores. In an interview with *The Wall Street Journal* on Monday, CEO Jeff Gennette said the department store chain would shrink its less productive stores and cut back on staff at those locations.


Gennette said he hoped that by focusing less merchandise he would through, Macy's could create a cleaner shopping environment and ultimately a more desirable experience for the customer.

So far, Macy's is testing the new format at four locations, cutting as much as one-third off the total space.

**VIDEOS YOU MAY LIKE**

- A 63-year-old model reveals the secrets that have her back.
- Anthony Bonaventura: The entrepreneur who built a multi-billion-dollar fortune.
- How to win a million dollars.
- How to win a million dollars.
- How to win a million dollars.

**The Download** | What's up in emerging technology | July 16, 2018



**Walmart wants us to believe it's turning into a tech company**


Its latest partnerships and new services show the retailer's continued evolution toward becoming a tech-focused business.

**The latest ventures:** Earlier this week, Microsoft and Walmart announced a cloud computing partnership—that is, a collaboration between Amazon's biggest retail and cloud competitors. Microsoft CEO Satya Nadella told the *Wall Street Journal* that the shared rivalry is "absolutely core" to this deal. Then yesterday *The Information*

**Tesco** | Tesco trials 'shop and go' app in till-free store

Retailer says it will consider expanding scheme - but some shoppers may simply not pay

Zoe Wood | @zoeswood | The 28 Jun 2018 18:24:57



▲ Tesco's Scan Pay Go technology may appeal to time-pressed shoppers. Photograph: Danny

Tesco is trialling new "shop and go" technology that allows customers to scan and pay for their groceries on their smartphone and then walk out of the store without visiting a till.

The retailer is using staff at its Welwyn Garden City headquarters as guinea pigs for the service in a purpose-built Express convenience store on the site. Tesco has installed the app, Scan Pay Go, on the mobiles of 100 staff who are able to use it to scan barcodes and then pay for their shopping.

Traditional bricks-and-mortar retailers are investing in new technology as they try to keep pace with online rival Amazon, which opened an automated convenience store in the US earlier this year. The Co-op has already introduced pay-in-the-aisle technology, while Sainsbury's tested a similar app in 2017.



# Many retailers have already lost the game





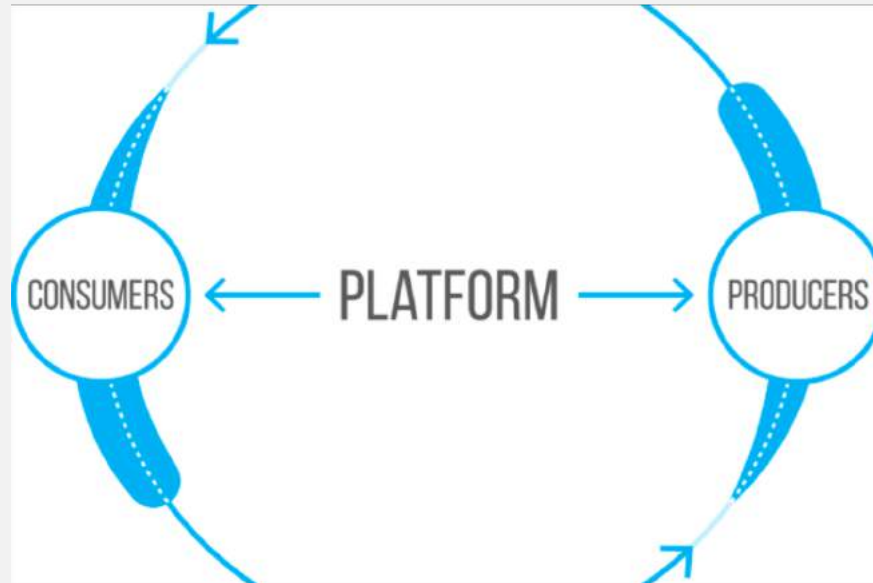
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# The Platform Economy and Retail

”[The Digital Platform Economy] *has led to radical change in how we work, socialize, create value in the economy, and compete for the resulting profits.*”

(Kenney & Zysman, 2017)

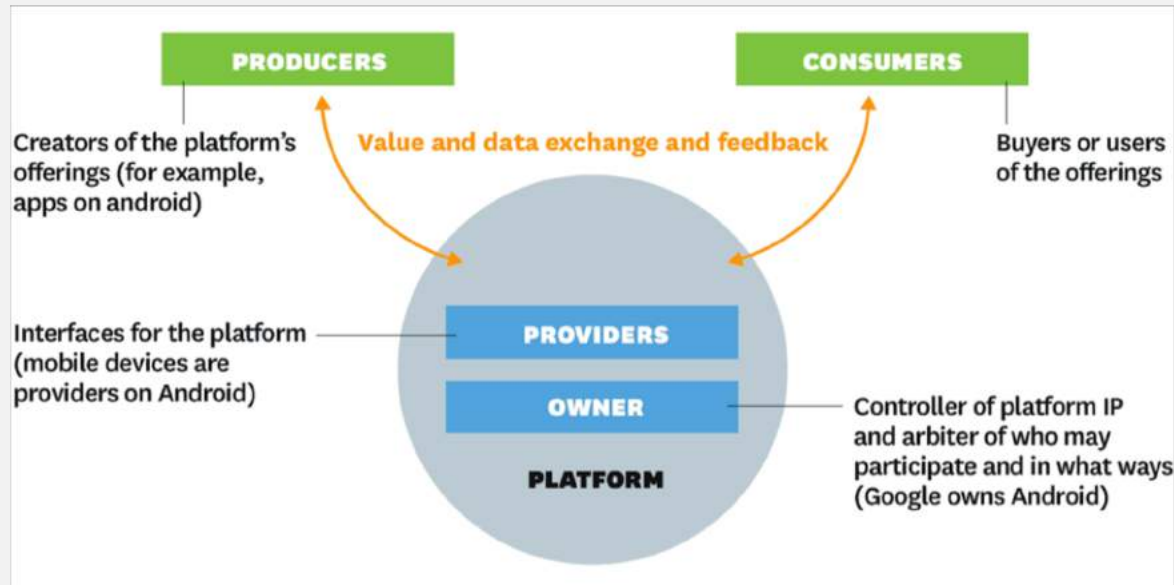
# Central to the platform economy is the mediation of exchange between consumers and independent providers



*“digital platform **intermediate transactions** among firms and/or individuals that may not be able to transact otherwise.”*

(McIntyre & Srinivasan, 2017)

# Central to platforms is customer understanding and big data

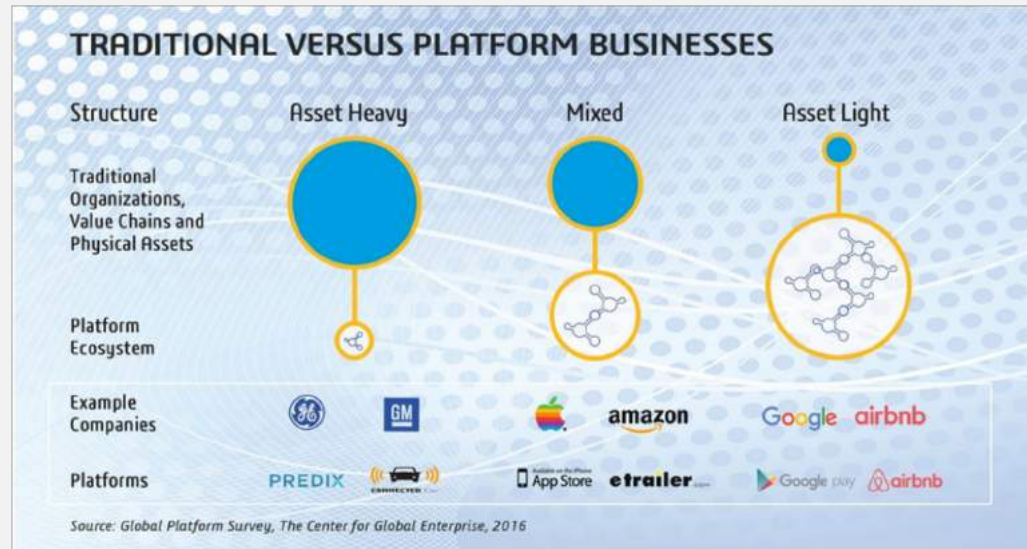


van Alstyne et al. 2016

*“transaction data are one such factor that distinguishes platforms from incumbent retail business models, and we expect that data generated through digital platforms will form an even greater competitive advantage in the future as these platforms can collect data from a multitude of interactions with their user base, both online and offline”*

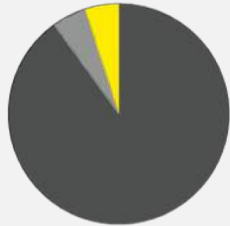
(Hänninen, Smedlund & Mitronen, 2018)

# Generally platforms differ from other business models in terms of assets and resources



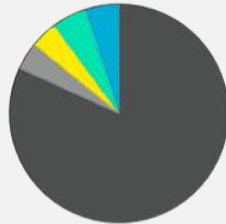


# As such, platforms can achieve high margins and profitability



Traditional Retailer

0.3x



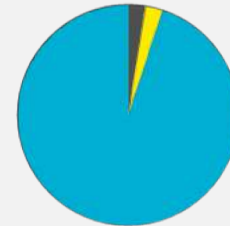
Starting to Evolve

0.5x



Hybrid Ecosystem Orchestrator

4x



Pure Play Platform

9x

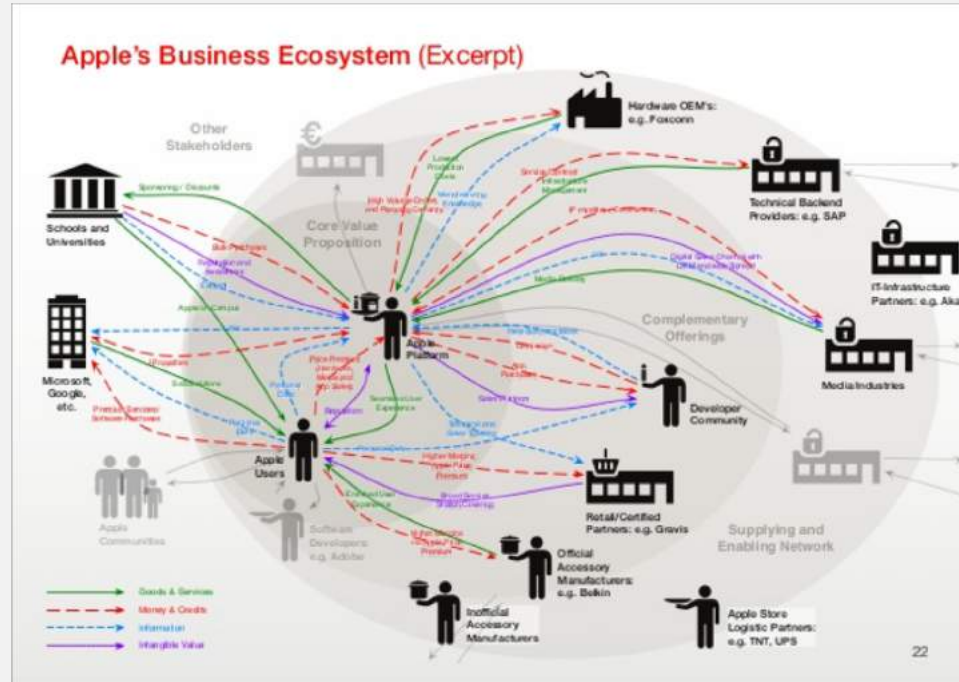
Business Model Elements



Price to Sales Ratios, April 2018

Simon Torrance (2018)

# Platforms also leverage ecosystems

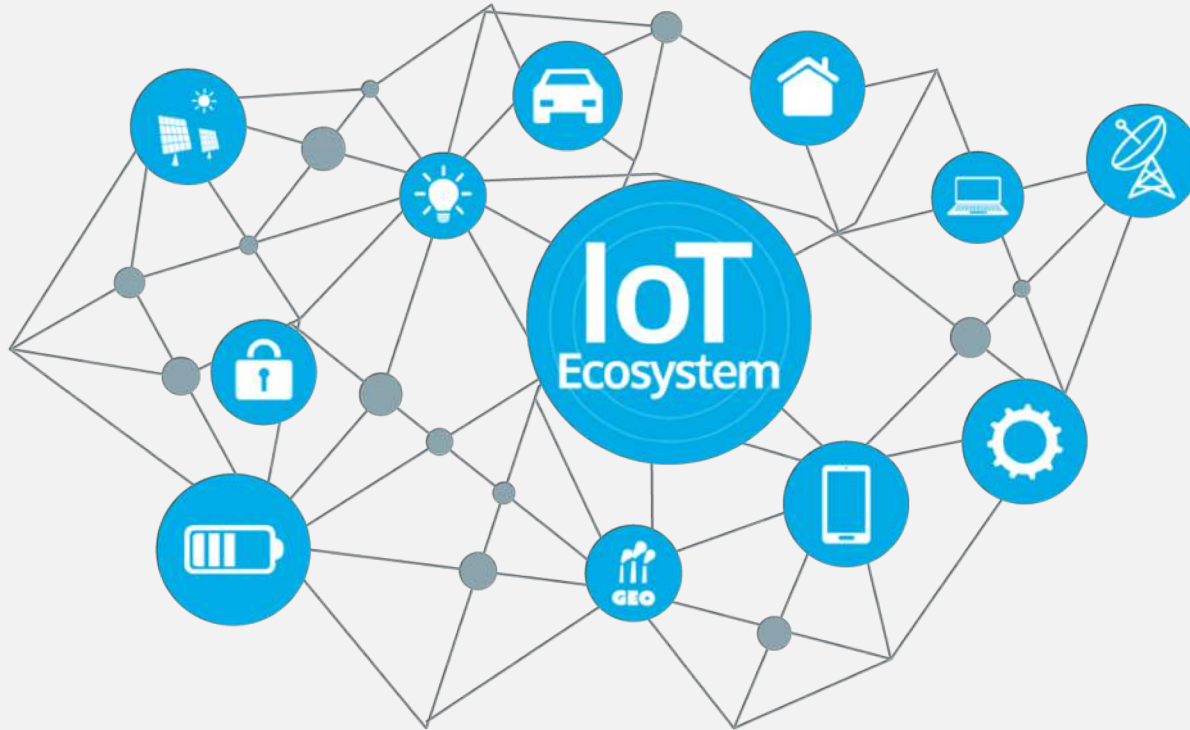


Jan Schiedgen (2013)

*“an ecosystem generally refers to **a group of interacting firms** that depend on each other’s activities.”*

(Jacobides, Evans & Gawer, 2018)

# Example. IOT - Ecosystem



# Example. BMW ecosystem

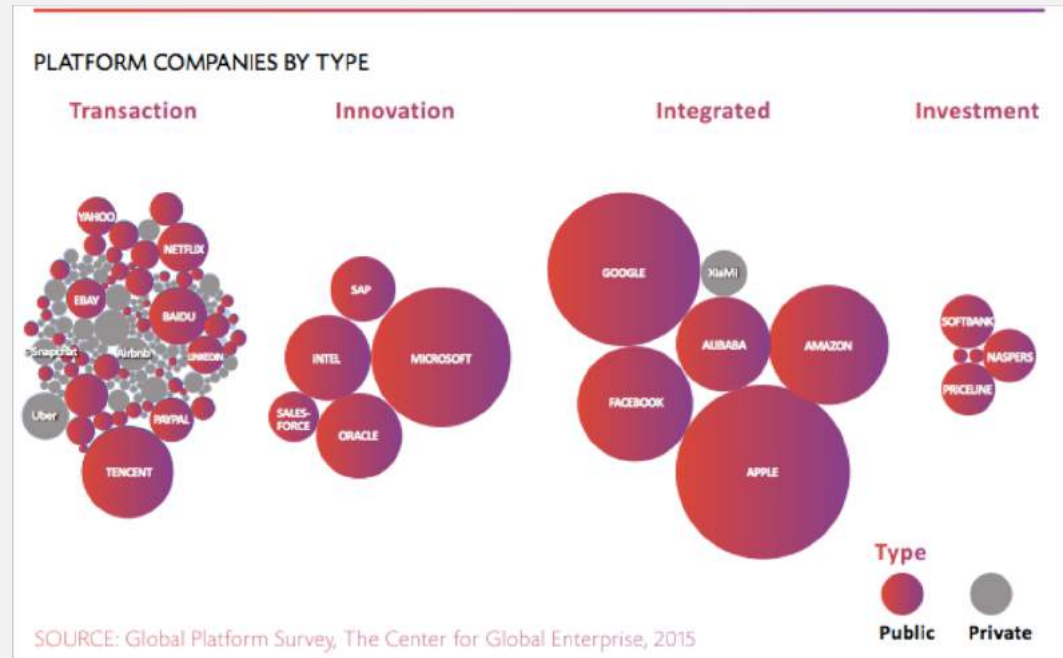


# Example. Smart City ecosystem



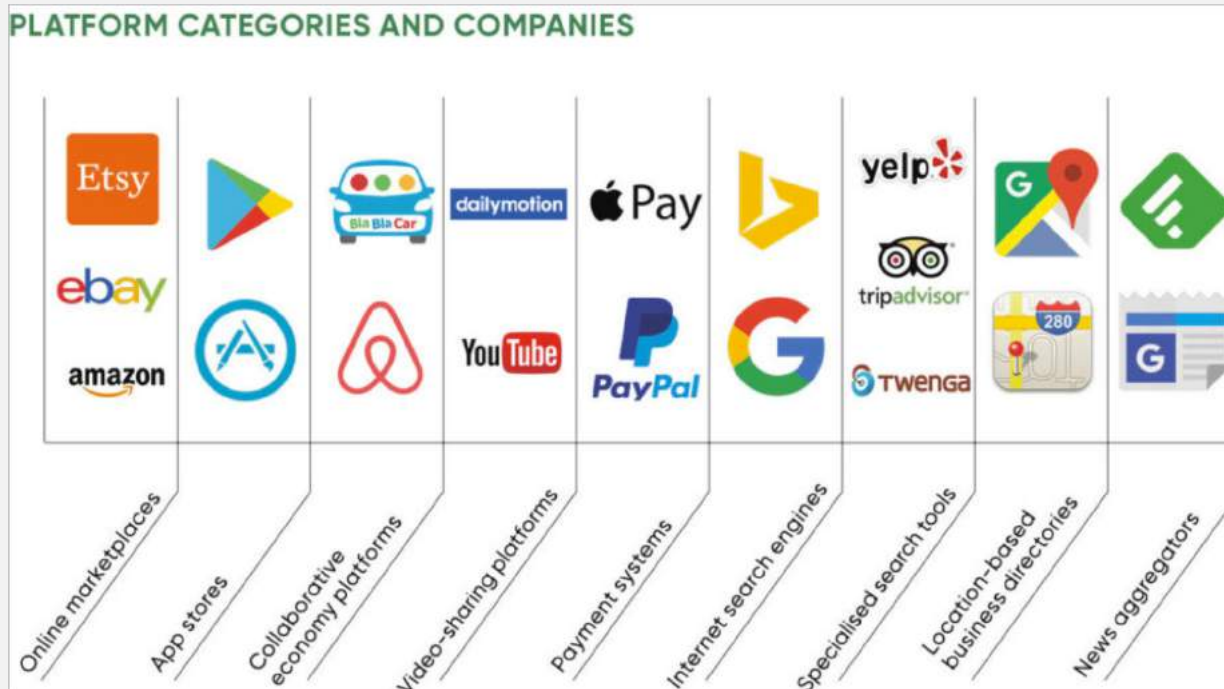
NextGen

# Platforms can be separated to transaction, innovation, integrated and investment platforms





# Thus, platforms can be found in many parts of the economy

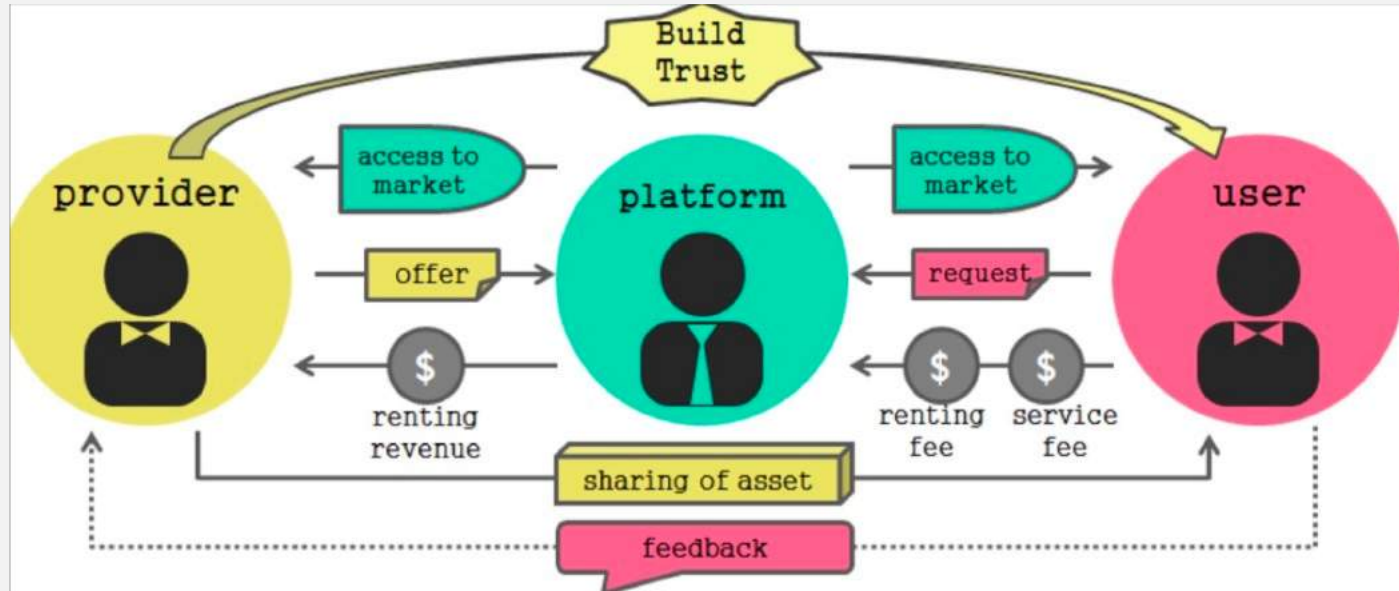


Raconteur (2017)



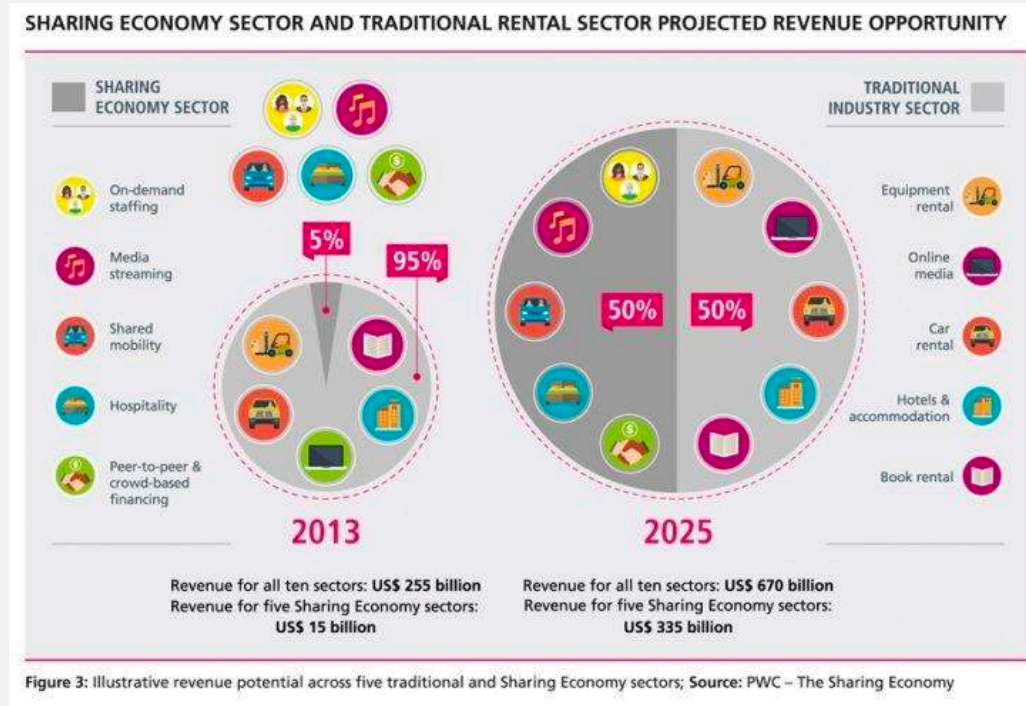


# Ideally platforms reduce transaction costs for buyers/sellers

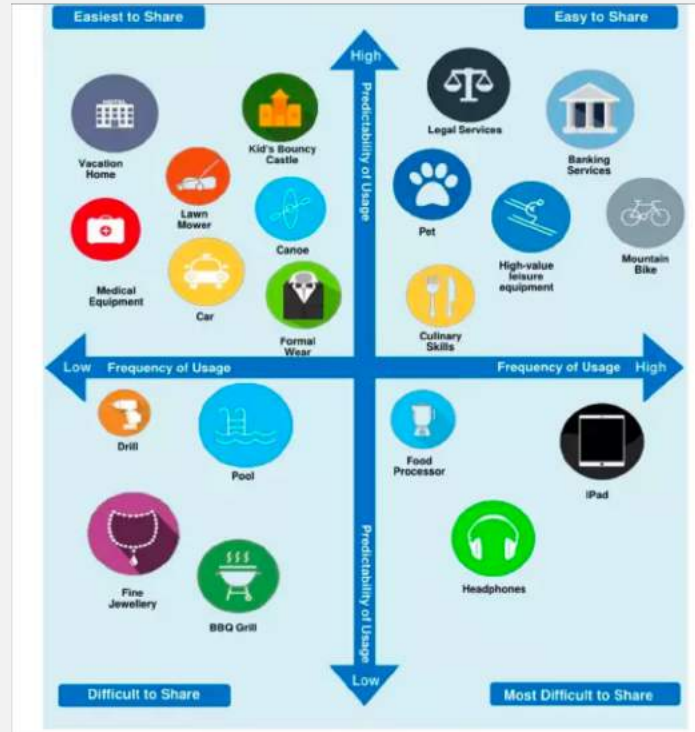


Deemly

# Accordingly, in many sectors the sharing economy has a major role



# In the future the sharing economy will most likely only continue to grow




Morgan Stanley


# A few examples of digital platforms




# *"The platform evolution"* has made platforms extremely valuable businesses




+



+



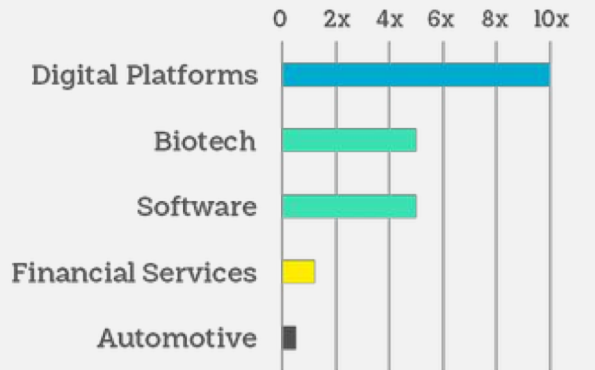
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**= over \$3.0 trillion**

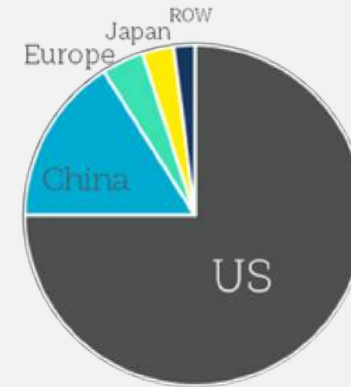
# Most platforms are found in the US (and China)

**Valuation Multiples**  
(Average Price-Sales Ratio, US & Europe top 500 listed companies)



© New Growth Playbook, Simon Torrance 2018

**Origins of platform-based businesses**



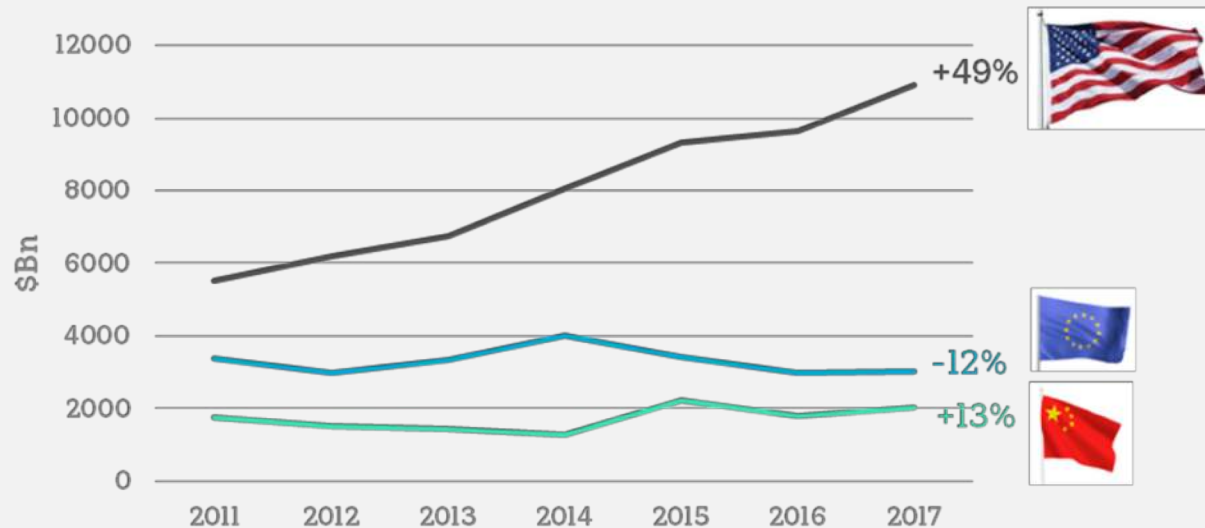
Source: Center for Global Enterprise, 2016



# Compared to Europe, China is taking the lead in digitalization

## European enterprises losing market share to US and China

Regional share of Market Cap - Global Top 100 Companies



Simon Torrance (2018)

# Indeed, in Europe there are only a few "major" platforms



***Delivery Hero***

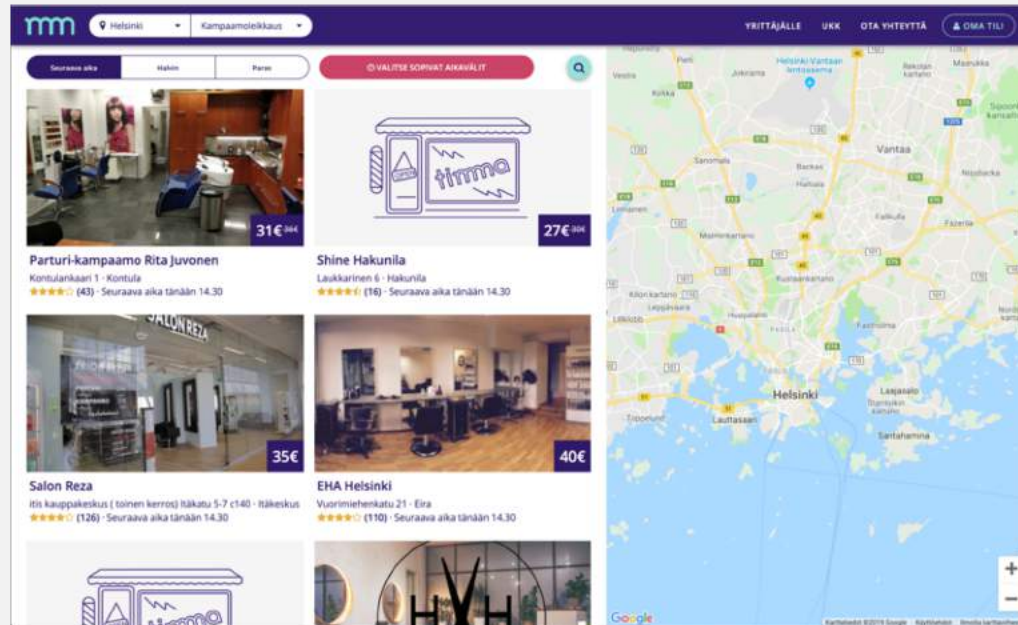


# In Finland, there are also only a few examples of platforms/marketplaces



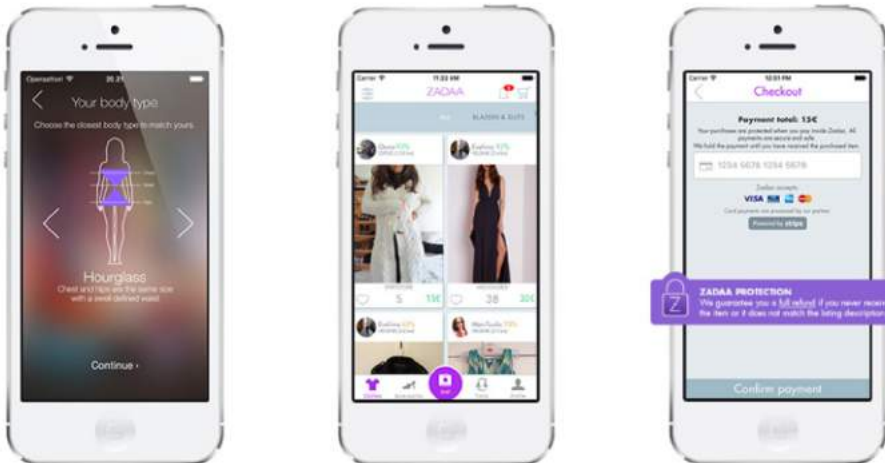
**ZADAA**  
Find clothes that fit.

# Example Timma. Marketplace in the beauty industry



# Example Zadaa. Marketplace for used clothing

How it works.



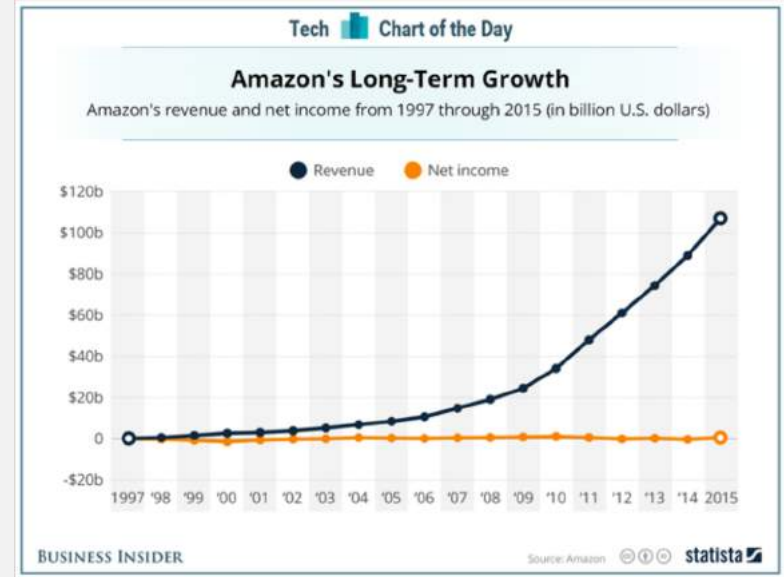
The image shows three sequential smartphone screens from the Zadaa app. The first screen is titled 'Your body type' and features a silhouette of a person with labels for 'Hourglass' body type. The second screen shows a grid of clothing items for sale, with a 'ZADA' logo at the top. The third screen is the 'Checkout' page, displaying a payment total of 13€ and a 'ZADA PROTECTION' badge that guarantees a refund if the item does not match the description.

**Find clothes that fit** from people who share a similar size and style.

**Buy and sell** quality clothes, shoes and other accessories.

**Pay safely** in-app and receive payments directly to your bank account.

# Platforms have become popular shopping channels amongst consumers



# What benefits do platforms deliver?



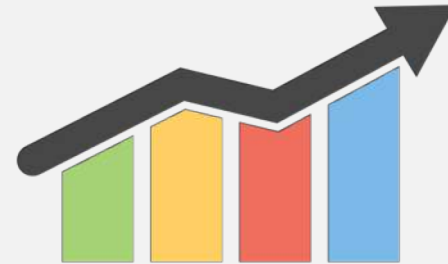
**New earnings model**



**Customer engagement**



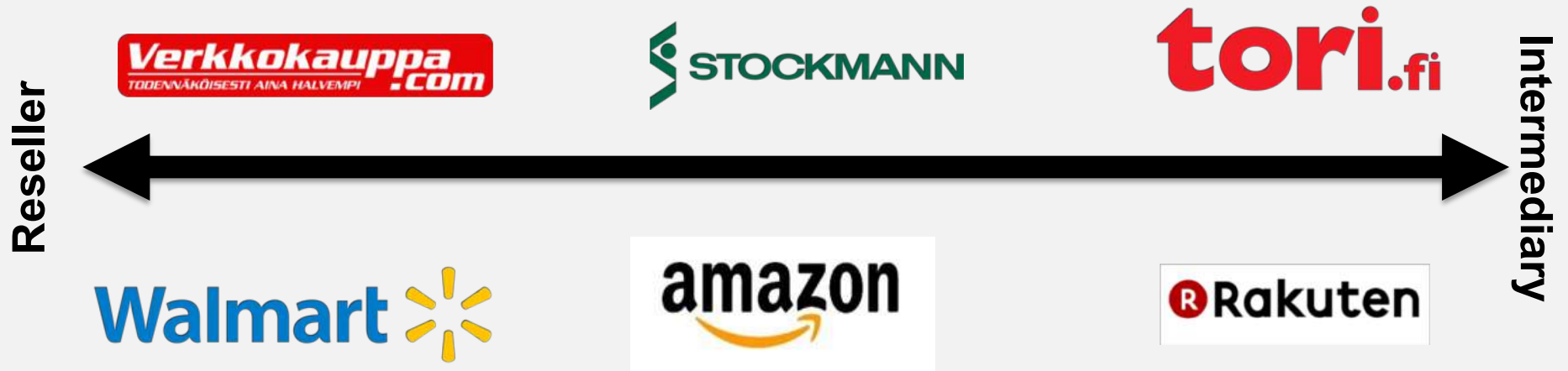
**Internationalization**



**Business growth**



# As such, many retailers are moving from resellers to intermediaries



# Many traditional player is also balancing between this axis

VERKKOKAUPAT | Pöytäkirja Yhteistyökeskus | 10.10.2017

## Suomalainen kauppalegenda siirtyy Amazonin malliin – avaa verkkokaupansa myös muille myyjille



Stockmann laajentaa verkkokaupansa tarjontaa avaamalla sen ulkopuolisille brändeille. Aluksi tarjolla on Stockmannin tavaratalossa ja kaupan olevia tuotemerkkejä, mutta alusta on zvoin kaikille Stockmannin yritysosaajien sopiville tuotteille.

Markkinapaikka on Stockmannille uutta digitaalista liiketoimintaa, sillä alustalle tulevat yritykset maksavat tavaratalokonsernille komissiota myynnistään verkkokaupassa.

Myyntiin tulee aluksi muodin, kodin ja kauneuden tuotteita, markkinapaikka avautuu ensi vuoden keväällä. Pilotina Stockmannin verkkosivulla on jo nyt myynnissä XS Lelujen tuotteita. XS Lelulla on omat osastot Stockmannin tavarataloissa.

JAA ARTIKKELI

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## Walmart's marketplace items get free 2-day shipping, in-store returns

Sarah Pease | @sarahpease | 11 hours ago



With **Fulfillment by Amazon**, marketplace sellers can make their products eligible for Amazon Prime's 2-day shipping. Today, Walmart is catching up on this front. The retailer today announced it's expanding its 2-day shipping to the millions of products offered by its own marketplace sellers. This expansion will roll out in the months ahead, alongside a process for simpler returns on marketplace purchases.


Walmart first launched free, 2-day shipping across millions of products back in January 2017, for orders that were over \$35. The move was meant to challenge Amazon Prime, as all it required was a minimum purchase – not an annual membership fee.

Now, that same shipping option will be made available across Walmart's marketplace, too.

The company says it will initially work with its hundreds of "high-performing" sellers to introduce free, two-day shipping across their eligible items in the U.S. This is being announced today, but will roll out more broadly in the coming months, Walmart notes.

## Tesco shuts its non-food website, Tesco Direct

500 jobs at risk as company concludes it cannot make the loss-making arm profitable



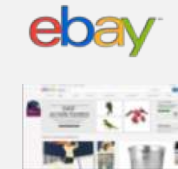
▲ Tesco blames high costs for fulfillment and online marketing for closing Tesco Direct. Photograph: Nick Ansell/PA

Tesco is shutting down its clothing and homewares website Tesco Direct in a surprise move that puts 500 jobs at risk.

Staff were briefed on Tuesday afternoon about the decision to close the loss-making website which was the supermarket giant's attempt to take on Argos and Amazon by selling everything from sofas to TVs and toys.

Tesco admitted it couldn't see a way to make the website, which launched in 2006, profitable. As a result the retailer said approximately 500 staff were at risk of redundancy.

# Globally, there are many retail marketplaces for consumers





Business model	"Pureplay" marketplace
GMV (Gross Merchandise Value) (Estimate, 2016)	\$550 billion
Market value (Forbes, summer 2018)	\$499 billion
Revenue (2017/2018)	\$37.28 billion
Net income (2016/2017)	\$9.2 billion
Active customers (estimate)	466 million
Marketplace sellers	8.5 million
Revenue growth (2016/2017 vs. 2017/2018)	<b>+62%</b>

Business model	Hybrid marketplace (850 logistics facilities, MWPVL)
GMV (Gross Merchandise Value) (Estimate, 2016)	\$260 billion
Market value (Forbes, summer 2018)	\$778 billion
Revenue (2018)	\$232.9 billion
Net income (2018)	\$10.1 billion
Active customers (estimate)	310 million
Marketplace sellers	2 million (approx. 50% of sales)
Revenue growth (2017 vs. 2018)	<b>+30%</b>

Business model	"B2B2C" marketplace
GMV (Gross Merchandise Value) (Estimate, 2016)	\$117 billion
Market value (Forbes, summer 2018)	\$9.6 billion
Revenue (2018)	\$10 billion
Net income (2018)	\$1.3 billion
Active customers (estimate)	95 million
Marketplace sellers	45 000
Revenue growth (2016 vs. 2017)	<b>+16%</b>





# What new do digital marketplaces deliver?



# Marketplaces infuse data and customer understanding across the business model



Fast deliveries



Trusted Payments



Diverse ecosystem



Large selections and low prices



Engaged suppliers



Superior customer experience





# Other is the infusion of data across the business



Dragon Social (2018)

# Customers are also increasing using marketplaces and digital platforms

## Amazon's Prime Day again became the biggest sales day in its history

Sarah Perez @sarahperez74 on X



Prime Day has once again broken records. Despite *serious glitches* at its start, Amazon announced this morning that Prime Day 2018 grew to become the biggest shopping event in its history, beating out Cyber Monday, Black Friday, and the previous Prime Day 2017. Of course, this year's Prime Day was longer – a full 36-hours, in fact. And while Amazon did make its comparisons to other sales holidays over the same period of time, it's not quite the same thing to compare a shorter sale to a longer one. (Last year's Prime Day was 30 hours, for example.)

Still, it's a remarkable showing on Amazon's part. So much so that Amazon has taken the unusual step of actually providing some numbers around how much people bought. Though it still declines to talk sales dollars, as per usual, it did say that Prime members worldwide purchased over 100 million products, with small and medium-sized businesses on Amazon "far exceeding" \$1 billion in sales this year.

It was unclear, however, if Amazon was counting sales at Whole Foods – which did participate in Prime Day for the first time – when calculating this 100 million products sold figure, or its "best day ever" statements. We asked the company to clarify this, and confirmed that Whole Foods sales were not being included in those

## EAST TECH WEST

### Alibaba sets new Singles Day record with more than \$30.8 billion in sales in 24 hours

- Alibaba smashed through its Singles Day sales record on Sunday.
- The gross merchandise value (GMV) hit over \$30.8 billion in sales in the 24-hour shopping event.
- That topped the \$25.3 billion record set in 2017.
- Singles Day got off to a strong start with sales hitting \$1 billion in one minute and 25 seconds.

Arjun Kharpal | @ArjunKharpal

Published 4:39 AM ET Sun, 11 Nov 2018 | Updated 8:14 PM ET Wed, 21 Nov 2018



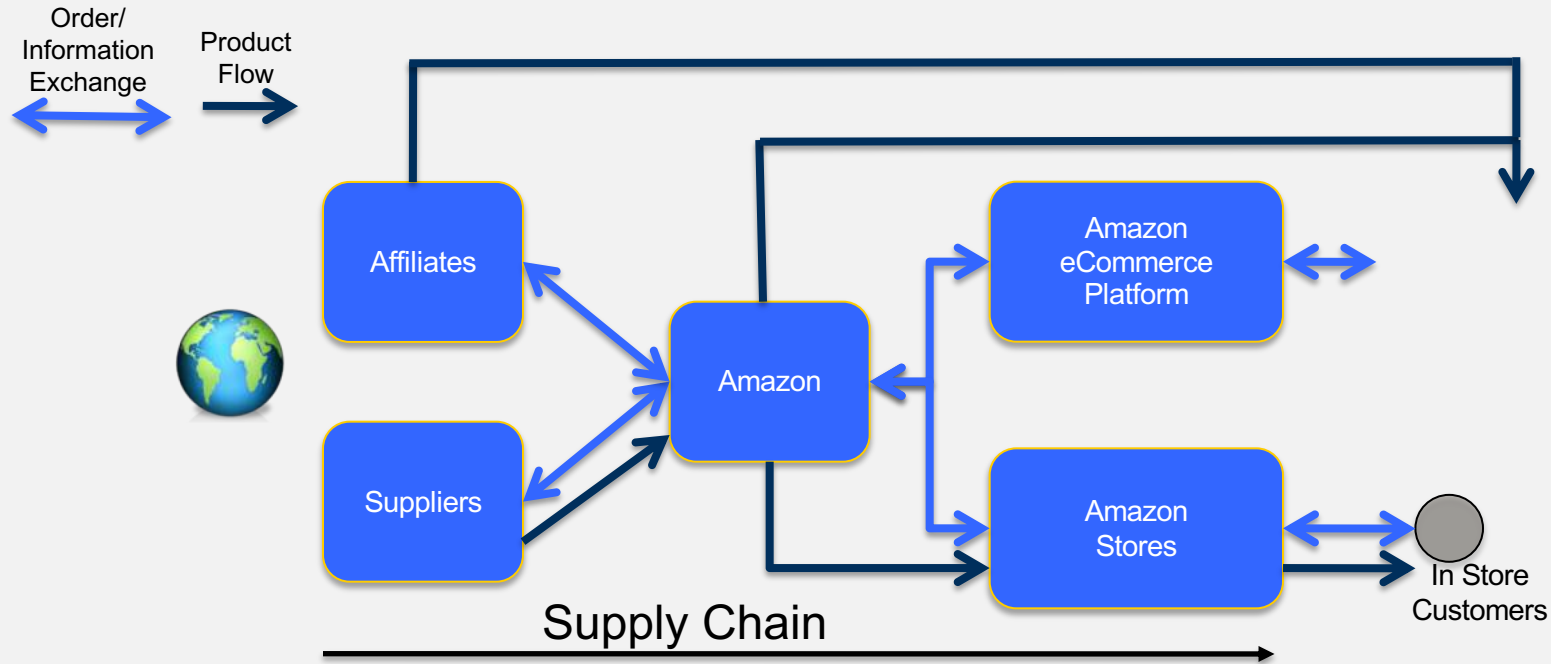
Alibaba on Sunday tore through last year's Singles Day sales record, racking up more than \$30.8 billion in the 24-hour shopping event.



# Example Amazon. From a book store to a tech giant in 20 years



# Example Amazon. Optimizing supply and demand



# Example Amazon. Ecosystem to support customer engagement





# Example Amazon. New growth from grocery retail



INTERNET SERVICES


## Amazon brings Whole Foods delivery to 10 new US cities

The Prime service has come to Las Vegas, New Orleans and Seattle, among others.


BY SEAN KEANE / SEPTEMBER 12, 2016 4:44 AM PDT

f t p u s

JULIAN NEW 4-STAR HOTEL  
Luxurious Features & Amenities  
BOOK NOW



ÄKKILÄHDÖT NYT  
jopa - 50%



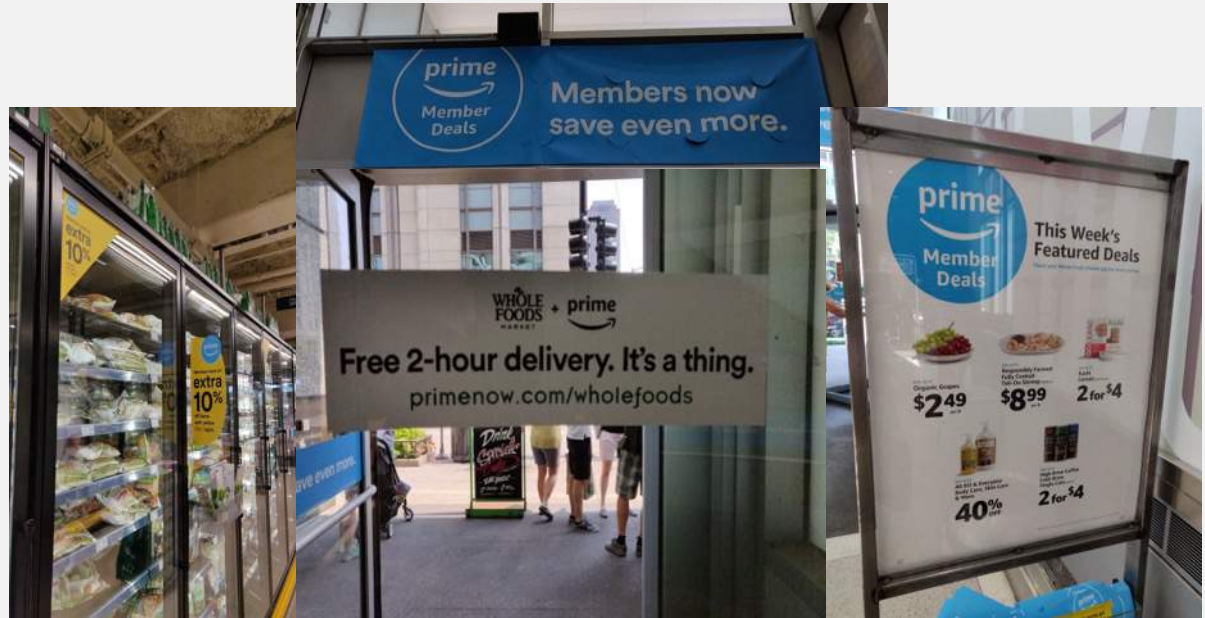
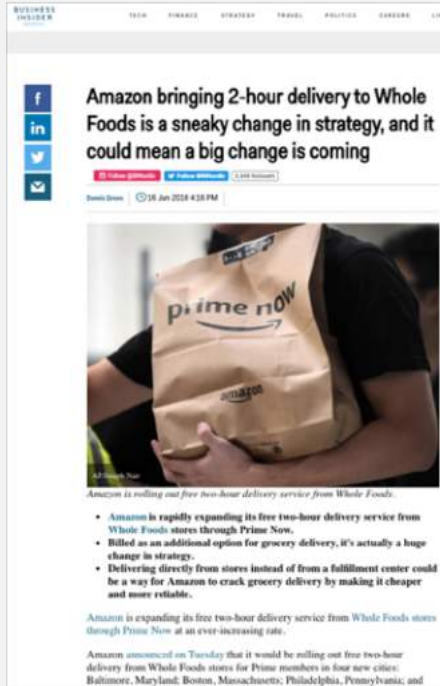
Whole Foods delivery has expanded to 10 more US cities.

Amazon's grocery deliveries just expanded to 10 more US cities.

Its Whole Foods delivery service is now available in Charlotte, North Carolina; Las Vegas; Memphis, Tennessee; Nashville, Tennessee; New Orleans; Oklahoma City;

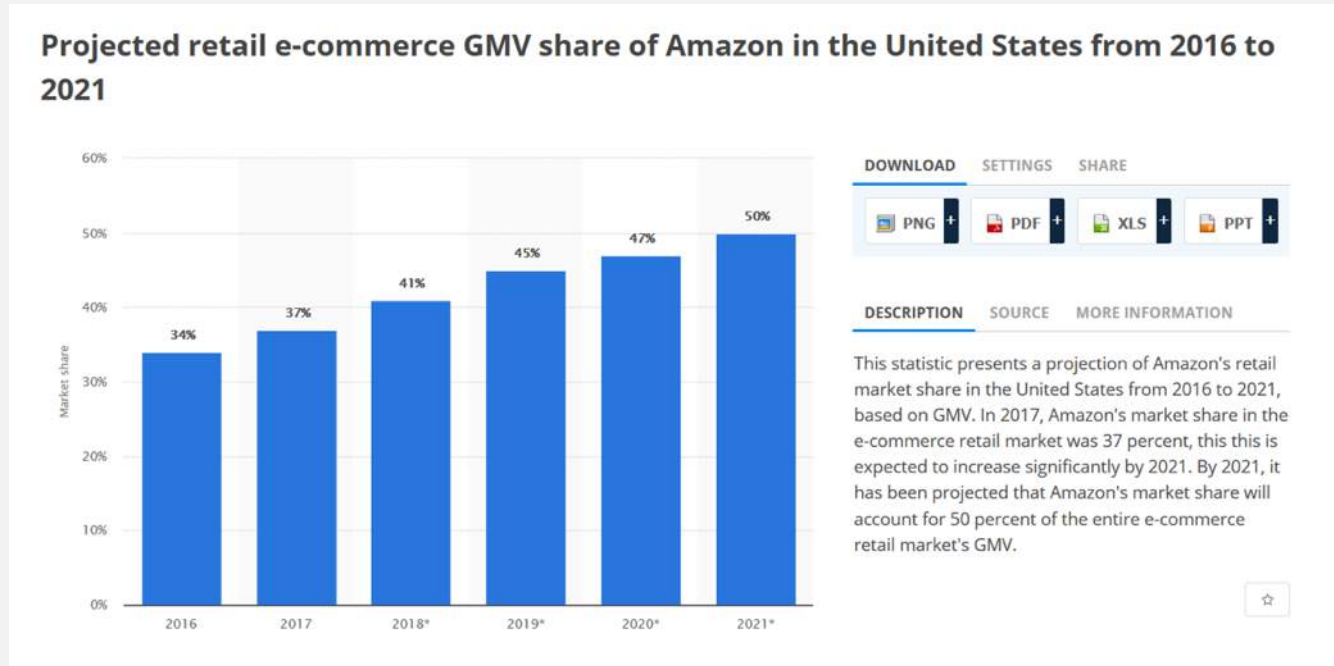


# Example Amazon. Combining best of physical and digital retail



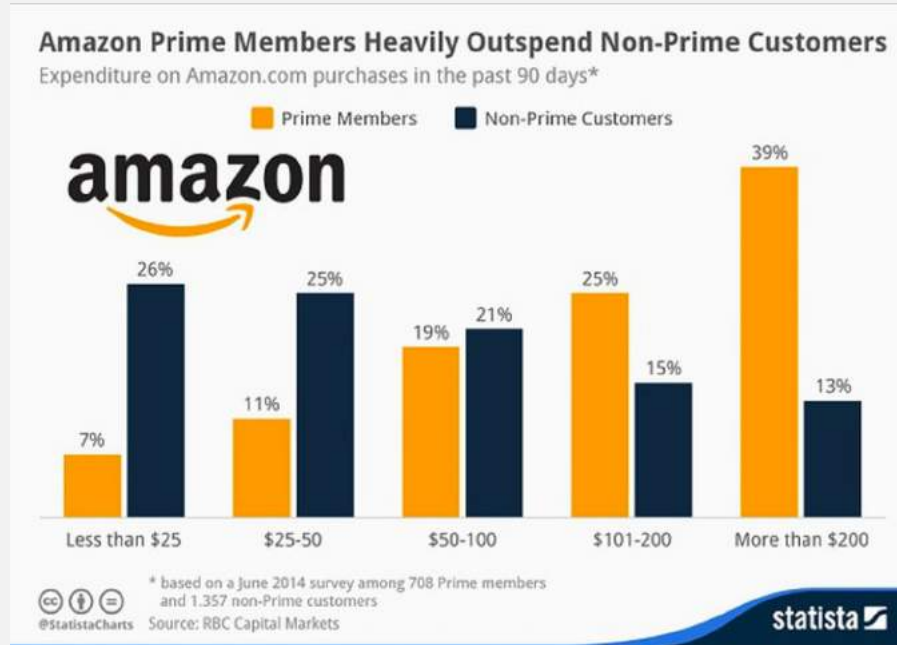
Whole Foods, Chicago, East Grand Avenue

# Example Amazon. Amazon expected to continue to grow



Statista

# Example Amazon. Prime important driver of loyalty



# Example Amazon. From physical to digital

*"I often get asked, "When are you going to open physical stores?" That's an expansion opportunity we've resisted. It fails all but one of the tests outlined above. The potential size of a network of physical stores is exciting. However: we don't know how to do it with low capital and high returns; physical-world retailing is a caged and ancient business that's already well served; and **we don't have any ideas for how to build a physical world store experience that's meaningfully differentiated for customers.**"*

- Jeff Bezos, Amazon Annual Report, 2006



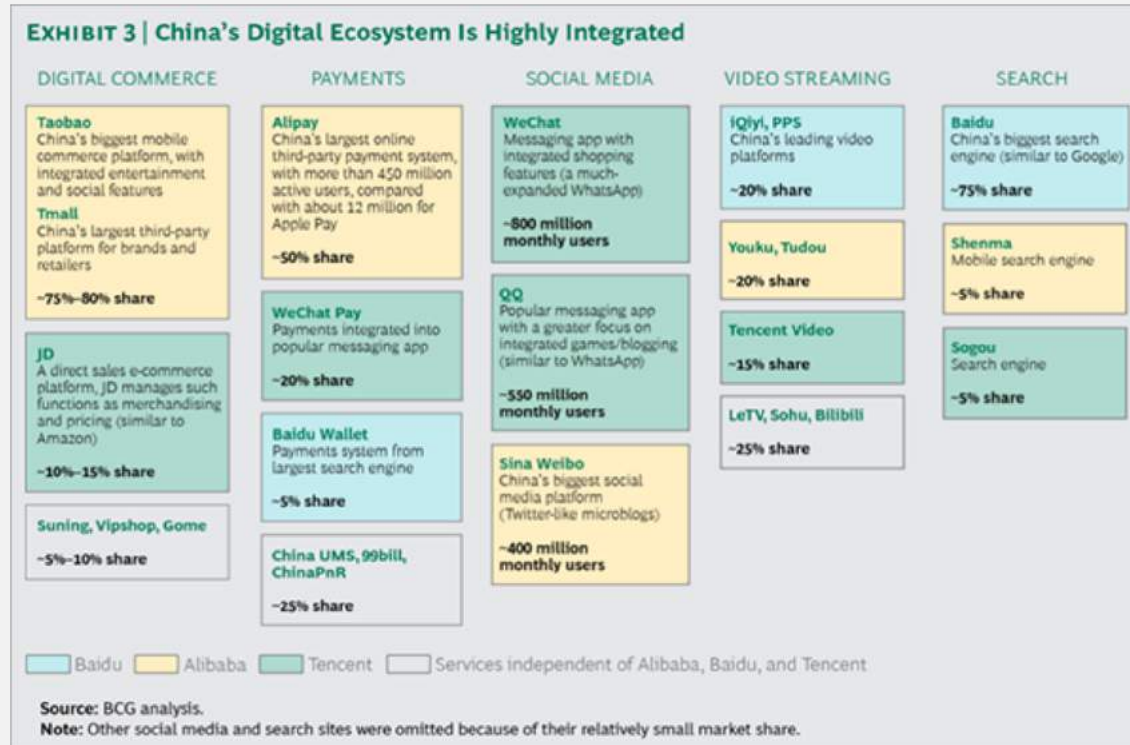
2006

2018

# Example Alibaba. Worlds largest marketplace



# Example Alibaba. China a frontrunner in digital retail



# Example Alibaba. Global aspirations?

“My vision is to build an e-commerce ecosystem that allows consumers and businesses **to do all aspects of business online**. We are going into search with Yahoo and have launched online auction and payment businesses. I want to create one million jobs, **change China's social and economic environment, and make it the largest Internet market in the world.**”

- Jack Ma, Interview Inc magazine, 2008

2006

“In the past 15 years, we grew from nothing to this size and **15 years from now, I want people to know about Alibaba because it's everywhere**. Fifteen years ago, we wondered what ecommerce was, why small business could use ecommerce, and Internet to do business across the nation. **I hope that 15 years from now, people would forget about ecommerce. It's like electricity**. Nobody thinks its high tech today. Fifteen years from now, I don't want us to walk on the street still, talking about how and why ecommerce can help people.”

- Jack Ma, Interview with Charlie Rose, 2015

2015



# So how to succeed in this age of increasing digital, data-driven, retail?

- 1) **Unique and competitive selection, brand and image.**
- 2) **Outstanding customer experience and engagement.**
- 3) **Advanced use of customer insights and data analytics. Data-driven business approach.**
- 4) **Use of platforms, ecosystems and new business models.**
- 5) **Offering superior benefits and services to customers, suppliers and partners (e.g. Rakuten Super Points, Fulfillment by Amazon)**



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# Q & A

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